UNITED NATIONS

UNSD Reference Copy Please do not remove (Rm.DC2-1408)



# Economic and Social Council

Distr. GENERAL

E/CN.3/1993/10 3 February 1993

ORIGINAL: ENGLISH

STATISTICAL COMMISSION Twenty-seventh session 22 February-3 March 1993 Item 7 of the provisional agenda\*

# SERVICE STATISTICS

Work done by national and international agencies in the field of service statistics

Report of the Secretary-General

#### SUMMARY

At its twenty-sixth session, the Statistical Commission requested that the documentation for the twenty-seventh session include a report on the work done by national and international agencies in the field of service statistics. 1/ The present report reviews developments in service statistics, including methodological developments, application of the international service classifications, and technical cooperation. The review is based primarily on materials presented at the 1991 meeting of the Voorburg Group on Service Statistics. Section I reviews the experiences, recent efforts, contributions and activities concerning the use of the services part of the provisional Central Product Classification (CPC) and the International Standard Industrial Classification of All Economic Activities (ISIC), Rev.3, as well as methodological developments in price and volume measures for services. Section II provides a brief account of the Voorburg Group's efforts to advance work in service statistics since the last session of the Commission. Section III contains statements on the initiatives and activities of international agencies. Section IV presents an assessment of needs for future work, with particular reference to the needs of developing countries. The points for discussion are presented in section V.

E/CN.3/1993/1.

**93-06865 3853f (E) 110293** 12/02/93

# CONTENTS

		<u>Paragraphs</u>	<u>Page</u>
INTRO	DUCTION	1 - 2	3
I.	WORK DONE BY NATIONAL STATISTICAL AGENCIES	3 - 28	3
	<ul> <li>A. Experiences with the use of International Standard Industrial Classification of All Economic Activities (ISIC), Rev.3, and the provisional Central Product Classification (CPC)</li> </ul>	4 - 12	4
	B. Methodological developments in price and volume measures	13 - 28	б
II.	VOORBURG GROUP ON SERVICE STATISTICS	29 - 37	11
111.	WORK DONE BY INTERNATIONAL AGENCIES	38 - 62	13
	A. Economic Commission for Europe	39 - 41	13
	B. Statistical Office of the European Communities	42 - 45	13
	C. General Agreement on Tarrifs and Trade	46 - 50	14
	D. International Monetary Fund	51 - 53	15
	E. Organisation for Economic Cooperation and Development	54 - 55	16
	F. United Nations Conference on Trade and Development	56 - 59	17
	G. Statistical Division of the United Nations Secretariat	60 - 62	17
IV.	PROPOSED FUTURE WORK	63 - 65	18
v.	POINTS FOR DISCUSSION	66	21

1...

#### INTRODUCTION

1. The present report on the work done by national and international agencies in the field of service statistics describes the progress made in methodological development, technical cooperation and the promotion of coordination since the twenty-sixth session of the Commission. The report reviews methodological development in the context of establishing international standards of measurement and classification. The Commission's Working Group on International Statistical Programmes and Coordination, at its fourteenth session, in 1991, requested that the present report include information on the current and planned methodological work being carried out on service statistics in a wide range of international organizations, including the International Monetary Fund (IMF), the United Nations Conference on Trade and Development (UNCTAD), the Organisation for Economic Cooperation and Development (OECD), and the Statistical Office of the European Communities (EUROSTAT). In addition, the Working Group also requested information on the work of the Voorburg Group on Service Statistics.

2. Section I of the present report reviews the emerging experiences concerning the use of ISIC, Rev.3, and the provisional CPC in national work on service statistics; summarizes national practices in price and volume measures for financial intermediation, business services, education and health services and public administration; and describes the progress made in the discussions of the proposed international guidelines on price and volume measures for services. Section II summarizes the contributions of the participants in the 1991 meeting of the Voorburg Group on Service Statistics and plans for the 1992 meeting. Section III contains statements on the initiatives and activities of international agencies. Section IV summarizes plans for future work by a number of international agencies. Points for discussion are presented in section V.

#### I. WORK DONE BY NATIONAL STATISTICAL AGENCIES

3. The review of the work done by national statistical agencies in the field of service statistics has two parts: part A describes the emerging experiences concerning the application of ISIC, Rev.3, and the provisional CPC in work on service statistics, and part B deals with various aspects of the process of formulating agreed international guidelines for price and volume measures, including national practices in the methodology of price and volume measures for financial intermediation, business services, education and health services and public administration, a brief account of the comments and suggestions of the Voorburg Group concerning the proposed guidelines on wholesale and retail trade, hotels and restaurants, transportation, storage and communications and a discussion of the format for the presentation of the guidelines.

