

**The background to
the 1993 revision of the
System of National
Accounts (SNA)**

**Prepared by
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Preface

The revision of the SNA published in 1993 was a process which lasted about ten years. After several years of preparation, the first of thirteen meetings of a small group of experts took place in June 1986. The last of these was held in April 1991. Before the first and after the last, a larger inter-regional meeting was held to set the broad tone of the revision and to pass comment on the final draft. Following this last meeting, work continued until the approval by the UN Statistical Commission in February 1993. Even then there was about another six months' work to prepare the document for publication, including incorporating last minute revisions made by the Commission.

At the outset it was decided that the proceedings of the expert groups should be fully documented, in part to assist the editor in reflecting their conclusions in the eventual text, in part to stand as a note for the record for the future. Extensive documentation was prepared for each meeting and initially it had been the intention that these would be published. In the event, however, only the papers from the three meetings organised by the IMF, those on the external sector, the public sector, and financial flows and balances, were so published. These appear in a volume entitled "The IMF's statistical systems" published by the IMF in 1991. While individual copies of the other background papers exist in some files, they were not systematically reviewed and revised for publication and since this was in the era immediately before regularly electronic communication and the existence of websites, they are not easily available.

They were, in addition, extremely voluminous, taking up approximately a metre and a half of shelf space. Since the text of the Blue Book reflects the position taken by the expert groups, it could be argued that this documentation has, in any case, been overtaken by events. However, the Blue Book does not reflect the differing positions which were considered by the experts nor the reasons for eventually choosing one rather than another. For this reason the formal reports of the meetings still have an interest either for those interested in the history of the SNA or for those involved in subsequent revisions.

There were two reports prepared for all the meetings except that in April 1991. The short report was brief, containing only the main decisions agreed in the meetings. This was prepared and agreed during each meeting and ran to about one page per day. Later a longer report was prepared, circulated to the participants for comment and revised as necessary. These typically ran to between forty and fifty pages per meeting. Thus even these abbreviated records of the process amount to over five hundred pages .

After an initial meeting discussing the overall structure of the new SNA, the second to seventh expert group meetings were subject specific. A core group of experts (from both developed and developing countries) made up about half of each group. The other half consisted of experts with in depth expertise of the subject under consideration. Because of the need to bring the disparate proposals together, there were then five coordinating meetings with constant membership. Many earlier discussions ended with a recommendation that another expert group needed to be involved and many later ones concluded that further research was necessary in order to ensure all the implications of a proposal had been considered.

Following the evolution of the discussion on a particular subject through the various reports as prepared is thus not easy since it may have been spread over many meetings. This document aims to overcome this. The individual reports were dissected by subject and reassembled grouped by subject. However, datelines have been retained to indicate which meeting is being reported. Some material has been deleted. This includes introductory statements by the host institution, lists of future action and detailed comments on early versions of the draft chapters of what became the 1993 SNA. Some very minor editing has been done. References to "the current SNA" have been replaced by "the 1968 SNA". Most references to those background papers not now generally available have been deleted and the introductions depersonalised. In some cases the short reports

have been merged with the longer ones, but in all cases the short report conclusions are shown in bold type to distinguish them from the more expansive longer ones. In a few instances commentary is added. This is shown in italics to make clear it is additional to the reports themselves.

Like the 1993 SNA, the compilation of the present document has taken about ten years. During the revision process, there were a number of occasions when the question was raised about why the 1968 SNA had taken one position or another but no documentation on this existed and the memories of those involved in it (and still alive) had faded. It thus seemed a useful exercise to make one document available bringing together all the considerations behind the 1993 revision. This was not a straightforward exercise because, as noted above, the reports were prepared at a time before word processors had become standardised and the electronic versions were not available or usable.

As soon as I acquired an OCR device, I started scanning the reports into a common format. This was easier for me than others because as the author of all the long reports except those for the three meetings organised by the IMF, I had the original version of the reports rather than a much photocopied, faxed version. The reports prepared by the IMF related to the meeting on the external sector transactions held in Washington in March 1987, that on the public sector held in Washington in January 1988 and that on financial flows and balances held in Washington in September 1988. With the permission of the IMF, the content of these reports has been included in the text which follows. It is quoted verbatim and in its entirety as far as substance is concerned. The text of these reports is identifiable throughout by being preceded by the "datelines" of March 1987, January 1988 or September 1988 as appropriate. When reference to background papers is made in these sections, the background paper can be found in the 1991 IMF publication "The IMF's statistical systems" previously referred to.

Dismantling the reports into separate subject areas was reasonably straightforward; reassembling them into a logical structure was less so because of the inter-related nature of the system. The OCR device I used was rather primitive and it was at this stage that I started removing the many mis-transcriptions. This was extremely tedious and time-consuming; and at some point I lost heart and thought that, in any case, there would be little interest in the end product. It was only after the advisory expert group meeting at the end of 2005 considering the update of the system when I heard many of the same arguments as had been voiced in the earlier revision round that I determined to finish the task and bring it to its present state. I would like to make clear that this task was performed on a personal basis and in my own time, not as part of my new function as the editor of the update though I hope that I and others will find it useful in the update process.

Though I penned most of the words here, the substance described is the work of the many people involved in the expert groups. A list of the meetings and of the participants in each follows as acknowledgement that attribution for the work should be given to them collectively.

*Anne Harrison
February, 2005*

List of expert group meetings for the 1993 revision of the SNA

	Inter-regional meeting, Geneva	<i>June , 1986 (1)</i>
1	SNA Structure, Geneva	<i>June, 1986 (2)</i>
2	Prices and quantity comparisons, Luxembourg	<i>November, 1986</i>
3	External sector, Washington	<i>March, 1987</i>
4	Household sector, Florence	<i>September, 1987</i>
5	Public sector, Washington	<i>January, 1988</i>
6	Production account and input-output tables, Vienna	<i>March, 1988</i>
7	Financial flows and balances, Washington	<i>September , 1988</i>
8	First coordinating meeting, Luxembourg	<i>January, 1989</i>
9	Second coordinating meeting, New York	<i>July, 1989</i>
10	Third coordinating meeting, New York	<i>September, 1989</i>
11	Reconciliation of SNA and MPS, Moscow	<i>December, 1989</i>
12	Fourth coordinating meeting, Washington	<i>December, 1990</i>
13	Fifth coordinating meeting, Harare	<i>April, 1991</i>
	Inter-regional meeting, Aquascalientes	<i>October, 1992</i>
	Statistical Commission approval	<i>February, 1993</i>

Participants at Expert Group meetings

Name	Affiliation	1	2	3	4	5	6	7	8	9	10	11	12	13
Hans Adler	Canada				x									
H.Akhniotis	Cyprus							x						
Peter Al	Netherlands		x											
Odd Aukrust	Norway	x												
Eneas Avondoglio	Argentina								x	x	x			
Jack Bame	USA			x					x	x	x		x	
Keith Blackburn	Australia	x												
Adriaan Bloem	Netherlands									x	x		x	x
Cornelius Bochove	Netherlands	x												
Carol Carson	USA		x	x	x	x	x	x	x	x	x	x	x	x
M. Cartagena	Ecuador			x										
Shirley Carter	UK			x										
Uma Roy Choudhury	India	x			x				x	x	x		x	x
Margaret Costa	Brazil					x								
Jean Courty	France			x										
Pierre Demangel	Congo					x								
Barbara Dunlop	Australia			x										
Bernardo Ferran	Venezuela	x												
Lourdes Ferran	INSTRAW				x		x			x				
Alfred Franz	Austria						x							
M. Fuentes	Cuba											x		
Raul Garcia	ECLAC								x	x	x			x
M. E. Gomez-Luna	Mexico				x									
Alan Heston	USA		x											
Piroska Horvath	Hungary				x							x		
A. Horii	Japan							x						
Ralf Hussmans	ILO				x									
R. Ibarra	Mexico							x						
Jana Ilieva	Bulgaria											x		
Yuri Ivanov	CMEA											x	x	x
P. Jayasundera	Sri Lanka					x								
M. Katyal	India											x		
Jagdish Kumar	India	x	x	x	x	x	x	x						
	ESCAP								x	x	x	x	x	x
Y. Kurabayashi	Japan		x											
Kishori Lal	Canada						x							
Marian Libreros	Colombia		x											
Liu Xiaofah	China											x		
Heinrich Lutz	Germany	x	x	x	x	x	x	x	x	x	x	x	x	x
Pablo Mandler	Israel	x	x	x	x	x	x	x	x	x	x	x	x	x
Devi Manraj	Mauritius				x									
Michel Mouyelo	Congo	x	x	x	x	x	x							
M. van Nieuwkerk	Netherlands			x										
Moffat Nyoni	Zimbabwe						x		x	x	x	x	x	x
Colin Pettigrew	UK							x	x	x	x		x	x
Igor Pogasov	USSR											x		
Karin Polenske	USA						x							
Graham Pyatt	UK				x									
Rene Rakatobe	ECA		x						x	x	x	x	x	x
Boris Ryabushkin	USSR											x		
K. Salah	Indonesia						x							
Gyorgy Sandor	Hungary												x	
M. Schlosser	CSFR											x		
Bogdan Sculz	Canada		x											
John Shadlow	Papua N.G.	x				x			x					

Name	Affiliation	1	2	3	4	5	6	7	8	9	10	11	12	13
Vaska Spassova	Bulgaria											x		
Georgy Szilargyi	ECE											x		
Erkki Tassia	Finland					x								
J. Terada	Cuba											x		
Bent Thage	Denmark						x							
Andre Vanoli	France	x	x	x	x	x	x	x	x	x	x		x	x
Seppo Varjonen	Finland											x		
Stewart Wells	Canada												x	
C. Wibulswasdi	Thailand							x						
John Wilson	USA							x						
D. Zmanay	Mauritius					x								
Piero Erba	Eurostat	x	x			x								
Alain Chantraine	Eurostat	x												
Brian Newson	Eurostat	x	x	x	x	x	x	x	x	x	x	x	x	x
Hugo Krijnse Locker	Eurostat		x											
J. Roman	Eurostat			x										
R. Salvat	Eurostat			x										
Werner Thon	Eurostat				x		x		x					x
Dieter Glatzel	Eurostat							x						
Arie Bouter	IMF	x		x										
Mahinder Gill	IMF	x		x						x	x	x		
Chandrakant Patel	IMF		x		x		x			x	x			
Jonathan Levin	IMF					x			x	x	x			
Kevin O'Connor	IMF							x			x	x	x	x
Peter Hill	OECD	x	x	x	x	x	x	x	x	x	x	x	x	x
Derek Blades	OECD	x	x		x	x	x	x	x	x	x	x	x	
Erwin Veil	OECD			x										
Jeff Owens	OECD					x								
J. E. Chapron	OECD						x	x	x					
I Divoy	OECD								x					
Lazslo Drechsler	UNSO		x	x	x					x	x			
Jan van Tongeren	UNSO	x	x	x	x	x	x	x	x	x	x	x	x	x
Cristina Hannig	UNSO	x								x	x	x	x	x
Vu Viet	UNSO						x			x	x			
Curtis McSween	UNSO							x						
Vladimir Drujchin	UNSO											x		
Ramesh Chander	World Bank				x	x	x	x	x	x	x	x	x	x
John O'Connor	World Bank			x				x						
Ernst Lutz	World Bank						x		x					
Anne Harrison	World Bank Consultant	x	x	x	x				x	x	x	x	x	x

Chapter 1. Planning the process

A. The starting point

After several years of planning how the revision should be carried out, a first meeting of experts was held in Geneva from 23-27 June 1986, preceded by an inter-regional meeting of representatives from developing countries from 18-21 June. This meeting was intended to give participants from developing countries the chance to ensure that their concerns were fully represented. There was considerable overlap between the two meetings, so some topics are only covered once where similar views were expressed.

June, 1986 (2)

The start of the first expert group meeting marked the mid-point of the process of the SNA review. A large number of regional and specialized discussions have taken place and the role of the expert group meetings now is to coordinate and finalize views that will be incorporated in the draft of a revised Blue Book and series of handbooks. Revisions to the SNA should be done in such a manner that they secured continuity of time series and did not jeopardize efforts by developing and other countries to introduce the system. As had been made clear at meetings at the Statistical Commission in 1983 and 1985, the revision should aim to clarify and update the concepts and bring the SNA and related economic statistics closer into line.

The meeting had before it two documents which aimed to summarize the discussions that had taken place to date. The initial presumption based on earlier discussions, was that **the revision w[ould] not involve major changes to the present SNA**. At the same time it was noted that it was the prerogative of this and subsequent expert group meetings to make sure that all conceptual issues relevant to the SNA are covered and that an agreed consensus on appropriate statements to be incorporated in the new SNA were reached.

B. What the SNA manual should cover

The SNA could be viewed from three perspectives.

- 1 It is an intellectual construct which forms the system; it embodies economic ideas and principles, concepts, definitions, relationships between concepts, groupings of transactors, and classifications .
- 2 It is the description of that system at present in the 1968 Blue Book and to be incorporated in future in the new Blue Book and associated handbooks.
- 3 It is the presentation of the system in terms of data and tables. In particular these tables may be those in international questionnaires but the data presentation issue is much more general than this. It is at this point that it is clear that some countries can go further than others in the implementation of this system and that guidance may be appropriate on the priorities for which parts should be implemented in preference to others.

There was general agreement that **a distinction should be made between the system as an abstract construct, the presentation of the system for purposes of explanation, and the system as a framework for data presentation.**

It was generally agreed that the new Blue Book should contain the explanation of the conceptual system. The handbooks should contain information on how the system should be implemented in practice and discuss questions of the presentation of the data in terms of questionnaires and alternative presentations. This does not mean that the new Blue Book should not contain tables but these should be aimed at elucidating the concepts rather than defining the exact terms of tables to be completed slavishly. **The Blue Book will give a comprehensive description of the conceptual system, including definitions and classifications of transactors and transactions.**

There was general agreement that the conceptual system could not be simplified but that there was an urgent need for clarification of the system and that the new Blue Book should be much clearer and more specific than the 1968 Blue Book. **A major objective of the revision is to clarify the Blue Book and related Handbooks to make them easier to understand by compilers and users of national accounts.**

The objective of simplification that the Statistical Commission endorsed will be obtained through recommendations in the handbooks where it will be made clear how subsets of the systems can be implemented using fewer resources. In general, the handbooks should serve for elaboration of parts of the system including more detailed classifications. They should give additional explanation of the concepts and the rationale behind these. They should give guidance on compilation and indicate conceptual differences with related systems.

The objective of simplification will be achieved by providing guidance in the Handbooks on implementation of data collection and tabular presentation.

The Handbooks will provide additional explanation and, where appropriate, more detailed classifications in their subject areas. They will give practical guidance on methods of compilation with particular reference to problems which might arise in countries at different stages of economic and statistical development and should illustrate possible uses and priorities of compilation.

The tables and accounts in the Blue Book will be explanatory in nature, not necessarily specifying the format for national and international reporting purposes.

C. What the SNA manual cannot cover

June, 1986 (1)

There was discussion about how far the Blue Book should meet the needs of users of national accounts rather than the producers. It was generally agreed that the **SNA is foremost a guide for national accounts compilers and users and cannot be at the same time an introduction to national accounting.** Basic textbooks in national accounting do exist and should be used where appropriate. However, there was a feeling that the SNA **should still include a chapter describing the theory behind the system and another dealing with potential uses of SNA data** so that economists attempting to analyze the full set of national accounts should be guided in their understanding to enable them to make the fullest and best use of the information provided.

June, 1986 (2)

There was some discussion about whether either the Blue Book or handbooks should contain priorities for countries. It was generally agreed that this would be inappropriate because the same list of priorities would not necessarily apply to all countries. At the same time, it was felt to be important that the manual should make clear that choices would have to be made about what parts of the system should be implemented and should give guidance on the sort of considerations that would determine the priorities. **The Blue Book will not assign priorities to particular parts of the system, but it will emphasize that countries should draw up their own priorities in the light of national circumstances.**

D. The role and content of the handbooks

June, 1986 (1)

Considerable emphasis was placed on the needs of compilers of national accounts in developing countries for documentation. Typically, such compilers are working in a much more isolated atmosphere than their counterparts in industrialized countries. The Chairman went so far as to characterize this view by saying, "The industrialized countries don't need manuals, they write them. It is the developing countries who desperately need guidance on both practical and conceptual issues."

Emphasis was laid on the need to produce the handbooks in parallel with the Blue Book, rather than after the Blue Book had been completed. The Handbooks are urgently needed by national accountant in developing countries. There was also emphasis on the need for the handbooks and the manual to be provided in languages other than English at an early stage. Both the French and Spanish versions of the existing Blue Books contain different interpretations from the English language version because of the way in which these translations were presented. During this meeting, and indeed the subsequent one, it became clear that the matter of translation was one of considerable importance and general concern. Further discussion also revealed that providing alternative language versions could be helpful to the process of elucidating the concepts in itself. For example, a concept that did not translate easily into French or Spanish probably required greater clarification in the original English version also .

There was discussion about which handbooks were needed and with what priority. This led to a questionnaire being circulated, as a result of which **participants suggested the following priorities for topics to be covered in handbooks:**

- 1. Production accounts**
- 2. Public sector**
- 3. Household sector**
- 4. Constant prices**
- 5. External sector**
- 6. Input-output**
- 7. Financial flows and balance sheets**

8. Enterprise accounts
9. Quarterly accounts
10. Developing countries and SAMs
11. Regional accounts
12. Capital stocks
13. ICP
14. SNA-MPS links.

June, 1986 (2)

The [first expert group] meeting endorsed the idea that **as far as possible the Handbooks should be prepared in parallel with the SNA revision process with the objective of final publication simultaneously with the revised Blue Book.** However, concern was expressed about how far this would be practical given the resource constraints at UNSO¹ and the limited amount of time available to produce so many handbooks. It was noted that decisions about what information should be contained in the manual and what in the handbooks took on an entirely different complexion if these were being produced simultaneously from the case where there would be a major delay in the handbooks becoming available.

In general, the Handbooks will contain the same definitions and classifications as the Blue Book. However, in special cases such as income distribution, consumption and external transactions, some variations may be necessary.

E. The SNA and developing countries

June, 1986 (1)

In the previous SNA revision, developing countries views could not be adequately reflected since national accounting systems were at that stage only rudimentary. The present revision should deal much more extensively with questions specific to developing countries now that most developing countries have had a chance to elaborate their systems of national accounts. The purpose of th[e first inter-regional] meeting was to learn from that experience and ensure that those representatives of the developing countries who would go on to subsequent expert group meetings would be able to represent not only their own experiences but, more generally the views of their colleagues in other developing countries.

The first major discussion point was whether the SNA could be equally applicable for both industrialized and developing countries. All participants very strongly endorsed the view that **the system applies equally to developed and developing countries. All issues relevant to either type of country should be covered in the Blue Book.** It was pointed out that in some cases the distinction between one developing country and another may be greater than between some developing countries and some industrialised countries.

¹ For most of the revision process, the title of the present United Nations Statistical Division (UNSD) was the United Nations Statistical Office (UNSO)

This reinforced the need for a system adequate for the whole spectrum of economic development. There are some features which are specific to developing countries but these should be integrated within the whole rather than used as the starting point for a separate subsystem.

June, 1986 (2)

The system in the Blue Book will be applicable as a common system for use by industrialised and developing countries alike. It will deal evenly with problems faced by countries at different levels of economic development.

1. *Problems of implementation of SNA in developing countries*

June, 1986 (1)

Typically, there have been differences in implementation between industrial and developing countries with many developing countries only producing consolidated accounts and perhaps input-output tables but not going on to produce sector accounts. This concentration on the consolidated accounts has presented a system to the users that is unbalanced and therefore betrays its general usefulness in the overall analysis of economic conditions. There is common consensus that it would be helpful to portray the full system of national accounts as a series of separable components, each of which could be elaborated in increasing detail. Emphasis should be laid on the desirability of integrating all the components paying attention to local conditions, rather than concentrating on elaborating one or two of the components in exhaustive detail first.

The meeting went on to discuss factors limiting the full implementation of the present SNA in developing countries. The reasons cited were lack of clarity in the manual, shortage of resources, shortage of expertise, inadequate data, and the special characteristics of developing countries. In many cases, extension of the basic system has been limited by lack of data. Another issue concerned the timeliness of available data. With increased emphasis on the need for timely data, there has been some tendency to push for disaggregation in time period rather than in detail. In this connection the need to link quarterly indicators and annual national accounts was mentioned explicitly as a subject for attention in the forthcoming Blue Book and repeated emphasis on timeliness. Another issue of concern was the lack of correlation between commercial and national accounting practices and the lack of adequate explanation of the interaction between the two.

Several participants remarked on the apparent conflict between providers of statistics and users in planning offices. The planners were seen frequently as requiring data to be both accurate and timely and to have difficulty understanding the inherent conflicts in these demands. It was remarked that the margins of error acceptable for planning may be different from those for other applications. For some forms of planning, particularly those where extensive analysis of an input-output table was involved, it may be that data compiled less often than annually was perfectly adequate. However, in the passage of time since the early 70s, when production accounts had often been developed for physical planning requirements, attention has tended to shift towards problems of inflation and monetary concerns and the demand for more timely data have accelerated. The need for increased and continuous communication and interaction between the users and producers of statistics was also referred to several times .

This lack of interaction was highlighted in the discussion about who uses national accounts. Many participants said that they were not closely involved with the domestic

users of the accounts. If these appeared in published form there was little need for national users to contact the providers of statistics directly. They therefore were most conscious of the demands made on the statistical office by the international organizations, especially the World Bank, International Monetary Fund and UN Statistics [Division]. Local demand usually is concerned with planning matters, with exchange rate policy, balance of payments issues, tax reforms, the formalization of the budget and simulations showing the effects of oil price changes. Demands for particular sets of data covered the urge to produce half yearly rather than annual data, more information on a public/private split of aggregates, savings by sector, investment by type and kind of activity unit, real earnings, regional data, information coming out of household surveys, including income distribution, public sector surveys, more information on debt and monetary circulation. The question was raised whether it would not be useful to present population and other demographic/social indicators in conjunction with national accounts in future.

It was generally agreed that national accountants should respond adequately to the demands by planners and other users for quick/advance estimates. Otherwise planners will make their own estimates which may be inferior.

Traditional use of national accounts for planning has contributed to the development of production accounts, e.g. growth measurement, input-output analysis, saving ratios, regional analysis and investment ratios.

More recent types of analysis might stimulate a more balanced development of national accounts. These include demands by the Ministries of Finance and Central Banks to analyse the public sector, assess the tax base assess the dependence of the country on foreign exchange, and study the impact of changes in export prices and external debt on the domestic economy. Governments, lending agencies and private corporations also make extensive use of national accounts to assess feasibility of development projects.

One reason cited for limited implementation of the SNA was the lack of expertise and the need for training of staff from national offices. **There is a need for improved training of national accountants.** This should cover not only training in the compilation of the data but also in the appropriate analysis of it. It should extend to the users of the data as well as the compilers. The possibility was raised of encouraging training to be provided in national accounts as part of university courses and requests were made of the UNSD as to why they could not undertake the same sort of formal training as the IMF did on its specialized statistical systems. As a case in point the improvement in African demographic statistics was quoted. This is an area where there has been extensive training and the fruits have been realized in a general improvement in these statistics. Although all participants felt the provision of clearer and more extensive handbooks on compilation practices would improve national accounts generally they felt that the importance of technical assistance and training to improve the accounts could hardly be over-emphasized. Many participants remarked on the lack of opportunity for compilers of national accounts from different countries in the developing world to get together to exchange experience and discuss mutual problems.

In 1995, the IMF department of statistics introduced a course based on the 1993 SNA at their training centre to complement the courses held on the IMF's specialised systems.

F. Looking back

In retrospect, the intentions to produce the Blue Book and associated handbooks simultaneously may seem hopelessly naive. In part this is true. It was difficult to realise initially just how many resources writing the Blue Book would absorb and how little capacity would be left for other work. Further, as the revision progressed, it became clear that it would be difficult to write a handbook before the whole Blue Book was complete and still guarantee consistency. It should also be recognised, however, that the 1993 Blue Book is much more extensive than originally envisaged and in effect includes material that updates documents previously seen as handbooks. In addition to the material in the 1968 Blue Book, the 1993 Blue Book covers material previously described in handbooks dedicated to constant prices, financial accounts and balance sheets, and the classification of tangible assets.. Progress on handbooks is referred to as appropriate in the following text

Chapter 2. Harmonisation of the SNA with other systems

A. General Issues

1. Concepts, definitions and classifications

June, 1986 (1)

One of the driving forces behind the call for a review of the SNA was the need to reconcile and harmonize the classifications used by different systems. This included specifically the IMF's Balance of Payments Manual (BPM), Government Financial and Money and Banking Statistics Systems (GFS and MBS); but, in addition, reference was made to the industrial statistics classification, agricultural classifications as used by FAO, the household sector information referred to in publication M61 (The distribution of income, consumption and accumulation of households), employment data as used by ILO, and enterprise accounting. Since the SNA is intended as an organizing framework for the whole range of economic statistics, it should allow relating analysis of specialized fields with the general economic conditions portrayed in the national accounts. This can only be done effectively if the various specialized systems can be related to the definitions in the SNA. The extra detail in some systems, for example on taxes, may enrich the basic SNA data. On the other hand, sometimes the specialized systems would need extra breakdowns to permit the calculation of SNA concepts, one example is the distinction between current and capital transfers in the balance of payments. A major distinction between the SNA and other systems was that typically it is only the SNA that includes imputations.

Two papers produced jointly by the UNSO and the IMF, one on the harmonization of government financial statistics with SNA and one on the Balance of Payments statistics were presented. Separate expert group meetings will discuss each of these in detail. Further there will be an expert group meeting which will discuss the money and banking statistics system along with other financial flow issues. The BPM and GFS could be seen as points of departure for SNA data; budget constraints on statistical offices implied that maximum use should be made of these and they were a good basis for the calculation of sector accounts in developing countries.

It had to be recognized that the specialised systems responded to particular needs and where inconsistencies were inevitable it would be helpful if the reason for these, related to analytical needs, could be spelled out in more detail.

Nevertheless, it was felt there should be some level at which total reconciliation should be possible between the alternative systems even if this was at a fairly aggregate level. The main difference between the sectoring in GFS and MBS is functional, rather than institutional. Although this introduces discrepancies in many countries, the differences may in practice be insignificant. Again, it was clearly stated that the SNA Blue Book should give a conceptually clear and correct framework for economic accounting. The strength of the SNA is its total consistency but it should be recognized that specific areas need consistency valid within that area and may lead to differences within the more detailed areas.

There was agreement on the importance of reconciliation and harmonization of data and concepts in the SNA and specialized statistical systems. Bridge tables such as those linking GFS and BOP with SNA concepts were thought to be useful as devices for identifying differences.

There was general support for the practical implementation of the reconciliation through sequential compilation of GFS, BOP and other specialized statistics, which thereafter are incorporated in the national accounts, and reconciled with other national accounts data.

The SNA must remain the co-ordinating framework for all economic statistics. Harmonization of the concepts in SNA and specialized statistical systems should not distort either the conceptual framework of the SNA nor that of the other systems. Lack of data was not thought to be a sufficient reason for modifying the concepts in the systems to be reconciled. On the other hand, it was recognized that minor changes in either system might be helpful to simplify the correspondence between their respective concepts. It is particularly important to harmonize at the level of the main aggregates.

There was also discussion about reconciliation with commercial accounting practices; in this connection, the experiences of francophone Africa with a "plan comptable" were quoted. This was a system which allowed bridge tables from commercial accounting to SNA concepts to be built very easily. In that part of Africa it has been possible to amend commercial accounting practices so as to derive national accounting aggregates with greater ease than was the case before. A "plan comptable" is being developed for banks, governments agencies, and farms. Similar experience was reported from Latin America but unfortunately was less successful there, perhaps because it was too ambitious.

Reference was also made to the need of reconciliation within UN-sponsored classifications. A particular instance cited was industrial statistics where the use of the term "value-added" has a quite different definition from the SNA concept.

Harmonization with the SNA should be particularly emphasized for industrial, agricultural, employment, and income distribution and household sector statistics.

There was also discussion about micro/macro links and the use of household surveys. In many African countries, household surveys are conducted frequently but the information is not fully utilized in national accounts and are sometimes regarded as being a separate statistical exercise. In Latin America also there are many continuous household surveys but again bridge tables are necessary in order to show how the survey results can be incorporated into national accounts.

Micro-macro links are not restricted to households only. They also include the links between the administrative records, accounting data and survey results for enterprises and government units and the macro presentation of those units in the national accounts. In this context mention was made of the positive experiences of several African countries with a "plan comptable" for enterprises, financial institutions, government and large agricultural producers. The standards of the "plan comptable" conform closely to the requirements of national accounts.

June, 1986 (2)

Although much attention was paid to the reconciliation between balance of payments, government finance statistics and the SNA, it should be recognized that there are a number of other important areas where links need to be established. These include money

and banking statistics, industrial statistics, agriculture, the household sector, income distribution, employment. Sometimes the concepts were fairly close in alternative systems and the specialized systems simply provided extra detail. Sometimes the coverage was different because of problems of imputations and attributions. The aim of the work originally had been for total harmonization but as work has progressed this now looks less feasible. The main reason preventing harmonization is that the specialized systems often have different analytical objectives from those in the SNA. This has led to an alternative procedure of specifying reconciliation between the alternative systems via bridge tables to clarify the differences for users and producers. What is suggested now is that both approaches should be combined, that unimportant conceptual differences should be removed and the essential ones clarified. The question then was at what level the harmonization can be carried out and whether any areas in the SNA can and should be changed in order to accommodate this.

The group noted the burdens placed on respondents especially in developing countries in providing data on specific sectors of the economy in terms of the SNA on the one hand, and in terms of related systems (such as balance of payments, government finance, and money and banking) on the other. While recognizing the coordinating role of the SNA as a framework for all economic statistics, the expert group felt that, with a view to reducing reporting burdens on countries, the SNA and related statistical systems should be fully harmonized as far as possible. It, therefore, recommended that this issue be examined in depth in the relevant expert group meetings. The expert group suggested that, in formulating proposals for harmonization, the analytical uses and requirements of internal consistency of the SNA on the one hand and those of related systems on the other should be kept in view.

The burden of producing data according to different systems was noted and all participants recognized that a main benefit to be achieved from harmonization rather than reconciliation was a lightening of the burden on reporting countries. Although it will be difficult to achieve harmonization, this should be the goal of the exercise presently under way and should be kept in mind as the desired objective in each of the specialized expert group meetings. Only when harmonization was absolutely impossible should there be recourse to reconciliation.

It was pointed out that one cause of incompatibility between data had to do with lack of contact between the relevant compilers rather than basic inconsistencies in the systems they were implementing.

It should be noted that there was great determination to obtain harmonization but it was recognized there would be costs associated with it and the costs must be borne on both sides; both the SNA and the specialized systems would have to make accommodations to the goal of harmonization.

Harmonization was a concept that applied to definitions of transactors and transactions and to the classifications of transactors and transactions. If this harmonization was achieved, it would minimize the amount of data required in order to complete the relevant parts of the SNA and related systems. Harmonization of the accounting structures would further lead to harmonization of data presentation.

2. Data Links

The earlier discussion on the harmonization of the SNA with the alternative statistical systems concerned mainly the harmonization of concepts and definitions of transactors and transactions. One participant argued that harmonization should be required at the

basic data element level. With the advent of large computerized databases this would mean that alternative presentations could be produced fairly readily and the question of the harmonization of data presentation would be a lesser consideration. An example of the advantages this would bring was that reinvested earnings could be available in alternative systems without necessarily having the same aggregates. This argues for a bottom up way of achieving harmonization.

This view was not unanimously accepted by the group and a number of participants felt that the organization of the SNA should be a top down process; one should get agreement on the system and presentation and then determine what basic statistics the compilers need to produce. Indeed this approach was that accepted in the discussion described in the preceding section. There was agreement that there needs to be clear definition given to the producers of statistics but units providing information can only give figures they know. It therefore follows that it is important to define the flows and know how they are generated from the basic recording in individual accounts.

One of the problems with the bottom up approach is that many of the users are only familiar with key aggregates and not in the details of their contents and the relation between these. It would therefore be difficult for the users to function effectively in a system where consistency and harmonization was defined at a very detailed level.

It was also pointed out that the differences in institutional, social, and economic conditions in different countries was so different that it may be very difficult to establish harmonization at the very detailed level while it still remains practical to have harmonization at a rather more aggregate level. But while admitting that it may be impossible to harmonize the origins of the basic data, the handbooks can still give guidance on the best use of sources.

The group endorsed the importance of work on harmonization of the SNA and related systems, such as Government Finance Statistics and Balance of Payments. It noted that harmonization offers benefits both in compilation and use but will also involve some sacrifices. In this regard, the group realised that in order to achieve harmonization, changes to the SNA and to related systems may be necessary, and there should be openness to change on all sides.

The expert group felt that, as far as possible, the SNA and related statistical systems should be fully harmonized with a view to reducing reporting burdens on countries. It therefore recommended that this issue be addressed in depth at meetings of the relevant expert groups and suggested that, in formulating proposals for harmonization, account be taken of the analytical uses and requirements of internal consistency of the SNA, on the one hand, and those of related statistical systems on the other.

The group also endorsed the need for harmonization with other classification systems for industry, agriculture, the household sector, and income distribution statistics. Further harmonized categories of employment and population need to be presented in conjunction with national accounts aggregates.

B. Harmonisation of the SNA and BPM

1. Consolidation of goods and services components

March, 1987

Work undertaken jointly by the Fund and the UNSO had focussed on the explicit and implicit links between the external sector account of the SNA and the BPM, and studied the availability of data in selected countries to narrow gaps between the systems. Detailed bridge tables, going from the balance of payments to the national accounts and vice versa were presented. Essentially, in the first table each standard component of the balance of payments is divided into sub-components, with each sub-component identified as to its location in the SNA. In the second table, the process is reversed with each sub-component of the national accounts being identified as to its location in the balance of payments.

The links shown in these tables are very complex, although in many cases the differences between the two systems are marginal and often unintentional. Examples of major differences are the treatment of factor and non-factor services, which in the balance of payments, contrary to the national accounts, are sometimes grouped together, and unilateral transfers, which are not segregated between current and capital transfers in the balance of payments.

From the studies of selected country practices, it became apparent that many of the details needed to effect a reconciliation were not available, so that consideration was given to establishing the links at a more aggregate level. An example of a link at a more aggregate level of detail would be one established at the level of total merchandise exports and imports, rather than at the level of individual commodities.

The Group agreed that, in order to simplify the reconciliation of the balance of payments and the national accounts, the national accounts details for exports and imports of goods and services should be the details that are needed for internal consistency. The development of a more detailed breakdown should be done in such a framework.

2. Classification of services, income, and unrequited transfers

In discussion reference was made to the views of a small, representative group of national balance of payments compilers who, in the capacity of consultants, assisted the staff of the Fund in drafting the fourth edition of the BPM. Originally, it had been the view of these consultants that there should be no more than 50 standard components. In the end, however, they agreed to distinguish more than twice that number of standard components. Nevertheless, by now it has become clear that there is a need for an expansion of the current list of standard components, particularly with respect to transactions in services.

The EC's representatives agreed that they were interested in more detail, but pointed out that there was a general interest in more data on services, not just in the balance of payments, but throughout the spectrum of economic statistics. In the balance of payments there should, at least, be a clear distinction between services, income, and transfers.

It was noted that in OECD member countries, over 60 percent of the labour force is engaged in the production of services, which generates a demand for more data on these activities. This demand is augmented by the data requirements of GATT (now WTO)

negotiations on services. Currently, there is no counterpart for services to the Standard International Trade Classification (SITC)².

Some practical difficulties to collecting data on services were also mentioned, such as the need to obtain data from what one could identify as service producing enterprises, which provide services as a by-product of the main operation. Another problem would be valuing cross-licensing arrangements for which no payment is made, while, in the income accounts, even if a decision can be made as to whether a particular return represents income or capital gain, the allocation of the flow by residency may still be difficult.

Factor income

A main concern of the Group was the identification of factor incomes in the current account of the balance of payments. Currently, factor incomes show up in the current account in five places; as direct investment income; as other investment income; as a sub-component of government transactions, reflecting the compensation of employees; as the labour income, n.i.e., component of other goods, services, and income, reflecting the compensation of border workers and seasonal workers; and as the property income, n.i.e., component of other goods, services, and income, reflecting the income on non-financial intangible assets. A proposed presentation of the current account, including all the detail required for the identification of factor income, was generally favourably received by the Group. Some experts queried whether all of the data would be available, and if not, whether it would be appropriate to request what would be difficult to provide. In this context, reference was made to the need to be clear as to what is required from a conceptual point of view. Practical difficulties about obtaining data could be addressed in a companion handbook to the next BPM.

The Group agreed that the balance of payments and the external sector of the national accounts should identify factor income items. In some case mainly with respect to compensation of employees, the identification may be difficult. Because of the importance of the concept, factor income should be recognized in setting up the hierarchy of the tables

Standard list for service items

Opinion on the need to expand the list of service items contained in the BPM was divided. It was recognized that the list is currently quite short and that developments since the fourth edition of the BPM have increased the desirability of incorporating new details. However, it was also pointed out that keeping service details to a minimum is consistent with the merchandise account for which no commodity detail is requested. The counter argument that was made suggested that the commodity detail on merchandise trade is available elsewhere, while details on international service transactions are normally only available in the balance of payments. Any development of the classification of services should be done in conjunction with other areas of the national accounts, such as input-output.

The Group agreed that a standard list of services items should be used as the basis for a harmonized presentation. These items would include the traditional items shown under services - transport, travel, etc.- and also those items that are becoming

² The Manual on Statistics on International Trade in Services was published jointly by the UN, EU, IMF, OECD, UNCTAD and WTO in 2002.

increasingly important as international transactions, such as financial services and communications. The details to be shown should agree with the Central Product Classification (CPC), preferably at a high level of that hierarchy. The Group agreed that those concerned with the CPC classification pay particular attention to the needs of the balance of payments and external sector accounts, so that harmonization between these accounts and other accounts, including input-output, be attainable.

Current and capital transfers

There is presently no distinction between current and capital unrequited transfers in the balance of payments. All unrequited transfers are included in the current account, so that the capital account reflects changes in financial assets and liabilities (net lending in the SNA). One reason why there is no distinction between the two types of transfers is the difficulty in determining the nature of a transfer. It was suggested that criteria that could be adopted for distinguishing between current and capital transfers are contained in the European System of Accounts (ESA). The remaining problem is whether to include capital transfers with the capital account or to incorporate them elsewhere in the balance of payments. (A concomitant problem is the treatment of purchases and sales of non-financial intangible assets. If these are not included in the current account, the current account will not be conceptually consistent with net lending).

The Group agreed that the distinction between current and capital transfers is essential to the national accounts. The Group, furthermore, agreed that harmonization between the balance of payments and the external sector account of the national accounts is desirable and that harmonization would be in the direction of recognizing capital transfers in the balance of payments. The Group saw some difficulty in implementing the concept of capital transfers for the balance of payments and recommended that the principles be clarified in a paper that is to include references to empirical cases. The placement of capital transfers in the balance of payments would be worked out on the basis of the review of capital transfers.

October, 1992

In March 1992 a meeting of balance of payments compilers met and agreed the draft balance of payments manual fifth edition. As a result there will be a very high degree of harmonisation between balance of payments and the SNA. The balance of payments compilers agreed that there should be a clear separation of goods and services from income flows, that the treatment of goods for process and repair should be consistent between the two systems, and that capital transfers should be introduced into the balance of payments accounts within a sub-division of the former capital account of the balance of payments to further extend the consistency with the SNA. On the other hand there was unanimous agreement among the balance of payments compilers that they do not wish to see imputed service charge for financial intermediation (FISIM) introduced into the balance of payments and this will not appear in the balance of payments manual.

The Expert Group welcomed the degree of harmonisation that had been reached between the two systems, noting that this had seemed unlikely when the Expert Group meeting on the balance of payments was held in early 1987.

The fifth edition of the Balance of Payments Manual (BPM5), reflecting this high degree of harmonisation with the SNA, together with a Compilation guide and a Textbook have now been published by the IMF. Annex II of the 1993 SNA explains the relationship between BPM5 and the SNA and contains detailed bridge tables.

C. Harmonisation between SNA and GFS

1. Structural relationships

March, 1987

The first questions posed concerned the types of data on government needed by GFS to guide IMF and member countries in their fiscal and financial policies and the types of data needed by SNA for the construction of national accounts, and the extent to which concepts serving the different objectives inherent in both systems could be harmonized and reconciled.

GFS data were developed to meet the need for measuring government in a format which could be useful for analyzing the financial and macro-economic implications of government operations. A useful point of view taken in this regard was to measure government differently from the market sector of the economy because the motivations for government behaviour, largely non-market and political in nature, were different from those governing the market oriented sectors of the economy. To do so, a functional classification of government and other sectors of the economy was adopted. In general, this functional definition or classification is an important aspect of IMF statistics. Another is that the statistics have to be verifiable. There cannot be imputations, which are not verifiable, and the numbers have to come out of the accounting system, generally on a payment basis. Reflecting the different motivation of government, IMF statistics on government embrace analytical concepts which depart from those in analysis applicable to other sectors. The most outstanding of these is the counting of lending with spending rather than with borrowing, because governments, to a varying degree, lend to promote public policy purposes. Therefore the key variable, the overall deficit/surplus, is calculated after including with spending the lending undertaken by government for public policy purposes. There are many concepts of government which are not of primary concern to this type of analysis. IMF missions do not try to make an estimate of the government's physical output; there is no special interest in government consumption as opposed to government transfer payments as an operating concept, and no attempt to calculate the net worth of government.

In contrast, in the SNA, the concepts of government product, value added and government consumption are very important. Accruals data are necessary to measure production and the distribution of income and estimates are necessary in order to arrive at several meaningful concepts. Furthermore, as a system that looks at all sectors of the economy, there is the necessity of maintaining symmetrical treatment of the activity being measured so that the statistical data for government can be aggregated with those for the rest of the economy.

These differences in objectives, however, allow certain opportunity for harmonization and reconciliation. Concepts of no importance in one system need not be reconciled when they are not a part of the other system. On the other hand, concepts that are very close, like the distinction between the concepts of current and capital in GFS, which parallel those the SNA, may be discussed for possible reconciliation. Furthermore, where, asymmetrical views of the same transactions arise, some systematic approach may be sought to the question of how to reconcile the two views in a system which looks at one sector and a system that looks at all sectors.

As part of the efforts to harmonize GFS and SNA, the United Nations Statistical Office (UNSO) and IMF undertook joint case studies of ten countries to examine what was being done in practice in measuring GFS and SNA. In a number of cases, neither system

followed the rules that were being set down; in others, certain shortcuts and departures were made in practice for both systems.

In the ensuing discussion, participants expressed different views regarding the extent and nature of the differences between the GFS system and the SNA. One view was that there could have been far fewer differences, if the starting point for the development of GFS had been the SNA, since many GFS aggregates were derivable as alternative concepts within the SNA. It was stated that the European Community (EC) had undertaken an exercise to create what was called the “budgetary presentation” from national accounts data on government with relatively few re-classifications, imputations and re-routings of data.

A different view was that the procedure for compilation could not obviate the conceptual differences deriving from the different objectives of both systems. While in some EC countries the national accounts were so well developed that government finance statistics could come out of the same compilation process, this was not the case elsewhere. In most other countries of the world, GFS correspondents had to draw data together from various national sources and make the necessary adjustments so that data in the standardized, internationally comparable format of the Government Finance Statistics Yearbook could be obtained. As a result of these efforts, the data published in the GFS Yearbook for 134 countries had been used by the UNSO for the development of national accounts in developing countries and for comparison with national accounts in both industrial and developing countries.

Differing views were expressed regarding the relative importance of each system for the economic analysis of government operations. One participant thought that the GFS system was focused primarily on the short term analysis of government operations while the SNA provided a more general and complete framework allowing both short- and long-term economic analysis. While useful as a short-term framework, the GFS system, in this view, left out important issues of longer term structural analysis of government, such as analysis of government output, wealth, accumulation of assets and allocation of resources. Other participants argued that the reverse was true, particularly if one studied public finance literature, where GFS concepts were selected for use, for example, in economic analysis of tax reform and the effects of taxation on the labour supply. In the OECD Committee on Fiscal Affairs project on tax classification, problems were encountered with SNA figures because of their accrual basis and insufficient clarity on the distinctions between tax and non-tax categories and between direct and indirect taxes. Moreover, since OECD revenue statistics went back to 1955 and GFS data had been published back to 1970, it was not accurate to argue that the GFS system was useful only for short-term analysis. Analysis of these data revealed important trends, movements and variations.

It was further pointed out that the difference in the analytical focus of GFS and SNA was not one of short- or long-term analysis but of statistics for one sector in contrast to statistics for all sectors. GFS are the sectoral statistics of government and constitute the language of government and of public debate about government in the economy. Discussion of government and fiscal policy is generally in terms of revenue and expenditure, the deficit and government borrowing. These concepts are not explicitly included in the SNA, which measures government product, government value added, government consumption, government capital formation and government net lending or the change in government net worth. This provides an analysis of the government sector in terms comparable to the analysis of other sectors of the economy as a whole but not in terms of the specific analytical needs of the government sector in itself. Because of the different nature of the government sector, there is no concern in GFS for the government’s asset position as a reflection of the government’s wealth. GFS focuses on the breakdown

between current and capital expenditures, the mix of total expenditures between transfers, wages and salaries, interest payments, and purchases, and the extent and nature of tax collection, in order to promote optimum development of the national economy.

There was general support among participants to harmonize concepts in both systems to the extent possible to bring the two systems closer together. However, the issue of harmonization generated discussions regarding the proper approach. Questions were raised regarding the status of one system vis-a-vis the other. One view expressed was that harmonisation should proceed to establish the GFS system as a complementary system to the more general framework of the SNA.

An alternative view towards harmonization posed a number of questions on the appropriate relations between the two systems existing separately. Should GFS try to include in its framework all measurements for government currently undertaken in the SNA including certain imputations, depreciation estimates, measurements of consumption and capital formation beyond what normally were available in government accounts? Should the SNA try to include all of the cash concepts of GFS though they do not correspond to the accrual basis of the SNA? Or, should the two different systems be delineated, underlining their relationships without attempting to have in each system concepts foreign to its basic principles? A proper delineation of similarities and differences could establish harmonization procedures that could encourage cooperative sequential divisions of labour between GFS and SNA compilers whenever warranted. GFS compilers could compile government finance statistics from government accounts, which would then, with further imputations and adjustments, be converted into SNA statistics.

The group concluded that for the analysis of the government sector, both the System of National Accounts and the Government Finance Statistics System are useful and mutually supportive. Though it is not proposed that the two systems be altered in such a way that one provides all the information that is needed in the other, **a major concern of the group is to find out whether it is possible to have additional information in the SNA or in GFS in such a way that one provides all the information that is needed for the other.**

Changes to facilitate reconciliation

Following a brief description of the GFS analytical framework, some of the basic concepts in the GFS system were also mentioned:

1. Gross measurement of government payments and receipts.
2. Distinction between current and capital transactions (as in SNA).
3. Classification of transactions by the nature of what flows in the opposite direction.
4. Division of flows in exchange for others' liabilities to government between those undertaken for public policy purposes and those for the management of government liquidity.
5. Balancing of the analytical framework by the change in cash balances.

The super-imposition of a number of SNA components on the GFS analytical framework, illustrate some of the differences between the GFS system and the SNA, as follows:

1. GFS are organized into a single balanced account, in contrast to the several accounts utilized in SNA.
2. The classification of taxes differs, for example, the classification of estate and gift taxes as capital transfers in SNA but as taxes and current revenue in GFS.
3. Balancing concepts differ in GFS and SNA.
4. There is a need to impute transactions in SNA, while GFS in general avoids the imputation of transactions.
5. There are differences in perception of some transactions, for example, those involving re-routing in SNA.
6. SNA adopts the accrual basis, while GFS are compiled primarily on a cash basis.
7. There are different consolidation rules.

It was agreed that there is a need to reconcile differences between both systems. A number of topics to be discussed during the meeting related to the harmonization of both systems:

1. Tax classification,
2. Social security funds sectorization,
3. Supranational authorities,
4. Debt cancellation as transfers, and
5. Monetary authorities sectorization.

Some of the other questions that were to be discussed during the week were mentioned briefly, such as the depreciation of government fixed assets, imputations and re-routings, etc., but these are SNA problems not directly related to the GFS system.

Small conceptual differences

A number of questions were raised about the use of bridge tables to link the GFS and SNA systems:

1. Is it fruitful or detrimental to have a detailed bridge table to delineate interrelationships between both systems?
2. In the past, these bridge tables have been used in a few countries to obtain SNA government accounts from GFS data; should this continue to be done in countries where SNA are not available even if it is not complete?
3. What should be done about small conceptual differences between both systems which remain after conceptual reconciliation efforts?

The use of detailed bridge tables for describing the link between SNA and GFS was favoured by several participants and was considered especially useful in a number of countries that have GFS data but not SNA.

At the UNSO, officials have been working with bridge tables in an effort to link both systems. This has been very complex work because of many small differences between both systems. They have established operational bridge tables, i.e., bridge tables with figures, in some countries to convert from GFS to SNA; these bridge tables vary somewhat from country to country.

As an example, the sequential procedure used for the Netherlands involves the following steps:

1. Use of GFS data (on a cash basis) and for subsequent conversion to an accrual basis.
2. Conversion through operational bridge tables.
3. Adjustments for transactions in kind, etc. (different from country to country).

There are two uses for applying this technique:

1. If a country has GFS and SNA data available, then the sequential procedure can be urged to compare them and improve them.
2. If GFS data are available, but not SNA data, then SNA government accounts could be derived from GFS.

In the UNSO, this exercise has been carried out also for Venezuela and efforts are currently being made for Mexico.

The meeting concluded that it is difficult to give general recommendations on how to handle apparently minor conceptual differences between the GFS and the SNA, since differences may be large in one country and small in another. Conceptual bridge tables should be constructed to show all such differences.

2. Data links

Originally the idea of using GFS-SNA bridge tables was with the purpose of identifying conceptual differences between GFS and SNA in order to explain them to users. However, the emphasis has shifted to establishing data links not only to identify conceptual differences but to obtain an approximation of SNA data. Bridge tables are now being used at the UNSO for that purpose.

Participants from other institutions and from different countries agreed that the sequential compilation procedure leading from government accounts, to GFS, to SNA, is very useful and should be applied. It was also agreed that bridge tables are very useful even if they cannot be completely filled out with numbers. However, the work of preparing a bridge table should be done by GFS and SNA people jointly in each country.

A question was raised as to how to go from a cash to an accrual basis. This is one of the difficult steps in the sequential procedure. It was also mentioned that for countries with high inflation, the use of accrual or cash basis can make a big difference. It cannot be said

that cash basis or accrual basis is better than the other, but rather that they are complementary.

Some of the participants at the meeting work in offices which are responsible for preparing both GFS and SNA. They found the recommendation for using bridge tables to be very reasonable and acceptable and they believe these tables will help improve the information for both systems.

A distinction was also made between countries, particularly OECD countries, that may have facilities and resources to develop both GFS and SNA systems and establish a bridge between them, and other countries, where resources and information are scarce; in these countries, if GFS data are available, the SNA people can use them to obtain approximate SNA accounts for governments.

It was concluded that operational bridge tables, that is bridge tables with figures, are an important tool in identifying why the numbers shown in the two systems are different. Such bridge tables are useful both for the users and producers of data. In those countries where no sector accounts for the general government are available within the national accounts, the GFS data and the operational bridge tables may serve as a first step in preparing estimates for the general government in the SNA.

3. Reconciliation of GFS and SNA

April, 1991

Unlike the BPM which had been substantially harmonised with the SNA, it was recognised that the Fund's government finance statistics differed quite basically from the SNA in many aspects, particularly the coverage of transactions, timing of recording, and analytical framework.

A draft annex showing the detailed reconciliation between GFS and SNA was prepared and discussed by the Expert Group in April 1991. Soon afterwards, it was decided not to include this in the 1993 SNA because the GFS was itself to be revised and thus a new document showing the inter-relationship would be needed. The revised version of the Government Finance Statistics Manual was published in 2001.

D. Harmonisation between the SNA and other statistical systems of financial flows and balances

1. Analytical objectives and structural relationships

September, 1988

This topic of the agenda was aimed at establishing the appropriate role for the analysis of financial transactions in the SNA in relation to other statistical systems, such as the IMF's Money and Banking Statistics (MBS) or flow of funds analysis, that are specifically directed at financial analysis. The present SNA provides insufficient detail in the capital finance accounts to permit detailed analysis of the ways in which sectoral savings/investment gaps are financed, A major issue that needed to be addressed was whether the SNA should be expanded to provide the basis for such detailed analysis or whether such concerns should remain with other statistical systems. In either case, the objectives of and the links between the SNA and these other systems needed to be examined.

It was recognised that SNA and specialised financial statistics such as MBS have different analytical objectives. The SNA provides a comprehensive framework for measuring and analysing the determinants of income (production, and distribution and redistribution of income and wealth) and attempts to examine the extent to which each sector of the economy is involved in each of those determinants of income. As transactions involving production and distribution of income and wealth are classified in the same manner for all sectors, the analysis is also able to determine the effect of the actions of one sector on the income of other sectors as well as the limitations imposed by other sectors' actions on the income of the sector under study.

The purpose of the data on financial assets and liabilities included in the accumulation accounts of the SNA is to enable the analyst to assess the effects of production and income distribution on the asset and liability portfolio of each sector and, of equal importance, to assess how this portfolio impinges on the sector in the execution of its production plans and in its possibilities of income generation. The incorporation of accounts of financial institutions enables the SNA to analyse the intermediary role of financial institutions in this process.

The Group recognised that MBS focuses on a narrower analytical objective, that is, on relating a concept of money to the domestic and external positions of banking institutions. In contrast with the SNA, MBS is designed to provide a standard set of analytic financial aggregates that facilitates the integration of money, credit, and balance of payments analyses. Monetary statistics are compiled by countries because of the demonstrated relationship between money growth and real output, prices, and the balance of payments and their relevance for the formulation of financial policy. There is no universally applicable approach to monetary analysis or policy and thus there is no single analytical framework which can encompass the needs of all users. MBS is, however, sufficiently generalised to permit assessment of the linkages among the banking sector, the balance of payments, and the other domestic sectors of the economy, with special emphasis accorded to the Government or public sector. These constitute key elements of a financial program, focusing on the principal financial targets, that is generally applicable.

Approaches to monetary analysis have been undergoing significant change in many countries, in part because of the substantial innovation that has affected financial markets, financial institutions, and financial instruments. The concept of money itself has undergone considerable revision since the 1968 SNA. Many countries now tend to focus on monetary measures considerably broader than that of currency plus transferable (or demand) deposits, which previously was regarded as having a generally stable relationship to income. The quality of this relationship has declined, owing to changes in the structure of financial institutions and instruments that have increased the substitutability of other assets for narrow money, while higher rates of inflation have made it increasingly costly to maintain non-income-earning balances. Countries have therefore tended to focus on a variety of money measures, which include nontransferable deposits (time, fixed, and savings accounts) and often short-term securities issued by the banking system, in an effort to identify the particular mix of instruments that bears a stable relationship to target macro-economic variables. In addition to these measures comprising only bank liabilities, many countries have developed even broader liquidity concepts, which include financial liabilities of other sectors that, from the point of view of the holder, can be easily substituted for banking sector liabilities (treasury bills, commercial paper, etc.).

In the discussion, the Group concluded that **both the SNA and MBS provide a picture of the economy, including information useful for decision making. The SNA is a broad system, encompassing both financial and non-financial transactions as well as balance**

sheets. MBS focuses on financial activities and related stocks. The SNA and MBS have different objectives, and the SNA should not be expected to embrace all of their objectives but only those relevant to national accounts analysis. In this connection, one participant noted the difficulty of having one presentation that would meet all possible analytical uses. The consensus of the Group was that the SNA should not define a monetary concept, as this would soon become outmoded. There was support, however, for the inclusion of an explanation of monetary concepts and the range of monetary aggregates in a handbook so long as these explanations were updated periodically. It was suggested that, in any event, the SNA classification of financial instruments should be structured in such a way that a variety of monetary aggregates could be derived.

One participant, noting that in the present SNA the various accounts for the financial system are identical to those for other sectors, raised the possibility of adopting a three-dimensional approach for the financial sector (that is, by instrument as well as by creditor/debtor sectors), similar to that in the 1968 SNA Table 24, "Financial transactions of the detailed sub-sectors". There was some support among the Group for this proposal. An additional question that would need to be addressed in the discussion of subsequent agenda items was whether such an approach should be followed in the SNA accounts or in a supplementary table.

Several speakers questioned the stated MBS need for international comparability insofar as this could detract from the usefulness of the data for national policy-makers if carried too far.

It was noted that the SNA accounting presentation might not be the best framework for presenting monetary data, and that differences in the frequency and currentness of SNA and MBS data were an additional factor that could cause these two presentations to differ. Notwithstanding this, the links between the SNA and MBS are important, and the Group concluded that **consistency in definitions of transactors and transactions at higher levels of aggregation is critical to the complementary use of both systems. Consistency at other levels is generally desirable, but should not conflict with the preparation of statistics for particular analytical objectives.**

The Group also noted the Expert Group on Public Sector Accounts' conclusion that there was a lack of feedback in the SNA among the production, income and outlay, capital formation, and accumulation accounts, and that the SNA needed to be an integrated system. One participant questioned whether MBS served to facilitate integration with the IMF's government finance and balance of payments statistics, since the former system is based on stock data whereas the latter two are based on flows.

2. *Flow of funds accounts*

The present SNA includes information on assets and liabilities in balance sheets, reconciliation accounts, and capital flow accounts for all sectors; each of these accounts includes the same sector breakdown for assets and liabilities by type. In the sector balance sheets and accounts of the SNA no three-dimensional information is available on the links among the types of financial instruments, the sector which holds a financial asset, and the sector for which this instrument constitutes a liability. Outside the sector accounts, however, the SNA includes one table (Table 24) which presents changes in the holdings of financial assets by debtor and creditor sectors; the institutional and instrument classifications used in the table are consistent with those included in the rest of the system. Table 34 of Provisional International Guidelines on the National and Sectoral Balance Sheet and Reconciliation Accounts of the System of National Accounts (M60) includes the stocks of assets and liabilities by debtor and creditor sectors.

Apart from questions of linking the SNA to specific statistical systems for financial analysis such as MBS, which are discussed in the next section (Links between the SNA and MBS) a more basic question concerns the extent to which detailed data on financial flows should be integrated into the revised SNA. Flow of funds systems have been developed in a number of countries as extensions of the national accounts to deal with the specific issue of inter-sectoral financing. Flow of funds accounts in their simplest form are records of the financial transactions of a sector with the other sectors of the economy and with the rest of the world. They are a natural extension of the accumulation accounts of the SNA which identify aggregate savings/investment gaps for each sector and provide further information on the financial instruments through which the sector obtains funds from or provides funds to other sectors.

The Group recognised, however, that extending the present SNA accumulation accounts to a three-dimensional classification identifying creditor and debtor sectors would amplify those accounts to a greater extent than the income and capital accumulation accounts of the system, where such detailed inter-sectoral linkages are not included. On the other hand, flow of funds accounts facilitate the detailed analysis of how surplus sectors finance deficit sectors and, in particular, permit an analysis of the key role played in the economy by financial institutions even though their impact on the production, income and outlay, and capital accumulation accounts is quite small. Flow of funds matrices which include detailed information on financial instruments and sectors also assist the investigation of the impact of interest rates and exchange rates on financing decisions.

The Group recognised that the accumulation accounts of the present SNA were a form of flow of funds accounts but noted that, to date, only a few countries had developed accumulation accounts. Several reasons were cited, namely: data limitations; the complex requirements of the SNA; lack of staff; the fact that many countries are still following earlier versions of the SNA; lack of co-ordination between central banks and statistical offices; poor results in modelling, possibly due to data limitations; and the long lag inherent in the compilation of data, resulting in the use by analysts of more current indicators.

The Group decided that, paralleling the 1968 SNA accumulation accounts, **the SNA will continue to record, for each sector, changes in assets and liabilities broken down by type of instrument. In addition, the central framework should contain a three-dimensional matrix classified by instrument, creditor sector, and debtor sector in the general form of flow Table 24 of the SNA and stock Table 34 of M60.** While this expanded presentation would form part of the central framework, it would be given a **lower priority than that accorded the accumulation accounts. The instrument and sector classification schemes should be identical for the stock and flow matrices.** In order to encourage the wider development of flow of funds accounts in the context of differences in the stages of statistical development among countries, it was agreed that a variety of options for their development, that would be less demanding in terms of both resource and data requirements, should be articulated. However, since the SNA should propose a conceptually ideal system, such options should be elaborated in a handbook. The importance of providing a variety of options was emphasised, since "developing countries" were in no sense a homogeneous group. On the general question of the complementary role of handbooks in the implementation of the revised SNA, it was noted that unless these were issued simultaneously with the SNA, countries would lack practical guidance on how to implement the SNA's recommendations,

3. *Links between the SNA and MBS*

The decision made by the Group to include in the SNA detailed stock data, articulated by debtor and creditor sectors, means that there will be little difficulty, in principle, in reconciling these data with disaggregated MBS data. This would permit the integration of monetary analysis with the other SNA analyses indicated above.

The remaining question under this agenda item, therefore, was whether the links between the SNA and MBS should be further improved by expanding the present MBS to include financial flow data. On this question, most participants agreed that such an expansion would be desirable since monetary analysis is facilitated by flow data and since flow data are more readily reconciled with SNA transactions and more usefully integrated with flow of funds analysis. It was recognised that a flow analysis based on changes in levels would often be unsatisfactory, as it could be distorted by such factors as valuation changes, changes in accounting practices, and discontinuities in data resulting from changes in coverage or in the reporting population. The presentation of stock and flow data for MBS would have to be accompanied by a fairly detailed reconciliation account.

Although the Group considered an expansion of MBS to encompass flow data to be desirable, both for monetary analysis and for facilitating links with the SNA, it was felt that the development of a fully articulated and consistent set of flow data in MBS would be very difficult, owing to a variety of practical problems. These included the following:

1. While some of the adjustments necessary to move from stock data to flow data were in principle straightforward, others were more complex and problematic in nature; these would include the treatment of provisions and write-offs and the valuation of securities and foreign currency liabilities and assets.
2. The compilation of flow data by the IMF would require a much greater disaggregation of reported data than at present and would increase significantly the resources required to prepare and compile such data in both member countries and the IMF.
3. Collecting flow data directly or estimating detailed flows from stocks would be impractical for an international organisation such as the IMF. This could be done only by countries themselves, since they have access to the required detailed data, but this would be a major problem in countries facing resource constraints. It was further recognised that preparation of flow data might involve substantially expanded data collection within countries.
4. Since the analytical usefulness of flow data would be diminished considerably if such data were not compiled on a monthly (or perhaps quarterly) basis as are stock data, this requirement would add further to the reporting burden of countries.

In view of these practical problems, some participants suggested that should perhaps take a pragmatic approach, namely: (1) SNA should have flow data for those countries that regularly produce such data; (2) in cases where valuation and other non-transactions-related factors are not important, only stock data would be presented; and (3) in other cases, a middle ground could be sought by compiling "adjusted" stock data, rather than "fully fledged" flow data, whereby only the major non-transactions-related adjustments are made.

In summary, the participants agreed that **it would be desirable to have flow data consistent with MBS stock data, since flows better reflect underlying financial activity in a form consistent with the SNA. However, participants recognised that it would not be feasible in most cases for the IMF to derive flow data from the stocks due to technical difficulties with respect to provisioning, write-offs, valuation, and other reconciliation account items.**

E. Harmonisation with ISIC definitions

March, 1988

Terms such as establishment and enterprise are used in the 1968 SNA in a way that can give rise to confusion since it is not always clear when these are being referred to as reporting units or analytic units. As a first step towards seeking greater clarification of the more specific units, earlier expert group meetings had already agreed to the concept of dual classification that is using a classification by kind of activity for the production accounts and classification by institutional sector for the income and accumulation accounts. It had also been proposed that production accounts should be compiled for institutional sectors. Some discussion on this had already taken place at the earlier Expert Group Meeting on Household Sector Accounts and the Expert Group Meeting on Public Sector but the present meeting had to consider the issue specifically.

1. Institutional Units

As the 1968 SNA does not define institutional units explicitly, the definition of institutional units in the 1979 ESA was referred to. **The meeting agreed to endorse the general principle of the ESA definition and recommended that an institutional unit is a resident unit that keeps complete accounts and enjoys autonomy of decision in respect of its principal function.**

2. Enterprises

In respect of the institutional classification of corporate and quasi-corporate enterprises it was still necessary to make a decision on how to define enterprise units. How far was the distinction between enterprise and establishment determined by the degree of autonomy of decision-making? What was the appropriate way of treating ancillary activities? How should the balance be struck between reporting considerations and analytical ones?

It was argued that an enterprise ought to be defined as the smallest unit that satisfies the two criteria included in the definition of the Institutional unit, i.e., autonomy of decision and complete accounts. The question was raised of whether and how far it was ever appropriate to think in terms of family of units as the basis for analysis. Particular examples were cited where this might be useful; for example, in countries where conglomerates have a great concentration of power and one may wish to undertake an analysis in terms of these conglomerates or where one may wish to do analysis based on the distinction between domestically and foreign owned or between public and privately owned enterprises. It was suggested that such analyses should be regarded as extra analyses obtained by aggregation of the basic data and they did not in general provide a good basis for defining an enterprise. It was felt that the enterprise should be defined at the smallest possible level. In many cases, though not always, this may correspond with the smallest legal entity (in some countries partnerships may be borderline cases from the point of view of legality).

This implies that unincorporated enterprises owned by households or government, that are not legal entities but have a complete set of accounts, including information on withdrawals by households are also treated as enterprises. This would, inter alia, agree with the decision reached at the Household Sector Expert Group on how quasi corporate enterprises should be separated from the rest of the household sector. It was further clear that this linked the unit to the concept of transactor and no fundamental change in that concept was being proposed.

In the standard accounts for corporate sectors, the statistical unit is the smallest legal entity for which complete accounts are available; this unit is called an enterprise. Unincorporated enterprises owned by households or government, that are not legal units but have a complete set of accounts, including information on withdrawals by households, are treated as enterprises. For some complementary analyses, it may be useful also to compile data based on families of enterprises.

3. *Establishments*

Between 80 and 95 per cent of enterprises may constitute only one establishment but problems arise for the minority of cases where an enterprise consists of a multiple number of establishments. In considering production accounts compiled on an establishment and an enterprise basis it was necessary to think about the relationship between these and the degree of detail in each. Three different definitions of establishment were put forward representing different levels of pragmatism. What is presently referred to as a homogeneous unit of production in the ESA is a unit undertaking production of a single product in a single location using a single form of technology. This accords exactly with the theoretical definition of establishment given in the SNA. In common usage, however, some countries, for example the Federal Republic of Germany, do not work at a level lower than the smallest enterprise unit for which data is directly observable thus ensuring that no subjective elements are introduced into the basic data system. As is often the case in the discussion on the revision of the SNA, it was agreed that the conceptual correct definitions was the one presently included in the SNA for an establishment, but that some flexibility might be necessary in its interpretation in different countries. In practice the establishment unit would then be the unit for which production and an analysis of capital formation by kind of activity could be compiled. These production accounts typically would contain considerable detail on the types of intermediate inputs purchased even though the SNA presently included in the production accounts only intermediate input as a total.

The question arose therefore about how to link this information as compiled for establishments and enterprises. In principle very detailed information would be necessary in order to make a good match but in practice the use of different sources suggested that links at the level of more aggregate indicators only would be possible. There was a general consensus that it would be appropriate to base the link primarily on information related to value added.

The establishment unit should continue to be the statistical unit for production accounts and capital formation by detailed kind of activity.

Statistical units must be defined in the same way in the revised versions of both the International Standard Industrial Classification of All Economic Activities (ISIC) and the SNA.

In principle, the establishment is an enterprise or part of an enterprise that engages in one kind of activity at a single physical location. In practice, some establishments may be engaged in more than one activity and at more than one location.

4. Homogeneity

At present the definitions proposed in the ISIC draft relate only to the homogeneity of output and not of the inputs used in the production process. Input considerations are covered in terms of the technical unit. The ESA definition of homogeneous unit of production basically asserts a homogeneity over both input and output but it was argued that this may be unworkably idealistic in practice. Homogeneity of input will be affected not only by the difference between the use of modern and traditional techniques but also the degree of vertical integration within a firm. It remains for consideration whether some emphasis should be given to the question of homogeneity of inputs in order to determine a breakdown between, say, modern and traditional methods of production as a standard part of the SNA.

5. Ancillary activities

The main issues for discussion were as follows: Should the SNA adopt the definition of ancillary unit used in ISIC? Should outlays of ancillary units be distributed among the establishments they serve or should they be included in the same category as the predominant kind of activity of the enterprise? Under what circumstances should production not for sale in the market be identified as a separate establishment rather than treated as ancillary production? This is particularly important in respect of headquarter services, own produced electricity, crude oil produced and refined in the same establishment, repair activities, own account capital formation and services. In the main there are two possible approaches to this problem. One is to take the question of charging to cover cost and if the costs are covered either entirely or in large part this would be the basis for treating these activities as a separate establishment. The alternative would be to have a specific list of items to be always treated as separate activities.

The discussion quickly revealed that two types of activities were being confused here. The first were those sort of services such as book-keeping, storage, security, cleaning and maintenance which all firms typically have to undertake. Most of them are service activities and most are consumed internally. These are what are really intended as ancillary activities. One could conceive of goods being products of ancillary activities but not generally. The other cases being considered, such as the production and refining of oil and production of electricity, are to be regarded as integrated activities because the degree of their existence in different enterprises depends on the degree of vertical integration existing in that enterprise

In the case of ancillary activities as just defined, it was agreed that it would be appropriate to treat these as non characteristic output (secondary products) only if actually sold on the market. If the amount sold is greater than 50 per cent of the output then a separate establishment should be imputed for the production of this output and the activity would not properly be described as ancillary. It was recognized that distributing the cost of ancillary units across the various establishments of a multi-establishment enterprise would be difficult. It was felt that it would be appropriate to say they should be allocated according to some meaningful economic indicator without specifying very clearly what this would be but giving indications to the users of what sort of criteria would be appropriate. Wherever possible it would be sensible to ask the providers of the data to make this allocation since it is to be presumed their knowledge of the appropriate allocation is better than that of the compilers in the statistical office. In general, therefore,

the recommendation of the 1968 SNA in paragraph 5.19 on the allocation of ancillary activity is to be preserved.

It is important to distinguish between ancillary and integrated activities. Ancillary activities typically involve the production of services that are for use in the enterprise they serve and that are usually found in similar enterprises. Ancillary production is only shown as non-characteristic output if actually sold on the market. If sales exceed 50 per cent of output, the unit should be treated as a separate establishment, i.e. it is no longer ancillary. The output of ancillary activities should be divided between the establishments they serve, as recommended in the 1968 SNA (see para 5.19).

6. *Integrated activities*

The appropriate treatment for integrated activities was more difficult to establish. There was some divergence of opinion about how far it was desirable to make a separation of these activities in principle. If the separation were undertaken the resulting pattern of input would be closer to the pattern of homogeneous technology which some applications of input-output analysis assume. Against this it was argued that an input-output table should reflect the change in the vertical integration of industries over time and should be a reflection of economic activity not of engineering technique. It was recognised that if separation were the preferred alternative the question has to be asked at what level this separation should be practiced. Almost all manufacturing processes involve the creation of 'semi-manufactured' products during the production process, many of which do not have a market value. It was these sort of considerations that had led to the suggestion that an exhaustive list of items to be so treated should be prepared. In general, however, this was not looked on very favourably because of the difficulty of making this list exhaustive at present and for the future as technology changes. It was generally felt that the correct theoretical approach was to go for separation of integrated activities and that this was particularly important where products concerned fell in significantly different parts of ISIC. Specifically it was felt appropriate to identify separately agriculture, mining and quarrying, manufacturing and various service categories. The degree of detail that was felt appropriate to insist on would correspond with the existing one digit level of ISIC though it was recognised that this would change with the revision to ISIC and at the first level of the hierarchy there are likely to be many more headings. This issue needs to be revisited when the revised ISIC is clearer.

It was recognised that implementing this decision would present a number of very difficult problems in practice because of the extreme difficulty of allocating gross operating surplus to different stages in an integrated production process. Arbitrary invention of a price for an intermediate good which does not in fact exist on the market may be unhelpful so again the recommendation was that in principle separation was to be desired but it was recognised that in practice this may not always be possible though efforts should be made to adhere to the one digit ISIC level if at all practical.

A second consideration that was agreed was that if vertical integration exists but the various stages of integration take place in separate locations then the activities at each location should be treated as separate establishments.

"Integrated activities" refer to the production of different types of goods, and possibly services, such as may be carried out in a vertically-integrated enterprise. Examples include the production of crude oil together with refining and the growing of tea together with processing. If these different activities are carried out in separate locations they are always to be regarded as being produced in separate establishments;

if they are carried out in the same location they should in principle be treated as separate establishments although this may be difficult in practice.

Different establishments should always be created for two integrated activities if they belong to different classes of the first level of the ISIC.

7. *Coordination with ISIC revision*

Throughout the discussion there were frequent references to the detailed text of the proposed introduction to the third revision ISIC. Many participants felt that this text was in need of very careful editing and that this editing was important so that exactly the same text could be used both for ISIC definition purposes and for the Blue Book. It was understood that this paper was to be discussed at a classification meeting at the UNSO at the end of April [1988] and it was hoped that the concerns of this Expert Group would be represented at this meeting.

January, 1989

Mr. Beekman previously of the Classifications Unit at the United Nations Statistical Office and who happened to be attending a meeting in EUROSTAT (where this meeting was being held) came to discuss with the SNA meeting the introductory text for the revised draft of ISIC. An earlier version of this draft had been discussed by the expert group on the Production Accounts in March, 1988. That meeting had expressed the hope that it would be possible to adopt identical definitions on such concepts as establishment, enterprise, primary, secondary and ancillary activities and the definition of statistical units. Further, it had been hoped that identical text might be used in both the SNA and the ISIC draft. Since that meeting, however, a revised version of the ISIC draft has been prepared and [would be] before the Statistical Commission meeting in February 1989. The participants were concerned to note that not only had the comments made by the earlier expert group not been taken into account in preparing the revised draft of ISIC but that the status of the present draft and the fact that it was due to be approved by the Statistical Commission suggest that it was now too late to achieve identical definitions. Given the considerable effort that has been made in the process of reviewing the SNA and the links with associated systems it would be especially disappointing if it was not possible to achieve harmonisation in this particular area.

8. *“In principle” or “in practice”?*

A major cause of difference was the approach being taken by the two groups. Throughout the SNA expert group meetings much emphasis has been laid on defining the concepts that are theoretically correct and accepting later that approximations may have to be made to these concepts in the light of practical circumstance. This approach has been endorsed repeatedly as the best way of explaining the system to users and can of itself give guidance on whether and when approximations should be accepted. If the approximations are built into the definitions then the rationale for these is not always clear nor is it easy always to decide what approach should be adopted when conditions are somewhat different. In contrast, those concerned with the ISIC draft had been very heavily influenced by the practical problems that they faced typically in compiling business registers and therefore had deliberately chosen not to separate the “in principle” definitions from the “in practice” ones.

A point of major concern was the definition of establishment. At present the ISIC draft says “the establishment is defined as an autonomous part of an enterprise which engages in one or predominantly one kind of activity at a single location”. For the SNA the

establishment is defined simply as a unit that engages in one kind of activity at a single location. In discussion it was not at all clear to the participants of this meeting what ISIC intended by introducing the notion of autonomy. A number of instances were quoted where even large enterprises do not have full autonomy over all of the business decisions before them. For example where car production is separated between a number of enterprises, one producing parts, another producing bodies and so on, there must be centralised decisions taken about the relative levels of output of each of the components and this would seem to impinge on the autonomy of these enterprises. Nevertheless it seemed clear that such enterprises should be regarded as such both by ISIC and by the SNA. Not only was it not clear to the meeting what the concept of autonomy implied but it was felt that it would water down the definition of an establishment in a way that was unacceptable to the SNA. It was therefore urged most strongly that this qualification should, if at all possible, be removed from the definition of establishments as it presently exists in the ISIC draft.

9. Services

The participants also noted that they felt that the present ISIC draft did not reflect the increasing interest in services nor the evolution of aspects of the service industry. It was felt, therefore, that some more work in this area would be necessary at some time in the future. It was also noted that there was a growing interest in what might be called the demography and structure of enterprises and the present draft did not provide an obvious entree to such studies. Lastly a question was raised about whether co-ordination with definitions used in employment statistics had been sought and although the answer was uncertain it seemed that this had not been sought. This too was noted as a disappointment by the group.

The following conclusions of the group were agreed and were to be passed to those concerned with the development of ISIC in the hope that harmonisation could be reached..

The definition of statistical units should be identical in SNA and ISIC.

For SNA purposes, autonomy should not be a criterion for defining an establishment.

The introduction to the revised ISIC should make a clear distinction between the ideal definitions from rules for their application in practice.

Terminology - such as primary, secondary and ancillary activities - should be identical in ISIC and SNA.

The definitions of units may need to be adapted in the light of ongoing work on service industries.

10. Establishments and homogeneity

July, 1989

In the previous version of the SNA and ISIC an establishment was defined conceptually as a unit undertaking a homogeneous process of production at a single location. It was recognised that in practice many production processes are not as limited as this. As a compromise, therefore, it was recognised that more than one type of production may take place and the definition was relaxed so that operationally it was the smallest unit undertaking one or predominantly one process of production at a single location with a

set of book-keeping data available. In the course of revising ISIC the business register group were especially concerned with how to apply the definition of an establishment in practice and moved from the homogeneity requirement constrained by data availability to homogeneity constrained by autonomy of decision making. The view was that data availability was symptomatic of other problems. Data availability was supposed to be conditioned to the nature and scope of decisions to be taken in a firm and since it was this decision making aspect that drove the availability of data it seemed appropriate to incorporate this explicitly rather than data availability in the definition of an establishment.

The implications of this change in definition were illustrated by an example. Suppose, for example, that a car factory makes cars incorporating clocks in an economy where there are also specialised car clock manufacturers and it is supposed that making cars and making clocks fall in different production groups. The question is whether the car factory which also manufactures car clocks should be treated as one establishment or two. If the autonomy of decision criteria is considered crucial it could be argued that there is only one establishment whereas under the previous definition it would be usual to say there were two establishments. As a further example consider a factory which makes both clocks and computers though with the same management but using quite different production processes. The traditional view would be to say that these again represented two establishments and clarification was sought as to whether under the proposed guidelines on autonomy this would remain as two establishments or become one because of the single management being exercised. In discussion it was suggested that the situation is rather more complicated than this simple example suggests. For example, if car factories typically include the production of car clocks then this would be the norm for a single establishment undertaking this activity. If only one factory includes car clocks then it should be treated as two establishments. Therefore it is necessary to take account of the distribution of the types of units as well as a simple enumeration of the production processes taking place. One of the objectives of the new ISIC definition is to avoid wholesale imputation across a wide range of productive activities. This brings the discussion back to considering the classification itself. If car production typically includes the production of car clocks then description of the the activity of car production should make this clear. Then as far as possible the situation of having each unit engaging in only one kind of activity as specified in the classification will predominate. If a situation results where extensive imputations are necessary this is indicative that the activity classification is not well attuned to the needs of the economy being considered.

11. *Enterprises and legal entities*

As far as enterprises are concerned, the SNA defines an enterprise as the smallest legal unit with a complete set of accounts (or conceptually capable of producing a complete set of accounts). The business register group has been much exercised by the growing practice of dividing producing units into separate legal entities most of which supply ancillary services back to the main producing unit. For example it is not unknown for all the staff to constitute a separate legal entity which sells their services to the production process, for the capital stock to be held by a separate legal entity and for the selling operation to be separated legally. Although these entities are legally separate the separation is artificial when viewed from the economic point of view. The definition in the new ISIC therefore is intended to cope with this circumstance and say when this happens the individual legal entities should be consolidated to recover a self contained productive process which would itself be treated as a single enterprise. As further justification it was pointed out that ISIC is used for many purposes other than those in the SNA including, for example, the demography of enterprises. A legal entity has three purposes; firstly as a unit of registration; secondly the means by which the business

communicates with the tax authorities and thirdly (optionally) as a means of communication with the shareholders, though in more complex organisations this may not be undertaken at the level of individual legal entities. Despite this legal organisation businesses choose other ways of organising themselves on a day to day basis and the internal book-keeping records reflect these operational organisations. Only once a year does the information get mapped back to the legal form. In numerous simple businesses or where the business is organised along lines of the legal organisation there is no problem in consolidating legal units. Although such units are very numerous, they represent a relatively small proportion of activity and thus it is the treatment of the more complex units which determines the results of classifications and survey results.

The fact that institutional units are legal entities does not necessarily imply that all legal entities should be treated as institutional units. It was recognised that it would usually be sensible to treat separate legal entities as institutional units but the need for some exceptions were recognised. It was suggested that these exceptions should cover the case where only ancillary activities were undertaken in separate legal entities and that the whole of the production of these entities was sold to another unit under the same single unit of ownership. Some reservations were expressed about this. Relaxing the constraint that sales have to be to units with the same single owner and the possibility of consolidating vertically integrated enterprises was also mentioned but these were not generally received with sympathy. A suggestion was made that the definition should refer to the smallest group of legal entities under the same ownership and control authorised to consolidate their accounts but this was felt to be unworkable on an international basis because of the difference in legal practices from one country to another.

Within the SNA the establishment is used as the basis for production accounts by industry and the input/output table. The enterprise is used as the statistical unit for the compilation of integrated accounts including income and accumulation accounts. The question before the group, therefore, was how far the concerns expressed by the business registers group should be taken into account in the SNA. Much emphasis has been laid in preparing the SNA draft in separating the conceptually correct definition from recommendations that temper this pure approach with practical considerations. However it was felt that the text relating to production accounts is perhaps too purist and the fact that secondary production does frequently take place and must be dealt with within the system should be mentioned in closer proximity to the original definition of an establishment than is presently the case. But the question still remained as to whether the approximation to the ideal establishment should be based on data availability or autonomy.

12. Observation and analytical units

Several participants said they understood why ISIC favoured the concept of autonomy and felt it may well influence the availability of data. On the other hand it was felt that this was not relevant for statistical purposes because it is a criteria that cannot be measured with statistical tools. Does autonomy mean the freedom to decide what to produce, how to produce it, when to produce it or all of these? The ambiguity of the concept makes it dangerous as a principle to apply. On the other hand having a set of book-keeping data establishes that autonomy exists. This may not be an ideal criteria but it is workable. This leads to the suggestion that two sorts of units are necessary. The first is what came to be called an observation unit which is essentially an observational unit defined with economic data and economic criterion. In order to determine the operating surplus it may be necessary to have a fairly large heterogeneous establishment because of the need for a full profit and loss account even if not a balance sheet. On the other hand

to study production from a technical point of view as in the Leontief input/output matrix the homogeneity of production is crucially important but these units may only exist analytically and be derived specifically in the context of deriving a commodity by commodity input/output table. This would mean the concept of a homogeneous unit of production was retained in the SNA but it would be described only as an analytical unit and not as an establishment.

Several speakers pointed out that the increasing sophistication of internal book-keeping practices allied with the power of computers meant that in many cases information was available at a level of detail much greater than that covered in the activity classifications. It was generally agreed that in such cases the fact that detailed data existed was not a reason to create establishments below the level of detail in the activity classification. On the other hand where separate data were available for activities which were separated in the classification but under a single unified management in general it would be desirable to treat these as separate establishments. Homogeneity of production is not an absolute concept but is related to the classification of economic activity.

13. *Next steps in harmonisation*

By the end of the morning's discussion it was clear that agreement in principle between the two groups was very near. It was recognised that the SNA had to admit that the ideal definition of the homogeneous unit of production could not be implemented in practice throughout the system. At the same time the impression that had previously been given that ISIC concentrated on the autonomy of decision as of overriding importance rather than being a secondary consideration was recognised as incorrect. Subsequent to the meeting a small sub group met to consider the matter further. Their report is given below; the full group adopted it as part of the conclusions of the meeting. It is expected that a revised version of the ISIC introduction will be available by the September meeting and it is hoped that this will be acceptable to the SNA expert group.

A small sub-group reported back to the full group which accepted the following summary report as part of the group's conclusions.

The SNA Co-ordinating Group attached high importance to the full consistency between SNA and ISIC in respect of statistical units, and welcomed the opportunity to discuss the problem with invited experts representing the views expressed in the ISIC draft and at the meeting on Business Registers in Auckland.

The "independence" (referred to by others as "autonomy of decision") of the units is an important characteristic and for many purposes may play a considerable role in statistics. There was general agreement that "autonomy" or "independence" may indirectly influence the delineation of establishments. It may also have an effect on the details of the national activity classification. This should be explained both in SNA and ISIC.

However, this group considered that the "independence" ("autonomy of decision") should not become a formal criterion in the definition of the establishment, partly because it is very difficult to define, and so it is not an operational criterion. Particular difficulties arise in using this criterion for centrally planned economies.

Production homogeneity and locality should remain the main criteria of the definition of the establishment. It should be made clear that data availability is not a conceptual requirement although it is important in making the definition operational. However,

this does not imply that separate establishments must be identified in every case where production accounts could be constructed.

Participants agreed that enterprises in which a complete production process is carried out within a given activity category and at one location should not be split in separate establishments even though sub-activities of that integrated activity are mentioned separately in the activity classification. Neither should establishments be separated if data availability goes beyond the most detailed categories of the activity classification in the given country.

The Group agreed that in both the SNA and the ISIC the operational definition of establishment should be discussed in addition to the ideal/theoretical concept of the establishment.

"Homogeneous unit of production" should be retained both in SNA and ISIC but should be referred to as analytical unit.

The Group agreed that different levels/variants of enterprise concept are useful for different analytical purposes:

- families of enterprises,
- small (sub)groups of families of enterprises,
- enterprises (as institutional units)

Enterprises (as economic institutional units) are generally but not necessarily the smallest legal units. If ancillary activities are carried out by separate legal units and they serve one single enterprise (e.g., a bookkeeping "enterprise" exclusively serving an industrial enterprise) they should be merged with the unit they serve.

Small groups (or sub-groups) of enterprises are useful for some purposes or in some circumstances, e.g., when one legal unit supplies its output exclusively to another legal unit owned by the same single unit, or to a group of legal units owned by the same single unit.

Subsequently a group of experts produced a working draft showing how these ideas could be elaborated and incorporated in the new SNA and ISIC introduction.

F. Harmonisation with ILO definitions and concepts

1. Outworkers

September, 1987

As a special case of unincorporated enterprises, consideration was given to the appropriate classification of outworkers. These consist of workers, often women, who assemble products at home from components which may either be bought by the outworker or may be supplied without cost from an enterprise. In some cases, this enterprise may not even be located in the country in question. There is also variation in whether the outworkers own any capital equipment that is necessary to assemble the products, for example a sewing machine in the case of assembling clothing. Whether such workers are classified as employees or self-employed depends on a number of criterion

The relationship between the person and the employer is important. If there is a contract implying regularity of employment then the worker would normally be regarded as an employee. If payment is on a piece rate basis this would tend to imply the worker should be treated as self-employed. A number of participants with special interest in this subject met with Mr. Hussmans from ILO and prepared the set of conclusions below which the meeting subsequently endorsed.

In general, the term "outworkers" may cover a variety of different working situations, depending on national practices.

Usually, outwork applies only to non-agricultural activities. Remuneration is typically received on a piece-rate or task-specific basis (as opposed to a time-rate basis) and thus, within certain limits, outworkers are free to determine the number of hours devoted to their task and in scheduling their working time. Persons who themselves employ paid workers are not to be considered as outworkers.

