

Report of the Extended London Group Meeting Voorburg, the Netherlands (May 7-11, 2001)

Introduction

This conference report reviews for each chapter the substantial issues of discussion and provides accompanying action points that were found necessary for finalising the SEEA-2000. A small number of discussion points are headed under 'other issues' in those cases where the London Group did not clearly decide on further actions. The last section in this report discusses the future of the London Group on environmental accounting.

Final comments on the Voorburg version of the SEEA 2000 from the London Group can be taken into consideration until the end of May and should preferably be sent to both Anne Harrison, the corresponding Chapter Presenter and the Co-ordinating Committee. Comments should not be at the wording level. Moreover, they should reflect the issues discussed during the meeting. The restricted time schedule makes it impossible to take into consideration totally new fields of comments.

Currently, three major remaining tasks to be finalised are:

- a) revision of the main text and annexes
- b) SEEA-land data-set
- c) preface, glossary, references and index

A revised version of the SEEA 2000 handbook will be available by the end of July and will be placed on the London Group web-site: www4.statcan.ca/citygrp/london/london.htm still labelled as work in progress.

Chapter I. Introduction to SEEA 2000

Chair: Steven Keuning, Chapter presenter: Rocky Harris

Changes recommended by the London Group

The current Chapter I serves appropriately as an executive summary. The preface in the handbook will further outline the provenance of the SEEA-2000 revision and its relation to the 1993 SEEA. The conceptual differences between SEEA 2000 and SEEA 1993 and the reason for revision will be further explained in an annex, which is still to be drafted. Another annex will spell out the relationship between the SEEA 2000 and SNA 1993, including the National Accounting Matrix (NAM).

As a non-technical introduction, Chapter I will provide more emphasis on the following issues:

- SEEA-2000 serves as a book of current best practices.
- Explaining the added value of environmental *accounting* (in addition to environmental statistics).
- The relationship of environmental accounting to sustainable development and indicators (including the social dimension).
- Explaining how environmental accounting relates to the economic accounting framework. The scope and limitations of the SNA 1993 in respect of environmental accounting need some further explanation.

- The relationship of SEEA-2000 with business accounting and accounting practice in a broader sense.
- Implementation priorities related to the modular set-up of the SEEA-2000 framework.
- Institutional arrangements, the specific role of different agencies and the importance of cross-agency collaboration and capacity building (though a full treatment would be more appropriate in an Operational Manual).
- The calculation of adjusted economic aggregates.

The discussion on sustainability in Chapter I was considered to be too limited. Chapter I will therefore be extended with a much broader discussion on this topic. Outlining sustainability is, however, a subject on which much debate is possible. Therefore the handbook will acknowledge the different sustainability perspectives, i.e. sustaining capital, welfare, consumption etc. In addition, the concept of different types of capital (natural capital, human capital) and related assumptions such as weak and strong substitutability will be discussed in relation to SEEA 2000. The discussion will also cover the link between physical and monetary sustainability and the fact that physical quality, as well as quantity is an important aspect of sustainability.

The sustainability discussion in Chapter I will be used to further explain the modular structure of the SEEA-2000.

The chapter summaries will focus more on each Chapter's policy relevance. Policy related issues will be generally introduced in Chapter I and will be further elaborated in Chapter IX.

Plans for future work will not be presented in Chapter I but will instead be discussed in the preface.

Chapter I will more clearly explain the boundaries of the SEEA 2000 and explain what the book does or does not cover, e.g. the treatment of damages from catastrophes.

Chapter I will provide additional information on the relation of the SEEA 2000 to other bodies of relevant work such as climate change modelling.

Other issues

It was discussed how Figure 1.1 could additionally reflect the effects of additions to stock and the calculation of adjusted national accounts aggregates. No firm conclusion was made in the meeting.

It was agreed that basic key terminology such as rent should be defined either in Chapter I or Chapter II.

Chapter II. The accounting structure of the SEEA

Chair: Steven Keuning, Chapter Presenter: Rocky Harris

Changes recommended by the London Group

Chapter II aims to provide a comprehensive overview of the accounting elements of the subsequent chapters. The SEEA 2000 is conceptually a single integrated system within which the modules generally fit into a wider framework based on economic accounting, and where individual modules can be implemented without necessarily implementing the whole system. Some accounts will be described in physical terms while others will be denominated in terms of money. It was agreed that this was a reasonable compromise.