# A. <u>Experiences with the use of the International Standard</u> <u>Industrial Classification of All Economic Activities</u> <u>(ISIC), Rev.3, and the provisional Central Product</u> <u>Classification (CPC)</u>

The Statistical Commission, at its twenty-fifth session, in 1989, 4. approved the final draft of the provisional CPC and recommended that member States make use of the classification as a provisional classification in order to gain experience in obtaining internationally comparable data on goods and services. 2/ International standards of activity and product classifications are an essential prerequisite for the development of comparable performance measures for the service sector. The measures include the breakdown of gross output by type of service, the disaggregation of value added by kind of service activity, and statistics on product output and input by industry of origin. The sources of information on the use of the service classifications are the country experiences reported to the annual meetings of the Voorburg Group on Service Statistics and the responses to a survey questionnaire prepared by the Statisical Division of the United Nations Secretariat (UNSTAT) on activities in connection with the implementation and use of ISIC, Rev.3, and the provisional CPC.

Many of the countries participating in the Voorburg Group are using these 5. classifications as part of their developmental work in service statistics. Practical experiences in adapting the classifications to domestic circumstances are emerging in connection with survey design, pilot surveys and data collection to develop benchmark statistics on service products and activities. Some initial experiences with the CPC and ISIC in the improvement and expansion of service sector statistics were reported by Canada, France, Finland, New Zealand and Sweden at the 1990 and 1991 meetings of the Voorburg Group. These countries are testing the services part of the CPC and ISIC in various ways to find out to what extent the product and activity classifications correspond to the structure of the domestic market for services and what amendments are required for the classifications to be applicable. The countries reported on their efforts in different areas of statistical work involving the application of the CPC. These efforts are mostly in survey organization and data collection areas but at times they are also in the area of harmonization of the provisional standards with compatible classifications.

6. Country reports to the Voorburg Group indicate that the initial efforts to apply the CPC in data collection have concentrated on the structure and content of section 8 of the CPC that cover business services. Statistics Canada tested the CPC in the collection of revenue data by type of service from the engineering services industry and found that the CPC appropriately classifies engineering services. Finland and Sweden worked independently on the application of the CPC in surveys of business service industries to find out the distribution of turnover or invoicing among their different services. The CPC groups covered were the 4-digit classes in respect of legal services, accounting, auditing and book-keeping services, taxation services, management consulting services, services related to management consulting, architectural,

engineering and other technical services, and advertising services. The experiences of Canada, Finland and Sweden confirmed the statistical relevance of the 4-digit classes in general but also suggested the need for refinement in a number of instances.

A few countries are testing the services part of the CPC and ISIC in 7. particular industries through the use of model surveys. The model survey provides a means for countries to collect internationally comparable data and to test the service classifications simultaneously. The initial efforts to test the CPC and ISIC in the computer services industry helped to determine the appropriateness of the classes for data collection and the linking of service classifications in respect of information on production, trade, accumulation and employment. The model survey of computer services that is currently being conducted as a pilot by some of the Voorburg Group participants (Canada, France, New Zealand and Sweden) is providing valuable insights into comparative economic structures, the range of service operations and products, record-keeping practices, limitations of some product and activity classifications, as well as the amendments that are needed to make the classifications more representative. The countries have also examined proposals for explanatory notes, as well as for modification in the structure of the classification. Further testing of the CPC and ISIC is being considered in connection with model surveys for audiovisual services, telecommunications and insurance services.

8. The initial work and discussions of experiences by the Voorburg Group participants suggest that they are in general agreement with the design of the CPC and ISIC. Despite some shortcomings, there is considerable consensus about the feasibility of applying the CPC for the purpose of delineating the composition of output of service industries. The use of the CPC for the collection of ouput statistics has helped countries to assess the relative importance of the various categories of business services, generated concordances between domestic and international classifications and contributed useful information on where amendments to the international classifications are needed. The experiences from data collection indicate the need for merging some of the categories as well as for the creation of new ones.

9. Countries have reported a number of activities in connection with the implementation of the CPC and ISIC. They include (a) user consultations to determine whether the CPC structure represents industries' view of the types of services provided; (b) the collection of data on the distribution of turnover among different services to find out to what degree the CPC structure is relevant to domestic circumstances; (c) testing the CPC and ISIC as applied to a particular service industry; and (d) contributions to international developmental work to establish appropriate nomenclatures and explanatory notes.

10. In 1992, UNSTAT inquired about the above-mentioned activities as part of a questionnaire circulated to national statistical offices on the implementation and use of ISIC, Rev.3, and the provisional CPC. In addition,

countries were asked to indicate whether the disaggregations used in their service statistics were being linked to the CPC and ISIC, Rev.3. A final question was concerned with whether the service classifications were used in the estimation of the value of product by industry of origin.

11. Twenty countries indicated that they had practical experience with the use of ISIC, Rev.3, and the CPC in work on service statistics. The respondents included 10 countries with advanced statistical systems. The responses indicated that practical experience is emerging in connection with the various activities listed in paragraph 9. The responding countries did not specify any other areas of work.