According to the International Certificate of Status in Employment (ICSE), outworkers may, depending on the specific conditions in which their activity is performed, be classified into the categories of either "employee" (i.e., performing work for wage or salary) or "own-account workers" (i.e., operating business/enterprise without assistance of paid workers, but possibly with the assistance of unpaid family workers). Thus, because they would be regarded as owning a business/enterprise, workers who own the necessary equipment (e.g. sewing machines) or own some or all of the material they use (e.g. yarn or fabric) should not, in principle, be classified as employees. However, it appears that, in establishment surveys and censuses, they are often classified as employees and their income reported as wages. Further work needs to be done in cooperation with the ILO in order to harmonize the classifications in the SNA and in labour statistics and to align principle and practice.

2. *Employment promotion schemes*

March, 1988

The Expert Group discussed a paper prepared by the ILO on employment promotion schemes which spelt out when someone on a training scheme would be regarded as employed and raised the question of whether payments to such people should be treated as subsidies to the enterprise employing the trainee or a direct transfer to the people on the training schemes. An apparent conflict may arise when training takes place outside the enterprise but the trainees are regarded as being employed without necessarily contributing to the production process.

It was pointed out that there are at present more than 200 schemes in operation throughout the European Community and it is not easy to categorize how these affect employment statistics. The participants felt the primary decision rested with ILO definitions about when such people are to be regarded as employees and when not. **If persons on training programmes under employment promotion schemes are defined by the ILO as being in employment, the payments they receive are to be treated as compensation of employees, Any payments from government in support of the training schemes, whether or not routed through the enterprise, should be regarded as subsidies to the enterprise and the payments to the trainees be recorded as wages and salaries. Only if the trainees were not regarded as being employed should the payments be treated as current transfers.**

Subsidies in respect of training programmes are treated as other subsidies on production.

3. Population and Employment Data

January, 1989

There are many uses and many users that link national accounts with employment and population data but the SNA, unlike the ESA, contains little explicit information on the appropriate way to make these links. Much of the data that is compiled in accordance with ILO recommendations makes no adjustment for part-time workers and definitions have been changed so as to include more people in the employed population. While recognising the considerable data limitations that exist in the area of labour statistics it was felt appropriate to state that the SNA needs recommendations on population and employment data to be included in the text and that there should be definitions given that are appropriate for use with SNA data: for example the definition of residency should be consistent between both sets of data. Secondly it is important to stress that for analytical purposes there should be estimates made of the volume of work based on person hours rather than on simple head counts.

In discussion it was noted that labour statistics in general are subject to considerable political sensitivity and that in many countries one attraction of quoting head counts rather than person hours is that these give a more positive view of government employment policy. Despite this difficulty the group felt strongly that explicit volume measures were conceptually required for use in conjunction with national accounts aggregates and that this should be recommended in the new Blue Book. Some discussion took place as to whether person years might be more appropriate than person hours or whether full-time adult equivalents should be used but other participants reported that trying to implement these on an internationally comparable basis had proved to be very difficult and the preferred alternative seemed therefore to be person hours as a volume measure.

Population and employment data consistent with SNA definitions of residency, timing etc are needed for use in conjunction with SNA aggregates, and this should be emphasised in the new Blue Book.

Data expressed in person hours worked rather than simple head counts should be derived where possible as measures of the 'volume' of labour inputs.

April, 1991

The group confirmed the importance of population and employment statistics in the analysis of national income and productivity and agreed that there should be a chapter in the revised Blue book on this subject.

Self-employed include employers and own-account workers including unpaid family workers. The question of how to treat sole owners of corporations working in those corporations needs to be clarified.

The group agreed that the criteria to be adopted for employment data in the Blue Book should to the extent possible be the same as those used by the ILO. Relevant extracts from the ILO text should be appended to the SNA chapter. Some experts thought that the ILO threshold of one hour's work per week was too low. It was noted, however, that this threshold had been introduced during recent extensive discussions in the ILO.

The treatment of persons laid off was queried as it may lead to double-counting; it was agreed that this point should be clarified.

With regard to measurement in terms of quantity, it was agreed that hours worked is the most meaningful concept for productivity studies. Three other possible measures (the number of jobs, of full-time equivalents, and of persons) should be mentioned in the text as next best alternatives. In view of the practical difficulties of measuring the hours worked by the self-employed, it may be difficult to treat them other than on the basis of one full-time equivalent.

It was noted that a weighted index of hours worked by employees, taking quality of work into account as measured by relative rates of remuneration, is equivalent to the value of compensation of employees at constant rates of remuneration. In practice, it is not possible to compile a similar measure for the self-employed.

Two breakdowns of employment should be recommended as important: a) by industry, and b) by type of employment (e.g., employees and self-employed). The possibility of other breakdowns, such as male/female, should be indicated.

G. Links to household budget surveys

September, 1987

There was discussion about the development of a handbook on the household sector. This was intended to contain the further elaboration of the system as presented in the Blue Book and should deal with the problems associated with collecting data at source and compiling this data into suitable forms. The handbook(s) should also deal with the links with complementary systems but it was hoped that sufficient changes would be made to the income guidelines that these would now be seen as integral with the larger concept of the SNA and not an entirely separate analysis. One aspect of the handbook should be an emphasis on giving guidance to compilers on direct measures of household activity rather than leaving compilers to derive the whole of this sector residually. It was also supposed that the handbook on the household sector would deal with the question of measures of enlarged GDP where estimates were made for household activities and possibly for measurement of leisure time.

The handbook would obviously deal with the whole question of micro-macro linkages but a plea was made that the impression should not be given that it was only relevant if a suitable large scale survey were available but point out that useful information can be derived about the household sector even without such micro datasets. The handbook too was the place where the question of sub-sectoring the sector and procedures for compiling income and outlay and capital formation accounts for various sub-sectors should be entered into.

The meeting recognized that there was a conflict between an open-ended list of desires in relation to the handbook and the budget and time constraints that were in effect; but, given the importance of the household sector, the group hoped that some forward progress in this area could be made as soon as possible.

The group welcomed the intention of the U.N. Statistical Office to produce a handbook on household sector statistics amplifying concepts, classifications, methods of compilation and links between micro and macro data. The group emphasized the importance they attached to early publication.

The group recognized that it was not possible to eliminate all differences in the concepts and definitions used for household income and expenditure surveys and those used for the national accounts. The Blue Book should emphasize the importance of micro data-sets for the household sector and draw attention to their elaboration in the handbook. Differences should however be reduced to the minimum, and bridge tables linking the micro and macro concepts should be provided in the handbook.

The group stressed the importance of alternative presentations of income and its redistribution as commonly portrayed in Social Accounting Matrices (SAMs) and called for a detailed paper on the possibilities and problems of making these aspects a standard part of the SNA. The paper should be considered by the expert group on input-output and by the final group on the SNA structure.

The 1993 SNA contains a chapter on Social Accounting Matrices. The Canberra city group on income distribution in close collaboration with related work being undertaken in Eurostat, prepared a manual on the distribution of income, consumption and accumulation of household. This was published as the Final report of the Expert Group on Household income statistics in 2001.

H. Links with industrial statistics

March, 1988

The Group considered a paper entitled "Comparisons between industrial statistics and national accounts - an empirical study on measures of manufacturing value added" provided by UNIDO. This report described in detail the results of an investigation as to why data from the two different sources varied by up to 15 per cent and 20 per cent in many cases. These differences were not systematic and were due to various reasons. In some cases, the comparison was between source data and survey data with a cut-off point determined by the number of employees and inadequate allowance had been made for units falling below the cut-off. Some discrepancies were also due to the difference in definitions of value added with one source using the national accounts definition and the other census value added. There were differences due to the valuation being used (producers, purchasers, basic prices). Finally, it appeared that national accounts made efforts to estimate the informal sector where industrial statistics were usually restricted only to formal activities. The causes for the divergence varied from country to country. While figures for large groups of countries varied less it was more problematical when a small group of countries or individual countries were concerned.

A number of participants said that they felt the presentation of industrial statistics in a way that was not immediately compatible with the SNA was confusing to users and wondered whether it should not be possible to move closer towards reaching harmonisation. The argument for deriving census value added by not allowing for the purchase of non-industrial services applied strictly only to multi-establishment enterprises and as had been noted earlier in the meeting, between 80 and 90 percent of firms there was a coincidence between the enterprise and establishment concept. Participants also felt that it would be helpful if the work done by UNIDO would be expanded to cover service industries as well as manufacturing industries, given the growth of interest in this area. In response it was noted that the guidelines in industrial statistics were to be revised and it was hoped that both of these questions would be addressed.

The group understood that the definition of census value added had been adopted on practical grounds - i.e. census value added can be reported by establishment - rather than theoretical grounds and that in consequence there was no good reason to

incorporate census value added in the SNA. The group unanimously recommended that the definition of census value added should be reviewed, on the occasion of the next revision of the UN guidelines on industrial statistics, with a view to bringing it closer into line with the SNA definition.

A further paper entitled “Goods and services, value added and the production boundary” prepared by UNSO was presented. This paper noted that there was a close parallel between the services excluded from industrial statistics and also those treated as non-material services in the MPS (System of balances of the national economy). If a separation of services along these lines were made standard, it would be possible to partition an input/output table so that the services not covered in industrial statistics fell to the bottom and right of the table and one would be left with a leading diagonal sub-matrix of intermediate demand which contained those activities that were covered by industrial statistics and also in the MPS. It was noted, though, that there were some differences between industrial services and material services which would need to be overcome.

Many participants remarked on the importance of distinguishing goods from services. In the classification of both producers and products subdividing services further between those related to goods and others may also prove instructive.

In discussion, a number of participants said that they had procedures for getting from SNA data to something equivalent to industrial statistics or the MPS and noted a number of other problems, for example the difference in the accounting year that may be reported differently in industrial statistics censuses.

It was felt that more work was necessary to detail the interaction between MPS and industrial statistics and SNA data and it was hoped that this detailed comparison would form the basis of a handbook. It was expected that further work would be carried out on the distinction between goods and services and that the results would be available for the expert group meeting on the reconciliation of SNA/MPS standards of national accounting.

A clear distinction is needed between goods and services both in classifying producers and products. Further distinction between goods-related and other services may be useful. The possibility of this distinction should be further explored especially in connection with the reconciliation between the SNA and MPS and the preparation of a handbook showing the links between the two systems.

1. *Enterprise statistics*

The UNSO also introduced a paper entitled “Enterprise sector transactions in a system of national accounts”. This paper was the first draft of a handbook on this topic. It aimed to produce bridge tables between commercial accounts and enterprise sector accounts. The UNSO has undertaken a survey and discovered that in 27 countries work on enterprise sector accounts is going on, in 10 of which this work is more or less complete. Undertaking this work often needs supplementary enquiries and the use of tax data.

The participants welcomed this document while recognizing that it was still in a very early stage of preparation. It was felt that provision of such a handbook would fill what is presently an area of omission in the current set of publications supporting the Blue Book. However more information is needed on questions of valuation and depreciation. Reference was made to the “plan comptable” accounts that are being compiled in francophone West Africa. These are proving very successful because of the use of standard accounting forms and the concentration of a large proportion of industrial

activity in a small number of enterprises. With the notable exception of France it seems that this was an area where more development had taken place in developing than in industrial countries.

The group welcomed the proposal by the UN Statistical Office to compile a handbook on enterprise accounting. This handbook should explain the various adjustments that are needed to move from commercial business accounts to the items needed for the SNA accounts.

Such a handbook was published by UNSD in 2000.

I. Harmonisation of other classifications

1. Classification of functions of government (COFOG)

January, 1988

In a discussion on the relationship between COFOG and the International Standard Industrial Classification (ISIC) it was noted that COFOG stipulates that the transaction is in principle the unit of classification but that for many types of outlays related to production activities COFOG codes will have to be assigned to units of the establishment types. In addition, the 1968 SNA paragraph 5.31 recommends that the establishment type units should be the same as for the activity (ISIC) breakdown of producers of government services so as to allow 'transferring data classified according to kind of economic activity of the producers into data classified according to the purpose they serve'.

It was reported, however, that a study by Eurostat into the structure of COFOG and the structure of ISIC indicated that even if the establishment types were the same, the two classification systems were so different that it would in practice be very difficult to transfer data from one classification to the other. The group considered, therefore, whether COFOG should be revised so that, at a moderately aggregated level, it would be possible to achieve a simple correspondence between COFOG categories and ISIC categories.

The group recommended that a study should be carried out into the possibility of reconciling COFOG and ISIC but not so far as to jeopardise the concepts and analytic requirements of the two classifications which were designed with different aims in mind, one a classification by purpose (COFOG) and the other a classification by activity (ISIC).

2. Other

December, 1990

Classifications are an integral part of the SNA and some of these remain to be updated and revised. ISIC has just been revised. There is a draft proposal for a revised classification of household goods and services prepared by OECD and EUROSTAT but work remains to be done in a number of other areas. On several occasions experts have pointed to the need to revise COFOG to facilitate the breakdown between individual and collective consumption and also to identify specific areas of expenditure, for example on the environment and research and development. The classification of exports and imports needed attention and also the classification of changes in inventories. At present few links existed between functional classifications and those based on products and activities.

The group endorsed these concerns and hoped that resources would be found to pursue the matters raised. They also referred again to the neglected draft on classifications of outlays by industry by purpose (COIP) and expressed their strong concern that this should be taken up as a matter of some urgency.

Activity product and functional classifications are an integral part of the SNA. Several of these need to be revised or further developed. In particular the functional classifications should be revised to identify expenditure on environmental protection and R & D as well as to permit distinction between individual and collective consumption.

A classification of outlays by enterprises by purpose should be included in the new SNA. This should be based on the "COIP" drafted by UNSD.

Revised versions of COFOG, COICOP (Classification Of Individual Consumption by Purpose), COPNI (Classification of Non-Profit Institutions) and COPP (Classification of Purchases by Purpose) were published in 1999.

J. Coordination of the SNA and MPS

A meeting was held in Moscow in December, 1989 to discuss the interface between the SNA and MPS. When the meeting had been originally planned in 1985, it was assumed that both the SNA and MPS would continue in much their existing forms with basically different sets of countries applying either one or the other. By the time the meeting took place in 1989, there was strong interest in producing an "integrated" system which would encompass the aggregates familiar to the users of both systems. By 1992, when the draft of the 1993 SNA was being finalised, it had become clear that with the transition to market economies, most if not all of those countries formerly using the MPS would replace it by the SNA in the immediate future. In the time between 1989 and 1992, therefore, attention focussed on ensuring that the SNA was sufficiently general to allow the special conditions of the countries in transition to be covered. The discussion, even of the 1989 meeting, is included because it shows how far and how quickly objectives changed and also because it shows again how often harmonisation is a question of small detail rather than major principle.

1. Causes of differences

December, 1989

The meeting was to concentrate on the possibility of improving harmonisation between the national accounting systems of the SNA and MPS, not least in order to improve international comparability. It was recognised that another major problem in undertaking international comparisons at the present time is the question of converting data from national currencies into a common unit. This very substantial problem has been addressed in the context of the purchasing power parity (PPP) work for some time and as such was not to form part of the agenda for this meeting, important though the matter was.

The initial work on harmonising the SNA and MPS started in the early sixties. The first phase consisted of explaining the differences but not implementing change in either system. In the 1989 Statistical Commission all participants from centrally planned economies (CPEs) expressed a desire to go further and to bring the systems together in a process of integration. The differences between the two systems could be summarised under three headings:

1. differences in economic theory, for example differences in the definition of the sphere of production.
2. institutional arrangements, for example the different role played by banks in market economies and CPEs.
3. incidental differences, for example the treatment of business travel. Some of these incidental differences were large and some small but almost always concerned areas where arguments for alternative treatments could be made in both systems and it was largely a historical accident that different conventions had been adopted.

The proposal put forward was that differences due to economic theory should simply be accepted as a reflection of different economic perspectives. As far as institutional differences were concerned, it was hoped that the SNA would be able to explain how to deal with non-profit oriented banks and other similarly different institutional arrangements. On the third type of issues, the incidental ones, since so many of these turned on pragmatic conventions, it was hoped that harmonisation should enable elimination of most, if not all, of these.

There was some discussion about what integration of the two systems implied. There was no proposal that one system should swallow the other. What was needed was a qualitatively new stage in macro economics by involving co-ordinating the basic sectors of the two systems. It was hoped that the need for building two systems would be removed. It was argued that the positive aspect of the MPS is to clearly trace the use of physical resources in the course of production. The great advantage of SNA is to show how production is tied to income and financial concepts. Integration should be seen as a global strategic task involving two way traffic but where the end product was a set of macro indicators familiar to the proponents of both systems.

It became even clearer as discussion progressed that the approach adopted to integration depended on the attitude adopted with respect to each of the types of differences outlined above. Some SNA experts explained that in the course of the review one approach had been to question the rationale for decisions that had been made. For example, until now military durables in the SNA have been treated as current expenditure whereas in the MPS they are capital. However, it became clear that there was no very good rationale underlying the SNA convention and therefore the experts felt that it was possible to suggest change in this area. It was felt that it might be appropriate to distinguish goods and material services³ from non-material services but the rationale for treating non-material services as non-productive was not clear to SNA experts. If the concepts of material and non-material services were to be introduced in the SNA, it was felt that an adequate explanation for the distinction between them was necessary and that the risk of identifying non-material services with non-productive activity was considerable and from the SNA point of view to be avoided.

It was felt that the emphasis on institutional differences between the two systems could be overdrawn. For example, in the case of banks, conditions throughout the world are not such that there is a simple dichotomy between a commercial, profit oriented bank and a state run institution. Indeed most countries in the world have a banking sector which

³Material services are those relating to goods, for example transportation and repair and are usually rendered to enterprises. Non-material services include items such as health and education and are generally part of final consumption.

represents a compromise between these two extremes though some countries are more to one end of the range than the other. Nevertheless methodology has been developed in order to deal with this range of banking activity within the SNA context and it was intended that the explanations given in the SNA for dealing with banks and their role as financial intermediaries should be adequate to cope with the wide variety of situations now prevalent throughout market economies and if necessary an extension should cover the situation prevailing in CPEs also.

As far as the incidental differences were concerned, there were basically two approaches proposed. Several participants felt that these incidental differences should be eliminated as quickly and easily as possible and that in some respects it did not always matter very much which of the two conventions would be adopted. Other participants were very concerned that to change a convention would introduce discontinuities with past practice and that therefore a bridge mechanism between the existing conventions in both systems and the other could be established. Several participants from CPE countries who already compiled SNA aggregates said it was possible to compile SNA aggregates, such as GDP, using MPS conventions about intermediate consumption, for example, as well as using SNA definitions. However this led to two estimates of GDP with basically minor differences and this was not only resource intensive for compilers but also confusing to the users. These proponents therefore felt that full harmonisation was the preferred solution.

There was widespread agreement that the concepts and terminology of both systems had to be universally understood and as far as possible the same terminology should not be used with different interpretation in the alternative system. Where conceptual differences persist it would not be possible to fully integrate the concepts but at a practical level approximations can be made acceptable on both sides and this would lead to the idea of an integrated framework rather than that of a single integrated system.

It was felt it would be useful to define non-material services explicitly in terms of the revised international standard industrial classification (ISIC) and the classification used by CPEs. The UN Statistical Office was requested to undertake an identification of the components of non-material services. It was hoped that this list would be included in the annex to the Blue Book discussing links between the SNA and MPS.

2. *Production Boundary*

Output (gross output in the 1968 SNA and in the MPS) is the central production concept in both the SNA and the MPS. Although there is a great deal of common ground in the definition of the concept between the two systems, there are some points of difference that require clarification. These are discussed in turn below.

Household activities

On household activities it was explained that in the new SNA the criterion for including household activities within the production boundary will be much clearer and simpler. Basically all home-produced goods that are capable of being sold on the market will be included but in practice these will only be included if home produced goods constitute a significant proportion of the total availability of the goods. Services produced in the home without payment will not be included in the accounts. These proposals are not expected to lead to dramatic changes in practice but rather to easier implementation of the recommendations.

Illegal activities

Some concern was expressed by MPS experts about the recommendation to be included in the new SNA that illegal activities should in principle be included within the production boundary. SNA experts explained that throughout the SNA review a distinction had been drawn between what was the conceptually correct recommendation to make and what would be implemented in practice. It had been felt that there was no reason in principle for excluding illegal activities. Almost every type of activity had at some stage been illegal under some regime or other and even now there was no international agreement on which activities are legal and which illegal. It was therefore agreed that there was no reason to exclude illegal activities on conceptual grounds from the production boundary, though it was recognised that in practice it would be extremely difficult to make good estimates for many of these activities.

A distinction between domestic and rest-of-the-world transactions is presently not clear in the MPS and this is an area that needs to be developed. It was felt that the SNA guidelines would form a good basis for a discussion on this in a subsequent CMEA⁴ meeting.

Output

Just as the production boundary is similar between the two systems so is the concept of output. Again however there are points of detail where differences occur. The first of these is in respect of statistical units. The MPS does not have a unit that corresponds exactly to the SNA concept of establishment though it is felt that the differences may reflect institutional arrangements as much as conceptual and perhaps terminological differences. Clarification is also required as to whether the definitions of principal and secondary production and ancillary activities are identical between the two systems.

One area where there is a difference between the two systems is on consolidation of establishments to the same enterprise. The SNA rule is relatively simple; it consolidates intra-establishment output but not intra-enterprise output. The MPS rules are more pragmatic; it does not consolidate intra-establishment inputs and outputs in the case of agriculture but does consolidate inter-establishment (and inter-enterprise) flows for construction, for example. This matter should be explored in the context of reconciling the definition of production units and output in the two systems. An area where this is a particular problem is in defining the gross output of agriculture. As well as reconciling the two systems, it was felt desirable to take into account the recommendations of the FAO in their economic accounts for agriculture.

The MPS treats the gross output of restaurants, cafes, etc as the margin added to the value of the products consumed. This treatment was used in the 1953 SNA, but the treatment was subsequently changed from resembling the treatment of retail trade to that resembling manufacturing processes. This difference affects output but not value added since similar differences exist in the definition of intermediate consumption. In this case it was suggested that the MPS experts might consider the rationale underlying the change from the 1953 to 1968 SNA and consider adopting this in the MPS.

⁴ Under the Council for Mutual Economic Assistance (CMEA), there was a system of agreeing common statistical standards to be applied throughout centrally planned economies.

Another difference between the two systems concerns the treatment of tips and gratuities. These are treated as part of compensation of employees in the SNA but as transfers in the MPS. It was agreed that this is a typical case of an incidental difference where arguments could be made on both sides but it was suggested that perhaps the MPS might follow the SNA convention. Another difference between the two systems concerns the treatment of second-hand goods and waste materials purchased by enterprises from households. In the SNA these sales by households are regarded as negative consumption but such a concept does not exist in the MPS. It was recognised however that these products do not constitute current period production and some adjustment to the accounts needed to be made to recognise this fact. As a result it was again suggested that perhaps the MPS might follow the SNA convention.

Subsidies

Both the SNA and MPS have difficulties dealing with the situation when government intervenes in an industry to ensure that the product is available to consumers at a price far below cost or even free. The different approaches to dealing with this problem did not reflect a difference between the two systems but rather one of economic interpretation. The traditional approach in the SNA has been to treat the payment by government to the industry to cover their losses as a subsidy. This then affects the value of GDP at market prices and makes international comparison particularly difficult. An alternative approach was to treat the payment by government to industry as a purchase of the goods and services concerned, which would then be part of general government final consumption expenditure and then of actual final consumption of households. This eases the problems of international comparability but at the expense of imputing sales to government which would be included in the market price valuation of the company's output. This topic has given rise to extensive discussion in the course of the review of the SNA and as yet no solution has been reached. It was clear from the discussion in this meeting that similarly strong feelings are held by different CMEA countries and consensus will be difficult to reach. Because no resolution could be reached during the meeting it was suggested that when the SNA revision process has reached an agreed solution this solution should be studied by CMEA countries to see if they could adopt it also. Obviously the concerns and conditions of the CMEA countries will be taken into account by the SNA experts in attempting to reach an agreement for that system.

This is one of the unresolved items which remains on the research agenda.

3. The boundary between intermediate and final consumption

A number of incidental differences between the two systems were discussed under this heading, the first of which concerned business travel expenses. These are treated as intermediate consumption in the SNA and as final consumption in the MPS. Despite these recommendations however it is clear that not all countries exactly implement the recommendations of the systems they use. After some discussion it was agreed that in principle the costs of travel and accommodation should be regarded as intermediate consumption and that all other business travel expenses, mainly representing an allowance for food, should be treated as final consumption. Although this decision was accepted in principle it was recognised that almost every country would have difficulty implementing this in practice because of lack of availability of data at such a detailed level.

In the case of uniforms it was agreed that when uniforms are normally worn away from work they may be treated as income in kind but otherwise they should be treated as intermediate consumption of the employer.

A more extended discussion took place on the question of expenditure by enterprises and other units on cultural, sporting and similar facilities. The SNA treats such expenditure either as income in kind or intermediate consumption of the producing units concerned. In the MPS these all tend to be treated as final consumption. During the course of the revision of the SNA there had been discussion about whether to introduce the concept of final consumption for enterprises and this had been rejected for a number of reasons. The decision about whether such expenditure should be treated as income in kind or intermediate consumption depends on whether the expenditure primarily benefits employees or is mainly for the benefit of the employer. Payments primarily of benefit to the employees, especially if they are large, should be treated as compensation in kind. A further characteristic of income in kind is that the benefit can be attributed to an individual employee. Payments that are primarily of benefit to the employer should be treated as intermediate consumption. It was agreed that housing, free or low price meals and sporting and other facilities open to family members should be treated as compensation of employees in kind. On the other hand especially nourishing meals provided to workers doing strenuous work, working clothes, washroom and shower facilities, medical and first aid services provided to employees at their place of work for work-related injuries should all be treated as intermediate expenditure. It was agreed that this distinction would apply to both systems.

One item on which conclusion was not reached was the treatment of food provided to inmates of prisons, hospitals and other institutions. Further discussion on this subject is necessary before a final decision can be made.

4. *The boundary between intermediate consumption and capital formation*

It was proposed to change the treatment of military durables in the SNA so that all items which had a comparable civilian use would be treated as fixed capital rather than intermediate consumption. Only weapons and their means of delivery would continue to be treated as current intermediate consumption. This change in treatment brings the SNA much closer to the treatment accorded in the MPS.

At the present stage of the revision of the SNA it is proposed to extend the definition of capital formation to include expenditure on research and development and expenditure on mineral exploration. However in the course of review several fundamental questions about the definition of assets and their treatment in the accounts had arisen and further work was to be undertaken in this area in connection with the SNA review. It was agreed that the fruits of the work would be passed to CMEA countries for their consideration.

Capital Formation

It was noted that at present the SNA and MPS adopt different treatments for unfinished construction. The MPS regards this as a change in inventories whereas the SNA treats it as fixed capital when a contract for sale exists during the construction process. Discussion revealed a number of problems with this approach, not least in the calculation of consumption of fixed capital and it was agreed that the SNA treatment should be reviewed with a view to adopting the MPS approach.

Losses

The MPS has a much more explicit and comprehensive set of guidelines for the treatment of losses than does the SNA. In the MPS explicit allowance is made for loss of output, stocks and assets. In the SNA loss of output and stocks are implicitly included in intermediate consumption but for assets the assumptions underlying the perpetual

inventory method take account of average accounting losses only and not explicit occurrences. It was agreed that this area should be the subject of further study to see whether a consistent treatment can be implemented in both systems.

Consumption of fixed capital

This appears to be an important area of difference between the MPS and SNA. In discussion however it proved that some of the differences between the two systems may be due more to practical considerations than theoretical constraints. The SNA estimates how much fixed capital is used up in the course of production in a year and what the replacement cost for this capital would be. The MPS on the other hand estimates the writing down of assets in a year based on their historic cost. Because for many years prices changed very slowly in CPE countries, the difference between historic and replacement cost would not have been extreme. In more recent years when it became apparent that historic costs did not represent the full cost of using capital in a given year, it became more common to do periodic revaluations of capital stock. It became apparent in discussion that there is very close similarity between the concepts sought in both systems; both seek to measure the use of fixed capital. The MPS does this by direct measurement by conducting a statistical survey of capital stock and the rate at which it is consumed. The SNA recommends an analytical approach using the perpetual inventory method. According to this method a model is built which accumulates fixed capital as acquired and estimates consumption using assumptions about the life length of various types of assets and the relative price increases that should be applied to them. Although this is the recommendation it was noted that in many countries using the SNA this approach is not adopted but rather figures recorded as depreciation in commercial accounts are used. It thus emerged that much of the difference between the two systems was whether an analytical approach should be used or whether an attempt should be made to measure capital consumption directly by means of a survey, which is the approach taken with every other aspect of the economic accounts. While direct measurement was held by many to be desirable in theory, grave reservations were expressed about the possibility of determining realistic data in this way.

Several participants pointed to the importance of consumption of fixed capital and the means of estimating it as one of the major differences between the SNA and MPS. For countries used to working with net material product the change to gross domestic product not only involves the inclusion of non-material services but also the change from a net product to a gross product measure. This is obviously a different type of change from the decision to include non-material services and a number of participants queried whether a comparison might not better be made between net material product and net domestic product rather than with gross domestic product. The view was expressed that a product measure should be gross because, for example, assets can only be acquired gross rather than net of capital consumption. On the other hand income measures are more appropriately treated net because they are based on the notion of keeping capital intact. This also led to a consideration of the need for real income measures which implied calculating the consumption of fixed capital in real terms. This is presently undertaken within the framework of the SNA but not the MPS.

5. Household Consumption

One of the by-products of the earlier work on SNA/MPS links is the introduction of a concept of consumption in the new SNA to be called "actual consumption of households" which is effectively the same as the total consumption of the population concept of the MPS. It was felt that both systems need to include items corresponding to consumption expenditure and actual consumption as now defined in the revised SNA, with

appropriate terminology. Further, these concepts should be brought into line as far as possible by eliminating as many incidental differences as possible. The major difference that was seen to remain between the two concepts was the treatment of individualizable legal services. The reason that these are not presently included in actual household consumption in the SNA is pragmatic. It was decided to identify those individualizable expenses of government that should be treated as actual consumption of households by selecting appropriate headings in the classifications of functions of government (COFOG), particularly, of course, those that relate to health and education expenditure. It is recognised that in a number of countries individuals who cannot pay legal fees on their own behalf receive legal aid from government and this ought also to be treated as individualizable consumption. However at present this legal aid is included in the heading for public order and safety within COFOG and is extremely difficult to separate out. It had been noted in the course of the SNA review that some changes to COFOG would be desirable especially in relation to the treatment of actual consumption of households and this was another area where if a change to COFOG could be agreed then the corresponding change to consumption would follow.

6. *Income Concepts*

The MPS as originally published focussed on the flows of material goods and the activities of production and consumption. Subsequently, it was extended to include indicators of non-material services and the derivation of some income concepts, such as total consumption of the population and total income of the population. However the fact that such extensions exist is not always fully appreciated. They are not fully integrated with the basic system and the MPS therefore does not have such a coherent view of the interaction between production and income as does the SNA. It is anticipated that such an integration should be developed and it was expected that the approach used in the SNA could be used as a model for this work. One consequence of this difference between SNA and MPS is the treatment of redistributive transactions. Again it was felt that in developing the MPS attention should be paid to the treatment of these transactions in the SNA with the view to seeing whether a similar treatment could be adopted. It was noted that this would involve some changes to current MPS concepts.

7. *Transactions with the Rest of the World*

It was noted that the SNA is in general more rigorous in its definition of resident and non-resident units and the implications for transactions between the national economy and the rest of the world. Traditionally the MPS has relied more pragmatically on transactions identified through the medium of foreign currency. The CMEA is at present, however, reviewing foreign trade statistics and their integration with the MPS and it is expected that a much more rigorous system will be introduced, which hopefully will be broadly consistent with SNA conventions.

8. *Integrated Accounts*

At several times in the discussion, reference had been made to product and income measures and the difference between them. At present income measures are essentially ancillary to the basic MPS and it is difficult to integrate these without an adequate treatment of non-material services. In the MPS financial balance, which broadly corresponds to the income accounts in the existing SNA, no estimates of disposable income or savings are made and there are no balance sheets integrated with the system of balances. However many participants from CMEA countries expressed their interest in developing such an integrated system and hoped that the SNA framework could be used as a model around which to build such an elaboration.

9. Ensuring the SNA could be used in countries in transition

December, 1990

While it was acknowledged that a handbook would be prepared discussing how countries in transition could implement the SNA, there were a number of items where references in the Blue Book would be necessary in order to cope with particular characteristics of transition economies. A number of these characteristics are expected to persist for some time; these include the much expanded size of government, the lack of markets and general competition and the degree of subsidisation.

One area of particular difficulty was the provision by enterprises of cultural and social amenities to their employees. There were three ways in which this could be treated. It could either be regarded as compensation of employees in kind, it could be treated as transfers to the employees and final demand by households or finally it could be treated as final expenditure of enterprises. This last alternative had been considered by previous Expert Groups and rejected though at the time of the consideration the particular problems of countries in transitions were not directly considered. Because the payments made were not perceived either by the employer or the employee as being related to labour costs those used to the MPS might prefer the second of the three alternatives.

In discussion the question was raised again about how wide a set of conditions the SNA were supposed to cover. It was pointed out that there were quite wide variations in conditions between countries in transition, that other countries outside eastern Europe with a history of using the MPS were also considering implementing the SNA possibly in parallel with the MPS and that even for the so called market economies there were imperfections in the operation of markets to varying degrees which made rigorous interpretation of the SNA difficult. Many developing countries shared many of the characteristics of countries in transition not just with respect to the role of government and the degree of subsidisation but also, for example, distortions in the housing market. These situations had persisted for a very long period of time and were likely to persist for some years to come. Therefore while there was clearly a pressing need for a handbook to address the particular problems of countries in transition now, it would be a mistake to assume that all these problems would disappear very quickly and it would be appropriate for the Blue Book to cover a number of problem areas caused by market failure. This was to ratify one of the conclusions of the very first Expert Group meeting on the structure of the SNA that the system should, in principle, be applicable to all countries whatever their internal characteristics and whatever their present state of development.

A number of points were made in response to particular queries raised. It was felt it was inappropriate to regard market prices as necessarily synonymous with fully competitive prices. Within the SNA a market price is a transaction price and this is unambiguously defined even if the price is fixed rather than determined by market conditions. It is true that in some instances external trade of countries in transition have been conducted along lines closer to barter than market transactions but the system allows for the recording of barter transactions and of itself this should not pose a theoretical problem about the appropriate treatment. One area where it was felt there may be difficulties in producing consistent statistics on a before and after transition basis was in respect of financial claims since the nature of these in centrally planned economies is significantly different from those in mixed economies and it is this that has led to the development of two tier banking systems in many countries in transition.

In conclusion it was agreed that the number of points to be clarified in the Blue Book would be further elaborated in a paper for the next Expert Group meeting. These points

were expected to cover, among other items, the treatment of prices, the identification of institutional units, the appropriate treatment of services provided to employees, exchange rate problem, measurement of the financial system, distortions in the housing markets and the measurement of consumption of fixed capital. A revised version of the paper under discussion would be prepared for the April 1991 meeting including identification of particular parts and paragraphs in the draft SNA that would need to be altered and may contain suggested amendments in these areas.

Most experts agreed that some subsidies (not yet delimited) on goods and services destined for final consumption should be treated as government consumption expenditure in the revised SNA; others will continue to be treated as subsidies. The identification of the subsidies concerned requires further study.

The group confirmed that the revised SNA was intended to be applicable to all countries of the world.

Many of the structural features characteristic of the economies of the countries in transition are also found to some extent in market economies. The SNA can therefore accommodate many of the structural features of countries in transition either as it is already drafted or with some clarifications. Other features will have to be dealt with in a handbook.

For the next expert group on coordination, a UNSO consultant will propose additions or amendments to the SNA text to better reflect or cater for certain structural features of the economies of countries in transition such as limited autonomy of enterprises, administered prices, etc.

The group reconfirmed that it will be necessary to publish a handbook to provide further practical guidance on the compilation of national accounts in countries in transition.

April, 1991

The discussions covered three specific issues ; the allocation to sector of a single political party run by the state, the residence of large multi-country investment projects and subsidies.

The group agreed that the a single constitutional party should be included in the general government sector and this should be stated explicitly in the Blue Book.

Two issues were raised with respect to large investment projects among CMEA countries; the recording of the activity and the recording of resulting flows. With respect to the activity itself, it was agreed that when such activity was within a country a notional unit should be created. When such an activity involved construction across a border with participation of several countries, the group agreed that the treatment in principal would be to share the transactions and balances among member countries of the group according to their share of participation in the project; in some cases where one country had almost all of the participation, it might be suitable to assign all transactions and balances to that country.

It was pointed out that resulting flows from such multi-country arrangements in CMEA countries were often made in kind. The group agreed that such transactions did not present difficulties in principle but that the text of the draft Blue Book on barter

transactions would be reviewed so that this and similar issues would be covered. Further details would be dealt with in detail in the Transition Handbook.

It was agreed that explicit reference to subsidies to achieve government- set aims and subsidies to avoid shut-downs should be included in the Blue Book.

On a number of other issues, external accounts, the use of comparable prices, depreciation and the imputation for housing services, comments on the draft would be submitted to the authors of the draft.

The handbook on applying the SNA to countries in transition was approved for publication by the UNSD in 1996.

Chapter 3. Units and sectors

A. Institutional sectors

There was very little difficulty in agreeing the broad nature of the institutional sectors in the 1993 SNA. Extensive discussion was required on a number of points of detail. The most significant of these was the definition of enterprises and establishments with the objective of finding guidelines that were satisfactory for both the SNA and ISIC. These discussions are reported in the previous chapter. Other issues where successful resolutions were found concerned boundary problems for government and financial institutions. More difficulty was encountered in trying to define suitable sub-sectors for the household sector. The ultimate goal of reaching consensus with the ILO on a definition of formal/informal was not wholly successful because the ILO was unable to reach a decision on this by the time the SNA was finalised.

June, 1986 (2)

The discussion paper proposed to identify five main sectors by distinguishing between financial and non-financial corporate enterprises. There was general agreement that this was desirable. The behaviour of financial enterprises is significantly different from non-financial enterprises and in general it is easier to collect information for financial enterprises. It was, however, pointed out that there are unincorporated financial enterprises, especially in many developing countries, for example, local money lenders. This distinction should be kept in mind in the new Blue Book.

There was considerable discussion about whether the household sector should be subdivided to show households including enterprise activity distinguished from those without. In general, though this was thought to be desirable in theory it was accepted that it would be totally unworkable in practice and therefore after much discussion it was agreed to keep the household sector as it presently appears in the SNA, that is, including both private, unincorporated enterprises and private, non-profit institution serving households.

It was agreed that the following should be distinguished at the first level of the institutional sector classification: "Non-Financial Corporations", "Financial Corporations", "General Government", "Households" and the "Rest of the World".

The institutional sector "Non-Financial Corporations" includes quasi-corporate enterprises.

"Financial Corporations" and "Non-Financial Corporations" should be divided into public and private.

The institutional sector "Households" includes households containing private unincorporated enterprises that cannot be treated as quasi-corporate, and private non-profit institutions serving households.

Towards the end of the revision process, it was decided to create a separate sector for non-profit institutions serving households.

The sub-sectoring of the institutional sectors will be considered by the expert group meetings on the public sector, household sector, and financial flows and balance sheets.

B. Dual sectoring

In the 1968 SNA, production accounts had been subdivided only according to industrial activity; the income and outlay accounts and capital finance accounts (income and accumulation accounts in the 1993 SNA) had been sub-divided only according to institutional sectors. This left a lack of articulation in the full set of accounts with no immediate way to associate the breakdown of value added by industry in the production accounts with the breakdown of value added by sectors in the income accounts. This practice was known as “dual sectoring”.

The first major point for discussion was whether dual sectoring should be retained. On the whole there was broad agreement that it was sensible to first divide all the transactors in the economy into sectors depending on institutional arrangements and then to divide them into industries depending upon their kind of activity. However, knowledge that the second division by industry was to be made would on occasion influence the decision on sectoring. In the previous SNA it had been assumed that it was the institution which would make decisions that affected the transactions but that is clearly not always so and that on occasion decisions on the production process are made either at the enterprise, the enterprise group or even the establishment level. Nevertheless, the division into institutional sectors was felt to be helpful. Further, it was felt that it would be helpful to suggest production accounts for institutional sectors. A number of participants said they felt this would be useful and it has been much requested; it also would help clarify the integration between production income and outlay and capital accounts and input-output tables where the transition is made from institutional sectors to industrial classifications

The principle of dual classification of institutional units into sectors and establishment-type units into industries should be retained in the revised SNA.

The system should include production accounts for all institutional sectors along the lines of those in the present SNA questionnaire.

The Blue Book will show the links between the kind of activity units and institutional sectors by means of a three-dimensional matrix, in which the components of value added are cross-classified both by kind of activity of the establishment and by sector of the institutional unit.

It was noted that a link-matrix of this kind could most easily be completed by countries which had established a central integrated register linking producing and institutional units. The appropriate Handbooks should emphasize the importance of establishing registers of these kinds and provide guidance on their creation.

Having endorsed the principle of dual sectoring, the expert group recognized that there were serious difficulties in implementation at the border-lines, in particular, there were ambiguities over defining the production activities of government, private non-profit institutions and identification of quasi-corporations. Each of these were addressed in turn.

More clarity is required in the presentation of the nature of institutional units and how they are grouped into sectors, especially with regard to the borderlines between the non-financial enterprise sector and the general government and household sectors.

Although the 1993 SNA recommends that value added be disaggregated both by industrial activity and institutional sector, the terminology "dual sectoring" has been discontinued as it had become associated with the seeming break in the flow of accounts as implemented in the 1968 SNA.

C. Sub-sectoring non-financial and financial corporations

It was agreed that the distinction between public and private enterprises should apply to both financial and non-financial corporations. Clear guidance needed to be given to definition of what constituted a public enterprise; the present concept of control was too vague and one could interpret this in a variety of ways leading to either very few or very many resultant public enterprises. Again, the question of permanency of classification between public and private was raised as an issue for clarification.

The question was also broached of establishing the split of national and foreign-owned companies which was of particular interest in developing countries and a further split perhaps between trans-nationals and foreign owned companies.

1. Public/private

March, 1988

The Expert Group Meeting on the Public Sector reached two conclusions concerning the split between public and private. The first one was that an enterprise should be regarded as public either if it is more than 50 per cent owned by the public sector (note more than 50 per cent not at least 50 per cent) or if it is controlled by the public sector even if the ownership is less than 50 per cent. The second conclusion reached by the Public Sector Expert Group was that the ownership principle would apply hierarchically; that is enterprises where the majority of the equity is held by enterprises in which the government holds more than 50 per cent of the equity would also be treated as public enterprises.

This discussion is reported below under the heading "General government".

2. Domestic/foreign

There was general agreement that it would be appropriate to specify a distinction between domestic and foreign owned enterprises as part of the standard presentation. This was very strongly supported by developing countries but to a not insignificant extent also by participants from developed countries.

The revised SNA should include a recommendation that the accounts for corporate enterprise sectors should be prepared separately for private and government-owned as well as for resident-owned and for foreign-owned enterprises. A paper describing criteria for making the latter distinction, particularly in relation to the definition of direct investment, shall be presented to the SNA Expert Group on Financial Accounts and Balance Sheets.

September, 1988

The specific issue before the Group was whether resident, corporate enterprises should be differentiated between direct investment enterprises and nondirect investment enterprises rather than in terms of foreign-owned (that is, majority ownership of equity) and domestically owned enterprises (that is, majority ownership of equity). Direct investment enterprises were defined in accordance with the OECD "Detailed Benchmark Definition of

Foreign Direct Investment" to encompass those enterprises in which a single foreign investor or a group of related entities had 10 percent of equity participation. These enterprises, therefore, encompassed branches, subsidiaries (where the ownership of the foreign investor or related investors was more than 50 percent), and associate companies (where the ownership of the foreign investor or group of related investors was 50 percent or less).

The Group agreed that the financial and non-financial corporate sectors should be divided into three sub-sectors on the basis of control: i.e., public, national private, and foreign-controlled. The same rules should be used to determine publicly controlled enterprises as those adopted to define foreign-controlled enterprises. **In the absence of other evidence of control, it was agreed that the degree of ownership of equity should be used as a proxy for control because it was a more measurable criterion.** As a "rule of thumb," the level of ownership by a foreign investor or group of related investors should be in excess of 50 percent of total equity. The group also agreed that the foreign-controlled sub-sector would include branches and subsidiaries as specified in the OECD "Detailed Benchmark Definition of Foreign Direct Investment". The decision on whether to include associates where the ownership is 50 percent or less would be left to individual countries on the basis of their qualitative assessment of the degree of control effectively exercised.

September, 1989

It is possible to identify two separate groups of enterprises; those that are deemed to be subject to foreign control (i.e. essentially branches and majority-owned subsidiaries of foreign corporations) and direct investment enterprises defined in accordance with the OECD benchmark definition of direct investment. The latter defines direct investment enterprises as those enterprises in which a single foreign investor or a group of associated investors have control of the shares or voting stock of a corporation for purposes of having an effective voice in its management. In this context, the threshold of 10% of equity holding is taken as presumptive evidence of foreign direct investment unless it is established that this did not confer an effective voice in the management of the enterprise. The Group did not find the OECD definition to be particularly helpful, especially when in certain circumstances an effective voice in the management could come about through an equity holding of less than 10%. In this regard, the Group noted that the OECD definition did not purport to suggest any precise degree of control, but merely referred to influence in the management of the enterprise. At the same time, the Group recognised that it was difficult to define the concept of control, other than effective authority over all management decisions.

Several participants felt that it would only be confusing to users and compilers of the accounts to continue with the two sets of enterprises especially since there would in most cases be a large overlap between the two concepts. Eventually, however, it was agreed that it was necessary to preserve both groups. However, in the chapters on Institutional Units and Sectoring it is necessary only to define foreign controlled enterprises so that financial and non-financial enterprises can be sub-sectored into publicly controlled, domestic private enterprises and foreign controlled enterprises. The concept of direct investment enterprises is necessary only in connection with the recording of transactions related to reinvested earnings and this concept, therefore, can be discussed in another chapter probably in that concerned with Incomes. At that point it would be made clear that all foreign controlled enterprises are direct investment enterprises but it is also possible that some domestic private and some publicly controlled enterprises may also be direct investment enterprises.

The sub-sector foreign-controlled corporations may not have exactly the same coverage as corporations in which a non-resident has a direct investment.

Foreign-controlled corporations are defined using parallel criteria to those used in the System to define public corporations. Direct investment will be defined in accordance with the OECD Benchmark Definition. Hence, direct investment flows may also be recorded in respect of public and national private corporations.

3. Size of enterprise

March, 1988

Although the topic did not appear in the annotated agenda a strong case was put forward for requiring that a breakdown of enterprises according to some size criteria should also be required in the revised SNA since this was very illuminating on the question of industrial concentration

The revised SNA should include a recommendation to classify enterprises according to some size criterion.

D. Financial corporations

1. Definition of financial institutions

September, 1988

The 1968 SNA and MBS define financial institutions as those enterprises primarily engaged in financial transactions in the market consisting of both incurring financial liabilities and acquiring financial assets. The Group discussed the following two situations in which the application of this definition may not be appropriate.

1. A growing number of establishments presently classified in the enterprise sector deal in financial instruments and/or provide financial services. These services, which in some cases may be similar to those undertaken by banks, include those provided by securities brokers, dealers, flotation companies, commodity brokers, and loan brokers. Also included are agencies whose principal function is to guarantee, by endorsement, bills or similar instruments intended for discounting or refinancing by financial institutions and institutions engaging solely in hedging instruments, such as swaps, options, and futures, which have resulted from recent financial innovation. Although these establishments provide services which are very similar to those provided by financial institutions proper, they are not considered to be financial institutions under the present SNA definition since they are not "at risk," that is, they do not incur liabilities on their own behalf nor do they acquire financial assets.
2. In many countries, institutions deal in financial transactions as agents for individuals and private companies by holding funds in trust and investing on behalf of beneficiaries but do not incur liabilities and acquire assets on their own account. Trust and custody activities of banks and nominee companies fall into this category.

Most of the participants recommended that the financial institutions sector in the SNA be expanded to include (in addition to enterprises which are primarily engaged in

financial transactions in the market consisting of both incurring financial liabilities and acquiring financial assets) auxiliary enterprises that facilitate financial intermediation. These auxiliary enterprises would include financial guarantors, brokers, mortgage advisors, financial advisors, etc. Several reasons were given for this broadening of the present SNA sectoral boundary, namely:

1. Financial institutions are increasingly engaging in the provision of financial services as well as financial intermediation per se. The financial services they provide do not differ from those of institutions engaged solely in providing financial services. The present SNA classifies the latter as non-financial institutions, implying, paradoxically, that the services they provide are non-financial ones.
2. This broadening would be consistent with the recommendation of the Expert Group Meeting on Production Accounts and Input-Output Tables in March 1988 that the revised SNA should give more attention to the "production" of financial institutions.
3. A continued focus on the present narrowly defined financial institutions sector would mean that the non-financial private corporate sector would increasingly become a residual category for financial service institutions.
4. It is becoming increasingly difficult to draw the line between true intermediation and auxiliary financial activities, particularly those involving contingent assets and liabilities. Therefore, institutions performing these intermediation and auxiliary activities should be grouped together for a complete picture of financial activities.
5. The rapid changes in financial arrangements and behaviour as a result of continuing innovation would mean that continued adherence to a narrow definition would result in individual institutions continuously moving in and out of a sector defined in terms of primary activity as an intermediary. A broader definition that would include financial service institutions would reduce such occurrences and would minimise the amount of secondary production.

The Group agreed that, in defining the broad-based financial institutions sector, the guiding principle should be the primary type of transaction or activity, although some participants cautioned that there may be borderline questions, particularly in sub-sectoring within the financial institutions sector. There was general agreement that the definition of the financial institutions sector should be consistent with, or identical to, other major international classification schemes. The Group agreed that **the financial sector will consist of corporate and quasi-corporate enterprises whose primary activities fall in divisions 65, 66, and 67 of the current draft version of the International Standard Industrial Classification, Rev. 3 (ISIC).** The Group's feeling was that the use of ISIC would lead to a definition that would be close to the SNA's activity classification underlying the production accounts, and that the adoption of a different classification would obscure the analysis of production and financial intermediation. The use of ISIC would also minimise the amount of secondary production by financial enterprises and the amount of financial activity by [non-financial] production units. In addition, if the ISIC definition of "financial intermediation services" were not adopted, there would be a danger of losing information on financial services since once these were allocated to the non-financial corporate sector it would be difficult to separate them.

Several participants favoured retaining the present narrow SNA definition of the financial sector. In their view, the financial/ non-financial breakdown was a relatively minor one, affecting only the supplementary tables in SNA balance sheets, and any attempt to amend the present definition to reflect the effects of financial innovation would have a profound effect on the SNA. The question was also raised as to whether it was financial service enterprises that had become more important or whether the main impact of innovations was in the growth of off-balance sheet items of financial intermediaries as well as of direct financing in the non-financial corporate sector.

The present definition of financial institutions covers both incorporated and unincorporated enterprises. In view of the problems involved in collecting data for unincorporated enterprises, the question arises as to whether it might be more practical and appropriate to include them in the household sector. The Group concluded that, **in contrast to the present SNA, unincorporated enterprises mainly engaged in financial activities falling in divisions 65, 66, and 67 of ISIC, Rev. 3, should be treated in the same way as unincorporated enterprises engaged in non-financial activities.** This means that they will be treated as quasi-corporate enterprises and classified with financial institutions only if they have a complete set of accounts including information on withdrawals. Otherwise, they will be classified with the household sector.

2. Sub-sectors of the financial corporations sector

The Group recommended that the financial sector should be sub-sectored as follows:

1. Central bank
2. Other depository institutions
 - 2.1. Deposit money institutions
 - 2.2. Other
3. Other financial intermediaries except insurance companies and pension funds
4. Financial auxiliaries
5. Insurance companies and pension funds.

The Group agreed that this enlarged financial sector should be referred to as the financial corporate sector.

The Group agreed on the definitions presented in Table 1, below, for the financial corporate sector and the appropriate sub-sectors. Primary identification of sub-sectors would be at the one-digit level. In the case of category 2, Other depository institutions, it is suggested that, when national authorities find it analytically useful, this category should be divided between 2.1. Deposit money institutions, and 2.2, Other.

With respect to the central bank sub-sector, the Group agreed that this would include the accounts of the central bank and would not include central bank or monetary authority functions carried out by the government unless separate full accounts were maintained for these operations. The central bank sub-sector in the revised SNA will therefore be identical to that in the 1968 SNA.

Definition of the Financial Corporations Sector and Sub-sectors

Financial corporations ¹

Incorporated and quasi-corporate enterprises which are (i) primarily involved in financial intermediation in the market, that is, engaged in financial transactions consisting of both incurring liabilities and acquiring assets which are primarily financial; or (ii) engaged in auxiliary activities, that is, those closely related to financial intermediation but not in themselves involving financial intermediation. Holding companies whose primary activity is the management and control of financial enterprises are to be considered financial enterprises and classified in the sub-sector which includes the preponderance of their subsidiaries' activities, irrespective of their own specific activities. All sub-sectors of the financial sector should be divided between public, national private, and foreign-controlled corporations.

Sub-sectors

1. The central bank

The public financial institution which is a monetary authority, that is, which issues currency and sometimes coins, and may hold all or part of the international reserves of the country. The central bank also has liabilities in the form of demand or reserve deposits of other depository institutions and often government deposits.

2. Other depository institutions

All financial enterprises, except the central bank, which have liabilities in the form of deposits or financial instruments such as short-term certificates which are close substitutes for deposits in mobilising financial resources and which are included in measures of money broadly defined.

At a second level of sub-sectoring, other depository institutions may be divided into:

2.1. Deposit money institutions

All depository institutions which have liabilities in the form of deposits payable on demand and transferable by check or otherwise usable in making payments.

2.2. other

All other depository institutions which have liabilities in the form of deposits other than transferable deposits or in the form of financial instruments such as short-term certificates which are close substitutes for deposits and which are included in measures of money broadly defined.

3. Other financial intermediaries except insurance companies and pension funds

All financial enterprises (except those included above and except insurance companies and pension funds) which are primarily engaged in financial transactions in the market, consisting of acquiring financial assets and incurring liabilities.

4. Financial auxiliaries

All enterprises engaged primarily in activities closely related to financial intermediation but which do not themselves perform an intermediation role. This would include enterprises which provide guarantees, stock brokers, mortgage brokers, insurance brokers, insurance agents, actuaries, financial advisors, etc. Also included are entities which manage the operation of financial markets.

5. Insurance companies and pension funds

(No change in coverage from 1968 SNA.)

¹. Bodies which regulate or supervise financial corporate enterprises should be included in the general government sector or central bank sub-sector as appropriate.

The Group noted that the sub-sectoring of financial institutions in the 1968 SNA is based on a narrow concept of money defined as the sum of currency outside banks and deposits payable on demand and transferable by cheque or otherwise usable in making payments (hereinafter referred to as "transferable deposits"). The Group recognised that, because of financial innovation, banks are able to offer "money substitutes" which in most respects differ little from "transferable deposits." As a result, the generally close historical relationship between narrow money and income has weakened in many countries. For purposes of monetary analysis, countries, as well as MBS have begun to emphasise broader measures of money which encompass all money substitutes that are liabilities of banking institutions. The above developments also call into question the usefulness of separately identifying the existing SNA sub-sector termed "other financial institutions", since such a separate identification results in a large and growing group of other banking institutions that operate in a similar way to narrow money-issuing institutions being included in a residual sector in SNA.

While the Group was of the view that the above developments necessitated a restructuring of the sub-sectoring in the SNA, they were not in favour of basing the sub-sectoring on any one measure of money. Nevertheless, several participants favoured the introduction of an SNA "banking" sub-sector that would parallel the MBS Banking Survey level of consolidation, since this would be consistent with the trend toward analysis of broad money measures. Two participants noted that if broad money aggregates were to be a guiding principle the term "banks" was perhaps not the most appropriate since in many countries this term has a strict legal meaning and there might be institutions that, while not defined as "banks," issue money substitutes. The Group therefore agreed to use the term "other depository institutions". It was also agreed that the issuance of narrow money and broad money could be a useful guiding principle, although this would take a subsidiary role to the one-digit level of classification and would have to be based on each country's particular definitions of monetary aggregates. This breakdown of other depository institutions, which would be an optional one, was seen by some participants as useful in providing continuity with the 1968 SNA and in enabling the continued identification of narrow money. It would also be a useful breakdown for countries to maintain as they established procedures for the collection of data on "other" other depository institutions.

While several participants felt that only those depository institutions with "appreciable" transferable deposits should be classified as deposit money institutions, the majority of the Group felt that this would be inconsistent with the need to reduce the focus on narrow money and would not provide for historical continuity.

A number of participants expressed the view that defining sub-sectors in terms of a national definition of money, whether broad or narrow, could lead to a lack of comparability across countries. The Group recognised this as a potential difficulty but concluded that for the time being the other depository institutions sub-sector should be based on a broad money concept that would, to a certain extent, be left up to individual countries to specify. This was considered an issue that could be reviewed in later meetings. In this context the Group agreed that, while the text of the SNA would not specify a particular definition of money, the various broad measures that do exist would be described.

With respect to the other sub-sectors of the financial corporate sector, the Group recognised that "other financial intermediaries except insurance companies and pension funds" would include many important institutions whose primary function is carrying out financial transactions in the market but which do not incur broad money liabilities. It

was agreed that the definition of the sub-sector would not be exhaustive but that the text of the SNA would include illustrative examples.

The decision taken by the Group to expand the coverage of the financial institutions sector to include entities engaged primarily in the provision of financial services but not themselves intermediaries required the addition of a new sub-sector of "Financial auxiliaries". The types of activities to be included in this sub-sector have been discussed in the previous section of this report.

The definition of the sub-sector for "insurance companies and pension funds" in the 1968 SNA was left unchanged by the Group because the coverage of institutions was thought to be appropriate. The treatment of insurance transactions in the new SNA was seen to be in need of substantial revision, particularly with regard to casualty insurance. Preliminary discussions of this topic were held later in the meeting but it was recognised that the topic would require further discussion at subsequent meetings.

3. *The borderline of financial institutions*

Non-financial corporations

The Group recognised that one aspect of financial innovation in recent years has been the substantial growth of activity formerly carried out by or through financial institutions but now engaged in directly by non-financial enterprises. Two examples that were noted were the increase in consumer credit directly provided by producers and retailers of goods, and the tendency of enterprises in some countries to meet their financing needs by selling their own obligations directly on the money and capital markets. In some cases, the obligations incurred by the non-financial enterprises were similar in form to obligations of depository institutions that were included in measures of broad money. The Group was asked to address the question of whether these developments should be reflected in any way in the financial institutions sector.

The Group recognised that the increase in financial activity on the part of non-financial enterprises was an important economic development that reflected changes in the roles of financial and non-financial enterprises, but this was not seen to have any implications for the sectoring of the transactors. The Group agreed that the sector in which a transactor was to be classified would be determined only by its primary activity and that no attempt should be made to differentiate activities beyond the level of the statistical unit that maintained full accounts. Thus, the provision of credit by a large retail enterprise would not influence the sectorization of that unit unless it became the primary activity, or unless the credit were provided by a subsidiary that maintained its own full set of accounts, in which case the subsidiary would be classified in the financial corporate sector. Similarly, the mode of financing of an enterprise would not determine its sectorization.

Holding companies

The Group then addressed the complex issue of holding companies. An extensive discussion took place on the definition and sectorization of such companies, which centred on two alternative criteria to be used in classifying holding companies: according to the character of its subsidiaries or according to the function of the holding company itself. It was recognised that mere ownership of other companies would not be sufficient to classify an enterprise as a holding company. A large retail company that owned producing subsidiaries would be classified according to its own primary activity, as would each of the subsidiaries which maintained full accounts.

Holding companies were therefore defined as companies set up mainly to own and control other companies; they normally would not have any direct activity of their own. Some participants expressed the view that holding companies should always be classified as financial institutions, irrespective of the nature of their subsidiaries' activities, since the essence of a holding company is not production but rather the financing and control of its subsidiaries; this is evident from the preponderance of financial assets on its balance sheet representing claims on subsidiaries. Most participants felt, however, that the European System of Accounts (ESA) practice of classifying holding companies according to the sector in which the majority of the subsidiaries are classified was appropriate. Several participants felt that to always classify holding companies as financial institutions would distort the analysis of the flow of funds in the economy, since, if the subsidiaries were predominantly non-financial, large cross-sectoral transactions would be generated between the holding company and its subsidiaries.

The discussion then turned to precisely how a holding company and its subsidiaries should be classified. Several speakers favoured following the ISIC classification, although it was recognised that ISIC is not clear in this area. It was suggested that holding companies that received funds from outside and channelled these to their subsidiaries should be classified to ISIC Division 65 (that is, 6599: Other financial intermediation n.e.c.), while those that engaged in non-financial activities should be classified to ISIC Division 74 (that is, 7414: Business and management consultancy activities). Several participants said that ISIC should be used to classify holding companies but suggested a rewording to the effect that "in all cases where a holding company has a majority of financial subsidiaries, it should be considered a financial institution"; this approach was generally in line with ESA.

The Group reached the tentative conclusion that holding companies should be classified to the institutional sector in which the activity of the group is concentrated. The Group expressed the hope that this recommendation would be reviewed in the near future by other Expert Groups, and noted that the recommendation might not be consistent with the latest draft of ISIC. It was agreed by the Group that steps should be taken to ensure that ISIC be amended as necessary to be consistent with the Group's recommendations concerning the classification of holding companies.

With regard to the sub-sectoral classification of holding companies, it was agreed that holding companies should be classified to the category of "other financial intermediaries except insurance companies and pension funds" unless most of the subsidiaries they controlled belonged to one of the other financial sub-sectors. Thus, a bank holding company whose subsidiaries were primarily depository institutions would be classified under sub-sector 2, Other depository institutions, and a holding company whose subsidiaries were primarily in insurance would be classified under sub-sector 5, Insurance companies and pension funds.

With respect to financial subsidiaries of retailers or manufacturers whose primary function is to provide credit to customers who purchase their goods, the Group recommended classification in the financial sector if there are separate legal entities with complete accounts.

With regard to internal financing arms (that is, subsidiaries whose role is to incur liabilities and provide funds to the other members of the group) some participants felt that these should always be classified according to the enterprise's main activity. One participant suggested that if the financing subsidiary were not a separate legal unit, any attempt to classify it as a financial institution without regard to the nature of the activities of the group as a whole would be a fiction. Another participant noted that if the

subsidiary's sole role was to finance the activities of the group, it should not be considered a financial institution; if, however, it also channelled funds outside (except for cash management operations), it should be classified in the financial sector. A further suggestion was that these subsidiaries should be classified in the financial sector only if they obtained funds from the market: if their funds were derived solely from the parent they would not be classified in this way. The Group's reaction to these suggestions was mixed. They were seen by some as a departure from the "legal principle" of classification, as inconsistent with the earlier decision made on holding companies (since the financing objective could be met either by the holding company or the financing subsidiary), and noted that if the financing subsidiary did not have autonomy of decision making it should not be considered a financial institution. Others, however, expressed the opinion that, since the Group had agreed to extend the coverage of financial institutions to include auxiliary services, it would be illogical not to include financing subsidiaries in the financial sector. **The majority of the Group recommended that subsidiary enterprises whose primary role is to raise funds on the market to finance the parent organisation should be classified in the financial sector if the subsidiaries are separate legal entities with complete accounts. The Group noted that some participants argued that it would often be more useful for analytic purposes to combine these subsidiaries with their parent organisation.**

The Group was in favour of disaggregated reporting, in keeping with the decision made by the Expert Group Meeting on Production Accounts and Input-Output Tables, in March 1988, which decided to retain the "legal unit" rather than the "family of enterprises" concept. One participant suggested that the family of enterprises concept could be shown in supplementary tables. Another was in favour of aggregated reporting on the grounds that it would be difficult to sectorize large and diversified enterprises. It was also pointed out that disaggregated reporting might be difficult in practice, since only consolidated accounts might be available.

4. Government

Monetary authorities functions and acceptance of deposit liabilities

January, 1988

The group discussed possible means of reflecting in the SNA the treatment of monetary authorities functions in GFS and other IMF statistics undertaken to permit the basic distinction between monetary policy and fiscal policy. The IMF has over the last 40 years tried to make this distinction in the data being published and in the analysis of these data. It was explained that there are institutions in government which perform monetary functions; i.e., parts of the monetary policy are undertaken by government institutions. Such functions are treated in the IMF's GFS and financial statistics as carried out not by the government but by the monetary authorities subsector which includes also the operations of the central bank.

The question was raised whether the flows to or from government resulting from the performance of monetary authorities functions should be rerouted in the SNA and shown as government inflows from or outflows to the financial institutions sector.

An analogy was made with other parts of the SNA system, where a number of reroutings of transaction flows are carried out for analytical purposes; for example, employer contributions to social security or pension schemes which are rerouted through households. It was further explained that the GFS system tries to identify transactions in government that deal with monetary policy (and not fiscal policy) and in order to be

consistent with this distinction, these transactions are treated separately, i.e., they are rerouted and shown in the monetary sector. This does not violate the integrity of the institutions. A recommendation was made that the SNA system should consider this treatment, to avoid the need to redesign money and banking statistics to cover the banking activities of government.

It was also explained that there are many countries in the world where the Treasury Department carries out monetary functions.

It was noted that the November 1987 Meeting of the European Communities Working Group on National Accounts recommended that where monetary authorities functions were carried out by parts of government which are not separate institutional units, they should remain in the general government sector in national accounts. It was pointed out that the proposed rerouting would not separate such operations from the general government sector but simply reroute the transactions through the monetary authorities subsector.

A reference was made to Table 25 in the 1968 SNA (p. 201), 'Financial Transactions in the Monetary System', which includes transactions of the Central Bank, other monetary authorities and the monetary functions of the Treasury, with the suggestion that this table might meet the data and analytical requirements. It was stated, however, that this table had been in place for 20 years and had not been found by the IMF to provide a satisfactory solution.

It was agreed that what is needed is to identify separately the transactions of the government sector in the SNA, and that this does not imply a split of the institutions. Where government agencies carrying out monetary authorities functions are not separate institutional units, they must remain part of the government sector. The group concluded that to meet the needs of both fiscal and monetary policy and to provide links to GFS and money and banking statistics, it will be necessary to introduce appropriate sub-divisions of the SNA transactions classification and a complementary presentation. The outlines of the subdivisions and complementary presentation should be taken up by the Expert Group on Financial Accounts and Balance Sheets.

September, 1988

The Expert Group Meeting on Public Sector Accounts, which took place in January 1988, had concluded that, where government agencies carrying out monetary authority type functions are not separate institutional units, they must remain part of the government sector. To meet the needs of both fiscal and monetary policy, and to provide links to the IMF's Government Finance Statistics (GFS) and MBS, the Meeting had decided that it would be necessary to introduce appropriate subdivisions of the main SNA transactions classification and a complementary presentation, and had referred the question of how this should be done to the Expert Group Meeting on Financial Flows and Balances.

MBS identifies the following monetary authority type functions that may be undertaken by government and that are consolidated with the accounts of the central banks to obtain the monetary authorities' accounts:

1. maintenance of international reserves;
2. issuance of currency;
3. transactions with the IMF; and

4. operation of exchange stabilisation funds.

Where these operations are undertaken within government, MBS reroutes them into a monetary authorities account, which consolidates these transactions with the accounts of the central bank.

The SNA recognises that these central banking functions may be performed outside the central bank in some cases, but it adopts a different approach to displaying the relationships involved. Because it is concerned with all the activities of the economic agents whose accounts it presents and not with just one particular aspect (such as their role in financial intermediation), the SNA considers it important that the institutional identity of the decision making transactor units be maintained in the basic accounts. It does recognise, however, that the data with which MBS is concerned may be important to many analysts, and it provides for a supplementary table (Table 25, "Financial transactions of the monetary system," in the 1968 SNA) on central banking functions performed by entities other than the central bank and gives a consolidation of the central bank and other monetary institutions to form the equivalent of the MBS Monetary Survey.

In ESA, the sub-sector for central banking authorities includes, in addition to the central bank, "central monetary agencies of essentially public origin (e.g., agencies managing foreign exchange, agencies whose function is to influence the bond market or money supply), which keep a complete set of accounts and enjoy autonomy of decision in relation to the central government"; however, ESA concludes that "most of the general government agencies engaged in monetary activities are not institutional units". The issue of currency by the state, its transactions with the Fund, and its management of portfolio investments designed to influence the money supply are therefore assigned in most cases to the central government sub-sector in ESA.

In SNA the sub-sector of financial institutions termed "other monetary institutions" is defined to include all banks except the central bank that have liabilities in the form of transferable deposits. MBS defines an analogous sub-sector termed "deposit money banks", which differs slightly from the SNA grouping of "other monetary institutions" because of reroutings made in MBS for deposits accepted by governmental institutions such as postal giro systems and the treasury. These deposits are consolidated with the deposit money banks' accounts in MBS. In addition, central banks sometimes engage in commercial banking activities and play a major role in the creation of deposit money. Where separate accounts relating to such commercial banking activities are maintained, MBS consolidates them with the accounts of the deposit money banks.

Table 25 of the 1968 SNA consolidates the accounts of the central bank and other monetary institutions (defined in terms of narrow money) with the monetary functions of the treasury to obtain a consolidated account for the monetary system. The questions posed to the Group were:

1. Is this consolidated statement sufficient for the respective analyses of fiscal and monetary policy, or is there a need to identify separately a consolidated monetary authority which brings together monetary authority type functions that are carried out by the central bank and by the government?
2. How should the revised SNA treat deposit-taking activities of government institutions? Should they be included in a construct similar to Table 25 in the 1968 SNA?

Three participants expressed the view that SNA should not have a monetary concept and logically, therefore, it should not have a monetary authorities concept. Many felt, however, that even if it were not useful for the SNA proper, it would be important to have a monetary authorities concept in the SNA in order to show the relationship between the SNA and MBS. **The Group supported the recommendation of the Expert Group Meeting on Public Sector Accounts with regard to the treatment of government agencies carrying out monetary authority and deposit-taking functions: (1) these agencies must remain part of the government sector where they are not separate institutional units, and (2) it will be necessary to introduce appropriate subdivisions of the main transactions and balance sheet classification in order to meet the needs of both fiscal and monetary analysis and to provide links to SNA and MBS .**

On the question of presentation, **the Group concluded that a complementary presentation along the lines of SNA Table 25 should be included in a handbook rather than in the SNA proper.** One participant suggested that the table should show each of the sub-sectors and individual reroutings in the columns and instruments in the rows, since this would effectively provide a bridge between the SNA and MBS. It was agreed that the IMF would provide the author of the revised SNA with a proposed precise formulation of the table; this would reflect possible changes now being considered in the manner in which contra-entries for reroutings are made in the MBS presentation.

Lending operations of government

Government lending operations may be carried out in a wide variety of ways. The government may lend directly to the final user of funds through a development budget or a special lending fund; the government may borrow directly from abroad and on-lend the funds to a domestic user; or the government may lend funds to a financial institution which then on-lends to the final user. In these cases the government directly acquires a financial asset. The government may also facilitate lending operations by guaranteeing the borrowing of other institutions or enterprises.

The above discussion raises the question as to whether lending operations undertaken by the government solely for public policy purposes should be attributed to the government or to the financial institutions sector.

The 1968 SNA includes in the government sector “(v) public saving and lending bodies which are financially integrated with a government or which lack the authority to acquire financial assets or incur liabilities, respectively, in the capital market” (SNA Table 5.1, “The definition of institutional sectors and sub-sectors,” p. 79). The guideline for financial institutions is parallel, stating: “Where the public institutions include lending institutions, the liabilities of which are in fact to the public authorities only, though they have the legal authority to incur liabilities to the public or to other financial institutions, the data in respect of these entities should be given separately.” This suggestion presumably was made to permit an alternative supplementary consolidation of such institutions in the government sector.

The Group was asked to address the question of the appropriate treatment of government lending operations, particularly in the following areas:

1. Should the present legalistic distinction as to when lending institutions should be included in the government sector be maintained in the revised SNA?

2. Should financial institutions whose lending operations are directly controlled by government be classified in the government sector, or should they continue to be separately identified as public financial institutions?
3. Should a financial institution that is incorporated be placed in the financial institutions sector regardless of its source of funds? This would parallel the treatment accorded to enterprises.

The Group concluded that the 1968 SNA criteria for deciding whether a government lending body should be classified to the government sector or to the financial sector should be maintained. The criteria include in the government sector those bodies that "are financially integrated with government" or "lack the authority . . . to incur liabilities in the capital market. "

5. *Related issues*

Regional central banks

When there is a common central bank for a group of countries, many financial statistics take on different meanings from those for countries with their own central banks. The Annotated Agenda raised a number of issues with respect to the statistical treatment of the operations of regional central banks (RCBs) and the use of a common currency, including: the residency of the headquarters of the common central bank; the allocation of the total assets and liabilities of the headquarters to the balance sheets of the national offices; and the measurement of foreign assets and currency in circulation in each member country.

Discussion of this specialised topic was limited. Several participants said that if an RCB is not considered to be an international organisation, all of its assets and liabilities should be apportioned among the member countries, although they were uncertain as to how this might be done: a technical paper setting out options would be needed. One participant did not see the problems set out in the Annotated Agenda as insuperable: the assets and liabilities of the headquarters of RCBs should be prorated among member countries, as should the balance comprising net worth. In his view, problems arising in measuring currency in circulation were not necessarily more severe than for countries whose currency circulates freely in other countries; this had not precluded countries in the latter situation from compiling money measures. Overall, the participants felt that the SNA depiction of the central bank would have to recognise that prorating would have to be done for regional central banks.

On the basis of the above discussion, the Group agreed that all financial assets and liabilities of RCBs should be allocated among the participating countries. The statistical problems raised by RCBs should be dealt with in the sections of the revised SNA where residency and central banks are discussed.

E. General government

1. The boundary with non-financial enterprises

Dual sectoring in government

June, 1986 (2)

Government produces both commodities and government services. If the activities producing commodities are all treated as enterprises and moved to the enterprise sector, then the identity between the producers of government services and the government sector is established and dual sectoring collapses in this context. There was therefore extended discussion about whether this was a desirable outcome or not. Units such as railways and post offices which mainly sell their product to sectors outside government should clearly be treated as enterprises whether or not they are formally part of government. A more difficult case is the example of the public works department for government which usually produces output only or mainly for government and may or may not be reimbursed within the government accounting system but in such a way that this represents only a transfer of funds between government departments rather than an in-flow of money from an alternative source. Is such a unit producing a commodity (construction) or government services? Should it be treated as a corporate construction enterprise or part of the government sector? One suggested solution was to create a new subsector into which such units would be allocated. These could then either be aggregated with public enterprises or with government depending on user preference. Such a subdivision might also be particularly useful when the link to input-output needed to be established. An alternative suggestion was not to remove departmental enterprises from general government but to treat them all as producers of government services and then provide a table showing the commodity classification of the output of the producers of government services. It was generally agreed that the most common practice is that large important units are separated out and treated as enterprises and smaller ones are left within government. This decision is based on a fuzziness of definition as well as ambiguities over the availability of data. It was widely recognized that this is not a satisfactory solution and that it is an area where much greater clarification and guidance is needed in the new Blue Book. Care needs to be taken with the examples quoted; for example, a government printing press may seem to be an obviously "industrial" activity but changes in technology may mean an apparent recommendation that some secretarial functions should be treated as enterprise activities.

It was recognized that this area needed to be given much greater consideration at the expert group meeting on the government sector. It was also recommended that attention be paid to the fate of enterprises which were successively nationalized or privatized and guidance should be given as to how long runs of data should be prepared taking these events into account.

January, 1988

Departmental enterprises⁵ are government owned unincorporated units, (establishment type as defined in SNA), which are mainly engaged in selling goods and services at prices designed to cover the costs of production to the general public or in providing goods and

⁵ This term is used in the GFS but not in the SNA. Such units are referred to there simply as producer units within government.

services to other units of general government (as ancillary units). Some of the issues relating to departmental enterprises arise from the contrasting measurement of the output of the producers of government services and of industries. Both the SNA and GFS classify government owned industries in the nonfinancial public enterprise (NFPE) sector when their sales to the public are large and they are incorporated. There is no difference between both systems in this respect. Both systems classify unincorporated industries with only small sales to the public within the government sector and measure their activities using a different methodology from that applied to other government activities. The SNA production account for industries in government is based on the market value of sales, like the production account for enterprises outside government. In contrast, the SNA production account for producers of government services is based on inputs because there are no market sales and there is not a precise way of measuring the value of output. Output is therefore assured to be equal to input for the producers of government services

Because the expenditures of departmental enterprises are used to produce goods that can then be sold, it is important not to classify their expenditures with the inputs for the production of government services. Similarly, on the receipt side, the sales proceeds of departmental enterprises, which must be used to meet production costs, should not be added to government revenues, which generally constitute disposable income for the government. What is done in GFS is to net the proceeds of departmental enterprises' sales to the public against their corresponding production costs and add only the net operating surplus or the net operating deficit to government receipts or expenditures, respectively, for classification by purpose or by other characteristics. Nonoperating receipts and expenditures of departmental enterprises are combined in their entirety with other government operations in GFS. Incidental sales of government are treated on a gross basis in GFS and SNA, since their costs cannot be identified.

Reservations were expressed with regard to the concept of small sales and large sales to the public as a criterion for classifying enterprises as inside or outside government, since a definition of small and large scale sales is not provided. There is a reluctance to apply this concept, which remains vague, and would differ in application to local or central governments.

While the principal question before the group was whether departmental enterprises should be kept within government or moved to the NFPE sector, it is regarded important for both GFS and SNA that, in either case, some mechanism remain for separating or netting the enterprise activities that are found in the government accounts from the activities of producers of government services.

It was the view of the group that a departmental enterprise is a government-owned enterprise which does not have a complete set of accounts and autonomy of decision-making but for which separate production account data are available. For the production account, therefore, a departmental enterprise should be treated as a market establishment with the operating surplus or deficit derived in that account being transferred to the income accounts of government. For the purposes of the income and accumulation accounts, the departmental enterprise should be treated as a part of a larger institutional unit of government and not as a nonfinancial public enterprise. The calculation in SNA provides a kind of netting parallel to that required by GFS. Incidental sales by government are to be treated without separation from the producer of government services. The group decided against the alternative of treating departmental enterprises as producers of government services. One participant remarked that under the treatment adopted, operating deficits of departmental enterprises would imply the payment of a subsidy from the government to itself. It was explained that such a subsidy would be from the government to a market establishment of government. It was agreed that the

distinction between market and nonmarket activities will be further discussed during the next Expert Group Meeting on Input-Output and Production Accounts. The treatment of operating deficits or surpluses of the departmental enterprises was discussed later during this meeting

The Expert Group agreed that departmental enterprises have accounting data for the production costs and sales income but do not have a full set of accounts; however, the scale of activities should no longer be a criterion for defining departmental enterprises in the next version of the SNA. It was therefore agreed that departmental enterprises should be separated from producers of nonmarket government services in the analysis of production, but not in the sector accounts.

Ancillary enterprises

The group discussed the valuation of the output and the coverage of ancillary enterprises which produce primarily for other units of government, and provide their output to other units of government at either nominal prices or no charge. There was concern on the one hand that such units' output would be undervalued if measured by sales price. This led to a proposal that such units be classified as producers of government services so that their output would be valued as the cost of inputs. There was concern, on the other hand, over classification of the same types of production, i.e., the government printer, as a market establishment in countries where the output is sold to other government units and as a producer of government services in countries where the output is provided to other government units at either a nominal charge or no charge. Two approaches were discussed to overcome these problems. One approach would establish a list of types of activities undertaken by ancillary enterprises which, for the sake of uniformity, should be classified as market establishments in all countries regardless of the level of charges to other units of government. There was a suggestion that such a list could be based on ISIC categories and discussion as to whether such a list of market establishments would be restricted to production of goods or could include services as well.

A majority of the Group preferred another approach, referred to as the market-nonmarket solution, which would classify as market establishments only those units which produce for other units of government at a level of charges designed to cover the major part of the costs of production. Preference was also expressed for valuation at actual prices, of sale of market establishments and of inputs for nonmarket establishments, rather than at the price of parallel products in the market. A final determination of the basis for classifying units as ancillary enterprises, however, was referred to the subsequent Expert Group Meeting on Input-Output and Production Accounts. It was also recommended that in view of other uses of the term 'ancillary', the appropriateness of the term 'ancillary' to units providing goods and services to other parts of government be examined.

March, 1988

At the Expert Group Meeting on Public Sector Accounts, three alternative proposals had been put forward for dealing with what were then described as ancillary enterprises of government. The first was that if the output was sold to cover costs it should be treated as market production in both the production account and capital account. If the output was not sold or was sold at a price that did not cover costs it should be treated as non-market production. The second proposal was that a specific list of activities should be treated as market production whether the output was sold or not and remaining activities should be treated as non-market. The third alternative was that all goods should be treated as market production and services as non-market.

There was wide agreement among the participants at this meeting that the treatment of government output should be brought into line as far as possible with the agreements reached for treatment of enterprises. This meant for example, that it was inappropriate to talk about ancillary enterprises of government. Ancillary activities such as bookkeeping which by definition could not be separated into distinct units should be included with the units which they serve. This then left the question of secondary production and how far this should be treated as a separable unit and how far as integrated activity. Again it was felt in line with earlier conclusions that if most of the unit's output was sold, whether to purchasers inside or outside government, at a price to cover costs then it should be treated as a separate establishment undertaking market production. The remaining problem concerns secondary activities which were usually produced by market producers but which could be undertaken by government who then had the choice of whether to make these products themselves or buy them from outside. This problem was seen as being closely analogous to that of integrated activities in the case of corporate enterprises. It was felt that these should be separated out wherever feasible. They should be classified according to the appropriate kind of activity classification but would be treated as non-market producers. There is no reason in principle why this should be limited to the treatment of goods. Some services may fall within this heading also. As this is done in the case of enterprises, the cost of and value added generated in ancillary activities in government are to be allocated among the various government activities that they serve. Given the proposal to have a cross classification between kind of activity classification and the distinction between market and non-market production, this treatment could be easily accommodated as could the possibility of a non-market producer having secondary market production. Such a treatment and its close parallel with corporate enterprises was felt preferable to the existing rules. Accordingly, the term departmental enterprise should be dropped from the new version of the Blue Book. It was felt that some flexibility must be given to the interpretation of these guidelines. For example, the existence of a repair shop within one department would be treated as an ancillary activity but if a major repair establishment existed for the whole of government then it may be more appropriate to treat this as an integrated activity in a separate establishment where feasible. Further elaboration of this principle is needed. In deciding when separation is desirable, reference should be made to the principle established earlier of distinguishing activities at approximately the one digit heading level of the present ISIC.

It was noted that there could be a conflict in the recommendation if an activity sold more than 50 per cent of its output outside government but at a price that did not cover costs. Appropriate treatment for this case has yet to be considered.

Government units that sell their output (whether to purchasers inside or outside government) at prices intended to cover the costs of production are considered to be market producers. They do not involve ancillary or integrated activities and are not considered under this heading.

In general, the definition and treatment of ancillary and integrated activities should be the same for both the government sector and the enterprise sector. The term 'departmental enterprises' should not be used in the future Blue Book.

As is done in the case of enterprises, the costs of, and the value added generated in, ancillary activities in government are to be allocated among the various activities that they serve.

In line with the rules agreed for vertically-integrated enterprises, integrated activities in government should be separately classified by the appropriate ISIC category within non-market producers if it involves production of capital goods or if it produces goods

or services that are not usually produced by government. In practice, it may be impossible to separate out integrated activities as distinct establishments. In this case the output of integrated activities will be treated as secondary production of non-market producers.

2. Community production of services and capital goods

January, 1988

The group was asked to consider whether the production of capital assets constructed on a communal basis for which the government has the responsibility for maintenance and repair should be attributed to government in the SNA. This question does not arise in GFS because in GFS the transactions are shown on a cash basis.

The group considered the following situations:

1. The community through a nonprofit institution serving households produces the capital assets and maintains them, and
2. The community produces the capital asset and, because of lack of resources, the government undertakes their maintenance.

In the second case, should the SNA include an imputation to transfer the capital asset to the government? Two further questions remain:

1. a timing problem between the date of production of the capital assets and the date at which the government undertakes responsibility for their upkeep, and
2. how the upkeep of the assets should be evaluated.

One participant indicated that unless the government is involved in upkeep, there would be no way to know about the production of the capital assets by the community. It was indicated that when the government maintains and repairs the capital assets, the government expenditures could be classified in SNA as current transfers to private nonprofit institutions.

The group agreed that structures produced on a communal basis should be treated as production and fixed capital formation of nonprofit institutions serving households. If the government will provide maintenance and repair of the structure, and if the ownership is not clearly retained by the nonprofit institutions serving households, then these assets should be transferred to the government balance sheet through the reconciliation account.

3. The boundary with financial institutions

See also the section above on the boundary between financial institutions and government

Government employee pension schemes

The question was raised as to whether government employee pension funds invested with the employer government should form part of the government or of the financial institutions sector.

It was explained that the SNA separates out from the pension fund subsector all the pension funds invested exclusively with the employers. This classification is also followed in GFS.

However, because prudence or legal requirements lead many private pension funds to invest in government securities, the rationale for classifying such government employee pension funds within the employer government does not apply. Consequently, in the case of government employee pension funds, it was proposed that these should be classified in the pension fund subsector of the financial institutions sector. This would permit the analysis of government employee pension funds which can best be provided in the context of pension funds and insurance companies. The analysis would be independent of whether reserves are invested entirely with the securities of the employer government. **The group agreed that the fact that a government employee pension fund is invested in government securities is not a sufficient justification for including it in the government sector rather than in the financial institutions sector.**

Government employee welfare funds and unfunded welfare and pension schemes

It was explained that there are three types of schemes: unfunded government employee pension schemes, unfunded government employee welfare schemes, and funded government employee welfare funds. The question was raised as to whether these three categories of schemes should be considered as social security schemes, with their contributions and benefits classified as social security contributions and benefits.

The SNA for the government sector calls for separate treatment of these schemes from the social security schemes. However, in practice it has been found that the SNA distinction was not being followed in many countries, as national accountants found it difficult to make the distinction. Because the government's role as employer and as provider of social security overlaps in many cases, many such schemes are considered a part of social security or indistinguishable from it. This proposal for simplification was justified, therefore, from both a theoretical and practical point of view. It would bring no change in the total of employee and employer contributions and of benefits registered in the SNA for the government sector. An additional benefit is that there would not be any need for imputations of service charges for these three schemes. The proposal does not affect the institutional classification but rather the transaction classification.

The group agreed that the three schemes mentioned above should continue to be classified in the employer (government) sector. However, contributions and benefits should be classified as social security contributions and benefits.

4. Nonprofit institutions

The group was asked to discuss an aspect of an issue covered by the Household Sector Meeting, which determined that the criteria to determine where to include private nonprofit institutions should be which sector the nonprofit institutions (NPIs) serve.

For this meeting, the question raised was whether the government sector should include nonprofit institutions serving either households or enterprises with majority financing and control by government. The discussion centred on the two criteria of financing and control.

It was stated that in both the GFS system and the 1968 SNA, NPIs are included in government only if they are both majority-financed and controlled by government, that is, if both criteria are met.