The link between tables in this chapter and those in the subsequent chapters will be further strengthened, for example by using exactly the same presentation format (e.g. a matrix format for

the NAMEA presentation). The overall structure of the complete system will be further illustrated by the SEEA-land data-set which will as planned be introduced in the latter part of this chapter.

There was a considerable concern that the SNA should be presented adequately and it was discussed how detailed this should be. The linkages between the tables should be clarified in more detail and more explicitly. On the other hand it was recognised that it was not appropriate to describe the SNA in full detail. It was thought to be essential to present a full sequence of SNA accounts to relate adequately to the SEEA including the introduction in chapter II of a conceptual NAMEA table for this purpose. It was also thought essential that the overall structure of the system of accounts is set out in this chapter.

The chapter will further emphasise that the order in which the chapters are arranged does not imply a necessary order of implementation.

Chapter II will introduce some of the key differences between input-output and supply-use tables. Further details will be given in Chapters III and IV.

The chapter will contain a discussion on the calculation of adjusted aggregates.

Other issues

Recommendations were made to improve the presentation of the SEEA for those users who are less familiar with national accounting, such as indicating the modular focus of the SEEA structure, by simplifying guidance to the different chapters of the manual and by simplifying the principle text of the SEEA 2000 by using annexes for specific examples and mathematical derivations.

Several countries noted that the framework of the SEEA 2000 is looser than the framework of the 1993 SEEA or the Operational Manual. It was recommended to improve the presentation of the SEEA 2000 framework indicating its modular approach.

It was agreed that basic key terminology such as rent should be defined either in Chapter I or Chapter II.

Chapter III. Physical flow accounts

Chair: Steven Keuning, Chapter Presenter: Ole Gravgård

Changes recommended by the London Group

The structure of accounts and its flexibility with respect to implementation was found to be sufficiently clear. Some aspects related to the notion of material balance and the principle of preservation of matter and energy need further clarification. For example, balancing inputs and outputs in physical terms put much emphasis on amounts of materials estimated as the difference between inputs and outputs and often less attention is given to residuals that are particularly significant from an environmental impact perspective. Also, in the aggregates, an enormous variation of different physical flows is expressed by one single unit (tonnes). Therefore, the limitations of adding apples and oranges will be spelled out much more clearly. It will be made clear more explicitly that aggregation is specifically useful as a tool for checking consistency of physical flow accounting. Partial aggregation along the lines of homogeneous products or environmental themes/ecological functions will be recommended.

In Chapter III, more emphasis will be drawn to the fact that volume measurement in the SNA differs from the term volume/quantity in physical flow accounting. The difference is related to the quality aspect.

Additional information will be given on the borderline between the economic sphere and the natural environment and the demarcation of the various flow types i.e. residuals, products, natural resources and ecosystem inputs. Definitions of ecosystem input and natural resources, and residual classification will be reconsidered especially for water. In this context, the use of multiple classifications for the various purposes will be reconsidered.

The natural resource flow classification applied in Chapter III will distinguish between renewable and non-renewable natural resources.

A certain level of flexibility will be given with respect to the gross and net recording of residuals.

Also, the possibilities to account for the inputs gross versus net will be further underlined.

Especially for various kinds of agricultural production, the usefulness of both types of recording will be further illustrated. It was decided that recycling and treatment of waste will be regarded as residual flows within the economy instead of flows to the economy back from the environment.

Chapter III will include an additional sub-section on recycling.

Chapter IV. Integrating physical and monetary accounts

Chair: Steven Keuning, Chapter Presenter: Mark de Haan

Changes recommended by the London Group

There is no need for more operational information in this chapter on air emissions. Further explanation will be given on themes other than air emissions.

Discussions on the policy relevance of applications will be transferred to Chapter IX. Technical aspects will be elaborated in Chapter IV. More emphasis is needed on the methodology of applications (in some cases there is too much discussion of the numbers). Some duplication is considered as unavoidable.

The discussion on input-output tables and analysis assumes too much prior knowledge at present. A short introduction on related topics will be included (1 or 2 pages, or a box, here or in chapter II) and additionally specific references will be made to input-output literature.

Building up a full NAMEA starting from a SUTEA is considered appropriate. The introduction of Chapter IV will be improved by explaining that the SUTEA is really a truncated NAMEA and that the additional benefits can be derived from the full NAMEA-framework. Particularly, the relevance of the sector accounts in the NAMEA will be further elaborated; with specific applications or illustrations.