12. The responses did not reveal a particular pattern of activities in implementing the classifications, other than practical considerations that may have determined the choice of activities. For example, only countries with less-advanced systems indicated that the classifications were used in developing the product approach to measuring value added. Similarly, only countries with advanced systems indicated activities involving user consultation to determine whether the provisional CPC aligns with businesses' perception of the range of services provided. The majority of responding countries used the international classifications mostly for the purpose of establishing appropriate nomenclatures and definitions for service products and activities. The other important areas of work are the collection of data on the size of the market for service products and the development of linkages to ISIC, Rev.3.

### B. Methodological developments in price and volume measures

13. The Central Bureau of Statistics of Norway contributed a proposal for guidelines on price and volume measures entitled "Volume measures of services and service industries. Draft international quidelines. Part 1. Wholesale and retail trade; hotels and restaurants; transport, storage and communications", at the 1990 Paris meeting of the Voorburg Group on Service Statistics. The draft guidelines as proposed by Norway specified the product approach to measuring value added in service activities, the valuation of the output of services, the deflators of output and input, as well as the volume indicators used for extrapolation. The scope of activity and product coverage corresponded to the 3-digit level of ISIC, Rev.3, and the 4-digit level of the CPC, respectively. The guidelines favoured the double deflation method for estimating value added at constant prices and price deflation for the measurement of the change in output of services. Specific guidelines were presented for 29 ISIC 3-digit groups and 86 CPC 4-digit classes. At the 1990 meeting, the Voorburg Group supported the establishment of guidelines based on the experiences of various countries and decided to discuss the proposed guidelines at its 1991 meeting on the basis of a survey of its participants' views to be carried out by Statistics Canada.

14. Accordingly, at its October 1991 meeting in Helsinki, the Voorburg Group discussed the draft guidelines on the basis of a report prepared by Statistics

Canada entitled "Comments on volume measures for services and service industries: Draft international guidelines". The survey did not find a clear agreement on the general approach used in the guidelines. The respondents to the survey examined the draft guidelines primarily from different points of view. Some respondents considered the guidelines from the perspective of what is practically feasible at various stages of statistical development. Others described their own experiences in constant-price estimation. A few offered suggestions on the specific recommendations in different areas. The Group did not take a position on what should be eliminated, amended or allowed to stand.

15. The discussion by the Voorburg Group focused on measurement and classification issues and experiences in constant-price work. The issues concerned the recommendation to use double deflation in measuring the volume of trade services and the degree of detail required in classifications of trade activities, products and types of outlets. The experiences involved the development and use of suitable price indices for trade services as well as the conditions that should be met to obtain comparable measures among countries.

16. The Group agreed that double deflation was difficult to use for calculating the volume of total output of the distributive trade services. This is because there are no wholesale price indices that could be applied to deliveries of goods for resale without significant errors of measurement. The Group discussed alternative measurements based on deflating trade margins by price indices of turnover ratios and changes in margin ratios. The Group considered that the classification of the consumer price index should follow the product classification if it was to be of use for the calculation of turnover at constant prices as a measure of the real volume of trade services.

17. The Group also agreed that both the General Industrial Classification of Economic Activities within the European Communities (NACE) and ISIC are inadequately developed as regards the services sector. The distributive trades are classified on the basis of goods traded and consideration should be given to the services provided. The classification should be comprehensive enough to cover data on CPC commodities and the types of trade outlet.

18. The 1991 meeting concluded that there was a need for further work on the guidelines to bring them in line with more recent experiences in price and volume measures as well as the structuring of industry groups. A consensus emerged that these guidelines should be based on diverse experiences that would allow countries the flexibility to choose from the guidelines the methods most appropriate to their means. There is support for the opinion that the guidelines have to be more specific in terms of explaining what solutions can be applied under different situations. This is because of data limitations among countries in the availability of statistics on gross output, intermediate input and specific price indices. The discussion of the question of the presentation of the guidelines favoured a broader approach that would encompass the guidelines as proposed by Norway, but would also discuss alternative methods based on different experiences. During 1992, UNSTAT has carried forward this work (see para. 62 below). It will also require that

volunteer contributors supplement the draft guidelines with information on the methods they use for deriving their constant-price measures of output or value added.

19. The Norwegian proposal on the draft guidelines also offered a format for consideration as a standard for presenting specific guidelines for the entire area of services. The scope and organization of the format are outlined in the framework shown in the table. The guidelines are organized under the headings of industry and product coverage, nomenclature and definitions, and the methods for deriving constant price measures of output and value added.

20. A review of country practices in the methodology of price and volume measures in financial intermediation, business services, education and health services and public administration was completed by UNSTAT in 1991 and presented at the Helsinki meeting of the Voorburg Group on Service Statistics. The report is contained in the draft document entitled "Volume measures in ISIC 8 and 9 service industries: country practices as a basis for international guidelines", which covers developments in deflation and extrapolation methods that will serve as background information in the formulation of international guidelines in the methodology of price and volume measures for services. The draft report will be made available to interested national statistical offices on request.