It was mentioned that in Finland there is a nonprofit institutions (NPI) sector separate from government and that the national accountants would like to keep that separation. The NPI sector in Finland includes churches, some of which are funded by government but have independent activities. It was mentioned that in Norway, where priests are paid by government, the churches are included in the government sector; however, it was recognized that it is a problem to determine, in the case of churches, if they are part of government and are in fact financed and controlled by government. Circumstances in the individual countries would determine whether churches met the criteria and should or should not be included in government.

The question was raised on how to classify NPIs that are only financed or controlled by government. It was stated that if only one of the criteria is met, then the NPI should be considered private and classified according to the sector they serve.

It was stated that there appeared to be inconsistencies between countries in their definitions of finance and control. The criterion for finance probably differs in developing and developed countries. A suggestion was made that the SNA should provide some guidance in order to interpret these terms. At present, the countries have to make the interpretation themselves.

A question was also raised about the treatment of political parties. In Congo, the party, which receives about 95 percent of financing from government, is considered as part of government.

The group therefore agreed that the criteria for including NPIs in government are that they are both majority financed and controlled by government. Private institutions (outside government) are allocated according to the sector they serve. NPIs serving enterprises should be shown in the corporate enterprise sector even if they serve unincorporated enterprises. It was recommended that the revised SNA provide a further explanation of control.

5. *International organizations*

Supranational authorities

The SNA differs from the GFS in that the GFS defines supranational authorities as international organizations which are empowered to levy taxes within countries. The only supranational authorities which exist at the moment is the European Community. To give a complete measurement of overall government activities as regards taxes and expenditures, GFS includes governmental functions assigned to supranational authorities within statistics for government, by showing explicitly unconsolidated data for the non-headquarters operations of supranational authorities within a country and also data consolidated with the rest of national government of that country. GFS present the consolidated data as data for general government, which therefore is defined to encompass both the national government and a non-resident sub-sector, the supranational authorities.

The SNA does not discuss supranational authorities but stipulates that: international bodies, such as political, administrative, economic social or financial institutions, in which

members are governments, are not considered residents of the country in which they are located or operate. General government in the SNA does not include non-resident units.

The group discussed whether general government in the SNA should include, as a non-resident subsector, the non-headquarters operations within the country of supranational authorities.

It was agreed that supranational authorities should be discussed in general terms because of the possibility that other supranational authorities, i.e., other than the European Communities, might be created in the future. Several participants expressed reservations about the extension of the term general government to include a non-resident subsector. Several clarifications were offered on the GFS treatment. It was pointed out that the overall deficit/surplus of supranational authorities is always defined to be zero by having a balancing item which consists of net flows to or from headquarters. The GFS treatment implies no conflict with balance of payments statistics since data for supranational authorities are identified as those of a non-resident subsector and are shown separately under GFS. The advantage of the GFS treatment was seen to be the inclusion of all governmental activities, such as taxes and expenditures, within one overall total for government.

The group decided that in the SNA, the term general government should be restricted to resident units and that supranational authorities should be separately identified as a subsector of the rest of the world. It was agreed that the combination of general government plus the transactions of supranational authorities in the country would be useful and it was suggested that a separate term for this combination be found.

Other international organizations

Participants in the Expert Group Meeting on External Sector Transactions concluded that, for completeness and symmetry of national accounts, an additional unit embracing international organizations classified as non-resident everywhere they operate should be defined and measured through the compilation and consolidation of data on their activities. Such international organizations were defined to include organizations that meet three criteria:

1. Authority derived directly from the authority of the organization's members, which may be independent states or international organizations;
2. sovereign status, i.e., the laws and regulations of the country or countries in which it is located do not apply to the international organization;
3. production of services which are primarily nonmarket services.

The proposal was that data on operations of all international organizations excluded as nonresident from all countries' national accounts be aggregated as an additional unit to complete the universe of national accounts.

It was pointed out that the proposal for international organizations was different from that for supranational authorities in that data need to be prepared for supranational authorities' operations in each country, whereas the accounts to be prepared for international organizations would cover their operations throughout the world. It was also noted that while the proposal would not change the 1968 SNA treatment of international organizations, in that transfers to and from international organizations

already appear in the rest of the world accounts, data would also become available for international organizations' production.

The group agreed that it would be desirable to compile full economic accounts for international organizations in total.

6. *Borderlines within general government*

Central, state, local and other government levels

The topic discussed was whether it would be useful to present data in SNA for the state, provincial or regional level of government, for countries where they operate as a level of government, separate from central and from local governments.

Data for state, provincial, or regional governments are published in the GFS Yearbook for about 22 countries. This level of government is defined in the GFS Manual Section I.D., as comprising 'governmental units exercising a competence independently of central government in a part of a country's territory encompassing a number of smaller localities, that is, occupying an intermediate position between the central government and independent local governments that may exist.'

The 1968 SNA distinguishes only between central government and local governments; however, the revised UN-SNA questionnaire distinguishes a separate intermediate level of government, where it exists, between central and local governments.

The main benefit of separating state from local government data, when state governments exist, is that it allows a better understanding of the relations between the different levels of general government and of the financial flows between them. The role of a separate level of regional government in such flows may be particularly significant, justifying separate measurement. The separation of an intermediate level of government raises no difficulties in consolidating the different components of general government.

It was generally agreed that this was a useful proposal and discussion centred on issues arising in its implementation.

Different criteria are presently being used to decide whether such a level of government exists. The criteria cited by the discussion paper, drawing on the GFS Manual, is that 'a government may be considered to have substantial autonomy when it has the power to raise a substantial portion of its revenue from sources it controls and its officers are independent of external administrative control in the actual operation of the unit's activities', (see p. 14 of the GFS Manual). While the OECD follows the same criteria as the IMF, in fact it reports intermediate level revenues only for the six OECD countries with a federal structure. It was suggested that both control of revenue and a federal structure may be too restrictive. The November 1987 Meeting of the EC Working Group on National Accounts discussing this point examined an alternative criteria of the existence of a state parliament and state ministries, but reached no conclusion. It was suggested that this would restrict the intermediate level to federal countries, which would be too limited. A number of countries, among them Spain and Italy, are assigning greater importance to regional governments without calling it a federal structure. It was also stated that control of revenue need not be limited to tax revenue, since nontax revenue and block grants might also be significant. Besides control of revenue, moreover, attention should also be paid to control of expenditures.

It was pointed out that the criteria cited in the discussion paper did not fully represent the list of criteria set out in the GFS Manual (on page 14). It was agreed, therefore, that a full list of criteria like that in the GFS Manual would be useful to countries in deciding whether to report a separate, regional level of government. It was felt that the question of the existence of an autonomous regional government level was not only an economic question but also a political question, and that the decision as to whether to report data for such a level separately should be left up to the individual countries with the guidance of a list of criteria the SNA considered significant.

There was also a suggestion that perhaps it would be useful to have in the SNA a more refined classification of government units by regional groupings and the functions they exert. However, it was decided that this point should be discussed under the heading of statistical units.

The group agreed that it would be useful to introduce intermediate levels of government between central and local governments as an additional level of government for countries where this extra breakdown would be meaningful. The group noted that the GFS Manual contained helpful guidelines for identifying this additional level.

Social security funds

Under the 1968 SNA all social security funds are combined into a single subsector of government separate from the central government and local government subsectors. Under the GFS, however, social security funds do not form a separate subsector and are consolidated within the level of government at which they operate, though separate data on their operations are presented. It was demonstrated in the discussion paper and background paper, and agreed upon during the meeting, that social security funds have lost a great deal of their financial independence and have been integrated more closely with government over the past two decades. It was felt, however, that to help maintain the integrity of social security funds and reassure contributors, it was important to continue to maintain separate statistics on operations of social security funds. It was stated, on the other hand, that presentation of data for central government excluding social security funds operating at the national level (amounting to only 56 percent of the combined total in France and 45 percent in Germany) would fail to meet the needs of users like the IMF requiring a measure of central fiscal policy. For some SNA users central government including social security funds would be of lesser interest, as intercountry comparisons were usually made at the general government level and production and consumption analysis might proceed by separating social security funds. Country practice differed markedly, with political discussion focussing on budgetary and social security fund operations separately in France and Germany, for instance, but together in the United States.

Against this background, there was complete agreement in the group that full information should be provided permitting cross-classification of social security funds by level of government so that they could be consolidated with either the level of government at which they operate or with social security funds at other levels. There was disagreement, however, as to which configuration of the data should come first in the hierarchy of presentation, as it was stated that some national publications were likely to present only the aggregates at the first level below general government. Most of the discussion centred on the hierarchy of presentation, therefore, some participants favouring consolidation of all social security funds first, others favouring consolidation of social security funds within each level of government first. There were objections to a compromise presentation including both central government, consolidated social security

funds, and a combination of the two, on grounds that where social security funds existed also at other levels of government the combination would misrepresent decisions taken at the central government level. Another suggestion called for separate presentation of the social security fund and non-social security fund components of each level of government. It was stated that with sectorization, as with other aspects of SNA, a hierarchical arrangement should permit compilers to present more aggregate concepts in the event of the lack or insignificance of detail. There was also a suggestion that different configurations of the components might be preferred by different users and different countries.

The group concluded that harmonization of the GFS and SNA on sectorization of social security funds was desirable, that cross- classification of social security funds and levels of government to permit meeting both needs was essential, and that further consultation with users was necessary before determining which hierarchy of presentation should be preferred.

January, 1989

At the expert group meeting on Public Sector Accounts it was concluded that it is important to have both data for social security funds separate from other parts of government and data for each level of government, including the social security funds associated with the level. This established two classifications of government that should have equal priority within the Blue Book. It was also envisaged that a cross classification would be undertaken so that for each of three levels of government (central, local and state government) there would be information on social security funds for each and other government expenditure for each. This clarification was accepted by the meeting.

General government will be subsectored two ways of equal rank: central, state government excluding social security funds, and social security funds; central, state and local government including social security funds each broken into social security funds and other.

F. Public sector

1. Ownership, control

Ownership and/or control

January, 1988

Because of their special relationship with government, public enterprises may be subject to different influences and motivations than private enterprises, so that their analysis in a separate public enterprise grouping may serve to delineate separate patterns of behaviour. The 1968 SNA proposes that the criterion for distinguishing between public and private enterprises should be ownership and/or control but this criterion has been criticized for lack of clarity: does 'and/or' mean 'and' and 'or', and how is control to be defined?

In 1984, the OECD Secretariat proposed that the next SNA should give four necessary conditions for classifying an enterprise as public:

1. it is owned by government
2. it is controlled by government

3. it is large
4. it is intended that the enterprise will be retained in public ownership on a more or less permanent basis.

The question posed was whether the revised SNA should retain the present ownership and/or control criteria or adopt some new formulation.

In the ensuing discussion, participants agreed that the size criteria and intended permanent public ownership should not be taken into account. It was stated that the purpose of the criteria was to group enterprises which exhibit a pattern of economic behaviour reflecting the influence of their special relationship to government and that this should be explained in the SNA. Others felt that the setting out of the criteria in the SNA would avoid possible confusion. It was stressed that clarity of interpretation of the criteria should be important and that the term and/or should be avoided.

The group agreed to treat as public corporate enterprises those in which the government owns the majority of the equity and those in which it exercises control over the enterprises' economic behaviour even if it holds 50 percent or less of the equity.

Majority ownership

The question posed here was whether government majority ownership should be defined to include units in which majority ownership is held not directly by the government but by a unit in which the government holds majority ownership.

The group decided that enterprises in which the majority of the equity is held either by the government or by other enterprises in which the government holds more than 50 percent of the equity should be treated as public enterprises.

2. *Accounts and tables for nonfinancial public enterprises and public financial institutions*

The 1968 SNA does not provide for a public/private split in the main accounts of the system although it does recommend a public/private breakdown in two supporting tables: Domestic Factor Incomes According to Kind of Activity and Institutional Sector of Origin (Table 17) and Capital Transactions of the Private and Public Institutions (Table 19). The question posed was whether the next SNA should provide for a public/private breakdown in the accounts or supporting tables. It was stated that such information was in widespread public demand and would be useful for analysis carried out, for example, by the World Bank.

The group agreed that a full set of accounts should be prepared for public enterprises (including both financial and nonfinancial enterprises). Because in some countries the compilation of detail might not be carried to the third or fourth levels, to have a public sector concept it would be necessary to make the public/private breakdown at the second level, immediately after making the subdivision between nonfinancial enterprises and financial institutions.

3. *Nonfinancial public sector, nonmonetary public sector*

The 1968 SNA recommends that in countries where the public authorities play a particularly important role in the economy, it may be useful to prepare accounts for the

'Public Sector' consisting of general government plus nonfinancial public enterprises and public financial institutions. In order to ensure that certain important transactions such as central bank financing of general government and nonfinancial public enterprises are not eliminated in consolidation, the GFS Manual recommends consolidation of only the general government and the nonfinancial public enterprises, referred to as the nonfinancial public sector. Similarly, for cases where government policy is carried out extensively through borrowing from not only the central bank but also from other government owned or controlled monetary institutions, it may be useful to focus on the nonmonetary public sector so as not to eliminate in consolidation the borrowing from the central bank and other public monetary institutions.

The group felt that it would be useful for the revised SNA to recognize and explain alternative formulations of the public sector such as the nonfinancial public sector, and the nonmonetary public sector. It was pointed out that the information for such a presentation is available and that guidelines for such a consolidation are discussed in the GFS Manual.

The group recommended that a consolidated presentation of the nonfinancial public sector (i.e., general government plus nonfinancial public enterprises) and the nonmonetary public sector (i.e., the nonfinancial public sector plus nonmonetary public financial institutions) should be included in the SNA as a complementary table providing information on the capital finance account.

G. Statistical Units in the Government Sector

1. Classification of the Functions of Government (COFOG)

Two main questions were raised; the first concerning appropriate statistical units in the Classification of the Functions of Government expenditures (COFOG) and the second, concerning the definition of an institutional unit in the government sector.

With regard to COFOG, the following questions were raised:

1. Should the unit for classification of COFOG be in principle a transactor unit rather than a transaction?
2. If so, should the transactor unit be applicable not only to the production cost of government and output of government, but also to other expenses in the income and in the accumulation accounts?
3. Should the transactor unit be the same as the establishment- type unit recommended in SNA for classifying production accounts and capital formation by economic activity?

Both SNA and COFOG state, in principle, that with regard to the functional classification of government expenses, the unit of classification should be the transaction. However, for practical reasons, both recommend the use of establishment-type units for the classification of production and capital formation expenses, and the use of the transaction as the unit for the classification of other expenses. It was suggested that, as the main aim of COFOG is to analyze government policies carried out through government programs in terms of the purposes they serve, programs integrating groups of expenditure that serve the same purpose might be used as the statistical unit.

It was mentioned in the discussion that statistical units can be classified according to three different criteria:

1. Activity,
2. Institution, and
3. Purpose or function.

It was stated that for the activity classification, the establishment-type unit is clearly the statistical unit, and that the institutional classification is used in the sector accounting. It was therefore only for the COFOG presentation that statistical units needed to be discussed at the meeting.

Several members of the group called for a clear, explicit definition of units in the general government. It needed to be clarified whether, for example, a Ministry or a Department in a Ministry should be considered as statistical unit. It was also argued that it would be very difficult to identify in the budget of many countries the programs referred to in the discussion paper.

The implications of using a transactor unit rather than a transaction as the unit of classification in COFOG were analyzed by looking at several examples. For instance, if the Ministry of Defense had a school for the children of military personnel, and the discussion paper's suggestion of using the transactor unit as the unit of classification were followed, the corresponding expenditures would be classified as Defense. However, most of the members of the group disagreed with this classification and stated that one should look at the purpose of these expenditures and therefore classify them in Education.

The group agreed consequently that the statistical unit for applying functional classification of government outlays should be the transaction, or group of transactions which serve the same function, rather than the transactor.

However, as the grouping of transactions would usually depend upon the budget and accounting structure, it would have to be decided in each case how to group transactions for functional analysis.

2. Statistical Units for Sector Accounts

The later part of the discussion dealt with the SNA definition of institutional units in the government sector. At present, an institutional unit is defined loosely in the SNA as a unit of decision, control and management. The central government is taken as one unit and various state provincial, local governments and individual social security schemes are each considered as separate institutional units. It was stated that this might not be the most appropriate way to define a unit in the government sector and that for the analysis of government operations (by government subsectors, regional analysis, etc.), a more refined definition may be needed.

The discussion paper suggests possible additional criteria for defining an institutional unit, such as:

1. availability of separate accounting records on income and outlay and capital transactions;
2. a separate accounting or budget office, or

3. funding for the majority of its expenses by its own revenues (taxes).

It was stated that the definition of institutional units given in SNA cannot be different for the government sector. However, it was suggested that for analytical purposes it might be useful to define an intermediate between the institutional-type units used in the sector accounts and the establishment-type units used for the activity classification, one possible application being the World Bank studies of the impact of government policy on social structure which would be difficult to carry out if establishment type units were used. There were questions raised as to the existence of intermediate units in many circumstances and what a clear definition would consist of.

In response to a question as to the kind of data one could refer to for an intermediate unit, it was suggested that an intermediate unit should have full set of income and outlay accounts.

It was concluded that further clarification is needed on the definition of statistical units in the sector accounts for government-and that for some analytical purposes, definition of an intermediate unit between the establishment-type unit used for the activity classification and the institutional-type unit used in the sector accounts would be necessary.

H. Quasi-Corporations

June, 1986 (2)

This is another very difficult boundary problem. In addition, there was some discomfort with the term "quasi-corporation" but an alternative was not immediately apparent.

There was unanimous agreement that the legal definition of a corporation was not a satisfactory basis for making a distinction between corporate and non-corporate activities. Obviously, it should be the economic form that determines the classification and not the legal form. At a pragmatic level, several participants reported that levels of employment were sometime used to determine quasi-corporations; as a pragmatic guide, this may be acceptable. Further suggestions for the practical recognition of quasi corporations concerned identifying them from tax records or simply accepting that those where data can be provided should be treated as enterprises and those where accounts were inextricably mixed up with household activity should not.

Because of the practical difficulties of identifying quasi-corporate enterprises, one suggestion was that in the name of simplification the concept should be dropped. This was seen as being a good intention but undesirable in practice .

In all issues that deal with quasi-corporate enterprises, non-profit institutions and the treatment of governmental enterprises, the problems of reroutings in the accounts need to be considered explicitly and explained unambiguously.

The present SNA concept and treatment of quasi-corporate enterprises (though not necessarily the terminology) should be retained and clarified. The criterion for the definition of institutional units should be economic behaviour, not legal form.

1. **Quasi-corporations and unincorporated enterprises**

June, 1986 (1)

Associated with the discussion on the distinction between formal and informal activities was the difficulty of identifying quasi-corporations. There was widespread recognition that despite the advice in the 1968 SNA that all productive activities of households should be treated as quasi-corporations and included in the corporate sector, in practice this was virtually impossible. It was therefore recommended that production accounts for the household sector should indeed be incorporated in the new SNA. The question was raised of producing input-output tables on a sector as well as an industry basis. This would go some way to integrating the transition from production account through income and outlay and capital formation accounts. Many countries have the data available for the government sector, the external sector and some large corporations. This would leave a residual category composed of households and small corporate enterprises but even this degree of aggregation would be an improvement over a system of accounts that stopped at the aggregate details only.

Some participants argued that distinctions according to numbers of employees, level of technology etc, could help to identify quasi-corporate enterprises. This would also help to define the production units covered in household surveys.

The distinction between monetary and non-monetary activities had also been discussed and, in connection with a production account for the non-monetary sector, it was pointed out that value added cannot properly ever be described non-monetary but only as "value added associated with non-monetary gross output." It was felt that this distinction might be a fine one and that no great degree of error would be introduced in referring to non-monetary value added.

It was emphasized that the distinction between monetary and non-monetary (i.e. production for own consumption) could only be made for final expenditures. Value-added cannot be divided up in this way because it is a residual between flows (gross output and intermediate consumption) that will often be both monetary and non-monetary.

September, 1987

It is clearly recognized that not all productive activity is carried out by corporate enterprises. There are basically three alternatives for dealing with unincorporated enterprises.

1. They can all be left in the household sector;
2. Estimates can be made for their activity and these estimates can be added to the corporate sector, leaving the household sector without any productive activity; or
3. A compromise can be established whereby some unincorporated enterprises are treated as quasi-corporations and transferred to the corporate sector, leaving the remaining unincorporated enterprises in the household sector.

There were some advocates for each of these solutions. The main reason for leaving unincorporated enterprises included in the household sector is because of the

impossibility of disentangling the accounts for these production activities from the accounts related to other household activities. In particular, capital financing was usually inextricably entangled and therefore even if one can make estimates for the production account it is much more difficult to make estimates for the income and outlay and capital finance accounts for unincorporated enterprises. Such estimates are however made by Germany, for example, which means that capital formation and interest payments, taxation and borrowing for enterprise activity is aggregated whether this is for corporate or unincorporated enterprises.

Many participants had difficulty with the idea of making such estimates accurately and were therefore more disposed to the proposition that all unincorporated enterprises should remain within the household sector. However, it was recognised that for some countries there are important large unincorporated enterprises which function to all intents and purposes as corporate enterprises except perhaps for the question of what amount of withdrawals from operating surplus are made by the proprietors. The 1968 SNA recognises such firms and suggests they be treated as quasi-corporations and transferred out of the household sector. The criterion given is that these firms should have separate accounts and be "relatively large and important". Many participants expressed dissatisfaction with this last clause because of the ambiguity of interpreting it. It was also felt that there may be some large and important firms for which estimates of withdrawals could not be made adequately and equally some smaller firms where adequate estimates could be made. The question was also raised of the parallel with public enterprises. A table for six Common Market countries was circulated showing the treatment of quasi-corporations. At present, it varies very substantially from country to country with 77% of gross operating surplus for Italy appearing in the household sector, 38% for the U.K., and 0 for Germany and the Netherlands. This underlines the fact that the present guidelines are interpreted very differently from country to country and that the size criteria in this and other contexts has proved unenforceable.

After considerable discussion, most of the group agreed that the concept of quasi-corporate enterprise should be retained, but extended to cover unincorporated enterprise of whatever size for which complete accounts, including information on withdrawals by households, are available. It was noted, though, that such accounts may not often be available and so few unincorporated enterprises may be so treated in practice. Unincorporated enterprises for which no such complete accounts exist remain in the household sector because it is not possible to distinguish transactions relating to the unincorporated enterprises from those relating to the household.

There was little if any sympathy with the idea that unincorporated enterprises be defined only by size with small incorporated enterprises being included in the household sector. The criterion accepted implies that if a distinction between formal and informal activities is based on the legal criterion of incorporation or a close parallel then the corporate and public sectors in the SNA would correspond with the formal sector and production activity within households would correspond to informal activity.

It was confirmed that a consequence of this decision would be that in future production accounts should be calculated for the household sector. Not doing so may lead to errors in GDP by treating intermediate purchases for unincorporated enterprises as final consumption.

I. Identifying a distinction between formal and informal sectors

1. Formal/informal distinctions

June, 1986 (1)

There was extensive discussion on the definition of formal versus informal activities and on sectoring and in particular the distinction between households and quasi-corporations. The suggestion was made that formal/informal was a more useful distinction to make than between modern and traditional since informal activity was also considerable in industrialized countries. The informal sector has a large role to play in cushioning the effects of downturn in economic cycles and is important for all economies not just developing ones.

One suggestion was a proposal that the number of employees be a criterion rather than legal status, but in general this was not very sympathetically received. An alternative was to define formal as corresponding with the availability of data, i.e. whether accounts existed rather than depending on the legal status of a firm. At first sight this seemed a preferable distinction but further queries were raised. Does formal then mean that questionnaires can be sent and returned? This does not seem satisfactory because estimates of non-response from large firms should be included in the formal sector. Large, formally-structured family enterprises should clearly be included as quasi-corporations in the formal sector rather than allowed to fall into the informal sector. Would registers allow a distinction? This might help but would still leave some area of ambiguity. The distinction between formal and informal was felt to be of use to both the compiler and the user and some pragmatic distinction may still be adequate. The size of the firm could not be the only distinguishing factor, it must also relate to the type of activity. All large firms are likely to fall into the formal sector but small firms may be traditional or modern. Informal activity is important for developing countries because of the social effects; it is characterized by low productivity and the technology used often in the tertiary sector.

A particularly helpful suggestion was to introduce a two-way dichotomy. One axis would distinguish modern from traditional on grounds to with technology, for example one could use "use of power" or "size" as a criterion. The other axis would distinguish formal from informal and legal status might be the appropriate criteria for distinction here. Most activity would fall on the leading diagonal with modern/formal sector appearing for both developed and developing countries and informal/ tradition activities being very large in developing countries. Both types of countries would have off-diagonal elements though it would be supposed that the modern/informal cell would be larger in developed countries and the traditional/formal sector larger developing countries. The chart below illustrates this suggestion.

	Technology	
	Modern	Traditional
Legal Status		
Formal	Government Public Enterprise	Estate Agriculture Traditional Textiles
Informal	Taxis Home Selling Home Computer Services	Subsistence Agriculture

The need to link the formal/informal distinction with classifications used elsewhere, for example in social analyses used by the ILO, was stressed. Following on from this it was suggested that there should be an ILO representative present when these issues are discussed at subsequent expert groups. A quotation was read from the Labour Accounting System document on the need for harmonization in this area also.

Participants considered that distinctions such as formal-informal, traditional-modern market-non market were very useful. Several criteria were suggested for making these distinctions, such as legal status, employment, data availability and level of technology, although no definite recommendations were agreed. It was also noted that distinctions of this kind were relevant other economic statistics.

September, 1987

The meeting briefly reconsidered the distinction between the formal and informal sectors of the economy. Mr. Hussmanns from the ILO pointed out that there would be a conference of international labour statisticians in October where this could be considered. The proposal at present was that informal activities should be defined as those that are small scale, self-employment activities with or without employees. They have a low level of organisation and technology. They tend to escape tax and other regulatory bodies. It was recalled that at the interregional seminar a distinction had been made between formal and informal activities which were primarily to do with the legal status of a firm and modern and traditional methods of production which had largely to do with technology. It was possible to think of formal traditional activities as well as informal activities using modern technology. It was therefore suggested that the ILO meeting should reconsider this aspect of their definition of informal.

The group expressed a strong interest in incorporating the distinction between formal and informal activities in the accounts, but noted that this should be done in collaboration with the ILO who are due to consider this matter in October 1987.

The discussion of the treatment of outworkers, described in chapter 2 under issues of harmonisation with the ILO also bears on this matter

March, 1988

There was discussion about whether it was desirable to introduce a split between formal and informal and if so whether it should correspond to the split between incorporated and unincorporated enterprises. This coincidence has an intuitive appeal but it was pointed out that this may be difficult to implement in practice. For example, a respondent to a survey would not always know whether the employer was an incorporated enterprise or not. The ILO defines informal as concerning more than unincorporated and may involve aspects such as access to the market. Another possibility is that they will move instead to define formal in terms of both location and number of employees and have informal left as a residual. It was therefore felt this too was an area where it was impossible to reach a definitive conclusion until more information was available from the ILO.

On the distinction between traditional and modern methods of technology, the practical problems of implementing a definition were raised again. It was pointed out however that this applied not just to manufacturing industry but to all industrial activity and was particularly important in agriculture. It was felt that traditional was not a particularly helpful word and another word might be preferred.

When sectoring is revisited and the guidelines for the new Blue Book are agreed it should be made clear that this level of subsectoring should be applied through all accounts including the institutional production accounts.

The meeting agreed that there should be a socio-economic breakdown of the household sector and endorsed the proposals made by the Expert Group on the Household Sector. Further elaboration, including the distinction between the formal and informal sectors should be done in close coordination with other international organizations, including the International Labour Organization (ILO).

The sub-sectoring (including the formal-informal distinction) could then apply in all accounts of the household sector, including the simplified production accounts which show gross output, intermediate consumption and the components of value added.

July, 1989

The group was reminded that earlier the recommendation had been to suggest a distinction be made between formal and informal activity especially in relationship to unincorporated enterprises. It had been reported that the ILO was not in a position at this stage to define what was meant by formal activities and the question was raised whether this recommendation should then be dropped from the SNA. After discussion it was agreed that the recommendation to make a distinction between formal and informal activities should be preserved but it should be clearly stated that at present the ILO had not felt able to come to an international recommendation on this. A suggestion was made that it might be appropriate to treat all corporate and quasi corporate enterprises as formal and all unincorporated enterprises as informal but this did not receive unanimous agreement from the group and should not be recommended in the SNA.

The distinction between "formal" and "informal" activities will be recommended although no international standard definition has yet been developed by the ILO.

J. Households

1. Coverage of the sector

September, 1987

Confusion often arises between micro datasets and surveys which relate to households and the concept of the household sector as presently defined in the SNA and it was suggested that it might be appropriate to use some other word, perhaps personal or individual, to refer to the household sector.

Many participants agreed that confusion was frequent but were not happy with the alternatives presented. One objection was on grounds of terminology; "individual" has a particular meaning often used in contradistinction to household as representing the members of the household separately and therefore introducing this term to relate to the sector would simply exacerbate the confusion rather than relieve it. It was also felt to be rather premature to decide this issue before the role of unincorporated enterprises and non-profit institutions were resolved later in the agenda.

Many participants felt that the confusion arose only because the terminology was used too loosely. The household sector as defined in the Blue Book refers to households as institutional units. These institutional units perform a number of functions, particularly as consumers and as producers. In this latter role as producers the institutional unit of the

household functions as an unincorporated enterprise. To talk about the household sector containing households and unincorporated enterprises is to confuse the institutional unit and the function being performed by that unit. **It was agreed that the existing SNA terminology was appropriate for describing the household sector as a group of institutional units. The sector will in future comprise:**

Households (including private unincorporated enterprises)

Private non-profit institutions .

Production and consumption are functions performed by the institutional units of this sector. The term "household sector" will be used to refer to the institutional sector as such; when referring to households in their act of consumption, the term "consumers" will be used.

At this meeting a paper was presented exploring some of the uses that can be met by providing accounts for sub-sectors of the household sector, including for example the needs raised by recent interest in the role of women in development and the possibility of deriving a concept of extended GDP. The paper also examined the characteristics that might be used in determining sub-sectors. These two characteristics of sub-sectoring, the analytical usefulness of providing extra information relating to the household sector and the practical questions of how to do the sub-sectoring, were the two lines along which the discussion developed.

The case was strongly argued that the present SNA concentrated on the production process and the technology involved in producing goods and services, but largely ignores the distributional effects of who benefits by the production generated. The present SNA review therefore could be seen as an opportunity to redress this imbalance and provide for an extension to the accounts that would allow explicitly for the analysis of who gets what out of productive activities. A means of doing this would be to disaggregate both household consumption and compensation of employees using the same sub-sectoring characteristics and also to provide a mapping between the individuals who are recompensed via compensation of employees with their incidence in households. Information on distribution of company profits to households and transfers from government and with the rest of the world would also need to be disaggregated according to the same criteria.

While several participants agreed that the present review was indeed an occasion to look forward and identify aspects of the accounts that needed emphasizing in the future, they felt the full scheme being proposed here might be over-ambitious for incorporation in the main Blue Book. This concern was underlined by a number of participants who reminded the meeting that the Statistical Commission had called for a simplification of the process, and useful as this extra information might be, it was an elaboration rather than a simplification of the present system.

It was pointed out that there is at present no significant complementary system of statistics that deals with the issues of household income and expenditure. Most of the work done to date has concentrated almost entirely on analyzing the results of household surveys and has had difficulty in reconciling these results with aggregate national accounts at both the theoretical and practical levels. One possibility that should be explored, therefore, is to elaborate the principles frequently worked through in social accounting matrices in such a way that this work could be seen as being a complementary system to the SNA. Just as it is usual for countries to compile an input-output table once every five years, say, it might also be possible to recommend that similar work on the

distribution and redistribution of income should also be done at approximately this frequency. Putting these aspects forward as an integral part of the national accounts ought also help focus attention on the need to study the household sector directly, instead of as is frequently the case merely deriving it residually

Closely linked to these discussions was the proposal that the 1993 SNA should include descriptions of social accounting matrices as a means of covering a range of analytical issues including those related to households. These discussions are reported in chapter 4 on the accounts of the system.

2. Sub-sectoring households

There was extensive discussion as to what appropriate characteristics should be taken into account in determining sub-sectoring. It was pointed out that in general countries at different stages of development differ more in the composition of their household sectors than in any other sector of their economy, so it might be difficult to determine characteristics that should be commonly adopted across countries. Previous expert groups have accepted the concept of hierarchies of classification which would apply to transactors as well as transactions. This may be a case where a standard recommendation was made at a high level of the hierarchy and countries should be left to choose the appropriate characteristics for lower level disaggregation depending on local circumstance.

A key question was whether the socio-economic characteristics of the head of household should be the appropriate criterion of the first level classification in the hierarchy. In general it was felt the term head of household should be dropped; this carries cultural connotations which are not necessarily appropriate to data needs and practicalities. In preference the term reference person should be used; in some cases this person would indeed be the head of the household but should not necessarily be selected on that basis.

Many participants felt that it would be more appropriate to allocate households to sub-sectors according to characteristics of their total or main income rather than the characteristics of an individual. Such characteristics may be in terms of income bands or whether the main source of income is from an unincorporated enterprise, as an employee or from some other source, for example recipient of transfers.

One way of combining the theoretically desired and practical aspects of sub-sectoring may be to recommend that where possible the reference person for a household should be chosen as the main provider of income. Categorizing the household according to the employment status of this individual would then be equivalent to classifying the household according to main source of income. Again it was argued that there was a distinction between analysis according to ex ante characteristics which was useful for policy purposes and analysis based on ex post characteristics used for descriptive purposes. The classic example of an ex post characteristic is actual income distribution

In general the characteristics that were listed as being possible candidates for sub-sectoring included employment status, in an unincorporated enterprise, as an employee, industry of employment, income from some other source, for example recipient of transfers or characteristics such as race, religion, language, location, endowments such as the ownership of land. While many people welcome this approach in theory, it was deemed to be difficult to execute in practice. Sampling frames for surveys typically had to be drawn up from socio-economic data on individuals and it was therefore felt appropriate to revert to dealing with the socio-economic characteristics of an individual.

Given this plethora of alternatives and the recognition that not all of these could be accommodated in international guidelines but rather should be left to be selected on the basis of local priorities, an attempt was made to distinguish the main characteristics which was felt should be recommended for standardization at the international level. The questionnaire and Income Guideline Recommendations distinguish first by industry. It was felt it would be more helpful to preserve employment status as the first level in the hierarchy. This would lead to a three-way split between entrepreneurs, employees and other. Full sets of accounts should be provided for each of these sub-classifications. It is obvious that entrepreneurs will need a production account but production accounts would also be needed for employees and others insofar as households in these categories had owner-occupied housing, undertook domestic service or had unincorporated enterprises in the households which did not provide the main source of income. All three categories would of course have income and outlay and capital finance accounts and balance sheets. There was less unanimity about subsequent disaggregations of the hierarchy. It was felt it might be appropriate to distinguish between agriculture, industry and services for entrepreneurs and employees. It might also be appropriate to break entrepreneurs into employers and own-account workers. Further, it might be appropriate to disaggregate employees according to the level of skill required, for example, high, medium and low skills. As far as the third category "other" was concerned, it was felt appropriate that disaggregation should be between recipients of property income (rent, dividends, etc.), pensioners and other recipients of transfers. The purpose of distinguishing pensioners from other recipients of transfers was that typically pensioners may not be poor whereas those dependent on transfers from other family members for example usually would be. It was noted that inmates of institutions who fall within the personal sector from the point of view of expenditure would usually be incorporated in the category of other recipients of transfers.

There was discussion about how many of these recommendations should be included in the Blue Book but it was generally recognized that where disaggregations are recommended in the Blue Book this is likely to encourage data collection procedures to follow suit. A suggestion was made that the overall structure of the national accounts to be presented in the Blue Book might be given with the advice that different sectors may be expanded in different years thus obviating the need to ever do a fully expanded system at one time but allowing flexibility to deploy resources in alternate sectors as opportunity permits. If this concept is acceptable then one should be careful that all of the major components are mentioned in the Blue Book. Those which are dealt with only in handbooks will tend to be treated as less important and may never be undertaken.

Socio-economic criteria should be used for subsectoring the household sector. Households will be allocated to sub-sectors according to the characteristics of the reference person, who many participants felt should usually be the main income provider.

Most of the group agreed that the first level of the classification should be: entrepreneurs, employees, others. For lower levels of the hierarchy, the following breakdowns were suggested:

for entrepreneurs, "employers" and "other entrepreneurs";

for entrepreneurs and employees, "agriculture", "industry", and "services";

for employees, "high", "medium" and "low" skills;

for others, "rentiers", "pensioners" and "other transfer recipients".

The last category would include inmates of most collective households.

Under these proposals, "entrepreneurs" will always have production accounts, "employees" and "others" will have production accounts only in respect of owner-occupied housing, domestic service, incidental production activities and unincorporated enterprises owned by members of the household other than the reference person. All three first-level categories will have income and outlay, capital finance accounts and balance sheets.

In view of the importance of information on labour markets, some participants suggested that recommendations should be made in the SNA to subdivide compensation of employees and labour inputs according to labour market characteristics such as education, location and characteristics that might be grounds for discrimination.

January, 1989

At the Household Sector meeting it was agreed that at the first level of sub sectoring the household sector the classification should be a three way split between entrepreneurs, employees and others. In the paper before this meeting it was suggested that this should be extended to include five categories of households; (i) employees, (ii) employers, (iii) own account workers, (iv) rentiers and pensioners and (v) other transfer recipients. Many participants were unhappy with grouping rentiers and pensioners together and felt that these should be separated. This would bring the total number of sub sectors to six and while each of them had important characteristics it was felt that there may be some imbalance between the role, for example, of rentiers and employees. A compromise position was suggested whereby the number of sub sectors should be established at four: employees, employers, own account workers and other and this last category should then be sub divided into at least three at a lower level in the hierarchy: rentiers, pensioners and other transfer recipients.

There was considerable discussion about how far it was sensible to suggest standard sub sectoring of the household sector. Participants from both the World Bank and the International Monetary Fund explained the growing interest in those institutions in monitoring the social dimensions of adjustment programmes and in poverty studies. The importance of such work was acknowledged by all participants but felt that the categorisation of household types which may be appropriate in countries where such studies were being undertaken might not necessarily be appropriate, say, for countries of the European Community. On the other hand it was felt that not to include any recommendation on sub sectoring households would be a major omission from the Blue Book.

There was also extensive discussion about how households were to be allocated to one sub sector or another. At the time of the Household Sector meeting the advice from the ILO was that allocation had to be done according to the characteristics of a single reference person and that meeting had been led to expect that some clarification on these grounds could be expected from a meeting due to have been held in October 1987. However, no such clarification has been forthcoming and the information from the ILO now seems to have altered in tenor somewhat. The suggestion now is that it may after all be possible to categorise households according to income levels. Such a characteristic is an ex-post rather than an ex-ante criterion and while it may be used for analysis it may not necessarily be used for survey design. As with discussion on ISIC the participants felt that it was very important that consistent recommendations be made by the ILO and the SNA. It was therefore regarded as matter of some urgency that further discussion should

take place with the ILO to see whether progress could be made in reaching agreed definitions. Unlike the case with ISIC, however, the timing issue is different. The indications are that the ILO may not reach decision until about 1992, that is after the SNA is due to be finalised.

In the household sector households will be sub-sectored into four groups: employees, "own-account workers", employers, and other.

In the first draft of the Blue Book, the criterion for household classification will be the income of the reference person. This will be reviewed when the ILO basis of classification is defined.

An ambiguity in the present structure of the system was revealed in the discussion about levels of classification in the household sector. As presently agreed both households and non-profit institutions will comprise the household sector. It could therefore be argued that the first level of sub sectoring would be simply to disaggregate these two and that what had been under discussion above was therefore already a second level of the hierarchy of classifications. There was fairly general agreement that information relating to all households but excluding private non-profit institutions was necessary in the new system.

July, 1989

Concern was expressed that no rationale for the sub sectoring of households was given. It was suggested that the existence of an unincorporated enterprise within a household should always be sufficient to place this household in the category of either own account worker or employer regardless of whether or not the unincorporated enterprise constituted the major source of income. Various problems were seen with this approach. Much agriculture, even in developed countries, is undertaken on a part-time basis so many households are involved in this but it does not necessarily constitute a major source of income. If all production activities of households including ownership of dwellings were to be classed as unincorporated enterprises the vast majority of households would therefore fall into these categories and the distinction between type of households would be substantially lost. Several people expressed disquiet that sectoring of households should be done on the basis of the characteristics of a reference person but it was agreed after long discussion that this was the decision that had been taken at the Household Sector meeting and therefore it should be adhered to.

It was agreed that the description 'other' for the fourth category of households (that is other than employers, own account workers and employees) was not descriptive and after some discussion it was agreed that this should be changed to 'recipients of property income and transfers'. It was then suggested that this category would then be broken down at the next lowest level of the hierarchy into recipients of property income, pensions and other transfers. There was some discussion about whether pensions should cover all pensions or simply retirement pensions, widows' and veterans' pensions being the two most obvious alternative source of pension income. There was also discussion about whether a skills level should be given for employees. A background paper gave a classification of transactions and transactors. Here employees were broken down between high skills, medium skills and low skills. Several participants expressed reservations with this breakdown. It was not felt that these terms were sufficiently precise to lead to consistency over time and space. The view was also expressed that classification by the characteristic of a reference person in the area of skills would be a rather tenuous extension to a household as a whole. Again a small sub-group was set up

to look into the problem of household classification and their report will be considered in September.

A second level of subsectors will be distinguished for "Households excluding non-profit institutions serving households" as follows:

Employees

Own account workers

Employees

Recipients of property and transfer incomes

As previously decided households will be allocated to these four groups on the basis of the reference person who would normally provide the main source of income.

September, 1989

It was agreed that the sub-sector 'recipients of property and transfer income' should be sub-divided into recipients of (i) property income; (ii) pensions; and (iii) other transfers. Pensions would include all forms of pensions and not just retirement pensions. Returns from equity in life insurance funds would not be regarded as pensions but as property income. Social security benefits other than pensions are to be treated as other transfers.

Households which are classed as recipients of property and transfer income will be sub-sectored into recipients of

- 1. property income,**
- 2. pensions, and**
- 3. other transfers,**

according to the main source of income of the reference person. No restriction on the type of pension applies to sub-sector (ii).

The document describing the status of the draft Blue Book will draw together references to areas where co-ordination of definitions and classifications with ILO and UNESCO concepts is required. This includes, inter-alia, the disaggregation of employed households by skill level.

April, 1991

The sub-sectoring of the household sector presently included in the draft SNA (employers, own-account workers, employees, recipients of property and transfer income) will be maintained as the central international classification. The text of the Blue book will recognise, in the interest of flexibility to reflect national circumstances and analytical needs, that additional criteria may be used in conjunction with these so long as it is possible to produce data on the international classification.

K. Non-Profit Institutions Serving Households (NPISHs)

June, 1986 (2)

This is another area where there was great ambiguity in both definitions and practical considerations. It was recognized that the public perception of a non-profit institution, particularly in the U.S. and other economies influenced by U.S. practice, is very different from the SNA concept.

There is an implicit assumption in the present SNA that private non-profit institutions (PNPIs) are relatively small; however this may not always be so. In Japan, for example, the gross value added of PNPIs is approximately 6% of GDP and growing. The main growth is in research, development and cultural activities. In some small countries the activities can also be very big, for example, those conducted by the church, etc.. It was therefore felt that despite the obvious data problems of identifying such activities, every effort should be made to distinguish them and that conceptually the distinction should be clarified.

One suggestion was to define PNPIs serving corporations, government and households separately and then combine them elsewhere to form a private non-profit institutions total. Some participants suggested not making the distinction between who the PNPIs served but include them all in the household sector but this was not felt to be acceptable. It was generally agreed that PNPIs serving households should be included in the household sector but the others should be included where appropriate with the corporate sector and with government.

The expert group favoured showing private non-profit institutions serving households as a sub-sector of the household sector. Identification of these PNPI should be based on economic, not legal, definition. Private non-profit institutions serving enterprises and government will continue to be allocated to their respective sectors. A suggestion to isolate them as sub-sectors therein was deemed too complicated.

September, 1987

A paper reviewing the role of private non-profit institutions included the results of a mini-survey conducted by the U.N. Statistical Office which revealed the disparity of practices currently employed by countries in response to the present recommendations in the SNA. At present, non-profit institutions (NPIs) are defined as those that obtain their revenue principally from transfers and operate at or below cost. The categorization of NPI's between sectors is initially undertaken on the basis of the source of finance. However, this leads to four categories of NPI's, those serving government, those serving enterprises, those serving households with more than two employees and those included within the household sector which have fewer than two full-time employees.

The meeting felt that in principle NPI's should be defined by what they do and not by whether they make a profit or not. National legislation about the treatment of non-profit bodies was not felt to be an adequate conceptual definition of these institutions.

It was felt that it would be appropriate to defer discussion of non-profit institutions funded by government until the expert group meeting on the public sector. That group should define whether NPI's to be included in the government sector should be defined only according to the source of finance or whether some definition such as "financed and controlled by" government were appropriate.

There was extensive discussion about whether private NPI's should be divided between the enterprise and household sector according to who provided the finance or who the institution served. It was pointed out that for many developing countries, NPI's are very important but are frequently financed from abroad, sometimes from foreign governments. It was felt therefore there was no alternative for these NPI's but to attribute them to sector depending on who they serve. If domestically financed NPI's were attributed to sector according to the source of finance, this could lead to some anomalous inconsistencies. It was also pointed out that many NPI's received finance from both the enterprise and household sector and the proportion of this funding may well alter from year to year. Therefore, it was ultimately agreed, though with some reluctance, that it would be appropriate to use the consideration of who the NPI served as the basis for sectorization for all private NPI's.

There was then discussion about whether private NPI's should form a sector on their own of equal status with households, government and the enterprise sector or whether they should be treated as a sub-sector of the household sector. On balance, it was agreed that they should probably be treated as a sub-sector. This would remove the necessity of distinguishing between those with more than two employees and those with fewer. It was pointed out that some countries have little if any data available on NPI's. At the moment, this leads to an omission of the whole sector and to some error in the household account for those NPI's with fewer than two employees. It was felt it would be preferable to merge these two omissions in a single location. However it was also strongly urged that where possible estimates should be made for NPI's and shown as a distinct sub-sector so that alternative analyses could be undertaken if so desired.

Some other aspects of private non-profit institutions were also discussed. It was confirmed that where possible these should be classified according to COFOG and this would lead in principle to the concept of individual and collective consumption within the household sector in respect of NPISHs.

It was agreed that religious missions, private aid agencies and community activities should form part of private NPISHs. In many cases these would explicitly appear as NPISHs. If such activities existed for a sufficiently short period of time that they would not otherwise count as resident agents, it might be appropriate to impute an NPISH nonetheless. Communal associations might also constitute an NPISH. Where such associations produced capital assets, these assets would be attributed to the sector that was responsible for their upkeep. The valuation of such assets would be based on the market price analog; this might imply imputing a value to the labour involved in constructing the asset. In general however labour provided free or at very reduced costs to NPISHs should be reflected at its actual cost however low. These two conclusions are in conformity with the decisions made earlier on own-account production; that it was only goods for which a value would be imputed and not services. In this case the capital assets are being treated as goods where the pure services provided by free labour remain services. This decision also maintains consistency with labour statistics where volunteers are not included in employment measures.

The group agreed that the present SNA definition of non-profit institution was broadly satisfactory. The scope of government NPIs should be defined by the expert group on the public sector. Allocation of non-governmental NPIs between institutional sectors should be based on whom they serve.

Most of the group preferred to put private NPISHs into a subsector of the household sector.

It was agreed that, in principle, all private NPISHs should be allocated to this sub-sector regardless of the number of employees.

The group agreed that religious missions, private aid agencies and community activities form part of the private NPISHs .

Labour inputs provided in mission schools and hospitals and volunteer labour in NPI's generally should be valued at actual compensation paid even if this was very low or even zero.

In accordance with the definition of the production boundary, all production including capital assets such as roads, schools, etc. produced on a communal basis should be valued at market prices.

Capital assets constructed on a communal basis should be attributed to the sector responsible for their upkeep; that sector may be different from the sector that produced the asset.

April, 1991

The meeting unanimously recommended that private non-profit institutions serving households will constitute a full sector instead of a sub-sector of the household sector as earlier decided,

There is no written record of the reasons for this last minute change.

Chapter 4. Terminology and accounting rules

A. The concept of “transaction”

June, 1986 (1)

The concept of “transaction” is not defined in the 1968 SNA yet there is a need for a definition in order to isolate imputations and attributions. This was another instance where the question of language came up. Documentation in French and Spanish available simultaneously with the English documentation was highly desirable, not only to help those without command of English but also to clarify the definitions in use. Concepts which did not translate readily into other languages probably needed further clarification in English. “Transaction” was such a case in point. The meeting endorsed strongly the desirability of ensuring coherence between alternative language versions of the final recommendations.

The revised Blue Book should include a formal definition of “transaction”.

September, 1987

It had become clear in the discussion on imputations and re-routings that there is some misunderstanding about the word transaction. Several participants argued that it carried a connotation of relating only to market activity and one where there is an exchange of money for goods and services in a two way flow. This differs from the concept described in French as “opération” which covers both monetary and non-monetary transactions and also transfers. It was argued that a suitable English word should be sought that could be used with the same definition as opération. Several participants were reluctant to introduce an alternative term since they felt that this would give rise to confusion, especially with those who were not working in either French, English or Spanish as their mother tongue. Further, it was supposed that there would be an unofficial translation of the term into transaction and any existing confusion would be perpetuated.

It was agreed that there is a need for a concept relating to all flows, whether monetary or non-monetary and whether relating to flows connected with goods and services, redistribution or financial assets and liabilities. In French the term "opération" is used for this concept. The group proposed that an appropriate English term should be sought conveying the same meaning; if no such word can be found, the term "transaction" should be defined with this meaning.

December, 1990

There was some discussion about how far “transaction” should be used as an expression to cover all of the entries in the flow accounts. It could be argued that output, intermediate consumption and the consumption of fixed capital are not really transactions but rather could be regarded as transformations. This distinction could also be made about many of the items in the other changes in volume of assets account, for example war losses. Nor were the balancing items in the accounts appropriately described as transactions. As mentioned in earlier meetings there is a word in the French system of accounts “opération” which is a more general term. By starting with a definition of this concept it is then possible to get back to a definition of transactions as

being a subset of this more general class. There was general agreement that a distinction can be made between different types of entries in the account but no single English omnibus term could be suggested.

The definition proposed for a transaction drew heavily on the distinction between goods and services and some participants queried whether this was necessary and helpful. One view was that the exchange of ownership of goods and assets was quite a different type of transaction from the provision of services. It was possible to have retrading and secondary markets in goods but not in services. If one travels from A to B one could not then decide not to keep to the journey, for example. Others expressed the view that the change of ownership was too legalistic a concept to rely on and that in the measurement of work in progress, for example, no such change of ownership took place. There was a grey area between pure goods and pure services and the embodiment of a service in a good was different from the provision of the service itself and did not convert the service to a good. Other participants felt that a distinction between goods and services should be made even though it was not possible to have a precise definition that was correct for every border line case.

There was then discussion about the distinction between monetary and non-monetary transactions. Clarification was needed about whether accounts receivable and payable were the same as monetary transactions. It might be helpful to introduce distinctions between transactions that do not involve the financial accounts, those that involve only the financial accounts and those that span both.

There was some discussion about the appropriate treatment of barter transactions. A barter transaction initially involves an economic and not a financial claim but if there is a delay in completing the transaction, then the format of the accounts requires that a financial claim be introduced under the heading of trade credit.

B. Classification of transactions

June, 1986 (2)

Even from the time of the first expert group meeting, a hierarchy of transactions and transactors was proposed. Such a hierarchy can serve two purposes. At the simplest level, it is a progressive degree of detail which can indicate to developing countries the various stages of detail that can be introduced, that is they could start with the simplest one-level digit of the hierarchy and move to two-digit as resources permit. The levels of the hierarchy under the various categories are intended to be consonant with this idea. The second purpose of introducing a hierarchy is that this may ease the harmonization between the SNA and related systems so that for example complete harmony may exist at one of the higher levels of the hierarchy but not at the lowest levels. Indeed it might be argued that harmonization at the lowest level may not be necessary or appropriate since the SNA and other systems may be concerned with different types of disaggregation at the lower levels.

The participants welcomed the principle that the classification of transactors and transactions should include a hierarchy of aggregation.

The details to be included in the classification should be considered by the relevant expert groups.

C. Consolidation

A more important implication concerned consolidation. In the 1968 SNA, in moving to higher levels of the hierarchy, for example in moving to general government from central and state government, it is normal practice is to consolidate the detailed data. This means that it is subsequently impossible to unconsolidate the data and to work back to a more detailed level. Many of the participants quoted occasions when this had given rise to difficulties in practice. One example is the case of interest which is frequently shown consolidated within sectors where the holdings to which the interest relate are not consolidated. There are a few occasions where unconsolidated information is not helpful; the case of financial bonds was quoted. **Although some consolidation is desirable, often consolidation leads to loss of useful information and in general it should be avoided. There must be a section in the Blue Book dealing with consolidation in all the flow accounts and the balance sheets.**

January, 1988

It was noted that while in the GFS all transactions being measured within the government are eliminated in consolidation, in the SNA transactions within the government are eliminated only if they appear in the same account for both transactors. This limit on SNA consolidation is necessary so that balancing items, especially GDP, do not alter depending on the degree of aggregation adopted. The ESA follows the same basic consolidation rules as SNA but the ESA supplementary accounting system for government accounts follow the GFS consolidation rules. In the GFS and ESA supplementary accounts the objective is not to measure government production, value added, or consumption, but the flow of revenues, expenditures, lending and financing between the government sector and the rest of the economy.

To accommodate other purposes, such as analyzing the relationship between government and the rest of the economy, it was proposed that the SNA recognize other principles of consolidation, as was done in the SNA Draft Handbook on Public Sector Accounts, which, however, does not provide any details for such consolidation. It was felt that there would be advantages in providing for such further consolidation, facilitating the harmonization between GFS and SNA and making it possible to use SNA data for other purposes than the measurement of gross output.

Very little explanation is given in the 1968 SNA on the consolidation rules. These rules need to be made more explicit in the revised Blue Book.

Some members of the group expressed the opinion that they find satisfactory the extent of consolidation in the 1968 SNA. It was mentioned that in previous meetings of the expert groups it was agreed that figures should be shown as unconsolidated as possible. However, it was also argued that the usefulness of the SNA would be increased if supplementary tables were introduced with consolidated accounts and also with a presentation closer to the one in the GFS Yearbook. The degree of consolidation would obviously depend on the statistics needed.

With regard to consolidation of different subsectors of government, it was noted that the principles of consolidation with regard to general government are the same in GFS and in SNA. In the GFS Yearbook, data for each of the levels (subsectors) of the government (Central, State, and Local) are shown separately and an additional table is presented for General Government, in which all the intergovernmental transactions have been eliminated. However, the tables for central government in the GFS Yearbook include the

operations of national social security funds separately identified, whereas in the SNA social security funds data are shown separately from the central government.

The derivation table for central government in the GFS Yearbook shows data for some of the intragovernmental transactions that are eliminated in the consolidation of central government. There are also some memorandum items showing data that have been eliminated in consolidation such as taxes paid by government. There was discussion as to whether it would be useful to introduce other GFS memorandum items presenting more information on transactions which were eliminated in the consolidation.

It was agreed that although both GFS and SNA have different objectives, it is important that data from one system meet some of the needs of the other system, including those arising from different consolidation principles.

The group concluded that in the SNA government sector accounts, the extent of consolidation should be retained, but that it would also be useful to show certain flows in the government accounts on a more consolidated basis in supplementary tables.

D. Gross and net recording

Discussion centred on whether flows which have been previously shown net in SNA should be shown gross in order to increase the information on actual flows.

The principle in GFS is to show the most information possible. Therefore, all nonfinancing flows in GFS are shown gross with the exception of corrective transactions, such as refunds, and sales to the public by departmental enterprises, which are offset against corresponding operating costs.

In SNA, several entries are shown net, without a separate listing of their gross components. This includes, for example, gross fixed capital formation, which consists of acquisitions less dispositions of fixed capital assets. (This netting is distinct from the netting for depreciation.) While such netting may be useful in the household sector, where fixed assets are mainly sold to other households, it obscures the different nature of acquisitions and sales when applied to the government sector, for which separate gross information on both the acquisition and disposition of fixed capital assets could be significant.

It was suggested that if gross fixed capital formation is presented for the government sector without offsetting dispositions against acquisitions, this should also be done for the other sectors, such as the corporate sector, though it might not be practical for the household sector.

It was also suggested that introduction of separate gross figures in SNA would be simpler if both gross flows (one of them necessarily negative) and the resulting net flow were restricted to one side of the account. It was mentioned that it would probably be more difficult for items in the production account to be shown on a gross basis as sales of second-hand goods, for example, are subtracted from consumption.

It was explained that when the 1968 SNA was drafted it was believed that it would be more difficult to show the gross amount in some sectors, and it was therefore decided to show them as net in those sectors. This was only a matter of statistical presentation and not a matter of principle, however; in recent years entries for a number of categories, such as transfers, have been presented on a gross basis in SNA questionnaires.

The group agreed that in both the GFS and SNA transactions should, in principle, be shown on a gross basis, with netting an exception resorted to only when justified by statistical or presentational requirements.

At the end of the discussion, it was emphasized that the word “net” should only be used when similar items are deducted from each other. It was suggested that the term net lending, which is presently defined in SNA as lending minus borrowing should be used only to designate lending minus the repayment of past lending, since, as the GFS Manual points out, for government, lending and borrowing are two totally different types of economic activity or behaviour.

As the draft progressed, an even more restricted use of the words “gross” and “net” was adopted so that in almost all cases this applied only to balancing items with the understanding “gross (or net) of consumption of fixed capital”. The usage of net taxes was replaced by the more explicit “taxes less subsidies”. In the case of gross output, it was decided that the word “gross” was not necessary and could be confusing so it was dropped. On the other hand, it was thought little confusion was likely to arise because of the use of the word “net” in the expressions net lending and net worth and because of pervasive use of these terms outside strict SNA usage, their continued use was, somewhat reluctantly, agreed upon.

E. Imputations and Re-Routings

1. The core and building block discussion

June, 1986 (2)

In the run-up to the revision, a number of papers had been prepared by the Central Bureau of Statistics of the Netherlands. Some of these have been published in the *Review of Income and Wealth*. These proposals had been discussed extensively at meetings within Europe, most recently at the ECE meeting in March 1986. These proposals put forward the idea that the “core” of the national accounts should be a recording of the market transactions as they actually occur. This information would be supplemented by detailed accounting of all the imputations and attributions (reroutings) which were added to the system in order to reach the SNA as we presently know it. It had been argued by the Dutch that a radical approach was needed to the exposition of the system since it would have to last well into the next century and it was desirable to conceptualize a framework that had sufficient flexibility to allow developments as yet unanticipated to be articulated through the system to be incorporated in the new Blue Book. This proposal had generally had rather a cool reception though it is fair to record that at the ECE meeting in March, where a more detailed working through was available, rather greater sympathy for it was expressed.

It became clear in the discussion that some confusion still arose due to ambiguities in the terminology. The use of the expression “core” suggested that this was some sort of kernel of the accounts or a rather small but vital section of the full set of SNA. This is not what the Dutch proposed. The core would be a very large set of accounts but designed to reflect better micro perception and behaviour rather than the view of an economist or a statistician. “Imputations” are taken to apply only to the monetary values placed on non-monetary transactions and should not be assumed to include, for example, grossing up for non-response. Monetary transactions that take place but are not measured or are measured badly are not regarded as imputations in the Dutch use of this term. Showing true imputations and attributions separately from monetary transactions was felt to be useful because then alterations in the way transactions were attributed or variations in the valuations of imputations or the impact of making additional imputations or attributions

could be worked through directly in a way that could be related to the preceding definitions.

Many of the participants said that they welcomed the proposal to be more explicit about the imputations and attributions occurring in the system and felt that moves to show these explicitly should be welcomed because of the extra flexibility it added to the system. Mention was also made of the use of satellite accounts developed by France for showing greater detail in a particular area than is covered in the main national accounts. It was suggested that this was a way of bringing in other variables such as employment and population which also need to be analyzed in connection with economic variables.

The group did not accept the proposal to identify a set of core accounts excluding imputations and reroutings. The imputations and reroutings in the present SNA were considered to be broadly acceptable, but so far as possible they should be separately distinguished.

2. Identifying imputations

September, 1987

Previous discussion had suggested that it would be helpful to develop a taxonomy of imputations and re-routings. This would be useful for the Blue Book and SNA structure as a whole but was particularly important for the household sector given the magnitude and importance of some of these items for this sector. In particular a potential taxonomy was introduced which distinguished three classes of imputations for non-monetary transactions and distinguishes between imputed and re-routed transfers.

The paper contained three tables as annexes. The first annex attempted to enumerate all the imputations and re-routings identified in terms of the SNA headings shown in Table 8.2 of the 1968 SNA. Another table made available to participants showed these imputations and re-routings related to the individual transactions in the account laid out as presented in the accounts following Table 8.3 in the Blue Book. These two showed how sector accounts may be represented including only the most important imputations and re-routings. Based on this, another table showed how the accounts may be separated into actual flows and imputed and re-routed flows. These tables were discussed both in general under imputations and re-routings and more particularly later in the discussion on the measures of household income.

As has happened in previous discussions, the ambiguity over some of the terms used proved an immediate difficulty. Is an imputation necessarily an imputed transaction or is transaction a term that should be restricted to market transactions? Is the process of attributing value-added to the banking sector on the basis of interest payments or separating the service charge element from insurance premia paid a process of imputation? If so, does it result in one imputation or two since one measured quantity is divided into two notional components? It was pointed out that the extent of imputations through the accounts is very considerable. Consider the effects of aggregation. If estimating the consumption of fixed capital is defined as an imputation then it follows that the gross operating surplus also must be an imputation. Indeed, if the output of government services is treated as an imputation then presumably so is GDP itself. Further, even if these problem are overcome it is clear that much derived data, for example all data at constant prices, all seasonally adjusted data and much of the data contained in input-output tables would also have to be described as imputations.

For all these reasons it was eventually decided that it would not be practical at this stage to develop a full taxonomy of imputations. However it was recognized that while it is

difficult to define the abstract concept, there is a common sense set of items which need to be specifically treated in the SNA which should be itemised.

The group acknowledged the intention expressed at earlier meetings to develop a comprehensive typology of imputations and reroutings. However, the meeting agreed that this was not possible at the present time and it may be more practical to resort to definition by enumeration.

It was agreed that the Blue Book should contain a comprehensive list of imputations and reroutings as a guide to both users and compilers. This may appear as an annex. Part E of Annex V of the 1993 Blue Book is intended to meet this need in a more general context .

It was agreed that it would be appropriate to itemize these. Because this would constitute a definition of imputation by a process of enumeration, it was important that these lists be comprehensive. Several participants felt that the attraction of a table was that it then became clear where the counterpart entries of the items would appear. It was also argued that an extensive table like this might be rather offputting for the reader but given the difficulty of defining a succinct concept it is not clear what the alternative is

While such an itemisation would be an aid to both users and compilers, instruction needs to be given to compilers that efforts should not be made to compile data for all of these items where they are thought to be insignificant. This may lead to different countries showing different numbers of imputations but clearly some minimum list would need to be agreed for inclusion within the SNA questionnaire. The extensive discussion that would be necessary to guide compilers in determining what was important and how it should be calculated should be left for inclusion in the handbooks .

The handbooks will contain more information on imputations and reroutings, on how they should be calculated, and which of these should be identified in published tables.

The opportunity to distinguish market from non-market transactions was felt to be very important. It is clear that the sort of imputation involved for the output of the banking sector is quite different from the imputation used to value own-account subsistence agriculture. This led to agreement that it might be helpful to distinguish between the case where no transaction has taken place but one is imputed (for example consumption of own output), re-routings (for example employers contributions to pension funds) and "re-classifications" (for example the division of insurance premia into service charges and net premia). It was also thought it would be helpful if some indication were given in published accounts of the extent of imputations. Some countries already do so; for example, imputations account for approximately 9% of GNP in the USA.

The group did not discuss the possible extensions to the present set of imputations.

March, 1987

It was the conclusion of previous expert group meetings that the present imputations and reroutings should stay in the SNA but that, to avoid overburdening data publications, only the most important should be identified. During the discussion, reference was made to the main imputations and reroutings which give rise to differences between the SNA and GFS, as listed in the discussion paper, and in more detail in Bridge Table II of the GFS Manual (pp. 263-273). It was suggested that while compilers and users of data were both interested in bridge tables identifying the imputations and reroutings which constituted differences between the GFS and SNA, their interests were somewhat different. Conceptual bridge tables told compilers where they should be making adjustments. Users

sought to know where the adjustments had been carried out, that is, where the differences had numerical values attached to them. It was suggested also that more importance be attached to the larger differences and that numbers might not have to be provided in all cases for some of the smaller items.

To meet the needs of compilers and users, the group strongly supported the use of both conceptual GFS-SNA bridge tables and operational bridge tables containing actual numbers to show the imputations and reroutings used in the derivation of SNA government data. A handbook on the government sector, rather than the Blue Book, should explain how the necessary estimates are to be made.

F. Valuation

June, 1986 (1)

The question of price valuation was raised briefly. A number of participants said they felt that the change in the 1968 SNA to basic and producer prices had not been widely adopted. There was still extensive use of factor cost and market prices as the alternative valuations and **some participants suggested that GDP at factor cost and GNP should be re-introduced in the SNA.**

June, 1986 (2)

Given the difficulty many people have had in making the transition to producer prices, the recommendation to do this should be reviewed. At the very least, a refinement of the definitions of true and approximate basic prices needs to be agreed for inclusion in the handbook. It was generally felt that purchasers' prices was not a helpful category and should be replaced by market prices wherever it presently appeared. This would leave basic and producer prices as the alternatives for input-output tables but final demand should be expressed in terms of market prices.

The revised SNA must be markedly more clear than the 1968 version on the relationships between different price valuations and why they are appropriate in different parts of the system.

The terminology for price valuations should be reviewed; in particular the present use of "purchasers' values" when applied to GDP.

G. Basic prices

March, 1988

The main topic for discussion was whether approximate basic prices should remain the preferred valuation for use in the make, use and symmetric input-output matrices both for compilation and analysis. All participants testified to the difficulty presently experienced in interpreting the existing Blue Book in respect of its definition of true and approximate basic prices and the way these related to producers' and purchasers' prices. It is clearly an area where major clarification was needed in the revised Blue Book. The difference between purchasers' and producers' prices concerns the transport and distribution margins and is not relevant to the difference between true and approximate basic prices and is ignored here.

There was universal agreement that the present exposition of the concept of valuation in the 1968 Blue Book is extremely misleading. The glossary defines value added at

approximate basic prices as gross output in approximate basic prices less intermediate inputs at purchasers' prices. This seems to be equivalent to the definition of value added at factor cost and seems in conflict with the algebraic derivation in paragraph 4.104. This underlined the concern that **approximate valuations (in the 1968 SNA usage) should apply only to output, final demand and intermediate inputs and not to value added.**

In the columns of the use of matrix compiled at producers' prices the valuation for intermediate inputs and output is the same with all taxes on production included. Those taxes on products that are included in intermediate demand appear twice in the matrix, once included in the intermediate consumption of the industry paying the taxes and once in the taxes on production of the industry whose product is subject to the tax concerned.

The main reason for introducing the distinction between taxes on products and other taxes on production is because of the analytical interest in examining the impact of changes in the incidence of these taxes. The concept of basic prices is a valuation which eliminates the effect of taxes on products but retains the impact of other taxes on production.

If all taxes on products fell on final demand it would be possible to alter the use of matrix from a valuation at producer prices to one at basic prices by making deductions only from the final demand and value added submatrices. This valuation would be what the 1968 Blue Book calls true basic prices. Although in all countries most taxes on products fall on final demand, in all countries there are exceptions where amounts (usually small in proportion to the total) continue to fall on intermediate demand. In practice, therefore, it is seldom if ever possible to produce a matrix at true basic prices whose interpretation is immediately obvious.

When there are taxes on production falling on intermediate consumption, it is complicated to eliminate them entirely from the use matrix because, as noted above, they are included twice in the table. Complete elimination of these taxes would introduce a valuation of output below the actual costs of production by ignoring them. The concept of approximate basic prices is intended to circumvent this difficulty. It entails a presentation where taxes on products are eliminated from final demand but not from intermediate consumption.

After discussion of these alternative valuations, a number of conclusions were agreed.

Firstly the emphasis that is given to the difference between true and approximate basic prices seems disproportionate and confusing. Since a table at true basic prices cannot be measured and only calculated with extreme difficulty it is proposed that this concept be dropped and the expression "basic prices" used for what is now called approximate basic prices but without the use of the qualifier "approximate".

Secondly it becomes clear that the concept of value added at approximate factor cost or approximate basic prices relates to value added plus the element of taxes on products incurred on the producer's intermediate inputs. **Value added at approximate basic, as well as at approximate factor, values are not useful concepts and will not be referred to in the next version of the SNA.** Because value added is a balancing item and cannot be decomposed into price and volume elements, it is more appropriate to describe it in terms of basic values rather than basic prices. **The distinction between "prices" and "values" should be further elaborated in the revised SNA.**

It was felt that basic prices was the appropriate valuation to recommend for recording output in input/output tables wherever possible. Where valuation at basic prices is not

available, it should continue to be on the basis of producer prices. For aid in exposition in the Blue Book it may be useful to coin a phrase which means “in basic prices if possible but if not producer prices”

It was noted that conceptually basic prices is what might be understood by some as being the cost of production, while others may consider that as the current definition of producer prices. Consideration will, therefore, have to be given to these terminologies in the new Blue Book.

There was discussion about whether it was important to retain the distinction between taxes on products and other taxes on production and whether the whole concept of basic prices could be dropped from the Blue Book. It was strongly argued that the difference between the two types of taxes is useful in studying price behaviour. The concept of basic values is thus fundamental and must be included in the Blue Book. It was felt however that most of the details regarding the links between the valuation of the use matrix and price behaviour should be included in a Handbook.

There was discussion about the implications of adopting a valuation at basic prices for the institutional production accounts. One participant pointed out that basic prices are the only practical valuation since taxes on products such as import duties and possibly some other taxes such as non-deductible VAT are not distributed to individual institutional sectors. It is therefore possible to derive value added at market prices in total only. When value added is disaggregated by institutional sector an adjustment for taxes on products must be added to the sum of value added by sector.

Approximate basic prices should be used to value goods and services in the input-output framework; they would also be used in the production accounts for institutional sectors. Approximate basic prices exclude direct payments of net taxes on products (i.e. taxes on products minus subsidies on products). Producers' prices may sometimes have to be used as an alternative to approximate basic prices. Producers' prices includes direct payments of net taxes on products.

September, 1989

The [then existing draft of the 1993 SNA] assert[ed] that value added should be determined by subtracting intermediate inputs from output when both these concepts are measured at the same prices so that value added at basic prices, for example, is defined as output at basic prices less intermediate inputs at basic prices and value added at purchasers' or market prices is derived as output at purchasers' prices less intermediate inputs at purchasers' prices. The practice of deriving value added as output at basic prices less intermediate input at purchasers' prices is described as being at mixed prices and the text asserts this valuation is conceptually wrong.

The Group accepted the position on purchasers' prices and noted that in many instances this was the valuation that would be used for practical reasons of data compilation or otherwise. However, in many contexts and particularly for input/output tables and supply and disposition tables the use of purchasers' prices was not appropriate because of the distortions that could be introduced by the uneven application of prices.

The concept of basic prices had originally been introduced into the SNA in order to give homogeneous valuation to products in the context of an input/output table. Within an input/output table each of the intermediate inputs could be valued at basic prices. However, the column totals of intermediate inputs into any one industry are not valued at basic prices because of the inclusion of the entries representing distribution margins on

these products. The entry representing the taxes on products paid on intermediate inputs was also added to the column sum of intermediate inputs bringing the total to a valuation at the cost to the producer (i. e. purchasers' prices). This then left a concept of value added where the only taxes included were other taxes on production. The discussion about whether intermediate inputs should be valued at purchaser or basic prices revolved around the appropriate treatment of the entries for taxes on products paid on the intermediate inputs. The view of most of the Group was that these taxes were included in the cost of products delivered to the producer and therefore should be shown as part of the total intermediate cost. The view put forward by Peter Hill was that the taxes to be paid on intermediate inputs were a charge against the value added of the producing firm and therefore should be included in value added. This would mean, for example, that if a producer used as input a quantity of petroleum on which a high excise duty has been levied the payment of this petroleum excise would be shown routed not through the accounts of the industry supplying the petroleum but through the accounts of the industry using the petroleum. It was argued by most participants that the present practice of treating such taxes as part of intermediate costs should be preserved. Recording intermediate inputs at purchaser prices was consistent with the way in which such payments were actually recorded in the firm's accounts and typically submitted to statistical offices. Further, it allowed the possibility that the production accounts could be compiled where the commodity detail of the accounts were also valued at purchaser prices rather than disaggregated into basic prices plus margins and taxes.

After extensive discussion the Group agreed that when value added was derived from output at basic prices it should be by deducting intermediate inputs at purchasers' prices. The only taxes, therefore, that would be included in this measure of value added would be other taxes on production. This was to be described as the preferred way of deriving value added. If in a particular country it was not possible to use basic prices then output should be measured at producer prices and intermediate inputs for deduction should be valued at the cost to the producer (i. e. purchasers' prices). The resulting measures of value added would include excise duties, for instance, levied on products. This meant that the share of value added within a particular industry would be influenced by the relative size of excise duties. In such analyses the petroleum industry usually showed the highest share of value added, a fact which distorted the usefulness of such figures for the economic analyst.

In the institutional sector accounts and the central supply and use tables that are integrated with them, output can be valued at either basic or producers' prices. All transactions on the uses of goods and services are valued at market prices (purchasers' prices), market prices being defined as including all taxes on products except the deductible part of value added type taxes.

When output is valued at basic prices, value added excludes taxes on products net of subsidies; these taxes must then be added to the sum of value added of all producers in order to derive GDP at market prices. When output is valued at producers' prices, value added includes net taxes on products other than VAT type taxes; in this case, taxes on imports and non-deductible VAT-type taxes, if any, have to be added to the sum of value added of all producers in order to arrive at GDP market prices.

Other methods of valuation may be used in other versions of the supply and use tables and symmetric input-output tables; in the latter case, valuation at basic prices is specially relevant.

Discussion centred on two issues: the treatment of transport margins and the treatment of taxes on products. At the last Expert Group meeting in September 1989 it became clear that there was a difference of opinion about how intermediate input should be valued in a production account where output is measured at basic prices. One view is that taxes on products paid on intermediate inputs should be treated as part of value added and a charge against that producer's value added with intermediate inputs valued at basic prices. The alternative is to regard taxes on intermediate products of part of the cost of intermediate inputs so the taxes would be regarded as being paid by the supplier of these goods and intermediate inputs would be valued at purchaser's prices.

It was suggested that these alternative points of view arise from ambiguity about the nature of taxes on product. Purchasers' prices exceed producer prices by taxes on products and it is implicit in this attribution that it is the purchaser and not the producer who pays the tax on the product. It was argued, therefore, that it is appropriate to treat taxes on products not as a tax on production but a tax on consumption. Some taxes on products, specifically taxes on imports and non-deductible VAT, cannot be treated as taxes on production and must remain a charge against the value added of the unit consuming the products to which these taxes apply. Consistency would suggest that all taxes on products should be treated similarly leading to intermediate inputs always being valued at basic prices in production accounts where output is valued at basic prices. (Note that if taxes on products were treated this way it would be consistent to treat subsidies on products in a similar way; that is as a receipt by the final consumers. This would help resolve the allocation of which subsidies should be treated as government purchase of goods and services and which as subsidies to producers).

Detailed discussion on this proposal was limited. The view was expressed that the whole question of value of production at basic prices was rather academic and that for many purposes valuation at market prices was usually acceptable and what was done in practice.

H. Transport margins

It was agreed that where transport is provided by a producer as an ancillary service this would be included in the valuation at basic prices and would not form part of the transport margin. This is in accordance with the proposals that ancillary services should not be separately identified and valued and that intra unit deliveries for intermediate consumption would be consolidated out. On the other hand if the producer provided transport to the purchaser and charged separately for it, this would be regarded as secondary production of the producer and the amount concerned would be included in transport margins. So also would transport provided by a third party transporting the goods in question from the producer to the purchaser.

Transport margins include only transport services paid by purchasers. Own account transport services performed by the producer are an ancillary activity and are included in the producer's price; transport services paid by the producer are included in the producer's intermediate consumption and in the producer's price.

I. **Taxes**

1. **Value Added Tax**

June, 1986 (2)

This is a problem that has vexed the members of the European community for some period of time and clarification is needed on the appropriate treatment of this tax. It has suggested that the work done in the ESA might be taken as a basis for discussion by a subsequent expert group, but it was not clear which one. The temptation was to suggest the input-output group but so many problems had been referred to this group that it was not clear they would be able to give adequate time to all of the very important problems being referred to them.

The revised SNA must specify the treatment of value added tax and similar deductible taxes. The starting point could be the experience of the European Community countries.

It was pointed out that there are similar tax regimes with deductibility in many other countries and there are some countries that have production taxes which also give rise to problematic treatment in determining appropriate prices.

The solution must be placed in the wider context of all taxes on production.

This problem bears on the work of many later expert groups. Given its pervasiveness, the expert group urged the secretariat to prepare a paper on the problem as soon as possible.

March, 1988

There was discussion of whether a use matrix should be shown net or gross of deductible VAT. The advantages of using the gross treatment is that this results in more homogeneous valuation across the rows of the use matrix. However, it does not show taxes as borne. The basic enquiries record output net of VAT and purchases net of deductible VAT. Therefore, in order to compile a table on a gross basis imputations would be necessary on a considerable scale. Special treatment would have to be adopted for cases where VAT was usually deductible, for example on exports and fixed capital. The solution adopted by ESA, therefore, was to record the matrix net of deductible VAT but also to have a matrix available of the amounts of non-deductible VAT. This can then lead to a presentation where the elements of intermediate demand are shown net of all VAT payments and a line showing payments of non-deductible VAT appears as a row underneath intermediate inputs. This presentation is frequently called the net net presentation and is the solution adopted by Eurostat. This is to treat non-deductible VAT in a similar way to margins or imports. It was also argued that this net net treatment is the one that is consistent with a valuation at approximate basic prices and therefore should be adopted to be consistent with the decision made above on this topic. It should be noted that other taxes may be deductible and if so they should be treated in a similar way.

The Group agreed that goods and services flows will be recorded net of deductible VAT.

2. Taxes and subsidies on production (indirect taxes)

It had already been agreed that it was important to make a distinction between taxes on products and other taxes on production. It was felt the distinction should be determined by the nature of the tax and not whether it was strictly proportionate to the output of the industry. The question of payroll tax was quoted as a case in point. Even if these taxes are substantial they should be treated as other taxes on production and not as taxes on products.

It was noted that new indirect taxes were currently being considered, such as taxes on interest and taxes determined by the value added base of the enterprise. At some later point consideration needs to be given to how new indirect taxes such as these should be treated.

Indirect taxes are now called taxes on production and divided into "taxes on products" and "other taxes on production". Payroll taxes are "other taxes on production". Subsidies should be classified in a similar way, i.e. a distinction should be made between "subsidies on products" and "other subsidies on production".

3. Indirect taxes ⁶

January, 1988

It was noted that in the 1968 SNA indirect taxes consist of commodity taxes, which are taxes on goods and services that are proportional to the value of goods and services produced or sold by industry, and non-commodity taxes, which include taxes on payroll, payments by business of motor vehicle taxes, which are classified as direct taxes when paid by households, and payments by business of regulatory and administrative fees such as court fees, passport fees, etc., which are classified as current transfers when paid by households. GFS, however, does not identify indirect taxes separately and does not distinguish between payments by households and by business. Payments by households and business of motor vehicle taxes are classified in GFS as taxes and payments of regulatory and administrative fees as nontax revenue.

It was further noted that countries do not usually make the distinction between tax payments by business or non-business units when responding to the SNA and usually allocate the total receipts from one heading to the predominant element. In addition, analysis of national accounts data shows that the difference between total indirect taxes and commodity taxes is very small.

For practical purposes and to facilitate the link with GFS data in the construction of national accounts, the group was asked to consider two proposals:

1. That indirect taxes be restricted to commodity taxes and the coverage of commodity taxes be expanded to include a major non-commodity tax such as taxes on payroll, which reportedly account for the major portion of non-commodity taxes;

⁶Subsequently much of the terminology used in the SNA concerning taxes was changed. Indirect taxes are now referred to as taxes on production. Commodity taxes become taxes on products; non-commodity (other indirect) taxes become other taxes on production. Direct taxes become current taxes on income, wealth, etc or capital taxes.

2. That the distinction between payments by business and households be eliminated as regards motor vehicle taxes, administrative and regulatory fees by classifying these payments outside the purview of indirect taxes.

It was stated by several participants that the 1968 SNA distinction between indirect taxes and direct taxes was not sufficiently clear and that the terminology should be replaced. It was felt, however, that the distinction between commodity taxes and non-commodity taxes should be maintained because the identification of commodity taxes was necessary for input-output analysis. In this connection, it was thought to be undesirable to reclassify taxes on payroll as commodity taxes since it would be difficult to allocate payroll taxes to the various commodities produced by a single enterprise.

With respect to the second proposal, it was argued that within the system of the national accounts a distinction had to be maintained between payments by producers and by households. The distinction could not be avoided in the context of the national accounts even if in practice there were some countries which did not have the statistical resources to separate certain payments by business from payments by households.

It was suggested, however, that the primary distinction should be between taxes and nontaxes, and not between payments by business or households. Then numbers could be taken from the government accounts, classified as taxes or nontaxes under GFS, with a breakdown subsequently made by national accountants to distinguish payments by business or households. In that way, consistent sets of statistics could be produced for GFS and the SNA and movement from one system to the other could be facilitated. The proper distinction between taxes and nontaxes, however, was referred to the group's subsequent discussion of fees.

The group recommended that the 1968 SNA terminology of indirect and direct taxes be replaced. In addition, the group agreed not to change the distinction between commodity taxes and other indirect taxes and the distinction in the SNA between taxes paid by producers treated as indirect taxes, and by households treated as direct taxes. (See footnote attached to the heading of this section)

4. Estate and gift taxes

It was noted that the 1968 SNA classifies estate and gift taxes and nonrecurrent taxes on property not as taxes but as capital transfers to government, whereas GFS and the OECD's Revenue Statistics include these taxes in tax revenue and GFS classifies all tax revenue as current revenue of government. It was pointed out that the GFS and OECD treatment represented the views of public finance theories, and that governments receive a continued flow of estate and gift taxes and regard them as recurrent in nature, like other taxes, in no cases earmarking their receipts for capital purposes. It was argued that from the point of view of households and governments, these payments are taxes and are current in nature and that the defining characteristic as to the current or capital nature of transfer payments should be the purpose of the payment. While individual households may sometimes pay these taxes through a reduction in their own assets, there is no perception that the payments are going to be used for capital expenditures by the government.

In discussion, it was indicated that during the Expert Group Meeting on the Household Sector, it was decided that the current and capital distinction should be discussed again at a future expert group meeting on the basis of a study to be prepared by the OECD. A proposal was therefore made to classify estate and gift taxes and nonrecurrent taxes on property as taxes in the SNA but to postpone discussion of their current or capital aspect

to another expert group meeting when the OECD study would be available. However, the payments would be called taxes regardless of the decision made on their current and capital nature.

The group agreed that the borderline between current and capital taxes should be reviewed in the wider context of the distinction between current and capital transactions in another Expert Group meeting on the basis of the OECD study. The group also agreed to use the term tax with respect to those taxes included in the SNA capital account.

5. Social security contributions

Discussing the difference in treatment of social security contributions between the SNA and the GFS and OECD Revenue Statistics, the group noted that social security contributions are not classified as taxes in the SNA, but referred to only as social security contributions. In the SNA, employer social security contributions are deemed to be routed through households as compensation of employees and simultaneously paid to government by households, while employee contributions are collected from households. The OECD Committee on Fiscal Affairs and GFS, on the other hand, classify compulsory social security contributions as taxes, since they are compulsory, unrequited, nonrepayable payments to government. Voluntary social security contributions are classified as nontax revenue. However, reflecting the distinctiveness of social security contributions, which allow contributors to be admitted to a benefits system, social security contributions are separately identified from other payroll taxes and in the OECD Revenue Statistics publication total taxes are presented both with and without the inclusion of compulsory social security contributions. The proposal before the group was not to change the SNA treatment of social security contributions, channelled through households, but to identify them as part of the overall category of taxes so as to correspond to OECD Revenue Statistics and GFS definitions and facilitate international comparisons of data.

It was explained that as sectoral systems of statistics focusing on government GFS and OECD Revenue Statistics could not very well exclude social security contributions from overall taxes, since the contributions were widely regarded within public finance literature as taxes. It was felt on the other hand, however, that social security contributions were not regarded as taxes in a number of countries and that it would be difficult to include them in the context of the SNA as part of taxes. It was determined that a single figure combining taxes and social security contributions was not a necessity in the SNA context, so that by omitting such a number from SNA confusion with the GFS and OECD Revenue Statistics concept of total taxes could be avoided.

The group agreed not to apply the term tax to social security contributions in the SNA, but to avoid using the term total taxes in the SNA. In addition, to facilitate the link to the tax concept of GFS and OECD Revenue Statistics, the group recommended showing a supplementary presentation in the SNA in which all taxes and compulsory social security contributions would be totalled to reach the GFS and OECD concept of total taxes.

6. Fees

The group examined the differing treatment of fees in the SNA and in the GFS and OECD Revenue Statistics with a view to clarification and the possible elimination of differences between them. It was noted that in the SNA fees are classified as indirect taxes if paid by businesses and as a part of fees, fines and penalties if paid by households other than for

non-regulatory services. In the GFS and OECD Revenue Statistics, on the other hand, the classification of fees is not determined by whether they are paid by businesses or households. The principle followed by the GFS and OECD Revenue Statistics classifies fees as nontax revenues, in a GFS category for administrative fees and charges, if they are paid in return for a service, whether compulsory fees for provision of a regulatory service or voluntary charges for provision of a non-regulatory service, unless the payment is out of all proportion to the cost or distribution of the government service provided to the payer. It was pointed out that practitioners had found themselves unable to agree on identification of regulatory and nonregulatory services. In addition, as there were differences in interpretation of this definition among OECD countries, the decision taken, after years of discussion, in the OECD Fiscal Affairs Committee, and adhered to by the GFS, was to follow the predominant practice of tax administration authorities and provide a specification of which fees are classified as taxes and which are classified as administrative fees and charges.

It was proposed that harmonization could be advanced if the primary decision in the SNA could be taken on the basis of the nature of the fee as tax or nontax, with determination of its classification resulting from payment by businesses or households made subsequently. It was felt that compulsory fees could be treated as taxes in the SNA, with the proviso that those paid by businesses be classified as indirect taxes and those paid by households as direct taxes.

With regard to fees paid for a service, there was discussion of whether fees considered to represent payment for a service could be accommodated in the SNA production account for enterprises. Agreement was reached that such fees could be classified as part of enterprises' intermediate consumption, the provider of the service being the government. It was noted, however, that fees out of all proportion to the cost to government of providing the service would be classified as taxes rather than as payments for a service, in line with the provisions followed by OECD Revenue Statistics and GFS.

It was stated that in principle SNA already permitted classification of some fees as payment for a service provided by government. It was agreed that the group ask for clarification in the SNA of the borderline between fees that are transfers and fees that are payments for a service and recommend that the borderline be the same as it is in the GFS and OECD Revenue Statistics. This would permit establishment of a similar borderline between taxes and nontaxes in the SNA and the GFS-OECD Revenue Statistics, though the subdivision of individual tax categories in the SNA between payments by business and by households would lead to necessary differences in some further classifications of taxes. It was agreed that such subsequent classification by who pays fees and taxes and whether they are to be included in the production account or income and outlay account is essential to the SNA.