In discussing the location of the NAMEA in the SEEA 2000, recommendations varied from presenting the NAMEA in a separate annex to including a conceptual full-fledged NAMEA in Chapter IV. It was recommended to present such a table in Chapter II as a way of explaining the SEEA framework in relation to the SNA.

International harmonisation is considered as highly desirable and the harmonisation of environmental statistics to national accounts classifications is always preferable. However, for further analysis, other, more homogeneous classifications will be mentioned as useful.

Deviations from the SNA in the present NAMEA example should be either removed or justified. Section F will be moved to Chapter V.

Chapter V. Environmental protection and resource management accounts

Chair: Wim van Nunspeet, Chapter Presenter: Anton Steurer

Changes recommended by the London Group

Chapter V is found to be complete in addressing a wide range of topics. However, the distinction between natural resource exploitation, natural resource management and environmental protection accounts has to be further strengthened. Also, the demarcation between expenditure on sustainable natural resource management and commercial production related expenditure should be further explained. Resource management in SEEA is more a tool for environment policy and management, which is different from looking at resource management exclusively from an economic point of view. Environmental protection is largely but not exclusively residuals management, but also includes nature and ecosystem protection. For a great number of developing countries, the management expenditures of natural resources, such as national parks, eco-systems, etc., are more relevant than that of strict environmental protection. The protection and management of species (such as elephants and rhinos) can be a key element that illustrates this.

Chapter V should acknowledge more openly the current status of its contents. The conceptual backgrounds of environmental protection expenditure are well established while natural resource management accounts will be an issue for future research. More attention should be given to the extent to which natural hazards are or are not included. The distinction between environmental protection (protecting nature from humans) and natural hazards (protecting humans from nature) should be made clearer.

The environmental protection accounts are sufficiently treated in Chapter V while natural resource management account will be expanded. More material is needed and Australia, Chile and Finland offered to look for useful material.

The classifications of environment-related activities should be improved but at the same time be acknowledged as work in progress. For a classification of resource management, the OECD/Eurostat classification of the environmental industry will serve as a good reference point to begin with.

Especially for resource-rich countries, the expenditure on natural resource management is significant and relevant, and has implications for tradable permits and environmental taxes. More emphasis will be given to the institutional context; the accounts will be better organised to reflect user needs including the organisation of government departments which differ across countries. Sets of related issues will be covered by sets of related accounts. Countries should apply the main elements of the accounts but flexibility of implementing the accounts needs to be emphasised, reflecting the context – e.g. importance of natural resources and institutional arrangements.

The German environmental input-output analysis in Chapter IX (p.9-15) will be moved back to Chapter V.

The definition of R&D expenditure in environmental industry in Chapter IX (p.9-18) will be moved back to Chapter V.

The tables of indicators in Chapter IX (tables 9.10 and 9.11) will be moved back to Chapter V with back reference in Chapter IX.

Section F.1 “links to physical data” (p.5-40) will be improved and expanded with an example. In this context, the analytical alternatives behind the two types of recording ancillary activities

(externalising as in Chapters V or as separate row and column in Chapter IV) will be further explained in either chapter IV or V.

Further attention is needed on the use and non-use of standard SNA terminology which can be a source of confusion at present:

- Box 5.1 page 4-15 uses categories of “market”, “other non-market” and “non market” under “categories of environmental protection products”. These differences are defined differently from the SNA93.
- Para. 5.115 of p. 5-27: a non-specialist producer is allowed to become a specialist producer under certain conditions. This is inconsistent with earlier discussions (see table 5.6 p. 5-26) and should be modified
- Change the name “revaluation table” (table 5.5 p. 5-24) to “conversion table” to prevent misunderstanding
- Review the “operating unit” as defined in para. 5.71 of p. 5-15 which is not a standardised statistical unit in SNA93.

The London Group recommended Annex V (CEPA2000) for acceptance but requested the development of an additional classification for natural resource management. UNSD, in co-operation with FAO and others, offered to develop such a classification.

About Annex VII (discussion on the role of regional activity classifications such as NAICS) it is suggested that the title will be changed by removing “ISIC” and “NAICS”. ISIC will be presented as the primary internationally used classification. Both NAICS and NACE will be included as additional help to indicate various categories. A footnote will be added mentioning that the detailed categories of NAICS differ for Canada, Mexico and the United States.

More contextual information (explanatory notes) for several annexes will be added if manageable. This is for the benefit of a broader range of readers.