21. Few countries have experience with the use of price deflation techniques and volume measurement in financial intermediation, business services, education and health services, and public administration. Forty-two countries responded to a 1989 survey on practices. Eleven countries supplied descriptions of deflation and extrapolation methods. The low response rate may indicate that, in the above-mentioned service industries, value added is rarely estimated as gross output reduced by its intermediate consumption. Price measures for the corresponding services are sometimes not feasible and the standing recommendation is to resort to volume measures using proxy indicators. However, several countries are working on estimation methods and data sources to reduce the proportion of services not covered by price measures.

22. The survey responses showed that countries' methods of estimating real output of monetary institutions and other financial institutions and financial services are described as volume measures obtained mostly by deflating service charges; changes in the volume of transactions in various financial services as well as base-year output extrapolated by movements in employment. The range of deflators includes margin rates, general price indexes, unit value indexes and input prices. The volume measures of insurance are described in terms of insurance benefits, consumers expenditures at base-year prices, sums assured as well as net premiums.

23. The real output of business services is generally measured on the basis of the movement in employment, for example, numbers of persons engaged and hours worked. However, some countries reported that their practices also involved volume measures obtained mostly by the method of deflation and,

occasionally, on the basis of quantity data. The deflators may represent either input prices, wage rates or specific prices.

24. The measures of the real output of health services are mostly based on persons engaged and sometimes hours worked. Occasionally, real output is estimated from volume measures such as the number of professional consultations: examinations, treatments and calls, and hospital stays. Alternatively, volume measures may be derived indirectly by deflating personal consumption expenditures, receipts, medical benefits as well as health services costs (comprising wages and salaries and capital consumption). The deflators include special indexes of fees and remunerations, consumer price indexes (CPI) components for medical care and medical goods and services as well as wage rates.

25. Public administration services at constant prices are computed most often from the cost side with or without adjustments for changes in labour productivity. The estimates may represent either employees compensation at base-year wage rates or employees compensation and consumption of fixed capital, and sometimes including intermediate consumption. Compensation of employees is deflated by wage indexes according to groups of employees. In other instances, the base-year compensation of employees is extrapolated by a weighted index of government employees classified according to characteristics such as activity, rank, grade, experience and length of service.

26. Recent evidence in the work to establish price measures for services comes from papers presented at the meetings of the Voorburg Group on Service Statistics and national publications. The development work includes price measures for business services, gross output prices, and prices of services inputs. The price series are intended primarily for improving and extending deflation techniques and as short-term indicators.

27. At the 1991 Helsinki meeting of the Voorburg Group, Canada, France and Sweden contributed papers on efforts to measure output prices. The development work is concerned mainly with the conceptual basis of price measures for business services. The important areas of interest include establishing the types of pricing methods typical of an industry, how contract prices are set and examination of the values and nature of output. Business services vary from time to time and according to the types of pricing methods. The efforts to establish price measures for output consider the development of time-to-time price measures on the basis of a fixed basket of services and the method of model pricing. In model pricing, the survey respondents provide price estimates for a hypothetical contract that serves as a model for the type of work they do. It is used in situations where actual contracts are unique.

28. Recent price collection efforts have been reported by Canada, Japan and the United States. Japan has extended price collections to include actual contract prices for services provided to corporations. Canada started measuring price changes for the outputs of consulting engineers. In the United States, work to improve the estimation of constant dollar gross product by industry extended in the range of services price indexes used for double deflation.

# Framework for presenting the methodologies for volume measures of service industries and services

# Industry and product coverage

<sup>19</sup> ISIC sections G, H and I

- G. Wholesale and retail trade
- H. Hotels and restaurants
- I. Transport, storage and communications

CPC sections 6 and 7

- 6. Trade services, hotels and restaurants services
- 7. Transport, storage and communications services

# Nomenclature and definitions

Activity groups, 3-digit

Product classes, 4-digit

Value added, method of current price estimations

Value added, main methods of constant price estimation

Double indicator method

Volume Output

Volume Input

Single indicator method (deflation, extrapolation)

/...

Output measurement in current and constant prices

CPC product classes

Valuation of output

Volume output

### II. VOORBURG GROUP ON SERVICE STATISTICS

29. The Voorburg Group on Service Statistics held annual meetings in 1991 and 1992. The 1991 and 1992 meetings were hosted by the Central Statistical Office of Finland and the Bureau of the Census of the United States of America, respectively. The participants submitted reports on substantive topics for the Group's discussions of experiences in various aspects of service statistics, including service classifications, prices and quantities in services, survey organization, administrative records and international trade.

30. The Voorburg Group's agenda included an item on the testing of the CPC and ISIC. The discussion of the use of these classifications was addressed in paragraphs 4 to 12 above. As regards the CPC revision and final acceptance in 1993, it was the view of the Group that some experience will have been accumulated by then, but hardly enough to have fully assessed the complete services part of the CPC.