The group concluded that attempts should be made to harmonize, to the extent possible, the SNA and OECD/GFS borderline between taxes, fees, and service charges, in respect of both classification and terminology.

7. *Reconciliation of Tax Classifications*

January, 1989

A paper "Reconciliation of SNA and OECD IMF tax classifications" aimed to eliminate some outstanding differences between the two sets of tax classifications. Basically the differences were of two types. The first relates to inheritance tax which the national accounts regard as capital but OECD/IMF treats as current. Unless and until the SNA

treatment of capital transfers was changed it was felt it was not possible to reach harmonisation on this topic. However as agreed at the Expert Group meeting on the Public Sector accounts inheritance tax will be called a tax in the SNA. The other matters concerned much smaller items under the heading of "compulsory fees". Some of these are treated as taxes and some as payments of services and the difference between the two is at present not the same in SNA and OECD/IMF. Many of the items are small such as licences to hunt, fish and shoot. Classification of them had, nevertheless, occupied a great deal of time in OECD/IMF meetings and in the end it had been agreed that only a convention could be used to decide which category they should fall in. It was therefore agreed that **in the SNA the distinction between those compulsory fees to be treated as taxes and those to be treated as payments of services will be identical with the distinction in the OECD- IMF tax classification. This implies that by convention motor vehicle licenses and licenses to hunt, fish and shoot will be treated as taxes; all other compulsory fees will be treated as payments for services.**

With the exception of the current or capital nature of inheritance tax, therefore, there should be consistent treatment between the SNA and GFS on the classification of taxes.

J. Registration of Transactions

1. Property income

Withdrawals of entrepreneurial income

January, 1988

The question put to the group was whether the category of dividends received by government should be combined with the category of withdrawal of entrepreneurial income from quasi-corporations, to eliminate a distinction which many governments do not make and which is not made in GFS.

It was pointed out that in practice it is very difficult to identify what corresponds to dividends from corporations or income from quasi-corporations because the distinction between corporations and quasi-corporations is not clear in many countries. The group felt, however, that it would be useful to keep the greatest degree of information for those countries where it is available. It was pointed out that the breakdown applies also to other sectors and not to government alone. **The group concluded, therefore, that the distinction between withdrawals from entrepreneurial income of quasi-corporations and dividends is a useful one and recommended that it should be retained.**

To accommodate the reporting of data combining both categories when information permitting this separation is not available, it was proposed that an entry combining both categories be provided at a higher level in the reporting hierarchy. It was not felt to be appropriate for the group to resolve reporting hierarchy questions. No concrete recommendation was advanced, therefore, as to the level of the transaction classification hierarchy at which this distinction should be made.

2. Accrual and cash basis

The group discussed two basic questions: (i) how to define accruals of various government payments and receipts, and (ii) how to relate accrual and cash basis statistics. Whereas the SNA recommends that transactions should be recorded on an accrual basis,

GFS adheres to cash basis reporting⁷. The resulting differences are reflected in different types of transactions:

1. Actual transactions in goods and services where the receipts and payments may be registered at different times in GFS and in SNA.
2. Transactions which are imputed in SNA, for example, wages and salaries in kind; these transactions are not recorded in GFS, except in some instances as memorandum items.
3. Transactions registered in both system but treated differently, for example contributions which are paid by the employers directly to government, but which in SNA are channelled through the household sector.

It was pointed out that while the accrual basis in SNA is applicable to all sectors, the cash basis in GFS is dictated in part by the nature of government transactions, most of which are not for the delivery of goods and services, with most government receipts corresponding to taxes and most of government expenditure to transfers. The government cannot register its liabilities from others or to others completely on an accrual basis, since at the moment when many of the liabilities are generated the government is not a direct participant in the transaction. Because the nature of government operations is different from those of the other sectors of the economy, it is not entirely possible for the government to have complete registration of accruals of government liabilities to others or of others' liabilities to government.

It was generally agreed in the discussion that both the accrual and the cash basis are important for analysis of government operations and formulation of policy. It is therefore useful to show a link between the two basis. It was then suggested that it is important that the UNSO and the IMF's Bureau of Statistics continue the work already undertaken on the conceptual and operational bridge tables by spelling out for each type of transaction what specific adjustments would be necessary to go from one basis to another. This should distinguish between revenue and expenditure data for government. While an ideal solution would be to have both accrual and cash data showing the receipts and outlays of governments, permitting analysis from both perspectives, this is not possible in practice.

In the case of revenue, especially for tax revenue, cash basis data were most useful for measuring tax performance or tax effort. On the expenditure side, it was suggested that both sets of data would be useful, since they would show what accruing liabilities the government has incurred and what the actual disbursements were. For GFS, data on a cash basis can be derived in many countries from the government accounts after making some adjustments; these are shown in the derivation tables in the GFS Yearbook.

Differences between accrual and cash revenue data vary not only from country to country, but also according to the type of tax. For example, for external trade taxes, accrual and cash based data are very close; however, for income taxes they might be very different due to tax arrears, tax defaults, etc. The problem of arrears, which the group agreed is a very important one, will be further discussed in the meeting on Financial Flows and Balances.

⁷ This part of the report is now of historic interest only since the revised GFSM published in 2001 recommends using an accrual basis of recording.

It was felt that although in principle the SNA should be on an accrual basis and the GFS system on a cash basis, in practice this is not always the case, and in many countries there is actually not much difference between the basis of registration in GFS and in SNA.

In Brazil, for example, the records for revenue were reported to be approximately on a cash basis and those for expenditure approximately on an accrual basis. However, expenditures were registered not when the obligations are incurred but rather when the government recognizes these obligations. Because grace periods vary greatly from one tax to another it has not proved practical to adjust the yearly tax statements of tax collections to an accrual basis for SNA. Nor has it been possible to adjust the approximately accrual basis expenditure data in detail for GFS purposes, so that adjustments have been made only for the totals rather than for the detailed data. This situation appeared to be typical of many other countries, with detailed data between a cash and an accruals basis

It was pointed out that the Manual on Government Finance Statistics in addition to calling for use of the best available data and adjusting to a cash basis total, recommends, in Section II.B, Supplementary noncash data (p. 40), that, for the proper analysis of government operations, one should use not only cash data but also available accrual data.

It was noted also that Eurostat has tried to reconcile its tax figures with those published by the OECD and has found that about 90 percent of the tax figures in Eurostat are on a cash basis.

Another factor raised in the discussion was the compilation in the SNA not only of annual accounts but also of quarterly accounts, for which questions of timing are more acute and require additional adjustments for timing differences.

It was emphasized that a clearer statement is needed in SNA of what the accrual concept actually represents. One suggestion was that for the revision of the SNA, it might be helpful to consult the work done in the European System of Accounts (ESA) several years ago which includes specific recommendations on how to define the moment of recording.

In conclusion, the group confirmed that the accrual basis is the correct one for recording transactions in SNA, and the cash basis is the correct one for GFS. It was recognized, however, that for analysis of government operations supplementary presentations on the other bases are useful for both systems.

Currently, recording for both SNA and GFS was found to be a pragmatic mix of cash and accruals reflecting the state of the source data. It was recommended that the government authorities should be urged to maintain clear and consistent accounting practices.

It was concluded, finally, that further clarification of the accruals concepts is necessary in the revised SNA, and that prior to this, the IMF and UNSO should examine the relationship between the cash and accrual basis for different classes of transactions.

3. *Recording of taxes - accruals*

September, 1989

There was further discussion on the appropriate treatment of accruals especially in connection with the payment of taxes. The text at present uses the expression "due for payment" in connection with taxes but this may not be unambiguous; for example sales tax may not be due for payment to government until thirty days after the close of the

month in which the transaction takes place. However, if the intention in the SNA is to ensure consistency between the paying and receiving sector, "due for payment" needs to be interpreted differently from the legal obligation and this must be made explicit. It was also pointed out that the theoretical accrual base for taxes may differ from ultimate actual receipts because some taxes are not paid; for example if a firm goes bankrupt before meeting their tax obligations. It was argued that the conceptually correct basis for the SNA was that taxes should be recorded on a full accrual basis; that is when the liability arises. It should be recognised however, that in practice one may have to use either a cash receipts or, due for payment basis. The question that arose then was where to put the difference between the theoretically correct and practically possible value, the answer presumably being somewhere in the financial accounts. It was pointed out that it was not always possible or even desirable to try to record some taxes on this full accrual basis; for example there was no liability to income tax on gross income because the liability was only calculated ex post. A further complication that arose was the question of whether a tax liability should be recorded in respect of transactions that are not themselves recorded; for example illegal activity. This gave rise to the possibility that there were three sorts of non-payment of taxes; (1) because the tax had been collected but not passed on to government, for example because the firm went bankrupt, (2) the tax was due but not collected by government because of the inefficiency of the tax collection system and (3) the tax was not even known to be due because it is related to an illegal activity. After some discussion it was agreed that the total tax received by government should be the amount recorded in the accounts and no allowance should be made for tax not collected for whatever reason. The tax collected should be allocated to the period in which the transaction which gave rise to the tax liability occurred.

At least one participant had serious reservations about recording tax on the basis of the amount paid to government. In the case of a badly administered system where the tax due was very much greater than the cash paid, this shortfall in government revenue would not show in the accounts. Not only was this an undesirable omission in itself, it could be taken as setting the precedent for similar treatment in other parts of the accounts, a process which the Group was not endorsing.

The taxes to be recorded in the System are those that are actually collected by government, and not those assessed by government or declared by taxpayers. Assessments and declarations do not constitute a sufficiently firm basis for recording them as financial assets and liabilities pending the ultimate payment of taxes. The System does not therefore require the imputation of taxes which are evaded.

The group provisionally agreed to distinguish between (i) full accrual basis, (ii) due for payment basis and (iii) cash basis. These concepts need to be clarified and may need to be modified since they need to be applicable to transactions other than taxes .

The System should allocate tax collections to the period in which transactions occurred in the case of taxes on transactions in goods, services, financial assets or intangible assets, and to the period when they are due in the case of taxes on income or capital. This latter rule still needs to be spelled out for particular types of taxes. Estimates based on intermediate stages in the tax collection process should be allocated to the appropriate time period in a similar way.

4. Time of recording of transactions

December, 1990

It should be noted that full accrual is the theoretically correct basis of recording but that in many instances this will be a counsel of perfection which cannot be adhered to.

There was discussion of the time of recording taxes. This reflects an earlier decision of the Expert Group to record taxes on a cash basis. However, several participants had been unhappy with that decision at the time and further discussion led to a revised decision to record taxes in general on a due for payment basis except when the amounts due cannot be effectively construed as constituting payables within the system. Even in this case, however, the taxes actually paid should be recorded at the times at which the liabilities arise rather than when the payments are made.

The group changed its decision to record taxes on a cash basis. The taxes in the system are generally to be measured by the amounts due to be paid.

5. Other tax-related payments

September, 1989

There was also discussion about payments that included both taxes due and an element of interest. This is a particular problem in countries suffering high inflation. In principle the interest element is to be separated from taxes and shown as interest payments. A similar problem appeared to arise in the case of fines for late payment of taxes which then became due with the tax payment itself. In principle these should be separated and shown as a fine for late payment and not as a tax. However, extensive discussion within the OECD has shown that this is not workable in practice and therefore the convention that late payments would be treated as taxes should be continued.

Interest charged on taxes paid late should in principle be treated as interest, but in practice this interest will in general be treated as a tax.

The implicit taxes (or subsidies) deriving from multiple exchange rate regimes should be shown separately from taxes or subsidies.

K. Market and non-market

1. Terminology

June, 1986 (2)

The 1968 SNA makes the distinction between commodities and other goods and services and between industries and producers of government services and non-profit institutions. This distinction is largely driven by the need to distinguish market from non-market transactions; but it makes for very cumbersome terminology which can on occasion confuse explanation of the system. There are occasions where this distinction is glossed over. For example, in input-output tables, it is usual to talk about a simple commodity by industry table although it should properly be a commodity and other goods and services by industry and producers of government services and non-profit institutions table. It was therefore suggested that the new SNA could help clarify understanding of the system by using "industries" for all activities and "commodities" for all products. The differentiation contained in the 1968 system could be maintained by making specific the

distinction between market and non-market orientation. A consequence of introducing this more elementary distinction would be to develop all-embracing commodity and activity classifications instead of the present system whereby for example, producers of government services are an add-on to ISIC. On top of this basic distinction between industries and commodities, one could superimpose other distinctions, for example between monetary and non-monetary, or between formal and informal. Indeed one could go further and make a three-way classification with industries distinguished by ISIC and the formal/informal classification. The distinctions between market and non-market which underlay the present terminology is an important one and should be preserved; it was argued that this applied as a classification of producers and not products, for example health care produced privately and by government may be the same product but relates to a different type of industry.

The terminology used in the 1968 SNA distinguishing “commodities” from “other goods and services” will be re-examined, and also the terminology distinguishing “industries” and “other producers”.

The existing distinction between “market” and “non-market” production will remain a fundamental distinction in tables and accounts which employ a kind of activity or commodity classification.

There are other breakdowns which countries may wish to superimpose on the activity and commodity classifications, such as formal/informal, modern/traditional, monetary/non-monetary. Expert groups dealing with the household sector and production accounts should make specific proposals for making these, and possibly other, distinctions.

March, 1988

It had been suggested that the expressions “industries” and “other producers” should be replaced by “market producers” and “non market producers” respectively, that “commodities” and “other goods and services” should be replaced by “market goods and services” and “non market goods and services” respectively. There was also a suggestion that the difference between goods and services could be described as the difference between material products and non-material products.

It was recognized that the Expert Group could not take binding decisions on terminology. This was a question for the author of the Blue Book who had to pay attention to the question of translation into French and Spanish equivalents as well. However, the Group’s opinion of the suggestions was sought.

The suggestion that goods and services should be distinguished by the use of the words material and non-material was felt to be very unhelpful because this distinction was not the same as the use of these terms in the MPS system. If adjectives are needed to qualify products it was felt that tangible and non-tangible would be a better pair. In general the other proposed changes in terminology were welcomed and it was felt that dropping the term “commodity” might be appropriate given its confusion with specific primary products used in international trade statistics. It was further suggested that “product” might be used as a synonym for “goods and services”. This would mean that where the present SNA talks about the difference between industries and commodities the revised SNA could talk about the difference between producers and products. One consequence of this change would affect direct taxes which are presently disaggregated into “commodity taxes” and “other indirect taxes”. With the change in terminology proposed it would be appropriate to use the ESA description of these taxes as “taxes [on] products”

and "other taxes [on] production". Similar terminology would be used in respect of subsidies. The total would be referred to as "taxes or subsidies on production" and the expression "indirect taxes" would be deleted. In line with recommendations by the Expert Group on Public Sector, the term direct taxes will also be replaced; instead reference will be made to taxes on income and taxes on capital.

The group was strongly in favour of reforming the existing SNA terms "industries" and "other producers", and "commodities" and "other goods and services". There was wide support for the use of terms such as "market producers" and "non-market producers", "market goods and services" and "non-market goods and services". The term "product" might be used as a synonym for "goods and services".

The group also noted that the same terminology should be used in the SNA, in external trade statistics and in the Balance of Payments manual.

2. Classification

There was considerable discussion about the role of the market and non-market distinction for producers. The first point made was that the expression "market" must be clearly distinguished from "marketed" so that production for own consumption and inter industry sales are clearly included as market production although they are not marketed.

After discussion it was agreed that the distinction between market and non-market was complementary to a classification by kind of activity. There should be no question of a hierarchy with one or the other assuming priority. In principle there would be a full matrix of activities by kind of activity and by type of market and the market/non-market distinction should always be separated when an activity classification is used. One of the consequences of this conceptual presentation is that non-market activity would no longer be necessarily restricted to service activities only but thought needs to be given to quite what the implications are for non-market goods production. A subsidized product could be the output of a market or non-market producer depending on whether it is competing on the market with a non-subsidized product. There would not be a complete identity between non-market products and non-market producers because these latter may have secondary production of market products. It was thought that this presentation would improve the clarity of table 7 in the 1968 Blue Book which is confusing.

A further issue for clarification will be the definition of market prices since presumably these would strictly relate only to market products. What then would be the appropriate terminology for what is now known as GDP at market prices?

The distinction between market and non-market producers is fundamental to the SNA. It is a different dimension of economic activity than found in the ISIC. In principle, any activity could be arranged on a market or a non-market basis. It was recognized that goods production on a non-market basis does not exist in the present SNA. Further elaboration of this new concept is needed.

3. Domestic services

The Expert Group then turned to a consideration of two particular items presently treated as non-market goods and services, the first of these being domestic services. When a household employs domestic staff directly it is the household that is the producer of the output and thus must be classified as a non market producer. By contrast if domestic service is provided to the household through a commercial cleaning service company that

output is market production. Self-employed persons producing cleaning services also would be counted as market producers.

Domestic services produced in households by employees should continue to be treated as “non-market services”. Enterprises (including self-employed persons with no employees) who provide similar kinds of domestic services such as window-cleaning and house-cleaning will continue to be classified as market producers.

4. *Purchases abroad by households*

A second specific item considered was purchases by households abroad and purchases in the domestic territory by foreigners. These at present are treated as non-market goods and services and they appear in the external account rather as an adjustment item. In future it is proposed that they should be treated explicitly as market products.

It was emphasised again that consistency of terminology with the balance of payments is essential and that any changes to be introduced in the SNA should also be agreed by balance of payments experts.

Direct purchases by residents abroad and direct purchases in the country by non-residents should be included in market goods and services. This is a change from the 1968 SNA which includes these purchases with non-market goods and services.

5. *The boundary between market and non-market producers*

July, 1989

The meeting discussed whether there were units in government that should be treated as unincorporated enterprises rather than quasi corporations. It was felt that the definition of quasi corporations adopted elsewhere (specifically that they should have separate accounts and withdrawals from income should be clearly identifiable) was the only basis on which a quasi corporation should be identified. Other participants suggested that in connection with government an important criteria was whether the sales were to other government departments or not and whether the prices charged were “market” prices or not. There was no immediate agreement as to whether these latter criteria should be taken into account or whether the only important factor was that revenue from sales had to cover at least 50% of the costs (which determined that the producer was a market producer) and had a full set of accounts. Because resolution could not be easily achieved a small sub group was set up to discuss the matter further. Though they produced a report, time was not available to discuss this and the report is held over for discussion until the September meeting.

The distinction between market and non-market producers is important not only intrinsically but because of the implications for the treatment of payments by government to loss making producers. If they are regarded as market producers they will have negative operating surplus and receive a subsidy. If they are non-market producers they will have neither. It therefore is unsatisfactory to have a situation in which they may be treated as market producers in one year and non-market producers in another. This raises the possibility that the output of a non-market producer might not always be valued at cost but rather that if it sells the whole of its output even at a loss then the sale should be equated with output. The market/non-market distinction applies in principle to products, producers and institutional units but to determine whether a producer (an establishment) is market or non-market it is necessary to consider total output and not the output of just one product. It was generally agreed that only market producers can be

quasi corporations and therefore the problem largely amounted to determining when government producers of goods and services should be treated as market producers.

September, 1989

This topic was left over from the July meeting and despite further extensive discussion no final resolution on the matter was reached at this meeting either.

The criterion in the draft for defining a market producer is that 50 per cent or more of the cost of its output should be covered by receipts from sales. This criterion is not in the current Blue Book. It is suggested that it should not be interpreted in an overly rigid manner; for example a producer may have losses that exceed 50 per cent of his costs for some years but still be considered a market producer because on average, in the longer run, more than half his costs are met by sales. The problem arises concerning a producer who receives extensive receipts from government other than from sales over a long period of time. If he were to be treated as a non-market producer he could not then be classified to the corporate sector since by convention only market producers are classified as corporations. One solution would be to leave the producer in the corporate sector and treat the payments from government as a subsidy. This depresses the value of GDP at market prices and causes problems in international comparisons particularly in respect of the ICP and the SNA/MPS comparisons.

The sub-group that had been considering the definition of market and non-market production had suggested that a third approach was possible. This was that for specific commodities made available to specific groups of consumers at rates below cost, the payments from government should be regarded as the purchase of goods and services by government which would appear in the individual consumption of government. On the whole this proposal received the least enthusiasm from the group because of the difficulty of specifying the products to be considered and the identification of the recipient groups. This then left the first two alternatives; either to treat the producer as a non-market producer and therefore not in the corporate sector or to be in receipt of subsidies and thus depress the value of GDP. Because the Group could reach no resolution on which of these alternatives to adopt a further sub group is to work on producing a draft outlining the various possibilities and their consequences for early circulation and discussion.

December, 1990

There are three aspects to the distinction between market and non-market. The first is how to make the distinction between market and non-market producers; the second is what are the consequences of this distinction for sectoring in the accounts and the third what is the consequence on valuation of output of the two types of producers.

The 1968 SNA defines industries as being full cost producers and also refers to other producers of good and services. The proposal now is to use the terms market and non-market to cover these two groups. In the ESA, the distinction is made by means of convention and relies on where resources for the producers come from. In the input/output Expert Group meeting, however, it was agreed that in principle all activities could either be market or non-market and the problem was how to define rules so that activities that were felt on a common sense basis to be enterprises (for example railways or steel mills) would be classified in such a way as to fall into the corporate sector, even though they may receive most of their resources directly from government. Under the 1968 SNA conventions either these activities were treated in the corporate sector and the payments from government regarded as subsidies or if they were to be

regarded as non-market producers (because their sales did not cover most of their costs) they would be included in general government because by convention the corporate sector cannot include non-market producers. Since there was general recognition that this last alternative, that is the allocation to general government, was to be avoided, the question then was how to frame the definitions of market and non-market activity, and subsidies in order to avoid this.

It was suggested that some clarity could be achieved by looking at three different types of production: production for the market, production on own account and production where no market exists. The first two were marketable and the last two were not marketed. The present distinction between market and non-market is concerned with the distinction with whether the production is marketable rather than not. It was suggested that it would be helpful to change instead to a distinction between whether the goods were marketed or not. For simplicity in discussion this latter distinction was referred to as commercial and non-commercial although ultimately the terms market and non-market might still be used with this revised interpretation since they do not exist in the 1968 SNA. Only commercial producers would be included in the corporate sectors, though sometimes they will also be engaged in non-commercial production (e. g. own account capital formation).

There was clear agreement that pure public goods (that is those where the use by one individual did not impact the use by others) should be treated as non-commercial production. In general, except for the services rendered to enterprises by government, these would be designated collective consumption in the new SNA. Education and health activities were more difficult to categorise between commercial and non-commercial.

For commercial producers it was argued that there was normally a relationship between prices, costs, demand and the balance of supply and use. A commercial producer might be defined as one who sold most of his output (in volume terms) at a price that was high enough to significantly affect demand. There was general agreement with the intent of this statement but several participants felt it was not sufficiently precise for ready implementation in a wide variety of conditions where information about price elasticity, for example, was missing.

The move to a distinction between commercial and non-commercial producers eased the principles of valuation. Both own account production and production for which there is no market should be valued at the prices of products made by commercial producers where these exist (for example subsistence agriculture) and at the sum of costs where comparative prices do not exist.

To determine the value of output of commercial producers it is necessary to know whether to treat payments from government as purchases of goods and services or as subsidies. Most of the group were in favour of treating at least some of the payments by government as imputed purchases of goods and services and a number spoke in favour of the distinction being made according to whether the goods and services formed part of final consumption or were costs incurred by enterprises with the former being treated as government expenditure on the goods and services concerned and the latter as subsidies. No final agreement on this point was reached and the matter remains for resolution.

Own-account producers will be separated from other producers in what is now called industries. This would produce a group of "commercial/market" producers. Own account producers and what are now called producers of other goods and services will be treated as non-market producers. These distinctions are of use in the extended supply and use table.

Most experts agreed with a definition of market producers along the following lines: producers who sell most of their output at prices which are significant for costs and demand.

December, 1992

On the question of market and non-market, after considerable discussion, it was agreed that the alternative of making a three-way split of production between those goods that were sold and those that were produced for own-use, and non-market output of government and NPIs would perhaps be preferable to the present dichotomy between market and non-market. A quick check of the use of the term "non-market" in the existing draft suggested that the changes to the draft to implement this suggestion would not be difficult and, indeed, since non-market is often used in the restricted sense of only applying to government and non-profit institutions, the change in terminology would give greater clarity and precision to the text. There was, however, no agreement about the words to be used: the use of market and non-market assumes an exclusive dichotomy. If the terms were changed to be market, own account and other non-market, there is still an assumption that own-account production is also non-market. The question of terminology but not the decision to introduce a three-way classification was deferred.

Chapter 5. Accounting Structure

A. The new sequence of accounts

At the first expert group meetings, a schematic plan of the accounts of the new system was presented. It split the 1968 income and outlay account into accounts showing separately the generation, distribution, redistribution and use of income. The 1968 capital finance account was divided to show redistribution of saving, acquisition of tangible assets, acquisition of intangible assets and the financing of accumulation. Although many points of detail were changed, even at this point the overall structure of the 1993 SNA accounts was recognisable. This new presentation was shown as a set of integrated accounts in the form of a T account, similar to table 2.8 in the 1993 SNA.

June, 1986 (1)

Some participants said they felt a T-table was very helpful and preferred it to the matrix presentation. Others felt that the matrix presentation was inherent to a full understanding of the interaction of the full SNA. The general consensus was that this T-table presentation could be a useful addition but not a replacement for the matrix presentation in the 1968 Blue Book.

June, 1986 (2)

Participants were asked whether they felt the new presentation was an improvement to be used either in addition to or replacement for some of the existing presentations. Though a number of detailed changes to the table were suggested, in general the presentation was welcomed, but as an addition to the conventional matrix presentation rather than a replacement for it.

An overall synoptic presentation of the accounts was felt to be a useful format for various purposes in conjunction with other presentations, especially a matrix presentation. The expert group recommended that the Secretariat prepare a paper showing alternative presentations of such a table.

Questions were raised over the treatment of taxes and, in particular, the appropriate treatment for value-added tax and indirect taxes on imports. These would need clarification in a representation of this table.

The extra balancing items shown through dividing the 1968 SNA production, income and outlay and capital finance accounts were thought to be generally useful except for total surplus. The revised set of accounts should include specific modifications. *These are covered in the preceding chapter on accounting rules.*

January, 1989

The paper "The SNA accounting structure reconsidered" was a revised version of a paper first produced for the expert group on the SNA structure in July 1986 and subsequently presented in a revised version at the IARIW meeting in August 1987. There were a number of aspects to the paper but because of shortage of time the discussion centred

firstly around the format and role of the accounting structure in the Blue Book and secondly comments on the proposals about the main tables.

B. Format of the tables

There would be three sorts of tables appearing in the Blue Book. There would be simple tables amplifying the discussion on particular areas such as production accounts and income accounts. There would be an overall framework like the existing Table 2.1 and there would be a third set of tables which presented the standard accounts of the system. It was expected that the tables in the new Blue Book would contain data entries so that users would be able to see where entries were expected and where cells were by definition empty. The third set of tables for standard accounts of the system would obviously be related to the international reporting questionnaires but should not be designed with international reporting as the prime consideration.

Several participants made the point that at present many users found it difficult to relate the comprehensive presentation of the overall system in Table 2.1 with subsequent tables. As a result some users by-pass the discussion in Table 2.1 and never gain a complete overview of the system. Further, because they do not understand the way the tables inter-relate they choose those tables which seem most "relevant" and compile these only. It was felt to be very important that the new Blue Book should be aimed at such a level that it was possible for someone new to the area of national accounts to gain an understanding of the inter-connections of the system. The Blue Book cannot be all things to all people and it would be impossible to span the entire range from elementary and introductory text book to a comprehensive detailed reference manual but one of the major problems with the existing SNA is the alienation that many readers feel with the method of presentation in the early chapters.

T-accounts are easier to understand than accounts in matrix form, although the matrix is useful for providing an overview of the system. Both types of presentation are therefore required.

C. Role of the tables

It was difficult within the confines of the Blue Book to think in terms of increasing the readers' understanding by simplifying the system. This introduced approximations which in the end caused difficulties. What had to be done was to ensure that there was clarification of the concepts and these were presented in a readily understood form. It was recognised that some readers will find this easier through text and some through tables and the Blue Book should cater to both needs. There was also some discussion about the physical presentation of the Blue Book and it was felt with the new advances in printing technology and the use of innovative typographical features the Book could be made more accessible with indication given to users as to which parts are more difficult and could perhaps be by-passed at a first reading. It was emphasised again that the Blue Book should be aimed not just at the compilers of national accounts but for users and for those concerned with a wider range of economic statistics who wish to use the SNA as the overall framework under which they could develop ancillary systems. The opening part of the Blue Book must explain the use of the system as well as an overview of the accounting structure.

The opening chapters of the new Blue Book should serve as an introduction to the system for users as well as compilers. These chapters should not be aimed at specialists in national accounts.

The physical presentation of the new Blue Book is important. Modern typographical techniques should be used to guide readers through the text.

D. Matrix presentation

Several participants felt that one of the problems of understanding the system at present was due to the matrix presentation. It was suggested that T accounts were much easier to understand and that therefore if the presentation concentrated on this format of the accounts users would find it easier to follow the arguments put forward. While there was some considerable sympathy with this point of view, there was also a strong feeling that the matrix presentation is a very powerful and coherent way of explaining the inter-connectedness of the system and that as agreed in earlier meetings both presentations should be preserved. The suggestion was made, however, that it might be more appropriate for the matrix presentation to appear at the end of the Book rather than at the beginning so that users who had worked through the individual components of the system could then see how they interact rather than having to make the attempt to grasp a large inter-connected system at the outset.

It was demonstrated how a table showing accounts for institutional sectors at an aggregate level could be combined with the classification of transactors. This showed among other applications that there could be a three dimensional classification for the accounts relating to income appropriation and distribution. By expanding the categories of the household sector and these two parts of the income accounts and collapsing much of the rest of the table one could draw attention to those aspects of the social accounting matrix that had been canvassed earlier as being of considerable importance in studies of poverty, and examining the effects of structural adjustment on economies. In a similar way the entries related to assets and liabilities could be presented in three dimensions leading to a detailed flow of funds table with assets distinguished by type and identified by creditor and debtor.

Supplementary tables and matrices will be included containing three dimensional classifications of household income and expenditures as included in social accounting matrices and of flow of funds.

Several participants commented on the apparent imbalance between information relating to the capital accounts which occupied nearly two pages in the draft proposals and to the production account information which was contained in less than half a page. While recognising that at present some countries may concentrate too many resources on the production account to the exclusion of the capital account several participants felt this to be rather too great a reversal in balance between the two.

E. The place of input-output in the system

June, 1986 (1)

There was animated discussion on the appropriate place of input-output within the SNA. Does the Blue Book give too much emphasis to input-output and should it include only the supply and disposition tables⁸ with further details on the technical coefficients and associated analyses in a separate handbook? Many participants stressed the importance of

⁸ At the time of this and some subsequent meetings, the terms "supply and disposition table" was used for what the 1993 SNA describes as a "supply and use table".

supply and disposition tables and the fact that they were an essential means of ensuring consistency in the basic national accounts data. This was integral to the whole structure of the national accounts and should be included in the Blue Book. The following points were made by one or several participants. Supply and disposition tables should be compiled every year but not necessarily at the same degree of detail as for an input-output table. It is important to have gross output, value added, and expenditure information at this detail. Whether the supply and disposition table is published and how disaggregated it may be can be variable but it is absolutely essential that it be done. In fact detailed validity checking is implicitly a supply and disposition matrix even if it is not performed by that name. It should be stressed that as a supply and disposition table is given more detail it merges into a full input-output table. Ideally it might be desirable to have annual input-output tables; this enabled one to investigate consistency across years and lack of consistency with annual national accounts estimates. The use of input-output tables in the case of rebasing the national accounts was also mentioned as an item to be included in the Blue Book rather than a handbook.

There was no consensus with regard to the inclusion of input-output tables in the Blue Book. Those who favoured annual compilation of input-output tables felt they should be included. Others however thought that the Blue Book should only include supply and disposition tables which are an important instrument for checking the internal consistency of the accounts, although one participant argued that input-output tables may be necessary for compiling supply and disposition tables.

June, 1986 (2)

The question in the annotated agenda was how far should input-output tables form an integral part of the SNA. Many participants felt this question to be provocative and there was emphatic endorsement that input-output is indeed integral to the system. The question that is really at issue is how far should input-output analysis be described within the Blue Book and how far should it be confined to the handbooks. It was generally agreed that the present Blue Book is unbalanced with too much analysis of input-output including the detailed algebraic derivations of the symmetric tables, but to say this was not to say that the role of input-output should be reduced. Indeed, for many countries, producing an input-output table was the first step in producing the national accounts and therefore it could not be ignored. In the discussion that followed, the industry by commodity tables in Tables 2 and 3 of the 1968 SNA were referred to as supply and disposition tables and the symmetric commodity-by-commodity (and industry-by-industry) tables were referred to as input-output. Viewed this way, there is no conflict between supply and disposition and input-output; indeed it is necessary to start with the first to reach the second. The major distinction is that the supply and disposition tables can be compiled directly from the basic information as collected whereas the input-output tables need much further manipulation. There was therefore some suggestion that it was the symmetric tables that should be removed from the Blue Book and included in the handbooks. However, this met with a considerable amount of opposition from some of the participants; it was stressed that one of the main purposes and advantages of input-output tables is in order to perform consistency checks on the data available and for this it is necessary to work with a symmetric table. The Blue Book should not suggest that simply compiling a supply and disposition table every year is sufficient to derive the macro-aggregates but should state it is still necessary to use some sort of input-output information to cross-check the components.

While the group could reach no formal consensus, there was agreement that the input-output table was integral to the SNA, that the supply and disposition and the input-output matrix should be in the Blue Book and enough information to show they can be

reconciled in order to ensure internal statistical consistency of the data in each of them. The details about how much should be included and how much not, including elaboration of terminology and a consideration of how far a discussion of true and approximate prices is needed in the Blue Book will be left to the special input-output expert group.

Input-output tables are an integral part of the SNA. The Blue Book should contain exposition of the matrices analogous to the supply and disposition of goods and services matrix and the gross output and inputs of industries matrix of the present SNA sufficient to explain how these matrices can be used to ensure consistency between output and use of commodities.

The full analytical assumptions of how to produce symmetrical tables from the basic data, the interpretation of coefficients and other manipulative techniques will be mainly considered in a Handbook.

March, 1988

A major topic for consideration was the integration of input/output with the national accounts. There was unanimous agreement that input/output is integral to the SNA system. The question is rather one of which tables should be presented in the Blue Book and how much explanation should accompany these tables.

Some clarification of terms using the changes in terminology suggested earlier in the meeting were found necessary. The make matrix is a table, not necessarily square, showing a cross classification of supply by producers and importers in the rows and by products in the columns. The use matrix is made up of three submatrices; the leading submatrix is the cross classification of products in the rows and producers in the columns. The two other submatrices constitute the absorption of products by categories of final demand and the use of components of value added by producers. The leading submatrix of this table will be of the same size as the make matrix and again may not be square. The make and use matrices can be combined to form two symmetric square matrices. One of these, previously called the commodity by commodity matrix, would now be referred to as product by product matrix. The other, which was previously referred to as an industry by industry matrix, would now be referred to as a producer by producer matrix. The question facing the Expert Group therefore was whether all four tables, make, use and the two symmetric tables, should appear in the Blue Book or simply the make and use matrices or as a third alternative only the symmetric tables. This last alternative, although it is the approach currently adopted by ESA, was quickly rejected. Almost all the participants felt that it was essential that the Blue Book explain how the input-output framework can be used for quality control and balancing supply and disposition of products in relation to the basic data. This necessarily involved working with the make and use matrices since these tables were the ones that related to data as it was collected. While it is possible to go from make and use matrices to symmetric tables it is not possible to work backwards from symmetric tables to make and use matrices reflecting the data as collected. The first conclusion, therefore, was that the make and use matrices should appear in the Blue Book along with an explanation as to how they can be used for quality control purposes. These two matrices are sometimes referred to as "basic" matrices and, jointly, as a supply and disposition matrix.

The discussion then turned to whether the symmetric tables should also be included in the Blue Book. The same argument was put forward as had been advanced [at a specialised input-output meeting the week before] that there was a difference in kind between the make and use matrices which reflected data as collected and the symmetric

tables which were essentially analytic tables representing a considerable amount of manipulation data by the compilers based on assumptions for example about the type of technology being used in production. It was generally felt that while this distinction was literally true it gave a much sharper picture of a dichotomy than actually exists in practice. Even to compile the make and use matrices a great deal of subjective judgement is needed to manipulate the basic data and achieve consistency between the two tables. The type of judgement and analysis needed to go from these balanced tables to the symmetric tables was felt to be relatively small in proportion to the effort already needed to produce the basic tables. Nevertheless, it was felt that exhaustive detail about how to produce the symmetric tables and how these could be used in further analysis was out of place in the Blue Book. The recommended solution therefore was that the Blue Book should contain examples of symmetric matrices with text saying that such tables could be produced and were useful for certain sorts of analyses and for details the reader should be referred to the handbook.

The question then turned to whether one or both of the symmetric table should be included in the Blue Book. There was considerable interest in including the product by product matrix but it is the producer by producer table that provides the link with value added by kind of activity unit. It was therefore felt that both symmetric tables should be included in the Blue Book but with reduced emphasis on them.

On the question of terminology again it was agreed that the input/output framework would constitute the four tables; make, use, product by product and producer by producer. A question was raised about whether it was appropriate to talk about "technology" assumptions in deriving the symmetric tables. The use of this word implies a degree of sophistication which is often missing from the manipulations undertaken and it was suggested that if a more neutral expression were used the apparent dichotomy between descriptive tables and analytical tables would be played down.

The make and use matrices should continue to form an integral part of the SNA. The make matrix is a cross-classification of supply by kind of activity of producers and imports in the rows, and by type of products in the columns; the use matrix is a cross-classification by type of products and primary inputs used in the rows and kind of activity of producers and final demand categories in the columns. The Blue Book should also include the product x product and producer x producer matrices derived after merging the make and use matrices. These extensions and the conversion methods to arrive at them should however be given less emphasis in the Blue Book; their derivation should be worked out in detail in a handbook.

The make and use matrices and the square product x product and producer x producer matrices will together constitute the input-output framework in the revised SNA.

There was then discussion about what degree of details should be shown in a kind of activity table. The supporting table number 17 in the 1968 Blue Book is fairly detailed. It was generally felt that it would be preferable to go for the same sort of level of detail as had been discussed in the context of separating out integrated activities, that is at something corresponding approximately to the one digit level of the present ISIC. Again it was recognized that this may have to be reviewed when the new ISIC is finalized.

In conclusion, the meeting agreed that the accounts for corporate enterprise sectors should be subdivided according to kind of activity. This sub-division would be done by allocating entire enterprises (without splitting) to their predominant kind of activity. In principle, the allocation of multi-activity enterprises should be based on gross value added, as recommended in the draft introduction to the proposed 3rd

Revision of the ISIC. The group agreed that the activity classification should be applied to enterprises only at a low level of detail such as, for example, the one digit level of the present ISIC. For some countries it would be appropriate to show more specific detail for key sectors.

As far as the public sector is concerned it was agreed in the Expert Group Meeting on Public Sector Accounts that within COFOG (Classification of Functions of Government) the appropriate statistical unit would be the transaction or group of transactions. This would apply to the classification of expenditures in all the accounts for the government sector. However it may still be appropriate to have a dual classification of the production accounts of government, by activity and by institutional subsectors of government, with accounts for example, for central government and local authorities and where regional or state government is important for this level also.

For convenience sake the meeting agreed to use the term statistical unit as a generic label which refers both to reporting and analytical units of transactors such as establishment, enterprise, branches, etc.

1. Secondary production

A hierarchy of items was proposed, divided first between secondary and special products. Secondary products could be divided into subsidiary and by-products, by-products themselves being distinguished between exclusive by-products and ordinary by-products. Subsidiary products are those that are produced by secondary activities, that is using techniques of production that are different from those used by the principle activity of an establishment. By-products are technologically linked to the production of other products. They may be produced only as by-products in which case they are exclusive by-products or they may be produced in conjunction with another product and independently in which case they are described here as ordinary by-products. The case of special products is rather different. The only item considered was the item known in ESA as adjacent products which refers to products whose use is similar to another product classified in a different industry because of a different method of production for example shoes made of leather rather than plastic.

Secondary production is important because it explains the difficulty in going from the make and use matrices to the symmetric tables. However apart from pointing out this fact and highlighting the degree of subjectivity that needed to be used by the compiler of the data even at the level of compiling the make and use matrices, it was felt that most of this detail should be relegated to the handbook. The SNA also introduces the concept of joint product but it was felt that there was no need to have a distinction between joint product and an ordinary by-product nor was it felt useful to have a heading special products which included only the specific case of adjacent products. It was felt preferable to use the term secondary product to refer to both subsidiary and by-products although the ESA presently defines secondary products as being equivalent to subsidiary products. The exact use of the above terms is to be left to the author of the Blue Book.

The term "secondary production" will be used in the revised SNA to refer to "subsidiary products" and to "by-products". The term "adjacent products" should be used when reference is made to products that are used similarly but that are produced by different methods of production (e.g. leather, rubber, plastic shoes).

F. Income measures

June, 1986 (2)

The question was raised whether GNP should be reintroduced as a central aggregate in the SNA; in particular, the World Bank and the IMF strongly endorsed the reintroduction of GNP. In many developing countries, the role of factor incomes is crucially important to an understanding of the economic forces at work in the country and ignoring these by concentrating only on GDP can be extremely misleading. The general consensus of the participants was that in certain circumstances, GNP could indeed be a useful concept but they pointed out that this was always available from the components appearing in the accounts and did not of itself necessitate restoring GNP to the position it formerly held at the centre of the national accounts. A number of participants felt that producing multiple "key" aggregates, for example gross national product, gross domestic product, gross and net product and valuations at market price and factor cost could simply be very confusing to the users. The Blue Book and/or handbook could show how each of these could be produced depending on the needs of particular analyses.

Several participants suggested that GDP at factor cost should replace GDP at market prices as the central aggregate of the system but this did not meet with universal approval and on balance the preference was to retain GDP at market prices.

The question of terminology was raised again in connection with the GDP-GNP discussion. It was universally agreed that gross domestic product was a measure of product and in the sense that it was identical to value added was also an income measure. What is presently referred to as GNP is derived by adding net factor income to GDP; it is thus properly an income concept rather than a product concept and should properly be referred to as gross national income at market prices and not gross national product at market prices. The group strongly recommended that this change in terminology should be introduced with the new Blue Book but recognized that "GNP" is widely used on a popular basis by many who perhaps do not understand what these initials stand for. That being so, it would be very difficult to introduce the change.

While accepting that GNP is properly an income measure, it was agreed that one of the extensions to the SNA that needs to be considered is the derivation of alternative income measures and in particular derivation of real national disposable income. There is a problem about the choice of a deflator to produce this but all were agreed that it is a useful concept to be introduced in the new SNA.

Also on terminology, it was queried whether the distinction between purchasers prices and market prices is useful and whether it should be retained in the new SNA.

It was agreed that Gross Domestic Product at market prices should remain the central aggregate of the system.

The group strongly endorsed the use of the terms "Gross National Income" to replace "Gross National Product".

The Blue Book should contain a description on how income aggregates such as Gross National Income and Disposable Income can be derived from GDP.

The revised system should include income aggregates in real terms.

1. **Definition of income**

January, 1989

The next item on the agenda was the paper "The concept of income and the distinction between current and capital items". In the 1968 SNA current transfers are defined as those made out of income but income itself is not defined and therefore there is a circularity in this definition of current transfers. Most of the considerations of income have started from Hicks' definition that income is what can be consumed in a period and still leave one as well off at the end of the period as at the beginning. In this form it is an ex-ante definition of income. However, national accounts were essentially an ex-post enumeration of transactions and Peter Hill argued that an ex-post alternative to Hicks' definition of income as being actual consumption plus the change in net worth was consistent with such an overall ex-post framework. In this case income is defined not as the maximum amount that can be consumed which maintains the initial capital intact but the maximum which maintains the initial capital and net transfers of capital received in the period. Unless such a definition is accepted he believes it is logically impossible to have capital transfers. The attitude of a rational individual to capital received is to acquire a capital asset with it, not to regard it as income. What distinguishes a current from a capital receipt is that a current receipt is a type which a recipient expects to go on receiving regularly in the future. In his view there was no need to be more precise about the definition of current receipts. A capital transfer is one where there is no reason to suppose that another similar flow will be forthcoming.

The participants had sympathy with the definition of ex-post income as articulated and agreed that the definition be used for purposes of explaining the concept of income in the Blue Book. On the other hand the idea of defining capital transfers simply in terms of regularity met with a considerable amount of opposition. It was argued that defining capital transfers in this way simply moved the circularity of definition from current transfers to capital and that a more independent definition of capital transfers was needed. It was also felt unsatisfactory to apply the criterion of expectation of regularity simply to the recipient of a transfer. If one looked at the expectation on the part of the payer the conclusion might be different. The case of inheritance taxes was an example where the recipient would regard the transfer as current but conventionally to date this has always been regarded as a capital transfer by households since it is the payment that is not expected to recur. Further, there is a difference between micro and macro expectations; for example government would regard the transfer of inheritance tax from a single individual as being an irregular occurrence but from the population at large the receipts would be regular.

While the distinction put forward might enable receipts to be separated into current and capital elements this definition could not be used for expenditure. Many firms undertook regular expenditure on the same sort of equipment and yet this was capital; for example replenishing a fleet of cars for a car hire firm. In clarification Peter Hill said the distinction between current and capital based on regularity was to be applied only to transfers; this should be regarded as a definition only to tidy up a loose end that had not previously been well defined.

Even this was not very sympathetically received. A number of instances were quoted where existing capital transfers would be reclassified because they were small and frequent, for example terminal benefits of savings plans, or were large and frequent such as repeated assistance from government to public corporations. On the other hand instances were quoted of large and infrequent payments that should not be treated as capital transfers, for example famine relief. Other instances were quoted of large and

infrequent receipts, for example payment on life insurance policies or lottery winnings, which are not shown in the accounts at all because these are netted out at the macro level.

As the discussion developed it became clear that the main criteria that people felt should be used to distinguish capital transfers was the purpose for which the transfer was made. However, this was not the sole criterion. In total four criteria could be cited (i) purpose, (ii) source of funding, (iii) the size of the transaction and (iv) the frequency with which it was made. It was noted that there could be some conflict between these criterion and one of two alternatives had to be adopted. The first was to say that because of the difficulty of identifying capital transfers the concept should be abandoned altogether and all transfers should be treated as current. Earlier expert group meetings, however, had rejected this approach and had determined that capital transfers should persist in the system. In order for this to be done a hierarchy among the four criteria cited above needs to be determined and difficult borderline cases need to be examined and explained.

The meeting then considered the paper "Current and capital transfers" which in particular concentrated on the identification and treatment of international capital transfers, a matter that had been unresolved at the External Sector meeting. Here much of the concern was concentrated not so much on income but on savings. If a government was in receipt of a large transfer from abroad should this always be regarded as an increase in saving or should some such transfers be treated as capital and therefore excluded from saving? In discussion it became clear that identifying capital transfers internationally was no easier than doing it domestically. Further, there was the complication about where capital transfers would show in the balance of payments account, since the capital account of the balance of payments corresponds to the [financial account] of the domestic accounts. Again the discussion produced a list of examples where function seems to be the main criterion for determining that the transfer was capital in nature. The possibility of defining capital transfers by enumeration was raised and though this was felt to be inappropriate as a definition it was felt it would be helpful to include an extensive list of examples of capital transfers in the Blue Book.

The question of where to place capital transfers in the balance of payments account was not resolved. The position adopted by the balance of payments compilers was that all transfers should appear in the current account although some will be designated capital transfers. National accountants were uncomfortable with this suggestion and thought that they would need to exclude capital transfers from the current account balance thus deriving a different total from that shown in the balance of payments account. The point was made that at present there are a number of different measures of income and money supply available to analysts so why should there be a concern about having two versions of the balance of payments current account balance? This point was noted but not enthusiastically supported given the overall concern with harmonisation of the different systems.

A recurrent point during the discussion had been the difficulty of dealing with transfers that appeared to be current on one side and capital on the other and the point had been raised of whether it would be possible to introduce asymmetries in handling of such transfers. Some participants felt that this was a violation of a very fundamental principal but others thought the matter should be examined and it was agreed that a paper would be produced for consideration in July which would study the implications of introducing asymmetries; how a reconciliation of the consequential imbalances may be achieved; what the consequences, cost and benefits of such a system would be.

The definition of income as the maximum amount that can be consumed in a period while maintaining initial capital and net capital transfers received in that period intact will be used for purposes of explaining the concept of income in the system.

The concept of capital transfer will continue to exist in the SNA. A transfer is distinguished as being capital rather than current in nature according to several criteria : i) purpose ii) source of funding iii) size and iv) frequency. Since these may be in conflict a hierarchy among them needs to be established.

International capital transfers are to be distinguished according to the same principles as domestic capital transfers. In this case purpose may be the main criterion but it is not the sole one. A list of examples of capital transfers is to be provided in the SNA. The placement of capital transfers in the balance of payments account was not determined. *Ultimately the BPM5 included capital transfers in an account, new to the BPM, corresponding to the SNA capital account.*

A study is to be prepared for the July meeting exploring the advantages and disadvantages of allowing a transfer to be treated as current by one party (sector) to the transaction and as capital by the other party. The study will also examine how the resulting imbalances are to be reconciled. *Such a report was not prepared. Discussion suggested no satisfactory resolution could be found because asymmetric treatment of some transfers would lead to omission or double counting of the relevant transfers in aggregate saving.*

2. Mixed income

July, 1989

The draft text about the treatment of operating surplus of unincorporated enterprises suggested that for some types of activity particularly, for example, subsistence farming it might be more appropriate to attribute part or all of this as compensation of employees rather than operating surplus. There was a widespread feeling that this was not acceptable but that it was also misleading to talk about the operating surplus of unincorporated enterprises as the same concept as operating surplus of corporate enterprises. For unincorporated enterprises two elements are combined; one the wage element earned by the owner of the unincorporated enterprise (assuming he works in that enterprise) and the "profit" element he generates. For these reasons it was felt that it would be appropriate to introduce a third component of value added to be called "mixed income". This would include all the net value added of unincorporated enterprises which could not unambiguously be identified either as compensation of employees or gross operating surplus. This last would be appropriate in the case where the owner of the unincorporated enterprise did not himself work in it. In general however the balancing item on the production account for households would in future be mixed income. This item should be shown not only in the household production account but in the integrated accounts for the nation so that in future value added would always be shown as being composed of compensation of employees, mixed income and gross operating surplus.

That part of value added of the household sector that does not consist either of "pure" operating surplus or of compensation of employees will be referred to as "mixed income". Value added will therefore be classified into three categories (compensation of employees, operating surplus and mixed income) throughout the system.

The Group rejected the proposal to allocate part of this income from self-employment to compensation of employees.

3. Factor incomes and property incomes

September, 1989

Some concern was expressed about the exposition of the income items generated in the production account (compensation of employees and operating surplus) and their apparent relationship to factors of production. It was pointed out that compensation of employees does not measure the return to all labour but only to employed labour. Operating surplus is described in the text as accruing to the owners of the enterprise but this is something of a simplification because property income describes the distribution of income (and not its redistribution). It could be argued that property income flows also represents factor income and that attempts to match factor income with factors of production would need to take this into account. Because income from land is treated in the national accounts as property income, the income items generated by production accounts do not relate to all the factors of production as commonly interpreted by economists. It was felt that it would be unhelpful to redefine factors of production in a way that could be interpreted in a national accounts sense but one in which it would be impossible to tie the income flows to the economists' concepts of factors of production. One consequence is that the term factor income could usefully be dropped and replaced in the title of the chapter and elsewhere simply as income.

The System need not define factors of production and "factor incomes" will not appear in the classification. Instead, the sequence of accounts shows the full process whereby incomes are generated from production and then distributed and redistributed.

April, 1991

Discussion focused on clarifying the economic significance of primary income and factor income. Most participants recommended that the term "factor income" should in fact be avoided in the Blue Book. A rationale was suggested for primary income on the following lines, what is available as a return for participating in production or allowing your capital to be used. Additionally, indirect taxes are primary income of the government sector but no analytic significance should be attached to this category.

The concept of entrepreneurial income will be retained. It is unambiguous for the corporate sector, but it was recognised that dividing interest received and paid that pertain to households in their roles of consumers and of producers may be problematical in some circumstances.

G. The Reconciliation account

June, 1986 (2)

Historically, the reconciliation account was introduced to explain how one moved from the items shown in the SNA flow accounts to the stocks information in balance sheets and, initially, it was only thought that revaluation terms would be present. However, as new considerations have arisen, particularly for example the treatment of subsoil assets, these have been covered in the reconciliation account rather than change the existing flow accounts. The question now therefore was whether some of these items should be moved back into the flow accounts; if so, there would be a question as to whether they should affect production accounts or the capital accounts.

There was general agreement that there should be no arbitrary decision to reduce the reconciliation account to revaluation items only. Each of the items included in the reconciliation account should be considered on its own merit in subsequent expert groups. It was pointed out that the reconciliation account could be of interest in its own right. Indeed, there was considerable support for the idea that the reconciliation account might be split into two, one part dealing with exceptional events which would cover not only the discovery and exploitation of subsoil assets but natural disasters such as floods, etc. Other flows, many of which would be revaluation, would be in a second part of the reconciliation account.

In general, the expert group was unsympathetic to the idea of incorporating changes in subsoil assets in the flow accounts and felt these should be kept in the reconciliation account. However, it was recognized that this subject should be discussed in detail by the expert group on financial flows.

It was pointed out that some asymmetries have already crept into the present treatment. For example, changes in tangible assets are not included in the flow accounts but some changes in financial assets are included, for example, an agreement to cancel debt is included as a capital transfer.

The group was strongly of the opinion that each of the subsequent specialized expert groups should consider items falling within the reconciliation account which came within its purview. At the end, it would then be necessary to review the resulting composition of the reconciliation account and make firm decisions at that point as to how it should be presented and whether any fundamental changes should be made.

The group did not favour the removal of all reconciliation items into the flow accounts. There was particularly strong opposition to the suggestion that changes in reserves of sub-soil assets should be recorded in the production or other flow accounts.

The Expert Group on Financial Flows and Balance Sheets should consider the contents of the Reconciliation Accounts. It should examine the desirability of dividing the present reconciliation account into two separate accounts with one of these confined to exceptional events. This latter might include, inter alia, discovery of mineral deposits, war damage, flood losses, and holding gains and losses arising from relative price movements.

September, 1988

The Group turned to a discussion of the role and form of the reconciliation accounts, particularly with regard to their distinction from the capital accounts.

The 1968 SNA includes in the capital accounts all capital formation in tangible reproducible assets, as well as changes in the accumulation of tangible nonreproducible assets if the latter changes are a consequence of a purchase or sale of those assets. Also included are the creation, elimination, purchases, and sales of financial assets and intangible nonfinancial assets. Not included in the capital flow accounts, but rather in the reconciliation accounts of the SNA, are all other changes in the stocks of financial, intangible nonfinancial, and tangible assets. While the reconciliation accounts were originally conceived as including only valuation changes, M60 broadened their coverage to include: (1) nonreproducible assets used in production that were not part of the capital finance accounts (such as discovered subsoil assets and items as livestock, growth of timber tracts, etc.); (2) adjustments for unforeseen events; and (3) adjustments for changes in structure and classification.

In past discussions there have been two arguments brought forward to expand the present coverage of the capital accounts to include more changes in the stocks of tangible and intangible assets, to the extreme that all changes would be shown in the capital flow accounts, and the reconciliation accounts would include, exclusively, revaluations of assets. It was suggested, first, that such a treatment would result in reconciliation accounts that would be more meaningful analytically, and secondly, that the capital flow accounts of the SNA would cover all changes in assets that affect the relation among production, income generation, and investments (fixed and financial). Expansion of the capital flow accounts does not necessarily mean that production and GDP would be affected. Such an effect could be avoided by incorporating in the capital flow accounts counter-items to those increases or decreases of assets that are not the result of production; such counter-items (which would not represent changes in either assets or liabilities) to be added to gross saving would avoid affecting the measure of GDP and net lending.

Three proposals emerged from the ensuing discussion, namely:

1. Retain the present SNA treatment, which includes only actual transactions in the capital accounts with a separate set of reconciliation accounts (which include both revaluation and reconciliation items).
2. Adopt the proposal made in the Annotated Agenda, which would move most nonrevaluation items from the reconciliation account to the capital account, and extend the proposal by subdividing the reconciliation accounts into two parts, comprising revaluation items and reconciliation items, respectively. Reconciliation items relating to changes in reproducible and nonreproducible tangible assets would be moved to the capital accumulation accounts, while the remainder would stay in the revaluation subcategory of the reconciliation accounts.
3. Adopt the approach described in the background paper on "How to deal with non produced assets and exceptional events in the national accounts? Considerations on the variations of wealth account."⁹. Under this proposal, the reconciliation accounts would be integrated with the main SNA tables to provide a measure of net worth. A "Change in Wealth Account" would be introduced. This would have three parts: (1) one corresponding to the capital accumulation accounts; (2) the net acquisition of assets and Incurrence of liabilities (that is, financial accounts); and (3) reconciliation accounts, albeit with a different name. This proposal would not change balance sheet values but would simply be a reformulation of Table 7.1 in M60.

Most of the Group felt that the SNA needed to change, and therefore they did not support the first proposal noted above. Neither did they support the proposal made in the Annotated Agenda, modified as noted above, since **the majority of the Group did not wish to extend the coverage of the capital finance account of the SNA**. Such a broadening would introduce an inconsistency between the income accounts and the capital accounts. The Group agreed, **however, that the capital finance account should be divided into two separate accounts**.

⁹Paper 31 in "The IMF's Statistical Systems".

The Group was in broad agreement with the proposal made in the background paper, and it was agreed that **the present reconciliation accounts developed in M60 needed to be further integrated with the present sector accounts of the SNA and that a new concept, called "Changes in Net Worth," should be introduced into the SNA. In doing this, the Group supported the recommendation made by the Expert Group on the SNA Structure to divide the present reconciliation accounts into two separate accounts (or subaccounts), one covering revaluation items and the other containing the remaining items from the present reconciliation accounts.** The need to separately identify revaluation items was seen to be necessary to enable alternative income measures to be constructed. The second subaccount would comprise structural and coverage changes and unexplained differences. Two participants thought that a sectoral breakdown for each item in the two new subaccounts would be needed.

Agreement was reached on assigning the name financial account to the second section of the present capital finance account, and the term revaluation account to cover the revaluation items of the present reconciliation accounts. It was suggested that further details regarding the order, balancing items, and names of the remaining two accounts should be elaborated as part of the design of an accounting framework for the which is planned to be discussed in a future Expert Group Meeting.

On the question of presentation, it was noted that the form of reconciliation account suggested in M60 is perhaps not the clearest or most useful. Several participants saw the need for a presentation that would show how to move from opening to closing balances and said that the presentation adopted needed to be an integral part of the conceptual tables in the SNA. Although the Group did not reach a formal conclusion on this point, the view that emerged was that, in order to integrate the reconciliation accounts with the SNA, the first panel of the capital accumulation accounts would show capital transactions, the second panel would show the reconciliation accounts with the breakdown agreed by the Group, and the final panel would show the financial accounts. Within the reconciliation accounts there would be, for each type of asset and liability, a column for opening values and columns for each of the factors leading to the closing values, which would be shown in the final column. There would also be totals at the bottom of each subaccount.

The Group agreed that **the revaluation account must be so arranged that holding gains and losses can be clearly identified, distinguishing changes due to relative price movements from changes due to general price movements.** This would be necessary to enable the derivation of measures of real capital gains and real net worth. In its discussion of the choice of an indicator of general price movements, the Group noted that there was a long-standing debate on how to measure general inflation, and that there was no ideal measure. Nonetheless, it was considered important that the Group reach a decision on the indicator to be used. The Group concluded that **the index measuring general price movements, that is, the variation in the internal purchasing power of the currency, should be as broad as possible in its coverage. An acceptable approximation is the price index of Gross National Expenditure (GNE), which covers final consumption and capital formation.** It was noted that the price index of GNE would not be available for all countries and, in addition, that it would not be sufficient to have an index that was available only on an annual basis, since it would be necessary to capture price variations within the year. Monthly or quarterly indexes that could be used to interpolate the annual index were therefore needed. For these reasons the Group concluded that **alternative broad measures will also be suggested in the revised SNA when the GNE index is not available.**

H. National and Sectoral Balance Sheets and Reconciliation Accounts

September, 1988

In concept at least, balance sheets were an integral part of the 1968 though the structure and definitions and the classifications and tables were not presented. Practical recommendations appeared in 1977 in M60, which developed recommendations for balance sheets compatible with the 1968 SNA and in so doing revealed some problems in linking stock and flow data in terms of valuation, coverage, and changes in stocks not accounted for by current flows.

The Expert Group Meeting on the SNA Structure (held during June 23-27, 1986) had recommended that the new SNA embody more fully the balance sheets and reconciliation accounts to produce a complete set of accounts, from opening stocks through transactions and revaluations to closing stocks. This implies some constraints on the form, the valuations used, and the classifications of assets and sectors used in the balance sheets, but at the same time the interlinked system strengthens both the concepts and the data of national accounts.

As an analytical tool, balance sheets represent a useful step forward. In practice, to date only a few countries have developed balance-sheet-type data; in consequence, not much national experience is available on the problems of developing balance sheets along the lines of those proposed in M60. Such experience as is available suggests that, at this stage at least, the main problems relate to data availability and valuation rather than to definitions or concepts of balance sheets.

I. Flexibility in the accounts

June, 1986 (2)

Many participants welcomed the developments that had been pioneered by the French in the use of satellite accounts and thought the use of such accounts could usefully be described in the new Blue Book. One use of satellite accounts is to look systematically at particular areas from three ways: from that of production, consumption, and financing. Reference was made to work being done by the ILO working on manpower statistics in satellite accounts. Andre Vanoli offered to provide a paper on what is sufficiently mature in the French experience to be included in the new Blue Book.

The Blue Book should refer to the usefulness of satellite accounts to develop further analyses of certain areas. (Tourism was mentioned as a particular example.)

In the timescale of the revision it may only be possible to set outline standards for a limited number of areas.

Mr. Vanoli (INSEE, France) undertook to prepare a paper on what seems feasible.

September, 1989

One very positive response to the chapter [on the flexible use of the accounts] was the encouragement that it would give to readers to view the system as being essentially flexible and capable of portraying areas of special interest to individual countries. This should help to avoid the slavish adherence to the SNA which has sometimes inhibited useful development of national accounts in some countries. At the same time it was not

helpful to give the idea that this was allowing countries to develop their “own” SNA and some reformulation of part of the text to make this clearer would be desirable.

Participants mentioned many other areas that they felt could usefully be mentioned in this chapter or in the one on satellite accounts. These topics covered changes in the production boundary to identify specifically the role of women in the economy, environmental statistics, social protection and agriculture accounts. It would also be appropriate to consider presenting the accounts so that formal and informal activities were distinguished and whether the mode of technology was traditional or modern. The concept of key sectors could be extended so that, for example, consideration of the role of petroleum could also take in the role of petrochemical processing; cotton growing could include the activities of spinning, weaving of textiles and garment manufacture.

Many participants felt that it was important to make clear in this chapter that the articulation of many of these concerns within the overall framework of the SNA was what was frequently described as a social accounting matrix and it would be important to make clear in this chapter that a SAM is nothing more than a flexible interpretation of the existing system and not an alternative approach.

It was suggested that some more attention could be given to the use of alternative presentations of the accounts not just from the point of view of economic analysis but also to investigate the nature of the data system involved. For example, by separating those parts of the accounts that are well based from those that are more tenuous estimates, it is possible to examine the interaction of errors in the system and to investigate the trade off between timeliness and accuracy.

The Group strongly endorsed the emphasis on flexibility in applying the system introduced by these chapters. The scope for flexibility should also be emphasised at an early point in the Blue Book.

Satellite accounts are particularly suitable for developing new concepts and systems. Environmental accounting is an important example and should be given prominence in the Blue Book.

There was some discussion about how much discussion was appropriate on quarterly accounts and regional accounts. These are recognised as being areas which deserve priority in the programme to implement the SNA in a number of countries. However, after discussion it was felt that many of the problems associated with them are essentially practical in nature and detailed exposition of how to compile these accounts is probably more appropriate for handbooks than for the Blue Book itself, though the desirability of compiling these accounts should be clear in this text.

The group recommended that the problem associated with the compilation of quarterly and regional accounts are more appropriate to a handbook than to the Blue Book.

J. Social accounting matrices

March, 1988

The logical consequence of the discussion on sectoring led to a reconsideration of the role of social accounting matrices (SAMs) in the new SNA. A SAM relates consumption to production to value added to household income and back to consumption thus making explicit the circular flow of income whereas the input-output framework has no direct link between value added and household expenditure. Ideally SAM's should be able to

show whether there are links between groups of products, for example between the public and private or formal and informal sectors which underlines the need to carry these splits through all of the accounting for consumption, production, value added and within the household sector. Table 2 from a paper "An integrated matrix and accounting framework for the revised SNA" which had been presented to the Second International Meeting of Compilers of Input-Output Tables held at Baden near Vienna in the week before this Expert Group Meeting is a variation on table 2.1 from the 1968 SNA but making explicit the disaggregation of the household sector and the flows from value added to the households and the interactions among institutional sectors in terms of disaggregated factor incomes. Several participants spoke enthusiastically about the desirability of incorporating such a table in the new SNA and explained the specific aggregations that had been introduced in their countries. It was recognized that the variation in disaggregation that is appropriate from country to country is one of the reasons that makes for difficulty in presenting a framework such as this in the standard part of the SNA. If agreement can be reached on minimal subsectoring criteria, part of this problem could be overcome. The view was expressed that it was misleading to see a SAM as being radically different from the existing SNA structure and that table 2 as presented demonstrated clearly that a SAM can be produced from the existing SNA structure simply by introducing a degree of elaboration with flexibility in the disaggregation of the household sector. There was general agreement with this latter point but it was felt important that emphasis be laid on income distribution and re-distribution aspects of the accounts rather than merely on production. It was important to make clear that a table such as table 2 is both a SAM and the standard SNA.

The meeting agreed that the contents of Social Accounting Matrices (SAMs) are an integral part of the SNA. However, special attention should be given to the aspect of income distribution in the future SNA. Particularly, the presentation of table 2.1 of the 1968 SNA will be amended to give greater prominence to SAMs and to show how they can be elaborated within the system through further disaggregation of the household Sector and further disaggregation of factor incomes.

January, 1989

A number of participants spoke in favour of emphasising the construction of social accounting matrices in the new Blue Book. It was pointed out, not for the first time, that Table 2. 1 of the present Blue Book in fact constitutes a social accounting matrix but because of the lack of disaggregation of the household sector and the lack of emphasis that is given to this possibility it is not always realised that the existing framework provides the infrastructure necessary to articulate the link between income generation and consumption. There was general agreement that this aspect of the full accounting system should receive considerably greater emphasis in the new Blue Book. This emphasis will also explain that disaggregation of income, consumption and the transfers among and between household sub sectors are necessary in order to study distribution and re-distribution of income at the household level.

The 1968 Blue Book includes the link between income generation and household consumption but this needs to be emphasised and further articulated in the presentation of the accounting structure, of the production, income and outlay and capital formation accounts.

April, 1991

The discussion concerned the draft outline of a chapter on SAMs. Four specific questions were dealt with: (a) Should the text in the revised SNA emphasise that the SAMs

presented are examples and not the SNA SAM? (b) Should the SAM presentation be included in a separate chapter or integrated with an existing chapter? (c) Should the SAM presentation include opening and closing balance sheets? (d) Could SAMs include classifications which are not found elsewhere in the SNA?

Most of the group welcomed the material presented as the outline of a SAM presentation in the SNA. The SAMs are seen as important in presenting the flexibility of the system. Accordingly the SAMs should be presented as examples reflecting such flexibility, illustrating the diverse analytical needs of countries. There was some concern however about the way the SAM presentation would be explained in terms of its place in the system as a whole.

Most of the group agreed that there should be a separate chapter on SAMs. Some concern however was expressed about the appropriate balance between the material presented in that chapter and other chapters.

Most participants thought that balance sheets should be conceptually integrated with the presentation of SAMs.

It was agreed that classifications not included elsewhere in the SNA could be shown in the presentation of SAMs.

When discussing references to SAM literature, it was noted that the revised SNA does not include references to selected literature; there was support however for exploring options.

Chapter 6. Production

A. The production boundary

June, 1986 (1)

There was discussion about possible extensions to the production boundary. It was suggested that water-carrying, repairs to buildings, the services of midwives and undertakers should be included though they are excluded from the 1968 SNA recommendations. There was a suggestion that some secondary activity, for example dressmaking, should also be included. In the support of the suggestion on repairs, the difficulty of including construction of own dwellings but omitting repairs was pointed out and that therefore despite the present recommendations the chances were that many of the repairs presently carried out were already included in output and construction estimates. Another issue that should be considered is the question of storing crops. Not all of these are stored for own consumption and therefore represent stock accumulation. Omission of this understates GDP in a year of a good harvest. Recommendations must be clear on valuation as well as coverage on this topic. It was also suggested that the question of rent on owner-occupied commercial and government buildings should be considered and reviewed with a possibility of extending the treatment presently given to the rent of owner-occupied dwellings.

The present production boundary of the SNA should not be drastically changed. Some clarification is needed, however, on the treatment of crop storage by farmers and activities such as water carrying, repair and maintenance of buildings which can be very important in developing countries. Guidance should be given on the valuation of these activities.

June, 1986 (2)

The Inter-Regional Seminar in the preceding week had suggested that no major extensions should be made to the production boundary but a short list of activities to be included was suggested. These included wood-carrying, repair and maintenance of buildings, and change in the treatment of crop storage. It was pointed out that including the repair and maintenance of dwellings in developing countries had implications for the inclusion of do-it-yourself work in developed countries. One of the distinctions is that in developed countries, the items used in do-it-yourself work are already included in personal consumption whereas in developing countries very often the materials are provided without market cost, for example cutting bamboo, making bricks, etc. Again, this is an area where clarification is desirable; it should be made quite clear that own account capital formation should include major repairs and not just the initial construction.

Reference was also made to the ILO definition which has recently changed to now include secondary and tertiary own account production. Efforts should be made to coordinate this definition with the ILO. On other extensions to the system, it was recognized that this may not be practical but satellite accounts could take account of a wider production boundary, for example to incorporate environmental effects and accounting for leisure.

There will be no fundamental change to the production boundary of the present SNA, although the new Blue Book and Handbooks should give clarification on the scope of own-account activities to be covered in the accounts, and on the treatment of illegal activities.

September, 1987

It was recalled that at the first expert group meeting on the structure of the SNA and the preceding Interregional seminar it had been agreed that the production boundary should be largely unchanged though it was clear that some clarification and minor extension was needed in respect of own-account production. In general it was not felt possible to have a single succinct definition of the production boundary that would explain why some items were included and some excluded but it was felt that it was possible to give fairly general indications followed by specific lists of examples that would make clear where the boundary should be drawn. It should also be admitted explicitly that a degree of pragmatism is reflected in this approach.

In accepting this approach, stress was laid however on the need to be clear on what should be included and what excluded from GDP. It should not be an area where excessive discretion was left to national accountants because of the need for harmonisation with other statistics and international comparability.

It was agreed that the existing SNA production boundary should not be changed significantly although it should be clarified particularly with regard to production for own consumption.

As a first step in defining the production boundary, it was felt it would be helpful to have a definition of production. It was suggested that a definition similar to that used in the French System of Accounts could be appropriate. This can be translated as "production is the creation of good and services which are exchanged on the market, are capable of being marketed or are produced with factors of production bought in the market" (this last covers primarily the production of government services). This definition of production should be amplified by some of the present Blue Book guidance on the production boundary. For example, it should exclude the further processing of goods bought for household consumption. Production which is marketed is included and the additions that are made for non-marketed production are largely made to avoid the distorting effects of increasing monetization of productive activities.

Production was provisionally defined as consisting of goods and services which are (a) purchased at the market, (b) capable of being purchased at the market or (c) produced by factors of production purchased on the market. The group agreed that this general definition should be supplemented in the Blue Book by an extensive list of examples of the kinds of goods typically produced for own consumption in developing countries that should be included within the production boundary. These goods would only be included in the accounts if they were quantitatively important in the total supply of these goods for the country in question. However the previous restrictions that such goods should only be included if made from primary products, or if made from own produced materials or if some were exchanged on the market should be removed.

In contrast to goods, services once produced on own account are not available for sale on the market. Presumably for this reason, hitherto they were excluded from GDP and the group reaffirmed this convention.

1. Specific inclusions and exclusions

The meeting considered a table which defined the recommendations for activities to be included in the production boundary in the 1968 Blue Book. Some changes to this table were agreed readily. In particular, it was suggested that weaving baskets and mats, making clay pots and plates, weaving textiles and making furniture along with dressmaking and tailoring and handicrafts not involving primary products) should be included in the production boundary where the amount of such items produced on own-account was a significant proportion of the total produced in the country. However, it was agreed that three previous restrictions should be dropped.

i) It should not be necessary that the raw materials used for these handicrafts to be primary products; it was felt unreasonable to include weaving of cotton but exclude weaving involving synthetic materials, for example.

ii) Further the 1968 SNA includes such activities only if some of the output is in fact marketed; this too was felt to be an inappropriate condition. At present the activity of a weaver who sells a small proportion of his product is all included whereas the product of one who sells none is wholly excluded. In future the activity of both should be included in total as long as home weaving is a significant part of the production of fabric in an economy.

iii) The 1968 SNA also suggests that processing of primary products is only included if the production of the primary product and the processing are done by the same institutional unit. This also was felt to be inappropriate; if processing of milk into butter is to be included, it should not matter whether the milk is produced from within that household or by a neighbour's household.

While there was general agreement on the above proposals, some warnings were issued about their interpretation. For example, in including the creation of goods and services capable of being marketed in production, clarification needs to be given as to whether the criterion means they must be capable of being marketed domestically or is the existence of a market in another country sufficient justification for inclusion. Further, in valuing the output, recognition should be given to the fact that if only a small proportion of output is marketed this may be at a price which is not representative of the price that would prevail if all the activity were in fact marketed.

A discussion on the appropriate treatment of home tailoring led to a further clarification of present practice. In some countries all tailoring is done within the household. Consumers buy material and take it to the tailors to make up and ready made garments are not usually available for direct purchase. In these cases, the consumer buys the material and a tailoring service; the tailor does not acquire ownership of the materials and these should not be shown as intermediate inputs.

2. Agricultural production

It was pointed out that gathering field crops or fruit and vegetables is presently included in the SNA production boundary and should continue to be so.

The question of the appropriate valuation of production for own consumption was also raised. It was agreed that valuation should not reflect the amount of time taken in producing a commodity but should represent the appropriate market valuation. This market price would be the price prevailing at the nearest point of transaction of similar goods. The implication for agricultural products therefore will usually be equivalent to

the farmgate price conventionally used in valuing subsistence agriculture. As mentioned above however, this should include implicit costs of harvesting and storage of crops where this is appropriate.

Further it was agreed that the cost of storing crops should be regarded as part of the cost of growing and producing crops and the value attributed to crop production should include storage costs where appropriate.

There was also recognition that the theoretical recommendations on the valuation of subsistence activity was difficult to implement in practice. In some cases, producer prices simply may not exist and there may be no alternative to using market prices. The example was also quoted of instances in Africa where some merchants purchase the crops before the harvest at a lower price than is subsequently realised. It was agreed that this was equivalent to a financial transaction between the merchant and the farmer and should theoretically be shown as such in the accounts.

It was agreed that producers' prices of farm crops should be measured at the nearest point where these crops are actually sold, even if this includes transport cost.

3. *Water*

It was argued that the activity of obtaining water for own consumption was equivalent to gathering fruit and vegetables and should be treated as the production of a good (that is making the water available where it is needed) and thus should be included within the production boundary. There was some discussion about the value to be placed on this activity and references were made in connection with this item as with many others about the amount of time that may be involved in undertaking this activity. It was agreed that the amount of time needed to produce a good is irrelevant as far as the SNA production boundary is concerned. Goods, when produced, are ascribed the market value of these goods and if the market value is zero then the product has zero value. The question of the allocation and valuation of use of time is important in its own right but this is not what the SNA production boundary presently attempts to measure and the participants did not think this should change.

After considering several additions to the present list of types of goods that should be included in the production boundary, it was agreed that clothes and handicrafts made for own consumption should be included. Obtaining water for own consumption was regarded as producing a good (i.e. water made available at the place where needed) and therefore falls within the production boundary. The activity of growing crops should be deemed to include harvesting and storage of crops.

4. *Midwives and funerals*

Two other items that had previously been discussed for inclusion within the production boundary were midwife and funeral services. It was agreed in discussion that it would be difficult to identify these unambiguously because they are often associated with possibly expensive ceremonies. More substantive discussion suggested they should not after all be included in the production boundary. It was argued that the only extensions to the production boundary previously accepted are for the production of goods. This presumably is on the basis that a good once produced, is capable of being resold. However this is not true for services. Services produced on own account are always immediately consumed by those producing them and therefore do not add to the pool of goods and services available for redistribution. On these grounds, therefore, it was agreed that no own-account services should be included within the production boundary.

This exclusion would include midwife and funeral services thus reversing the provisional suggestion to include them.

5. Repairs to buildings

The other major item for discussion on how far the production boundary should cover own-account activities was on activities related to constructing, repairing and maintaining dwellings and farm buildings. The existing SNA production boundary includes construction and major repairs of dwellings and farm buildings and it was confirmed this should remain so. In many developing countries where buildings are less robust, it may be necessary to carry out substantial repairs on a regular basis. Rethatching a building every year was quoted as a specific example. It was agreed that such activity should be treated as capital repair to buildings in accordance with the present Blue Book definition of capital repairs as “those that lengthen the expected lifetime of the building or increase its productivity”. As such these activities should be included within the production boundary.

There was then discussion about the appropriate treatment of current repairs and maintenance defined as those that make good breakage or keep the buildings in proper working order. It was felt that these could be subdivided into two categories by reference to commercial renting of property; those minor repairs which would normally be carried out by a tenant (for example, painting walls, changing a tap washer, installing curtain rails) should not be treated as falling within the production boundary. The items purchased should be included as final consumption but no imputed value added should be made for the labour input. For more substantial repairs (mending a hole in the roof, replastering a wall) the tenant would expect the owner to undertake this activity and the owner would normally employ a commercial firm to do this. Where such activities are undertaken by the owner, either in respect of his owner-occupied dwelling or a dwelling he owns but rents, these activities should also be included within the production boundary including imputed value added for the labour input. There was discussion about how this activity should be shown in the accounts. In this case the owner-occupier is undertaking two separate activities, one as the owner-occupier of the house and the second as construction activity. In principle, it would be possible to show these as two production accounts, one attributed to own account housing and one to construction but it was felt more appropriate to consolidate them in a single production account and assume that the production of construction services was secondary production within a single production account.

It was confirmed that capital repairs and alterations to buildings, identified as those that lengthen the expected lifetime of the building or increase its productivity, undertaken by the owners are included in the production boundary as fixed capital formation.

The group discussed whether own-account current repairs and maintenance to buildings, identified as those that make good breakage or keep them in proper working order, should be specifically included in the production boundary. If owner-occupiers as owners maintain their own dwellings they are providing construction output which they consume themselves in addition to their principal output (housing services). It was agreed that both the principal and secondary outputs should be shown in a single production account for owner-occupied dwellings.

Materials used for repairs normally carried out by tenants should appear in final consumption with no associated value-added for imputed labour input.

The group agreed that own account production should be valued at prices prevailing at the nearest point of transaction of similar goods. This principle would usually imply the use of farm-gate prices for agricultural products.

6. Review

April, 1991

At the final expert group meeting, discussion was based on Regional commissions' views on the production boundary for household activities. The group concluded :

1. The goods and services distinction in the current draft was sufficient to distinguish those household activities that fall within the production from those outside it;
2. Water is a good. Water carrying, which was better described as supply of water, is a part of the production process of this good and should be included within the production boundary where it was significant. Significance should be determined flexibly with reference, *inter alia*, to the volume of such services and the effort (distance) required to collect it;
3. Valuation, as in many other cases of imputation, should be made on the basis of a market price, if one could be determined, and otherwise on the sum of the costs (imputed value of the labour involved). The group recognised the practical difficulties involved in estimating value.

B. Measuring production activities within households

June, 1986 (1)

Two papers were presented, one on the measurement of subsistence activities and the other on productive activities of households. The subsequent discussion took up issues that had already arisen in the meeting under the discussion of the production boundary and sectoring of the economy. There was widespread recognition that the theoretical distinction between household activity and quasi-corporate activity was very difficult to establish in practice and some pragmatic decisions were inevitable. It was agreed that, as far as possible, expenditure for the household as consumer and as producer should be separated. However, it was unlikely that this separation could be carried all the way through the accounts and that in particular saving and financial aspects were inextricably mingled. While it might be possible to make an alignment between the formal/informal distinction and household and quasi-corporate activities, this distinction could not be carried over to a distinction between modern and traditional activities. Although there was clear agreement that production accounts for households should be introduced there will be practical problems in estimating these where household consumption is derived as a residual. Consideration needs to be given to how household surveys should collect information relative to production and to the units to be covered by household surveys. Again, it was recognized that these problems are common to both developed and developing countries.

There was agreement that production accounts for the household and unincorporated enterprise sector should be introduced. Where possible transactions of households as "consumers" should be separated from transactions of unincorporated enterprises.

C. Communal activities

A major issue that is not presently covered in the SNA is the treatment of communal activities. These can be very substantial and very important in Africa and Latin America. In the Congo, for example, schools are built by a collection of households who then combine to pay the teachers; other examples were quoted where communal activities are used in the building of roads and bridges. It was agreed that these activities should be included in production but when they resulted in the construction of fixed capital, there is ambiguity as to who owns these products. The definition of production for own-account in these cases would be interpreted more liberally than meaning for the consumption of an individual household producing the good.

Communal activities are important in several developing countries and are included in GDP. Where these activities result in the production of capital goods such as roads, bridges, schools, more guidance is needed on the allocation of the capital assets to the appropriate sector (owner). Clarification is also needed on the valuation of free labour engaged in communal activities.

April, 1991

The group reaffirmed the earlier recommendation (Household Sector meeting, 1987) that voluntary labour inputs into production of services by non-profit institutions should be valued at actual compensation paid even if this were very low or even zero.

Production of goods such as roads, schools, etc. that is organised on a communal basis should be valued at market prices of similar goods. Where such market prices are not available, output will be valued as the sum of costs including an imputation for the value of labour input (but no imputed profit). The value of labour input imputed in valuing output will not be distributed as compensation of employees, but remain as mixed income. Such production will be shown as carried out by the households involved.

Capital goods produced in this way will be allocated to the balance sheet of the sector responsible for their upkeep and this will be effected by means of a capital transfer.

D. Household services

June, 1986(1)

There was some discussion about how far an enlarged GDP concept was appropriate. It is clear that there is considerable interest in several quarters in deriving a measure of GDP that includes household services. However, it was not felt appropriate that the basic concept of GDP should be extended to include these. While it can be argued that excluding such services discriminates unfairly against poor countries, it can equally be argued that including these services would be detrimental to the interpretation of the accounts for such countries since by reducto ad absurdum if one includes sufficient activities, it can be shown that no one is poor at all. Without reaching conclusions on how enlarged measures of GDP should be measured, it was agreed that where possible the estimates for own account production should be shown separately from marketed production wherever possible.

E. Implications for labour statistics

There was discussion about the implications for labour statistics of the proposed changes to the production boundary. Mr. Hussmanns from ILO confirmed that an individual was

deemed to be economically active if he or she was undertaking production that fell within the production boundary of the SNA . He felt that the changes proposed above would make it easier to interpret this definition. In commenting on the question of enlarged consumption, he pointed out that not only can one define away poverty by including sufficient activity, one can also define away the economically inactive population by including sufficient within the production boundary.

Subsequent to the meeting, contact was made with the FAO in Rome and the proposed changes to the production boundary were explained to them. Here too, there was agreement that these clarifications to the production boundary were desirable and would improve the harmonization of data provided by different agencies..

F. Illegal Activities

There is a distinction to be made between illegal and hidden activities, that is activities which are themselves legal but may not be disclosed for example to the tax authorities. The 1968

SNA mentions illegal activities explicitly and says they should be included where the receipts are obtained with the unenforced consent of the payer. This would mean that some illegal transfers, for example payments made under extortion would be excluded. The question therefore was whether to abide by the present recommendations or to make changes.

It was generally agreed that there needed to be clarifications of such terms as illegal, hidden, black and informal activities. It was agreed that black was an inappropriate adjective to use and should in general be avoided.

The criterion of unenforced consent obviously gives rise to difficulties. While it may be possible to use this to judge whether an activity is included in the production boundary or not, subsequent transactions involving payments which may originally have been excluded will not be identifiable by this criterion and it is therefore very difficult to track the implications of such transactions throughout the accounts. It was generally agreed that the most important illegal activity that needed to be encompassed in national accounts is all aspects of the drug trade. Here, some of the payments made may appear to be voluntary but in fact are backed up by threats of reprisals. It was generally agreed that in principle all transactions, including transfers, connected with illegal activities should be included though it was recognized that there would be difficulties of measurement in practice.

The meeting was reminded of discussion on this subject that had taken place at the regional meeting in Addis Ababa There, the distinction was made between activities that are illegal but not criminal, for example building a house without permission, those that are illegal and criminal such as drugs, and smuggling which was felt to be a special case. There the participants strongly felt that all such activities should be included in the accounts.

It was pointed out that the treatment of illegal activities does not pertain only to the household sector. Arguably some drug producers and drug dealers should be treated as establishments. Large scale theft may lead to subsequent distribution which should certainly be included within the production boundary as an establishment activity; indeed the owner of the establishment may not always be aware that the goods he is dealing in were originally stolen. Both businesses and government may be involved in smuggling or in international transactions which are not legal in the partner country.

There was some discussion about the specific treatment of shoplifting. It was agreed that the price of the goods actually sold includes an allowance for losses due to shoplifting. Nevertheless it was argued that the value of the shoplifting should be treated as value added with a compensating increase in final consumption and should lead therefore to an increase in GDP. Similarly, bribery also would imply higher levels of both consumption and wages and salaries.

The Blue Book should clarify the distinction between illegal and hidden activities. In principle the fact that a flow is illegal or hidden is not a reason for excluding it from the flows presented in the national accounts, although there are obvious difficulties of measurement.

G. Gross output of establishments

March, 1988

The 1968 SNA is rather vague on how gross output should be defined in terms of how far intra-firm transactions should be included and how far transactions between producers in the same kind of activity units should be included. The ESA gives clearer but complicated guidance. It specifies that all transactions between producers belonging to the same kind of activity unit should be netted out and this can lead to some transactions which are actual market transactions being deleted. On the other hand, transactions between producers in different kind of activity units are always included even though the units may belong to the same enterprise. In addition, the output of certain goods are always recorded even if these goods are consumed in the same unit where they are produced so in this case an imputation needs to be made for transactions which do not actually take place in the market.

The Expert Group agreed that there should be a much clearer statement of what was intended by gross output with specific recommendations for these type of activities. It was generally agreed that gross output should be defined according to the table below.