Chapter VI. Asset accounts

Chair: Wim van Nunspeet, Chapter Presenter: Bob Harrison

Changes recommended by the London Group

There was concern that it is not clear how the monetary accounts are spread over the chapters and that there may be too much emphasis on physical accounts. In general it was acknowledged that a balance should be found between monetary versus physical accounting. It was decided that Chapter VI will be re-titled and that cross-referencing as well as strengthening the explanation of the manual structure is sufficient to solve the problem. Also, the Chapter introduction will be improved in explaining what the chapter does and does not cover. Chapter-headings are somewhat unhelpful in finding the information one is looking for and should therefore be modified.

It was stated that sections E, F and G currently provide partial presentations and should better reflect the main alternatives which are proposed. The pros and cons of the alternative methods will be further explained and the chapter will provide better guidance for the reader. A preference for any alternative should not be stated but it will be helpful for the reader to have additional information on which alternative/technique is currently applied in a majority of countries.

It was recognised that it is difficult to identify an audience for Chapter VI. Many different audiences (different ministries, general economists, national accountants) can be recognised.

Several solutions were mentioned including a better introduction in either Chapter I or VI. Also a suggestion was made to reorganise the information in Chapter VI somewhat to establish different reading-levels. Possibly indicating “the following information is for more experienced national accountants” could be helpful for less experienced readers. The introduction chapter (I or II) will additionally provide a description of the most important basic economic concepts such as “rent”, to enable chapters to refer to this information.

It was stated that the relation of some issues in chapter VI to sustainability has not been described in enough detail. The issue of sustainability will be described carefully in Chapter 1. In this way the different chapters can refer to Chapter I.

The asset classification (Annex I) has been subject to continuing revisions up to the present. There are still inconsistencies between headings of the classification and Chapters VI and VII which need to be resolved.

A key aspect of the extension of the asset boundary in the SEEA depends on the difference the SNA introduces between produced and non-produced assets (cultivated and non-cultivated in the case of biological assets). In the course of the SEEA discussions, it was suggested that the SNA definition would benefit from a more closely worded formulation. The added words to the definition of cultivated assets on page 6-10 lead to a better harmony between the SEEA and SNA and the group accepts the proposed wording for SEEA and recommend its consideration for adoption by the SNA.

The section on valuation of natural resource stocks and flows covers a number of options where alternative views are held. Rewording of page 6-6 in combination with page 6-26 is proposed. It is suggested to include extra sentences, namely: 1) on page 6-6 : ” In order to define assets we first need to define benefits/values “ and 2) something on page 26 to clarify which values will be addressed in the remaining of the chapter.

The general feeling was that Chapter VI goes too fast into technical details. The more basic concepts (e.g. what is valuation) will be explained beforehand in the introduction of Chapter VI. Alternative valuation methods will be reviewed in a more balanced way, including additional information on the pros and cons of the various approaches.

Although the title of the chapter was originally confined to the asset accounts, and these are now presented first (as suggested by a number of comments), there is also a section describing the consequences for the flows accounts and measures of income, with the possibility of calculating a “depletion adjusted” operating surplus. The latter discussion was not found to be entirely balanced. Various solutions/alternatives for recording discoveries and depletion of natural resources have to be discussed in a more explicit way. More clarity is needed concerning what is different to current SNA practice and less support should be expressed for the depletion adjusted approach outlined in the example. There was consensus that the range of possibilities allowed for within the numerical example should also become more explicit.

Chapter VI currently introduces a wide range of new terminology. Terminology consistency through the chapter will be checked and cross-references will be established between the sections. Also, the algebra notation will be made consistent throughout the SEEA-2000. The different concepts of adjusted aggregates will be further clarified in Sections F and G. Furthermore, adjusted aggregates will be introduced in the first two chapters of the SEEA. Reservations on the possible calculation and interpretation of adjusted aggregates must be presented. Furthermore, the modified adjusted aggregates have some problems built in that are not discussed: e.g. there is incomplete accounting with the subtraction type depletion adjustment. The text on page 6-50 (section 2. Variations in the accounts) will be expanded. Implications for

GDP will be spelled out more clearly as well as the treatment of discoveries. A diagram will be included, showing what happens with different accounting alternatives. Consequences to be shown are obviously for both the explorer, the extractor and the owner. Splitting the Sections F and G from Chapter VI was considered as counterproductive.