31. The discussion of prices and quantities in services was based on contributions on various subject-matters. The contributions dealt with the problems of price comparisons (Germany and France), commented on the draft international guidelines (Canada), described the methods of constant-price estimation (Statistical Division of the United Nations Secretariat), and set out an outline for a methodological manual (EUROSTAT). In addition, some participants reported their efforts to develop constant-price measurement of output and value added for specific services, including distribution (France), transportation (Finland), business services (Canada, France and Sweden), insurance services (Finland) and government services (Netherlands).

32. The Group recognized that there were unresolved issues in applying deflation techniques. The conclusions concerning the participants' efforts in prices and quantities emphasized the importance of developing price indexes; agreed that double deflation was difficult to use for calculating the volume of total output of the distributive trade services; and encouraged further efforts to arrive at better solutions than those currently available in business and insurance services.

33. There is common interest in developing appropriate survey methodology for improving and extending service sector statistics. The contributions on statistical surveys of service activities described the results from the implementation of the model survey of computer services (Canada, France and New Zealand), as well as recent experiences in survey methods and organization (Australia, Japan and Sweden). In view of the considerable amount of information available in country papers, the Voorburg Group is considering a detailed compilation and analysis of the results from surveys of service activities.

34. Reports on the use of administrative records were contributed by Denmark, Finland, France and the United States of America. The contributions described the institutional arrangements for gathering economic statistics as well as

the structure, content and limitations of administration registers as a source of business statistics. The use of administrative data for compiling statistics is considered important in several countries because it reduces the respondent burden of enterprises in general and enables the coverage of small enterprises and non-employers, which constitute a relatively large proportion of the service sector. In addition to providing a direct source of statistics, administrative data are considered an important source of information for compiling and updating business registers and constructing sampling frames.

With regard to international trade in services, the 1991 meeting was 35. informed about developments in classification standards and issues in data collection. The contributors in these subject-matter areas were the General Agreement on Tariffs and Trade (GATT), IMF, OECD-EUROSTAT, UNCTAD and UNSTAT. Developments in classification standards were presented by IMF and OECD-EUROSTAT. Much work has gone into the harmonization of the IMF draft Classification of International Transactions in Services and the proposed Joint OECD-EUROSTAT Trade in Services Classification. The IMF classification, which has been reviewed in the context of the revision of the Balance of Payments Manual, was also harmonized with the draft revised System of National Accounts (SNA). Although the harmonization of the Manual and SNA was objectively limited owing to the different analytical purposes of the two systems, the IMF classification changed substantially. An important aspect is that services and incomes elements, which were not distinguished before, are made separate categories in the new <u>Manual</u>.

36. The contributions from UNCTAD and UNSTAT described data-collection and publication practices in selected Asian countries. The descriptions included the sources of information, the scope of coverage, application of international standards and comparability in the statistics on trade in services. Recommendations were presented for data development and for priorities to be adopted. In addition, an account of Hong Kong's practices was presented separately.

37. Finally, the contribution from GATT reported the latest developments in statistics on the size of world trade in commercial services and some general findings on price indices for total services as well as the statistical implications of the Uruguay Round of multilateral trade negotiations. It was concluded that the lack of consistency, incomplete coverage and the level of aggregation of trade in services data made cross-country comparisons difficult. The comparison of price indices for services derived from various goods and services price indices showed that any comparison between merchandise and services growth rates within a given country needed to be interpreted cautiously, whereas international comparisons were hardly possible.

1...

### III. WORK DONE BY INTERNATIONAL AGENCIES

38. The Statistical Commission's Working Group on International Statistical Programmes and Coordination requested that the present report include information on the current and planned methodological work carried out by international agencies. This section consists of summary statements on the initiatives and activities of the Economic Commission for Europe (ECE), GATT, IMF, OECD and UNCTAD to advance service statistics in member countries. The statements were provided by the respective international agencies.

#### A. <u>Economic Commission for Europe</u>

39. The work of ECE in service statistics remains largely oriented towards the needs of the statistical offices in transition countries. ECE assists these countries in establishing a system of service statistics comparable with the emerging standards in this field. The future work of ECE will also contribute further to the conceptual development of service statistics.

40. Future activities of the Conference of European Statisticians were discussed at a joint ECE/EUROSTAT Meeting on Service Statistics in March 1991. The Meeting endorsed the following general directions of work of the Conference: (a) contribution to the conceptual development of service statistics; (b) contribution to a coordinated international database on service statistics; (c) organization and implementation of cooperative projects in the field of service statistics in transition economies; and (d) consideration of methodological issues when required.