1. Sales of own products
- + 2. deliveries to other establishments of the same enterprise
- ± 3. change in inventories of own products and work in progress
- + 4. own account fixed capital formation
- + 5. own account production for final consumption
- + 6. own production given in kind
- = Gross output

The exceptions to this table would concern flows relating to the distributive trades where only the trade margins were concerned, financial and insurance institutions where an imputed service charge would be derived as the difference between the appropriate receipts and payments, and non-market producers where output is the sum of the production costs. A further exception was suggested in connection with agriculture where it was proposed that a national farm concept where sales are to non-agriculture units only should be adopted. In the discussion, however, it proved clear that this concept is familiar only to member countries of the European Community and that other countries, both developed and developing, are neither familiar with this nor convinced of its usefulness at present. This issue needs to be considered again later.

There was general agreement that this proposed re-definition of gross output would not only be clearer for compilers and users of data but would keep the data closer to the form in which it is originally recorded. It would also make measurements of gross output invariant under aggregation which is not presently the case.

Gross output will include all deliveries between establishments of the same enterprise and will include all sales between establishments within the same activity.

H. Cross classification of value added

There was general agreement that a matrix should be included in the SNA showing the cross-classification of gross value added and its components by institutional sector and by kind of activity.

Simplified production accounts will be included for all institutional sectors. These production accounts will show total gross output, total intermediate consumption and the components of value added.

I. Changes in inventories and work in progress

April, 1991

The group had a lengthy discussion on this issue, partly in response to comments from Regional Commissions, on the draft SNA annex 5 "Changes in stocks and holding gains". They reaffirmed that output includes the value of work in progress to be valued at basic prices; if these are not available, they could be approximated by costs plus a mark-up for profits.

The group also reaffirmed that storage of products is a productive activity and that in the observable price change over the period of storage a volume element is included.

As in the 1968 SNA, the group agreed that for proper valuation of output, goods put into stock should be valued at the prices prevailing at the moment of entry and goods withdrawn are valued at the prices prevailing when they are withdrawn.

J. Statistical units in agriculture

In its 1988 Vienna meeting, the Expert Group proposed that a national farm concept should be adopted for agriculture. The group felt, however, that clarification of this concept was necessary and that this issue needed to be reconsidered.

Two questions had to be decided: a) Should the individual establishment or the national farm be the statistical unit for agriculture in the SNA? b) Should output for agriculture be defined excluding uses for intermediate consumption within the same establishment, in accordance with the general definition of output in the SNA?

The group agreed that in agriculture the statistical unit and the definition of output should be the same as that proposed for other market producers in the SNA. The statistical unit is the establishment as an individual agricultural holding. The output will include transactions between agricultural holdings but will exclude products for intermediate consumption within the same agricultural holding.

It was confirmed that in agriculture as in other activities, changes in stocks also includes that part of the output for use as intermediate consumption in a future period within the same establishment.

It was recognised that statistical information in agriculture is often only available in total, including products used for intermediate consumption in the same agricultural holding. If no additional information on sales is available, a "gross-gross" measurement of output

is the only possibility to be applied. In these cases, the recording of total output, that is, harvested output excluding losses on the producing farm between harvest and the utilisation or storage of the goods in question, as proposed by the FAO, is the only possible measure of output in agriculture. This should not, however, be the general rule.

Chapter 7. Consumption

A. Actual household consumption

June, 1986 (1)

There was general agreement that the concept of the total consumption of the population¹⁰ was a useful one and should be included in the new SNA. The conceptual framework paper shows government can finance private consumption in three ways: through social benefits; the direct provision of services or goods; and consumption subsidies. These have the same intention and effect but very different consequences in the accounts. Many of the “subsidies” in various countries would be better treated as current transfers to households though such change in treatment would in fact change the value of GDP somewhat.

The revised SNA should include the concept of “total consumption of the population”.

June, 1986 (2)

The concept of total consumption of the population is not new; it was recognized but not tackled in the preparation of the 1968 SNA, particularly in connection with the links of the MPS. The question now is whether it should be ducked again at this review of the SNA or approached more directly. Two recent developments suggest a more direct approach; one is the need to harmonize SNA concepts with those used in ICP where something much closer to total consumption of the population is in common use. The other is the suggestion put forward by Petre in 1981 which distinguishes consumption for households, government and private non-profit institutions divided between individual and collective consumption. There were two basic questions which needed to be answered. Is there a need for total consumption? If so, should it be calculated inside the SNA or outside it?

The Petre proposal had been well-received but there were still some minor details that needed tidying up in order to make it totally functional within the SNA. At present, therefore, all of the work had been done outside the SNA and the temptation was to leave it so. On the other hand, since the new SNA would have a life length extending well into the next century, it should be recognized that this is not a satisfactory long-term solution and ways should be investigated of incorporating total consumption of the population within the SNA. It was recommended that a paper showing the totality of the problem should be prepared and discussed probably at the expert group meeting concerned with the household sector.

The expert group felt strongly that an enlarged consumption aggregate should be introduced in the SNA.

¹⁰ The term “actual household consumption” was eventually adopted to replace “total consumption of the population”

It should if possible be within the main accounts.

It also has implications in several areas (household accounts, government accounts, ICP).

The group requested the secretariat to prepare a paper examining the possible alternatives and their treatment throughout the system.

September, 1987

The arguments that had led to the concept of individualized and collective consumption were recapitulated. After extensive discussion in various fora, it seemed clear that there was a desire to introduce these concepts into the national accounts; the question that remained was whether to use individual and collective consumption as a substitute for the previous breakdown for household and government consumption or to introduce it as an additional concept.

There was fairly unanimous agreement that the concept should be introduced as an additional one and five components of consumption should be shown, individualized consumption by general government, private non-profit institutions and households and collective consumption by general government and private non-profit institutions. There was some discussion about how this should be presented, whether the primary categorization should be by consumption or by consumption expenditure. Several participants favoured classification by consumption, that is to show all the components of individual consumption followed by both the components of collective consumption but others pointed out that to leave the first categorization by consumption expenditure would make the transition from the present practice easier and possibly less confusing.

It was pointed out that so far there has been no study of services provided by government to enterprises and how these should be treated. At the moment, overheads for transport services for example, which might properly be regarded as intermediate consumption for enterprises are still dealt with as collective consumption of government. It was suggested that a study in this area should be undertaken, if possible in time for the expert group meeting on the public sector.

There was some discussion about terminology. On the whole, the participants favoured the expressions consumption and consumption expenditure and would not adopt the terminology total consumption of the population. However, it was recognized that there was a need to have corresponding income concepts and the terminology for these was not clear. Maintaining the expression total consumption would allow the possibility of the matching income aggregate being referred to as total income but no resolution was reached on this issue.

It was readily agreed that the principle for sectoral allocation of consumption expenditure should be based on the final bearer of the expense rather than the unit undertaking the initial expenditure. It was pointed out however that this has implications for the calculation of income concepts which have yet to be worked through comprehensively and may indeed present difficulties in reaching an entirely congruent concept.

There was also discussion about how far individualized consumption expenditure could be disaggregated when the household sector is sub-sectored. While it seems that some information from government would permit disaggregation at certain levels of the hierarchy, it is not clear whether this can be carried down to very fine disaggregation. This too is a topic which should be investigated.

The next item to be discussed is the appropriate treatment of government expenditure on goods and services. It was proposed that goods and services forming part of individual consumption expenditure should appear in an input-output table as final demand for the appropriate categories. Other purchases would appear as intermediate input into the output of government services which would itself then appear in total under a separate column for government collective consumption. This approach was generally received sympathetically but it was felt that it would be helpful to have a short paper working through the consequences presented to the expert group on input-output and this was agreed. One consequence of these changes is that in future government would no longer simply produce non-market services but would also in effect produce goods and services, though the goods component would be relatively small, for example food aid and medicines bought on prescription.

The next item for discussion was the criteria to distinguish individual from collective consumption. In general it is agreed that the individual nature of consumption can be identified at least in theory the consumers and beneficiaries can be identified because the goods and services provided are for a limited number of consumers and because usually the consumer must take the initiative to acquire the goods and services. Collective consumption on the other hand is defined as consumption such that once the service has been produced, the individual consumer has no alternative but to consume it and consumption of the service by one individual consumer does not reduce the utility of another. These broad definitions are acceptable in general terms but it was felt that a more specific definition should be incorporated in the Blue Book. The idea of defining collective consumption explicitly and individual consumption as all other government consumption was not thought to be acceptable; rather the alternative of using categories of COFOG (Classifications of Function of Government) was felt to be superior. However it was pointed out that in the present COFOG classification general administration for each heading is included without distinction from the rest of the heading but these items should be treated as collective consumption. It was therefore strongly urged that the public sector expert group should be asked to consider modifying COFOG so that these administrative headings could be grouped together separately from their functional headings.

It was provisionally agreed that expenditure by private non-profit institutions should be divided between individual and collective consumption along the same lines as expenditure by government. This was subsequently confirmed in the discussion on non-profit institutions.

The group expressed preference for the term "consumption" instead of "total consumption of the population" to describe household consumption including individualized consumption of government and PNPI's. The term "consumption expenditure" would be retained for the concept now in the SNA. The importance and usefulness of the concepts (total) consumption and consumption expenditure should be included in the central part of the SNA.

Attention was drawn to the importance of the relationship between consumption and income concepts. The Group proposed the compilation of an income concept to be the counterpart of (total) consumption. The view was expressed that (total) income may play a less important role in income statistics than (total) consumption in consumption statistics.

Preference was expressed for the consumption expenditure concept based on the ultimate bearer principle, i.e. to treat reimbursed expenditures initially made by

households as expenditure of the reimbursing sector. The implications of this for the integration of total income in the income and outlay accounts require further study.

Attention was drawn to the fact that government expenditure provides benefits not only to households, but also to enterprises. Thus, analogously to the transfer of some government expenditure to household consumption, similar transfers from the government to the enterprise sector may be justified. The group recognized the importance of this problem and urged that further studies should be made in this respect, and referred to the expert group on the public sector.

It was proposed that (total) consumption should be compiled also for sub-sectors of the household sector. While it is possible to do this at the meso level it may be very difficult to undertake this at the micro/individual level.

It was proposed that goods and services purchased by government for direct transfer to households should be routed directly to government's final demand in input-output tables without passing through its intermediate consumption and output. A paper on this and related proposals will be presented to the SNA expert group on input-output and production accounts.

Individual consumption expenditure of government consists of services provided to identifiable consumers. In practice these services will be identified in the Blue Book by reference to the relevant COFOG (Classification of the Functions of Government) codes agreed by the Group.

COFOG should be revised to facilitate the identification of individual consumption expenditure of government by isolating general administrative and research expenditure at a high level of the classification, so it may be attributed to collective consumption. This matter should be referred to the expert group on the public sector.

It was agreed that, in principle, consumption expenditure of private non-profit institutions serving households should be divided into collective and individual components on the same principles as government expenditure.

March, 1988

The items to be considered under this heading mainly concerned a number of detailed points that had been referred forward to this meeting from earlier expert group meetings. This first item concerned the presentation of details associated with total consumption of the population in the input/output table. At the Expert Group Meeting of Household Sector Accounts, it had been agreed that five items should appear in the summary of national accounts in the future and these would be collective consumption by private non-profit institutions, individual consumption by private non-profit institutions and individual consumption by households. The question for discussion now was whether this ordering should also be preserved in the input/output table or would it be more helpful to group the individual consumption together and collective consumption together. A few participants preferred the latter presentation. However, the majority of participants thought that it was preferable to keep the present structure with the breakdown by institutional sector bearing the expenditure as the primary ordering and the breakdown between individual and collective as secondary. Partly, this was for continuity with the past, partly because for analysis interest was often in the decision makers rather than the consumers. It was thought helpful to keep the same ordering in both the summary accounts and the input-output tables and therefore the order agreed at the Expert Group Meeting on Household Sector Accounts will be preserved.

Most participants preferred that in the classification of consumption expenditures, the first breakdown should be by the institutional sector bearing the expenditures. Consumption expenditures of private non-profit institutions serving households and of government would then be subdivided into "individual" and "collective".

The decision to restrict consumption by NPISHs to being treated as all individual was introduced very late in the drafting process as a simplifying convention.

B. Household Income Concepts

June, 1986 (1)

It was pointed out that the terms subsistence sector and traditional sector were inconsistent with the formal concept of sectoring used in the SNA and it would avoid confusion if it was made clear that these were subsectors of the household sector. There was also a plea made that the household sector should not be confused by too many imputations or, at the very least, that they should be clearly distinguished from monetary transactions.

Attributions and imputations should be shown separately, but still be included in the total value of the concept in question. Some participants favoured limiting imputations in the household sector accounts.

September, 1987

The meeting discussed a paper "Alternative Household Income Concepts in the SNA". This paper incorporated concepts that had been discussed previously under imputations and re-routings and the effects of agreeing to incorporate enlarged consumption measures. Much of the discussion centred around the Tables A and B. Table A gives an income and outlay account for the household sector with sufficient extra detail incorporated to be able to distinguish imputed transactions. Table B is then a rearrangement of Table A with all of the actual transactions assembled at the top of the table and imputed income and expenditure in the lower half of the table. Also, re-routings have been consolidated out. A balancing item is introduced in Table B entitled discretionary income which is arithmetically equivalent to monetary final consumption expenditure plus monetary savings. This concept is equivalent to available income as used in the M61 Income Guidelines.

Although some changes needed to be made to the exact form of these tables, the general structure was welcomed by the participants and it was felt it would be very helpful to have both tables included in the Blue Book. Table A was felt to be much more useful than the present income and outlay account for the household sector. The inclusion of Table B would, it was felt, help to show both users and compilers how one could rearrange the standard accounts to produce extra analyses that gave insight into particular facets of the accounts and demystified the process of so doing.

Reference was made again to the need to determine appropriate terminology for a total income concept matching consumption. There was also some discussion about whether the term "discretionary" or "available" was the appropriate word to use. It was agreed that a single concept should be used both in the SNA and M61; preferences were expressed in favour of both available and discretionary as the term to use but it was pointed out that both these words translate into the same word in both French and Spanish. If one were needed, this is an extra reason to push for harmonization of the concepts.

Neither table explicitly describes income as being primary, secondary or income after redistribution because it is felt that these concepts can be defined clearly as long as the various components are identified separately.

There was some specific discussion about the treatment of gross operating surplus of own-account production. In Table B it is treated as being all non-monetary and all non-discretionary but these attributions may not always be completely correct. It was agreed that some more working through in respect of this item was necessary.

Another issue was raised relating to the treatment of operating surplus. Many participants felt that analyses based on the consolidated accounts of a nation were frequently misleading when a comparison was made between the proportion of GDP attributable to operating surplus as against compensation of employees and this proportion was regarded as the ratio of profits to wages. Operating surplus in the household sector account relates to operating surplus of unincorporated enterprises and therefore contains both profit and wage elements which means that the proportion described immediately previously can be very misleading. There was a strong feeling that it would be appropriate in the new SNA to ensure that value added was described as being made up of three components, operating surplus of incorporated enterprises, operating surplus of unincorporated enterprises and compensation of employees. The possibility of finding other terminology to make the difference clear between operating surplus for different sorts of enterprises should be investigated but bearing in mind the need to have a correspondence in presentations of a T account. Part of the problem arises from the assumption that gross operating surplus is in effect profits. While national accountants are aware this is not so, it may be very difficult to change the public preconception of this identity.

It was also thought it might be appropriate to distinguish own-account housing from other own-account production.

There was some discussion, without resolution, about how many monetary transfer payments should be treated as non-discretionary.

The meeting then discussed whether income concepts corresponding to those previously discussed for the household should exist for all other sectors. Summary presentations of accounts for all sectors in the form of a T account typically require that matching concepts be present for all sectors. The question then was what the interpretation for these income concepts was for the other sectors and were they helpful. It was agreed that for the government sector this should be discussed explicitly as the public sector expert group meeting. It was not clear where corresponding discussion for the enterprise sector would take place. The view was expressed that the main purpose of the T accounts is as a basis for teaching and exposition and that therefore it is important to have matching concepts throughout. If it was felt that it is not possible to use matching concepts to discretionary income in other accounts then it may be appropriate to revert to introducing a table like Table B as a bridge table for the household sector rather than as part of the basic structure.

One concern about treating Table B as an ancillary table is that then the concept of total income of the population does not exist in a central framework although it had previously been agreed that total consumption of the population would so exist. The omission of total income of the population means that some of the steps in the distribution and redistribution of income would be missing. It was argued that this omission would be more important than the introduction of discretionary income items for other sectors.

Given the decision to base the definition of individual consumption on the basis of the ultimate bearer, the implications for calculating the corresponding income concept have still to be worked through. It was agreed study on this was necessary.

The group welcomed the creation of income aggregates for the household sector, in addition to those in the present SNA.

Two tables were discussed. The first proposed an income and outlay account for the household sector in which non-monetary and rerouted components were separately identified. The second table showed how these components could be rearranged to obtain a narrow measure of discretionary income and a broader concept of total income, the latter being the income equivalent of (total) consumption. The group agreed that both types of tables should appear in the Blue Book. The group was unhappy with the term "discretionary" income, and also with the near-equivalent "available" income used in the income guidelines (M61). A new term should be found to be used with identical coverage in both the SNA and M61.

The group noted that operating surplus of the household sector combines the return to labour with the return to capital. In many countries this has created problems in interpreting operating surplus. This problem would be eased by showing gross operating surplus of the household sector separately from the corporate sector in the consolidated accounts.

C. Enterprise Final Consumption

The group considered the possibility of introducing the concept of final consumption of enterprises. Items which could fall into this category were of two sorts, i) an extended set of benefits accruing to employees such as the provision of sporting facilities and ii) expenditure undertaken by enterprises which incidentally or indirectly benefitted the population at large. Under this latter category television programs supported by advertising and commercial sponsorship of the arts and sporting events are the obvious examples. The two types of expenditure were treated separately in discussion.

It was generally agreed that expenditure of the first sort could be treated by extending the definition of wages in kind. Some exceptions to this principle were noted, for example where accommodation is provided for employees in enclave establishments where the benefits are more properly regarded as benefits to the employers than to the employees.

It was recognized that the other type of expenditure by enterprises for the population at large presented problems of interpretation and particularly of international comparability. However the group felt strongly that it would not be appropriate to introduce a concept of final consumption of enterprises. Even if entertainment services are funded by advertising contributions, those advertising fees are truly intermediate consumption of the enterprises producing the commodities or the distribution industries concerned in selling them. It would not be appropriate to increase the value of GDP because of the production of entertainment as a by-product either at zero or a reduced cost. Elsewhere in the accounts, products are valued at their market price and this is felt to be the appropriate valuation for these market services also. However the problem of international comparability was recognized. It was suggested an appropriate alternative might be to develop an alternative analysis which allowed for the separation of the entertainment services in a way analogous to the separation of distribution margins from market price expenditure. A separate paper on this topic will be prepared and circulated to members of this expert group and for consideration possibly at the coordinating group meeting.

There was some discussion about how far sponsorship was analogous to advertising; in some cases obviously the parallel is very close but instances were quoted where sponsorship is undertaken by firms as an image-building exercise with the political aim of avoiding nationalization. Nor is it clear whether in some instances sponsorship is paid for out of post-tax profits rather than being regarded as intermediate expenditure. In such cases sponsorship might more appropriately be treated as a transfer than intermediate consumption.

The group rejected the proposal to establish a concept of final consumption expenditure of enterprises. The definition of income in kind needs to be expanded to include more types of enterprise expenditures that are clearly of benefit to employees, such as company cars. Other examples may be child-care, sporting and recreational facilities. However it was also noticed that some such expenditure is mainly of benefit to the employer; in these cases the expenditure remains intermediate consumption of the enterprise. Enterprise expenditure on advertising and sponsorship with finance entertainment services should continue to be treated as intermediate consumption.

The group requested a short paper exploring possible ways of dealing with enterprise-financed entertainment services in the ICP (International Comparisons Project) context.

D. The boundary between government and household consumption

1. Consumer Subsidies

Some subsidies are intended to modify the price of various items to allow more of the population to purchase these items. Because the effect is focused in terms of particular sections of the population, it has been argued that these subsidies should be treated like individual consumption rather than as subsidies in general. This has led to a proposal that subsidies should be split between economic and social subsidies, economic subsidies raising the returns to the producer and social subsidies reducing the prices for the consumer. The most obvious categories for subsidies which are candidates for being treated as social subsidies are those relating to housing and food. Three possible ways of dealing with these subsidies have been suggested. The first is to include them explicitly as individual expenditure of government, the second is to treat them as transfers to households and then record consumption at the full price. The third was to leave the SNA as it is but provide extra information on the classification of subsidies to allow analyses to be undertaken in, for example, a satellite account.

There was widespread sympathy with the idea that the distinction between subsidies such as these and individual consumption by government was a fine one. It is anomalous that if consumers pay the full cost of housing the full cost appears as household consumption expenditure; if government pays the whole cost it appears as individual consumption by government but if government subsidizes household expenditure than a smaller total expenditure on housing appears in GDP. Because of the importance of housing and food subsidies in some economies, considerable support was expressed in favour of treating these subsidies as additions to GDP. However, most participants felt that restricting the treatment to food and housing would be artificial and not easily defensible. In a country where housing is subsidized by government in such a way that consumers pay part of the rent and government pays a subsidy, the fact that GDP is lower than it otherwise would be reflects actual institutional arrangements. Making the adjustment to GDP of treating the subsidies as final expenditure is, in effect, an analysis along the lines of "What if the institutional arrangements were different?" Once this question is raised, there are a never ending series of questions which may be asked, most

noticeably in relation to public enterprises. What if they operated under different conditions to alter their prices? What if the indirect tax structure were different? And so on.

Even in the case of an imputed government subsidy on food, the case for treating this as individual consumption is not unambiguous. If the government were to remove the subsidy and it had been treated as individual consumption then total consumption would not alter although in practice consumers would clearly be worse off. Similar considerations carry over to the treatment of VAT where the imposition of differential rates may be regarded as embodying implicit subsidies (or indirect taxes). Estimate the "true" rate and correctly interpreting the effects of changes to these rates would be difficult and arguably contentious in much the same way as "adjusting" the prices of the outputs of public enterprises would be.

It was noted that the incidence of subsidies under the present treatment should not affect the derivation of constant price data as long as the prices at different points in time correctly allowed for the effect of subsidies. It could however give problems for price indices or other index measures such as in ICP where the weights for subsidized expenditure were considered lower than the unsubsidized equivalent.

Lastly, considerable unease was expressed about the basis of distinguishing economic from social subsidies; it is the nature of a subsidy to change both the return to the producer and cost to the consumer.

In general therefore, the group came down against the idea of introducing consumer subsidies as a form of final expenditure. This recommendation was buttressed by two others however. Firstly, in the public sector expert group attention should be drawn to the need not to use the expression "subsidy" for government expenditure which national accountants would regard as a transfer. Secondly, a detailed classification of subsidies by type and purpose should be elaborated and presented as part of the analysis of government expenditure in the SNA so that a detailed study of the full effects of tax incidence can be carried out. It was further suggested that an elaboration of how such an analysis should be conducted might be included in the handbook on the household sector.

Some participants felt that some government payments to producers and importers may be more appropriately shown as social benefits to households than as subsidies. Important examples include payments (now shown as subsidies) on food, housing and pharmaceuticals.

Many participants considered treating these payments as social benefits was an unjustified manipulation of market prices for consumption, at least in the main accounts. However, a classification of subsidies by COFOG would allow users to make alternative analyses. In revising COFOG clearer guidance should be given on the functional classification of subsidies.

March, 1988

The presentation of items bought by government but as part of individual consumption was discussed. The first alternative was to show purchases of, say, medicines and trade margins as two items of intermediate consumption under producers of government services and then show the consumption of the producers of government services in the individual consumption. The alternative was to show the medicines and trade margins separately directly in the final expenditure column for individual consumption of general

government. If the second alternative is adopted then the definition of government intermediate consumption will change and will in future show only those items of goods and services purchased as part of collective consumption. The participants agreed to show purchase of goods and services for individual consumption directly in the final expenditure column of the input/output table because no government production transformation is involved.

Most participants preferred to exclude from intermediate consumption of government any goods that are purchased by government and transferred, without transformation, to households. These goods would be shown only in individual consumption expenditure of government.

April, 1991

Two main questions were discussed: a) What subsidies are to be regarded as consumption subsidies? b) How are the consumption subsidies to be treated in the system?

In the December 1990 meeting, the group came to the following recommendation: "Most experts agreed that some subsidies (not yet delimited) on goods and services destined for final consumption should be treated as government consumption expenditure in the revised SNA; others will continue to be treated as subsidies. The identification of subsidies concerned requires further study"

The group agreed to discuss two alternatives of treating consumption subsidies within the integrated system: a) treat them as government consumption expenditure and as part of actual household consumption; or b) treat them as subsidies as in the 1968 SNA.

In the case of the second alternative it is also possible to show the actual final consumption including the value of consumption subsidies, but outside the integrated system.

The group could not propose a definition which precisely says which subsidies should be included and which not. Instead, a flexible arrangement is proposed to meet the special situations in different countries. Included should be all subsidies which are clearly destined to benefit specific groups of the population or all households. This could include not only subsidies on products for final consumption but also other subsidies on production and subsidies on products that are used to produce goods and services for final consumption if it is clear that these subsidies are for the benefit of households.

Mainly because of the problem of identifying and defining consumption subsidies, the group recommended not to change the treatment of subsidies.

There will be a supplementary presentation of subsidies by purpose so that consumption subsidies can be identified.

Outside the integrated system there should be a supplementary table in which actual final consumption will be shown with a different valuation that includes the value of consumption subsidies.

2. *Subsidies and social assistance*

January, 1988

The objective of this discussion was to examine the consequences for the government sector of proposals made in the Expert Group Meeting on the Household Sector for the treatment in the revised SNA of consumption expenditures and of total and individual consumption and their financing.

In a summary of discussions held at the Household Sector Meeting it was noted that the meeting had rejected a proposal by some of its members that certain items of government expenditure which are now treated as subsidies (such as subsidies designed to lower prices, or to diminish the financial burden on households of certain goods and services), should instead be treated as final consumption expenditure of government, i.e., showing the government as bearing part of the cost. Noted also was another proposal, rejected at the Household Sector Meeting, that some of the subsidies mentioned above be treated as social benefits, with the households sector expenditure recorded as if they had paid full price.

It was reported that the Household Sector Meeting had agreed that the concept of total consumption should be introduced in the central part of the SNA and that five components of final consumption should be shown:

1. individual consumption expenditure by general government,
2. collective consumption expenditure by general government,
3. individual consumption expenditure by private nonprofit institutions serving households,
4. collective consumption expenditure by private nonprofit institutions serving households, and
5. (individual) consumption expenditure of households.

The Expert Group of the Household Sector had suggested that the main criteria for the allocation of final consumption expenditure to the sector accounts should be the "ultimate bearer of the expense". It was stated, however, that the implications for the government sector of the conclusion reached at the Household Sector Meeting had not been carefully analysed

At the present meeting it was suggested that it was very important to first spell out clearly how to integrate income and consumption in a total presentation; only then could the implications for the government sector be analyzed.

It was also stated that for GFS purposes, it would be very important to maintain the distinction between transfers and purchases of goods and services, and that the breakdown between individual consumption and collective consumption should be at a secondary level. In this way one could still see what the government purchases are and what the government provides as transfers to others.

It was suggested that there should be two concepts of presentation; the expenditure concept and the consumption concept. For GFS purposes. The expenditure concept would be more important; for SNA purposes, the consumption concept would also be important.

The group concluded that it could not discuss the repercussions of introducing the concepts of individual consumption, consumption subsidies and social assistance because the ramifications of introducing these concepts for the government sector had not been completely worked out, and that a more detailed study would need to be prepared for this purpose.

3. *Transactions in kind*

The question presented to the group was whether government transactions in kind, such as the provision of wages in kind or of free education or health services, should be valued at cost or at prices for comparable marketed goods and services.

The 1968 SNA recommends valuation of these payments in kind at input costs, i.e., the sum of compensation of employees, consumption of fixed capital, and intermediate costs. The proposal to value government provision of goods or services in kind at market price would seek to correct an undervaluation of such transactions resulting from the omission of an operating surplus, or profit margin, for the government sector. One participant pointed out that in some cases the cost to the government of inputs could exceed the market price, so that valuing these goods or services provided in kind at market prices could lead to computing an operating deficit for the government sector, which could then lead to a host of problems. It was also noted that use of market prices assumed that government goods and services were of the same quality as those sold in the market.

It was agreed, therefore, that no change be made in the SNA valuation at cost of payments made in kind. It was recognized, however, in view of the difficulty of valuing the input costs of providing dwellings, that where the government provides employees free or subsidized accommodation in government-owned buildings, the imputed rent, which is to be included in compensation of employees as income in kind, should be estimated at the market rents of comparable dwellings.

September, 1989

It was necessary to distinguish between transfers in cash and transfers in kind because they enter different parts of the accounting structure. It was important to distinguish between the acquisition of goods and services and the means of financing this acquisition. Further, in order to preserve the income equals consumption plus capital formation identity, the money value of the transfer had to be recorded in order that the income and expenditure sides balanced. It was suggested that the problem was one of precision of terminology. Although this seemed to be pedantic, the appropriate explanation was fundamental to the rationale for explaining the SNA. In the first place there is an imputed transfer of economic rights or claims to particular goods which was equal in value to the goods. Secondly, there was the simultaneous acquisition of the goods in question. It was important not to use the word expenditure in this context or to lose the distinction between consumption and consumption expenditure. This marks a fundamental difference between a transaction in kind and a transfer in kind; since with remuneration in kind there is an imputed cash income and matching imputed cash expenditure and a similar approach is adopted for own account production. When the numeraire in the system is money, it is difficult conceptually to say that an imputed transfer value equal to 'x' is not an imputed transfer of cash so perhaps what is necessary is to describe not just the transfer of economic rights but a transfer of economic rights in money terms. The accounts must show the transfer of economic claims in one part and the later transfer of goods in the goods and services account.

The SNA must explain how transfers in kind from government and NPISHs to households intervene in the transition from consumption expenditure to actual consumption and between the associated income measures. The treatment of these transfers differs from that of compensation of employees in kind and of own-account production for consumption which are treated as disposable income and consumption expenditure of the receiving sector.

4. *Food coupons*

January, 1988

The group discussed whether the issuance of coupons to households for use in purchases of food or other commodities, with subsequent redemption by government, should be classified as government purchases of goods and services, as subsidies, or as social assistance grants to households.

It was noted that government payments for goods and services provided to households is classified as government intermediate consumption in the SNA only when the households have no choice as to the goods or services provided. When the households have some choice as to the products for which the coupons are to be employed, it was felt that the overall operation should be regarded not as a government purchase of goods and services but as an unrequited transfer. It was necessary to determine, however, whether it should be regarded as a subsidy to enterprises or as a social assistance grant to households.

Another question to be decided was the timing of the registration- In the SNA, which is an accrual-based system, these operations could be registered when the coupons are issued to households, when the households use the coupons to make purchases and receive delivery, when enterprises present their claims for payment from the government, when such payment is due at some interval after presentation for payment, or when payment is actually made. In the GFS system, issuance of such coupons is registered at the time the payment is made to enterprises redeeming the coupons.

It was recommended that the issuance of coupons should be treated as social assistance grants to households rather than as subsidies to enterprises, since such coupons do not change the market price in any respect and payment to enterprises for redemption of the coupons is not unrequited. It was also recommended that the coupons should be recorded in the SNA in the period in which they are issued.

5. *Welfare work assignments*

The group discussed whether payments to welfare recipients requiring performance of work assignments should be classified as social assistance grants or as payments for factor services. It was noted that this classification is becoming very important because of the growing number of welfare systems which include such work assignments.

One suggestion was that if the work contributes to improve the character of the person doing the work, it should be considered a social assistance grant, but that if the work adds to the product, it should be considered a payment for factor services.

It was suggested, however, that for the sake of international consistency this question should be discussed with the International Labour Organization (ILO), since it is related to employment and unemployment statistics. **It was agreed that if the person involved is considered to be employed, then payments for welfare work assignments should be**

considered to be wages and salaries; if the person is considered to be unemployed, then the payments should be treated as social assistance grants. The determination of whether the person is considered to be employed or unemployed should be made after consultation with the ILO. This consultation should take place before the Expert Group Meeting on Input-Output and Production Accounts.

It was noted that the European Communities had also been looking into this matter and had found it to be a very complicated question because of the wide range of existing welfare work schemes. The questions emerging were not only whether to classify the persons involved as employed or unemployed but also how to determine the amount to be recorded.

E. Boundary Problems Between Household Income and Consumption

September, 1987

A number of specific and rather disparate issues were taken up under this heading. These included items which affect not only the derivation of total consumption of the population but also the interface between micro and macro data. The main paper that was relevant for this discussion was "Household Consumption and Income Statistics in the SNA and the Micro Statistics".

1. Consumer durables

The paper raised again the question of whether consumer durables should be treated as capital formation with consequent imputations of output over the life of the asset. It was generally agreed that this would not be an appropriate treatment; consumer durables should not be regarded as fixed capital of the same sort as the capital of enterprises. One consequence of this is that consumer durables should not enter into balance sheet calculations except as a memorandum item and possibly in the reconciliation account.

2. Owner-occupied housing

It was felt the present treatment of owner-occupied housing is adequate; these constitute unincorporated enterprises and generate an operating surplus. The output generated should not be treated as property income.

3. Human capital

While recognizing the importance of human capital, it was not felt appropriate at this stage to change the SNA to convert consumption on educational services into a concept of human capital. Studies in this area should continue to be done as satellite analyses.

4. Second-hand sales

Second-hand sales of consumer goods by households should be treated as negative consumption. The present provisions for treatment of losses in the SNA was felt to be adequate. Incidental small losses should be treated as consumption. Accidental losses which are replaced via insurance policies are covered by a transfer from insurance enterprises to households and new consumption by households. Major disasters such as earthquakes do not affect the current flows in the SNA but will affect the reconciliation account.

5. Domestic and national consumption

It was agreed that the practice common in some countries of describing household consumption expenditure as being calculated on a domestic and a national basis was inaccurate and misleading. The concept required for national accounts is consumption expenditure by resident households either in the domestic territory or abroad. Items showing expenditure abroad by nationals and expenditure in the domestic territory by non-nationals may be necessary intermediate steps to reach this total but should not be used to derive an alternative confusing concept of household consumption expenditure.

It was noticed that in principle customs duties paid by resident households on consumer goods imported should be included in consumption; where necessary this may be included in a miscellaneous item.

Consumer goods received by resident households from abroad or purchased by resident households as gifts to be sent abroad should be treated as imports and exports as appropriate with corresponding transfers in the balance of payments account. Migrants household goods should not be treated as imports or exports since these are goods not changing ownership and have been regarded as consumption at the time and in the country of purchase.

6. Interest on consumer debt

The question of the appropriate treatment of interest on consumer debt was raised; this is an important issue for the household sector and some participants felt that the view that interest be treated as a service should still be considered. This item is for discussion at the financial flows and balance sheet expert group meeting.

7. Business travel

September 1987

Business travel should be treated as intermediate expenditure. If an enterprise provides a car to an employee, this should be treated as income in kind and final consumption. If however the enterprise provides a bus service to its employees, this should be treated as intermediate consumption. The provision of free railway travel to employees of the railways should also be regarded as income in kind; there is a remaining question of what the appropriate valuation of this should be.

July 1989

It was felt that it was too sophisticated to treat business travel as intermediate consumption and allowance for meals and accommodation to be treated as compensation of employees and it was agreed that all of them should be treated as intermediate consumption. The question of the value in cash of the provision of interest free loans was raised. In principle this should probably be treated as compensation of employees but if income in kind is regarded as something with a matching expenditure in kind it is clear that such a payment does not represent an income in kind but rather is an imputed cash transaction. one problem with introducing this concept into compensation of employees would be the need to introduce analogous imputations elsewhere in the accounts, for example government sometimes lends below market rates, say to public corporations. Should these be accompanied by imputed flows to be treated as grants? How would the difference between fixed and variable rate loans be treated? Because of these

considerations this item was left pending until factor incomes are discussed in greater detail in the September meeting.

8. Working expenses

Working tools and specialized clothing should be regarded as intermediate consumption if there is a contractual obligation on the employee to provide these.

9. Uniforms

All uniforms should be treated as intermediate consumption; this is a change to the present SNA recommendations where uniforms provided to civilian employees only are treated this way. It is felt that the lack of distinction between army uniforms and those provided to private security guards and the nature of combat uniform for the army are such that it is simpler and more appropriate to treat all uniforms as intermediate consumption.

10. Military housing

The present SNA recommendations on free housing for the military should stand; that is, accommodation provided to staff and their families should be treated as income in kind and household consumption but barracks should be treated as intermediate consumption.

11. Prisons

As far as prisons are concerned, in principle, food issued to prisoners should be treated as individual consumption. Lodging and clothing however would continue to be treated as intermediate consumption of government and therefore collective consumption.

The group considered the list of problems in delineating household consumption expenditure from other aggregates given in the annotated agenda under this heading. The existing SNA treatment was confirmed by the group with the following exceptions:

(a) military uniforms are to be treated as intermediate consumption like other working clothes;

(b) the adjectives "national" and "domestic" will no longer be applied to household consumption expenditure. This latter will only appear in the SNA on a national basis (i.e. expenditure by residents at home and abroad).

In addition, it was agreed that food provided by government to prisoners will be defined as individual consumption expenditure of government.

F. Social Security, Private Pension and Life Assurance Funds

1. Social security payments

The discussion turned to the question of social security contributions paid by the employer on behalf of the employee. These transactions may seem different from the point of view of the different parties involved. From the government's point of view, these payments essentially constitute taxes. For the employer, they represent part of labour cost. To the employee they frequently seem to have nothing to do with earnings. However, it was generally agreed that these payments do indeed represent part of labour

cost and frequently not all employees have the same rights to social security benefits. These entitlements may depend on the extent of contributions made on their behalf by employers. Continuing to treat employers' contributions to social security as part of compensation of employees and routing these through the household sector would preserve symmetry with private schemes and, on balance, it was agreed that this present treatment should be preserved. There was some sympathy for the view that these payments should be treated as a tax but it was not quite clear whether they should be regarded as a direct or an indirect tax, neither category seeming wholly appropriate. There was also discussion about the possibility of estimating the true cost of labour which would include other costs to the employers, for example medical expenses and transport costs. It was suggested that it might be appropriate to ask the expert group meeting on production accounts to consider defining the cost of labour.

The 1968 SNA routing of employers' contributions to social security schemes through compensation of employees should be maintained.

2. Pensions

The discussion then turned to the question of employers' contributions to pension and life insurance schemes. It was proposed that these should be treated in the same way as social security payments just discussed. There was also a question about the status of these funds; should they be regarded as being owned by the employees? If so, a consequence was that the interest earned on pension and life insurance funds is attributed to the household sector and these interest earnings are implicitly included in household disposable income. It was generally agreed that while this last effect is not always apparent to users of the statistics, it was a logical consequence of a decision to treat employers' contributions in this way and it was felt on balance appropriate that this treatment should continue. However, it was urged that the items representing these imputed interest earnings and their attribution to households should be shown explicitly.

As regards household transactions with private pension and life insurance funds, the group also preferred to keep the present SNA treatment. However the group agreed that a supporting table should be included in the Blue Book that would detail household payments into and receipts from these funds.

December, 1990

This item had originally been a topic for consideration during the SNA review process but has not been taken up at any of the Expert Group meetings so far. It was agreed that though it is rather late in the revision process, the issue is too important not to investigate. The matter was felt to be important not least for a socio-economic breakdown of household income and because the importance of pensions was likely to increase over time. In any case practical recommendations had to be found for the appropriate treatment of over-funded schemes and establishing the ownership of the funds committed to the schemes.

Much preliminary work had been done in the area but this does not elaborate the consequences of making changes. It was agreed that the Inter Secretariat Group would try to find a consultant to write a paper on this topic for consideration at the April meeting.

The group felt the treatment of pensions should be reviewed. The ISWGNA will attempt to find a consultant to write a report of the treatment of pensions for discussion at the meeting in April 1991.

April, 1991

The group had no new documentation or proposals in this area so the discussion on this topic began with an update of activities since the December 1990 meeting. EUROSTAT had arranged a consultancy with Mr. John Walton to deal with the issues raised in the paper "Pensions in the SNA" that had been prepared for the December meeting and other issues related to the revision of SNA and ESA. Mr. Walton had prepared an outline of a paper which was expected to be finalised by the end of May, which would be very late in the revision process. The group was therefore asked to address three possibilities--(1) retain the 1968 SNA treatment of pensions; (2) adopt the ESA treatment that dealt with some of the criticisms in this regard in the SNA or (3) deal with the issues in an annex and a set of supplementary tables.

The group agreed that the 1968 treatment of pensions would be retained in the central framework. The group recommended that the pension issue be dealt with in an annex or in a chapter outside those on the main sequence of accounts which would include other topics in a similar status. Coverage would consist of bridge tables and supplementary presentation tables along with appropriate text. The group further agreed that Mr. Walton be asked to produce a draft for a section of a chapter or an annex; that a small task force be set up to advise the Intersecretariat Working Group on the draft; and that the Walton draft be circulated to all members of the Expert Group. The results of the task force work will also be circulated to the Expert Group.

January, 1992

As regards pensions it was noted that

1. The 1968 SNA treatment had fairly frequently been criticised since the review of the SNA began,
2. This is an area of divergence between ESA and SNA,
3. The SNA expert group meeting in Harare had advocated retaining the 1968 SNA treatment largely because no alternative study had been carried out,
4. The report by John Walton subsequently did provide a consistent set of proposals.

In the light of the foregoing considerations the meeting agreed

1. The draft texts being prepared, will take account of the treatment of pensions proposed in the Walton report.
2. In the chapter on secondary distribution of Income pension contribution and benefits will appear as social contributions and benefits.
3. The proposed treatment of the associated financial assets and liabilities will be incorporated into the financial account and balance sheet chapters.
4. When these chapters are circulated to the expert group, a covering note will draw attention to these changes.

3. Other forms of social protection

As regards other forms of social protection, certain assumptions implicit in the draft SNA classifications and/or the draft text (notably the Secondary Distribution of Income) needed to be clarified, reconciled and confirmed. The meeting decided :

1. Social contributions and benefits will not be restricted to transactions with government and employers, but will include arrangements with insurance enterprises that satisfy the definition of "social". This definition will be based on an illustrative list of contingencies (risks or needs), the fact that protection is provided collectively, the absence of a simultaneous counterpart and the intervention of a third party. The list of contingencies already included in the draft chapter on secondary distribution of income is extended to include education.
2. The heading "social assistance grants" in that chapter is no longer needed - education grants become social benefits, the rest become miscellaneous current transfers.
3. The distinction between compulsory and voluntary contributions will be shown for each sub-heading of actual social contributions. "compulsory" means 'imposed by government'.

4. Social insurance Schemes

October, 1992

This is an area where important developments had taken place since the last Expert Group meeting. It had been decided that, in general, it would be appropriate for the SNA to introduce a functional rather than an institutional approach to social insurance schemes and also to treat employers' pension schemes as social insurance schemes. Contributions to and benefits from schemes are recorded as current transfers in the secondary distribution of income account and these payments include contributions to pension schemes and receipts of pensions. The Experts accepted this change to the System but raised some detailed questions.

A suggestion was made that individual life insurance policies should also be treated in a similar way to pensions, with payments and receipts also appearing in the secondary distribution of income account. While recognising that a case could be made in certain circumstances for treating individual policies this way on balance the proposal was rejected.

A question was raised about the treatment of pension schemes run by employers on behalf of their employees. In the present text all of these schemes are treated as if they are unfunded. It was recognised, however, that it was possible to have autonomous but non-segregated funds organised by employers, and it was agreed that the draft would be changed to include this possibility.

The Walton report on pensions (not available at the time of the last Expert Group meeting) had suggested that property income attributable to pension fund recipients should be treated as imputed extra social contributions so that the adjustment made in the use of income account would become equal to the item showing the change in equity attributable to pension holders in the financial account. It was agreed that this should be done.

A suggestion was made that the adjustment for the change in equity of households in pension funds should be made in the capital account as a capital transfer instead of the use of income account, but this was not accepted.

On a related issue the definition of output of pension funds was raised. At present, as in the 1968 SNA, the output of pension funds is measured solely as the sum of costs. It was suggested by John Walton and agreed by the Experts that the measurement of the output of pension funds should be made consistent with the measurement of output of insurance companies.

Chapter 8. Financial account, assets and liabilities

Prior to the main discussion on issues concerning the financial accounts, the meetings on both the external sector and government accounts had noted a number of issues where coordination and harmonisation was needed. The main issues which carried over beyond the meeting on financial accounts concerned financial intermediation and insurance.

A. Issues arising at the external sector meeting

March, 1987

1. Harmonization of classification

With regard to the classification of financial instruments, the Group did not see any problem in harmonizing what is useful for the balance of payments with what would be useful for the other parts of the economic accounts.

2. Repurchase agreements

One possible difference in treatment between the BPM and the SNA related to repurchase agreements. The proposed SNA instrument classification views a repurchase agreement as the creation of a new instrument, whereas the BPM treats a repurchase agreement as a direct transfer of ownership of the underlying assets.

The Group noted the need to harmonize the treatment of repurchase agreements as proposed in EXT. 16 and referred the problem to the Group on Financial Flows for them to work out a treatment that would be applicable to both domestically and internationally traded assets.

3. Deposits

The Group noted the need to change the definition of deposits and to have, as a minimum, a distinction between residents and nonresidents. The Group referred the problem of working out the definition to the Group on Financial Flows.

4. Trade credits

One instrument breakdown proposed for the capital account which would be carried through to stock data of financial assets and liabilities, was that for trade and other suppliers' credits. It was noted that many analysts consider these types of claims to be interesting in the analysis of the balance of payments, although some experts mentioned the difficulty of segregating such information from short-term accounts payable and receivable. In discussions on the fourth edition of the BPM, these latter considerations were determined to be sufficiently important to exclude trade credits as a standard component in the balance of payments

The Group agreed to refer to the Group on Financial Flows the need for working out a definition of trade and other suppliers' credit. One consideration might well be that, in national practice, trade credit appears to cover credit on open book accounts as well as credit financed through trade bills.

5. Other financial instruments

A major concern was the separation of flows between capital, returns on capital in the form of interest (including similar forms of income), and service fees associated with financial transactions and capital gains and losses. The distinction between capital gains and losses and interest (including similar forms of income) is particularly important in the case of bond transactions, both when they are issued at a price other than their face value, in subsequent trading, as well as at redemption. The time of recording income transactions for zero-coupon bonds is also an open question, depending on whether one records income on an accrual or due for payment basis. With regard to option transactions, the question was raised as to whether the premium paid by the buyer to the seller should be regarded as a service fee or as a capital flow, which would recognize the existence of the buyer's financial asset, similar to a nonfinancial intangible asset. The issues raised in the securitizing of debt (the practice by which non-bank financing, some through the intermediation of banks, is supplanting traditional bank financing) seems to be more a practical problem of obtaining data from the asset holders than a conceptual one of deciding how the transaction should be treated.

Because the balance of payments issues cannot be resolved in isolation from the domestic sectors, it was suggested that these issues should be discussed in the expert groups looking at these issues.

With regard to other financial instruments, the Group noted several general issues: the separation of principal, interest, service fees, and capital gains/losses; the specification of a time of recording of these transactions; and the identification of the kinds of instrument and the maturity (which is complicated by the securitization of debt). These issues present some problems for the harmonization of the balance of payments and the external and domestic accounts; of particular note is the problem of identifying the resident status of the transactors, the associated flows, and assets/liabilities. However, the harmonization issues would probably be easier to identify and to resolve after some of the problems had been addressed in the context of the domestic sectors. **It is recommended that consideration of what constitutes income, services, and capital gains/losses be handled initially in the Group on Production Accounts, which then can forward advice to the Group on Financial Flows. The results of the deliberations of both Groups would be available to the IMF for use in revising the BPM. In their work, the Groups will probably find it useful to draw upon the papers on New Financial Instruments and the Balance of Payments and Classification of Transactions in Zero Coupon Bonds, Junk Bonds, and Indexed Bonds in the Balance of Payments.**

6. Gross recording

The classification of capital account transactions for direct investment transactions follows the treatment in BPM4, i.e., capital flows relating to direct investment abroad of the reporting economy are reported on a net basis (asset flows minus liability flows). Similarly, flows relating to foreign direct investment in the reporting economy are also reported on a net basis (liability flows minus asset flows). It was noted that this is the only instance in the capital account where flows relating to assets and liabilities are not segregated, and, therefore, inconsistent with the SNA.

The Group noted that, while in the SNA transactions in assets and liabilities are shown separately, in the BPM, with regard to direct investment, the flows relating to assets of direct investment abroad are shown net of related liabilities and the flows relating to liabilities of direct investment from abroad are shown net of related assets. The effort to harmonize recommendations (including those in the OECD Detailed Benchmark

Definition of Foreign Direct Investment) for both direct investment income and capital flows should be in the direction of showing more gross flows, because these flows are analytically useful.

7. *The International Securities Identification Numbering System*

The Group acknowledged the potential usefulness of the work on identifying securities represented by the "International Securities Identification Numbering System." The Group recommended that this material be forwarded to the Group on Financial Flows.

8. *Arrears and debt reorganization*

The details on transactions for arrears and debt reorganization are needed to link the data with external debt statistics being worked on by the International Compilers' Working Group on External Debt Statistics, and also to provide the data for calculating exceptional financing. These data should not, however, be new standard components of the balance of payments, but should rather be supplementary details to existing standard components. One issue raised in the paper was the possible asymmetry in the treatment of interest arrears, which may have been capitalized by the debtor but not by the creditor. Another issue was the treatment of debt forgiveness. In the light of the recommendation to segregate current and capital transfers, once a decision has been taken on what constitutes current and capital transfers, debt forgiveness will have to be classified in accordance with that decision.

The Group emphasized the importance of the problem of arrears and debt reorganization in both the domestic and international settings. The Group noted the necessity of having detailed information of the kind suggested in the paper *Some Issues in the Balance of Payments Presentation of Arrears and Debt Reorganization*. It was also noted that the paper was written prior to the Group's recommendation that capital and current transfers be distinguished in the balance of payments. This issue and the associated paper were referred to the Group on Financial Flows and the International Compilers' Working Group on External Debt Statistics.

9. *Sectorization*

Proposals for functional and sector breakdowns, are changed from the breakdowns contained in the fourth edition of the BPM. The functional breakdowns have been reduced to three: direct investment, reserves, and other capital. The existing category of portfolio investment has been subsumed within the category of other capital. Other capital is still divided into long-term and short-term, but the sectorization has been expanded to five: general government, monetary authorities, deposit money banks, nonmonetary financial institutions, and other sectors; the changes were the break-out of monetary authorities from general government, and nonmonetary institutions from other sectors. Some marginal instrument data has also been introduced for trade and other suppliers' credits. Liabilities constituting foreign authorities' reserves could be shown, where appropriate, as a functional item. However, the items comprising exceptional financing would not be shown separately in the detailed presentation, but would be included in an analytic presentation.

It was noted that the balance of payments is fundamentally different from the SNA in its categorization of capital account flows, as the latter is based strictly on a sector approach correlated to an instrument breakdown. Nevertheless, satisfactory links between the two should be possible through a building block approach.

The Group acknowledged that extensive work on sectorization will need to be done by the Group on Financial Flows and, therefore, agreed to forward to that Group the sectorization proposals in The Classification of Capital Account Transactions for their use in identifying building blocks that are necessary in order to construct presentations useful for balance of payments analysis. In addition, the Group suggested that the Group on Financial Flows should consider the possibility of providing a sector breakdown of direct investment.

10. Long -term versus short-term capital

The Group agreed that there should be a single definition of long-term and short-term with respect to financial assets and liabilities, and it referred the matter to the Group on Financial Flows for them to work out. (Reference was made to international liberalization codes on capital flows which the Group on Financial Flows might consider when drawing up a definition.) The Group noted that recent developments, affecting not only international but also domestic transactions, bring into question the usefulness of a long-term versus short-term distinction and urged that the distinction be reviewed critically.

B. The financial accounts meeting: Financial assets and liabilities

September, 1988

Financial innovations have affected not only the structure and character of financial institutions, as discussed in Section II of the Annotated Agenda, but also the number and the types of instruments available to financial markets and transactors. Financial deregulation has spurred the development of new instruments to provide the mix of liquidity, risk, and yield demanded by customers. For the most part, these new instruments may only combine features of existing instruments, but they do so in ways that frequently make their classification in the 1968 framework quite difficult. In addition, financial markets have developed new techniques or have sharply increased the use of existing techniques in ways that may effectively change the nature of the instruments involved. Examples of this phenomenon include: the expanded use of bankers' acceptances and repurchase agreements; the facilitating of financing through contingent liabilities such as note issuance facilities (NIFs) and revolving underwriting facilities (RUFs); and the development of hedging techniques, including interest rate swaps, options, and forward rate agreements.

In view of these phenomena, the primary question before the Group was whether there was a need for basic changes in existing instrument classification schemes to provide additional guidance to compilers to enable them to deal with continuing innovation and to give sufficient information to users of these statistics.

C. Current classification schemes

Financial innovations provide for new arrangements among debtors and creditors and also result in the expansion in the use of existing instruments and the flexibility and speed with which a group of instruments can be replaced by another group of instruments in reaction to changes in risk/yield preferences among the issuers and holders of financial assets. The Group was asked to consider the impact of these two aspects of innovation as far as the adequacy of the 1968 SNA classification scheme was concerned.

The Group examined various schemes for classifying financial instruments. In particular, it considered the possibility of identifying other characteristics of financial instruments--

such as negotiability, transferability, marketability, and convertibility--that might supplement or replace liquidity and maturity, which are the primary classification criteria in existing schemes. While this approach had some appeal to the participants, it was thought that it would be difficult to make such fine distinctions in practice and that, in any event, the characteristics, or the mix of characteristics, of a particular instrument could change very quickly. **The Group therefore agreed that the classification in the 1968 SNA was a good point of departure. In addition, the classification scheme as presented in the revised SNA would have to be accompanied by general principles to classify instruments that may be specific to particular countries and may be developed in the years to come.**

Most participants thought that, to be useful to all countries, the categories in the classification should be broad ones (although there could be explanatory listings within each category), since the list of instruments might vary among countries.

The Group recommended the classification scheme presented in the table below, for financial assets and liabilities. There was a consensus that many of the categories, but particularly category 2, Currency and deposits, should be subdivided according to positions denominated in domestic currency and those denominated in foreign currency. Category 6, Insurance technical reserves, should be subdivided between 6.1, Net equity of households on life insurance reserves and on pension funds, and 6.2, Prepayments of premiums and reserves against unsettled claims for casualty insurance. Category 7, Other accounts receivable and payable, should be subdivided between 7.1, Trade credit and advances, and 7.2, Other. Disaggregation of other categories (noted by letters in the table) was considered of secondary importance. Specifically, a maturity distinction of securities and loans would be optional. Most of the Group agreed that direct investment, which is included in categories 4, 5, and 7, should be recorded as a memorandum item rather than appearing in the classification.

D. Classification of specific financial instruments or groupings of instruments

The Group attached considerable importance and devoted substantial time to the discussion of the classification of a number of key financial instruments.

1. Gold

March 1987

The 1968 SNA treatment of gold monetization/demonetization is the same as that in the third edition of the BPM, i.e., these transactions are reflected through entries in the merchandise trade account. The fourth edition of the BPM changed this treatment, so that gold monetization/demonetization in the balance of payments is essentially recorded as a reconciliation item. This treatment parallels that for the allocation/cancellation of SDRs. Following a presentation of such a treatment in the SNA the national accounts experts agreed to show the monetization/demonetization entries in the reconciliation accounts.

Another point for discussion was the treatment of nonmonetary gold. Some experts felt that there were two classes of nonmonetary gold, gold held as a commodity, e.g., for industrial use, and gold held as a financial asset. Questions arose as to how to distinguish between these two types of gold and as to whether the gold held as a financial asset would be a foreign asset or a domestic asset.

Table . Classification of Financial Instruments

1. Gold and SDRs
 2. Currency and deposits
 - a. Currency
 - b. Transferable deposits
 - c. Other deposits
 3. Securities other than shares
 - a. Short-term
 - b. Long-term
 4. Loans
 - a. Short-term
 - b. Long-term
 5. Shares and other equity
 6. Insurance technical reserves
 - 6.1 Net equity of households on life insurance reserves and on pension funds
 - 6.2 Prepayments of premiums and reserves against unsettled claims for casualty insurance
 7. Other accounts receivable and payable
 - 7.1 Trade credit and advances
 - 7.2 Other
- Memorandum item:
- Direct Investment
 - Equity
 - Loans
 - Other

Most members of the Group agreed that the BPM distinction between monetary gold and commodity gold be the basis for the harmonized treatment of gold: "Monetary gold is gold owned by the authorities (or others subject to their effective control ...) that is held as a financial asset. Other gold (nonmonetary gold) owned by any entity, including the authorities that also own monetary gold, is treated ... like any other commodity." The Group recognized that the Group on Financial Flows may also have a view about the application of this distinction, and it would be useful for that Group to take this issue up in its meeting as well. The Group, furthermore, agreed to treat the reclassification of commodity to monetary gold and vice-versa (monetization/demonetization of gold) in line with what is described in the BPM. As now described

in the BPM, such a change is to be shown in the balance of payments, together with a counterpart for monetization (credit) or demonetization (debit) that matches the respective entry for the increase (debit) or decrease (credit) in holdings of the financial asset. In the SNA, the entry offsetting the entry for the change in holdings of the financial asset is to be made in the reconciliation accounts

September, 1988

Following on from the discussion in the external sector meeting, the discussion of this item centred initially on the question of whether gold held by financial institutions other than the monetary authorities should be treated as a financial asset or as a commodity. A few participants thought that such holdings should be considered financial assets: deposit money banks do not normally hold commodities and their gold holdings would be for hedging or investment purposes; such holdings would not be used for production and were not finished goods; and commodity gold would be used only to produce other goods. It was also pointed out that, at a meeting of the European Economic Community, following the Expert Group Meeting on External Sector Transactions (March 23-April 2, 1987), it was agreed that a new category of "financial gold" (comprising gold other than monetary and commodity gold) should be recognised and classified as a foreign asset. One participant noted more generally that gold was increasingly becoming a problem for national accountants and felt that items such as gold certificates and gold-denominated accounts should be recognised in the system as financial assets/liabilities.

The Group, however, endorsed the recommendations of the External Sector Meeting that only two categories of gold be recognised--namely monetary gold and commodity gold. Monetary gold is gold owned by the authorities that is held as a financial asset and as a component of foreign reserves. Other gold owned by any entity, including the authorities, is treated like any other commodity. The Group noted that a minority of the participants saw merit in including in the accounts a third category called financial gold, which would be classified as a financial asset. There was also some support for an even wider approach that would include, with nonmonetary/noncommodity gold, other tangibles such as platinum, silver, paintings, jewels, houses, etc.; this category of "financial investment goods" would fall between the categories of financial assets and intangible assets, since it would comprise reserves of value for which there is no liability. While many participants saw merit in this proposal, it was felt that its implementation would be impractical because there would be borderline problems and it would not be possible for statisticians to gauge the "motivation" of buyers of such commodities,

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The 1968 SNA and balance of payments (BPM4) are inconsistent on their treatment of financial gold. The conclusion reached at earlier expert group meetings was that the SNA should adopt the balance of payments convention so that the two systems would be harmonised. This means that the concept of financial gold would be omitted from the national accounts. Gold would either be a commodity or monetary gold, this latter when it was held by the monetary authorities as part of foreign reserves. At least one country (the UK) feels this decision is to the detriment of the national accounts which should continue to recognise that gold may be held as a financial asset by any sector, in particular of course, by commercial banks. The reasons for this can be summarised as follows: gold can be a means of payment; it can be cut up and reconstituted without losing value; it does not decay; there is a well established market for it with a daily value and it is now possible to have accounts denominated in gold which earn interest.

While the group had some sympathy with this point of view, they were concerned that if the case for gold as a financial asset were allowed this would set a precedent for treating other items, for example silver, platinum and diamonds, in a similar way.

The discussion also brought in the consideration of gold held by households. Although this is typically not fine gold but gold in the form of jewellery it had been accepted by other Expert Group meetings that this constituted a form of saving by households in many countries and should be recognised as a form of household assets. This implies that purchase of such gold jewellery should not form part of consumption expenditure and thus draw down savings but rather should be a use of savings in the capital account. It was felt that there should be parallels between this sort of treatment of gold for households and of gold held effectively as a financial asset in other sectors (and possibly by households also). Again the question was raised if jewellery and antiques can be treated this way by households why should consumer durables not be treated as assets but there was sympathy for the proposal to investigate the possibility of introducing another item to appear in the capital account which would show the acquisition of such physical objects as a form of saving rather than as final or intermediate consumption.

The group confirmed its decision to record as a financial asset only that gold held by monetary authorities as part of foreign reserves.

The group provisionally agreed to include precious metals and other valuables bought as stores of wealth in the capital account.

2. Financial leasing

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It is generally recognised that some types of leases effectively convey the full rights and risks related to a physical asset from the lessor to the lessee. These leases are categorised as financial (or finance) leases as opposed to operating leases in which the lessor retains the rights of ownership and is providing a service by leasing the asset. When a financial lease arrangement exists, it is suggested that the physical asset should be attributed to the accounts of the lessee with a counterpart financial liability, while the lessor has a financial claim on the lessee. The 1968 SNA does not recognise financial leases as financial instruments nor does it recognise the different flows that would have to be attributed to financial leases as opposed to operating leases. **The Group held the view that most international statistical systems as well as national accounting practices recognise financial leases as financial instruments.**

The Group agreed that financial leases should be recognised as financial instruments and that **financial leasing should be distinguished and treated differently from operating leasing in the SNA.**

The Group then discussed the question of how financial leasing should be distinguished from operating leasing. BPM4 states that "a lease arrangement expected to cover at least three fourths of the cost of the goods, together with the carrying charges, is to be taken as presumptive evidence that a change of ownership is intended." The present OECD practice is to require 100 percent coverage of cost. The International Accounting

Standards¹¹ differentiate financial leases from operating leases in qualitative terms without specifying a proportion of the original cost, apparently because of the practical difficulties of measurement. The Expert Group on External Sector Transactions appeared to favour a position somewhere between the BPM and a full-cost criterion. **The Group on Financial Flows and Balances concluded that financial leasing contracts should be defined essentially by the intention to transfer all the risks and rewards incident to ownership to the user of the asset. This definition was preferred to alternative definitions that are based on a specific percentage of the total cost covered by the lease payments.** One participant noted that the adoption of a specific cut-off might result in countries not reporting if the actual percentage of cost covered by the lease was not readily discernible.

On the question of the classification of transactions with respect to financial leasing, the Group concluded that **where goods are obtained through financial leasing contracts, such goods should be recorded as if purchased by the lessee, with an imputed loan from the lessor. The payments in respect of the financial leasing contract should be divided into two parts: repayment of the loan in the capital finance account, and payments of interest in the income and outlay account. Payments for use of goods obtained under operating leasing should continue to be treated as purchases of services.** One participant, while in favour of treating a financial lease as an imputed loan, was troubled by the re-attribution of ownership from one sector to another. For example, if a bank were to buy a factory and lease it to a producer, on the bank's books the bank is taking depreciation, obtaining a stream of payments, and in fact has the building. This would show producers investing less and banks engaging in more of the activities that they do not normally engage in. Re-attribution would cause major accounting problems, as a change of legal ownership would not actually have occurred. In response to this example, it was pointed out that in many countries, under generally accepted accounting principles with regard to leasing arrangements of this kind, the producer would be required to carry the physical assets on its books, while the bank would record a financial claim.

The Group recommended that **in the transaction accounts and balance sheets, financial leases should be classified in the same category as loans. Contracts that meet the definition of financial leasing, irrespective of the type of goods acquired and irrespective of whether they are acquired by producers or consumers, would be included. The Group noted that financial leasing is most usually offered by independent legal units which are to be classified in the financial corporate sector. Their output is then imputed like other financial services. The valuation and treatment of output where financial leasing facilities are offered by a nonfinancial enterprise will be discussed in a future Expert Group Meeting in connection with the overall question of imputed bank output.**

3. *Reinvested earnings*

The Expert Group on External Sector Transactions agreed that both the external and the domestic sectors of the national accounts, like the balance of payments, should include international flows of reinvested earnings attributable to direct investors.

¹¹ International Accounting Standards Committee, Accounting for Leases, International Accounting Standards No. 17, London, 1982.

The Group, furthermore, strongly recommended that a full accounting should be prepared for consideration by the Meeting on Financial Flows and Balances and that, in the accounting, particular attention should be drawn to the implications for saving and national disposable income.

The paper, "Proposed Treatment of Reinvested Earnings on Direct Investment in the Revised SNA," which was prepared in response to the recommendations of the Expert Group on External Sector Transactions, presents a review of the current treatment of international flows of reinvested earnings in the BPM and spells out the methodology for the inclusion and presentation of data on such flows in the revised SNA detailing how these transactions would affect the consolidated accounts of the nation and discussing practical issues of compiling the necessary data.

The Group reviewed the conclusion of the External Sector Meeting to include international flows of reinvested earnings attributable to direct investors in the accounts of the SNA in line with the treatment adopted for the BPM. Most participants supported the conclusion.

Some participants were also in favour of extending this treatment to reinvested earnings on direct investment between domestic sectors. The majority, however, felt that sufficient information was not available on the full implications of such treatment. As a result, it was agreed to postpone a final decision in this regard to a future Expert Group, for which a paper should be prepared.

Two participants expressed the view, however, that a number of countries did not see the usefulness of the proposed treatment (namely, imputing reinvested earnings in the SNA) and that attempting to extend this approach to reinvestment of earnings between domestic sectors would compound the problem.

4. *Transformed instruments*

Bankers' acceptances

There are a number of cases in which a given financial instrument may be transformed into another instrument while the underlying instrument is still in existence. A clear example of this is a banker's acceptance, which creates a new instrument by replacing a direct trade credit claim between the supplier and the purchaser of goods or services with an instrument of substantially different characteristics from the original credit. A banker's acceptance is freely negotiable and trades in financial markets in the same way as a negotiable certificate of deposit or commercial paper. The question before the Group was whether the SNA should treat a banker's acceptance as the creation of a new instrument.

Two specific issues were addressed, namely, should an acceptance be recognised as an actual liability of the bank, and, if it should, how should the bank's claims on the customer be treated. Two participants expressed the view that an acceptance was a contingent liability of the accepting bank until such time as it began to circulate on the market; if the creditor had no intention of discounting the bill it should be considered as a guarantee. Another participant countered that an acceptance did not imply any conditions such as those attached to a guarantee--the bank has agreed that it will pay, unconditionally, the specific amount on the bill on a specified future date and, in this sense, an acceptance was no less an actual liability than a negotiable certificate of deposit. Another participant pointed out that there is no consistency across countries in the accounting treatment of acceptances: some countries view them as contingent or off-

balance sheet entries while others require that they be recorded as actual liabilities (and the claims on the customer as assets) on the balance sheet at the time of acceptance.

A majority of the Group favoured treating bankers' acceptances as actual liabilities of banks at the time of acceptance, with the asset counterpart being claims on the banks' customers. Other participants, while seeing merit in this approach, felt that it was contrary to accounting practices in some countries and would be difficult to implement. It was noted that, in sectoring the liabilities arising from an acceptance, there would be problems in distinguishing between foreign and domestically held acceptances, but that this was a general problem applying to all negotiable liabilities issued by banks.

Repurchase agreements

A repurchase agreement involves the acquisition of funds through the sale of a financial instrument with the agreement to repurchase the instrument at a later date. While the legal form of the transaction usually is a sale, the nature of the transaction is more like a collateralized loan. The bulk of these transactions are very short term and the securities often do not change hands. In addition, as the purchaser often cannot dispose of the securities, it has been argued that no sale has taken place because the purchaser does not acquire a basic right of ownership. Reflecting this attribute, MBS treats repurchase agreements as the creation of a new instrument.

The discussion made it clear that there was no consistent treatment of repurchase agreements. In some countries the repurchase agreement itself was viewed as a contingent account, while the books of the buyer and seller recorded an actual movement of the underlying securities from seller to buyer. In others, the agreement was treated as the creation of a new instrument on the balance sheet--an asset for the seller and a liability for the purchaser--and the underlying securities remained on the balance sheet of the seller.

Most participants recommended that repurchase agreements should be treated as the creation of a new instrument having the nature of a collateralized loan. Others noted that in some countries this treatment would represent a deviation from the legal basis of repurchase agreements. The latter group of participants felt that the rules should be phrased in such a way that each country should be able to interpret them in the manner that is appropriate given that country's legal and economic features. If the underlying legal basis of the repurchase agreement was not as a loan against collateral, the repurchase agreement should be considered as the sale and purchase of an asset, and the reversal should be considered as a contingent item. Others felt it important that the treatment in the SNA of repurchase agreements should reflect the economic rather than the legal nature of the transaction and that, while some flexibility was desirable, harmonisation could only be achieved by a clear recommendation based on the economic nature of the transaction.

Suppliers' credits

The Expert Group on External Sector Transactions had suggested that the revised SNA should provide a definition (which is currently lacking) of trade and other suppliers' credits, and that in the formulation of such a definition, account should be taken of national practices.

The Group agreed that suppliers' credits should not be separately distinguished from trade credit, which also includes advances from purchasers. It was agreed that the

revised SNA would employ terminology that would subsume suppliers' credits under trade credit and would de-emphasise the use of the term "trade."

International reserves

In the 1968 SNA, international reserves are included only in Table 25, where it is noted that "the definitions of international reserves and offsets to these reserves are those of the International Monetary Fund and the collection internationally of these data is the responsibility of the Fund." The concept of reserves is critical to balance of payments statistics and is also an integral part of monetary statistics. The SNA defines reserves as "the monetary gold, special drawing rights (SDRs) in the Fund, reserve position in the Fund, use of Fund credit, and existing claims on non-residents that are available to the central authorities either to finance payments imbalances directly or to manage the size of such imbalances by intervening to influence the exchange rate for the national currency" (BPM4, p. 147). In defining which assets qualify as reserves, it is necessary to assess the assets' availability for use and the degree of effective control that the central authorities have over them. Within the IMF there is some variation in the definition of reserves; the BPM includes assets under the control of the central authorities (for example those held by deposit money banks), while MBS usually includes only assets actually held by the central bank and the government. In practice the differences are small. In recent years it has been noted that the major changes that have occurred in international capital markets and in the international monetary system have made it very difficult to define international liquidity simply in terms of official foreign reserves holdings. In order to assess a country's external liquidity in terms of available resources, it may be necessary to identify assets held by private residents that are close substitutes for official reserves, external resources that are readily available from international organisations and national authorities, and external resources that are readily available from private sources. Such a notion of liquidity can be far broader than reserves in that it includes private sector holdings and contingent assets, such as lines of credit, which can be mobilised by incurring a liability. The IMF is currently reviewing its definition of reserves.

In view of these developments the Group was asked to discuss whether SNA should have a concept of reserves and, if so, how such a measure should be defined.

The Group agreed that international reserves should be included in a supplementary presentation such as Table 25 in the 1968 SNA. Although the Group felt that a measure of international reserves was not an essential analytical component of a broad system such as SNA, it was agreed that it did deserve a place in a supplementary presentation since it was a major financial indicator; it was necessary for harmonisation with balance of payments; and its omission would place the SNA financial flows at risk of not being considered useful by analysts. It was concluded that it would be useful to identify the components of international reserves in the SNA instrument classification. **The Group agreed that the definition of international reserves would continue to be the responsibility of the IMF.** It was recognised that since the IMF's review of the definition might not be finalised until after the revised SNA is issued, and since adaptation to conditions in the future could lead to further redefinition, the SNA would have to be updated periodically to remain current with changes in the IMF's definition.

Monetary aggregates

No specific money measure is defined in the SNA although a narrow money concept is reflected in the definition of the "other monetary institutions" subsector and in Table 25. The importance attached to monetary measures arises from the use of such aggregates for financial analysis and policy formulation. In practice, money is an aggregate concept

encompassing a range of instruments. Having an explicit definition of money in the SNA raises questions concerning the objective of the present SNA framework and the usefulness and feasibility of constructing a standard statistical measure across countries. However, because of money's critical role in economic analysis in many countries, the issue of its specific definition in the SNA appears to be an important and timely one.

The monetary concept implicit in the 1968 SNA is a narrow one consisting of currency and transferable deposits issued by the central bank and the other monetary institutions. This narrow view of money has traditionally been related to the "transactions motive" for holding money. However, developments in financial markets since the last revision of the SNA, particularly financial innovation, inflation, deregulation in financial markets, and technological progress, have combined to produce many instruments with some "moneyness" or partial medium-of-exchange properties. These same factors have largely been responsible for the decline in the previously observed close relationship between narrow money and the level of economic activity.

The Group was unanimous in the view that the SNA should not have an explicit concept of money, since there is no single monetary aggregate that can be used across all countries and, even if there were, continuing innovation would make the elaboration of a harmonised monetary aggregate difficult and not useful. Some participants felt that it would be useful for MBS and the SNA to provide sufficient detail on broad money components to enable analysts to aggregate these as they saw fit.

It was agreed that the revised SNA would explain that there is no single definition of money. It would also explain that there is a range of aggregates, narrow and broad, the definitions of which differ among countries, and, moreover, that monetary definitions are continually changing. Illustration of the components used to derive alternative measures would be set out in a supplementary table.

5. *New financial instruments*

One of the major results of financial innovation in recent years has been the development of a broad range of new financial instruments. While the Group noted that **the new financial instruments are for the most part variants of traditional instruments and can be accommodated in the SNA instrument classification**, it went on to discuss some classes of instruments that represent major shifts in the way transactors conduct business and that may have a major impact on the usefulness of conventional balance sheet data for interpreting the performance of these transactors.

Note issuance facilities

Note issuance facilities (NIFs), revolving underwriting facilities (RUFs), and similar facilities are a rapidly growing means through which banks facilitate financing without necessarily providing credit. In a typical NIF, a bank or group of banks guarantees, generally for a period of five to seven years, that a borrower will be able to issue his own short-term securities up to the amount of the facility, and that the banks will purchase (or provide credit equivalent to) the securities not taken up by the market. The facility offers the borrower the guarantee of long-term financing with the flexibility of issuing short-term commercial paper or Euronotes. The banks receive a fee for the amount of the facility that is not drawn, irrespective of whether they have provided direct financing. The basic transactions involved in the NIF appear quite straightforward: for the banks the fees received are income, as is any interest received for credit actually provided under the NIF, and the credit and repayment would be recorded in the capital finance accounts; the borrowing sector's accounts would record the counterpart entries. The NIF itself

represents a contingent asset/liability of the banks similar to a line of credit; only the credit actually provided will enter the bank's balance sheet, which will therefore not reflect the bank's full exposure. This feature of the NIF causes the greatest difficulty among analysts and bank supervisors: the banks may earn substantial income that is not generated by their on-balance sheet assets but rather by off-balance sheet contingent accounts.

Under current rules, the SNA records the securities issued under the NIF in the capital finance accounts and in the balance sheets for the relevant sectors, but the facility itself would not appear in flow, stock, or reconciliation accounts. As these facilities may be important for explaining the income received by the banking sector, the question before the Group was whether supplementary data on them should be collected for the SNA.

The Group felt that NIFs, RUFs, and similar facilities did not raise major issues for the SNA, as current accounting rules appeared to cover all the actual transactions involved, as noted above. The question was raised as to whether the fee earned by banks for NIFs and RUFs should be treated as interest, similar to a commitment fee for a loan, or as service income. **The Group agreed that, in the case of NIFs, RUFs, and similar arrangements, the fee paid for the contingent position assumed by the credit institution should be treated as a fee for a service.** This was consistent with normal business accounting practices and with the conclusion of the Expert Group on External Sector Transactions that factor incomes and service charges be separated. **The Group said that interest and credit are only recorded when notes are issued.**

The contingent aspect of NIFs and their potential impact on the accounts was noted by two participants. One was not sure whether NIFs were contingent assets or contingent liabilities or both and felt that they were therefore not as easy to classify as a contingent item that is either one or the other; his view was that NIFs probably did not fit into the SNA framework. Another participant saw the contingent aspect of NIFs as part of a wider question that is also relevant for hedging. Hedging activity has taken on new dimensions, and SNA and flow of funds analysis give only a partial picture of what is happening in the real world. He noted that if traders are hedging prices in foreign currency, the present approach may lead to distortions.

Swaps, options, and forward rate agreements

Interest rate and currency swaps, foreign currency and interest rate options, and forward rate agreements (which are described in the IMF document "New Financial Instruments and the Balance of Payments") have grown rapidly in recent years, owing, at least in part, to a desire to hedge interest rate or currency exposure. The Group had before it the following proposals for the recording of these transactions in the SNA:

Swaps.

The original borrowing by the parties engaged in the swap would be recorded in the capital finance accounts as increases in liabilities. Streams of interest payments would be recorded in the income and outlay accounts and streams of principal payments would be recorded in the capital finance accounts. Payments between the parties engaged in a swap arrangement do not represent interest payments, as there is no financial asset/liability arrangement between the parties; rather, they should be treated as an exchange of capital items and, to the extent that the flows are not equal, as a payment for a service.

Options.

There are three possible transactions which can arise from an option agreement. First, a premium is paid at the signing of the option contract, and this should be recorded as a payment for services. Second, if the option is exercised, the transaction in the underlying instrument would be recorded in the capital finance accounts. Options are often marketable but, as the seller of the option incurs only a contingent liability and not an actual financial liability, the transaction of trading an option should be recorded as a transaction in intangible nonfinancial assets.

Forward rate agreements.

A forward rate agreement is a contract in which two parties agree on the interest to be paid on a notional deposit of specified maturity at a specific future time. Principal amounts are agreed but never paid so that only payments due to the interest rate differential are exchanged. The flow transactions involved in a forward rate agreement therefore do not involve the payment of principal as such. "New Financial Instruments and the Balance of Payments" suggests that the flow due to the difference between the agreed rate of interest of the agreement and the prevailing rate should be classified not as an interest flow but rather as a payment for a service akin to an insurance premium. Others have suggested, however, that the nature of the transaction is different from insurance and that the flow should be viewed as a kind of capital transfer.

The Group recognised that the arrangements under discussion were very complex and that the simplified examples before the Group might not be representative of all the transaction flows that could be generated by these instruments. The recommendations, therefore, had to be provisional, indicating the desired way in which these operations should affect the SNA.

In the case of swaps, some participants argued that the purpose of interest rate swaps is to change interest rates paid and that the proposal before the Group assumed that no swap had occurred and the balancing item between the two parties would be treated as a service charge; it would be preferable to treat the not amount (the cost to each party to the swap) as interest, since this is what the parties have to pay. **The Group agreed that the treatment in the SNA of swap transactions should reflect the economic nature of the transactions. In the case of simple interest rate swaps, interest payments should be recorded not of payments between parties. Neither of the parties of the swap should be regarded as providing a service to the other. The Group noted that, where swaps are arranged through specialised brokers, one or both parties will usually pay a fee for the service provided by the broker.**

It was pointed out that under the Group's proposed approach an actual transaction would not be accounted for. If a cross-border transaction were involved, the implication for the BPM was that final payments to non-residents should be recorded net of payments between the parties. The BPM could accommodate the Group's proposal, although in practice it might be difficult to collect the required data, since the BPM did allow for netting in certain cases. One participant favoured treating each of the party's interest on a gross basis; there could be two borrowers from different countries lending from units in a third country, and net recording would not allow for sectorization. He felt that recording should be gross but that the presentation could be on a net basis.

The Group agreed that the same treatment that it had agreed on for swaps would, in principle, be applied to transactions under forward rate agreements. The Group recognised that adaptations might have to be made in the case of more complex swap and forward rate agreement transactions.

On the question of options, the predominant view of the Group was that these should be treated as contingent, rather than actual, assets and liabilities. This is the normal business accounting treatment. As long as the option is in the market, the seller is at risk because the option would be exercised as soon as the situation became favourable to the buyer; until such a time, nothing would have transpired. One participant was, on balance, in favour of treating options as actual assets insofar as there are markets in which they can be sold. The initial seller would also have a liability since he would have a commitment. The present value of the commitment would be the value of the option in the market.

It was pointed out that a foreign currency option would change the value of the balance sheet, so that in a sense it would affect the value of an existing asset, although it would be extremely difficult to measure.

Contingent assets and liabilities¹²

The Group recognised that contingent positions maintained by financial institutions were becoming increasingly important in explaining their activities. The questions posed to the Group were whether there was a need to include contingent assets and liabilities in the main SNA accounts, or perhaps in supplementary tables, and how would it be possible to distinguish between real and contingent assets and liabilities. As was noted above in the discussion of note issuance facilities, financial institutions are increasingly conducting business through contingent accounts or off-balance sheet items. Some of these transactions are effectively replacing former banking business by partly shifting the risks to third parties. As a result, the present definitions of financial aggregates have become less comprehensive than originally intended. Measurement of these contingencies has become critical for financial analysis and supervision, and data have become increasingly available.

The Group concluded that **information about contingent assets and liabilities may be useful for certain types of economic analysis. The Group did not, however, see any reason for the SNA to deviate in this regard from its basic rule for recording transactions and stocks, and so concluded that contingent assets and liabilities should not be recorded in the main SNA accounts and tables. Information on contingent assets and liabilities, preferably broken down by type and sector, could be shown as memorandum items. It was suggested that it would be useful to disaggregate contingent items by type, since there are many different types, and a detailed sectoral breakdown of counterparties would be necessary to make the information analytically useful. It was pointed out that it would be difficult to collect data on contingencies from banks and even more so in the case of nonfinancial private enterprises. Actual assets and liabilities would be distinguished from contingent ones on the basis of the conditionality of the relationship between the transactors. Where an unconditional relationship exists on the part of both transactors, it would be an actual financial asset or liability. On this basis, bankers' acceptances would be actual liabilities whereas NIFs, RUFs, and lines of credit would be off-balance sheet. A letter of credit would be conditional and therefore off-balance sheet, because a variety of formalities have to be completed before it is activated.**

One participant was concerned about the precise definition of "conditionality", since various steps could be involved; if someone sells an option, the buyer is free to choose

¹² This is the one area of substance where significant change to the 1993 SNA has been made. The new treatment of derivatives was adopted in 1999.

whether to exercise the option or not yet the seller is unconditionally engaged and in that sense is in the same position as a bank making available a line of credit. **It was agreed that the revised SNA would give examples of contingent items.** It would also delineate the boundary between actual and contingent assets and liabilities.

It was noted that the Bank for International Settlements (BIS) had developed a rigorous framework for commitments and contingencies for use in bank supervision, although this might not cover all of the activities of nonbanks. The suggestion was made that the secretariat of the Cooke Committee be consulted concerning the definitions of contingencies, since these would have to be ratified by other Expert Groups before the revised SNA was published.

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With respect to the definition of financial instruments, the Expert Group on Financial Flows and Balances recommended that there must be an unconditional relationship on the part of both debtor and creditor for an actual financial instrument to exist. This was an attempt to distinguish actual financial assets from other assets (such as intangibles) as well as from contingent financial assets. It was recognised that this definition raised difficulties as certain assets of a financial nature, such as options, do not meet the test of unconditionality and previous Expert Groups had suggested options be treated as intangible assets. The preceding discussions of this meeting on property income had served to highlight possible disadvantages to this approach of treating "intangibles" as a residual category. Several of the participants felt that options should be treated as a financial asset since these are so classified in some countries and they do not share the same characteristics with other intangible assets. It was also felt that greater clarification was needed in the chapter with respect to the nature of hedging instruments.

Some participants argued against treating contingent liabilities and commitments as integral to the account because of the asymmetry that would be introduced in increases in net wealth since assets and liabilities would no longer necessarily balance. This argument would suggest that options should not be treated as financial assets.

Although the meeting did not have time to consider the matter further, it was agreed that there was a need to examine whether a contingent financial liability is necessary related to an intangible asset.

Derivatives

December, 1990

At the Financial Flows Expert Group meeting in September 1988 it had been agreed that options should be excluded from the category of financial assets and be treated as non-financial intangible assets. Further consideration suggested that they did not fit consistently with other items included under that heading either and that options were not the only type of new financial instrument which gave rise to similar problems. The paper under discussion, therefore, addressed instruments that have been variously described as new financial instruments, off balance sheet transactions, hedging instruments and contingent liabilities and assets. In particular it covered traded and over the counter options, futures, warrants and tradeable swaps. The term derivatives or secondary instruments was used to describe all of these.

All of them have the characteristics satisfying the definition of an asset agreed previously. Derivatives are often, but not always, linked to specific financial instruments though

options, futures and swaps can be linked to commodities. However, the basic characteristic of all these types of contract is essentially a financial arrangement. This pointed to reversing the earlier decision about the treatment of options and including them as financial assets. As financial assets are always met by liabilities, it would then be necessary to have liabilities imputed by convention. These would be construed to the person writing the option.

On balance the meeting agreed with these proposals as less harm would be caused by including these items in financial assets than by grouping them with other non-financial intangibles assets.

There was then discussion about how to classify the items. One proposal was that a separate category should be introduced for these but most of the group were in favour of including them under the other categories in the classification of financial instruments previously agreed. When a derivative is used to hedge the risk in, for example, an export contract, the derivative should not be regarded as an integral part of the other contract but as a separate financial transaction.

There was then discussion about whether the premiums for options should be treated as a form of insurance payment. It was argued that the whole of the premium should not be treated as a fee and indeed in the market the feeling is that none of it is a fee but that all of it represents the price of an asset. In practical terms it might be possible to determine a separate element for options but this would not be possible for futures and swaps. Given the wide range of problems that will emerge on imputing the service charge for financial intermediation, it may be better not to compound the imputation process by introducing more in this area. The meeting agreed with this proposal and suggested that the Blue Book should indicate that conceptually premiums on options includes a fee for service, but because of practical difficulties no attempt would be made to isolate this and instead the whole of the payment would be treated as a financial transaction.

In the discussion on non-financial assets the question of leases had been discussed. These are presently treated in the SNA as non-financial intangible assets and it was suggested that this treatment should be extended to other transferable contracts; for example contracts on services, on football players and contract to purchase aircraft at a future date. In light of the decision to treat traded and over the counter options as financial assets, work still needs to be done to clarify the boundary between transferable contracts to be treated as non-financial assets and options.

Leases and similar transferable contracts will continue to be treated as non-financial intangible assets.

The definition of financial assets in the draft text should be revised to include options and related derivatives whether tradeable or not. By convention, matching liabilities will be imputed to the writer (issuer).

Conceptually, the premia on options include a fee for services but since these cannot be distinguished the entire amount will be treated as a financial transaction.

Options and other derivatives will be classified under the appropriate headings of the existing classifications of financial assets.

Further study is required to develop guidelines for borderline cases such as purchase options for aircraft.

Hedging transactions are separate from the transaction to which they relate.

E. Other issues

1. Maturity-based classifications

September, 1988

The Expert Group on External Sector Transactions had raised questions about the desirability of maintaining a distinction in the balance of payments capital account between long- and short-term transactions, but referred to the Expert Group on Financial Flows and Balances the question of whether such distinctions were still important from the view of financial analysis.

The view that innovation had made the maturity distinction more tenuous and therefore less useful was widely shared in the Group. Three distinct types of maturities were noted: (1) those with a definite short-term maturity; (2) those with a definite long-term maturity; and (3) those where both parties agree to adapt maturities according to their respective economic needs. This last group had become more prominent through, for example, the increasing prevalence of rollovers, active trading in securities, and floating rate notes. In the case of adjustable mortgage loans, it was argued that each time the rate is adjusted a new instrument is effectively created; in this sense, such a loan could be viewed as a series of short-term loans rather than as a single long-term loan. Also noted was the possibility that the maturity of an instrument could be viewed differently by the creditor and the debtor. A debtor could view a NIF, for example, as access to medium-term financing, executed through short-term instruments, while the creditor's commitment would be medium-term but actual claims acquired, if any, would be short-term.