Other issues

It was suggested that Chapter VI could start with an organising framework.

It was also suggested to move more technical information to an annex or to a box.

Chapter VII. Specific resource accounts

Chair: Peter van de Ven, Chapter Presenter: Alessandra Alfieri

Changes recommended by the London Group

It was recommended that Chapter VII will provide in the introduction a more detailed explanation of what it covers in physical and monetary terms as well as the logic behind the choice of coverage.

It was recognised that this chapter introduces quality characteristics, in addition to quantity, as an important aspect of sustainability. It was recommended that this concept be included also in other chapters, in particular Chapters I, VI and IX. The link between physical and economic (or economic and ecological) sustainability needs to be established.

Chapter VII will follow the order of the asset classification in its presentation of the different resources accounts. This order will then be: B. Accounts for mineral and energy resources; C. Accounts for wooded land, timber and forest products; D. Accounts for aquatic resources; E. Accounts for water resources; F. Accounts for land and ecosystem accounts.

Section B (Minerals) needs to be presented in a much simpler way. The text on decommissioning cost will be repeated at least partly and a cross-reference to Chapter V is required. A certain degree of repetition between various chapters is acceptable in order to have the sections self-contained.

The McKelvey box will be re-introduced in Section B to present the reserves of mineral and energy resources.

Consistency between the definitions and formulas with Chapter VI needs to be checked. It was also suggested that the formulas are included in a box. It was noted that consistent symbols and terminology should be used throughout the book.

A table describing the different approaches to the calculation of depletion for mineral and energy resources will be presented in Chapter VI.

More clarification on the text on mineral exploration to amplify the SNA statement that it is valued “at cost” is needed.

It was agreed that **Section C (land)** should remain in the SEEA. The introduction of Chapter VII will explain that this section deals solely with terrestrial ecosystems; forest and aquatic ecosystems are further discussed in the other sections of the chapter, whereas atmospheric ecosystems are not discussed at all.

It was recognised that soil is a very important resource and should be discussed explicitly even if briefly. However, given the limited experience in this area and the tight time schedule it was suggested that accounting for soil degradation could be considered a topic for future work.

However it was agreed that the treatment of land degradation in the SNA should be included.

The valuation of land will be further discussed in Chapter VII.

The FAO and UNEP jointly developed a new Land Cover Classification System (LCCS) which uses a set of independent diagnostic criteria as classifiers rather than nomenclature based. The Group recognised that at this stage it would not be possible to re-open discussion about the classification of assets. However it was agreed that references to the LCCS will be made in the text.

The term “biotope” is used mostly in European countries. If appropriate, an alternative term more commonly used in other countries should also be introduced.

In **Section D (Forests)** the concepts and definitions are clearly defined, however a further check on similar terms used in existing classifications will be made to ensure consistency with those classifications as far as possible.

The coverage of assets in the monetary accounts should be clearly addressed. The discussion on the valuation of timber and forestland will be linked to the discussion on total economic values in Chapters VI and VIII. Possible text can be found in the FAO Manual on forest accounting.

Section E (Aquatic resources) contains a number of inconsistencies in the text on sustainability that need to be fixed.

It was agreed to treat the catches of fish by foreign vessels as production of the country of residence of the vessel operator as in accordance with the SNA and BOP. Although this treatment was considered by some participants counterintuitive for analysis, it was agreed that changing the SNA and BOP concept of residence would be too difficult. In addition information on the fish catch from national waters by non-resident vessels and catches by resident vessels in non-national waters is needed for a complete set of fish accounts.

Section F (Water, report from the water sub-group) – Water appears at various stages as an ecosystem input, natural resource, product and residual. The water absorbed by soil and vegetation is treated as ecosystem inputs. Water used for motive power, for cooling, as a means of transport or which is simply displaced from one location to another (e.g. in mines or as a result of flooding) is recorded as a natural resource flow. Water which after extraction is supplied to a third party is a product. Waste water is a residual; some may be retained within the economy for treatment and possible recycling; otherwise it is discharged to the environment. There are optional classifications about water extracted for own use. It could be recorded as a flow of a natural resource into and then (in part) out of the economy. It could be recorded as a product within the economy and residual flows out. Large amounts of water are extracted for own use (including but not confined to irrigation water) and there is increasing concern about the amounts of such usages and increasingly charges are being levied on extraction whether for own use or not. Whether own account extraction is classified as a natural resource or product, therefore, within supply and use tables the using industry should be specified and also a division made for water extracted without charge and that where a charge is payable.