41. In terms of the work to be undertaken in view of preparing a work session envisaged for 1993-1994, the following activities were proposed: (a) testing of the EUROSTAT methodological manual of statistics on service enterprises in cooperation with the Statistical Office of the European Communities (EUROSTAT); (b) implementing pilot surveys in selected service sectors in transition countries; (c) survey of national practices in measuring non-market services; (d) survey of national practices in measuring household services, including imputed rents; (e) survey of problems in developing short-term statistics for service enterprises; (f) study of matching problems between classifications of intermediate and final services and the CPC.

#### B. Statistical Office of the European Communities

42. EUROSTAT is currently developing a European statistical system on services in cooperation with the national statistical institutes of member countries of the European Communities and with other Directorates General of the Commission. Recently, the seven member States of the European Free Trade Association (EFTA) formally joined in this effort.

43. As outlined in the Statistical Programme of the European Communities, 1989-1992, plans include the development of a general framework for statistics on services, annual or, for conjunctural purposes, subannual collection of

enterprise statistics on market services and a statistical information system on services. A framework Council decision has been prepared and is in the process of adoption. The new Statistical Programme 1993-1997, currently in preparation, will reinforce the role of service statistics within the European Statistical System.

44. The activities undertaken within the system of service statistics are: (a) the development of a manual of methodology for service statistics; its general framework as well as most of its sectoral chapters are being discussed and are near adoption in view of a first public release; (b) the collection and consolidation of existing statistics on services; a regular flow of information is installed covering even rather new areas such as audiovisual services; (c) the introduction of pilot surveys on services to upgrade existing statistics and to take care of deficiencies; three pilot surveys are under way in distributive trade, business services and social economics, with first results expected soon; (d) the development of basic statistical tools such as registers, classifications, sampling and questionnaire design and survey processing methods; EUROSTAT is preparing a legal basis for enterprise registers; methods such as BLAISE from the Netherlands Central Bureau of Statistics are used within the mentioned pilot surveys; (e) the preparation of a legal basis for regular collection of harmonized statistics on the basis of annual surveys; a Council regulation is being prepared for collection of statistics in the distributive trade area; (f) the establishment of an information system on harmonized statistics on services covering database systems, traditional publications and new media.

45. EUROSTAT is continuously seeking close cooperation with international organizations. Cooperation with OECD and ECE has been reinforced, especially, but not only, for service statistics, in the intersecretariat meeting in September 1991 in Luxembourg. This cooperation concerns the parallel adoption of common methodologies and norms, the efficient planning and division of work, harmonization of surveys, especially if the same countries are concerned, exchange of information on data collection and databases. Within the process of EC support to countries in Central and Eastern Europe, EUROSTAT provides assistance and information to their statistical institutes and helps them in the transition process to market economies.

#### C. General Agreement on Tariffs and Trade

46. The GATT secretariat has been primarily concerned with the uses of national service statistics for analysing international trade in services and assisting in assessing the implications of the rules and principles governing trade liberalization in services.

47. Statistics on international transactions in services have been a recurring subject in the discussions of the Uruguay Round's Group of Negotiations on Services. As a result of this interest, a database of available statistics has been created by the GATT secretariat. The relevant data sets include statistics of domestic production, employment and external

1...

transactions. There is particular interest in the availability and comparability of these data because they are currently required for deriving rough estimates of the relative importance of specific services in national economies and on a regional basis; the evolution of service industries over time; the size of the global market for a given service; and the relative importance of service activities in the world economy.

48. In the context of the ongoing development of a general economic database, services will constitute an important part, including the following:

(a) International transactions on services (from the IMF <u>Balance of</u> <u>Payments Manual</u>);

(b) Contribution of aggregate service sectors to the gross domestic product (GDP) (from UNSTAT);

(c) Employment in the aggregate service sectors (from the International Labour Organisation (ILO)).

The database will record more disaggregated information when comparable and harmonized data become available.

49. The Group of Negotiations on Services has drawn up a sectoral list of services for negotiating purposes, which was built on the basis of negotiating requirements.

50. The new initiatives of GATT in service statistics will only be defined precisely with the outcome of the Uruguay Round.

#### D. International Monetary Fund

51. The work of IMF in service statistics encompasses the development of international guidelines for the compilation, collection and dissemination of data on international transactions in services as an integral part of the work in the area of balance-of-payments statistics. IMF is recognized as the international agency responsible for the development of the conceptual framework underpinning the successive editions of the <u>Balance of Payments</u> <u>Manual</u>. In addition to the development of conceptual and definitional guidelines for international transactions in services, this work involves the provision of practical advice on data compilation through the preparation of a <u>Balance of Payments Compilations Guide</u>, provision of technical assistance, along with the organization of training courses and the development of a database in this area.