In spite of the above developments, **the Group did not wish to abandon the maturity distinction and agreed to maintain the basic distinction between long-term and short-term instruments in the revised SNA, but as a secondary criterion.**

On the question of the definition of short-term, the Group agreed that **short-term securities and loans should be defined as those which have an original maturity usually of one year or less, but with a maximum of two years to accommodate variations in practice between countries.**

There was little support for the suggestion that maturity profiles be specified in terms of a number of time ranges. It was felt that there would be practical problems in having an international definition of maturity ranges, since some instruments, such as Euro-commercial paper, can be of any maturity and the dividing lines both within and among countries are different.

Concerning residual versus original maturity, **the Group recognised that analyses on the basis of residual maturity may be appropriate for certain purposes--for example, analysis of banks' liquidity positions--but that these data should be developed outside the SNA in specialised systems. For transactions data, residual maturity would not be feasible and original maturity would be more suitable.**

The maturity distinction in SNA should be based on original maturity rather than on residual maturity to promote consistency between the flow and balance-sheet accounts.

2. Zero-coupon and deep-discounted bonds and index-linked securities

The Expert Group on External Sector Transactions had addressed the question of the proper treatment in the SNA of the return on zero-coupon and deep-discounted bonds and indexed securities. That Group recommended that the return on zero-coupon bonds should be treated as interest and accrued over the life of the instrument. As the issue involves domestic as well as cross-border transactions, the Expert Group on External Sector Transactions had referred discussions to the Expert Group on Financial Flows and Balances.

Deep-discounted or zero-coupon bonds refer to a group of medium- or long-term financial instruments for which there is no or little interest paid during the life of the instrument. They are therefore similar in form to short-term discounted securities. However, in the case of long-term instruments the difference between the issue price and the redemption price can be very large. The principal issues that the Group was asked to address were the nature of the return to the lender on these instruments and when the return should be recorded.

With respect to the return on deep-discounted bonds, the issue would be whether it should be treated as interest and recorded in the income account or as a capital gain and recorded in the reconciliation account. As regards the time of recording the return, the options would include recording at the time of issue, at redemption, or distributed over the life of the instrument. In previous discussions of this issue, there had been little support for recording the return at the time of issue but there had been strong support for recording at redemption (following the normal rule of recording transactions on a due-for-payments basis) and over the life of the asset (adopting an accrual method of recording which matches the cost of capital with the provision of the capital). An intermediate approach would record the return in the income account at maturity but would record in the capital finance accounts increasing claims for the holder and liabilities for the issuer over the life of the instrument.

Similarly, the issue for indexed bonds would be whether to treat the indexed amounts as interest or as capital gains.

When this agenda item was introduced, it was pointed out that a number of studies made by the IMF on indexation had found some cases where the recipient of an index-linked payment had viewed this payment as interest income, and other cases where the payment had been considered as maintenance of value. This appeared to suggest that there is no single answer and that the best approach might be to collect separate data to enable the analyst to decide how these would best be used. It was also pointed out that there had not been a clear majority decision on the treatment of such securities at the EUROSTAT Joint Meeting of Working Parties on National Income Accounts and Money and Banking Statistics (Luxembourg, June 1988).

A majority of the Group recommended that the difference between the issue price and the value at maturity of both zero-coupon and other deep-discounted bonds should be treated as interest.

A variety of views were expressed as to when interest should be recorded. Some participants held the view that interest should be recorded when it was due; if due at the end of five years, it should not be accrued over the intervening period; it was not desirable to have imputations if they were not really necessary and if they did not reflect what was happening in the market; there was not an entitlement that was progressively earned. Other participants felt that when the interest was actually paid was irrelevant

and that, under normal business accounting practices, the interest would be considered to be earned over the life of the instrument. **A majority of the Group concluded that the interest on zero-coupon and deep-discounted bonds should be converted into a series of annual or quarterly payments over the full lifetime of the instruments.**

It was noted that, in principle, such an adjustment should be made for any security that did not pay a market rate of interest and for which the issue price differs from the redemption price.

The Group then turned to a discussion of index-linked securities. These were seen as instruments in which the contract states that the holder would receive an agreed amount of interest and adjustments in value during or at the end of the contract based on movements in an agreed index such as the consumer price index. The index-linked value could be viewed in two ways: (1) as pure revaluation, and therefore as part of the revaluation accounts; or (2) as part of the original contract, and therefore to be recorded as actual interest.

The majority of the Group recommended that, in the case of index-linked securities, the full return should be treated as interest, since any contractual agreement should not be considered as revaluation and therefore part of the revaluation account. Several participants felt, however, that the indexed increment or monetary correction should be treated as a price adjustment and therefore belonged in the revaluation account. Another noted that, in the case of a country with 300 percent inflation, if the indexed part were treated as interest, this would lead to the unsatisfactory implication that at the end of the period the capital amount had dropped to one third of its opening value. Against this view, it was pointed out that this result did not differ from what would happen under conditions of monetary instability to a non-indexed security when very high nominal interest rates prevailed.

The Group also recommended that, **in the case of index-linked securities, when the indexed return is paid only at maturity, that return should be converted into a series of annual or quarterly payments over the full lifetime of the instrument (as for zero-coupon or deep-discounted bonds).**

3. *Payments arrears*

In the introduction of this item it was pointed out that, while the 1968 SNA makes no specific reference to the recording of payments arrears, its accounting principles allow for the correct treatment of such arrears. The accounting treatment was seen to be straightforward. If the "due for payment principle" were adhered to, interest and amortisation would be recorded when due, and when these were not paid a contra-entry would be made in the capital finance accounts which would be equivalent to the new liability. The presentation for transactions would be to record interest when due in the current account, and to record in the capital account a new liability representing overdue interest and principal.

The Group agreed that **the appropriate treatment of payments arrears is that already provided for in the SNA. When the payments of interest and amortisation fall due, debits are recorded in the current and capital account, respectively, of the debtor, and a contra-entry is shown in the capital account in respect of the credit which has been involuntarily provided to the debtor.**

The Group saw two possibilities for the presentation of a new liability representing overdue interest: it could be shown as a new item or as a memorandum item, with

accounts payable broken down. Some neatness was seen in taking the memorandum item approach rather than expanding the list of assets and liabilities, and the Group therefore agreed that **it would be useful to identify these amounts as memorandum items where they are important.**

4. Provisions and write-offs

Creditors can adjust their balance sheets in a number of ways that are not considered transactions in the SNA. These adjustments can lead to substantial problems in estimating flows from stock data and can also lead to large asymmetries between creditor and debtor reporting. The most important of such adjustments relate to provisions, write-downs, and write-offs and these adjustments can be made against both domestic and external debtors. They usually involve a creditor reducing the balance sheet value of his claims on particular debtors (specific provisioning) or the whole of his asset portfolio (general provisioning). In the case of specific provisioning, all (write-off) or part (write-down) of a given claim may be removed from the balance sheet. These actions may be taken for prudential reasons or as required by supervisory authorities.

Provisions and write-offs do not affect the existence or value of the claim of the creditor on the debtor; the legal claim still exists but the balance sheet is adjusted to reflect the probable worth of the asset and also net worth. Since no real change has taken place in the debtor/creditor relationship through provisioning, these unilateral balance sheet changes on the part of the creditor should not be interpreted as transactions but rather as analogous to valuation changes. In calculating flows from balance sheets in which provisions have been made, it is necessary to adjust the assets so that the reduction in reported claims is not interpreted as a decline in credit (repayment of loans).

As neither the SNA nor M60 provides clear guidance on provisioning and write-offs, the question for the Group was whether these adjustments should be treated in the same way as valuation changes and should therefore be recorded in the reconciliation accounts of the SNA.

The Group saw a clear distinction between arrangements in which the claim of the creditor on the debtor was extinguished, and therefore in which a transaction had taken place, and arrangements in which the claim was not extinguished and there was no transaction. Within the first group, there was a need to distinguish between contractually agreed write-offs and those in which a creditor writes-off an item because he thinks the debtor will not pay. In the latter case there will be an imbalance in the balance sheets of the creditor and the debtor, because the debtor will not acknowledge the write-off in his balance sheet. This unilateral case would not lead to a transaction until and unless the liability were to be extinguished by the debtor; until such time, there would be only a valuation question with regard to the debtor's balance sheet. One participant noted that there was a need to distinguish between voluntary and involuntary forgiveness and that the symmetry of the system needed to be preserved, since involuntary forgiveness would represent a reconciliation entry rather than a capital transfer (as in the case of a voluntary forgiveness) and in the counterpart entry the asset would disappear (as it would in the reconciliation accounts).

The general view that emerged from the Group's discussions was that, for SNA balance sheet purposes, the creditor's balance sheet would be reconstituted (by adding back in any amounts the creditor had written down) unless there was incontrovertible evidence from both sides that the claim had been extinguished or unless the creditor removed the total claim from his balance sheet. It was admitted that a possible problem with this "reconstitution" approach for write-downs, which resulted in no entry in the

reconciliation accounts, was that write-downs may in some cases be economically equivalent to changes in market valuation which are reflected in the reconciliation accounts.

In summary, the Group identified three categories within the broad range of provisions, write-offs, and debt forgiveness operations:

1. With respect to a bilateral agreement between the creditor and debtor that a financial claim no longer existed, the SNA would record a capital transfer from the creditor to the debtor.
2. With regard to a full write-off of a claim from the creditor's balance sheet, this would be taken as prima facie evidence that the creditor no longer had a financial claim, and the reduction in the creditor's balance sheet would be accounted for by an entry in the reconciliation account.
3. All other adjustments to creditors' own balance sheets with regard to provisioning and write-downs of financial assets would be excluded from SNA; that is, these adjustments would be reversed for the purpose of SNA balance sheets and would therefore lead to entries in neither the transaction accounts nor reconciliation accounts.

5. Debt/equity swaps;

Debt/equity swaps or other forms of debt conversion have been used increasingly by heavily indebted countries to reduce their debt burden in the short and medium term. A secondary market for existing debt of developing countries emerged in 1982. This market played a major role in shifting international banks' debt exposure toward nonbank investors who purchased the debt instruments at discount from the banks. Increasingly, in the last several years, these claims have been exchanged for equity investments in the debtor countries. These arrangements vary between countries and may take many complex forms, but the end result is usually the extinction of a foreign currency-denominated fixed payment liability, such as a security or a loan, and the substitution of a domestic currency equity-type liability to a non-resident. This may occur directly, when the liability of an enterprise is exchanged for equity in the same enterprise, or indirectly, when the central bank redeems outstanding debt (normally at a discount) but the proceeds of the redemption must be reinvested in approved equity within the country. In the first case, debt is extinguished and replaced by an equity-type liability, while in the second case the debt still exists but is now a liability to a resident (the central bank). Both cases result in a non-resident's holding an equity-type claim in the debt-swapping country. In the second case the transactions are explicit--the central bank buys a financial asset from a non-resident for local currency and the non-resident uses the local currency to purchase equity--and should cause no difficulty for recording in the SNA. In the first case (the direct swap), the transaction may have to be imputed and there may be problems of valuing the transaction. An additional issue is also raised by the fact that the transaction by which the liability is extinguished may take place at a price substantially different from the value at which the liability is booked, thus requiring an entry in the reconciliation accounts.

In the ensuing discussion on the appropriate treatment of debt/equity swaps in the SNA, some participants saw the difference between the face value of the instrument and the amount actually received as more properly belonging to the reconciliation accounts, while others saw it as a transaction involving a capital transfer. Those favouring the treatment of the difference as a capital transfer did so both because it would reduce the government deficit and because the difference was agreed upon. Others felt that while

the difference could be construed as a capital transfer, this might not be the best reflection of what is actually happening. This would be true particularly if a third party were involved; in this case it would not be clear whether the capital transfer was being provided by the original creditor or by the third party. In concluding its discussion of this agenda item, **the Group agreed that the present SNA accounting principles could deal adequately with transactions involved in debt/equity swaps. The Group recognised that debt/equity swaps usually involve a difference between the full value of the debt instrument and the value of the equity obtained. The Group further agreed that this difference should be accounted for in the reconciliation account, not as a capital transfer.**

6. *Discounting/Rediscounting*

The appropriate treatment in the SNA of discounting financial instruments, where the intent of the transaction is to achieve an objective other than that of financing the original issuer of the instrument, was discussed by the Group. It was agreed that, both for balance sheets and for transaction flows, no special recognition of the intent of discounting would be recognised. It was pointed out that while MBS does not recognise discounted instruments in balance sheets, MBS recommends that, in the presentation of flow data, the intent of discounting should be recognised (for example when the central bank discounts government paper to increase the liquidity of banks).

F. *Links between financial flows and balances*

1. *General Principles*

In the matter of the valuation of financial instruments, M60 suggested three factors to be considered in deciding the most appropriate mode of valuing the items in national and sectoral balance sheet accounts. The mode of valuation should:

1. result in the most useful data for purposes of studying resources and wealth and economic and financial behaviour;
2. be practicable to use--the values chosen must be measurable and collectible; and
3. be used for all kinds of assets and liabilities to contribute to the comprehensiveness and simplicity of the relationships between these items in the balance sheet accounts.

It is considered axiomatic that entries must be valued identically for all transactors to facilitate comparison and consolidation of accounts. M60 reviews in detail the principles governing valuation of assets and liabilities and concludes in general that financial instruments are to be valued in a symmetrical manner regardless of their status as assets or liabilities. For those financial instruments with long-term maturity structures, the SNA recommends that as assets they should be valued at market values on the basis that the financial decisions of investors will be influenced by their sales value in the market. The same valuation principle applies to these instruments as the liabilities of debtors; they are to be valued at market prices on the grounds that issuers of debt such as long-term bonds may chose to refinance their liabilities depending on interest rate developments subsequent to the contraction of the original financial obligation. In comparison, short-term instruments (for example, treasury bills) are valued in the BPM at nominal face value, since as assets and as liabilities they can be traded at or near their full nominal face value. For financial instruments denominated in foreign currencies, the SNA

recommends that they should be converted to the national currency using the exchange rate prevailing on the balance sheet date.

The IMF Guide agrees with the SNA on the valuation of short-term assets and liabilities but recommends an asymmetrical treatment of long-term instruments, with assets being valued at market value while financial liabilities are to be valued at nominal face value, as this represents the ultimate cost to the debtor of discharging his obligations. It should be noted, however, that data on financial liabilities and assets compiled for MBS reflect accounting conventions in various countries that may differ from this recommendation.

The following questions were before the Group:

Should the SNA continue to recommend symmetry in the valuation of financial instruments as assets and liabilities?

Is there justification for valuing financial liabilities at nominal face value regardless of maturity structure in light of the active liability management currently being carried out by financial institutions?

As a general principle of valuation, the Group recommended retention of the symmetric treatment of assets and liabilities at market prices. There was interest, however, in developing information supplementary to the main tables that would show alternative valuation measures for corporate equity and long-term bonds. One participant noted that there might be problems in using market values in SNA since banks could probably provide only book values on the required monthly basis. He added that, while the M60 guidelines on valuation were useful ones, there were some problems: the suggestion that the value of unlisted securities be based on, for example, price/earnings ratios could not always be followed because the required data are not always available; the M60 proposal that data from companies' balance sheets be used for direct investment in subsidiaries could not always be followed because SNA valuation principles differ from normal business depreciation practices; M60 suggests that equity in life insurance and pension funds be shown in nominal values. Perhaps their value should be derived as a residual.

In order to assist the Group to reach a conclusion on the valuation of bonds issued at a discount, it was agreed that the IMF would extend the paper it had prepared for the External Sector Meeting to cover stocks.

2. *Independent net worth of quasi-corporate enterprises*

A question was raised as to whether a quasi-corporate enterprise can have a net worth independent of that of its owner. It was suggested that the owner's equity in a quasi-corporate enterprise should be set equal to the value of its assets less liabilities so any independent net worth would be exactly equal to zero. After some discussion it was agreed that an independent net worth for quasi-corporations would not be identified.

3. *The debtor/creditor principle*

March, 1987

The group addressed the question of whether financial transactions should be recorded on a "transaction" or a "debtor/creditor" basis. The former records only the actual transaction between institutional units while the latter specifies for all transactions the creditor/debtor relationship even when no change in the amount of liabilities occurs. The

group agreed that, even for the three dimensional financial transactions account and for the three dimensional balance sheet, the "transaction" basis would be used In the System.

March, 1988

The question had been raised as to whether the transaction principle or the debtor/creditor principle should be used as a basis for recording the financial account. The debtor/creditor principle may sometimes be conceptually preferable, but often it is less practical to implement as often in secondary markets the debtor neither knows nor is interested in who the creditor is. The transaction basis links the two units involved but adjustments are needed in order to get full links to the balance sheet. The transaction principle will remain the basis of the recording in the financial account.

G. Measuring the output of banks

1. At the external sector meeting

March, 1987

If it is recognized that a part of the output of the banking industry represents final demand, should an adjustment to interest payments should be made in order to differentiate between factor income flows and nonfactor services. This is, of course, a much wider issue than that determining the correct entries for the balance of payments and will, therefore, have to be examined by other expert groups however, the issue does seem to be particularly important for countries with important external banking activities.

The Group noted the substantial impact of the treatment of banking services on the external sector of the national accounts and on the balance of payments and strongly advised that the Group on Production Accounts and the Group on Financial Flows give due consideration to that impact in working out a revised treatment. These Groups may find the IMF paper "The Treatment of Output in the Banking Industry" useful in this work. The balance of payments experts noted their willingness, in principle, to accept, if necessary, imputations and adjustments to interest flows as part of a harmonized treatment.

2. First substantive discussion

March, 1988

The services provided by banks can be grouped under three main headings

1. providing the medium of payments,
2. intermediation between borrowers and lenders and
3. specialized financial services.

The first question is how to separate the transactions relating to each of these types of services and the second question is how to allocate them among users. The present SNA assumes that all these services are absorbed by enterprises and so the adjustment is simply a deduction from value added calculated before making allowance for bank service charges. The question for consideration was whether this deduction overstated the appropriate allocation of these services to enterprises given the amount of services rendered to final demand including exports.

Despite the plethora of literature on this subject, the participants felt that a clearly acceptable means of measuring bank output has yet to be articulated. It was generally felt to be inappropriate to refer to imputed output of banks. The output of banks was real, it was only the means of measuring it that had to be imputed. At present, there are two main alternatives that may be used. The first is the existing SNA treatment where the difference between interest paid and interest received is assumed to be a proxy for all the (implicit) services provided by banks. The second is to build up an account from the cost incurred by banks in producing these services including the purchase of goods and non-factor services, wages and salaries, consumption of fixed capital, taxes linked to production, etc.; this alternative requires a solution to the difficult problem of measuring the net operating surplus of banks.

It was noted that associated with the technological change in the industry there was a tendency to move towards charging for individual services explicitly and it was felt that this may hold promise for developing more specific and relevant indicators of the services provided by banks in the future. Until this could be done it was generally felt that it was appropriate to maintain the present practice of measuring the services by the single global measure of the difference between interest paid and received but given the internationalization of banking activity, applying this as a single adjustment to enterprise output was felt to be inappropriate. In the future the adjustment therefore must be allocated across categories of final demand and across industries within intermediate demand. The consequence of attributing some banking earnings to exports implies that similar adjustments must also be made to imports for those countries that are net importers of bank services, an adjustment which would be difficult to calculate on the basis of information on domestic banking practices and costs.

It has been suggested that pending the development of a more comprehensive methodology, allocation of service charges between industries should be on the basis of the sum of deposits and loans. This in turn could produce anomalies for the banking sector itself since because of their large deposits they may account for 50 per cent of the difference between interest received and paid. The question of the appropriate treatment of capital gains and losses on deposits and loans was also raised without resolution. The allocation of the use of bank services to households also raised problems since some of the services will be used by unincorporated enterprises, particularly in relation to the ownership of dwellings. Given the earlier decisions to calculate production accounts for both institutional sectors and establishments, the question of having consistent treatment of the imputed bank service charges between production and income and outlay accounts was raised. The imputation will carry through to the income and outlay account since the separation of existing interest flows into costs which appear in the production account and reduce operating surplus, will also reduce interest payments in the income and outlay account. similar adjustments of course would be made to receipts of interest.

The group summarised its conclusions as follows:

Banks produce genuine services; the problem is to measure their output.

There is a need to examine carefully the activities of banks in order to determine precisely what services they provide and to develop statistics to measure and value them. In the immediate future, indirect methods may have to be used to measure bank services globally. and the group favoured retaining the valuation method used in the present SNA.

Some participants felt that it could be preferable to value output as the sum of costs. The difficulty with this approach is to define and measure bank profits.

Bank service charges should be allocated to intermediate consumption of producers including producers of non-market) government services, to final consumption of households and to exports and imports.

Bank service charges allocated to intermediate consumption should be broken down by kind of activity in the i/o framework.

Allocation of bank service charges between all these various uses should be based on meaningful economic indicators. Until a better solution can be found, the allocation could be based on the sum of deposits and loans.

In the income and outlay accounts interest flows should be adjusted accordingly: interest received by depositors will be increased and interest paid by borrowers will be reduced) by the value of the service charges they are deemed to have paid. A supplementary table will show what adjustments have been made.

A comprehensive study on banking output and interest flows is required in the light of which the conclusions in para. 37-42 will be re-examined.

Despite the fact that these tentative conclusions were reached by the Expert Group there was a considerable feeling of unease that there may be problems with their implementation which had not yet surfaced. The Expert Group therefore urged very strongly that a new and comprehensive study on banking output and interest flows be produced in the light of which the foregoing conclusions could be reviewed. Among other subjects this comprehensive study should cover explicitly the following items:

1. banking production of non-banks,
2. subsidies and taxes on interest paid,
3. the relationship between bank profits and operating surplus with particular reference to capital gains and losses and the provision for bad debts,
4. the possibility of distinguishing the type of services provided by banks and the recipients of these services,
5. application of these principles to different types of institutions including the central bank,
6. measurement of imported bank services especially for highly indebted nations,
7. the treatment of property income earned on bank's own funds,
8. the separation of bank service charges between household consumption and intermediate consumption of unincorporated enterprises and
9. the treatment of index linked financial instruments.

The study should try to take note of the apparent conflict between presenting data on the banking sector that is analytically useful and in a way that is consistent with national accounts methodology for other aspects of the economy.

Constant price output of banks

The difficulty of measuring bank output at current prices is compounded when attempts are made to derive constant price volume measures. Two alternatives are available to the compiler either to try to deflate that current price figure by some price index which may produce fluctuations in the constant price measure which has odd implications for productivity changes or one may try to project constant price measures using volume indicators directly. This may resolve the productivity change problem but only at the cost of implying unrealistic price indices when current and constant price measures are contrasted. It was generally felt that until better resolution of the current price measurement problem is available the less unsatisfactory approach to take with constant price output measures was to extrapolate a base figure using volume indicators.

If bank services are measured by global indirect methods (as proposed for the time being) there is no natural price index available to deflate them. Constant price output should therefore be derived by extrapolation with volume-indicators.

3. *The first coordinating meeting*

January, 1989

The meeting returned to the vexed question of how imputed bank service charges should be valued in the SNA. Although in discussion many references were made to banks, the output of banks and imputed bank service charge it was recognised that the Financial Flows meeting in September 1988 had suggested that the term "bank" be dropped from the new Blue Book. The term "depository institutions" will be used instead of "banks" and the activity of banks will be described as financial intermediation. This activity is undertaken by financial intermediaries which include, but are not confined to, depository institutions.

Services directly charged for

The discussion on banks in the present Blue Book implies that intermediation between borrowers and lenders is the primary function of banks and it is therefore appropriate to calculate the output of the industry as the difference between interest received by the banks and interest paid by them. This rather simplified picture of banking activity is no longer appropriate in the late 1980's. The services provided by financial intermediaries can be grouped under three main headings: (i) providing a medium of payment; (ii) intermediation between borrowers and lenders; (iii) specialised financial services. Increasingly the third of these is being financed by direct fees levied in respect of the services provided and this part of their activity should obviously be measured in the conventional way of measuring service output. However, there remains the question of how to add an adjustment for the service of intermediation per se and though the discussion focussed around this activity it was understood that this was to be in addition to direct fee services and not a replacement for them.

Treatment of own funds

Although imperfect, it remained the view of the experts in earlier meetings that the output of intermediation was best measured as the difference between interest paid and interest received. The 1968 SNA suggests that property income financial intermediaries receive as a result of investing their own funds should not be taken into account in calculating the imputed service charge but it goes on to recognise that in practice it may be impractical to separate this property income and exclude it. The question was

therefore raised in the paper before the meeting as to whether the new Blue Book should continue to make this recommendation or should simply accept that income from investment of own funds should be included with other property income in calculating the imputed service charge.

The point was also made that it is not just as simple as viewing banks as holding their own funds plus funds of depositors. Banks may also incur loans on their own behalf and the flows associated with these loans as well as bank's own funds should be excluded from the imputed service charge associated with intermediation between depositors and borrowers.

There was universal agreement that in principle the calculation of the imputed service charge of financial intermediaries should exclude the effects of property income earned and paid by them in respect of their own investments and loans. The question is how to recommend this should be done in practice. Because of the unity of the balance sheet it will not in general be possible to identify how much interest earned is due to the bank's own funds and how much is due to the deposits of customers. An alternative way of approaching the problem therefore is to take total interest earnings including the property income of banks but deduct not only interest paid to depositors but also the corresponding outgoing in relation to the bank's own funds. The suggestion in the paper before the meeting was that the appropriate deduction would be dividends paid by banks. Discussion revealed however that this was felt to be unsatisfactory. Two banks whose transactions were equal in all other respects but one of whom retained more earnings than the other would therefore, according to this proposal, have quite different imputed service charges. It was felt quite inappropriate that the measure of the service provided should be affected by how profit was allocated. An alternative proposal therefore was that both dividends paid and retained earnings should be deducted along with interest paid. The group had some misgivings with this proposal also and suggested as an alternative that it might be possible to calculate the average cost of borrowed resources and apply this to the bank's own capital and add this adjustment to interest paid to lenders.

At this stage in the discussion the participants were agreed that **the imputed output of financial intermediation is to be measured by deducting from property income received by financial intermediaries the interest paid on deposits, bonds and bills issued. In principle income from the investment of their own funds should be excluded from the measure of their output.**

In the case of international banking centres the role of income imputed to foreigners as reinvested profits also needs to be taken into account.

Holding gains and losses, bad debts and defaults

The meeting then turned to consider the position on holding gains and losses, provision for bad debts and loan defaults in banks' accounts. The way these are treated affects the way of recording interest in the income and outlay account.

Some commentators have suggested that holding gains and losses and debt provision should be taken into account in the measurement of imputed bank services in order to bring the net operating surplus of financial institutions as shown in the national accounts closer to the net profit figures recorded in the financial institutions' own accounts. In the light of the discussion at the Financial Flows meeting in Washington, however, it was felt that this was not an appropriate treatment to be adopted in the national accounts where

consistent rules have to be applied not just to financial institutions but to other economic units.

A further complication arises where banks may be borrowing in foreign currency. When the transactions are converted back to local currency after currency fluctuations have taken place this may often result in apparently negative service charges. In such cases it was felt that interest should be calculated on the basis of the original capital and not on its revalued level based on a new exchange rate. In this case what appeared as an interest payment was in part a capital loss.

Measurement of the output of financial intermediaries should not be adjusted for capital gains and losses, provision for bad debts and debt write-off.

Secondary production

In the 1968 SNA the financial institution sector is defined in such a way that only this sector can provide bank services. At the Financial Flows and Balance Sheet meeting it was agreed that it was possible to have unincorporated financial institutions and these would fall within the household sector when they could not be treated as quasi corporations. Given the intention to treat separately (at least conceptually) bank services paid for by a direct fee and the process of intermediation it is possible to think of some other units, for example part of government, undertaking some financial intermediation as a non-principal activity. In the light of these two decisions it was felt inappropriate to confine the imputation for service charge for financial intermediation to incorporated financial intermediaries. In principle all units undertaking financial intermediation should have an imputed service charge calculated in relation to this activity. In practice of course this may be difficult or negligible but in principle there is now no need to restrict the function of intermediation to the sector of financial institutions.

Estimates of the output of financial intermediation should be made for all units involved in financial intermediation.

Allocation of charges

The next point for discussion was the major issue of how the imputed service charge for financial intermediation should be allocated across sectors of the economy once determined. The first aspect discussed concerned the treatment of imported bank services. The meeting confirmed the decision made earlier that the logical consequence of treating some service charge as exports is that imported service charges will also be recorded. Within the balance of payments accounts these will then be treated as factor rather than non-factor services. This will alter the levels of GDP and GNP but will leave the current account balance in the balance of payments unaffected.

Attribution of some imputed service charges of financial intermediation to exports implies that imports of such charges should also be recorded where appropriate.

A paper before the meeting contained an example of the allocation of service charges across sectors. This followed the proposal put forward in the Production Accounts meeting that the allocation should be done in proportion to the amount of loans, deposits, bills and bonds attributed to each sector. The meeting felt that this approach was over simplistic. It made no allowance for the fact that interest rates vary considerably across the class of customers and that the use of the services provided was not evenly distributed across customers.

It was recognised that despite the increasing practice of charging directly for specific services the difference between interest paid and interest received at present still covers some free services as well as intermediation. Not all borrowers benefit equally from these free services and this may be reflected in different rates of interest being charged. In particular borrowing and lending between banks is likely to include less of a service charge than borrowing and lending to households, for example. As well as the degree of services incurred by various classes of borrowers there is also the question of risk so that, for example, government is generally regarded as being a very good risk and therefore borrows at a preferential interest rate compared with commercial borrowers.

There was the further point that as far as international flows were concerned no allowance was made for the fact that much international lending to specific countries is at concessional rather than commercial rates of interest.

Services to consumers and unincorporated enterprises

There was also discussion about the appropriate treatment of interest paid by the household sector. Households may borrow money either to finance private consumption or to finance the purchase of a house or in relation to unincorporated businesses. It is because of the difficulty of disentangling accounts for these three types of activities that all are included in the household sector. Nevertheless with the proposed change in the treatment of interest service charges it is important to attempt to separate these since interest service charges in relation to unincorporated enterprises and owner occupied dwellings would count as intermediate consumption where interest service charges in relation to final consumption would itself be treated as final consumption. A proposal in the paper presented to the meeting was that all loans to households should be considered as corresponding to their domestic life. This was not thought to be appropriate and for some countries, especially developing countries, it was felt that it would be possible to make a separation. In many countries it is possible to separate house mortgages from other loans but there may be a problem with interpretation. The banks are moving towards an interest in supervisory rather than analytic classifications and thus they may be able to distinguish that a loan is secured against a house rather than that it is being used for house purchase.

[A] paper [will be prepared to] address how the allocation of imputed service charges of financial intermediation between categories of final demand and intermediate demand and the calculation of such imported services is to be undertaken. This includes the separation of attribution to households as producers and as consumers.

The discussion then turned to consideration of how far the imputed bank service charge should be allocated among consuming units. One possible simplification was to suggest that categories of final demand should be identified separately but that as far as intermediate demand was concerned an attempt should be made only to separate market from non-market producers and unincorporated from incorporated enterprises. A number of participants felt that this might be all, in practice, that many countries could achieve but this should not appear in the Blue Book as a possible recommendation since this would discourage a full breakdown. It was felt that in principle it was correct to encourage countries to allocate intermediate consumption across all kinds of activities so that the interest charges paid could appear as intermediate consumption.

In principle the attribution of imputed service charges of financial intermediaries to intermediate demand is to be allocated among all producers.

Consolidation

A related problem concerned the degree of consolidation that should be shown in the accounts. This is particularly acute in respect of the financial institutions sector. Three possibilities exist,

1. to consolidate out all interest payments and interest receipts among the sector,
2. to do no consolidation and
3. to consolidate only at the level of the sub sectors agreed in the Financial Flows meeting.

Some consolidation is already implicit in the recommendation that the imputed service charge be calculated as the difference between interest receipts and interest payments. Given the extent and variability of the amount of refinancing that goes on within the sector there was some sympathy for the idea of extending consolidation in this account although it is a practice not generally to be recommended throughout the Blue Book. On the other hand, given the desirability of establishing full accounts for the sub sectors agreed at the Financial Flows meeting it was felt that consolidation should not be carried out between these sub sectors. Nor across the division between public and private sub sectors of the economy.

A similar problem on consolidation related to the government sector in respect of on-lending that may be undertaken, for example from central to local government. This could be particularly important given that under the new recommendation an increase in government interest payments will lead to an increase in GDP unless this is offset by interest receipts or imported service charge for financial intermediation.

The paper [mentioned before] will also consider to what extent data for each of the financial corporation sub- sectors should be consolidated. There should be no consolidation between the sub-sectors agreed to at the Financial flows meeting nor between public and private sub-sectors.

These points concluded the discussion on the treatment of the output of financial intermediation. Two points, however, that had been raised at the Production Account meeting were not discussed and remain outstanding. The first of these is the time of recording interest payments and the second is the appropriate treatment for taxes and subsidies levied in respect of interest. Should these be treated as taxes on production or taxes on income?

The questions of time of recording of interest flows and whether taxes on interest are taxes on production or on income were deferred.

4. *The third coordinating meeting*

September, 1989

Discussion was based on the paper prepared in response to the request above and another written by Statistics Denmark. Although there were differences of detail the two papers were basically agreed that the use of a "pure" interest rate was the appropriate way in which to allocate the service charge across users. Discussion of the two papers fell into three sections; firstly, a reconsideration of whether income from the investment of

own funds should be included in the output of financial intermediaries; secondly, how the risk element in lending should be treated and thirdly, practical problems with defining the appropriate “pure” interest rate.

Own funds

The group's decision taken most recently in January 1989 in Luxembourg that income from the investment of own funds should be excluded was reiterated. The function of financial intermediation is to match borrowers and lenders. If financial intermediaries were regarded as providing output on the investment of their own funds then so would other lenders generate output. This leads to a form of analysis advocated among others by Preetam Sunga, an approach which has been (as yet) rejected by most national accounts practitioners not least because multiple on-lending would give increasingly higher income output and consumption.

The Group confirmed that income from investment of own funds is not taken into account in calculating the output of financial intermediaries.

Risk

The paper from Statistics Denmark suggested using a “pure” interest rate as the basis of allocating service charges but wanted to identify and exclude a risk element which they referred to as an insurance element. Two possible ways of doing this were suggested; one to deduct write-offs of bad debts, the other to compare the interest rate on bank loans with that earned by an issue in the market. This was described as being ingenious but not practicable because households, for example, do not issue bonds and there would be problems for non-residents also. There is often a long interval between default and the writing-off of bad debts; this would give rise to problems in identifying when loans were written off and could lead to erratic fluctuations. The allocation across sectors would be difficult; should it be allocated across all sectors or to the sector of default? If the latter this could result in negative service charges occurring, increasing the output of the counterpart sector. On the whole it was felt that the parallel with insurance was misleading. Banks are not offering insurance as such except as a secondary service. The risk element is part of the cost of financial intermediation. For insurance companies if there is a claim it comes out of their technical reserves and only when the pool is exhausted is the default a claim on the insurance company's capital. For banks the opposite is true. Debts are written off against the bank's own capital, the funds of depositors are at risk only in the last resort. Some banks offer incentives to low risk borrowers so if a special allocation for risk was to be made this would be needed in both directions. On balance therefore the group came down in favour of not making an allowance for the risk element in borrowing. This meant that a higher rate of interest charged implies a different level of service with more service being rendered to the borrower at the higher interest rate. This was recognised as being an approximation which will not always reflect reality. For example, all credit card holders receive the same service though those that pay on time pay less interest (none) than others. While noting these imperfections, actual interest rates paid remain the best indicator to use as a proxy for the service rendered.

Introducing a reference rate

There was considerable discussion about how the “pure” interest rate should be determined. Two different situations were cited where more than one interest rate would need to be applied. The first of these is where borrowing and lending in respect of specific instruments is separable from other borrowing and lending. The case of

marketable securities was quoted as an instance in point. The interest rate applicable to these securities may be different from the "pure" interest rate applying to borrowing and lending more generally. The second instance is where government controls exist to fix rates to particular types of customers. The case of India was quoted where lending to agriculture concerns is kept at an artificially low rate by regulation. This is equivalent to cross subsidisation between type of customer and the concept of a "pure" interest rate in these circumstances is difficult to apply. It was therefore suggested that instead of using the term "pure" interest rate the exposition should be in terms of a reference rate. In principle the reference rate would be a relevant market rate which in some cases might have to be approximated by rates on inter bank loans or central bank lending rates. A similar but more extreme position to that cited for India was in centrally planned economies where banks administer government policy and do not operate in a free market sense. Some participants argued that in these conditions banks should be treated as part of general government rather than as financial intermediaries, though this is not the present position of the SNA or the IMF's Money and Banking and Government Finance Statistics.

For non-domestic lending and borrowing it would be appropriate to determine a reference rate for each currency. Questions were raised about how concessional loans should be handled and more generally about how estimates for imports of financial services should be made.

The imputed service charges will be allocated to users according to the difference between the interest rate actually received or paid and a central "reference" rate.

The "reference" rate is, in principle, a relevant market rate.

Bonds

There was discussion about the appropriate interest rate to be used in connection with issues of bonds by financial intermediaries. One option would be to assume that the whole return on bonds is "pure" interest, that is that no services are rendered in respect of bonds. It was felt that in some circumstances this would be the appropriate procedure. Banks have three types of liabilities: deposits, bonds issued on the market and loans received. Except in the case of depositors it is difficult to say that the receiving bank offers a service to the lender and this may be another case where a nil service charge is appropriate.

Consolidation

The last point for discussion was how far interest payments between financial intermediaries should be consolidated. Although the January meeting in Luxembourg had said that consolidation should not take place, at two subsequent meetings, one each at Eurostat and OECD, the separate working parties on national accounts had said that consolidation was desirable. Interest payments between banks do not affect the level of output. If the service charge is to be distributed in proportion to interest paid and received using a reference rate it is possible to allocate a service charge to the sector but it is impossible to determine which bank produces and which consumes the service on the basis of the data alone. Because of the difficulty in interpreting this result it was therefore suggested that consolidation should take place. While this is true for a sub sector taken as a whole it is not true for any given financial intermediary where it would be possible to determine a measure of output taking into account interest payments and interest receipts for that one institution. In general it was agreed that consolidation would take place within the sub sectors of the financial corporate sector defined at the most detailed level

but not above this. This means, for example, that no consolidation would take place between public and private institutions at each level of the hierarchy.

The imputed service charge of financial intermediaries will be consolidated only within subsectors of the financial corporate sector defined at the most detailed level.

5. *The regional commission review*

April, 1991

Two broad topics that were raised in Regional Commission meetings were addressed under this heading: 1) the measurement of output of particular financial agents including money lenders, development banks, and central banks; and 2) the allocation of the output of financial intermediaries among users.

The group reaffirmed the position that the imputed output of financial intermediaries with respect to their intermediation activities is estimated **by their total property income received (excluding property income received from the investment of their own funds) minus their total interest payments.**

With respect to lenders, the group agreed that money lenders who incurred liabilities to mobilise funds were financial intermediaries and their output should be measured according to the same rules as other intermediaries. For money lenders who made loans from their own resources, there were several positions. Some experts felt that lending per se did not constitute the provision of services so that lenders from their own resources are not involved in productive activity. However, a majority of the group agreed that professional money lenders should be treated as producers of services provided that the service could be identified. There were no specific proposals as to how to measure output of these money lenders.

The group agreed for development banks that the criterion adopted by the Financial Flows and Balances Meeting for separating development banks from government was appropriate and adequate. The group also agreed that the transactions of development banks as such did not raise problems with respect to the measurement of output. As with other financial intermediaries, the imputation is only related to on-balance sheet assets and liabilities.

Concerning the financial intermediation activities of central banks, the group agreed that the output of these institutions should be measured in the same way as for other intermediaries, although it was recognised that the nature of central banks could lead to some extreme measurement results in some cases.

Concerning the allocation of the output of financial intermediaries, the group agreed that the Blue Book should advocate the allocation of this output among users as had been decided by previous meetings rather than reverting to the previous 1968 SNA treatment. The group recognised that definitive guidelines for carrying out this allocation had not been developed, but the Blue Book should suggest possible allocations according to a reference interest rate, according to sectorized assets and liabilities, or according to particular national practices.

6. *Final ISWGNA deliberations*

December, 1992

The most difficult controversial item to resolve was the appropriate treatment for the imputed service charge for financial intermediation. All the organisations recognised that the treatment of the 1968 SNA was deeply unsatisfactory from a conceptual point of view. Equally, there was recognition that there is some dissatisfaction with the present proposal and the full implications have not been fully worked out. The decision on whether to stand firm on the present recommendations or to revert to the 1968 treatment essentially came down to making a judgement between conceptual and practical considerations. Three organisations (IMF, World Bank and UNSTAT) felt that the existing proposals should stand. One of the major contributions in the revised SNA has been to develop more fully the financial accounts and it would be inconsistent not to pursue the allocation of the charge for financial intermediation in this context. The view of Eurostat, however, was that more weight should be given to the remaining practical problems. It was not clear how to deal with imports or how to calculate the allocated service charge at constant prices. It was not clear that any allocation was better than none. The Community countries are deeply opposed to the inclusion of an allocation at this time before the resolution of such issues and it is, therefore, likely that the revised ESA will not contain a recommendation to allocate the output of financial intermediaries. A divergence between the ESA and the SNA would be highly regrettable as was the divergence between the SNA and the recommendations in the Balance of Payments manual. On balance, therefore, the Eurostat recommendation would be to revert to the 1968 treatment. OECD also had reservations on practical grounds, and initially suggested that the SNA should contain the 1968 treatment initially, but with an indication that this was an item that deserved high priority for review and that a change should be expected in the near future when all the implications and practical considerations had been worked out. However, given that all members of the Group suggested that such a research activity was a very high priority and should be carried out regardless of the recommendation in the SNA, OECD agreed to concur with the other three institutions that recommended keeping the changes proposed in the draft SNA intact. It was agreed, however, that some modification of the language used in the draft would be in order, with less emphasis placed on the reference rate and more on alternative means of carrying out the proposed recommendations.

The topic of FISIM probably occupied more time of the expert groups than any other item. At one level it was not controversial; everyone agreed at a very early stage that in principle it should be allocated amongst users. The problems were all to do with the practical difficulties of effecting this. The draft submitted to the UN Statistical Commission in February 1993 contained only the proposal to allocate FISIM to consuming units. The representative of Eurostat, speaking on behalf of Member states, said this proposal was unacceptable as it stood. As a compromise, it was agreed that the Blue Book would permit alternative treatments, one allocating FISIM to users and one retaining the notional sector treatment of the 1968 SNA. This is the only area in the 1993 SNA where such explicit alternatives are offered. Work continues on how to improve the measurement of the activities of financial institutions.

H. Insurance

1. BPM considerations

March, 1987

The problem with insurance is that premiums and claims are entered on a net basis in the service account in the balance of payments. This may produce peculiar fluctuations in the series on services for casualty insurance, depending on the claims experience. (It was suggested that one way in which problem could be addressed would be to consider claim payments for major disasters as a contractual transfer, rather than as a negative service charge).

A further complication is that the gross premium for casualty insurance comprises two elements; a service fee, which is the gross output of the insurance sector and a net premium covering the insurance risk. For life insurance, the gross premium has a third element, representing an addition to actuarial reserves.

It was suggested that it might be possible to adopt a simplified solution for life insurance, where the flows are usually small. Another point mentioned was the impact of net insurance data (premiums less claims) on the c.i.f./f.o.b. adjustment for merchandise trade. Probably when going from a c.i.f. basis of imports to an f.o.b. basis, one should, in addition to adjusting for freight costs, deduct gross insurance premiums and add back the value of losses.

The Group saw the possibility of harmonization with regard to casualty insurance by approximating the service charge as a percentage of the gross premium. However, the Group agreed that it would be inappropriate to recommend that treatment until a full evaluation of the treatment of the complex of insurance transactions, including those related to life insurance and pension funds, would be in place. The Group, therefore, forwarded the matter to the Group on Production Accounts, the Group on Financial Flows, and the Group on the Household Sector Accounts and Income Distribution Statistics for an examination of the relevant issues, including the issues pertaining to the treatment of insurance on imports in the input-output table.

2. The financial flows meeting

September, 1988

Discussion of this item focused on the background paper on "A Further Look at the Treatment of Insurance in the SNA. " This paper noted that the SNA records insurance premiums when they are due to be paid, while ESA records them when they are earned. According to the SNA, insured sectors have no claims against insurance companies since claims are recorded only when paid; according to ESA, insurance companies have liabilities to the different sectors comprising prepayment of premiums. The paper proposed that the SNA follow the ESA treatment because it is more consistent with the analysis of insurance transactions and with the way insurance companies view their positions; if it were decided to change the SNA, then a new subcategory should be created under "insurance technical reserves".

It was pointed out that the above-mentioned treatments in ESA and the SNA also apply to insurance claims. There is no implication for the existence of liabilities of insurance companies but just a difference in the amount of claims. However, the part of claims that is not yet paid is classified by the SNA under "other accounts receivable/payable", while

in ESA it is treated under a subheading termed "insurance technical reserves". The paper proposed that the SNA adopt the ESA treatment and that, within the classification of financial instruments, it would be necessary to create a broad category termed "insurance technical reserves".

The Group was in favour of the proposals made in the background paper and recommended that **for casualty insurance, premiums should be recorded when earned¹³ (not when due) and claims should be recorded when the event occurs (not when payments are agreed). This treatment requires the recognition of prepayments of premiums and reserves against unsettled claims. In the instrument classification, these items would be part of a new category, insurance technical reserves, covering casualty as well as life insurance.**

The Group discussed the question of terminology in the area of casualty insurance and concluded that, since a satisfactory term could not be found, the term "casualty" would be retained. It was agreed that the revised SNA would provide a clear and comprehensive description of the coverage of the "casualty insurance" item.

The Group agreed that a thorough review of all aspects of insurance would be undertaken at the next Expert Group Meeting.

3. First coordinating meeting

January, 1989

The paper "A further look at the treatment of insurance in the SNA" had been tabled at the Financial Flows meeting in September 1988 but due to pressure of time could not be discussed in full and had therefore been referred forward to this meeting.

Time of recording

The first question to be discussed was whether premiums should be recorded as they are paid or as they are earned and whether claims should be recorded when agreement is reached or when the accident occurs. It was agreed that the correct time of recording was as premiums are earned and when accidents occur and that any adjustment between these sums and estimates of premiums paid and claims paid should appear under the heading of insurance technical reserves.

Third party risks

The second point to be discussed concerned risks run by third parties. The 1968 SNA recommends that claims should be recorded first as payments to the policyholders and secondly as transfers from policyholders to injured parties. While this is in line with the law on liability it was not felt appropriate for the national accounts and the SNA should be changed so as to show the claims being paid directly to the units which are the ultimate beneficiaries. This represent a change to the SNA but brings it into line with the practice recommended in ESA as is the case on the proposals above on time of recording.

¹³ In this context premiums earned means that part of the premiums paid which is intended to cover the risks during the relevant period.

Measuring output

The 1968 SNA determines the output of casualty insurance as being the difference between gross premiums paid and the payment of claims. This assumes that no reserves are built up by the insurance companies in relation to casualty insurance but this is clearly not the case. These reserves remain a liability of the insurance company but are used to generate income and the existence of this income causes the level of gross premiums charged to be lower than they would be if there were no such investment income. By ignoring the investment income very often the gross operating surplus for casualty insurance appears to be negative. This is clearly unrealistic and an unsatisfactory entry in the national accounts. The alternative therefore is to add some part of this investment income to the measure of insurance services. The question before the group was how this was to be done. The proposal in the paper is that insurance services should be defined as gross premiums earned plus the net income from investment of technical reserves less technical charges. The net investment income represents the difference between the income from all investments and the costs incurred for such investments including interest paid by the insurance companies in connection with re-insurance. Technical charges are defined as the claims due plus the changes in technical reserves. By adopting this approach the same principle can be used for casualty and life insurance though in this case technical reserves include not only the change in actuarial reserves but also the reserves for with profits insurance less the capital gains and losses allocated to the insured.

At a meeting of Eurostat national accountants this paper had been discussed and about half of them were in favour of the proposal as presented. The other half were inclined to view the investment income as being analogous to bank output and felt it should be treated in a similar way. This latter option, however, would not solve the problem of anomalous measures of gross operating surplus and valued added for insurance services and possibly for constant price measurements. It should be recognised that management of financial resources is intrinsic to the activity of insurance and therefore should be treated as part of their output. A question was raised about the parallel with bank output where it had earlier been decided that investment from the bank's own funds should not be included in the measurement of output. It was pointed out that in this case the funds being invested are not the property of the insurance company but represent a liability of theirs. Any income from the own funds of the insurance company should be excluded as is the case with financial institutions.

For both life and casualty insurance, the service charge will be defined as:

Gross premiums earned + net income from investment of technical reserves less Claims due excluding Changes in technical reserves and reserves for with profit insurance net of the Capital gains and losses allocated to the insured included in these technical reserves.

Holding gains and losses

There was then discussion about how holding gains and losses in respect of the technical reserves should be treated. There was some uncertainty about how technical reserves are recorded in company accounts and to what extent holding gains and losses are included in the figures recorded there. It was thought that for life insurance it should be possible to identify the holding gains and losses attributed to insured persons and these should be deducted from the calculation of insurance services as indicated above. For casualty insurance it was felt that in practice it would be difficult, if not impossible, to identify holding gains and losses. On the other hand, it was possible that such gains and losses

did affect the figures as recorded. It was agreed, therefore, to adopt the proposal above as the working hypothesis for the time being but the matter will be reviewed in July especially when those in OECD concerned with the measurement of insurance industry have had a chance to consider this paper and comment on it.

There was then discussion about where the holding gains and losses allocated to insured persons should be shown in the accounts. At present the SNA says that all of the reserves of pension funds should be treated as reserves of the insured persons. M60 makes a division and says that the reserves of the pension funds in excess of the liabilities to contributors should be treated as assets of the pension funds. After some discussion it was agreed that the M60 treatment is to be preferred and should be adopted for the new SNA. The holding gains and losses should be shown in the reconciliation account.

The reserves of pension funds in excess of liabilities to contributors will be treated as assets of the pension funds and not of the contributors.

Allocated capital gains and losses should appear in the reconciliation account.

Capital losses

There was then discussion of how claims on casualty insurance for capital losses should be treated. Payments by insurance companies under casualty insurance are treated as current expenditure and in the case of small claims will be current income for the recipients. There is a question, however, about whether an insurance payment in respect of a large capital loss should show as capital inflow. This raised the old problem of whether transfer payments need to be treated symmetrically between recipient and payer, a point that was raised subsequently in the meeting in the more general context. The point that was being made here was that if some claims should be seen as being capital inflows then perhaps net insurance premium should be seen as capital outgoings. This would, however, have the undesirable effect of apparently inflating savings unnecessarily. It was noted that in this respect the macro economic solution adopted by the SNA may give undesirable results for data compiled either at a micro- or meso-level. After some inconclusive discussion it was agreed that the problem being addressed here was a much more general one about how to distinguish current from capital transactions and that while agreeing to treat the payments here as current transactions the matter should be raised again when this topic was discussed later in the meeting.

All insurance premiums and claims for casualty insurance are to be recorded as current transactions.

To re-establish the identity between net premiums and claims in respect of casualty insurance, the net income from investment of technical reserves will be shown as distributed to policy holders and returned by them to the insurance enterprise, as is done for life insurance.

Insurance on imports

There was then discussion about how imports should be adjusted from a c.i.f. to an f.o.b. basis taking into account the decisions made above on insurance. At the expert group on the External Sector it had been agreed that it would not be possible in general to get an f.o.b. value for each category of imported goods so that a global adjustment would have to be made. The proposal being made now was that in order to calculate insurance services in respect of imports the income from investment of reserves should be ignored.

The appropriate service charge would then be calculated as gross premiums less the value of imports lost in transit and these would be approximated by the claims.

Service charges on imports are to be calculated as gross premiums less value of imports lost in transit (which can be approximated by claims).

4. *The regional commission review*

April, 1991

Misunderstandings arose in some Regional Commission meetings concerning the inclusion of holding gains and losses in the calculation of the output of insurance companies. The draft SNA will make clearer that the holding gains and losses are not included in output but must explicitly be taken into account in the calculation of output in order to eliminate them if they are included in technical charges (claims and changes in actuarial reserves and reserves for with-profits insurance policies)

Chapter 9. Non-financial assets

At the beginning of the revision process, it was assumed that there were few questions for discussion concerning non-financial assets, only a few points of detail requiring clarification. As the revision progressed, it was seen to be desirable to derive a general definition of an asset and to consider a number of areas where potentially large changes might be considered. These covered research and development, environmental assets and the area of intangible assets.

A. Issues of clarification and classification

1. Communal activities

June, 1986 (1)

A major issue that is not presently covered in the SNA is the treatment of communal activities. These can be very substantial and very important in Africa and Latin America. In the Congo, for example, schools are built by a collection of households who then combine to pay the teachers; other example were quoted where communal activities are used in the building of roads and bridges. It was agreed that these activities should be included in production but when they resulted in the construction of fixed capital, there is ambiguity as to who owns these products.

Communal activities are important in several developing countries and are included in GDP. Where these activities result in the production of capital goods such as roads, bridges, schools, more guidance is needed on the allocation of the capital assets to the appropriate sector (owner). Clarification is also needed on the valuation of free labour engaged in communal activities.

2. Military durables

This area proved highly contentious, with strong feelings for both options. After a very narrow decision in 1988 on the changes to be made, the possibility of changing the decision was reviewed again towards the end of the process. Since no new arguments were advance at that time, the earlier decision was maintained

January, 1988

The group discussed whether military expenditures classified as capital formation should be restricted to dependents' housing, as in the 1968 SNA and GFS Manual, or extended to include also military hospitals structures, durable equipment used or usable for civilian purposes or for mixed civilian and military purposes, or other military durables.

It was noted that, in contrast to the SNA, the UN Handbook of National Accounting: Accounting for Production Sources and Methods recommends including certain items of a clear nonmilitary nature in government fixed capital formation, even if they are financed out of military budgets. These are family-type housing, schools, hospitals caring for civilians as well as military personnel, highways, port facilities and airports, if they are not limited to military use. It was therefore suggested at the meeting that some guidance is needed.

Two questions were raised:

1. Whether there should be a list of assets used by military and civilians, such as schools, hospitals, roads, etc., which would always be considered as capital formation.
2. Whether, when an asset is transferred from military to civilian use, requiring in SNA a reduction in consumption and a rise in capital formation, this transfer should be handled in the reconciliation account in the flow accounts. (This second question was raised at an earlier meeting in Santiago.)

With regard to the first question, several participants suggested that in order to decide whether or not to change the present treatment, which excludes military durables from capital formation, it would be necessary to know the rationale for the present treatment. It was mentioned that one possible explanation is the uncertain lifetime of military assets, which could be expended in the course of hostilities.

It was suggested that the revised SNA should present a clear definition of what is meant by military purposes and explain whether internal order should also be considered as military. A distinction also needs to be made between expenditure by the military and expenditure for military purposes.

With regard to current practice, it was mentioned that in Brazil military equipment or weapons are not included in capital formation but military buildings are, and that this treatment is also followed in Finland.

It was reported that when these questions were discussed at the November 1987 meeting of the EC Working Group on National Accounts, opinions were divided. Those who opposed changing the present treatment argued that it would be very difficult to make the change operational; those who favoured a change differed on whether only schools and hospitals used by the military and civilians should be included in capital formation or whether all military assets with possible civilian use should be included.

It was stated that the IMF's position favoured retaining the present treatment, and also that any change in treatment would cause large changes in a number of measures of government and economy-wide performance, with an extensive effect on saving. The IMF position, as stated in the GFS Manual, recommends that any expenditure by the military for civilian use should not be considered a military expenditure. It was thought, however, that the concepts of "shared use by military and civilians" or "potential use by civilians" was very difficult to identify.

It was argued that although this principle of civilian use is a good one, it is sometimes difficult to apply in practice, and that perhaps one should therefore analyze the principal use or purpose.

It was stated that the World Bank's position is also that the treatment should remain the same. A change in the present treatment would have a major impact on the way the Bank operates with its capital-output ratios and with the required saving definition.

In the ensuing discussion, the group was divided as to whether military schools and hospitals should be included in government gross fixed capital formation. It was also stated that the lifetime of military assets should not be the only consideration in deciding how to classify them, since during wartime any civilian asset, such as a building, can have

as short a lifetime as many military assets have. It was felt that whatever treatment is recommended should be the same in time of war or peace.

Following a broad exchange of views, it was agreed that many unanswered questions will need to be discussed again at the meeting of the Expert Group on Input-Output and Production Accounts. However, in order to formulate a provisional recommendation for that meeting, the members of the group voted on the following set of possibilities, going from the widest to the narrowest solution:

1. Include all expenditure on durables (including weapons) within fixed capital formation;
2. Include all construction in fixed capital formation;
3. Include all military durables that can potentially be used for civilian purposes in fixed capital formation;
4. Include all durables that are used also for civilian purposes in fixed capital formation;
5. Include all expenditure on durables which are primarily used for civilian purposes, (more than 50 percent), as well as expenditure on hospitals, in fixed capital formation;
6. Include all those fixed assets that are primarily used for civilian purposes in fixed capital formation, even if such assets are produced or acquired by military establishments (i.e., no change in the present treatment).

The majority of the group voted for the last proposal, with the understanding that it is only preliminary, i.e., that there should be no change in the present treatment but that this issue should be considered again by the Expert Group on Input-Output and Production Accounts. The provisional proposal approved by the majority includes as capital formation the construction of fixed assets by military personnel, if these assets are primarily used for civilian purposes.

It was agreed that further research will be carried out on the rationale for the present treatment and on the implications of any change in the system, with the resulting study to be presented to the Input-Output and Production Accounts meeting. In addition, users will also be consulted for their views on this question.

In the discussion of how to treat a transfer of existing assets from military to civilian use, two situations were considered:

1. When the asset is sold, that is, the change is connected with a payment of money, and
2. When there is no payment of money involved.

In the first situation, it was recommended that the transaction be treated as negative intermediate consumption of government. If the purchaser of the existing military durables is a household, the purchase should be classified as part of the final consumption of households; if the purchaser is a producer, then the purchase should be shown as fixed capital formation of the producer.

In the case where there is no payment of money involved, it was recommended that the shift of existing military durables to civilian use should be recorded in the reconciliation account.

Both recommendations were approved without further discussion.

March, 1988

The Expert Group Meeting concluded with a very lively discussion on the appropriate treatment in the new SNA of military durables. This topic was introduced with a background paper "An informal documentary history of the treatment of military durables and construction". Contact with all those concerned with earlier recommendations on the appropriate treatment of military durables in the 1968 SNA had been made in the hope to define a rationale for the present treatment. It became clear from those replies and discussion around the table that the only rationale for treating equipment bought for the armed forces differently from equipment purchased for other parts of government was the distinctive characteristic of national defence. Some participants felt that military durables do not increase the productive capacity of an economy and therefore treatment should remain unchanged. However, a number of participants felt that this argument was not theoretically robust. They said it was not clear why a computer bought by the army should be treated as current expenditure where a similar computer bought for a Statistics Office would be treated as capital expenditure. An even finer line had to be drawn in the case of an armoured personnel carrier bought for the police which would be capitalized and one bought for the armed forces which would be treated as current expenditures. They also pointed out that incorporation of military durables as capital formation would be a logical corollary of the present SNA treatment to consider production of military services as part of production of government services.

There was specific discussion about whether some assets, which are mainly used for military purposes but may also have civilian uses such as schools, hospitals, roads and some vehicles, should be treated as fixed capital. A narrow majority of the Expert Group was in favour of making this change. There were some members who would go farther than this and could see no theoretical reason for excluding any military durables and would include all of them, including armaments, in fixed capital. The alternative view point also expressed strongly was summed up concisely by saying that what was proposed was a major change, it was not demanded by the users and presented major measurement problems. Although on a vote a narrow majority favoured the centre way of making some small extensions to the definition of military expenditure to be treated as capital, in view of the importance of the subject and the divergence of opinions held, later informal discussion suggested that this was a topic which would need to be returned to in subsequent meetings.

The group was divided between those who wished to retain the present SNA treatment of outlays on military durables as consumption expenditure and those who did not. A small majority argued that at least immovable assets, such as hospitals, schools, roads and airfields which are mainly for military use but which can also be used for civilian purposes should be treated as capital formation. Some participants wished to include all military durables as capital formation.

January, 1989

The proposed treatment of military hardware whereby destructive military weapons and the equipment to deliver such weapons is treated as current expenditure but other structures will be treated as capital was confirmed by the group.

April, 1991

With respect to military durables, the apparent anomaly that use of missiles and ammunition in the gulf war did not result in current expenditure and that loss of planes and tanks did not affect balance sheets was not seen as a reason to change the recommendation.

3. Government holdings of inventories

January, 1988

An additional point discussed in connection with government capital formation was what should be included in the "change in stocks" of the government sector in the SNA. The present provision is to include in changes in government inventories only changes in strategic stocks and inventories of departmental enterprises and ancillary enterprises. The question raised was whether this concept should be widened in the SNA to include also other goods which are acquired but not consumed in the period of account. It was pointed out that information on government inventories not yet utilized is generally not available. However, in theory, such unused materials could be considered to constitute capital assets rather than consumption, parallel to unused materials in the enterprise sector.

It was agreed that in principle it would be advisable to widen the present provision for the coverage of government inventories and to include all goods, though in practice it would generally be difficult to obtain the additional information.

4. Roads and bridges

February, 1988

The 1968 SNA, while calling for calculation of the consumption of fixed capital for all assets which have finite lives, such as buildings, plants, machinery, and vehicles, excludes roads, dams, and bridges, which it assumes can last forever with normal maintenance. Experience now suggests, however, that roads, dams and bridges also have finite useful lives. The group was asked to consider, therefore, whether depreciation should be calculated for an expanded list of government fixed assets including such structures, as recommended by the Economic and Social Commission for Asia and the Pacific (ESCAP) Seminar on the Review and Development of National Accounts in 1986. It was pointed out that not all capital assets would be depreciable, as improvements in land, while forming a part of capital formation, would add to the permanent value of the land not subject to depreciation.

The group accepted the proposal to extend estimates of consumption of fixed capital to cover roads, bridges, dams and similar structures. It was agreed that even with regular repair and maintenance, structures of this kind will, in general, have finite lives.

March, 1988

The group considered the measurement of gross output of government and in particular the question of how operating surplus of government should be measured. There were two background papers "Imputed rent on government buildings" prepared by EUROSTAT and another with the same title prepared by the Statistical Office of the Federal Republic of Germany. The 1968 SNA recommends that depreciation should not be calculated in respect of roads and bridges on the grounds that the process of continuous repair makes the life length of these assets virtually infinite. It has been recognized that this assumption is not valid either because repair is not undertaken when necessary or because changes in technology tend to make the assets inadequate for future heavier use. It was therefore suggested that in the new SNA consumption of fixed capital should be calculated in respect of these assets.

Consumption of fixed capital will be calculated in respect of roads, dams, bridges and similar structures. The group agreed that even with normal repairs and maintenance, structures of this kind have finite lives.

5. Classification of items with long production periods

March, 1988

The Expert Group worked through a series of specific points on capital formation which were in the background paper "Definition of capital formation in SNA and ESA" prepared by the Statistical Office of the Federal Republic of Germany.

The topic of the first item for discussion was the appropriate treatment of work in progress in connection with the production of both machinery and equipment and buildings which may take more than a year to complete. The 1968 SNA states that work in progress on machinery and equipment is treated as changes in inventories whereas work in progress on buildings is recorded as fixed capital formation as work is put in place. In the 1979 ESA, work in progress is treated as changes in inventories if no buyer has been found and as fixed capital formation if a buyer has been found. Several participants argued against this distinction, Their case was that the assets could not be used until complete and to include them as fixed capital before completion would lead to distortion in incremental capital output ratios (ICOR's) and was misleading because the asset did not generate income until it was complete. These arguments suggested that all work in progress should be treated as inventories until complete. The definition of completeness is open to question and it was agreed that a more precise formulation was the 1968 SNA statement that these items be recorded as capital formation in the capital account at the moment when the purchasers take legal possession of the items in question. Until then progress payments should be treated as trade advances by the buyers to the producers of the equipment and should appear as financial assets in the [financial] account. It was noted that in the case of some construction works the asset goes into use before the work is fully completed and in these cases capital formation should be recorded at that time in accordance with the principles above. It was agreed that these principles should also carry over to the treatment of houses. Those that are completed and sold should be treated as capital formation. Any that are completed but not sold or any that are sold before completion should be reflected in changes in inventories.

Assets which take more than one year to complete will be included in work-in-progress (i.e. in the producers' change in inventories) until a change of ownership is recorded. This change of ownership usually occurs when the assets are put to use. This rule applies, for example, to ships, aircraft, heavy machinery and all structures. For

structures, it is assumed that change of ownership occurs as value is put in place except where no buyer exists; completed buildings remain in inventories until sold.

This treatment would carry over to major repairs of capital goods. Where these repairs took longer than a year they would be treated as changes in inventories until the repairs were complete and put in service. In connection with this and more generally it was felt it would not be helpful to mention minimum value in connection with the definition of fixed capital because it would be difficult to determine a sum that was appropriate for all countries.

The SNA will not establish a lower value limit in defining capital goods. No single value would be suitable for all countries using the SNA.

In connection with dwellings it was agreed that mobile homes and dwellings on ships should be included as dwellings as also should garages. If there is a change in use of an existing dwelling, this should be a transaction in the flow accounts for physical durables.

6. Nuclear fuel

March, 1988

On nuclear fuel, the Expert Group felt a distinction should be possible between fuel rods which could be regarded as physical durables and mineral ore but the Expert Group accepted that they were not expert in the definition and technical details of the industry. Further guidance needs to be sought from the relevant experts. Subject to such guidance, it was provisionally agreed that physical durables such as fuel rods be treated as fixed capital and the mineral ore as changes in inventories.

Nuclear fuel rods should be included in fixed capital formation. Further clarification will be sought on the appropriate terminology necessary to distinguish the physical durables ("rods") from the mineral ores.

January, 1989

OECD have confirmed that nuclear fuel rods is the appropriate terminology and that these have an average life length of three years. It was pointed out that most energy economists tend to treat fuel rods as current because they wish to compare their costs with oil and coal, the fuels used in other power stations. However this was felt not to be an appropriate treatment to carry over into national accounts. Since the fuel rods have a life length exceeding one year they should, in principle, be treated as capital. It was noted, however, that it may be difficult to obtain direct information on the value of these rods in practice.

Since these have a life length of about three years nuclear fuel rods should in principle be treated as capital in the SNA.

7. Own account capital formation

December, 1990

A question was raised about whether the elimination of inter establishment flows meant that own account capital formation would only be recorded if separate establishments were defined to cover this activity. It was agreed that this was not what was intended by

the proposal to eliminate inter establishment flows; it was only those flows relating to intermediate consumption that should be eliminated.

8. Historical monuments

December, 1990

The treatment of historical monuments and works of art give rise to acute practical problems especially of measurement. They clearly satisfy the definition of asset agreed above but attributing correct valuations to them is frequently extremely difficult if not impossible. Often such items had been produced before compilation of national accounts was undertaken but not always. Recently constructed civic monuments may fall under the category of historical monuments, for example. The meeting agreed that while conceptually such items were produced within the production boundary, they should, by convention, be recorded in the accounts as non-produced assets and thus not subject to depreciation allowances (consumption of fixed capital).

By convention, historical monuments are deemed to be non-produced and therefore no capital consumption is charged. Historical monuments may require large expenditures on repairs and maintenance and if these are included in fixed capital formation, capital consumption should be charged in respect of these outlays.

January, 1992

Historical monuments will, in principle, be included in other structures.

B. Defining an asset

December, 1990

A paper entitled "Capital expenditure and assets" was introduced. In the first section of the paper the characteristics of existing assets recognised in the SNA were reviewed in terms of a number of distinguishing features often associated with assets. The objective was to identify those characteristics absolutely essential to assets so that a definition might be derived. At the completion of this overview it was suggested that an asset could be defined as "a stock of wealth over which ownership can be established and which may be the subject of an SNA transaction in future".

In discussion reference was also made to the definition of an asset occurring in a paper on derivatives discussed later in the week which was in accordance with the International Accounting Standards Committee (IASC) which read "an asset is a resource deriving from past events and from which future economic benefits are expected to flow". It was generally agreed that there was no great difference in intent between the two formulations and the question was what sort of definition was to be preferred. The reference to future economic benefits indicated the economic justification for regarding an asset as such but was itself a rather loose form of words which in turn would require clarification if this were the basis of the formal definition of an asset. By contrast the definition referring to SNA transactions, though less informative to a general economist, aimed at limiting more precisely the entities that could be regarded as assets. It was suggested that since it is an SNA definition of an asset that is required, the definition should be expressed in terms of concepts precisely defined in the SNA.

On the whole, however, the meeting concluded that they would prefer a rather more general form of definition such as "an economic asset is a stock of value to its owner

based on current or future economic benefits that may be derived from it". This one sentence definition should be accompanied by an exposition which explains the terms used together with descriptions of conventions that need to be adopted in border line cases.

There will be three parts to the definition of an asset; a one-sentence definition, an expanded definition of the terms used in the one sentence definition and a statement of any conventions adopted to resolve border line problems.

The group agreed that the one sentence definition will include ownership and expectations of future economic benefits as necessary criteria. Most participants agreed with the following one-sentence definition: "An economic asset is a stock of value to its owner based on current or future economic benefits that may be derived from it."

C. Service output of capital formation

December, 1990

The next aspect for discussion was one that has underlain much of the discussion on the extension of the asset boundary over several previous Expert Group meetings. Could the output of a service industry be treated as capital formation? At the moment the draft SNA states that services are consumed at the moment they are delivered which precludes their inclusion as assets. The output of some service industries, however, becomes embodied in goods and thus this output could be recorded as capital expenditure. In addition the output of some service industries may be regarded as goods and thus also qualify. There was some discussion about whether architectural plans, for example, which are clearly the output of a service industry should themselves be regarded as a service or as a good. There was general agreement that such products, whether goods or services, could under certain circumstances be treated as assets since they met the basis of the definition discussed earlier. It was also agreed that some services take a long time to produce, for example architectural designs and software development, and that it would be artificial to regard all production as taking place at the moment that the assignment was complete. This, therefore, would lead to the recording of the production of such services over an extended period of time and this production would not infrequently be recorded as inventories of work in progress even though it was not wholly embodied in items that could be construed as goods.

Certain kinds of services take a long time to produce; examples include architectural design, software development and consulting services. Work-in-progress in service production, therefore, is also to be recorded as output and change of inventories by the producer of such services.

D. Capital stock and capital consumption

December, 1990

The background documents for this subject were "Proposed annex on capital stock and consumption of fixed capital" by the OECD and some sections of the paper on non-financial assets. The calculation of consumption of fixed capital serves three purposes: (1) it shows the service of capital stock in production; (2) it shows the decline of the value of assets; (3) it demonstrates how capital formation is financed. The text should spell out these functions and elaborate them. However, some misgivings were expressed about the appropriateness of supposing that consumption of fixed capital represented the services

of capital stock, for example in the case of government buildings, and it was felt that for some analytical purposes net stock rather than gross stock was more useful.

It was felt there should be more discussion on the method of depreciation and whether and when straight line assumptions were appropriate. There should also be discussion about assumptions on life length and adjustments that may need to be made for the accounts if in the event these assumed life lengths prove to have been inaccurate.

Capital consumption calculations are usually based on the assumption that the residual value of an asset at the end of its useful life is small and positive or zero. However, there are some assets, for example oil wells and nuclear reactors, where the abandonment costs involved when the asset is no longer to be used are very considerable and amount to a large negative value of the asset at the end of its life. In some cases, for example the abandonment costs on oil wells, there are legal obligations to prepare for the write off of these costs during the use of the well. Adequate treatment of these issues should also be spelt out in the annex.

The new SNA will contain an annex on capital stock and capital consumption. Further work is required on a number of detailed points including:

1. **definition of obsolescence,**
2. **capital stock statistics for use in productivity studies,**
3. **relationship between capital consumption and capital services,**
4. **methods of estimating service lives and the consequences of differences between assumed and actual service lives,**
5. **basis of calculating consumption of fixed capital (straight line or other),**
6. **allowing for abandonment costs and residual value of assets,**
7. **depreciation of transfer costs.**

E. Fixed capital by owner and user

The 1968 SNA does not include explicitly data on capital stock. In the balance sheet assets are recorded but net of depreciation and at current prices. Capital stock information should be gross of disposals at constant: prices or at current replacement costs and for analytic purposes should be linked to the user and not to the owner of the capital stock. The decision taken at the Financial Flows and Balance Sheet meeting in September 1988 on financial leasing means that leased assets would be treated as a sale on long credit which in turn means that from the point of view of statistical recording the user and owner of the asset will become the same. However there remains a problem for operational leasing and the rental of buildings. The owner concept is obviously the basis that should be used for drawing up the accounts showing the financing of fixed capital formation, calculating operating surplus including the allocation of fixed capital consumption and estimating net worth in the balance sheets. However for production and the study of factors of production a user concept should be introduced as suggested in 'Guidelines on Tangible Assets' (UN publication M68).

(38) in discussion many participants stated that they felt both capital formation and capital stock should be analysed by user as well as by owner. In particular there should

be a cross classification between owner and enterprise, between owner and establishment and user and establishment. In making the allocation to establishment attention should be paid to the nature of the capital asset and the production process in which it was involved. The suggestion in the paper was that assets should be attributed to a user if they were used for longer than a year in the production process. However one participant in particular mentioned that this may not be adequate for analysts wishing to look at the impact of mechanisation on particular industries; for example in agriculture where the use of heavy machinery may extend over only a comparatively short period.

In the main accounts and balance sheets capital formation and capital stock will be classified according to owning sector based on institutional units as units of classification. Additionally, the SNA will recommend classifying capital formation and capital stock by kind of activity, based on establishment as units of classification. @ should be done for both using and owning kinds of activity.

F. Classification

April, 1991

The classification of transactions in goods and services is to be amended to show

1. acquisition of new capital assets,
2. acquisition of used capital assets, and
3. disposal of used capital assets as a breakdown under gross fixed tangible capital formation and gross fixed intangible capital formation.

The treatment of second hand assets in external transactions should not be changed; that is, they should continue to be treated as exports and imports.

October, 1992

The Expert Group was told of changes and clarifications introduced to the treatment and classification of assets.

Historical monuments are now treated as tangible fixed assets rather than tangible non-produced assets.

Non-cultivated biological resources and water resources have been added under tangible non-produced assets.

The word inventories has been adopted in place of "stocks" to avoid confusion with the concept of capital stock.

Further elaboration of the changes in volume of assets account have been introduced.

These proposals were accepted by the Group without discussion.

G. Non-produced assets

April, 1991

The discussion on non-financial non-produced assets in general (see also R&D below) revolved around three aspects: rest-of-the-world treatment, valuation in the balance sheet for periods after the initial purchase/sale, and terminology.

The earlier decision to use the notional resident enterprise treatment only for land was confirmed. When transactions in other non-financial non-produced assets occur, they should therefore appear in the capital account and not the financial account.

New historical monuments, major repairs to historical monuments, and land improvements are fixed capital formation and therefore are written off via consumption of fixed capital. Patented entities, goodwill, and transferable contracts should be written off via the other changes in volume of assets account.

The use of "tangible" and "intangible" will be retained in the draft if better terminology cannot be found.

H. Costs of ownership transfer

March, 1988

The question was raised whether the transfer costs of land should in future be treated as intermediate consumption of the buyer of the assets but there was general agreement that it would be preferable to keep the existing SNA treatment where such costs are treated as gross fixed capital formation.

Transfer costs for buildings and land will continue to be treated as fixed capital formation as in the 1968 SNA.

December, 1990

The Group discussed the appropriate treatment of transfer costs distribution and other margins paid on the acquisition of capital assets, whether new or second-hand. These payments themselves do not give rise to future economic benefits and therefore would not seem to satisfy the definition of assets agreed above. Should they, therefore, be treated as current expenditure rather than capital as in the present SNA? Almost all participants felt these payments should continue to be treated as capital and while the view was expressed that it might be desirable to write these costs off quickly in the other changes in volume of assets account, on balance the group agreed to continue to treat transfer costs etc as at present as part of capital expenditure. They should be written off over the whole life of the asset to which they apply in the calculation of consumption of fixed capital.

"Transfer costs" such as registration and legal fees, stamp duties and other taxes charged on transactions in land, buildings, second-hand fixed capital assets and non-financial intangible assets should continue to be treated as fixed capital formation.

January, 1992

Transfer costs of land and buildings will continue to be treated as fixed capital and written off via consumption of fixed capital over the life of the asset to which they relate.

December, 1992

The acquisition of an existing fixed asset is valued at the purchaser's price, so it includes the costs of ownership transfer. This represents the amount of gross fixed capital formation on the asset and the amount that enters the unit's balance sheet in respect of the acquisition. Subsequently, the value of gross fixed capital formation is written off over time and the value to be written off includes the costs of ownership transfer on acquisition.

When an existing fixed asset is sold, the selling price before taking account of the costs of ownership transfer by the purchaser should be the written down value of the asset. The price paid by the purchaser may cover some or all of the written down costs of ownership transfer on the original acquisition if the original transportation, installation etc. is of value to the new purchaser, for example if he would have to pay similar costs on a new asset of the same type. However it is likely that at least some of the original costs of ownership transfer, for example taxes and professional fees will not be recovered on resale. Further, the price recorded by the seller is the price received less the costs of ownership transfer on the sale. This is the amount of negative fixed capital formation by the seller and the amount to be deducted from his balance sheet. The difference between the value of the existing fixed asset as it appeared on the balance sheet immediately prior to the sale and the value received by the seller should be entered into the other changes in volume of assets account of the seller. It represents any part of the costs of ownership transfer on its original acquisition not written down and not recovered on resale and the costs of ownership transfer on the resale.

The principles for the treatment of costs of ownership transfer on land are similar but the manner of presentation is different. Because land is a non-produced asset, the acquisition and disposal of land is shown separately from the associated costs of ownership transfer. For the land alone, the purchase price and selling price must be equal. Further, since all land is held by resident units (if necessary by notional resident units), for the economy as a whole total acquisitions equal total disposals. The costs of ownership transfer for both purchaser and seller are treated as fixed capital formation and are written off over time in the estimate of consumption of fixed capital. As in the case of fixed assets, however, when land changes hands an adjustment is needed to the seller's balance sheet. Again the value of any costs of ownership transfer on the original acquisition not yet written down plus the costs of selling the land should be entered into the other changes in volume account for the seller so that the resulting entry in the balance sheet falls to zero.

I. Extending the asset boundary

1. Software

March, 1988

The treatment of computer software and whether this could be regarded as capital formation was discussed. It has been argued up until now that software when purchased with hardware could be capitalized but software purchased independently should be treated as current expenditure. This was felt to be inappropriate because standard system software and application software packages had the character of capital formation in that they had a long service life and generated an income stream over a period of time. It was therefore, felt that these also should be treated as fixed capital. On the question of packages developed in-house, it was felt that if these were significantly large and also expected to have a protracted life length, it would be appropriate to treat these as own account capital formation. The Expert Group was uncertain however, whether this

treatment should be extended to other computer information such as databases and felt that this needed to be examined further.

Participants agreed to include expenditures on system and standard applications software in fixed capital formation. The development of application software “in-house” is to be treated as own-account capital formation if it is expected to be used for several years. Further work needs to be done to decide how far composite products such as databases and associated software should be capitalized.

2. Research and Development (R & D)

March, 1988

The question for discussion was how far any research and development expenditure and how far any of this could or should be capitalized. As with mineral exploration, it may be difficult to identify all the associated costs and it was remarked that often such data is only estimated even by the firms undertaking R & D. Nevertheless, such data is recorded, for example by the OECD, and it was felt that such estimates would be adequate for national accounts purposes. On balance, the participants felt that some research and development, namely, R & D by enterprises should be included as capital formation but they were unsure where the boundary should be drawn. It should be clearly identified separately from other forms of capital formation. OECD, as custodians of existing data, were asked to prepare a paper for consideration at the first SNA co-ordinating group meeting.

The group noted that statistics on R& D expenditure have been collected by the OECD for more than a decade and that the classification and definition of such expenditures have been systematized at the international level in the Frascati Manual. The majority of participants agreed that there is a strong case for including at least some R & D expenditures in capital formation. Due to the complexity of the matter, the OECD was asked to prepare a paper for discussion at the first Co-ordinating Group.

September, 1988

The main topic under discussion for this item of the agenda was the treatment of research and development expenditures; this was an area in which an immediate decision was needed, as it had system-wide implications. The Expert Group Meeting in March 1988 had questioned the treatment in the 1968 SNA and had felt that such expenditures should not be considered as intermediate consumption, although it would also not be appropriate to treat them as final expenditures. Such expenditures were clearly a kind of capital expenditure that differed from fixed capital expenditure, although the intent (to enhance future productive capacity) was the same.

The Group endorsed the recommendations of the Expert Group on Production Accounts that expenditures on mineral exploration and some types of expenditures undertaken by producers on research and development should be removed from intermediate consumption and treated as capital formation.

Two main arguments were made in favour of the proposed treatment. Firstly, research and development expenditures should not be classified as intermediate consumption since their inclusion as such would not lead to a true measure of cost of production and could in fact lead to negative value added. Secondly, these expenditures would normally be expected to generate future income and, if they were classified as final expenditures, there would be double counting because there would be a future income return. On this

latter point some participants, while generally in favour of the treatment of such expenditures as capital formation, noted that these expenditures would not always lead to income-producing capital. There could be development expenditures on new technologies that were not recouped, or exploration that did not yield commercial results. For these reasons some participants favoured the establishment of a separate category for research and development expenditures (including exploration costs), which could perhaps be termed "investment expenditures". Most of the Group, however, preferred not to have a separate category and concluded that all such expenditures should be included in capital formation.

The Group agreed that there were problems in capitalising the items under discussion on the balance sheet and in ascribing a service life to them. Although most participants thought they should be amortised, it was not clear how this should be done and over what period. In this connection it was noted that a group of consultants to the OECD would shortly be finalising a report that covered the sorts of questions for which the Group was seeking answers. The Group concluded, therefore, that **questions concerning the types of expenditures to be treated in this way, the depreciation of such expenditures, and their treatment in balance sheets would be discussed in a later meeting on the basis of reports being prepared on research and development expenditures, and on mineral exploration.**

December, 1989

The first substantive topic to be discussed by the group was the treatment of research and development expenditure in the national accounts and a paper of this title prepared by OECD was introduced. The main point of concern expressed there was that R and D was not related to current output and it is not clear therefore why it should all be treated as intermediate consumption. Rather it was felt that some at least should be treated as capital expenditure. OECD had been asked to prepare a paper on this subject concerning both the theoretical and practical aspects because of their experience in collecting data on R and D under the guidelines in the Frascati manual (The Measurement of Scientific and Technical Activities, (OECD 1981).

Six points for discussion were suggested. The first of these was whether data would be available. It was felt it would be irresponsible to recommend that R and D expenditure(should be incorporated in the national accounts if it was impractical to collect such data. The paper described the difficulties encountered by OECD in collecting R and D data and how these difficulties had been overcome. It was felt that it might be difficult to collect such data for countries outside the OECD area but equally there may not be very significant amounts of R and D being conducted in such countries.

The second point was whether data collected according to the guidelines in the Frascati manual were suitable for SNA purposes. There were three criteria used in the Frascati manual that were not wholly consistent with SNA conventions. Firstly the sectoring is slightly different. Secondly the distinction between current and capital expenditure is not the same. Thirdly the Frascati definition of research and development is restricted to a development that is novel whereas the national accounts understanding of research and development may often incorporate the development of new products or processes devised using existing technology and knowledge.

The third concern was whether R and D activity should be restricted to enterprises or whether research and development undertaken by non-market producers should be treated in the same way.

The fourth query concerned the calculation of amortisation in respect of R and D expenditure. Basically three possibilities were open. One was to assume that no amortisation took place and that R and D remained an asset indefinitely (that is had an infinite service life). The second was to assume that it was amortised completely in the year of its discovery. The third alternative was to have a conventional service life which might be determined according, for example, to patent lives or product cycles.

A fifth concern was how to classify R and D assets and distinguish them from other types of assets presently shown under capital formation in the national accounts.

The last concern was how R and D assets should be included in net worth as shown in the balance sheets of the system.

Having introduced the subject in terms of how R and D information could be incorporated in the SNA as a form of capital, the possibility was raised that at this stage the expert group could decide that the concept could be abandoned and the existing boundary of capital formation maintained intact. The Directorate of Science, Technology and Industry in OECD, who were responsible for compiling the OECD data were interested in the idea that the SNA would endorse the use of their data in compiling national accounts but they had some misgivings about the coverage of the data and comparability across time and country.

The Chairman summarised the alternative before the meeting in the following way. The first proposition was to retain the existing SNA conventions whereby all research and development is treated as intermediate consumption. The second alternative was to adopt the proposal that had been put forward at the Financial Flows meeting whereby all research and development would be treated as final expenditure of a new kind which is neither final consumption nor fixed capital. The third alternative is the resolution adopted at the Production Account meetings that "at least some" research and development should be treated as capital expenditure.

In the course of discussion it became clear that almost all participants felt some unease both with the existing treatment of research and development in the SNA and also with the proposals before the meeting. Several speakers commented that ignoring capital formation in intangibles was one of the aspects cited as a deficiency in the system of national accounts by some economists, many of whom had worked on the idea of developing measures of intangible capital over several years.

Although there was some considerable sympathy for the idea that at least some R and D should be capitalised several participants were deeply concerned about the wider ramifications of such a decision. In a sense recognising R and D as a form of capital suggested that the corresponding asset was "knowledge" which is not presently recognised as a commodity in the SNA. If knowledge were to be recognised as a commodity then this would have far reaching implications for the treatment of education and the possible inclusion of the concept of a stock of human capital. Those concepts in turn could involve recognition of such other activities such as market research and vocational training as other forms of the creation of human capital. This would represent a major innovation in the national accounts which may well be desirable in the long term but it was felt that time was not available to consider the implications of such a development at this stage.

While most participants recognised these concerns as legitimate the balance of opinion was that it would be unduly negative to reject the incorporation of R and D as a form of capital formation because lack of time did not permit an exhaustive approach to the

incorporation of the concept of human capital. The discussion therefore reverted to a consideration of how much research and development activity, as presently defined, should be incorporated as capital formation in the new SNA.

It was recognised that some forms of service output are in fact already capitalised, particularly the transfer costs of land and existing buildings and it was therefore felt that there was no reason in principle why the output of other service activities should not also be capitalised. The output of a service industry may be difficult to measure but it is not conceptually difficult to identify even if it has no link with a tangible good. Therefore the first objection that R and D could not be capitalised because it was the output of a service industry was not felt to be a valid conclusion.

If any R and D were to be treated as capital it was felt that it would not be sensible or practical to distinguish or to attempt to distinguish between projects which were "successful" and those which did not lead directly to income generation in future periods. A firm that is behaving rationally will presumably control the R and D budget so that in total the rate of return is acceptable rather than linking this rate of return to individual successful projects. It was remarked that all physical capital is included in gross capital formation, even assets which may be unused for one reason or another. There was therefore fairly general agreement that success was not a criterion that should be applied in separating some R and D into intermediate and some as capital expenditure.