It was agreed to add more text on the possibility of accounting for water in land and soil and snow and ice as a stock.

Other issues

It was requested that the discussion in Chapter VI referring to mineral and energy resources should be made more general and the text referring to mineral resources should be included in Section B of Chapter VII. On the other hand, others suggested that at the cost of repetition, some of the Chapter VII material should also be included in Chapter VI. No firm conclusions were drawn here.

Chapter VIII. Valuing degradation

Chair: Steven Keuning, Chapter Presenter: Sofia Ahlroth

Changes recommended by the London Group

The London Group agrees that a better explanation and interpretation of the results of the different valuation methods (cost based and damage based methods) is needed in the introduction of the chapter. Differences between methods should be described more clearly, e.g.

- that different methods (cost versus damage oriented) are used for different policy goals. This should be made clear in the introduction, as well as in the sections describing the methods. Examples of policy goals served by the different approaches will be added.
- that different methods differ widely in scope, and therefore often differ widely in magnitude. This should be pointed out. Figure 9.18 should be shifted to chapter VIII as a good illustration of this.
- problems and difficulties that are inherent to the different methods.

With regard to accuracy, there must be a stronger warning on the possible margins of uncertainty of the outcomes.

The possibility to construct aggregate physical indicators should be discussed in the beginning of the chapter.

The link between the methods and the National Accounts should be described more clearly at the beginning of the chapter. In particular, the possible inconsistency between the damage-based method and the flow accounts in the National Accounts should be made explicit.

However, the description of the damage-based method needs to be improved on the following points:

- a better description of and distinction between the micro-economic level and the macro-economic level are necessary, similar to what is done for the cost-based method.
- It should be pointed out that at the aggregate level modeling is better to catch second-order effects.
- Further discussion on the term 'damage' is required. Confusion about this term should be prevented by a good explanation of the meaning of this term in the book, which may deviate from the meaning attached to it by policy makers, insurance companies, and so on.
- In none of the valuation methods discussed in Chapter VIII is there an attempt to include the value of benefits from a clean environment or good health in the measurements of either assets or flows. For the damage based method, this leads to an asymmetry when the value of damage suffered is accounted for. The consequences of this asymmetry will be emphasized more strongly.
- The order of the sections E4 (Damage-adjusted product and income) and E5 (Damage-adjusted saving) will be reversed. It is concluded that adjusted change in net worth reflects sustainability better than an adjusted GDP and this should be stated clearly in the book. The text will then focus on adjusted change in net worth and net savings, instead of focusing on adjusted income or product.
- A clear distinction should be made between adjustments of accounting aggregates and measurement of welfare. This distinction should be described more extensively.
- The limitations of the damage-based approach, particularly for adjusted income estimates, should be spelled out more clearly.

It should be made clearer in the manual that adjusted macro-aggregates are really always incomplete macro-aggregates. It must be explicitly mentioned what is included in, and excluded

from adjusted (and non-adjusted) macro-aggregates. With regard to use values and non-use values more clarification is needed.

Also, at present there is too much emphasis on macro-aggregation. More attention should be devoted to valuation at the micro- and meso-level, to the distinction between the most appropriate valuation methods at different levels, and to the need for modeling particularly at the macro-level.

The description of the valuation methods proposed are not intended to be so detailed as to permit immediate implementation but rather to indicate possible fruitful lines of enquiry. The general conclusion is that the description is satisfactory with regard to this discussion point.

The description of greened economy modeling and of the maintenance costs method should be better integrated, so as to describe the relationship between the two more clearly. The text on the greened economy modeling is rather short, vague and sometimes contradictory. This will be rectified by an alternative text provided by Bart de Boer and Martin O'Connor. This text will integrate parts of the conceptual discussion on SNI (currently in Chapter IX in the text on greened economy, without disturbing the balance (in size and otherwise) between the present text and the additions. The main points of SNI should be covered in the text on geND. The main results will be described, in a maximum of one page, in chapter IX.

It should also be stated clearly that the greened economy GDP models (in general) do not cover benefits from implementing the avoidance measures.

Other issues

It was suggested to add a broader systematic overview of existing modelling techniques to the chapter. However, no clear directives were given on how to present such an overview.