52. A major part of this work has been accomplished through the preparation of a draft of the fifth edition of the <u>Manual</u>, which was circulated for comment to national balance-of-payments compilers and interested international and regional organizations in October 1991. A meeting of balance-of-payments experts was held in March 1992, with a view to finalizing the <u>Manual</u>. The

revised Manual contains proposals for the classification of international transactions in services as an integral part of the balance of payments and consistent with the System of National Accounts, including proposed revisions therein. In developing these proposals, which imply a considerable extension in the scope of standard components for international transactions in services, account has been taken of comments of national compilers on earlier proposals and work undertaken in this area by EUROSTAT and OECD. The list of components of services transactions has been expanded and is dealt with in greater detail, reflecting their growing importance as well as the contribution of various international forums in developing a codified list to meet the needs of, and provide for links between, separate statistical systems. Also, a clear-cut distinction has been made between international transactions in services and in income in the list of standard components that comprise the current account. In addition, the Guide, which is intended to provide practical advice on the compilation of data on international trade in services as part of balance-of-payments statistics, has already been prepared in draft form, and will be circulated shortly to balance-of-payments compilers for comment. The Fund also intends to remain actively involved in efforts relating to the development of price or unit value indices for trade in services. It is expected that as a result of these initiatives, the Fund's database on international trade in services will be significantly expanded.

53. With a view to developing a more comprehensive and harmonized database for trade in services and for improving statistical methodologies followed in their compilation, IMF has been engaged in a range of activities, including the provision of technical assistance, the organization of training courses and seminars and technical cooperation with other international organizations. These training courses, organized regularly under the aegis of the IMF Institute, address, <u>inter alia</u>, issues of international transactions in services, including definitional issues and practical aspects of data compilation. In addition, over the years, technical assistance in these areas has been provided to a large number of countries resulting in the assembly of information on the sources and methods used in the compilation of data on international trade in services. IMF continues to assist countries to improve their balance-of-payments statistics, including the scope of data on international transactions in services.

#### E. Organisation for Economic Cooperation and Development

54. At OECD, the organization of work involves a number of horizontal and vertical committees working on service statistics. The main horizontal committee is the Trade Committee's Working Party, which deals with trade-in-services statistics. A general group for service statistics is in the process of being set up. The vertical committees cover a number of sectors, including tourism, banking and financial services and insurance.

55. The Trade Committee's work on service statistics has focused on surveys of the availability and comparability of statistics on international trade in services, the collection and improvement of relevant balance-of-payments data

and the development of an international classification of the service categories covered in international transactions. The results of the latest survey of member countries practices, time series data and trend analyses are documented in the report, <u>OECD Countries International Trade in Services</u> <u>1970-1989</u>. The Trade Committee's Working Party is also working towards the elaboration of an analytically useful detailed classification in close cooperation with EUROSTAT. The joint OECD-EUROSTAT classification is designed to be fully compatible with the less disaggregated trade-in-services classification in the draft fifth edition of the IMF <u>Balance of Payments</u> <u>Manual</u>.

## F. United Nations Conference on Trade and Development

56. The UNCTAD mandate on services is derived from Conference resolution 159 (II) and Trade and Development Board decision 309 (XX), which defined a work programme for the UNCTAD secretariat in services.

57. The components of the work programme are: (a) the elaboration of in-depth studies of the role of services in national, regional and global economies and their contribution to all aspects of the development process; (b) consideration of the definitional aspects of services and the strengthening of the database on services at the national, regional and interregional levels, together with methodological improvements in this field; and (c) assistance, upon request, to member States in the analysis of the role of services in their economies.

58. Recent initiatives were basically aimed at associating developing countries to the work of the Voorburg Group on Service Statistics. Such initiatives were carried out in close cooperation with countries, UNSTAT and the Economic and Social Commission for Asia and the Pacific (ESCAP).

59. Two papers were prepared on statistics on trade in services for submission to the Voorburg Group. The first paper, prepared by UNSTAT in cooperation with UNCTAD and ESCAP, was based on the result of a study carried out in the ESCAP region (Hong Kong, Republic of Korea, India, Singapore and Sri Lanka) describing the state of statistical activities in the area of trade in services statistics. The second paper, prepared for UNCTAD by a consultant, attempted to assess the current status of international service trade statistics in the above-mentioned countries or areas, making an evaluation with regard to coverage, level of details and adherence to international standards, and also making recommendations for data development and priorities.

#### G. Statistical Division of the United Nations Secretariat

60. During the biennium 1992-1993, the main areas of methodological work by UNSTAT include the methods of price and volume measures and initiation of work on the finalization of the CPC (see, also, E/CN.3/1993/7). It is anticipated that both areas of work will benefit significantly from countries'

documentation of methods of measurement and the adaptation of classifications. In addition, the Statistical Division expects to draw heavily on the development work of other international agencies, as well as on the discussions of measurement and classification issues by the Voorburg Group participants.