Several speakers remarked that much R and D, particularly in developing countries, was undertaken by government. The case of agricultural R and D where government may pioneer new techniques and then encourage their dissemination over a much broader front was quoted as one example and large scale medical R and D projects as another. On the whole it was felt that there was no a priori reason to assume that R and D undertaken by enterprises should be treated differently from R and D undertaken by non-market producers, particularly government. The effect overall on GDP will be different. Transferring enterprise R and D from intermediate consumption to fixed capital will increase GDP whereas transferring government expenditure on R and D from final consumption to capital formation will change only the allocation of GDP by expenditure category and not the level of GDP. However, it will change the incremental capital-output ratio, which is widely used for analysing the efficiency of investment. The continuity of the series on fixed capital formation will be affected if R and D expenditure data are not separately available. Nevertheless it was felt that if it was appropriate to include any given type of R and D as fixed capital then all R and D of that type should be treated in the same way regardless of whether a market or non-market producer undertook the expenditure.

The possibility was raised of using the enterprise's own judgement about what constituted investment as a measure of what to treat as capital formation. However, it was felt that such an approach would be unacceptable from the point of view of national accounts because of the impact of tax laws on the decision made by commercial companies about whether to treat expenditure as current or capital in any given period. After consideration therefore it was assumed that this possibility was not a viable course for SNA to follow.

Another question was raised concerning the coverage of R and D. In the Frascati manual a distinction is made between R and D in natural sciences and engineering (NSE) and in social sciences and humanities (SSH). NSE R and D covers that undertaken typically by enterprises, agriculture and medicine whereas SSH covers the softer subjects including economics. Again in discussion it was felt that there was little rationale that could be

given for including one class of R and D and not the other and therefore a majority of the participants favoured the inclusion of both classes in capital formation.

The feeling of the meeting therefore was that there was a strong case for including some R and D as capital formation and that once this case is admitted it is very difficult to draw a line and say that some forms of R and D should be included and some excluded. The decision therefore came down to one as to whether to include all R and D as capital or to exclude it all. The majority of the meeting felt that it would be appropriate to recommend that the SNA be changed so that all forms of research and development expenditure should hence forward be treated as capital formation in the SNA.

Expenditure by all sectors on all types of R & D will be treated as capital outlays.

In the introduction, reference had been made to differences between the definitions used in compiling data according to Frascati and the definitions that would be desirable from a national accounts point of view. It was noted that the Frascati manual is due to be revised and it was hoped that a process of discussion with the compilers would lead to the possibility of incorporating definitions in Frascati that were consistent with national accounts usage. It was felt that the Blue Book should explain what the appropriate national accounts definitions were in principle and make clear that if Frascati data were to be used these would be an approximation to the desired national accounts conventions.

In the SNA a broader definition of R & D will be given than in the Frascati manual, but it is expected that in practice the data compiled according to the narrower principles in the Frascati manual will have to be used. This will include R & D expenditures on both NSE (Natural Sciences & Engineering) and on SSH (Social Sciences and Humanities), as defined in the Frascati manual.

There was also some discussion on the question of amortisation. If R and D assets were deemed to have infinite service lives and enter the balance sheets at nominal value at the time the expenditure was incurred this would imply a form of amortisation dependent on the general rate of inflation. There was felt to be no logic in this but the alternative of constantly revaluing "knowledge" would be that it would come to dominate all of the assets shown in the balance sheet. For these reasons it was felt that it was not appropriate to show R and D assets as having an infinite life length.

Equally there was little sympathy for the idea of treating R and D expenditure as being amortised in the year the expenditure was incurred since this was tantamount to saying it was, after all, current rather than capital expenditure. On balance, therefore, the meeting came down in favour of estimating service lives of R and D assets in a similar manner to those estimated for physical assets. It was expected that these life lengths would be determined by reference to patent lives, product cycles or perhaps to tax and book-keeping practices.

The R & D assets will be amortised over periods determined by considerations such as patent lives, commercial accounting practices or in accordance with tax legislation.

While it was agreed that the R and D assets will appear in the balance sheet of their owner, the question of how to classify them was postponed to be taken up under the discussion on the accounting structure later in the week. In fact pressure of time precluded this, and the matter remains to be determined.

These assets will appear in the balance sheets of their owner.

December, 1990

The original recommendation on the possible treatment of research and development expenditure as capital formation was taken by the Expert Group on input/output in March 1988. This recommendation read "there is a strong case for including at least some R and D expenditures in capital formation". Discussion at subsequent Expert Groups suggested it was very difficult to make a distinction between some R and D expenditure to be included and some to be excluded and therefore concluded that all R and D expenditure should be treated as capital. In the time since that decision was made, a number of participants in the Expert Group have expressed some misgivings about this conclusion and in a number of other meetings involving the wider SNA community very considerable unease amounting almost to hostility to this suggestion has been encountered.

In the paper before the meeting a number of proposals were put forward. Firstly it was suggested that the original recommendation of the Expert Group was correct; that some R and D expenditures meet the definition of asset agreed above and the problem is to find a suitable demarcation of this subset of all R and D expenditure. one possibility would be to exclude some classes of R and D expenditure as identified in Frascati, for example expenditure undertaken by government or non-profit institutions not funded by enterprises, and an even more restrictive option would be to allow only those expenditures recognised by commercial accountants in accordance with IASC recommendations as capital to be similarly treated in the SNA. These recommendations are sufficiently stringent that while capitalisation of R and D expenditure would be possible it would be exceptional.

In discussion the group confirmed their unease with the proposal to classify all R and D expenditure as capital. It was felt, for example, that it was inappropriate to treat research into history as capital and that some medical research, for example the search for a cure for AIDS, while valuable in its own right might not be appropriate for treatment as capital expenditure. There was little support for the suggestion that IASC recommendations be followed and the group therefore concluded that its previous recommendations should be reversed and that no research and development expenditure should be treated as capital in the next SNA.

In mitigation of this decision there was very strong support that R and D expenditures should be identified in the accounts separated from other intermediate consumption. For this purpose it was felt that the classification of industrial outlays by purpose (COIP) should be revitalised and implemented as a matter of some importance and be an integral part of the changes associated with the new SNA. Identification of R and D expenditures along these lines would then allow the development of satellite accounts which could be tailored to individual country's needs and this was felt to be the best alternative to present at the moment.

The group reversed the previous conclusions and recommended that no expenditure on R & D should be treated as capital expenditure. It will continue to be treated as consumption.

The new Blue Book will describe satellite accounts for R & D.

Expenditure on training will not be treated as capital formation.

April, 1991

With respect to R&D:

1. Receipts from licensing are to be viewed as sales of services by the owner of the patent (as with film licensing) and as intermediate consumption by the purchaser.
2. It is important to identify R&D expenditure especially because of the recommendation to treat R&D in a satellite account. It was reconfirmed that R&D was not capital formation and agreed that it was not an ancillary activity. R&D should be shown as output if delivered between enterprises or between establishments. Special recording of intra-establishment R&D outlays was not recommended but such expenditures should be captured in a classification of business expenditure by purpose.

3. *Human capital*

September, 1988

The 1968 SNA includes as assets: all financial assets; intangible assets [non-produced assets in 1993 SNA terms] such as copyrights, patents, etc.; and, with regard to tangible assets [produced assets in 1993 SNA terms], all reproducible assets that are created as a result of a production process. Also included are certain tangible nonreproducible assets, such as land and natural resources, that are used as fixed assets in production. Some intermediate forms of assets that are included are improvements of nonreproducible assets such as improvements to land, costs that make mineral deposits operational for mining, costs spent on developing timber tracts, orchards, etc. which are assumed to reflect the increase in the value of the nonreproducible tangible assets, and, finally, growth of livestock. Excluded from assets covered in the SNA are tangible nonreproducible assets that are not used in production, such as forests, seas, and air, which could be called environmental assets; also excluded are human capital and the product of research and development.

The Group agreed that human capital would not be included in the SNA balance sheets. It also deferred a discussion of the possible inclusion of environmental assets to a later meeting.

4. *Consumer durables*

With respect to the treatment of consumer durables, it was noted that assets (and liabilities) are not only important as factors of production but should also be viewed as elements of wealth. It would therefore be useful to have balance sheets for households that would reflect their positions from the viewpoint of consumers rather than producers. Suggestions were made to identify two categories of consumer durables, those that represent a store of value and those that meet households' needs; the former category could be included in the balance sheets of households. Alternatively, consumer durables could be treated as memorandum items, although there could be a case for including items with a high resale value in the main wealth accounts.

5. *Intangible nonfinancial assets*

There was a limited discussion of intangible nonfinancial assets. Very few countries identify the 1968 SNA categories representing purchases and sales of intangible assets.

Any payments made are generally included with property income or by some countries as payments for services. This practice implicitly assumes that no such assets are identified. In view of this, it might be advisable to eliminate this category wholly or partly from the SNA. If partly eliminated, this category may only include those intangible assets that are of lasting value, because the authors, artists, or inventors who produced these assets (copyrights), have since died and the assets can no longer be reproduced; they have become assets similar to historical monuments.

The Group concluded that it would be useful to clarify the coverage of what is referred to in the present SNA as nonfinancial intangible assets. It was agreed that the defining characteristic of the assets covered here is that they confer "rights" on their owners without any corresponding liabilities elsewhere in the system. The list of assets presently included in this category may need to be enlarged.

6. Valuables

April, 1991

Wealth only assets¹⁴ was taken up following the decision of the December 1990 meeting to create a category of capital to include precious metals and other valuables and in response to discussions in a Regional Commission meeting concerning the holdings of gold by households,

The group concluded:

That expenditure on these types of items--to be referred to as "stores of value" assets--should be treated as a third type of capital formation, rather than the current treatment. Such capital formation could be carried out by any sector.

The items to be treated in this way are (1) of significant value, (2) are acquired as stores of wealth in that they are not to be used primarily for production and consumption, and (3) are expected to have a second-hand value at least as high as the cost of acquisition.

7. Goodwill

December, 1990

Goodwill is taken to be the difference between the purchase price of a company and its net worth, the latter being defined as the sum of the values of all the separately identifiable and valued assets and liabilities to third parties. In general it is agreed that there should be no entries for goodwill in the national accounts. However, when a company is taken over by another, part of the transaction cost must be attributed to goodwill (it may in some circumstances be negative) and it was argued that in such circumstances (only) purchased goodwill should appear in the list of assets acquired and on the balance sheet. It would be classified as a non-produced non-financial intangible asset and in keeping with commercial accounting practices would need to be written off over a period of time after acquisition of the company. This writing off should take place in the other changes in volume of assets account.

¹⁴ The terminology for this item was later changed to valuables

Purchased goodwill should be included in the balance sheet as a non-financial, non-produced intangible, asset. This goodwill will be written off in the other changes in volume of assets account.

8. Intellectual Property

January, 1989

In other discussion, particularly on the treatment of R and D mineral exploration and software, the group laid much emphasis on the existence of a product which would lead to increased production, income generation or cost saving in subsequent periods. It was this nature of the product which made it appropriate to classify it as capital rather than current expenditure. In this connection, however, it was noted that a number of other intangible goods may satisfy the same criteria. In general these could be described as "intellectual property". Particular examples cited were films, TV series and sound recordings where ownership entailed the right to earn income from these products in subsequent years say by leasing or selling duplicate copies or a copyright where the item, itself may be sold as a capital good. The group felt that based on the logic of the arguments developed in connect". on with R and D etc it would be appropriate to treat such products also as capital formation. On the other hand there were severe misgivings about the extent of coverage that such an extension, would imply. There was uncertainty about whether the term "intellectual property" was specific enough to be included in the SNA and whether the full coverage (if an adequate definition is available) should be treated as capital formation

The extension of capital formation to include [other] items pointed to the possibility of treating the acquisition or own account production of other "intellectual property" such as films, TV series and sound recordings as capital formation. A paper considering the coverage, characteristics and data problems relevant to this possibility will be prepared for the July meeting.

July, 1989

The background paper to the discussion was "Intellectual property and related rights in economic accounts". The intention had been to investigate what was meant by intellectual property so as to clarify the extent of the economic activity that was being considered for treatment as fixed capital. Initially this seemed a problem of looking at the boundary of capital but it turns out there are problems that were not previously recognised which have an impact on the production boundary. The identification and treatment of intellectual property is intimately bound up with the national accounts concept and treatment of intangible non-financial assets and in particular the treatment of patents, copyrights and trade marks and of royalties which the SNA defines as the payments for (income from) the use of these assets. Pursuing legal definitions of the terms used and consulting with WIPO (World Intellectual Property organisation) leads to the conclusion that the terms used in the Blue Book are used loosely and in a heuristic way which do not correspond with legal definitions in any one country. A fortiori the guidelines are not applicable to all countries.

The problem can be illustrated with reference to copyright and royalties. Copyright is not the right to publish a book. It is the right of the author to be identified with the work and establishes his "ownership" of the intellectual property. In many countries this right is inalienable and the author cannot transfer the copyright to anyone. One consequence which does not accord with the treatment suggested in the Blue Book is that transactions in intangible non-financial assets cannot be recorded in respect of transfer of ownership of

the copyright because this cannot occur. In other countries where the author can transfer the copyright, there is another consequence that does not accord with the Blue Book treatment. Payments to authors who have transferred the copyright to a publisher are not royalties in the SNA sense.

Paragraph 7.52 of the 1968 SNA states that authoring a book is not included in the measurement of gross output. This leads to the following anomalous situation. If a writer works for a firm who acquires the right to publish his work under the terms of his employment his activity is regarded as output of the firm. This is so also if he works on contract to the firm. However if he writes on his own account for publication it is not output. This implies that the production boundary is defined not in terms of the activity undertaken but in terms of the contract of employment and the means by which the product is sold. One possible resolution of this anomaly would be to treat the activity as always falling within the production boundary. The question then would be whether the output would ever be treated as an asset. The parallel with the argument on research and development would suggest that because the output could give rise to income in future it could be treated as an asset and like R and D would involve the treatment of service output as capital formation.

The case of patents is clearly related to expenditure on research and development. If R and D is treated as capital formation then including patents also as assets would lead to double counting of assets in the balance sheet. The problem is that the value of the patent may bear no obvious relationship to the value of R and D that has been treated as capital (assuming the present recommendation stands). A solution in line with other national accounts procedures would be to suggest that R and D expenditure should enter the balance sheet at its cost of production and that changes in this value in respect of the value put on patents should be entered as what are now revaluation changes in the balance sheet. (These changes could, of course, go in either direction).

The third type of item cited as non-financial intangible assets are trade marks. These do not have to be registered, have an infinite life length and have a value that is in no obvious way related to the cost of their production. They have a closer parallel with the goodwill of an enterprise than they do with any of its other assets and it could be argued therefore that the national accounts treatment of trade marks should be similar to the treatment of goodwill, and not be treated as assets.

A possible reinterpretation of the treatment of intellectual endeavour would be to say that all intellectual activity should be included within the production boundary. In so far as it is service output, some of it, for example research and development, and some creation of intellectual property may be treated as capital formation. The type of asset needs yet to be defined but it would be the result of a productive activity and not "intangible" as defined in the 1968 SNA, and so would not give rise to property income.

Several participants spoke in favour of treating the activity of producing a book or a film etc as being within the production boundary regardless of the terms under which it was produced. The example of a film was quoted. There are three alternative sources of income from it. (1) The company making the film might have its own cinemas and charge an entrance fee which would represent a service charge. (2) The film company might make videos and sell them. This would represent production of goods and generate income. (3) The film company might give the right to show the film to another-cinema in which case the income obtained would be property income and lie outside the production boundary. The proposal made was to treat this income from the right to show the film as a service charge rather than property income. It was also pointed out that in the definition of "miscellaneous commodities" in the classification of imports and exports of

goods and services, rental of films is included in the same category as rental of plant and equipment without further qualification.

It is possible that the production of the service is spread over time, in the example of the film the income generated may be \$15 million (\$8 million in the second and \$7 million in the third year) as against the cost of \$10 million to manufacture the film in the first year. This implies the need to record work in progress of services. At the end of the first year the output is \$10 million all treated as work in progress. In the second year the income is \$8 million with stocks run down to \$2 million and in year three the income is \$7 million with the stocks eliminated.

It was confirmed that for many entertainment companies the annual reports record the value of films, for example, as inventories or non-current assets. Only four OECD countries reported anything on net purchase of intangible assets in their national accounts and of these three were in respect of land, mineral deposits, timber etc. The question arose of where, for example, trade marks showed up. One possibility is that these were incorporated with other purchases, for example of whole companies. Whatever the answer it is clear that the intention of the present SNA is not being followed.

Partly for lack of time and partly because the subject impacted so directly on the treatment of factor incomes which is on the agenda for September remaining discussion on this topic was postponed till then.

December, 1990

The meeting then took up the appropriate treatment of literary artistic work. In the 1968 SNA when such works are produced on own account, the production is excluded from the production boundary and the income derived is regarded as property income. The group agreed that there is no basis for treating literary artistic endeavour on own account differently from such activity undertaken by employees. Therefore output which is produced for sale should be included in the production boundary and hence in measures of output, whether they are produced by employees or the self employed. The income would then arise directly from production and not be treated as property income. As a consequence when literary artistic output generates income over more than one accounting period it will be treated as a capital asset.

The value to be attributed to literary artistic work is the market price when it is sold or, where appropriate, at the cost of a similar product. Where neither of these valuations is available it should be valued at cost.

“Literary-artistic” outputs (i.e. the writing of books, composing music, etc) which are produced for sale should be included in gross output whether they are produced by employees or self-employed workers. This means that income from producing literary-artistic output is to be treated as income from production and not as property income.

Literary-artistic outputs that generate income over more than one accounting period are fixed capital assets.

J. Issues related to environmental accounting

There was little thought given at the outset of the revision process to the question of environmental accounting. There was a need to clarify the treatment of natural growth for livestock and crops but little else. The question of mineral exploration came up as part of the general discussion of non-produced assets. While the SNA revision was under way, there was also growing interest in the area of integrated economic and environmental accounting. A separate handbook on this topic, the SEEA, was also published in 1993 and is referred to in the SNA.

1. Natural growth

March, 1988

The difficulty of implementing the present recommendations on the treatment of livestock were noted. While the 1968 SNA treats breeding animals as fixed capital and animals for slaughter as part of inventories, in many countries, particularly developing countries, animals serve both purposes and it is impossible to make a suitable distinction between them. It was decided that it was appropriate to refer this matter to the FAO and seek their guidance on a suitable basis for distinction.

Most participants favoured retaining the 1968 SNA treatment of livestock but noted that the Food and Agriculture Organization and other international organizations dealing with agriculture should be consulted on this issue. The reason is that, depending on their use, some livestock are treated as fixed capital while others are considered as changes in inventories. However, some animals may serve both types of purposes.

April, 1991

Livestock reared for slaughter and meat production are to be included in inventories; livestock raised for other purposes (e. g., breeding and transport) is to be included in fixed assets. Whereas the 1968 SNA recommends that where the purpose is unclear or mixed, the animals should be treated as inventories, the group recommended that this decision be left to the judgement of national statisticians to reflect their circumstances.

March, 1988

It was noted that there was an anomaly in the SNA whereby natural growth in breeding animals was treated as fixed capital but natural growth of forests was not. It was noted that in the case of well managed woodland where a proportion was harvested every year equivalent to the natural growth in the remaining forest, it was illogical not to count this growth as production and capital formation. However, it was agreed to temporarily accept the 1968 SNA recommendations until this issue could be considered further probably in a more comprehensive review of the various items associated with environmental statistics.

The contrast of treatment between valuation of livestock where natural growth is included and timber tracks where it is not, was noted. It was agreed however to maintain the 1968 SNA recommendation pending more comprehensive suggestions which may also embrace the appropriate treatment for natural forests.

September, 1989

In the 1968 Blue Book growth in livestock is regarded as production in the year in which it occurs and may be recorded as change in inventories or capital formation as appropriate if the animals are still alive at the end of the period. On the other hand growing crops and forests are not regarded as productive until they are harvested. This was felt to be an anomalous situation and it was suggested that the same convention should apply to both types of natural growth. Several objections were raised to the possibility of treating growth of crops as output. One problem is how to value such output. Elsewhere the text suggests this might be done on the basis of cost incurred plus the value of labour involved. However in many cases, including developed countries, much agricultural output is grown by farmers who are self-employed and there are therefore no explicit labour costs. There is also the question about whether growth in cultivated forests should be treated differently from growth in natural forests. It was pointed out again that there was a need to re-examine the whole question of assets, the definition of what constitutes an asset, its classification and the valuation to be attributed to it as well as the link to production. Pending such an investigation, however, it was agreed that in future natural growth of crops and forests should be treated in the same way as growth in livestock, fish etc; that is it would count as production when it was cultivated by human activity and accounted for as it occurs giving rise to changes in inventories and capital formation as appropriate.

Natural growth of livestock, crops, forests, fish, etc. is to be counted as production when cultivated by human activity and accounted for as it occurs.

December, 1990

A previous conclusion by the Expert Group had been that natural growth should be recorded as production when this was growth of trees, crops or animals that were directly controlled and managed by human intervention. There are two reasons behind this recommendation. The first was to apply similar principles to trees and crops as had previously been applied to animals. The second concern arose from considerations of the effect of inflation on measurements of agricultural output. In years where there is high inflation the value of output greatly exceeds the cost of inputs incurred much earlier in the year. Rather than count the whole of the difference as value added, it should be recognised that part of this difference is in fact equivalent to a holding gain and as such should be eliminated from the value of output.

A number of participants said that although the principle of treating growth in tree crops should be treated in a parallel manner to that of animals, they felt this was not appropriate for annual crops. Where such crops are grown by peasant farmers without paid employees, there is no satisfactory basis on which to make an estimate of costs incurred during the growing season. Another objection concerned the consequences for countries where the crops grew but for a number of reasons (drought, locust plagues or the simple inability to harvest the crops) meant that a large proportion of the crop was wasted after the growth had taken place. These factors would frequently constitute exceptional events and on present proposals the growth would be recorded as part of gross product (going into stock) and eliminated from there via the other changes in volume account. Despite these reservations the group agreed to adhere to their previous recommendation without qualification.

The group confirmed its earlier decision that growth of controlled bio-products should be recorded as it occurs. This is particularly important in periods of high inflation.

January, 1992

Growth to maturity of produced natural assets is treated as work In progress except when it is own account production in which case it is treated as fixed capital.

2. Mineral exploration

March, 1988

In the case of mineral exploration, the present SNA states that only successful exploration should be treated as fixed capital. However, the practice in most countries is to treat all exploration as capital formation. This can give rise to two problems. What should be done in the case of a country where extensive exploration is undertaken but no deposits are found? In this case, the country would have recorded capital formation but have no corresponding asset. The second problem is how such an expanded definition of capital formation should be depreciated. The alternative to not treating exploration as capital formation in the start up years where there are very large negative operating surpluses. This has been a cause of concern to a number of countries over the fairly recent past. While recognizing this was an important problem, the Expert Group felt it had insufficient information on which to make a definitive decision.

Participants agreed to treat all mineral prospecting expenses as fixed capital formation. It was noted that a number of countries are already doing this in their own national accounts, and it was agreed that a paper would be prepared summarizing the current practices of a number of countries where mineral prospecting is important before making definitive recommendations for the new SNA. The place of this item in the classification of fixed assets by type should also be considered.

January, 1989

A paper on mineral exploration raised many aspects which had been covered in the earlier general discussion on research and development and it was felt that in parallel with the decisions taken on that subject, it would be appropriate also to classify all expenditure on mineral exploration as capital formation whether the exploration was successful or not. The appropriate amortisation period for such expenditures should be the average life of producing mines or wells. Indications on the availability of data for a number of countries make it clear that in this area compiling data presented fewer conceptual problems than did the compilation of R and D data. Although mineral exploration is not research and development as understood in the Frascati manual because little novelty is involved The group felt that in national accounts usage the two activities were sufficiently parallel that similar treatment should be given both.

It was noted that in relation to both R and D and expenditure on mineral exploration, the attribution of expenditure between foreign subsidiaries and parent companies may be affected by tax laws in the two countries involved. This was noted as yet another practical problem in implementing the concept that was felt to be theoretically appropriate.

All expenditures on mineral exploration will be treated as capital formation whether or not the exploration is successful.

The appropriate amortisation period will be the average life of producing mines or wells.

December, 1990

The 1968 SNA treats R and D and mineral exploration and development in a parallel manner. The paper before the meeting tried to explore some of the similarities and also some of the differences. The expenditure involved in mineral exploration and development reveals mineral deposits which are then brought into the production process by exploitation activities. However, it is the deposits themselves that qualify as assets in the sense previously defined and not the expenditure leading up to their discovery, though this is a cost that needs to be offset when calculating the commercial value of the assets. In commercial accounting these expenditures may, in certain circumstances, be treated as capital expenditure but they do not themselves represent assets. Rather they are liabilities in the sense of being borrowings against expected future earnings. These “deferred expenditures” are allowed to be shown as capital expenditures because of the extremes of timing differences between the preparatory work (mineral exploration and development) and the consequent productive activity (mineral exploitation). Again the paper suggested that it might be appropriate for the SNA to consider the IASC recommendations in this area.

The group did not consider that it would be appropriate to consider introducing the concept of deferred expenditure into the SNA and therefore reverted to the consideration of whether or not to consider mineral exploration as capital expenditure and if so how much? The major problem in considering such capital expenditure is that if no deposits are found there is capital expenditure recorded in the accounts with no resulting asset. Despite this and despite the fact that this could be rather important especially for small countries, the group decided that all expenditure on mineral exploration should be counted as capital expenditure. When the mineral deposits are recorded in the balance sheets the value attributed to them should be net of any capitalised exploration expenses. When all exploration is unsuccessful, the expenditure should be written off in the other changes in volume account.

There was some discussion about the possibility of including such expenditure only when it was successful. However the problem here is that it is not known at the time the expenditure is undertaken whether the end result will be successful or not. It was also argued that in other cases of recording capital expenditure, even on physical equipment, there was no requirement in the SNA that such expenditure should be successful (in the sense of being used) for it to qualify as capital expenditure. This meant it would introduce a new criterion for the category of mineral exploration if success was to be a necessary condition.

All expenditures on mineral exploration will be classified as fixed capital formation. When all exploration is unsuccessful, there will need to be a negative entry in the other changes in volume of assets account.

3. *Environmental satellite accounts*

March, 1988

There were two background papers “Environmental accounting and the system of national accounts”, and “Links between SNA and environmental statistics” prepared by the World Bank. After its recent reorganization, the World Bank had affirmed its primary policy objectives as being concerned with growth, poverty alleviation and environmental resource management, all three of which were mutually inter-dependent. There was a major concern that in common usage, gross domestic product was misapplied as a welfare measure and was misleading as the level of income available to countries. What

was more important was a concept of sustainable income. In order to derive this, it was necessary to make special allowance for defensive expenditure, that is expenditure undertaken to protect the environment and to maintain its basic quality and secondly to make allowances for the depletion of natural resources. It seemed counter-intuitive that higher expenditure on environmental protection programmes led to higher GDP. In order to counteract this, there was a question of whether an adjustment should be made in the central accounts or in satellite accounts. Similarly, it was felt inappropriate that depletion of natural resources should be recorded as income. There was a case for treating natural assets in parallel to the treatment of man-made assets. The Bank wished to argue that a user cost approach be adopted where true value added was separated from the cost of capital and the user cost was deducted both from gross and net product measures. Given that much of the work on environmental statistics was in an early stage, it may be appropriate that the immediate development of this area should take place in satellite accounts but in addition it was felt that it would be appropriate to advise countries where a significant proportion of GDP was based on the depletion or degradation of natural resources that they may be overstating their current income using present measures and that work should be encouraged to estimate costs and benefits of resource depletion and degradation. It was felt that other meetings could address the question of balance sheets.

It was suggested that some of the issues could be treated in a handbook and/or satellite accounts but there remained some issues for the central accounts. Was it possible that COFOG could be used as a basis for identifying environmental expenditure by government and COIP (classification of industrial expenditure by purposes) for private enterprises? While these approaches would be helpful they would not necessarily help to cover indirect expenses associated with environmental degradation, such as effects on health caused by urban pollution. There was a need to measure the depletion of natural resources as consumption of capital and to ensure that these resources should be recognised in the balance sheets. The question of whether it was possible to reach a figure for sustainable income by rearranging existing entries in the summary national accounts was raised.

The participants expressed a strong interest in the question of environmental statistics. They felt that this was a means of showing an integration between economic and social statistics and brought together the interaction of natural, man-made and human resources.

Some disquiet was expressed that much of the work on environmental accounting, including the interaction with the SNA, was being done by environmental economists who had very little contact with national accountants. For some participants the two background papers were the first they had heard about this work and felt that it was inadequate as a basis for a detailed consideration of the topic, important as it clearly was. There was considerable enthusiasm for the prospect of holding a joint meeting between national accountants and environmentalists if this could be arranged. It was also felt important that a common international approach should be taken to this problem rather than having it solved repeatedly in separate countries with possibly different approaches being taken.

It is important to develop statistics of the relationship between economic activity and the environment.

In the immediate future, it would be preferable to develop such statistics in a satellite account rather than in the central framework of the SNA. This procedure is designed to allow more freedom for progressive development and experimentation with these statistics without disturbing the main aggregates of the national accounts.

It was stressed that development of these satellite accounts requires cooperation of national accountants and environmentalists. It would be desirable to arrange joint meetings for this purpose.

Within the national accounts framework, priority should be given to developing the functional classification of government expenditure (COFOG) and the classification of enterprise expenditures (COIP) to isolate expenditure relevant to environment analysis.

January, 1989

There was consideration of the paper "Environmental accounting and the SNA" which contained a cover note prepared by UNSO as well as a report of a joint UNEP World Bank expert meeting on Environmental Accounting and the SNA held in Paris on the 21st and 22nd November, 1988. At the meeting in Paris the main conclusion had been that environmental accounts should exist as satellite accounts to the SNA and that this should be specifically mentioned in the chapter in the Blue Book dealing with satellite accounts. Work on environmental accounting was not sufficiently advanced to incorporate it explicitly in the main SNA at the moment but because of the growing importance and interest in this field it was felt appropriate that adequate allowance should be made for ancillary analyses to be undertaken consistent with the overall SNA framework. The paper that constituted the annotated agenda for the Paris meeting was, in effect, an outline for how a draft handbook on preparing environmental accounts might be developed. Once the draft manual was completed it was hoped to experiment with implementing the accounts elaborated there in a few developing countries. In the light of experience the manual would be revised and it would then become one of the handbooks in the series accompanying the SNA.

Several of the participants of the present meeting had also attended the Paris meeting on the environment and reported back that there had been a very strong feeling put forward in that meeting that environmentalists were saying that the concept of gross domestic product is wrong in principle and would prefer instead a measure of sustainable product. The feeling of the present meeting was that that was too strong a statement but that it would be appropriate for the Blue Book to stress that GDP was not a measure of welfare and care needed to be taken in the interpretation of the accounts. Some participants felt that environmental accounting was still at a very preliminary stage and that questions of identifying, defining and measuring environmental issues had still to be resolved. Once this was done then it would be possible to develop a totally coherent accounting framework. Other participants stressed that it was important that national accountants make a contribution to the field of environmental accounting. By emphasising the coherent data framework of the SNA then it should be possible to develop measures that are complementary to rather than competitive with major SNA aggregates.

The Blue Book should discuss the interpretation of the main national account aggregates in relation to environmental degradation, depletion and defensive expenditure as they affect the production boundary and classification of assets in the balance sheets etc which would clarify links to a future framework of environmental accounts.

National accountants should actively co-operate with environmental economists in developing satellite accounts consistent with the SNA framework.

The previous decision had been that environmental considerations should be treated in satellite accounts and not in the main system. Since then concern had been expressed that it was necessary to find a rationalisation for why this position had been adopted and further proposals had been made that some environmentally adjusted aggregates should still be presented in conjunction with the central accounts.

It was felt that the main message that needed to be given for the rationalisation for not including the environment in the central accounts arose from a misperception by a number of observers including many environmental economists. It was true that the conventional national accounts do not present measures of welfare or of sustainable income but the misperception is that they purport to do so. National accountants would be better advised to educate the users to realise this rather than to make adjustments that address some but not all of the deficiencies in these areas. At the same time it was felt appropriate that expenditures within the national accounts should clearly identify those elements relating to the environment because of the serious concern about this area that was generally recognised. As far as welfare was concerned it was argued that the notion that an increase in income is synonymous with an increase in welfare may be incorrect for both economic and non-economic reasons. The simple process of aggregating the accounts to measure welfare might require different approaches if a welfare measure is the objective rather than a more straightforward income measure. In the case of government expenditure, for example, institutional failure is recognised in the SNA which therefore measures the activity solely as the sum of costs without imputing a welfare measure to these. If society accepts that, for example, producers may create pollution without either legal or financial penalties how can the SNA make an objective rather than subjective "correction" to the resulting monetary flows?

A number of participants argued forcibly that they felt this attitude was excessively defensive and negative. They saw the criticism being levied against the SNA for its indifference to environmental attitudes as being a major challenge. If the SNA itself did not respond to the challenge, the risk was that an alternative system would be proposed by economists and others with less than perfect understanding of the national accounts system. A system of national accounts including adjustments for the environment would be developed and it would be better done by national accountants than by others.

Nevertheless the majority of the meeting felt that no system had yet been developed on the incorporation of environmental indicators into national accounts that was yet mature enough to incorporate within the SNA. They felt it would not be enough simply to include environmentally adjusted aggregates. These should not be optional "add ons" to the system but part of the fully integrated accounting system based on alternative assumptions. An earlier version of the UNSO paper had been presented to the OECD national accounts meeting in July 1990 and the participants there held this view very strongly with a number stating categorically that even if the SNA recommended such adjustment items their countries would not follow these recommendations. Both those present at that meeting and others felt that it would be inappropriate for the SNA to ignore this expressed opinion of a large number of practising national accountants.

The introductory chapter to the new SNA will recognise the importance of the development of environmental accounting but will include an explanation of why environmental concerns are not fully reflected in the central system. The explanation may refer to the evolving status of environmental accounting, the blurring of the distinction between SNA aggregates and welfare measures and the inappropriateness of attempting to record externalities in the SNA. The SNA text will discuss the

derivation of environmentally adjusted aggregates, drawing on the work now underway and deliberations at future meetings on environmental accounts.

Environmental accounting will be elaborated in detail in a Handbook.

It was agreed that a study will be carried out on an urgent basis, on the methodologies and implications of showing depletion of natural resources in the central system. This is one of the elements in deriving environmentally adjusted aggregates. The study is to enable the experts to determine whether or not to include a depletion adjustment in the central framework.

Despite this recommendation it was agreed that the question of depletion allowances should be looked at again separately. Although many of the areas involved in making environmental adjustments to national accounts are statistically "soft", the question of making an explicit allowance for the depletion of natural resources is rather more firmly based and the case for including this in the central SNA is stronger.

October, 1992

The chapter on satellite accounts has been extended to include a detailed description of satellite accounts for the environment drawing heavily on the handbook on environmental economic accounting (SEEA).

In discussion a number of points were made. Various Experts felt that, as written, there was too much emphasis on the monetary aspect of environmental accounting and a more balanced approach between monetary and physical accounting would be desirable. It was also suggested that estimates for the effects of depletion of natural resources were rather more firmly based than those for degradation, and this could usefully be stressed in the section of the chapter dealing with environmental issues. A question was also raised about how far this section was or should be consistent with the handbook on environmental accounting.

4. The asset boundary and environmental assets

December, 1990

It was pointed out that there needs to be some clarification on which natural assets should be recorded in the national accounts. It had previously been agreed that timber tracts should be included as assets and the growth in the timber recorded as production. What would the appropriate treatment for natural forests be? By parallel with the standing timber it would seem these should be included as assets. On the other hand this would imply that natural growth of these forests where there is no human intervention should be counted as production. On these grounds, therefore, one could argue that natural forests should be treated as environmental but not economic assets reserving this last term for assets that are deliberately drawn within the production boundary. Similar arguments could be advanced in relation to stocks of fish and herds of wild animals. How far should all land count as an economic asset? Should this include national parks and designated wilderness areas, for example? Even given agreement that economic assets as recorded in the SNA should be those assets that meet the definition agreed previously and which contribute to activities within the production boundary, a separate study would be undertaken investigating environmental assets in general to determine which should be included as economic assets and how the others should be treated in the context of satellite accounts for the environment.

In principle, all land, timber-tracts and sub-soil deposits are assets. A study will be undertaken to ascertain which natural assets should be included in economic assets in the SNA.

The term "sub-soil" covers surface deposits and under-sea deposits. The former are to be excluded from the category of land.

The value of tunnels, shafts etc. associated with mines are treated as fixed capital and not as part of the value of the sub-soil assets, This is a change in treatment from M60.

January, 1992

A technical sub-group discussing the relationship between the SNA and SEEA had suggested the two systems should use the same asset boundary which would be defined in physical and monetary terms

It was decided;

The SNA will have only one definition of economic assets as agreed by the expert group in Washington in 1990 which relates primarily to its economic benefit to its owner. This criterion will be used to determine which natural assets will be treated in the SNA as economic assets. "Economic benefit" is manifested in the case of natural assets through being controlled by an Institutional unit.

A further sub-decision of economic natural assets is made depending on whether they are cultivated or not by deliberate action. The natural growth of the former only are included in production.

To facilitate links to emerging environmental accounts, headings for "water" and "wild biota" had been proposed for inclusion in the SNA classification. These terms were considered too extensive for the SNA. Associated surface waters should be added to the headings for "recreational land" and "other land". Some underground water and some wild biota qualify as assets; expert advice is needed on how to identify and describe these.

In principle, land under buildings should be classified as a non-produced asset and shown separately there. Where a separation of the value of the building and its land is not possible, the joint value will be included in fixed assets and the value of land excluded from other land shown under non-produced assets. This assumes the building is worth more than the land. Where the land is the predominant value, the reverse allocation is to be made.

A similar principle holds for plantations.

Chapter 10. Prices and quantities

November, 1986

This expert group meeting was concerned with price and quantity issues and was one of the most self-contained of the expert group meetings.

A. Deflation of commodity flows

There were five issues for consideration:

2. resource cost versus user value;
3. how to adjust for quality changes, including the discussion of unique and non-unique products;
4. the introduction of new products;
5. how to treat the question of different prices being charged for the same item; and
6. the question of services generally, especially non-market services.

1. Resource Cost Versus User Value

In introducing the first issue, it was suggested the meeting consider how to quantify quality change. If resource cost was the basis for valuation, one then had “value” for production that was not demanded. If one used the user value approach, one had to ask what sort of users, only the well-informed or all users? What about features enforced by government legislation, for example, seatbelts in cars and anti-pollution measures. Were these increases in user value or only in resource cost?

The consideration of resource cost as the appropriate basis for price valuation is relatively recent and originated mainly in work done in the USA and, in particular, by Jack Triplet. His comments on the papers were reported to the meeting. Triplet’s view was that the use of input and output prices were pervasive in practice but ignored theoretically. The output of one industry is the input into another and from an accounting point of view, identity between the two should be preserved. Output is a result of the production process and is fundamental to national accounting; it is the numerator of productivity ratios. References to user value seem like a re-introduction of a welfare concept. It is recognized that the present measures of economic activity are not welfare concepts. If one looks therefore at the resource cost/user value discussion as a disguised form of the controversy over production/welfare measurement of national accounts, it was clear that resource costs should be the preferred alternative since GDP is not a welfare measure.

In discussion, it became clear that the expression “user value” was part of the source of the problem since this implied a subjective valuation of the product. There was universal agreement that this was not what was intended; the value of a product to the consumer is the price that the consumer pays and does not in fact carry a welfare connotation. This clarification then makes it clear that in many cases, resource cost and user value produce exactly the same valuation of a product. This is not to say that the measurement of the

product will always be achieved in the same way. For many products, it is only practical to measure the resource inputs rather than the end product. Construction activities, especially of roads, were cited as the most obvious example. Nevertheless this difference in measurement practices should not confuse the principle of measuring the output in terms of the price paid for that output.

“Resource cost” consists of intermediate consumption, labour costs and normal return to capital. “User value” is the price paid by the user and may be lower, higher or the same as resource cost.

“User value” is not synonymous with “product performance”. The difference in the “user value” of alternative models is measured by the ratio of the prices that purchasers pay for each product, and this may not be proportional to the difference in technical performance.

In an equilibrium situation, ratios of resource cost will equal ratios of user value. Usually any difference between the two ratios will be temporary. If it persists over long periods, resource costs may have been understated such as through the failure to include all research and development costs.

The decision to adopt “user value” does not imply that GDP is being viewed as a measure of welfare. User values reflect purchasers’ preferences, and not their welfare.

2. Quality Changes

The first item for clarification is the distinction of when similar items are exactly the same and when different. Roads built in northern Canada to withstand the heavy weather conditions are obviously different from roads built for light traffic in equable conditions. Identical products sold in different outlets and therefore attracting different distribution margins should be regarded as different products since they are each a combination of the distribution and other costs. In all these instances, the identity between user cost and resource value holds. It was recognized that the problem of goods being produced but not sold is normally covered as part of the distribution process. Distribution costs cover the loss incurred by a firm in not selling their complete stock.

Theoretically, if two goods of the same function are on sale at the same time, the ratio of their prices is a direct quantity ratio; it is not necessary to have a performance measurement per se. This theoretical statement was disputed on a number of practical grounds. Firstly, that the introduction of a new product may be the occasion for taking excess profit for a period of time. Also, that prices may co-exist for different products where the newer is better but also cheaper and this may reflect imperfections in the market. It was recognized that such conditions would give rise to measurement problems in practice.

Two examples were quoted of where it is frequent practice to obtain more product for less cost. These are the provision of electronic goods and airfares. The existence of these phenomenon reveal two possible causes; one is lack of awareness on the part of the purchasers that they could be purchasing more for less. The second is the decision on the part of the sellers to alter their profit margin in the short run because of expected long-term advantage.

There was then discussion of the treatment of the release of a modified product on the market where the price of the new version seemed disproportionate to the price of the old. It was agreed that the appropriate theoretical approach would be to consider the cost

of producing each with the same technology and an appropriate mark-up and find out at what price relative to the old one the producer would put the modified product on the market for . If there is a distinction between this price and the price actually being charged, this represents something which might be called super-profit or quasi-rent. It would be assumed that this could only be non-zero for a short period while disequilibrium persists. Once it is eliminated, user value will again equal resource cost. If this element does not decline to zero very quickly, one must assume that the basic valuation of resource cost has underestimated some of the costs, perhaps those of research and development.

Resolution of the appropriate treatment for the measurement of product and discussion of the cases where differences between user value and resource cost may occur at current prices is fundamental to all intertemporal and interspatial comparisons of economic activity. Repeatedly emphasis was laid on the need to preserve symmetry between differences over time and over space in so far as this was practical. Considerations which had arisen in the ICP work in interspatial comparison could cast light on the procedures that should be adopted theoretically for intertemporal comparisons as had already been made clear in examples cited to support the foregoing discussion. In the light of the clearer enunciation of the concept of user value described above this was agreed to be the correct basis for valuing output in current constant and international prices.

In principle, quality changes should be quantified by reference to “user value” and not by reference to “resource cost”. The same principle should be applied uniformly to quality changes in imports, production, intermediate and final consumption, capital formation and exports.

Unique Products

It is widely recognized that there are problems in identifying the volume and price element of products such as buildings, construction works, ships and heavy machinery. In practice, a number of methods have been used to deal with these. These range from very rudimentary input measures, for example, hours worked, number of bricks or steel plates used, etc. to a more detailed method where specifications are established for a complete product whether actual or hypothetical and quotations are derived for this product at various times. **It was agreed that though difficult in practice to establish, this latter should be preferred as a solution and that very rudimentary input measures should be rejected if at all possible. An intermediate method which was also thought to be acceptable was to obtain quotations for very well-specified components such as a linear measure of foundations dug or roofing installed, etc.**

Non-unique products

These can be divided into two categories: those which can be directly related to goods existing previously in the market and those which are truly new goods. As agreed before, it was recognized that where products serving the same function can be compared, the ratio of the prices indicates the ratio of the quantities and it is not necessary to have a performance measure per se. By definition, therefore, one can restrict the category of new goods to those where comparison with earlier existing products cannot be made. For deriving estimates at constant prices therefore, the question is when and how to introduce new goods into the compilation of price indices.

Quality changes which are not enough to necessitate treatment as new products can be well dealt with by splicing, although it was noted that the exact method of splicing adopted would in fact imply assumptions at price and volume changes by comparison

with other products in the basket. Hedonic regression may be used though it is often difficult to specify which variables are relevant. Production costs should only be used as a last resort.

As far as practicable, comparisons with existing products should be made. In these cases the relative price increase is the correct measure of the relative quantity increase, not physical performance measures.

3. *Introduction of New Goods*

New products are those where a direct functional comparison with an existing product cannot be made.

It is recognized that new goods are included in current price estimates as soon as they appear on the market. Even if they are not explicitly considered in deriving price estimates, the value of the new products will be deflated assuming that the prices for the goods that are covered in the deflation process are appropriate for the new goods also. This therefore, argues in favour of incorporating prices for new goods in an index as soon as possible. This represents a change from the existing advice which suggests on the whole that new products should only be introduced at a major rebasing which for many countries takes place approximately every five years. A compromise solution was suggested that parallels the approach adopted for ICP. This is to suggest that a hierarchy of weights be introduced and at the higher levels these should remain constant from one rebasing to the next but at a lower level, variations could be introduced at any time which would allow for the incorporation of new items. These variations should be allowed in response to conditions and where important new products appear on the market these should be incorporated in the lower level weights as soon as practical.

Where possible a base year valuation should be estimated, used for deflation purposes and incorporated in the relevant price indices as soon as possible.

A particular practical problem was raised that is manifest in many developing countries. Here the problem is not so much introducing new products as the re-introduction of old products which have been unavailable for some time. This may be true for ordinary consumer goods where there are shortages and is particularly acute in the case of investment goods where purchases are very intermittent. In these cases the goods are not "new" from a technological point of view but are new in the sense used in this discussion in that there is no comparable product with which they can be compared in immediately preceding time periods. It was recognized that this is an acute problem in some countries and special advice should be given on how to treat this problem in the handbook associated with price and quantity comparisons.

4. *Different Prices for the Same Product*

The problems raised by the same good being sold at different prices, were reviewed. Different prices may prevail as a result of:

1. bargaining;
2. seasonal variations;
3. regional variations;
4. the existence of parallel markets; and

5. different prices being charged to different kinds of customers.

The advice existing in the 1968 SNA in the case of 1) is to take a larger sample and obtain more estimates of prices prevailing. For conditions 2) to 5) the recommendation is to treat products with different prices as different goods. In the case of the last, this gives anomalous effects when there are movements between the classes of customers.

It was agreed that where prices vary simply because of the different types of outlet, the goods should be treated as different products. This is because the consumer is in fact buying a joint product part of which is a distribution margin and the customer is choosing to buy more or less of this depending on the outlet of choice.

Products sold at different prices should be treated as different products except when the individual purchasers are not free to choose the price at which to buy. The identification of different products affects the calculation of price and volume measures. Suppose a commodity is sold at different prices, and between two periods there is a change in purchasing patterns but no change in the individual prices. If the products are treated as different, the change in purchasing patterns will produce a volume change. If the products are not treated as different, the change in purchasing patterns will show as a price change with no volume change.

It was also agreed that goods whose prices varied across seasons or across regions should also be treated as different products. It was recognized that such differences were inexact; how many seasons would one normally treat in a year? One could think of a two season choice, that a good was in season or out of season, or one could have variations that vary by the month or even more frequently. In some countries the seasonal variations would not be the same in each region, which would add to the complexity of dealing with regional variations.

It was recognized that the implications of both the above decisions (that are in accordance with current practice) lead to rather specialized interpretations of the resulting volume measure and will not necessarily accord with a volume measure derived from purely physical characteristics. National accountants may be well aware of this distinction but can this information be presented in a way that is unambiguous and clear to other users of the data to avoid misconceptions and misinterpretations?

The question was raised but not fully answered as to whether in addition to a regular volume index as presently derived in national accounts this should be decomposed into an index showing physical change separately from the effect of changing market shares.

5. *Parallel Markets*

The discussion then turned to a consideration of parallel markets. It was pointed out that parallel markets are usually thought of as a market where the price is significantly higher than in a controlled market but this may not always be so. For example, many examples exist of markets where taxes which should legitimately be paid are being avoided, thus leading to lower prices for the commodities in question. In the situation where government attempts to regulate prices of a commodity, but limited stocks of the commodity are available for sale at the controlled price the consumer is not able to meet his demand at that controlled price. It therefore seems inappropriate to consider this controlled price as the true price of the good. In such a circumstance, it would be appropriate to take into account prices prevailing in the parallel market since this is in fact the valuation at which most transactions take place. In such a circumstance however, it is not appropriate to treat the goods as being different at the different prices; they

should be regarded as the same product although being sold in controlled and parallel markets simultaneously. The principle of treating products at different prices as different products is because of the element of choice available to the consumer; in the circumstance where rationing means that the amount of the product on sale at the controlled price is strictly limited, this choice is not then available to the consumer. This lack of choice dictates that the good should be treated as a single product rather than separate products.

Products sold both in limited quantities at controlled prices (e.g. in the case of rationing) and at the same time at different prices in parallel or parallel markets should not be treated as separate products.

In cases where it can be assumed that the distributive services incorporated in the prices of products are different, and the purchasers are freely choosing to buy in this or that outlet, products sold in different types of outlets should be treated as different products. In cases where it can be assumed that the distributive service is not different, and in particular if the choice is not free (e.g. the outlet having sold the product at lower prices stops selling it) the products should not be treated as different.

Products sold at different prices because of differences in the bargaining skills of different purchasers should not be treated as different products.

6. *Different Prices for Different Types of Consumers*

As an extension, the discussion turned to considering how to treat different prices charged to different kinds of consumers. Many examples are available, for example the provision of electricity at one rate to private consumers and another to industrial consumers or the provision of rail fares at reduced rates to elderly people or charging different rates for education for national and foreign students. The present practice in most countries is that if the prices do not change, no overall price change is recorded even if there is a change between the classes of consumers. This implies, for example, that if railway revenue remains the same, the resultant volume measure remains the same even though there may have been a change to people buying the cheaper tickets and therefore more passenger journeys having been undertaken. There was considerable sympathy for the view that this practice should be changed and that changes in the composition of the market should be reflected in a change to the implied price and therefore result in volume changes. A specific example was quoted where policy makers had already confronted this situation. In Colombia the government legislated to get goods out into the open market with lower margins. If these had been shown as still retaining the higher price and therefore a lower volume, the results would be counter-intuitive and antagonize the government who would believe that the statistics were not reflecting reality.

Different views were expressed as to the treatment of products that are offered by monopoly or near-monopoly producers at different prices to different classes of customers. In some views, since the customers have no free choice of the prices at which to buy, the products should not be treated as different products. Other participants, however, preferred to continue what is presently done in most countries e.g. if railway tariffs do not change, no price changes should be recorded whatever shifts take place in journeys purchased by different classes of customers.

Another example from Colombia raised a further consideration. There the government legislates that different prices should be charged for water for different consumers in Bogota although the product and its method of delivery is exactly the same. This could be

treated as a series of implicit taxes and subsidies and the question is then raised about whether these should be shown explicitly as such within GDP.

There was extensive discussion on how the treatment proposed above carried over to the external sector. If the export price and domestic price for a commodity were different, should they be treated as the same or different goods? On the whole, the view was that although this could be regarded as a “no choice” case, they should be treated as different products and a change in composition of demand should affect the volume measure. Less unanimous agreement concerned the treatment of imports; should imports from different countries, therefore with different prices, be treated as separate goods? There was fairly general consensus that this was not necessary but this conclusion paid considerable attention to the practical difficulties of implementation.

When products are sold at one price on the domestic market and at another price when they are exported, they should be treated as different products. No agreement was reached on whether in calculating price indices for imports and exports, it was necessary to calculate indices separately according to country of destination.

7. Services

Although most of the discussion described above was couched in terms of goods, it was recognized that the problem of measuring services and decomposing services into prices and quantities was even greater and less tractable. Equally, given the role of services in total GDP, it is clear that problems encountered in this area may be much more significant than some of those treated above in relation to goods. The fact that services cannot be retraded means that there is no limit to the price discrimination that can be exercised in their sale and the market cannot adjust to an equilibrium price as it can do for example in the case of goods through, if necessary, parallel market arrangements. Problems of quality change and uniqueness are even more pervasive in the area of services than for goods. Further, there are subjective elements in the quality of a service provided, for example, in the arts. Some services may be to prevent something happening rather than to provide an immediate deliverable (e.g. a fire service). While recognizing these problems, it was felt more appropriate to go on to discuss particular problems associated with non-market services. It was noted, however, that serious problems remain about the decomposition about imputed charges for bank services into price and volume components and it was stressed that this is a topic for urgent consideration at one of the subsequent expert group meetings either on input-output or on financial flows.

Recommendations had been made as long ago as 1975 that non-market services should be measured on an output basis and output measures should be used to separate a volume component. Despite this recommendation, little progress has been made since and it is considered important that both the handbook and new SNA manual give adequate guidance on this area.

The revised SNA will emphasize that output measures should, in principle, be used to measure non-market services at constant prices. The SNA should also define the output of both individualised and collective non-market services.

The handbook on national accounts at constant prices should give guidance on how output measures can be compiled and on how acceptable approximations can be developed.

Notwithstanding the theoretical superiority of output measures, it must be recognized that given the intractability of some service areas, good input measures may be superior

to crude output measures. But the pragmatism underlying this must also be made quite clear.

It was recognized that there might be cases where genuine output indices can be approximated better by refined input-type measures than by crude output indicators that, for example, fail to reflect important quality differences. Nevertheless, it was recommended that the main tendency in the development of quantity and price indices for services is in increasing the role of direct output measures.

There was extensive discussion of the impact of labour productivity as it affected measurement of service output. For example, different countries have different assumptions about productivity increases in public administration; unless these assumptions are made clear, the published data are prone to misinterpretation and international comparability is invalidated. Again, specific guidance needs to be given about how and whether increasing productivity may be built into the data as compiled. It was argued that blanket measures of medical treatments or pupil hours is as crude a measure of output as number of cars and that not allowing for quality change in services is as indefensible as not allowing for it in goods. The hidden fall in productivity in education was cited as an indictment of both statisticians and politicians. It is recognized that improved measures of service activity are now urgently required, especially by policy makers, but at the same time extra resources are not being provided in order to accomplish this.

In cases where approximations based on input indicators are used, countries are recommended to state explicitly what assumptions they make about changes in labour productivity.

A number of suggestions were made for improving measurement of the service areas. One might be to link labour productivity with capital utilization in the services concerned. Distinction should be made between individualized and collective public services and acknowledgement should be paid in the new Blue Book to the role of institutional differences between countries.

The SNA and the handbook should recognize that non-market services can be used by producers and do not only enter into final consumption.

Again, the special case of international trade in non-factor services was mentioned. This issue will be discussed at the next expert group meeting on the external sector.

It was agreed that the revised SNA and the handbook should give specific guidance on the measurement of internationally traded services at constant prices. In this connection, it would be very useful if the IMF, possibly in co-operation with one of the other international organizations, could investigate the methods currently used by a sample of countries for deflating these flows.

B. Deflation of Non-Commodity Flows

June, 1986 (1)

There was unanimous agreement that a terms of trade adjustment to national accounts at constant prices was desirable and had been recognized by many developing countries as necessary for a long period of time. On balance the participants felt that it would be desirable to preserve the existing constant price GDP concept and have, in addition, a version adjusted for terms of trade effect rather than redefining the present concept only.

There was some discussion about the appropriate formula to be used in calculating the terms of trade effect but it was agreed that this was a long and complicated subject and could not be concluded at this meeting. A paper showing the consequences of making adjustments for the terms of trade effect in measuring economic growth was presented to the meeting. It was pointed out that the results in the annex to that paper depend crucially on the choice of base year. Altering the base year can substantially reorder the "winners and losers."

It was agreed that real income and term of trade effects should be dealt with in the revised SNA. Methods of measuring these concepts should be worked out by the Expert Group on Constant Prices

November, 1986

There were four papers on the deflation of non-commodity flows before the meeting: "Real National and Household Income" prepared by OECD, "Treatment of the Terms of Trade Effect in Measuring Economic Growth" and "Growth Indices Adjusted for Terms of Trade Effect for 79 Countries: 72-79" both prepared by the U.N. Statistics Office and a room document prepared by the IMF.

It was generally recognized that there was increasing interest in having terms of trade effects explicitly calculated and that net factor income from abroad, net current transfers from abroad, and consumption of fixed capital had also to be deflated either implicitly or explicitly in order to reach a net national disposable income concept. It was also apparent that a household net disposable income figure would be advantageous. In reaching the household figure, it would also be necessary to deflate components such as compensation of employees, social benefits, and interest. The present SNA avoids these issues; but there has been increasing concern about the desirability of such data for policy analysis and it was agreed that the new Blue Book should contain these concepts and recommendations on how to calculate them. While all participants agreed as to the desirability of these concepts, there was a marked division as to how they should be calculated. This division was not resolved in the course of the meeting.

Basically, the OECD and Eurostat papers favoured the calculation of net national disposable income using the net domestic expenditure deflator to deflate all terms other than gross domestic product in total. As and when a terms of trade effect figure was necessary, this could be calculated separately using a deflator appropriate to that concept. There was some discussion as to whether this should be an import deflator only or some combination of an import and export deflator. However the main point at issue is that the OECD/Eurostat approach would treat the derivation of terms of trade effect and net national disposable income as two separate calculations and ignore the connection between them.

Other participants felt that this was unacceptable. Even if it were not shown explicitly in tables produced by statistical offices, users would be able to derive an implied deflator for the residual items (net factor income, net current transfers and consumption of fixed capital). This residual implied deflator would have no theoretical explanation whatsoever and these participants felt that the OECD/Eurostat position that this was an indefensible calculation could not be avoided in practice.

The revised SNA should include recommendations for the calculation of the terms of trade effect and for real income aggregates. In particular the concepts of National Disposable Income, National Income, Household Disposable Income, Terms of Trade

Effect and GDP adjusted for terms of trade effect were agreed to be useful concepts be explicitly defined and shown in the revised SNA.

It was agreed that the Blue Book should contain an explanation of the inter-relation of the aggregates shown in the table below.

Gross Domestic Product at constant prices
+ terms of trade effect in real terms
= Gross Domestic Income in real terms
+ net factor income from abroad in real terms
= Gross National Income in real terms
+ net current transfers from abroad in real terms
= Gross National Disposable Income in real terms
- consumption of fixed capital at constant prices
= (Net) National Disposable Income in real terms

Some participants felt that national income aggregates in real terms should be calculated independently from the terms of trade effect because the most appropriate deflator for national income was not necessarily the most appropriate for measuring the terms of trade effect. Other participants argued that the national aggregates should be obtained as the sum of the terms of trade effect and the other components listed in the table above, which would allow countries to analyse the effect on the national aggregate of changes in the various components.

Some participants felt the deflator to be used to deflate income components should be related to the purpose for which the income was expected to be spent. The most obvious example is deflating export earnings by import prices, but there was no general agreement on this principle.

The main difference turned round the desirability of preserving additivity among the conventional national accounting identities at constant prices. It can and has been argued that these identities break down in constant prices because of internal inconsistencies in the deflators appropriate to separate concepts. However, in practice, there was widespread recognition that for the point of view of ease of communication of what the data means to users, preserving the identities is highly desirable. The view was put forward forcibly that adopting an unrealistically purist attitude on such issues was likely to bring the practice of national accounting into disrepute rather than to enhance the reputability and integrity of the system to users.

The expert group noted that, because the terms of trade calculation uses moving weights, it is difficult to obtain transitivity among the indices adjusted for the terms of trade effect. Some participants considered that it would be better to explicitly give up the transitivity requirement rather than to subordinate the quality of the gross domestic income indices in order to obtain transitivity artificially.

Although there was no overall resolution of the problem, significant progress was made on a number of subsidiary points. **It was agreed that domestic expenditure was to be preferred to gross domestic product as a general deflator.** It was further recognized that in practice, gross domestic expenditure should probably be used in preference to net domestic expenditure; although net domestic expenditure might be felt to be theoretically superior, the practical problems of estimating consumption of fixed capital at both current and constant prices are such that the gross deflator is likely to be more reliable than the net deflator (in many cases they may not in fact be different).

There was some considerable discussion about what implied deflator would be appropriate for calculating the terms of trade effect. The case for using the import deflator only, as practiced in a number of countries, especially developing countries, was based on the belief that exports typically are used to fund imports and that the amount of imports is determined by exports earnings; when export prices move differently from imports, as frequently happens in the case of developing countries dependent on primary commodities, this in turn is a major limitation on imports. However, in more recent years, where developing countries have been constrained to spend a very large proportion of their export earnings on debt service, this argument for using the import deflator is less forceful. It was suggested that some additional research could be carried out exploring the effects of using import deflators other trade deflators and gross domestic expenditure in order to determine more closely the magnitude of difference involved in applying each of these alternative deflators, all of which could be defended from one or another theoretical point of view.

While most participants considered it desirable to have a formula proposed in the guidelines on the methods of the terms of trade effect measurement, views were divided as to the relative advantages and disadvantages of various formulae. It was agreed that in general terms the gain or loss from terms of trade changes is defined according to the formula:

$$\frac{X-M}{P} - \frac{X}{P_x} - \frac{M}{P_m}$$

where X = exports, P_x = export price index

M = imports, P_m = import price index

However the question was left open what price index should be applied for P (import price index, some average of the import and export price indices, etc.). If agreement could be reached in time, it would desirable to have it included in the Handbook.

There was discussion about how far it is desirable and possible to distribute the terms of trade effect across sectors. This would be easier if the domestic expenditure deflator were in general use but this was not felt to be a compelling reason for accepting this deflator by those who were in favour of being able to separate out the various items such as net current transfers involved in moving from GDP to national disposable income.

Considerable disquiet was expressed about the terminology in current use; it was generally agreed that income terms cannot really be said to exist "at constant prices." What is frequently referred to as "real domestic income" is properly "domestic product adjusted for the terms of trade effect." Although no final decision on the ultimate terminology to be used was determined, it was agreed that consideration needs to be given to finding appropriate terminology which will remove as much ambiguity as possible in the concepts being endorsed in the new Blue Book. Along these lines it was

also queried whether “terms of trade effect” was the correct expression or whether one should talk about the “terms of external transactions effect.”

It was agreed that the correct description for gross domestic product adjusted for the terms of trade effect was “Gross Domestic Income”. Income concepts cannot be described as being “at constant prices”.

Deflation of non-commodity flows is a major important area where no final recommendation was endorsed by the whole of the expert group. It was recognized that planners in many developing countries need a measure of “saving” in constant prices (or purchasing power of the base year) and the new Blue Book should address this issue. Opinions remained divided as to what the appropriate treatment should be. The process for reaching agreement remains somewhat unclear but will clearly have to be addressed in at least one subsequent expert group meeting.

C. Hyperinflation

June, 1986 (1)

The problems associated with high inflation can be categorized in various ways. Some participants felt this was only an acute version of a familiar problem but others felt it so acute that some of the conventional underlying assumptions of national accounts were called into question. For example, is it even viable to compile national accounts when prices are rising very rapidly? There are problems of both measurement and interpretation of such results. The theoretical approach of reducing the reporting period so that the price rises are not too great is unlikely to be viable. Further, it is not then clear whether it is sensible to add data for separate months together to reach annual aggregates. Perhaps the approach in publication M64 which assumes that constant prices are always derived as value divided by the price index is not appropriate in these conditions and it might be better to attempt to derive constant price data directly. In this connection, measuring services would, as always, be a particular problem. Particular problems also arise in connection with aggregates used as balancing items, particularly stock holding. It was pointed out that the IMF encourages countries suffering from high inflation to compile their balance of payments accounts in a stable currency; but this solution does not seem applicable to domestic activity.

The effects of hyper inflation on the reliability and meaning of national accounts aggregates at current as well as constant prices need further study. The effects may be as distorting for the current price estimates as for the estimates at constant prices.

November, 1986

This is a topic that has not been adequately treated in any of the existing recommendations to national accountants and, in view of its continuing importance in at least some countries, this omission should be rectified in the new Blue Book and associated handbooks. It is typically assumed that in periods of rapid inflation relative prices change much more quickly than they do in periods of more normal inflation; that is to say, hyperinflation is not simply an acceleration of the normal inflation process but has characteristics that are significantly different. It is pointed out however that little evidence is available to either support or contradict this assumption and this is an oversight. **Greater clarification on past experience is needed before adequate guidance can be given in the revised SNA and the handbooks. In particular, evidence is needed on the changes to relative prices in the short, medium and long term in periods of high inflation, as compared with other periods.**

One area where it is clear that special treatment needs to be given in periods of very rapid inflation is in relation to production processes that are extended in time. The classic example is agriculture, but other activities would also fall into the category where the cost of the inputs are incurred at a much lower level of inflation than the ultimate production is sold. **Attention should be drawn to the difficulty of deriving value added in such cases**

The difficulty of establishing current price data in periods of hyperinflation was recognized. **It was still necessary to produce what appeared to be normal annual national accounts for use in conjunction with monetary and financial variables, but it was recognized that the interpretation of such current price data in conventional national accounting terms was extremely difficult.**

It was also recognized that in contrast to usual recommendations, **in periods of hyperinflation it may be appropriate to compile national account in constant prices first and then inflate to current prices rather than to more normal reverse procedure.** Indeed it was reported that this practice is often followed in Latin America

It was noted that the terminology to be used in comparing movements in output and prices from year to year should be improved generally but was particularly acute in periods of hyperinflation. In particular, the distinction between price index and implicit price deflator was as important as the distinction between a compilation year and a comparison year for price indices .

There is an urgent need to define and adopt standard terminology for the concepts presently referred to as "base year", "reference year", "unit value index", "price index", "implied price deflator", "volume indices", "quantity indices", as well as "at constant prices", "in real terms", "in volume terms" and "constant purchasing power measures".

The parallel between hyperinflation over a relatively short period of time and more normal inflation over a much longer period of time was noted. It was pointed out that very few countries now compile very long runs of figures on what is truly a single price base; almost all other countries use some form of chain linking though the frequency with which the links are established may alter from country to country.

September, 1988

Although a wide range of views was expressed, **most of the Group preferred the term "holding" gains and losses to the proposed alternative "capital" gains and losses. These gains and losses include both realised and unrealised gains and losses.** Several participants were not certain as to how the results should be interpreted when the sum of relative changes in individual items was a large negative or positive figure. Presumably, if the result were positive, it would mean that relative prices of tangibles had increased at a faster rate than general inflation. The question was raised as to whether there was room conceptually for net gains or losses, and it was pointed out that the results would be open to interpretation if net gains or losses occurred because a less than ideal index had been used. One participant expressed the view that more thought and discussion should be given to the question of whether the index chosen should be one that exactly cancels out holding gains and losses.

D. Inflation accounting

November, 1986

A number of papers on inflation accounting were presented, including the reports of national accountants held in 1981 and 1984 to discuss the topic. The introduction of holding gains and losses on incomes and savings would be a major innovation in the new SNA. Their introduction would also have an effect on enterprise accounting and the assessment of government deficits. In Europe in the 1970's, household savings ratios were counter-intuitive until adjustments were made for holding gains and losses. In order to undertake these calculations, it is necessary to have balance sheet information which may not always exist. Inflation accounting may be an extra layer of analysis and make the presentation of the accounts more remote from the observed transactions; this raises the question then of whether it should be done at all. A compromise solution would be to leave the existing income and savings aggregates as they are but ensure that subsidiary information was included in the reconciliation accounts so that interested users could make the alternative calculations if they wished. There were therefore a number of questions that needed to be answered:

1. Should the new Blue Book state what income concept is adopted and how this relates to Hicksian income?
2. Should inflation adjusted measures of income and savings for domestic sectors be included in the main income accounts of the revised SNA or in supplementary tables?
3. Should holding gains and losses on foreign debt be included in real national income?
4. Would recording real interest in the income accounts be a useful and sufficient step towards removing biases?
5. If not in the main accounts, should the revised SNA merely provide enough data in the reconciliation account to allow knowledgeable analysts to produce their own adjusted measures or should the SNA make a choice between alternatives?
6. Wherever holding gains and losses are shown, what numeraire should be used?
7. On which group of assets should holding gains and losses be shown?
8. What advice can be offered to countries which have a high rate of inflation but no balance sheet and reconciliation accounts statistics?

The discussion first turned to the consideration of the Hicksian definition of income. Although it was very popular to refer to this and contrast it with the lack of a specific definition of income in the SNA, it was felt on the whole that this comparison was not very helpful. Another quote from Hicks reads: "What you want, you can't measure, and what you can measure is not what you want." It was also pointed out that whereas capital gains are not regarded as income in the SNA, realized holding gains would constitute part of Hicksian income. However, measurement of the holding gains presupposes that all the theoretical problems of definition and measurement had been resolved. It was agreed that despite the intellectual attraction of the Hicksian income concept, the present

SNA definitions of income and savings were operational, transaction-based concepts that in practice worked well within the constraints of practical measurement.

The revised SNA should contain a thorough treatment of the production and income concepts included in the system. The group generally agreed that would be useful to have a discussion of these concepts, including the "Hicksian" definition of income.

That said, there was still considerable interest in the concept of inflation accounting and establishing of holding gains and losses. It was the firm opinion of the expert group that these should be described in the new SNA and countries should be encouraged to establish balance sheets in order to derive these concepts. It was pointed out that whereas initially the interest in inflation accounting had been assumed to affect the allocation of savings between households and businesses, it was also a matter of considerable importance for government and the external account. This is particularly acute in developing countries which may not only have rapid rates of inflation eroding their reserves position but also marked changes in exchange rates.

Given the practical difficulties in establishing balance sheets across the whole of the economy, it was agreed that it would be desirable to expect calculations connected with inflation accounting to be kept separate from the conventional accounting concepts, as in the present SNA. But there is a need to have a much clearer exposition of what balance sheets are and why they are important than is the case in the present Blue Book.

1. Real Interest

November, 1986

The concept of real interest is one which had much popular appeal but there were great difficulties in establishing what this meant in quantified terms. The conference held at Bergamo unanimously opposed the introduction of this concept for a number of reasons, partly because of the non-intuitive applications, for example, real interest applies also to non-interest bearing assets. Further, the calculations can only be calculated ex post, though the economists who express such interest in real interest are in practice looking for an ex ante "expected" real interest rate. The problems in Latin America were referred to where there is confusion between nominal interest rates and apparent real interest rates. This is a particular problem where indexation is prevalent; it also leads to problems of interpretation of income accounts where dividends and rents are shown in "real" terms but interest is only shown in nominal terms. If it were possible to separate interest into a real and inflation component, this would lead to much more consistent presentation.

Because of all the recognized problems in actually quantifying real interest, it was recommended that as much information as possible should be provided but calculations of real interest should be shown as memorandum items only and not as an integral part of the accounts. It was recognized that although real interest is not the difference between holding gains and nominal interest, this may in many cases be a good proxy.

The income accounts should continue to show only nominal interest.

The revised SNA will contain balance sheets and reconciliation accounts and these should explicitly show holding gains and losses. The revised SNA will explain how the standard income and saving concepts can be modified to reflect holding gains and losses and how to deduct losses from nominal interest to obtain a proxy for "real interest". These will be presented as a supplement to, rather than an integral part of, the main system.

Some clarification is needed on the definition of nominal interest in the case of index linking.

While balance sheets are necessary for the calculation of holding gains and losses, they are not necessarily sufficient. One should be dealing with gross rather than net flows and this distinction can be very important in periods of high inflation. Further, guidance needs to be given on what nominal interest is. In some countries, there are adjustment factors which have other names but still represent interest in economic terms.

2. Numeraires

There was little unanimity on the question of what deflators should be used in order to calculate holding gains and losses. The alternative is basically between general and specific deflators. Many participants thought that the deflators should be chosen appropriate to the analysis being undertaken. For each asset and liability, one could apply either a general price indicator or a specific price indicator; for example, for international debt one could use export prices, for housing, one could take a housing price. One could also argue that the general indicator may not be universal; for example, a general indicator for housing might be the consumers' expenditure deflator.

There was general agreement that the best single general deflator would be the domestic expenditure deflator as agreed earlier in the discussion of the calculation of national income. However, it was pointed out that for national income calculations, the appropriate index should be a period average, whereas for inflation accounting, one needed to take the difference in the deflator between the beginning and end of a period. In general, most participants felt that it was desirable to retain the possibility of using asset-specific or sector-specific deflators as appropriate for particular analyses.

3. Asset Coverage

Another area where guidance was needed concerns which assets should have holding gains and losses calculated for them. Should this include just fixed monetary assets, all tangible assets, bills and bonds at both face and current market value, and index linked securities? It was generally agreed that it would be helpful to distinguish holding gains and losses for monetary assets from those for non-monetary assets. The view was expressed that to calculate holding gains and losses for monetary assets only could be more distorting than making no adjustment at all. On the other hand, it was felt that it would be helpful to encourage the calculation of holding gains and losses wherever this was appropriate and this would clearly be easier in the case of monetary assets since financial information is more readily available than the balance sheet information necessary for non-monetary asset calculations. The question was raised about how assets denominated in foreign currency should be treated since these were not fixed in local currency monetary terms. This raised again the need for more theoretical consideration to the implications for inflation accounting on the external account.

In principle holding gains and losses must be calculated on all assets and liabilities and this should be made clear in the revised SNA. The relevant handbook will however note that many countries will need to begin by calculating at least partial balance sheets and reconciliation accounts. In this case, it would be useful to compile data on monetary assets and liabilities first. Special attention should be given to the treatment of monetary assets and liabilities denominated in foreign currency.

April, 1991

A broad range of issues were discussed including methods of measuring real interest and the desirability of including within the central framework of the SNA a treatment of interest and holding gains and losses that would apply only to countries with significant rates of inflation.

The group agreed that;

- a) **the nature of the problem and the information needed to arrive at a possible solution should be elaborated in the relevant chapters of the Blue Book;**
- b) **as already agreed, a supplementary table should be prepared that would contain information on holding gains and losses on relevant financial assets and liabilities necessary to interpret income in conditions of significant inflation;**
- c) **high priority should be given to the preparation of a handbook on inflation accounting that could be published at the same time as the publication of the Blue Book.**
- d) **in the chapter "Application of the integrated framework to various circumstances and needs", a possible parallel treatment of interest suitable for countries experiencing significant inflation would be included that would not preclude a more comprehensive treatment in the handbook on inflation accounting.**

4. *Indexation of debt*

January, 1988

The group discussed the question of whether indexation payments on debt, used in some countries with high inflation to increase the attractiveness of government securities, should be classified as interest paid for use of capital or as amortization paid for repayment of capital in real terms. At present, both SNA and GFS generally classify indexation payments as interest payments, so that they appear in the SNA income account rather than in the accumulation accounts and above the line, increasing the deficit, in GFS. It was suggested that appropriate treatment should reflect the behaviour of the recipients of indexation payments: if lenders in an inflationary environment view their indexation payment receipts as a return of capital to be reinvested for maintenance of their capital's value, classification of such payments as interest in the income and outlay account would tend to overstate income and saving.

Participants stated that the topic had been discussed many times before this meeting and that the recommended treatment of indexation payments as interest had remained unchanged. It was felt that the experience of countries using indexation could contribute to the analysis. There was discussion of the Chilean case, in which there was a high nominal rate of interest, but the payments were not divided between interest and amortization. It was reported that in Brazil indexation payments were treated as interest in the public sector statistics but not in all other statistics, since analyses of changes in the public debt found that most of the variation is explained by the nominal change in the value of the liabilities involved, which was equivalent to the indexation of the liabilities. Practices in different countries were found to vary significantly and the group did not feel there was enough information for it to make a recommendation. **It was concluded that**

the subject should be referred to the Expert Group on Financial Flows and Balance Sheets.

5. *Holding gains and losses on changes in inventories*

January, 1989

The meeting discussed the draft describing the effect of inflation on the measurement of changes in inventories. **The value of stocks in the SNA are determined by valuing stocks at the point of their entry into or withdrawal from stocks at the prices prevailing at the times of these transactions; that is on a perpetual inventory basis.** The implication of this change in the value of goods held in stock is not spelt out in the 1968 SNA and is widely misunderstood. The purpose of this chapter is to explain the implications in detail and suggest ways in which adjustments may be made. In particular it draws a distinction between the correct SNA measure of stock change and a measure of stock change based on volume estimates which is frequently used as an approximation to the true SNA measure.

Many participants expressed their appreciation of this text as clarifying an area of the SNA which is presently widely misunderstood. There were some reservations, however, about including so much detail on the area in the Blue Book given that the practical problems of measuring stocks were such that the conceptually correct approach could almost never be implemented in practice.

Extensive discussion of the paper was curtailed due to lack of time. In particular the topic concerning the valuation of agricultural output which can be very important for a number of developing countries was not discussed and must be returned to at some future time.

6. *Holding gains and losses and income measures*

There was discussion of a draft on the concept of income and the distinction between current and capital items which covered specifically how to deal with holding gains and losses, particularly in times of acute inflation. If it is appropriate to make a distinction between current and capital transfers on the basis that some transfers are to be regarded as income and some not, then it would seem appropriate that a similar division might be made between holding gains. These can be viewed as being of two types. The first is where the holding gains result from changes in relative prices and are related to goods with a market price such as tangible assets, shares etc. The second sort of holding gain relates to assets whose nominal values are fixed in money terms and the holding gain results from changes in the general price level. In general these latter are predictable. Therefore, it is argued in the paper, they should be treated as current income. The first type of holding gains should appear only in the reconciliation account but the second should go into the flow accounts. However the proposal is not to alter the recording of nominal interest flows but to show the second type of holding gain as a separate item (specifically as an imputed transfer) between sectors which would allow the calculation of imputed real interest flows. Such a proposal is a radical departure from the present SNA but in conditions of hyper inflation such as are typically experienced in Latin America the question is whether the present SNA guidelines produce accounts that are analytically useful. The question therefore is which solution is least uncomfortable. To complement this presentation, some tables for Brazil which had been presented at the Regional Commission meeting on national accounts held in Buenos Aires in November 1988 showing the sort of calculations that were made there in order to make a money correction to nominal interest flows were reviewed.

The response to the paper was mixed. Many participants felt that the paper presented an interesting intellectual construct which could be very useful in analysing flows under conditions of hyper inflation. However introducing these changes as a standard part of the Blue Book would represent a major fundamental change in the existing system and it was felt that this was some way beyond the remit of this Statistical Commission. It was also felt that introducing such adjustments would be very sensitive politically and might even encourage inflation. Indexation transactions often have two parts; one related to capital and one to interest. The question is whether the return on capital is regarded as capital itself or as interest. It is important to analyse the economy from a behavioural point of view and it was argued that if the recipient views indexation as an interest payment he will regard it as income and spend it but in conditions of low inflation money illusion persists and the difference between nominal and real interest often is not perceived.

The participants from Latin America reported the discussion that had taken place at the ECLAC meeting in November. There is a distinction to be seen between trying to record what happens at market prices, that is before making any adjustments, and trying to analyse the effect of what happens, for which adjustments such as those put forward would be necessary. The view at ECLAC had been that both presentations were necessary but that the recording of the accounts under the present conventions should be the starting point and this should remain the main recommendation in the Blue Book, though emphasis should be laid on the need to undertake further analysis when conditions dictated this was appropriate. The concern was also expressed that in conditions of very high inflation all of the current price figures are distorted and therefore correcting only the interest flows was not a comprehensive approach to the problem.

The conclusion of the meeting was that holding gains and losses should not be introduced into the income flows. However it was felt that it would be appropriate to suggest that they should be distinguished between those that are due to general price increases (basically monetary assets) and those that are due to changes in relative prices but both types of holding gains should appear in the reconciliation account. The text would show how the first of these could be used in association with the normal flow accounts in order to make adjustments but this would not be part of the central system. It was also felt important that either a chapter of the Blue Book or a separate handbook should deal comprehensively with all the problems associated with hyper inflation.

Holding gains and losses will be identified in the system in the reconciliation accounts where gains and losses on financial and nonfinancial assets will appear in conjunction with one another.

Holding gains and losses on monetary assets will not be treated as income. They will not be integrated in the income and outlay accounts but will be shown as a memorandum item. A handbook dealing with all the problems of hyperinflation will, inter alia, describe how to prepare separate tables integrating this information on holding gains and losses

E. Index Numbers

November, 1986

A paper entitled "Index Number Theory: Chain Indices and National Accounts" was discussed. Index number theory always assumes that prices and quantities are greater than zero. It ignores the phenomenon of new products and quality changes where either the products or the quantity may be zero or negative. But these are practical problems

that national accountants have to contend with. The use of chain indices has grown but there are a number of problems associated with them, for example counter-intuitive results are obtained if one goes from A to B through C which is less like A than B. There is also the problem that chain-linked indices no longer preserve additive consistency and the question therefore arises whether the growing use of chain indices is appropriate for national accounts?

The trade-off between fixed weights and chaining has all the hallmarks of a classical dilemma. It can be characterized as saying that at least historically the national accountants wanted fixed weights and the price statisticians wanted chaining. Another participant drew an analogy with map-making where one could either have the distance or the area proportionate to actual measurements but not both.

There are two influences that have brought about the increased use of chaining. The first is the need to produce long runs of series where there are discontinuities in the type of products available at the beginning and end of the long time period. This problem is analogous to the problems encountered into the interspatial comparisons of the ICP and, in both, the temptation has been to go for chaining as a solution to the problem. From discussion among the experts it was clear that most countries do indeed adopt some sort of chaining to produce long runs of data.

If it is accepted that chaining is inevitable the question then arises how often this should be done. Many countries chain at five yearly intervals though some of the reasons for this are pragmatic. For many countries in OECD, it is felt that the relative price differences change so slowly that five yearly chaining is sufficient. Equally, it is felt that in order to undertake chaining annually, it would be desirable to have annual input-output tables and relatively few countries produce these.

A number of countries have adopted a rather purist approach to the problem. One example is to undertake annual chaining and simply show index numbers with one year changes; another is to allow chaining less frequently and accept the lack of additivity for earlier years. However, it was pointed out that while such solutions may be perfectly acceptable to statisticians, they are usually seen as being unsatisfactory to analysts and economists. In such cases, the users artificially construct long runs of series which are additive. There was a general feeling among the participants that the national accountants were in a better position to make this approximation than users who were unaware of the assumptions built into the basic data. The practice to be recommended in the new Blue Book must therefore contain a considerable pragmatic element.

In Colombia in periods of high inflation, the basic calculations are performed on an annual chain but they are not published as such but rather are converted to a fixed base. Approximately 500 products are taken and they are balanced with a minimum disturbance by first chaining and then allocating the differences among the components. The move to adopt absolute chaining was rejected because there are no international recommendations that endorse this and because the econometricians interested in model building required a fixed base. In Canada a run of data for 20 years using 760 items was compared under different linking techniques. The difference between annual linking and fixed weights was 10% over the whole period. The difference between using fixed weights and five yearly chaining was 4%. A previous calculation which had only disaggregated a hundred items showed differences only of the order of 2-3%, thus highlighting the importance not only of the period over which chaining took place but the number of items that were dealt with. In France and also in a number of Latin American countries, data is published in current prices, in constant base year prices using fixed weights, and in prices of the preceding year. In the case of Ecuador, for example, data for

1972 showed a 14.4% increase over the previous year in 1975 prices but only 7.5% increase at 1971 prices. For 1973, the increase over the preceding year was 25.3% in 1975 prices and 14.5% at 1972 prices.

It was observed that the attitude to chaining has changed dramatically since the previous revision of the SNA when all the advice was firmly in favour of fixed weights. It was also felt that particular advice had to be given about the choice of a base year. International comparability has led in recent years to recommending years ending in zero and five but instances can be found when this results in a particularly inappropriate year which will lead to distortions when the change is made to that year and then to a succeeding year. Particular advice should be given on this in the handbook. Some further recommendations were made for incorporation in the handbook. It was particularly mentioned that attention should be paid to the benefit of having a mid-year as the base year for a long run of constant price data rather than a year at one end of the series. Further, it was felt appropriate to separate the distinction between a base and reference year and to stress the coordination that was necessary with other international organizations, in particular the ILO recommendations on CPI rebasing.

The expert group noted the new developments in index number theory, both axiomatic and economic theoretic approaches (superlative indices aggregator functions, etc). From a theoretical point of view chain indices have many advantages so long as the path between different points is relatively regular. Chain indices give the best estimate of changes from one period to the next, which is frequently the most desired comparison. In practice too chain indices would ease considerably the treatment of new or disappearing products.

It was moreover noted that when compiling long time series, increasing use is made of some kind of linking procedure. Further study of this practice is urgently needed.

However chain indices have two major disadvantages in national accounts. Firstly, unlike a fixed-base index, they do not give results which are additively consistent over a run of years; additive consistency was felt by most participants to be a very desirable feature in a national accounts context. Secondly, chain indices require more frequent detailed data for the weights

No single general type of index could be recommended for SNA. There is a trade-off between the advantages of chain and fixed-base indices and between the requirements for different purposes. A reasonable compromise solution which attracted the support of many participants is to use a fixed base for blocks of about 5 years and then obtain long time series by chaining these together. When relative prices are not changing too fast such 5-yearly rebasing may be adequate. However, in periods of rapidly changing relative prices more frequent rebasing is desirable.

The group recommended that the new SNA should include some discussion of the advantages and disadvantages of chain and fixed-base indices different circumstances.

F. International Comparisons

June, 1986 (1)

The meeting then went on to discuss what benefits from the ICP project have accrued to developing countries; a number of instances were quoted. ICP expenditure data

requirements provide a challenge to the country which forces national statisticians to look anew at their possible sources of data; cooperation between the national offices and the international agencies compiling ICP results in exchange of information which also helps improve the national accounts. Perhaps the largest benefit of ICP is in the improvement of national price collection. The ICP methodology has helped in particular to widen the product coverage, to make clearer classifications of the products selected for price quotations and has brought a greater awareness of the need for national average prices and how they can be calculated. There was some dissent on some of these points where some participants felt that the price quotations called for in ICP were so unrepresentative as to be unhelpful to the participating countries.

November, 1986

It was felt that the whole evolution of price and quantity comparisons had been enhanced by the attention given in recent years to the ICP project and it was recommended that the new Blue Book should include references to the parallels between intertemporal and interspatial comparison of prices and volumes.

This was another area where full unanimity of views could not be obtained on all aspects of the problem. It was generally agreed that the lack of consistency between SNA and ICP should be reduced as far as possible. It was recognized that initiatives introduced by ICP, for example, in the reallocation of headings between household and government consumption was a reflection of institutional differences between countries which impaired the comparability of SNA data. It was generally agreed that the new SNA recommendations should aim to incorporate sufficient flexibility, perhaps via additional presentations, that it would no longer be necessary to have one definition of GDP used by national accountants and one as the basis of the ICP work. At a lower level of detail, it was reported that OECD has a consultant working on the classification of household goods and services with the intention to produce a classification that could be used equally by ICP and SNA.

It was also pointed out that the number of basic headings in ICP is usually much more detailed than that required for SNA work. This was largely in order that classifications could be made to agree at some intermediate level of the hierarchy and not all countries were expected to supply all the detail appearing in the ICP worksheets.

There was a marked difference of view as to how beneficial the ICP project had been to the development of statistics in developing countries. Some participants reported the withdrawal of countries from later stages of ICP because they believed there were no local benefits derived from participating in the project. Others argued that given the priorities in the country and very limited resources, one could well imagine circumstances where other issues should take priority. Some of the countries that reported favourably on the impact of ICP benefited generally from the level of technical assistance that accompanied the involvement of the international organizations and this was felt to be beneficial to those countries concerned. Because of this interaction, it was argued that the ICP should be seen as complementary to and not competitive with regular national accounts

It was noted that there is a large overlap between the price information collected for national (inter-temporal measurement) and international (ICP) purposes and that a number of developing countries made substantial use of the ICP exercise to improve their national price statistics (e.g. consumer or construction price index computations). It was recognized, however, that a full overlapping in respect of the price requirements

is not likely to be achieved since the international comparison requires additional price collections even in countries with developed national price statistics.