Chapter IX. Applications and policy uses of the SEEA

Chair: Steven Keuning, Chapter Presenter: Glenn-Marie Lange

Changes recommended by the London Group

Though there was significant support to restore the original order of the chapter (= order of subjects as advocated by the Chapter Presenter), this may create practical difficulties in view of time constraints, so the practicality of that option remains to be discussed. Anyhow, the envisaged use of this chapter - as an "appetiser" for policy makers - is a strong argument in favour of anyhow strengthening the introduction to Chapter IX. Also, the relation of this chapter to the (introductory) Chapters I and II should be carefully reviewed, as these three chapters taken together seem most relevant as an introduction for a non-technical audience (among which policy makers).

It was generally felt that examples of the construction of accounts should be relegated to the appropriate chapters, in favour of the inclusion of more examples of policy applications in Chapter IX. (This would also solve the occurrence of long sections devoted to one example.) The link between accounting methods and their applications should be covered by adding a table explaining these linkages.

Discussions on policy applications in earlier chapters should be referred to. This might be done by adding a reference at the appropriate place in Chapter IX. (The distribution of the examples over the chapters, meanwhile, should be decided on pragmatic grounds.) In Other remarks - at the end of the afternoon session - it was approved that a Table of all examples throughout the whole handbook (also refer to point 1.b above) is inserted in Chapter IX or in an Annex.

It was preferred that a broader discussion of sustainability is included in Chapter I and not in this chapter, as this notion is of paramount importance to the whole SEEA.

No specific remarks on consistency were made. But the applications concerning the asset accounts should be broadened to include "new discoveries".

Chapters VII and IX should have a better linkage with regard to the physical asset indicators.

For the notion of "constant prices" the reader should be referred to Chapter V. The differences with "current prices" and their respective relevance and use in treating natural assets should be discussed there.

It is preferred that the applications - if feasible- are assembled in Chapter IX, or at least that more comprehensive analyses are included in Chapter IX.

NAMEA applications should be primarily discussed in this chapter, although some overlap with Chapter IV seems unavoidable. Anyhow, the comparison of the UK – Netherlands structural decomposition will be transferred to Chapter IX.

The need was felt to mention a better linkage of monetary flow accounts and macro-economic indicators.

Too much text is currently devoted to EPE. On the other hand, a discussion on the environment industry (recycling, treatment) - now lacking - should be included.

In addition, a caveat should be included on the interpretation of the relation EPE/GDP (i.e. a higher ratio does not necessarily mean a better environmental policy).

It was decided that the NAMEA theme indicators are explained and illustrated in this chapter.

This should include a discussion on the possibility to set (policy) targets for the indicators and on the pros and cons of a concomitant further aggregation of the theme indicators ("average distance to target").

It was strongly felt that the tables on the Sustainable Development Indicators should be kept in here, including a discussion on the advantages of their linkage to a framework such as the SEEA. These advantages include consistency of outcomes, possibilities for analysing linkages, use in policy simulations and so forth. In addition, a strong caveat should be expressed in the Handbook with respect to a further aggregation of the Sustainable Development Indicators by means of computing simple averages, Genuine Progress Indicators and so on.

Other issues

There was support to discuss applications of both environmental corporate and national accounts. Connection to environmental accounts for the public sector was also deemed important.

However, no conclusions were drawn on the exact location or extent of such a discussion in the SEEA 2000.

Future of the London Group

There was a general agreement among the participants that the work of the London Group should continue as a forum for exchanging experiences. It was mentioned that the role of city groups like the London group is to make methodological progress within a particular field. The London Group intends to continue its contribution to manuals on specific topics of environmental accounting. Although progress has been made in the field of environmental accounting, many issues still have to be assessed. It was suggested that water accounts and policy uses and

applications of environmental accounts be considered as issues for discussion in the next meeting.

It was suggested that members of the London Group should be involved in the implementation of the SEEA by sharing their experience through participating in international workshops and country projects.

There was some debate whether the discussions of the London group should be more open. Some argued that a more public discussion may facilitate the spread of the knowledge and may increase the support of the ideas of the London Group. However, other members argue that the group may become too large and focus may be lost. Also, pressure groups may participate for non-methodological reasons. The atmosphere would be quite different and probably less methodological if the discussions are in public. In all, it was generally agreed that a closed structure was preferable, although it was acknowledged that transparency and diffusion of the work are important. Perhaps, the internet can play a role here. Moreover, it was emphasised that less restricted participation does not mean that any countries are excluded.

The co-ordinating committee of the London group will deal with the practicality of organising the next meeting.