61. The international guidelines on price and volume measures are expected to cover a wide range of services and service industries. The range of services encompasses the following provisional CPC sections: Trade services; hotels and restaurants (6); Transport, storage and communications services (7); Business services; agricultural, mining and manufacturing services (8); and Community, social and personal services (9). The corresponding service industries in terms of ISIC, Rev.3, categories are: Wholesale and retail trade (G); Hotels and restaurants (H); Transport, storage and communications (I); Financial intermediation (J); Real estate, renting and business activities (K); Public administration (L); Education (M); and Health and social work (N).

62. Following the twenty-sixth session of the Statistical Commission, UNSTAT reviewed countries' methods of price and volume measures in financial intermediation, business services, education and health services and public administration. In addition, Statistics Canada conducted an initial survey to solicit comments and suggestions on the proposed guidelines. In 1992, the Statistical Division started testing the framework shown in the table to determine whether it is suitable for presenting guidelines for the entire area of services. An upgraded version of the draft guidelines covering CPC sections 6 and 7, reflecting the results of the 1991 OECD survey of the methods of measurement of value added at constant prices in service activities/industries, was submitted to the 1992 meeting of the Voorburg Group. The guidelines will be circulated to national statistical offices for their comments. UNSTAT welcomes any amplifications or corrections that may be necessary on the descriptions of methods of constant-price measurement.

# IV. PROPOSED FUTURE WORK

63. At its twenty-sixth session, the Statistical Commission discussed the weaknesses of available service statistics, in particular, statistics on production by activity groups and international transactions in services. In addition, the Commission discussed the various activities and initiatives by national statistical offices and international agencies to improve the situation as well as the increasing attention paid to service statistics in methodological work, data collection and technical cooperation. If real progress is to be made in improving statistics, statistical capabilities and methods in this complex and relatively new field of statistics, international agencies and national statistical offices with experience in this field will have to cooperate closely. Accordingly, it is essential to ensure maximum coordination and complementarity of plans and activities.

1 . . .

64. A synthesis of the plans of international organizations in this field indicates that the future work is expected to concentrate on the following broad activities and topics:

(a) <u>Development of standards of classification and measurement</u>

ECE

Matching problems between classifications of intermediate and final services and the CPC;

National practices in measuring non-market services;

National practices in measuring household services, including imputed rent.

#### EUROSTAT

A manual of methodology for service statistics.

IMF

Conceptual and definitional guidelines for international transactions in services;

Balance of Payments Compilation Guide on international trade in services;

Proposals for the classification of international transactions in services.

OECD

The design of a joint OECD-EUROSTAT classification fully compatible with the balance-of-payments services classification;

Classification of international transactions in services.

UNSTAT

Finalization of the CPC;

National practices in prices and quantities in services;

Guidelines on volume measures of services and service industries.

# (b) Production and dissemination of statistics

ECE

Short-term statistics for service enterprises;

Pilot surveys in transition countries.

#### EUROSTAT

The development of data collection techniques;

Collection of enterprise statistics on market services;

Collection and consolidation of existing statistics on services;

Pilot surveys.

#### IMF

Extension in the scope of standard components for international transactions in services;

Inventory of sources and methods for data on trade in services.

OECD

Collection of balance-of-payments data;

Availability and comparability of statistics on trade in services, including countries' practices.

### (c) <u>Cooperation</u>

ECE

Testing of the EUROSTAT manual on service statistics.

OECD

Joint OECD-EUROSTAT classification.

IMF

Technical cooperation with EUROSTAT and OECD in the classification of international transactions in services.

# (d) <u>Technical cooperation</u>

EUROSTAT

Assistance and information to statistical institutes in transition countries.

IMF

Technical assistance in data compilation and the organization of training courses and seminars.

UNCTAD

Assistance in the analysis of the role of services in national economies.

### (e) <u>Service sector analysis</u>

UNCTAD

Studies of the role of services in national, regional and global economies and their contribution to development;

Evaluations of the current status of international service trade statistics.

GATT

Analysis of international trade in services in relation to the rules and principles governing trade liberalization in services.

65. In the planning of future work, further emphasis will need to be given to improving the coverage of services in the statistics of developing countries. Often, the databases are meagre and strategies to collect even some basic statistics should be an early goal. The starting point is to identify and to describe the various kinds of services produced and to use the international standards as a frame of reference for the classification of services according to product and activity. Eventually, pilot surveys would have to be undertaken if the developing countries are to establish the capacity to collect at least basic statistics on the outputs of services.

#### V. POINTS FOR DISCUSSION

66. The Commission may wish to comment on:

(a) The work of national and international agencies in the field of service statistics, particularly as it relates to paragraph 64;

(b) The scope and organization of the guidelines on price and volume measures;

(c) The work of the Voorburg Group, and provide guidance on future contributions of the Group to service statistics;

(d) The proposed future work programme, particularly in relation to developing countries.

# <u>Notes</u>

1/ Official Records of the Economic and Social Council, 1991, Supplement No.5 (E/1991/25 and Corr.1), para. 1.

2/ Ibid., 1989, Supplement No. 3 (E/1989/21), paras. 95 (f) and (g).