The revised SNA will include a substantial discussion of inter-temporal and inter-spatial price and volume comparisons, of their relationships and of their analytic uses. At the same time, the Blue Book should not go into the methodology and algebra involved in ICP. It was intended that two handbooks on prices would be written. A handbook on national accounts at constant prices will discuss issues common to both inter-temporal and inter-spatial volume comparisons. The full technical description of the methodology of inter-spatial comparisons will be given in a separate handbook.

The consistency between the classification systems of the SNA and ICP has to be improved. It was agreed that at the level of the presentation of data (at the level of the analytical classifications) full identity must be achieved. At the level of the stratification categories ("basic heading" in the ICP) full identity between the national and international classifications is not required.

In conclusion, it was recommended that particular problems harmonizing classifications used in SNA and ICP should be taken up at appropriate further expert group meetings.

Whenever meaningful, there should be symmetrical treatment of intertemporal and interspatial price and quantity comparisons.

It was agreed that following the incorporation of an additional concept of enlarged household consumption and possibly changes to the treatment consumer subsidies, the aggregates of SNA and ICP should be identical. SNA and ICP should also be consistent with regard to the choice between resource cost and user value for quantifying quality differences.

It was noted that there might be substantial differences between the results obtained by extrapolation (with national quantity or price indices of the inter-spatial indices for a given base year and the indices obtained by direct inter-spatial comparison for the current year mainly because national indices use national price or quantity data as weights, while inter-spatial comparisons are made on the basis of average international weights. While it was agreed that it would be desirable to reduce these differences as much as possible, it was recognized that total super-transitivity (two-dimensional transitivity) is unrealistic.

Chapter 11. The rest of the world account

A. Basis of harmonising SNA and BPM

March, 1987

The Group was aware that several issues that were scheduled to come up in its discussions were relevant not only to the external sector but also to the domestic sectors. In a number of these cases, the Group believed that it would be inappropriate to make a recommendation for a treatment without giving attention to the implications for the domestic sectors. In these cases, the Group tried to identify the major needs and concerns relevant to the external sector and referred the issues to a subsequent Expert Group, usually the Expert Group on Production Accounts and Input-Output Tables or the Expert Group on Financial Flows and Balance Sheets. The Group urged, however, that a paper outlining the implications for the external sector of proposals to be considered by other Groups be prepared as part of the documentation for the meetings of those Groups and that members of this Group, who will not be at those meetings, be asked to provide written comments.

The Group recognized the extreme importance of harmonization between the SNA and the BPM. For that reason, the Group tried to reach unanimous decisions on all aspects of methodology. When the report says that “the Group agreed” it means that there was unanimous agreement. When the report says that “most of the members of the Group agreed” it normally means that the Group agreed as a whole, but that there were participants who had reservations.

B. The Statistical Discrepancy in World Current Account Balances

As background to the work of the Expert Group, the Final Report of the Working Party on the Statistical Discrepancy in World Current Account Balances was introduced. In this introduction, it was noted that:

1. the global current account discrepancy, while down from its 1982 peak of over \$100 billion, was still a cause for concern;
2. the Working Party had concentrated its activities on the investment income account, which had shown a persistent growth in its discrepancy since 1979;
3. some initial work was also done on two other large discrepancies in the current account, those in the shipment and unrequited transfers accounts, which have, however, remained reasonably stable in the last few years;
4. the study also reviewed capital flows, the relationship of financial assets and liabilities to investment income flows, and the impact on such flows of offshore financial centres and financial innovation;
5. the study confirmed that countries have better statistics on their liabilities than on their assets and, consequently, better data on their investment income payments than on their receipts; the rising investment income

discrepancy, therefore, can be explained by the increasing gap between liabilities and assets, and sharply higher interest rates in the period;

6. most recommendations of the Working Party were of a practical nature, rather than addressed to the refinement of definitions, e.g., using International Banking Statistics stock data to obtain position numbers on which income flows could be estimated by applying representative interest rates;
7. the data problems created by offshore financial centres were not new but had existed in the international financial markets of London, Paris, etc., but that it was recognized that some aspects of financial innovation would make it more difficult to obtain balance of payments data;
8. the Bureau of Statistics was currently preparing a plan of action for its implementation of the Report's recommendations;
9. implementation by countries should not involve the need for new resources but would rather mean using existing resources more effectively;
10. the geographic distribution of the statistical discrepancy was not sufficiently concentrated to cause analytical problems; and
11. it was inappropriate to try to expand greatly the standard components in the balance of payments framework; additional details should be collected by occasional surveys.

C. The Residents of an Economy

1. Basic concept of residence and supplementary rules

The discussion paper on this topic was "The Residents of an Economy".¹⁵ In the introduction of the paper, it was suggested that the general principle with regard to residency suggested by the paper related to governmental jurisdiction, rather than to centre of economic interest. This reflected a government's interest in determining policies for the residents of the territory it governs. The paper discussed the problem of temporary shifts of residence and suggested that a one-year rule normally be applied to determine residence, i.e., if it is expected that an entity will be in a given economy for one year or more, that entity will be considered a resident of that economy. The paper then examined residency issues in the main economic sectors of general government, individuals, private nonprofit bodies serving individuals, and enterprises.

Point of reference

With very little discussion, **the Group agreed that the definition of residence should refer to natural and legal entities, rather than to the real or financial assets of those entities.**

¹⁵ This paper and others from the march 1987 meeting appear in "The IMF's Statistical Systems".

The definition of residents

Discussion on the basic concept of residence focussed on whether the concept to be applied should be jurisdictional, as proposed in the paper, or should be the centre of an entity's economic interest. The paper argued that the jurisdictional approach concentrated on the policy needs of a government and the application of its authority to entities within the territory it governed. This approach, it was suggested, was more realistic than the centre of economic interest, which was a vague concept. Nevertheless, some notion of permanency of residence was required, so that the one-year rule for determining residency would continue to be the rule of thumb.

Many participants, however, preferred to retain the concept of centre of economic interest, using the one-year rule as a proxy, or guideline, for it. Some exceptions to the one-year rule, however, would be required.

It was suggested that the main residency criterion for an individual might be the activity which the individual pursues, e.g., whether the individual is a consumer or a producer. That criterion would accommodate tourists, who travel abroad but remain residents of their country of origin, and also workers. It was mentioned, however, that that criterion does not address the question of retirees who establish themselves abroad. Another possible criterion was to take note of the reach of the taxation authority of governments.

One exception to the centre-of-economic-interest rule that was suggested referred to diplomatic, military, and certain other government officials stationed abroad. For these individuals, the jurisdictional approach, which dictated considering these individuals as residents of their employing country, was preferred. In expressing that preference, no reference was made, however, to these individuals' dependents. On the other hand, locally-engaged employees of these individuals were considered to be residents of the country where they lived.

When applying the one-year rule it was also generally recognized by the Group that an exception should be made for students, as their centre of economic interest would not have changed to the country where they were being educated. One expert pointed out, however, that students may not return to their countries of origin, may receive allowances from their own government, and may make remittances to their home countries.

Concluding its discussion on the definition of residents, **the Group agreed that the residents of an economy should be identified as the entities that may be expected to consume goods and services, participate in production, or engage in other economic activities in the territory of an economy on other than a temporary basis. In general, these are entities whose "centre of economic interest" is in the given economy.**

There are exceptions to the use of the centre of economic interest to distinguish nonresidents and residents. One of these is based on the jurisdictional criterion: official diplomatic and consular representatives, members of the armed forces, and other government personnel working in offices of their government in a foreign country where they live are not considered residents of that foreign country.

The phrase "on other than a temporary basis" is generally implemented by reference to the "one-year rule.~ There are, however, exceptions to that rule; for example, an exception is made for students, as it is considered that their centre of economic interest remains in their country of origin.

As described below, this principle and the implementation of the “one-year rule” are to be supplemented by reference to specific recommendations for individuals and enterprises made on the basis of their activities.

Territory

In discussing the definition of territory it was acknowledged that the territorial coverage of some data is motivated by political decisions, which the statistician must accommodate. In fact, there are many examples of countries that use a territorial coverage for the national accounts that differs from that used for the balance of payments.

Nevertheless, the Group agreed that, in principle, the territorial coverage for the balance of payments and the national accounts should be the same. In practice, however, given the practical problems faced in various countries in deciding on their territorial coverage, it is not feasible for a set of international guidelines to set out what the territorial coverage in either set of accounts should be. It would, however, be desirable to have official reconciliations of any differences in the territorial coverage of the two sets of accounts so that users would have access to that information.

2. Individuals

Following the decisions on the concept of centre of economic interest and the application of the one-year rule, the residency of certain individuals, whose status might be in doubt, was discussed.

Discussion focussed principally on the treatment of students, technical assistance personnel, and workers under long-term contracts. The discussion on students is summarized in paragraph 11, above. For technical assistance personnel, there were major concerns about the appropriate treatment. Several balance of payments experts favoured treating these personnel in the same way as other government employees stationed abroad, i.e., as residents of the country employing them, as, in the view of these experts, the centre of economic interest of these personnel had not been transferred to the country to which they were giving technical assistance, even in the exceptional cases where technical assistance personnel stayed in a host country longer than two or three years. It was also pointed out that for countries where such personnel are an important economic factor, the inclusion of their income in the domestic economy could distort some aggregates.

It was also mentioned that all major donor countries and most host countries, except for a number of francophone African countries, treat such personnel as residents of the donor country. No host country treating these personnel as their residents follows through consistently in this treatment, for example, by including balance of payments entries for migrants' transfers when the technical assistance personnel arrive for, or leave after, an assignment

Other experts, however, considered that the important factor to consider is that these people are largely integrated into the work units of the host economy and that their production should therefore be considered as domestic.

Due to the sharply divergent conceptual views, a suggestion was made to see if a resolution of the problem could be arrived at by an examination of the practical issues involved in the two treatments, especially the data requirements for their implementation. Many experts also suggested that all technical assistance personnel

should be treated the same, i.e., those from international organizations should be treated in the same way as those provided under bilateral agreements.

With regard to workers under long-term contracts, particularly those living in enclaves, a few experts suggested that their centre of economic interest should remain with their country of origin, rather than transfer to the country where they are employed. This is the balance of payments treatment followed by a number of small countries providing such workers, where the contribution of these factors of production to GNP is substantial. It was also pointed out that in many cases the workers do not receive their full compensation in the employing country, but, instead, in the workers' accounts in their country of origin.

Most experts were, however, reluctant to accept that workers under a long-term contract should be treated as an exception to the one-year rule, i.e., they should be treated as residents of the country where they are working.

In discussing the one-year rule, it was mentioned that the present cut-off for the determination of residency is one-year or more, that is, to be considered a resident of an economy an individual must have the intention of spending one year or more in that economy. However in the capital account the distinction between short-term and long-term is slightly different, in that long-term is defined as a financial claim with a original term to maturity of more than a year. While there is no conceptual reason why the two rules should be identical, it was suggested that from a practical point of view it would be preferable if they were the same.

Following these discussions, the recommendations for the treatment of specific types of individuals were:

Students

Most members of the Group agreed that **students' residence does not change, regardless of their length of stay in a country, but remains that of their home country.**

Ships' crews

The Group agreed that the **residence of constantly moving individuals, such as members of ships' crews, is the economy of the last-established residence.**

Technical assistance

The Group was fairly evenly split on the residency of individuals working under long-term contracts providing technical assistance. **The Group recommended that a paper be prepared that would explore the conceptual and practical implications of treating these individuals as residents of the host and, alternatively, the donor country. The paper should be forwarded to the members of the Expert Group on External Sector Transactions, who should indicate their preferred treatment in writing. The paper, along with a summary of the preferences, should be forwarded to the Core Coordinating Group.**

January, 1989

A summary of the comments received by the IMF on the paper "The residence of technical assistance personnel" was presented. The problem was whether technical assistance personnel should be regarded as residents of the donor country or of the

recipient country and whether their output should contribute towards domestic product of the donor or recipient country. At the external sector meeting the participants had been split fairly evenly between the two options with some strong views held on either side of the argument. This difference of opinion was reflected in the comments that had been collated in the paper before the present meeting.

In discussion parallels were drawn between technical assistance personnel provided under a bilateral agreement with staff of international organisations, with diplomatic staff and with expatriates working in commercial enterprises. Diplomatic staff are considered to be residents of their own country and contribute to that country's GDP. The argument in favour of treating technical assistance personnel in parallel stems in large part from recognising that like diplomatic personnel they have a contract of employment with a particular government other than that of the country where they are physically present. It was recognised that in some countries the presence of large numbers of expatriates makes a significant contribution to the size of GDP if they are to be regarded as residents of the recipient country and that this might be grounds for excluding them. On the other hand it was felt that no such argument is put forward to exclude the output of aid personnel of international organisations nor for expatriates in the enterprise sectors. On this latter the practice was to deem that a resident company was established if activities spread over one year, even where a subsidiary company was not formally registered. On balance the conclusion of the meeting was that the parallel between aid personnel and expatriates in market production was stronger than the parallel with diplomats and they should, therefore, be treated as residents of the recipient country and as contributing to gross domestic product in that country. It was expected that where expatriate earnings are large relative to earnings of the country's own nationals then it would be in the country's interest to show these figures separately. Technical assistance personnel who are resident for less than one year will continue to be treated as at present as residents of the donor country and contributing to the donor country's output. Their assistance will feature as a grant in kind in the balance of payments matched by imported services while the funding of longer term personnel will show in the balance of payments account as a current transfer with no associated service.

Technical assistance personnel who are resident for more than one year will be treated as resident in the recipient country and their output as part of the output of the recipient country. The payment by the donor is treated as a current transfer. This treatment applies equally to personnel supplied by international organisations.

Employees of international organizations

March, 1987

The Group agreed to recommend that **employees of international organizations be considered residents of the country in which the local or regional office is located.**

Other workers

Most members of the Group agreed to the general principle that **a person expected to be employed in a host country for [more than one year]/one year or more is so closely associated with the units of production that are in that host country that the person should be regarded as a resident of that country. (On pragmatic, rather than analytical grounds, the Group agreed, that the time period referred to in the previous sentence should be brought in line with the time period selected for the distinction between long-term and short-term capital.)** This principle, it was generally agreed, would apply

to individuals working under long-term contracts, even if these individuals were living in an enclave.

Illegal aliens and refugees

The Group agreed that **illegal aliens and refugees be considered residents of the host country. These individuals should be included in the population statistics of that country.**

3. Enterprises

The discussion focussed principally on the treatment of nonfinancial intangible assets and installation services.

With regard to the acquisition of nonfinancial intangible assets, such as patents or copyrights, the consensus of the Group was that it was not necessary to create a notional resident enterprise to record the acquisition of these assets. It was pointed out, however, that, unless a notional resident enterprise was created, the capital account of the balance of payments would change its character to comprise more than just financial assets if the acquisition was to be entered in the capital account.

For installation services, the discussion centred around whether a notional unit, which would be the generator of the installation activity, should be imputed in the country acquiring the services. If so, the the question would arise whether a notional unit should be imputed under all circumstances or only if the activity would take longer than a year. Most experts were opposed to creating a notional enterprise, even if the installation activity were to take more than one year.

The conclusions with regard to the issues pertaining to the residency of enterprises were:

Operators of mobile equipment

The Group could not offer any alternative to the current approach of using various attributes, such as the flag of registration of the equipment, the economy of incorporation of the company directing its operations, the residence of the owners of that company and, for an unincorporated enterprise, the residence of the entity responsible for its operations, in identifying the residence of operators of mobile equipment. The Group looked forward to what the further pursuit of the study of the Working Party on the Statistical Discrepancy in World Current Account Balances might yield in the way of guidelines that would result in consistent statistics on the transactions of these operators in countries' balance of payments accounts.

Offshore enterprises

The Group agreed that **the residence of offshore enterprises be considered the economy in which they are located.** The Group agreed that **both the gross and the net flows in and out of these enterprises are desirable for analytical purposes, but recognized that it is very difficult to get a complete accounting of these flows.**

Owners of land and structures

The Group agreed that **the existing practice for the treatment of land (i.e., attributing ownership of the land to a resident enterprise, notional if necessary, with a nonresident as the owner of that enterprise)be maintained.**

The Group agreed that **immovable assets, such as structures, be treated as land is treated. Most members of the Group agreed, however, that it is not necessary to create a notional enterprise as the owner of nonfinancial intangible assets, such as patents, i.e., such assets would not be treated as land is treated.**

Ships flying “flags of convenience”

Most members of the Group agreed that **fees to register ships or other mobile equipment in a so-called open-registry country for the purpose of obtaining the right to fly the flag of that country be treated as unrequited transfers.**

Jointly owned and organized enterprises operating outside national territories

The Group agreed that **the present treatment, in the balance of payments and the national accounts, of transactions of jointly owned and organized enterprises operating outside national territories, i.e., the attribution of their transactions to enterprises in the economies of each of their owners in proportion to the owners’ shares in the financial capital of the joint enterprises, be continued. The Group recognized, however, that the practical problems of implementing this recommendation may be great and that some judgmental solutions, such as considering the residence of the joint enterprise to be that of the member with the largest share, may be necessary.**

Enterprises engaged in installation of equipment

The Group agreed that **enterprises engaged in installation of equipment abroad should be considered residents of their economy of origin.**

Agents

The Group agreed that **transactions involving agents be attributed to the economy of the principal for whom the agent works and that the service of the agent to the principal be attributed to the economy of the agent.**

D. International Organizations

The discussion paper on the topic was “The Treatment of International Organizations”. The new, more detailed definition of an international organization, proposed in the discussion paper, addressed the jurisdictional status of an organization. According to this definition, an international organization would derive its authority directly from the authority of its members, i.e., from independent states. An international organization would have a sovereign status, because it would not be under the jurisdiction of any single government.

In the ensuing discussion reference was made to the Fund’s recent survey of its members to determine the current treatment of international organizations in member countries’ balance of payments. This survey provided a list of international organizations, as perceived by national compilers, as well as their treatment. On the whole, most countries were recording transactions with international organizations, including those physically located in their country, as being with a separate economy.

The problem of coping with a large number of international organizations was also mentioned. As the Fund intends to collect balance of payments data from international organizations to round out global totals, it was seen advantageous to keep the number of

such organizations to a minimum. Another point that was raised related to the product of international organizations. On the whole it was felt that the services produced are primarily nonmarket services, but it was recognized that in many instances financial intermediation services are important. While an international organization can be viewed as an economy similar to any other economy, a major reason for compiling data is not to analyze the activities of international organizations themselves but rather to provide global counterpart to countries' transactions with these organizations.

Certain problems were also mentioned relating to regional central banks, such as the Central Bank for West African States. These banks have a central headquarters organization as well as national offices, which act as the central bank in the country where they are located. The question is whether the headquarters should be treated as an international institution or whether its activities and financial position should be distributed among its member countries.

Concluding its discussion on this topic, the Group agreed that **the definition of an international organization should be based on three considerations. First, that it must have authority derived directly from the authority of its members, which may be independent states or international organizations. Second, that it must have a sovereign status, i.e., the laws and regulations of the country or countries in which it is located do not apply to the international organization. Third, that the services it produces are primarily nonmarket services.**

The Group recommended that **a list of such international organizations, which are considered to be operating outside any national territory, be drawn up in time for discussion by the Expert Group on Financial Flows and Balance Sheets (the Group on Financial Flows) and provided for use by national compilers and international organizations working in the field.**

E. Conversion

The discussion papers for this topic were: "The Conversion of Balance of Payments Transactions as a Source of Valuation Changes: Problems, Principles, and Practical Solutions", "Currency Conversion in a Multiple Exchange Rate System" and "The Treatment of Exchange Rate Differentials in the National Accounts".

1. Time of Conversion

These papers reviewed the principles of conversion of transactions values from a transaction currency into a unit of account and compared the effects of using the exchange rates at the contract date and at the date when ownership of the assets changes, or a proxy for this point in time, such as the time of the delivery of the assets. The rationale for using the exchange rate prevailing at the contract date, which is the treatment preferred in the paper, is that that rate reflects the price of the transaction currency that the party with a currency risk in the transaction has to take into account when entering into the contract. If the exchange rate prevailing at the contract date were used for all facets of a transaction involving a borrowing with a subsequent repayment, the borrowing and the repayment would be reflected at the same value, both in the transaction currency and in the unit of account. If, on the other hand, the conversions were made at rates prevailing at the transaction dates, the values of the borrowing and subsequent repayment would be different in the unit of account, reflecting the change in the exchange rate between the two transaction dates.

In the ensuing discussion nearly all participants expressed their support for the conversion of transactions at the exchange rates prevailing at the transaction dates rather than at the contract date. It was argued that a change in the exchange rate is a price change which is similar to the difference between the price prevailing at the contract date and the price at which the contract is executed. In the example discussed in the previous paragraph, any difference in values, for the borrowing and the repayment, expressed in the unit of account would be handled in the national accounts in the Reconciliation Account. It was suggested that using the exchange rate prevailing at the contract date would create problems for global data when expressed in the unit of account used for international comparisons. Specifically, if a country had applied that rate reconversion into the unit of account used for international comparisons, such as the SDR, at a period average exchange rate, this would yield a result that would differ from that obtained by converting the values in the transaction currency to that unit of account at contract-date rates.

With regard to the exchange rate that should be used for conversions into a unit of account, the ideal would be to use the exchange rate prevailing at the time of change of ownership. In most cases, however, it was thought that the exchange rate prevailing at the time of delivery of the assets would have to be accepted as a proxy for the one prevailing at the time of the change-of-ownership. The average exchange rate of the day of the change of ownership or delivery would be desirable. However, if that were not possible, the rate to be used should be the average for the shortest time span that includes the time of change of ownership.

The discussion on the conversion of stock data showed no disagreement with the principle, that conversion should be at the exchange rate prevailing at the balance sheet date. In using balance sheet data to derive transactions data, however, the attention of statisticians should be drawn to that component of the total change in stock data that represents unrealized valuation changes. To derive the flow data, this element has to be excluded from the total change. The conclusions were:

The principle for converting flow data

Most members of the Group agreed that **the exchange rate to be used for the conversion of flow data from a transactions unit to the unit of account is the rate prevailing when ownership of the assets changes (rather than the rate prevailing at the time of contract). Most members of the Group agreed that use of this rate would bring external transactions into alignment with the principle of recording activity when it actually takes place.**

For example, if delivery of the assets provided under a contract by transactor A (for example, provision of goods) has taken place at point t1 and delivery of the assets provided under that contract by transactor B (for example, the payment for the goods) has taken place at points t2 and t3, then the transaction values of these deliveries should be converted at exchange rates prevailing at points t1, t2, and t3, respectively.

The practice for converting flow data

The Group agreed that, **if it is not possible to convert flow data from the transactions unit to the unit of account at the rate prevailing when the change of ownership is recorded, the rate to be used should be an average of rates over the shortest period possible.**

The principle for converting stock data

The Group agreed that **the exchange rate to be used for the conversion of balance sheet data is the rate prevailing at the balance sheet date. It should be noted, however, that when balance sheets compiled in this way are used to estimate flow data, the data have to be adjusted to eliminate changes in valuation.**

2. Exchange rate differentials

During the presentation of the paper entitled "The Treatment of Exchange Rate Differentials in the National Accounts" it was stressed that exchange rates are important not only in compiling data for the external sector of the national accounts, but also as a link between components of the national accounts framework of individual countries and for making comparisons between major economic aggregates of countries. Discussion focussed on whether the spread between the buying and selling rates for foreign exchange represented a service, provided by the financial institution involved, or whether it was a realized capital gain.

The Group agreed that **the average of the buying and selling rates should be the rate for converting transactions from a foreign currency into the domestic currency. Any spread between the buying and selling rates and that average (the mid-point of buying and selling rates) should be construed as a service charge**

3. Multiple exchange rate regimes

The main discussion paper for this topic was "Currency Conversion in a Multiple Exchange Rate System". The point was made that multiple exchange rate systems give rise to implicit taxes and subsidies between different sectors of an economy and in determining the unitary rate of exchange these taxes and subsidies have to be taken into account. While These adjustments to the actual rates could be made at the transaction level, or transactions could be converted at actual exchange rates with the intersector transfers being handled at a global level.

Most experts, while agreeing with the principle of a unitary rate, thought that there were considerable practical difficulties in its application. One way to arrive at a unitary rate might be to try to weight transactions according to actual rates used and derive a weighted average from these data, which could be considered an accounting exchange rate. Another suggestion was to use the exchange rate at which market demand was satisfied as being the best representative rate available, which should be applied to all transactions.

Other experts favoured using the actual exchange rates applied to specific transactions to determine their values in the unit of account. For example, if one wanted to study the effects of the terms of trade of trade patterns it would seem appropriate to use actual exchange rates rather than a unitary rate.

In conclusion, the Group agreed that **a unitary rate would be analytically appropriate for some purposes and that the use of actual rates would be appropriate for other purposes. It was noted, however, that would be difficult to identify a unitary rate; use of both a weighted average and specific transaction rates were discussed. Because the implications of these alternatives for the full set of national accounts were not clear, the Group recommended that the matter be examined in depth by the Expert Group on Production Accounts and Input-Output Tables (the Group on Production Accounts). It**

was also noted that similar problems occur when the exchange rate of a country is artificially fixed by its government.

March, 1988

The topic of exchange rate differentials was covered in four of the background papers, "The treatment of exchange rate differentials in the national accounts" "Application in the SNA of a uniform exchange rate for transactions with the rest of the world", a paper prepared by ECLAC currently only available in Spanish and "Currency conversion in a multiple exchange rate system the implications for the full set of national accounts". While these problems have implications for all countries they are particularly acute for countries such as many in Latin America who compile their balance of payments accounts in a currency other than local, usually in US dollars. There are three types of circumstances that need to be considered: (1) Stable monetary conditions, (2) rapidly changing exchange rates and (3) multiple exchange rates. It became clear in discussion that it was helpful in fact to distinguish between multiple official exchange rates and multiple exchange rates where black market rates were involved. In all cases, if no adjustment is made the current account balance in dollars may misrepresent the balance calculated in local currency.

There was general agreement that the difference between sale and purchase price of foreign currency under stable monetary conditions, should be treated as a bank service charge. The exchange rate differentials caused by rapid changes over time of the value of the foreign currency should be considered as capital gains or losses for either the central or commercial banks. No specific agreement was reached on the allocation of the service charge to sectors using the foreign exchange service of the banks

The group considered at length the difficulties raised by the existence of official multiple exchange rates. It was agreed that in compiling the central accounts of the system any external flows reported in foreign currency should be converted to national currency using the exchange rates applicable to each type of transaction prevailing at the time the transaction occurred.

Multiple official rates

In the case of multiple exchange rates the first case that was considered was when all of the multiple rates are official rates, for example, as a result of government policy where different rates apply to different types of exports and imports. It was argued that the alternative rates are equivalent to the imposition of implicit taxes and subsidies and should be treated as such. It would be possible to calculate a single average exchange rate equivalent to that that would prevail in the absence of government control. A worked example showed how the size or even the sign of net lending of the external sector would be different when valued in U.S. dollars than when valued in local currency using actual exchange rates, and how the use of unitary rates, with imputations for indirect taxes and subsidies would bring the local currency value of external net lending in line with its value in U.S. dollars. This change in net lending is equivalent to the gains made by the central bank on converting foreign currency to local currency at the imposed varying rates. The case being made is that this is a real profit of the central bank and it should affect the level of GDP. If it were to be regarded as a capital gain it would appear only in the reconciliation account and not affect GDP. The argument is that it is appropriate to change GDP but this should be done only as a global adjustment and that changes should not be made in value added by industry or categories of final expenditure. The effect of exchange rate differentials should be calculated separately for imports and exports, for

factor income and for capital transactions, the effects being shown separately as net indirect taxes, taxes on income and taxes on capital.

In the example given, the unitary exchange rate is calculated as a weighted average, using as weights all transactions on the credit and debit side of the external account. It is possible to imagine other weighting factors being used but the example showed that although the components of indirect tax, tax on income and tax on capital may alter relative to one another the total imputed tax in effect on net lending is invariant under these alternative assumptions. There will however be changes in the values recorded for GDP for foreign trade surplus and savings. If it is assumed that all foreign exchange is managed by the central bank a transfer should be imputed from the government to the central bank. The savings and net lending figures of the government would be unchanged but those of the central bank would change compared to the case where no imputed tax adjustment was made. All of these transactions appear in the flow accounts and no adjustments would be needed in the reconciliation account.

A variation on this suggestion is that many of the transactions should be routed through a dummy account called the foreign exchange unit.

There was general agreement that this proposal seemed reasonable in the case of multiple official exchange rates but it was agreed that the proposal should be referred to the Expert Group Meeting On Financial Flows and Balances to consider specifically the implied transfer between the government and the central bank

In countries with official multiple exchange rates, accounts should contain global adjustment items, as explained [above].

The global adjustment items are calculated as the differences between transactions with the rest of the world converted into national currencies using the actual multiple rates, and the same flows converted using a "unitary" exchange rate.

The unitary exchange rate can be calculated as an average of the multiple rates using as weights imports and exports, transactions in the income and outlay accounts, and transactions in the capital finance accounts.

The adjustment items are to be treated as (net) taxes on production, taxes on income and capital taxes depending on whether they are levied on flows in the production, income and outlay or capital finance accounts, respectively.

Assuming that the multiple exchange rate system is managed by the Central Bank, the adjustment items will appear in the income and outlay accounts or capital finance accounts as receipts of transfers by the Central Bank from government and will affect the bank's saving and net lending; saving and net lending of government are not affected. The Expert Group on Financial Accounts and Balance Sheets will have to consider precisely how these transfers should be treated in the accounts of Central Banks.

Multiple rates including black market rates

The more complicated question of multiple exchange rates is where a black market rate was involved. The main difference between this case and the case of multiple official exchange rates is the implausibility of attributing imputed taxes and subsidies in the case of illegal or unofficial activities and the inappropriateness of assuming that the effects of these transactions would show up in the net lending of the general government sector.

The question arises of where the counterpart transactions appear in the accounts. After further discussion, it was agreed to postpone a decision on the appropriate treatment in this case until the views of the Expert Group Meeting on Financial Flows and Balances were known.

September, 1988

For those financial instruments denominated in foreign currencies, valuation changes can result from exchange rate changes as well as from changes in market prices. The associated gains and losses will therefore depend on the frequency with which balance sheet entries are revalued. As in the case of domestic financial instruments, the counterpart of the valuation changes in the balance sheet is recorded in the SNA in the reconciliation accounts.

When compiling balance sheet data in terms of the national currency, a question arises as to the appropriate exchange rate to be used in converting the value of financial instruments denominated in foreign currencies or units of account. In a fluctuating exchange rate regime involving a unitary rate, it would appear reasonable to use the prevailing end-of-period exchange rate. However, the appropriate exchange rate to be used in situations involving multiple exchange rates, or where there are official and parallel, or "black," markets for foreign exchange, is less clear.

When dealing with transactions, both the Expert Group on External Sector Transactions and the Expert Group on Production Accounts and Input-Output Tables recognised that a multiple exchange rate regime implicitly incorporates elements of taxes and subsidies that are essentially of domestic origin. They recommended that the implicit taxes and subsidies be imputed as the difference between the exchange rate specific to a given transaction and a notional unitary rate approximated as a weighted average of the multiple rates applicable to the different classes of transactions.

In the context of valuing outstanding amounts of assets and liabilities denominated in foreign currencies, the question arises as to which of the several end-of-period multiple rates could be said to be applicable, since the multiple rates are designed to affect the volume of certain classes of transactions (for example, exports, imports, capital flows, etc.), while their impact on the levels of foreign assets and liabilities is often not considered. In the circumstances, since it is difficult to conceptualise any kind of weighted average, consideration could be given to using the end-of-period principal rate or the rate at which most of the transactions are deemed to be occurring.

The prevalence of an illegal or "black" market for foreign exchange in addition to the official market poses yet another problem for choosing an appropriate exchange rate for valuing holdings of foreign assets and liabilities in terms of the domestic currency. In these circumstances, too, it would appear reasonable to recommend the use of the end-of-period principal rate prevailing in the official market for foreign exchange.

The Group agreed that under unitary exchange rate systems the valuation of foreign currency-denominated stock positions was straightforward, using the end-of-period unitary exchange rate. The Group concluded that under multiple exchange rate systems several techniques might have to be used to value foreign currency-denominated items in the balance sheet depending on individual countries' systems and data limitations. If there is a clear separation of markets, the preferred technique would be to apply the actual exchange rate used for transactions for a particular sector, asset, or liability. It was noted, however, that this might be difficult in practice because of data limitations. If the above clear separation does not exist, the conversion should

be based on a rate obtained as a weighted average of actual rates. It was pointed out that, if weighted averages were used, the weights could be extremely volatile, and in practice the weights used might not accord with reality. If such an average could not be compiled, the rate used should be a "primary" or "principal" rate, or the rate at which the majority of transactions take place. It was suggested that the text of the SNA should acknowledge the possible problems and implications of using such rates. **Whichever technique was selected, the rate would be an and-of-period one for the valuation of stocks. It was agreed that the IMF staff would guide the author of the revised SNA on exchange rate terminology used in the IMF.**

December, 1990

The paper for this topic was "Proposed SNA treatment of multiple exchange rates with particular emphasis on parallel market exchange rates". There were three questions to be answered: (1) how to treat revenue from exchange rate differentials received by private banks or foreign exchange dealers; (2) how to measure this; (3) how to present it in the accounts. The normal case is that the average between the buying and the selling rate is the rate used for conversion of the foreign transaction. The differences between this central rate and the buying and selling rates are service margins provided by financial auxiliaries and are paid by exporters, tourists or importers. They are domestic transactions. When there is a parallel market, the difference between the buying and selling rate is still a service charge. Where there is a difference between a parallel rate and an official rate, if an exporter, say, is allowed to sell part in the parallel market and part at the official rate, the appropriate exchange rate to be used is that formed by converting the transactions at the actual rate that is used i. e. a weighted average of the two rates, the weights representing the proportion of sales taking place at each of the two rates. The paper suggests that if the part of the transaction that is sold in a parallel market is done so illegally rather than legally, that the conversion should be done at the official rate. The group felt this was inappropriate and that the same procedure should be followed as when the transactions legally take place part in the official and part in the parallel market.

There was then discussion about how the revenue arising from differences between official and parallel rates should be treated. Some participants felt this too should be treated as a service charge but others argued that this represented a holding gain or loss on the grounds that it was too sophisticated to try to separate out a service charge and that in some cases all that may be possible would be to take gross foreign currency dealings and apply an arbitrary percentage to this without allocation to users. No decision was reached and the issue was left for a sub group to take up.

Mid-point rates should be calculated separately for the official market on the one hand and the parallel markets on the other.

If a parallel foreign exchange market is entirely separate from the official exchange market, revenue obtained from exchange rate differentials within the parallel market by banks and foreign exchange dealers will be treated as a charge for a service.

F. The Change-of-Ownership Principle

March, 1987

This topic was covered by two discussion papers, "Change of Ownership and Time of Recording in the National Accounts" and section IV.2 of "Harmonization of the Classification of International Transactions in the System of National Accounts (SNA) and the Balance of Payments Manual (BPM)"

1. *The principle*

In compiling data it is important to identify assets and liabilities, and their ownership. In both the current SNA and BPM, a transaction is deemed to have taken place when there is a change in the ownership of an asset. This, however, begs the question of how to record illegal transactions, which, from an economic point of view, are quite relevant. A complicating factor may be that a transaction is illegal in one country but not in the other. This suggests that a somewhat different concept is required; a concept that takes into account control over the assets in question.

The Group agreed that **the change-of-ownership principle should be the primary guide for recording transactions. However, it should not be used to the neglect of other aspects that may be more appropriate in particular situations, as exemplified below. The Group also agreed that, although time-of-contract recording is not appropriate for the balance of payments or the national accounts, information on that basis would also be useful.**

2. *Transactions between parts of the same legal entity*

Transactions between parts of the same legal entity, for example, between a branch and its foreign head office, do not reflect a change in the ownership of the assets involved. Nevertheless, the balance of payments should register such transactions as if a change of ownership had occurred. As a rule, there would be a set of accounts created to reflect the branch/head office relationship. Such records might be construed as reflecting a change in the control of assets within the same legal entity, which could be used for recording financial items, but which would probably be too cumbersome to use as a substitute for customs data to record merchandise flows. The Group therefore agreed that **there is not much potential for the adjustment of customs data on the basis of transactors' records in order to reflect change of control (as a proxy for change of ownership) between parts of the same legal entity.**

3. *Financial leases and similar arrangements*

In financial lease arrangements there is no legal change of ownership of the goods being leased. Nevertheless, due to the terms of the lease, a change of ownership is to be imputed, with the lease arrangements being regarded as the financing of a purchase. The Group agreed that **guidelines for both the balance of payments and the national accounts should refer to the same cut-off point in determining what percent of the cost of a good, together with the carrying charges, must be recovered by an arrangement to qualify it as a financial lease. The Group, furthermore, agreed that the cut-off point should be less than 100 percent and should be considered in light of any current developments in financial accounting. The commencement of the lease is to be recognized as the proxy for the change in ownership of the equipment under the financial lease. The Group also agreed that arrangements similar to financial leases be examined along with financial leases in preparing guidelines.**

4. *The time of recording for income*

There are three different possibilities for the recording of income, accrual, due-for-payment, and cash bases. Accrual refers to the recording of income related to financial instruments on a continuous basis, e.g., for bonds which pay interest only once a year their interest payments would be pro-rated on a quarterly basis if the balance of payment is compiled quarterly. On a due-for-payment basis the annual payment would be

included in the quarter in which the payment is due, even if it is not paid, while on a cash basis, the payment would only be included when it is actually paid.

The paper recommended the adoption of accrual accounting for interest income, so that the recording of income would be commensurate with the provision of capital. In particular, it was pointed out that recording on a due-for-payment basis, the BPM4 recommendation, led to recordings of a distorting nature in the case of zero-coupon bonds.

Many experts were, however, reluctant to adopt accrual recording for all interest transactions, particularly as they recognized that in many cases the data either would not be available or would be difficult to obtain. The present treatment should, therefore, be maintained with an exception made for zero-coupon bonds. It was also mentioned that supplementary information on cash payments was needed for certain types of analysis related to arrears. Methods for recording income are also being considered by the International Compilers' Working Group on External Debt Statistics.

The Group agreed that **the due-for-payment, as opposed to the full accrual, recording of income should be maintained.** (The Group agreed that an exception to the due-for-payment recording be made for zero-coupon bonds.) There are situations, however, such as debt arrears, when supplementary information would be needed.

5. *Reinvested earnings on direct investment*

The recommendation of BPM4, supported by the national balance of payments experts, is that reinvested earnings on direct investment be included in the balance of payments. If it is analytically useful to record direct investment transactions separately in the balance of payments, then the picture would be incomplete without these undistributed profits. Their inclusion ensures that incorporated subsidiaries are treated in the same way as branches in those cases where branch profits cannot be arbitrarily divided into distributed and undistributed parts. In addition, a better link is provided between the flow and stock data, while rates of return become more meaningful.

The national accounts experts were reluctant to fully endorse this position, as the implications for the treatment in the full set of national accounts were not clear. They felt that the matter should, therefore, be referred to the Group on Financial Flows for its consideration.

In the course of the discussion it was mentioned that there are many countries that do not have these data. Information from their partner countries could, however, be used by these countries as a starting point in constructing these estimates. Reference was also made to the work of the OECD in refining the definition of direct investment and related flows, such as earnings, both distributed and undistributed.

Most members of the Group agreed that **both the external and the domestic sector account of the national accounts, like the balance of payments, should include international flows of reinvested earnings attributable to direct investors.** Direct investment and reinvested earnings on direct investment would be as defined in the OECD "Detailed Benchmark Definition of Foreign Direct Investment." The Group, furthermore, strongly recommended that a full accounting for reinvested earnings should be prepared for consideration of other groups in the SNA review process, specifically the Group on Financial Flows, and that, in that accounting particular attention should be drawn to the implications for saving and national disposable income.

Neither for the balance of payments nor for the external sector of the national accounts is there any reason to extend this treatment to portfolio investment.

6. *Transactions between affiliated enterprises*

The 1968 SNA appears not to include cross-border flows of merchandise between affiliated enterprises in export and import statistics. Such flows should, however, be included in the merchandise account according to the BPM.

The Group agreed that **transactions between direct investment enterprises and their parents or other related enterprises be recorded as if a change in ownership had occurred in order to make the treatment of those transactions parallel to that of transactions between unrelated enterprises.** The exceptions to this procedure are the same as those for unrelated enterprises.

7. *Goods for sale on consignment*

If the principle of change of ownership is followed, goods on consignment should be included in the merchandise account when they are sold, i.e., when their ownership changes. Such goods would, however, be included in customs data when they cross the customs border. Some experts doubted that adequate adjustments could be made at the commodity level to correctly adjust the data. It was pointed out, however, that some exporters of primary commodities who sell on consignment, such as Australia, do have the capacity to make the necessary adjustments at the commodity level.

The Group agreed that **the change-of-ownership principle should be adhered to for goods for sale on consignment.** Consequently, for significant transactions, it may be necessary to make valuation and timing adjustments to the trade statistics when these are used as the basis for compiling the merchandise data. However, there may be practical problems to making those adjustments.

8. *The f.o.b. value of imports*

There is a difference in the valuation of imports in the 1968 SNA and BPM4. In the SNA imports are valued c.i.f., that is the cost of insurance and freight is included whether these services are provided by residents or nonresidents, while in the BPM imports are valued f.o.b., with the cost of insurance and freight services provided by nonresidents being included in the shipment account. To harmonize the treatment it was suggested that the BPM valuation be followed in both systems.

From the discussion it appeared that the national accounts experts were not averse to the BPM solution in principle, but were concerned about the practical problems of getting commodity detail on an f.o.b. basis. A solution to this problem which involved introducing a global adjustment to the import data was, however, proposed. It was noted that such adjustments presently are often carried in the detail of balance of payments presentations, where the total of imports on a c.i.f. basis is given together with the adjustments to come to an f.o.b. figure.

The Group agreed to the proposal that **the total of imported goods would be recorded in the external accounts on an f.o.b. basis.** Thus, imports and exports of goods and services would both be recorded on an f.o.b. basis, eliminating the discrepancy between the national accounts and the balance of payments. For the detailed analysis of goods and services~ as a rule, it is not possible to get an f.o.b. value for each category of imported goods, so that a global adjustment would have to be made in the

supply and disposition figures, as in the input-output tables, in order to adjust the c.i.f. total to the f.o.b. total for imports.

March, 1988

The meeting considered whether imports in the input/output matrix should be valued c.i.f. or f.o.b.. At the Expert Group Meeting on External Sector Transactions, considerable progress had been made in reaching harmonization between the presentation of trade data in the SNA and balance of payment statistics by agreeing that imports of goods should be recorded f.o.b. with the insurance and freight elements recorded in services. Such a presentation avoided the distortion presently employed when insurance and freight on imports is provided by domestic carriers and these are then imputed as exports of services as well as being recorded in imports of goods c.i.f.. Given this agreement the question now was how far the recording of imports of goods f.o.b. should be carried into the input/output presentation.

Many participants spoke in favour of the 1968 treatment where the use matrix contains the detailed breakdown of imports of goods on a c.i.f. basis. This treatment is practical for all countries since all countries record detailed imports c.i.f. where very few also record them f.o.b.. It was also argued that this was the correct theoretical treatment since it was appropriate to regard an imported good as being a joint product until it crossed the border because it was at this point that the item concerned entered the market and became competitive with domestically produced items. Against this it was suggested that this could lead to anomalies where, for example, a product that had a very high transport cost and was produced within the country but at some considerable distance from its point for use or across the border but close to the point of use would be portrayed very differently. Further if the real intention in an input/output matrix is to portray goods valued at their point of sale (ex-works) then arguably this should apply to imports as well as domestically produced products. An alternative would be to value all transactions at the point of use but for consistency this should apply to both imported and domestically produced products. While there was some sympathy for this argument on the whole the majority of participants felt that the present treatment recommended in the SNA should be preserved, that is detailed imports in the use matrix should be valued c.i.f.. Even those participants who are not wholly convinced of the theoretical justification for this procedure accepted that in practice it would usually be the only viable alternative.

In Canada exports in the input/output matrix are valued at their point of sale ex-works and the transport services provided to the border are treated as an export of services, The question of where transport costs for both imports and exports should be recorded in a regional input/output framework was raised but not resolved.

Having concluded that imports should be recorded c.i.f. at the detailed level it was argued forcibly that an adjustment within the supply and disposition matrix was necessary in order to present a consistent total for imports of goods f.o.b. in this framework that corresponded to the entries elsewhere in the national accounts and in the balance of payments statistics. While not all participants thought that such an adjustment was necessary for the sake of the supply and disposition framework per se it was agreed that harmonization with the rest of the accounts and alternative presentations suggested that such an adjustment should be shown.

In the external sector accounts of the next version of the SNA, imports of goods in total will be shown at f.o.b. values. They will therefore be consistent with the imports shown in the IMF Balance of Payments system.

The experts agreed that there are good analytical reasons for either f.o.b. or c.i.f. valuation in recording imports by detailed product groups in the input/output framework. However, a large majority preferred c.i.f. valuations taking into account analytical and practical grounds.

For each of the totals of imports of goods, imports of services, exports of goods and exports of services, the valuation should not be the cause of differences among the accounts and tables in the next version of the SNA and between the SNA and the Balance of Payments.

The group noted that there were several problems with the treatment of insurance on merchandise trade and asked that insurance should be taken up at the Expert Group Meeting on Financial Accounts and Balance Sheets.

9. *The write-off of bad debts*

March, 1987

Write-offs of bad debts are treated differently in the current SNA and the BPM. In the SNA, an entry is made for the notional repayment the amount written off, with a counterpart entry made in unrequited transfers. In the BPM, however, write-offs are treated as valuation adjustments, so that no entries are recorded.

The experts favoured the BPM treatment, but noted that in cases that involve the voluntary cancellation of debt through an agreement between the two parties involved, the SNA treatment would apply. This treatment also accords with the BPM treatment for this type of transaction

The Group agreed that **the write-off of a bad debt be treated as a valuation change, which should be excluded from the data on external transactions. In contrast, when the voluntary cancellation of a debt is a contractual arrangement between the parties concerned it is to be construed as an unrequited transfer.**

10. *Free goods and services for travellers*

While noting that the data would be very difficult to obtain in practice~ the Group agreed that **the value of free goods and services provided to travellers be included as part of travel. A contra-entry to the flow of free goods and services would have to be made in current transfers.**

11. *Goods for processing*

Goods that are sent for processing without a change of ownership from one country to another and that thereafter leave the second country are treated in the 1968 SNA in a way that differs from the way in which they are treated in BPM4. In the national accounts, the value of these goods is recorded in the merchandise account at their original and processed values, while in the balance of payments no entries are made in the merchandise account, with the value added due to processing being recorded as a service item.

The need to harmonize the treatment was recognized, with discussion focussing on how to do this. The national accounts experts seemed to feel that, particularly where the value added due to processing was a substantial proportion of the final value, the data should be recorded gross in the production account and in the merchandise account. There was,

however, some support for the suggestion that where the processing might only consist of packaging, instead of transforming the goods, only the value added should be recorded, as the recording of the transactions on a gross basis might distort the analysis of the trade data. It was also noted that processing is not a very precise term, but may span a whole range of activities from labelling, to packaging, assembling, or completely transforming the original goods in question. (According to paragraph 221 of the BPM, the first two activities would clearly not be considered to be processing). It would be useful to have a clear definition of processing and, in this connection, it was suggested that reference should be made to the latest recommendations of the United Nations on trade statistics.

The practical difficulties of obtaining the data were also mentioned. If, for example, goods for processing without a change of ownership are included in the trade statistics indistinguishably from other data, there would be no possibility for making any adjustments. In this case, there would be no choice but to have gross recording.

Another factor concerned the stock of goods for processing in an economy at the end of a reporting period. It was recognized that if the flows for these goods are incorporated in the merchandise account, to the extent that amounts are left in the processing economy at the end of a reporting period a contra-entry in the capital account has to be created.

To try to accommodate the points made above, two suggested tabulations were presented to the Group. On the whole, the Group favoured a presentation that separated export and import flows into processed goods, goods for processing, and other goods. A possible variation would be to deduct imported goods for processing from exports of processed goods and to deduct exported goods for processing from imports of processed goods.

The Group agreed that **both in the balance of payments and in the national accounts, goods exported/imported for processing and re-import/re-export should be recorded gross by the processing economy as well as by the economy that sent the goods for processing. This procedure should be followed if there is a substantial physical change in the goods reflecting a change in their characteristics. The Group further agreed that in the presentation of the balance of payments data goods that do not involve a change of ownership should be separately identified. In addition, an entry in the capital account may be needed in respect of these goods when exported/ imported for processing in one accounting period and re-imported/ re-exported in another period. The Group also agreed that there is a need for a clear definition in the revised SNA as to what constitutes processing activity. In this context, reference should be made to existing international guidelines on external trade statistics.**

12. Goods for repair

As a corollary to its discussion on goods for processing, the Group also considered the case of goods for repair. In the balance of payments, such transactions are treated in a similar fashion to goods for processing in that, as there is no change of ownership, no entries are recorded in the merchandise account. The national accounts experts, however, felt that a distinction should be drawn between repair activity that involved a substantial amount of manufacturing or reconstruction work, which would normally be performed on investment goods, and other repair activity, which might involve just the replacement of defective parts in a machine. In neither case should the value of the goods before the repair be shown in the balance of payments; however, the value of repairs on investment goods should be entered in the merchandise account, while other repair activity should be recorded as a service item.

The Group accepted that a distinction should be made between repairs performed on investment goods and repairs performed on other goods. The value of repairs on investment goods should be shown as part of the merchandise item; other repairs should be classified as a service item in both the balance of payments and the national account. With respect to the recording of goods for repair, the Group expressed the need for a review of existing international guidelines for the compilation of external trade statistics.

13. Other specific recommendations

In the context of the discussion on the classification of services, income, and unrequited transfers, the Group dealt with several other specific issues and agreed to the following:

Travel in the balance of payments is to be defined to exclude passport fees, visa fees, and airport taxes; they are to be treated as current transfers. The Group, furthermore, agreed that rent on land paid by travellers is not a reconciliation issue; it is covered within "travel" in the BPM and within "direct purchases abroad by resident households/direct purchases in the domestic market by nonresident households" in the

The content of the present category "official goods, services, and income" should be broken down to show factor income and services (where, in practice, services may include some goods that it would be desirable to show separately); and

Labour income in the BPM should be defined to be equivalent to the concept of compensation of employees as defined in the SNA. Practical solutions to distinguishing the flows of goods, services, factor income, and transfers will be needed.

G. Classification of capital account transactions

There were four principal considerations specified by the IMF. First, were the analytical and operational needs of the Fund; second, was the harmonization of the balance of payments and the financial accounts in the national accounts; third, was the desirability of having a classification scheme that facilitated comparisons between flow and stock data, and between the current and capital accounts in the balance of payments; and fourth, was the desirability of having compatible systems for the three areas of statistics for which the Fund has a prime responsibility, namely, the balance of payments, money and banking, and government accounts. Discussion focussed on the following points:

1. Supplementary information on the total change in reserves

In the BPM presentation of reserves, transactions are derived from data on total changes in reserves and counterparts to valuation changes, while the SNA, in its flow accounts, incorporates transactions data directly. Many balance of payments experts, while recognizing the usefulness of the additional data on stock and valuation changes, suggested that such data should be contained in a supplementary table, rather than in the body of the main table, which might also contain equally useful information on other stock changes. It was noted from the national accounts point of view that valuation changes belong not in the flow accounts but in the reconciliation accounts.

A related issue concerned the inclusion in reserves of assets held by deposit money banks that are under the effective control of the monetary authorities. This is the treatment in the BPM, and, to harmonize with the SNA, a breakdown of the assets of deposit money

banks would be required. Some participants noted that it might be difficult to come up with precise guidelines and that it might even be counterproductive to do so, as countries would find ways of circumventing them. The Group saw, however, the need to harmonize the SNA treatment with that of the BPM, and referred to the Group on Financial Flows the detailed resolution of the harmonization.

The Group agreed that with regard to the presentation of supplementary information on the total change in reserves the presentational issue for the balance of payments be left to be worked out by those who have special interest in that information. The Group urged that due consideration be given to making clear the relationship between the lines for transactions in the balance of payments presentation and the corresponding lines in the national accounts. With regard to the question of whether assets held by deposit money banks should be excluded or included in reserves, the Group agreed to bring to the attention of the Group on Financial Flows the need to include as reserve assets the assets that, although not owned by the monetary authorities, are under the effective control of those authorities, and to recommend that that Group work out a way to accommodate that need.

2. *Liabilities constituting foreign authorities' reserves*

Most members of the Group agreed that information on liabilities constituting foreign authorities' reserves is useful. In the view of most members of the Group, the balance of payments should continue to show breakdowns that identify these liabilities where appropriate. It was noted, however, that the practical difficulties of providing these breakdowns are substantial.

3. *Exceptional financing*

The elements of exceptional financing are not shown as separate standard components in the balance of payments but as details of standard components, which are regrouped from the detailed presentation to form an exceptional financing group in the aggregated presentation. Some experts felt that the present presentation did not, in all cases, make it clear what was covered by exceptional financing.

Most members of the Group agreed that information on exceptional financing (financing other than reserves and liabilities constituting foreign authorities' reserves) be reported as supplementary information, rather than as standard components.

Chapter 12. Public sector issues

Many of the issues discussed in this meeting are included in other chapters. In particular discussions about the classification of government activity between general government and non-financial corporations is included in the chapter on units under the distinction between market and non-market; the treatment of taxes on production in the chapter on accounting rules under valuation and the distinction between current and capital transactions is included in accounting rules; the question of reconciliation between GFS and the SNA in the chapter on harmonisation and issues concerning pensions, individual consumption and NPISHs are included in the consumption chapter.

A. Government assets and the production account

1. Rent on government-owned buildings

January, 1988

The 1968 SNA does not include imputations for rent on government owned buildings nor on buildings owned by non-profit organizations. Government output is based on costs but the value of services produced by government capital assets such as government-owned buildings is not necessarily reflected in those costs. The proposal therefore was to impute a rent to government-owned buildings to reflect more accurately all services produced by government.

It was argued that in the private sector the value of rent on owner-occupied buildings above depreciation and operating costs would be included in the operating surplus. Because government output is calculated at cost, however, there is no operating surplus and the value of the rent and of overall production is correspondingly underestimated. It was also stated that in detailed analyses the asymmetry between government rental of buildings owned by others and government use of its own buildings gives rise to difficulties and anomalies. One example cited was the difference in income attributed to local areas where military families lived in housing on the base, for which no rent was imputed, and where military families were given a housing allowance and rented private buildings off the base. It was to equalize such comparisons that previous reasoning had led to the imputation of households' rent on owner-occupied dwellings.

Opposing arguments focussed on the undesirability of adding imputations to the SNA when they are not absolutely necessary. It was stated that for producers of nonmarket services this would require imputation of a separate producer of rent, with output, input, fixed capital formation, consumption of fixed assets, value added, labour costs paid, an operating surplus, etc.

It was noted that the 1986 ESCAP Seminar on Review and Development of National Accounts had cited the omission of imputed rents on government-owned buildings as a serious omission resulting in the underestimation of the contribution of the government sector to GDP. The November 1987 meeting of the Eurostat Working Group on National Accounts, on the other hand, had opposed the proposal to impute rents on government owned buildings. In the discussion on the practicality of such imputation, it was suggested that rents of comparable buildings in the private sector could be used, as well as rents paid by government in privately owned buildings.

It was noted that GDP would normally be changed by the amount of the operating surplus that results from imputation of the rent on government owned buildings.

A majority of the group agreed that a rent should be imputed in respect of buildings used and owned by government. In principle, the imputation should be based on market rents for similar buildings. This imputation will normally result in a non-zero net operating surplus for government. Other participants disagreed with the proposal because of the practical problems connected with valuation of the rent services on the one hand and the proper identification of cost items associated with the imputed production of rent services on the other. Both elements would affect the resulting operating surplus.

2. *The cost of capital*

The group was asked to consider whether the value of government output should include some or all government interest payments in addition to other cost items, since the measurement of government output by the cost of inputs rather than by the market price of output omits the element of operating surplus from which interest payments are made in the enterprise sector. It was suggested that such government payments could be viewed as either the cost of borrowing by government or as the imputed interest on the government owned fixed capital assets used in the course of production of government services.

There was also the view that if interest payments were included in the cost of production, then interest received by government would also have to be included in the production account. The question was raised also as to whether the calculation should be limited to the interest paid for those loans invested for a productive purpose.

It was concluded, however, that the appropriate view of the problem was whether the cost of capital was being omitted and not whether interest payments should be counted. The discussion centred, therefore, on treatment of imputed interest on the fixed capital assets of the government. It was stated that the 1953 SNA recommended the imputation of interest on fixed capital assets of government used in the course of production, and that the major question faced under that provision was what rate of interest should be used for the calculations. This provision was deleted in the 1968 SNA, however, and the group's discussion was on the question of whether it should be restored. Some experts indicated that this imputation of interest in the production cost may represent a sharp increase in the resulting GDP. Others felt that such an increase in the GDP would be justified if the GDP is otherwise considered to be undervalued by failing to take into account the full cost of government capital assets utilized in government production. There was no clear majority for either solution to this issue. It was recommended that the question be further studied in conjunction with the recommendation on imputed rent for government-owned buildings and that a technical paper on the subject be prepared

3. *Rent on government buildings and the cost of capital*

March, 1988

It had also been suggested at the Expert Group Meeting on the Public Sector that in future rent on government buildings should be introduced. If a firm in the private sector owned its building, the savings on rent in intermediate costs in effect increased the gross operating surplus of that firm. Since government does not have a net operating surplus, the value of government owning and occupying its buildings does not presently show in the national accounts.

It was pointed out that many of the costs of operating a building were already covered in government current expenditure on goods and services. However, some element of the benefit of the capital asset was lost. It was suggested that one way of approaching this problem might be to consider estimating the cost of capital as an imputed service and then consumed by government. This could in principle apply not just to buildings but to other assets, for example roads, though this raised the question that consumption of these services fell not just to government but more generally.

The participants felt that in principle, rent on government buildings should be included in the national accounts but were very concerned about the difficulty of making such estimates, even for the buildings occupied by civil servants. It might be difficult to obtain equivalent office rent estimates and for other buildings owned by government the difficulties would be more difficult. It was pointed out that in some countries, government owned many church buildings and associated land as well as historic monuments. The basis for estimating rent for these buildings was obviously extremely difficult. While the possibility of considering the cost of capital might be a way to resolve this problem the participants felt that a paper was needed explaining the consequences of this in detail and the interaction with alternative proposals on estimating rent.

The group considered a proposal made by the expert group on Public Sector Accounts to include in government output the imputed rent on government-owned buildings based on market prices. A majority of participants favoured the proposal on theoretical grounds, but there were serious reservations on practical grounds

The group also considered a proposal to include a “cost of capital” component in government output. **The experts felt a paper was needed, explaining the conceptual and practical problems, including the interaction with the proposal on rent, before making a decision.**

April, 1991

As there was a mixed reaction in the Regional Commissions to the proposal to impute a rental value to government owned buildings, the group was faced with four questions:

- 1) Should a rental value for government buildings be imputed?
- 2) What rent should be imputed?
- 3) Should separate establishments that provide rental services be created within government?
- 4) Should we add estimated cost of capital (based on interest rates or alternative rate of return to government production)?

A large majority of the group favoured imputing a rental value for government buildings.

The group agreed that valuation should be based on a market comparator where available. In the absence of a market comparator, the cost approach should be followed and this cost should include capital cost. In either case, double counting of costs already included should be avoided but there was no need for creating a separate establishment.

The difference between the imputed rental value and the costs already included would be shown as operating surplus of government.

The group further agreed that a similar treatment should be accorded to buildings of private non-profit institutions.

While some experts advocated the inclusion of capital cost for all government fixed assets, the group was not in favour of supporting the extension at this time.

Although there had been a majority of experts in favour of introducing rent on government buildings each time it was discussed, there was always a strong minority who expressed misgivings. At the regional meetings that discussed the draft of the Blue Book and in particular at the inter-regional meeting in Acapulco in October 1992 more extensive reservations were expressed. Rent on government buildings thus became one of the seven unresolved issues taken to the meeting of the Statistical Commission in February 1993 that approved the revised Blue Book for final decision. The inter-secretariat group had discussed the matter in December 1992 and expressed unease with both the 1968 SNA treatment and the proposal to introduce an estimate for rent. On balance their recommendation was that estimates for rent should not be introduced but that the whole question on the cost of capital should be placed on the research agenda. This recommendation was accepted by the Statistical Commission, and the topic of the cost of capital is the first listed on the research agenda in the introduction to the SNA.

B. Operating deficits of public quasi-corporations

January, 1988

The group was asked to decide whether the operating deficits of departmental enterprises should be treated as government subsidies or as negative entrepreneurial income. It was pointed out that in the absence of adequate information it would be difficult to determine whether a departmental enterprise's loss on sales to the public was the result of a deliberate government policy to keep prices below costs or of an inability by the enterprise to contain costs below sales price. As the government's role vis-a-vis departmental enterprises was as both an owner and a possible provider of public policy subsidies, both alternatives were possible. It was noted that in GFS the basic public policy orientation of government in its operation of departmental enterprises was taken as overriding, and therefore operating losses were classified as subsidies. There was no provision in the GFS for a category of government current transfer payments to enterprises other than subsidies.

It was pointed out that in the SNA the two alternative treatments represented negative entrepreneurial treatment in one case, and the imputation of a subsidy payment to the departmental enterprise in the other, resulting in no negative operating surplus (operating deficit).

Several participants felt that a distinction was necessary between those cases in which operating deficits of departmental enterprises were deliberate, representing a government policy of subsidizing prices and those cases in which they were not. It was agreed that flexibility of treatment was necessary so that both possibilities could be reflected in the classification of government payments to meet departmental enterprises' operating deficits. It was pointed out that an operating surplus is treated in the SNA as either entrepreneurial income or indirect taxes depending on whether or not it arises as a result of deliberate policy in the case of a fiscal monopoly. It was argued that symmetry should be maintained in the case of an operating deficit, which should be treated either a subsidy

or as negative entrepreneurial income, depending on whether or not it arises as a result of deliberate policy.

The group decided, therefore, that both possibilities should be provided for in the revised version of the SNA, that is, as a negative operating surplus and as a subsidy, and that the subsidy solution should be used in cases where it is clear that the operating losses of a departmental enterprise's sales to the public arise from a deliberate government policy of providing particular goods and services at below cost.

C. Other measures of government saving and deficit/surplus

The group discussed whether the two concepts "own saving" and "overall deficit/surplus" should also be provided in SNA. It was noted that these two concepts are restricted in their application to the government sector and are included in GFS.

The reason given for including them in SNA is that they are very useful for the analysis of the government sector. Reasons for not including them are because: (1) they are not applicable to the other sectors of the economy, and (2) the numbers prepared for these concepts in SNA might differ from the GFS figures because of the different data bases used, etc., and consequently might confuse some of the users.

The two concepts were discussed separately.

1. Own-saving

The concept of government own-saving corresponds to the portion of current income, other than grants from governments and international organizations, remaining after current outlays. It is used to reflect the special position in government operations of grants, i.e., official transfers, which are in some cases provided to help the recipient government undertake particular expenditures and in other cases provided as a form of budgetary support to meet a deficit that would otherwise ensue. Because of their special position, official grants received by government are identified in a separate category in GFS to permit users to include grants above or below the line, according to their needs. It was suggested that recognition of the concept of government own-saving in the SNA would facilitate this type of analysis of government operations in the SNA.

It was mentioned during discussion of the concept of own-saving, that in some cases countries incur some current expenditures only because of grants they have received, and that the expenditure would be counted in calculation of own-saving while receipt of the grant would not.

While the group generally agreed that the concept of own-saving is a very useful one for analyzing the performance of each level of government and also of general government if there are grants from abroad, it recommended that it should not be included in the SNA. The reasons given were that: 1) There is no need to overload SNA accounts by including every measure used in GFS, and 2) it only applies to the government sector.

However, it was stated that it is necessary to make it possible in SNA to derive this GFS item by identifying in the transaction classification these types of flows.

Because of the usefulness of this concept, it was proposed that it should be explained in the Handbook of Public Sector Accounts with the data shown in supplementary tables. The Handbook should explain the relationship between GFS and SNA with regard

to this concept, and clarify any differences that may be found between the figures in the supplementary tables for SNA and the GFS figures.

2. Overall deficit/surplus

The overall deficit/surplus concept, which has application only in the government sector, represents the single most used measure of government performance. It is defined in the GFS Manual as revenue plus grants less expenditure less lending minus repayments. It is by definition equal, with an opposite sign, to the sum of net borrowing by the government, plus the net decrease in government cash, deposits and securities acquired for liquidity purposes. The GFS Manual distinguishes between government acquisition of financial assets for public policy purposes, which is treated like expenditure above the overall deficit/surplus line, and government acquisition of financial assets for the purpose of managing the government's liquidity, which is treated below the line as part of financing.

At present the overall deficit/surplus is not explicitly defined in the SNA and it is not generally derived from SNA data on government. The concepts used in the SNA are the saving concept, which measures the government's current account deficit/surplus, and the SNA net lending concept, which represents the net result of government lending and repayment of previous lending, and of government borrowing and amortization of previous government borrowing.

The two related questions discussed by the group were: 1) Should the concept of overall deficit/surplus for the government sector be included in the SNA? and 2) Can the SNA, in its revised version, make a better distinction between government lending and government borrowing?

In response to the first question, it was generally agreed that the concept of overall deficit/surplus is very useful and should therefore be included in the SNA; if it is not possible to include it within the central framework, then it should be included in supplementary tables, as is done in Eurostat publications. It was also agreed that it is very important to clarify the overall deficit/surplus concept in the SNA in order to eliminate any confusion resulting from differences in its presentation in the SNA supplementary tables and in the GFS publication.

With regard to the second question, it was agreed that it is necessary to replace the term "net lending" in the revised SNA.

D. Classifications within COFOG

1. Treatment of administrative, regulation and research expenditures

It was explained that COFOG differs from the 1968 SNA Table 5.3 in that COFOG distributes all expenditure on general administration, regulation and research among the heads of classification down to the most detailed three digit level. This aspect of COFOG classification raises two problems. On a practical level, it was reported during the discussions that many EC countries had found the procedure too detailed for systematic data compilation and as a result did not intend to follow this COFOG recommendation. On a general level, it was suggested that this COFOG recommendation hinders attempts to isolate the individualizable consumption expenditure of government. This is so because it does not distinguish between two types of government administration expenditure:

1. local administration expenditure within units producing services (for example, hospitals and schools) which could be provided by comparable private sector units, and which should be included as individual consumption;
2. general administration, regulation and research expenditure which cannot be found in private sector institutions providing individual services, and which should therefore be considered as collective consumption.

The group voted to recommend that expenditure for general administration, regulation and research be identified as a separate group within each major COFOG group, that is the fourteen first level groups.

2. *Functional allocation of subsidies*

The group was asked to consider whether the functional classification of subsidies in COFOG should depend on:

1. the ministry which pays it,
2. the industry which receives it, or
3. some perhaps more subjective assessment of its purpose (e.g., welfare).

It was noted that COFOG does not appear to provide clear direction as to which criteria to follow, although it does single out certain subsidies such as certain food and housing subsidies for classification under welfare (criteria 3) instead of under the industry which receives the subsidies (criteria 2).

Interest in this question had arisen from proposals to include the value of certain subsidies in the total consumption of the population. To calculate total consumption of the population, some exercises have added the value of certain social or consumption subsidies to the values of household consumption and the "individual" consumption expenditure of general government and private nonprofit institutions, in the belief that such "social" subsidies have an effect similar to the direct provision of the goods or services by government. In this connection, the Expert Group meeting of the Household Sector in September 1987 had decided against the idea of introducing consumer subsidies as a form of final expenditure but had recommended a detailed classification of subsidies by type and purpose.

The group voted to recommend that in COFOG subsidies should be allocated to the purpose served. However, in cases where the purpose is not sufficiently clear, the subsidy should be allocated to the function corresponding to the activity classification of the producer who receives it.

Chapter 13. Finishing the text

E. Leading up to the statistical commission

By the middle of 1992, a full draft of the SNA was available and this was widely circulated for discussion. In particular, a large number of national accountants from around the world met in Aguascalientes, Mexico in October 1992 to discuss the final draft. Although there was considerable praise for the text, there were eight issues where there were strong mis-givings about the text. These are listed below along with the response of an extended Inter-Secretariat Working Group on National Accounts (ISWGNA) and the impact on the draft.

Financial intermediation service charges indirectly measured (FISIM). *The draft suggested that FISIM should be allocated to using sectors but serious questions had been raised about the feasibility of implementing this proposal. Nevertheless, this was the proposal in the draft that went to the Statistical Commission.*

Imputed rent on government buildings. *Throughout the process there had been a strong majority in favour of including such rent in the value of non-market output of government. However, there were strong misgivings about including rents for buildings such as churches and historical monuments when these belonged to government. In the end, the ISWGNA decided to omit this proposal from the draft for the Statistical Commission.*

Monetary gold. *Throughout the process there had been a vocal minority in favour of recognising gold held by financial institutions other than the central bank as a financial asset. The ISWGNA did not recommend including this proposal in the draft.*

The delineation between market and non-market production. *While the idea of such a distinction was easily agreed, views were divided about whether output on own behalf which could be marketed but was not should be treated as market or non-market. In the end, it was decided to change the dichotomy to a three way split with "other non-market production" as the third category to cover own account production.*

Mineral exploration. *The text proposed that mineral exploration should be treated as capital formation, distinct from the minerals revealed by the exploration. Some objections were raised about the fact that it was difficult to comprehend an asset corresponding to unsuccessful exploration. Others felt that a distinction between the exploration activity and the mineral discovered was unrealistic. Nevertheless the majority accepted the proposals in the draft which was not amended in substance.*

*There were three areas where participants felt the draft was seriously deficient. These were in the coverage of **consumer subsidies**, a separation between **formal and informal activities** and **environmental accounting**. All of these had been the subject of discussions in the expert groups but no clear agreement on how to proceed with these had emerged and the text did not provide specific guidelines on them.*

Recognising that these concerns were legitimate but that approval and publication of the SNA could not wait until a satisfactory solution to each was reached, it was decided that the SNA should include recommendations for an on-going research agenda to deal with

these three items and a select number of others. Also included was the cost of capital, seen as a generalisation of the issue of rent on government buildings, functional classifications of consumption (both final and intermediate) and the means by which stocks and flows could be combined in a matrix formulation.

F. The Statistical Commission discussion

The Statistical Commission accepted the draft of the SNA at its meeting in February/March 1993 with only one reservation. This concerned the allocation of FISIM. It became clear that certain countries would block the approval of the whole draft if an accommodation were not made in this area. As a result, it was agreed that the text would allow two possible approaches to FISIM, one being the allocation to using sectors as originally proposed and one to retain the 1968 SNA device of allocating the whole of FISIM to a notional unit and treating it all as intermediate consumption.

The full text of the record of the Statistical Commission report concerning the SNA is attached.

G. After the Statistical Commission

Even after the approval by the Statistical Commission, the work was not finished. The front material had to be prepared and the index. The changes requested by the Statistical Commission had to be incorporated and the text prepared for the printer. Setting a new precedent, the volume was published jointly by the five organisations involved in the ISWGNA. Five logos were to appear on the front cover and the foreword was to be signed by the heads of the five organisations. Negotiations thus involved five legal departments and five publications units. In order to have the English language version published by the end of 1993, an exemption from the usual UN editing process was agreed. All these arrangements eventually fell into place and the first copies of the final book were caught in a snow storm coming south from the publisher in Canada to New York as 1993 became 1994.

Chapter III

NATIONAL ACCOUNTS AND BALANCES

A. System of National Accounts (SNA)

50. The Commission considered item 4 (a) of its agenda at its 453rd, 454th, 463rd and 464th meetings, on 23 February and 2 and 3 March 1993. It had before it the following documents:

(a) Report of the Intersecretariat Working Group on National Accounts on the revision of the System of National Accounts (E/CN.3/1993/4 and Add.1 and 2);

(b) Note by the International Labour Office concerning statistics of employment in the informal sector (E/CN.3/1993/5);

(c) Report of the Intersecretariat Working Group on National Accounts on implementation of the revised System of National Accounts (E/CN.3/1993/6);

(d) Report of the Secretary-General containing updated information on the work of the Statistical Division of the United Nations Secretariat (E/CN.3/1993/24, sect. I);

(e) Draft of the revised System of National Accounts (PROVISIONAL ST/ESA/STAT/SER.F/2/Rev.4).

The report of the Interregional Seminar on the Revision of the System of National Accounts, held in Aguascalientes, Mexico, in October 1992 (ESA/STAT/AC.43/8) was made available to the Commission as a background document.

51. Ms. Carol Carson, on behalf of the member organizations of the Intersecretariat Working Group on National Accounts (ISWGNA) (the Statistical Division of the United Nations Secretariat, the United Nations regional commissions, the World Bank, the International Monetary Fund (IMF), OECD and EUROSTAT), introduced the SNA documents for discussion.

52. The following eight major substantive issues addressed by ISWGNA in its report (E/CN.3/1993/4/Add.1) were brought to the attention of the Commission: financial intermediation service charges indirectly measured; imputed rent on government buildings; monetary gold; market/non-market output; mineral exploration; consumer subsidies; formal/informal activities; and environmental accounting.

53. The Commission noted the substantial effort made to have the final draft of the SNA before it, as it had requested at its twenty-sixth session. It also noted that ISWGNA had continued the broad consultative process in all regions of the world. That process was the hallmark of the revision procedure and had resulted in a revised SNA that was considered to be a vast improvement upon its predecessor, the 1968 SNA. The Commission also noted that, at the outset of the revision, the goals had been to clarify and simplify the 1968 SNA, update it and harmonize it more closely with other sets of statistical standards. The revised SNA represented a considerable achievement in meeting each of those goals.

54. The Commission expressed its deep appreciation to ISWGNA for its coordinating efforts and for the substantial resources provided by its participating organizations in carrying out the technical aspects of the work. It expressed its

thanks to Mr. Peter Hill and Mr. André Vanoli, who were the primary consultants, and to Ms. Carol Carson, who provided management support to ISWGNA. It recognized that national statistical offices had made substantial contributions to the revision process both in cash and in kind (e.g., in preparing drafts and translations), by hosting meetings (since the twenty-sixth session of the Commission, meetings had been held in Zimbabwe and Mexico) and by making their experts available for participation in the revision process, and expressed its thanks to them for those contributions. In all, about 50 experts in national accounting and other fields, from about 40 countries, had participated in the revision process, and the Commission recognized the contributions they had made. It also expressed its thanks to the International Association for Research in Income and Wealth for its assistance with administrative matters, and to several international organizations that maintained statistical systems for their collaborative efforts.

55. The draft of the revised System of National Accounts (PROVISIONAL ST/ESA/STAT/SER.F/2/Rev.4) was welcomed unanimously as a major achievement and the culmination of 10 years of effort to improve the basis of national accounts, to extend the scope of the national accounting framework and to harmonize different statistical systems. The revised SNA was flexible enough to be applied in different circumstances and to be extended to alternative analyses, such as social accounting matrices and environmental accounting. The readability of the draft was praised.

56. It was also noted that in such a vast undertaking it was impossible to satisfy the preferred positions of all countries on all subjects. Nevertheless, it was felt that a satisfactory balance had emerged and that the draft adequately represented a general consensus on most issues. In that context, the high degree of harmonization with the fifth edition of the Balance of Payments Manual of the International Monetary Fund was welcomed. There were a number of areas in which some reservations were expressed, but not insisted upon:

(a) Several representatives expressed regret that all research and development expenditure continued to be treated as current expenditure. It was noted that, in contrast, all mineral exploration expenditure was treated as capital expenditure;

(b) Two representatives expressed regret that the concept of financial gold had been dropped from the SNA;

(c) Several representatives expressed regret that the earlier decision to include imputed rent for buildings owned and occupied by Governments and non-profit institutions serving households had been reversed;

(d) One representative suggested that the proposal to treat military durables other than offensive weapons as fixed capital should be accompanied by treatment of armaments as inventories, rather than current expenditure;

(e) Several representatives were of the opinion that more precision was needed concerning the construction of production accounts for households;

(f) One representative was of the opinion that the distinction between actual final consumption and final consumption expenditure unnecessarily complicated the sequence of accounts;

(g) Certain representatives expressed regret that no final solution had been found for the identification and treatment of consumer subsidies.

57. Several representatives mentioned the importance and difficulty of measuring the informal sector. The representative of the International Labour Organisation (ILO) reported orally on the results of the discussion at the Fifteenth International Conference of Labour Statisticians (ICLS). Reference should be made in the chapter on institutional units and sectors to the work being done by ICLS on developing standards for the informal sector.

58. The Commission addressed in detail the problem of financial intermediation service charges indirectly measured. While most representatives recognized that it was desirable in principle to allocate those charges fully, an appreciable number expressed the view that there were many methodological and practical difficulties that had not yet been resolved. One member indicated also that there might be political difficulties to be taken into account. They also regretted that the treatment of those charges in the SNA gave rise to an inconsistency with the Balance of Payments Manual of the International Monetary Fund and could likewise be inconsistent with the European System of Integrated Economic Accounts (ESA) being developed by EUROSTAT. Other representatives agreed with the treatment in the existing text, citing their own experience in allocating financial intermediation charges and new approaches that they were considering.

59. In order to address the views of those who had expressed difficulties in implementing the proposed treatment, ISWGNA proposed a flexible treatment that recognized the desirability of allocating the charges fully while allowing sufficient flexibility in implementation to reflect the current circumstances in particular countries or groups of countries. The ISWGNA proposal was accepted unanimously by the Commission. The proposal (E/CN.3/1993/4/Add.2) consisted of five elements:

- (i) The present statement in the text that "In principle, the total output should be allocated among users for which no explicit charge is made" should be accepted;
- (ii) Those countries or groups of countries that could not currently allocate those charges explicitly to specific users should be permitted to allocate them all to intermediate use (the 1968 SNA de facto solution);
- (iii) Those countries or groups of countries that could allocate charges to both intermediate and final use should be permitted to do so;
- (iv) Those countries that allocated charges entirely to intermediate consumption should be requested to prepare, as soon as they could, supplementary estimates showing an explicit allocation to specific users and the effect that had on gross domestic product, gross national income and other relevant aggregates;
- (v) Those countries that allocated charges to both intermediate and final use should be requested to identify those allocations separately.

60. The information provided in the last two elements of the proposal would facilitate international comparisons on either basis.

61. In addition, it was suggested that the Statistical Commission request ISWGNA to place the highest priority on developing, in the near future, practical guidelines, including any necessary methodological work, for explicit allocation of financial intermediation service charges to specific users. The work should draw on the experiences of those countries currently implementing, or about to implement, a system of full allocation in order to review their procedures; it

should also draw on the work being carried out in those countries that had indicated major impediments to full allocation.

Action taken by the Commission

62. The Commission:

(a) Unanimously recommended the adoption of the revised System of National Accounts, subject to the amendments recommended by ISWGNA in documents E/CN.3/1993/4/Add.1 and 2. ISWGNA was urged:

(i) To ensure publication of the revised SNA in English before the end of 1993;

(ii) To expedite the publication of other language versions as soon as possible thereafter, noting that considerable revision to the current drafts was necessary to ensure the use of idiomatic language and correct technical terms;

(b) Agreed, in line with past practice in the adoption of other international recommendations of the Commission, that the decisions of the Commission and the substance of its report would be reflected in the front matter of the revised SNA when published.

1993 System of National Accounts

63. At the 463rd meeting, on 2 March 1993, the representative of Mexico, on behalf of Argentina, Brazil, Mexico, Morocco, the Netherlands, Poland and Zambia, introduced a draft resolution (E/CN.3/1993/L.5) entitled "System of National Accounts, 1993", which read as follows:

"The Economic and Social Council,

"Recognizing that the System of National Accounts, 1993, updates, clarifies and simplifies the previous SNA and harmonizes it more completely with other sets of international standards in statistics,

"Affirming that the 1993 SNA is a conceptual and accounting framework that is applicable to all countries,

"Recognizing also that the 1993 SNA emphasizes flexibility, thus acknowledging the need to encourage its use in economies that differ widely and to facilitate international comparisons,

"Noting that the 1993 SNA completes the integration of balance sheets, thus providing a fuller picture of the resources at an economy's disposal, consolidates hitherto separate presentations of important elements of an economy and lays the groundwork for dealing with interaction between the economy and the environment, and elaborates an analytical approach to the assessment of poverty through the Social Accounting Matrices,

"1. Expresses its deep appreciation to the member organizations of the Intersecretariat Working Group on National Accounts (the Statistical Division of the United Nations, the regional commissions of the United Nations, the International Monetary Fund, the Organisation for Economic Cooperation and Development, the Statistical Office of the European Communities and the World Bank), non-governmental organizations, a number of member States and many individual experts in national accounting for their

contributions in the form of human and financial resources, to the development of the 1993 SNA, over a period of more than ten years;

"2. Recommends that member States consider using the 1993 SNA as the international standard for the compilation of their national accounts statistics, as an analytical tool, and to promote the integration of economic and related statistics at the national and international levels;

"3. Recommends that member States use the 1993 SNA in the international reporting of comparable national accounting data;

"4. Requests the Secretary-General and the members of the Intersecretariat Working Group on National Accounts to proceed with publication of the 1993 SNA in all six languages of the United Nations as rapidly as possible and to promote its wide dissemination;

"5. Also requests member States and regional and international organizations to support all aspects of the implementation of the SNA - namely, basic data development; the issuance of handbooks, guidelines, manuals and special studies; training activities among both users and producers; and technical cooperation activities;

"6. Further requests member States and regional international organizations to assist in support of further developmental work on methodologies identified in the research agenda;

"7. Urges the Secretary-General to coordinate at a high level the mobilization of bilateral and multilateral resources for the implementation of the 1993 SNA."

64. At the 464th meeting, on 3 March, the Commission orally amended the draft resolution. The Commission then adopted the draft resolution, as orally amended (see chap. I, sect. A, draft resolution I).

B. Implementation of the revised System of National Accounts (SNA)

65. The Commission considered item 4 (b) of its agenda at its 454th and 455th meetings, on 23 and 24 February 1993. It had before it the report of the Intersecretariat Working Group on National Accounts (ISWGNA) on the implementation of the revised System of National Accounts (E/CN.3/1993/6).

66. The report outlined four areas where a coordinated international effort was critical: basic data development; handbooks, guidelines, manuals and special studies; training; and technical cooperation/assistance. ISWGNA also made suggestions about future work, for which resources had not yet been committed. ISWGNA identified a range of activities carrying forward a research agenda that would avoid lengthy delays in making major innovations in national accounts. With respect to publication of the revised SNA, ISWGNA was planning to publish the English version in 1993, with work to go forward on the other language versions as soon as the English manuscript including all changes, was available for translation - targeted for the end of June 1993. With respect to implementation, ISWGNA suggested a continuing role. It could possibly identify topics for research, seeking assistance for national statistical offices in bearing the burden of preparing handbooks and compilation guides, and promoting the preparation of manuals in other fields that harmonized with SNA. It also suggested

that it could serve as a coordinating body for, and could play a catalytic role with respect to, technical assistance/cooperation and training.

67. Constrained by the limited resources currently available, the Statistical Division of the United Nations Secretariat and the regional commissions, in close cooperation, outlined plans to assist countries in the implementation of the revised SNA by training trainers and the national accounts staff of national statistical offices, through seminars and country workshops, handbooks, the compilation of software and methodology and other training materials. In the first few years, efforts were likely to be concentrated on the preparation of handbooks and training materials, identification of the basic statistics needed, and pilot implementation projects in a limited number of countries. The projects constituted a combination of efforts under way in a limited number of countries and drew on experience already acquired. It was envisaged that provided new resources became available a much more widespread programme of assistance to countries would develop, based in part on regional and subregional priorities expressed at regional forums.

68. The International Monetary Fund confirmed its active support for all four types of activities to support implementation of the revised SNA. In particular, the fifth edition of the Balance of Payments Manual and a companion volume, a compilation guide, would be published in early 1993. Work had started on a new manual on financial statistics; a complete draft was expected by the end of 1994. During 1993 work would start on revisions to the Manual on Government Finance Statistics, with a new draft expected about the end of 1995. The Fund expected to continue its extensive technical assistance programme in the areas of balance-of-payments, financial and government finance statistics, and would, on request, provide members with specific technical assistance in national accounts.

69. The World Bank welcomed the emphasis placed on rapid implementation of the newly adopted SNA. It would continue to play a role in ISWGNA and work in a coordinated manner with the other agencies, so as to avoid duplicating efforts. Owing to its intimate contact with national statistical agencies, the Bank was of the view that implementation of the revised SNA in many of the developing and transition countries would depend on rapid development of basic economic statistics. Therefore, concerted efforts to build statistical capacities were an essential first step. The Bank endorsed the need for handbooks and manuals but stressed that they should have a practical orientation. Research into outstanding and emerging issues under the auspices of ISWGNA would require the support of national offices. The Bank would continue to consider requests for technical assistance, through loans and credits, on a case-by-case basis.

70. OECD had already begun to collect material on the plans to implement the revised SNA in its member countries. The material would be presented at the National Accounts Working Group, to be held in June 1993 in cooperation with the Economic Commission for Europe (ECE). As focal point for the implementation of the revised SNA in countries of the former Soviet Union, OECD had an extensive programme of technical assistance in national accounts for countries of Central and Eastern Europe and of the former Soviet Union which was already based on the revised SNA. Representatives of those countries would be invited to OECD meetings on national accounts and to special workshops and seminars.

71. EUROSTAT was working to develop a new version of the European System of Integrated Economic Accounts (ESA), which would be entirely consistent with the revised SNA and should be completed about mid-1994. Training in national accounts was provided to countries of the European Economic Area and Central and Eastern Europe under a special training programme. A similar programme was being

developed for the countries of the former Soviet Union, in close cooperation with OECD. Special assistance would also be offered to countries in the African, Caribbean and Pacific regions, under the terms of Lomé IV, and would involve training centres in both Europe and Africa.

72. Members of the Commission welcomed the suggestions made by ISWGNA regarding its future role. The Commission emphasized the urgent need for adequate handbooks and compilation guides. The guidelines should take note of differences in methodological and data-related problems in implementation in different countries and accordingly provide for a decentralized and specific approach. Those being prepared for countries in transition and dealing with conditions of high inflation were eagerly awaited. Several members mentioned plans to prepare national documentation which could be made generally available. Training and technical assistance were also stressed, and some members offered assistance in that area also.

73. Some members noted that, in general, plans and resources for assistance in the implementation of the revised SNA were already available for countries in the European region, although there was still a lack of clearly identified plans and resources for assistance for developing countries.

74. The Commission endorsed the intention to pursue research into the unresolved issues identified by ISWGNA and to work on future aspects of the accounts - for example, environmental accounting and coverage of the informal sector. However, members cautioned that the research agenda should not be over-long or over-ambitious.

Action taken by the Commission

75. The Commission:

(a) Acknowledged that ISWGNA had proved a very effective mechanism for overseeing the revision process and developing the revised SNA, and expressed the wish that ISWGNA would continue to operate and assume the responsibility for coordinating all aspects of the implementation programme, including preparation of an implementation plan. All the organizations concerned confirmed their continuing commitment to ISWGNA;

(b) Agreed that it would be desirable for the Working Group on International Statistical Programmes and Coordination to be kept informed, through its Chairman, of actions scheduled by members of ISWGNA;

(c) Welcomed the offers of several member States and regional and international organizations to cooperate and assist in all aspects of the implementation of the revised SNA, as an important part of their work programmes;

(d) Agreed that the United Nations regional commissions should play a major role in the implementation of the revised SNA in their respective regions and urged the Secretary-General of the United Nations to coordinate at a high level the mobilization of both bilateral and multilateral resources for that purpose.