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NATIONAL ACCOUNTS AND BALANCES: SYSTEM OF NATIONAL ACCOUNTS (SNA)

Progress report on the revision of the System of National Accounts (SNA)

Report of the Secretary-General

SUMMARY

The present report is a follow-up to a previous progress report on the revision of the System of National Accounts (SNA) presented to the Statistical Commission at its twenty-fifth session in 1989. It is divided into four sections. Section I provides information on the past and future work programme on the revision of SNA. Section II describes the main outstanding issues and the review of the revised SNA features by the regional commissions. Section III explains the concerns, needs and requirements for a successful implementation of SNA. Section IV includes points for discussion by the present session of the Commission.

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INTRODUCTION

- 1. At its twenty-fifth session, the Statistical Commission expressed overall satisfaction with the progress made in implementing the review programme of the System of National Accounts (SNA) since its twenty-fourth session. It noted that that progress was largely due to the efforts of the Inter-Secretariat Working Group on National Accounts, which is composed of the Statistical Office of the United Nations Secretariat and the statistical offices of the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the European Communities (EUROSTAT), the World Bank and the United Nations regional commissions. It was pleased to note the participation of the regional commissions in the Working Group, the increasing involvement of developing countries in the review process and the participation of some developed countries in meetings of the regional commissions in the developing regions.
- 2. The Commission reaffirmed the original objectives of the SNA review programme: simplification and clarification, further harmonization with other related systems of statistics and updating the system to fit new circumstances. The Commission commended the preliminary draft of the selected chapters of the revised SNA as prepared by a consultant. It was considered to be a good attempt at clarifying some of the SNA concepts. It agreed that the revised SNA should contain an accounting framework and a glossary and that for the further elaboration of the accounting framework, the Statistical Office of the United Nations Secretariat would be assisted by another consultant.
- 3. The Commission noted that the work on the SNA/System of Balances of the National Economy (MPS) links had entered a new phase and agreed that the main objective in that area was the substantial progress in the convergence of SNA and MPS, with the ultimate goal of integrating the two systems. The Commission also considered it essential that handbooks be prepared with the active involvement of developing countries, to come out at the same time as the revised SNA. It highlighted the importance of satellite accounts, in particular, those related to the environment. The Commission endorsed a revised timetable for the revised SNA, noted as critical the need to mobilize funds required for a timely completion of the programme, and once again assigned highest priority to that work programme.
 - I. SNA REVIEW PROGRAMME
 - A. Work programme 1989-1990
 - 1. Management of programme
 - (a) Role of the Inter-Secretariat Working Group on National Accounts
- 4. The planning and co-ordination of the SNA review work programme in 1989 and 1990 has continued to be directed by the Inter-Secretariat Working Group on National Accounts as mandated by the Statistical Commission. Representatives of the member organizations of the Working Group have met on an average of four to

five times a year. Within its mandate, the Working Group has agreed on various actions with regard to the preliminary draft chapters of the revised SNA and the handbooks, the elaboration of special studies, regional and expert group meetings on the SNA, the timetable, the use of consultancy funds and other organizational matters.

- 5. At a meeting in New York on 20 September 1989, there was widespread concern among the members of the Working Group that there was insufficient time before the twenty-sixth session of the Statistical Commission to resolve a number of outstanding methodological issues (most of which were unforeseen and arose late in the revision), to complete the full draft of the revised SNA (which took more time than expected), to review the draft and to ensure that the final draft took into account all the comments received. The Working Group noted that these concerns were also reflected in the views of many of the core group of experts and in the report of the thirteenth session of the Working Group on International Statistical Programmmes and Co-ordination of the Statistical Commission. Accordingly, the Inter-Secretariat Working Group on National Accounts unanimously recommended that the draft of the revised SNA be submitted to the twenty-sixth session of the Statistical Commission in 1991 as an interim draft for information and comments but not for adoption. It is planned that the twenty-seventh session of the Commission in 1993 will consider the draft for adoption.
- A special meeting of the Inter-Secretariat Working Group on National Accounts was held in Vienna on 17 June 1990 to give further momentum to the ongoing process of the revision of the SNA, which had arrived at a critical stage. All organizations represented stressed the importance of the SNA revision process and their commitment to seeing it through to a successful completion. Among other important aspects of the process, the meeting discussed an offer by the United States to make available the services of Carol Carson, from the Bureau of Economic Analysis, as a contribution in kind to the SNA review process. Representatives of all organizations welcomed the offered contribution, noting that as a member of the core group of experts, Ms. Carson could be particularly instrumental in (a) giving substantive support to the Working Group, (b) co-ordinating work on outstanding issues and (c) assisting in the integration of the text of the chapters and annexes of the revised SNA. Subsequent discussion elaborated her functions to include the improvement of communication between Working Group member organizations as to the work; the setting and monitoring deadlines for papers, comments and discussion; and the scheduling and identification of funds needed for the completion of the revision process.

(b) Funding for the SNA review

7. The Statistical Office of the United Nations Secretariat has continued to follow the recommendations of the Statistical Commission to treat the SNA review as one of the highest priority activities in its work programme. As a result, major portions of the regular budget consultancy, expert group and travel funds available to the Office have been allocated to this work. In addition, since the Statistical Commission at its twenty-fifth session noted as critical the need to mobilize funds for a timely completion of the SNA review, the Office intensified its efforts in raising extrabudgetary funds with very good results.

- As mentioned in the progress report presented to the twenty-fifth session of the Statistical Commission (E/CN.3/1989/4), in 1988 the Statistical Office of the United Nations Secretariat and EUROSTAT provided the funds through the International Association for Research in Income and Wealth (IARIW) to engage a consultant to draft the revised SNA. In 1989 the Statistical Office, having exhausted its full 1988-1989 regular budget consultancy fund in this consultancy, obtained additional funds from the Office of Programme Planning, Budget and Finance, Department of Administration and Management, to engage another consultant to further elaborate the SNA accounting framework and to hold a third expert group meeting on SNA Co-ordination. It should be noted that, although only one meeting of the Expert Group on SNA Co-ordination had been planned for 1989, actually three meetings were held: one in Luxembourg in January 1989 financed by EUROSTAT, and two in New York in the summer of 1989 financed by the Statistical Office of the United Nations Secretariat. Also, with the help of funds donated by two private foundations, the Statistical Office engaged a consultant to prepare the first draft of the handbook on environmental accounting.
- 9. With the generous co-operation and support of a number of organizations and countries, many of the most important shortcomings encountered due to the lack of resources have been considerably mitigated. Several countries have helped to finance some of the most critical SNA review activities by either donating funds through IARIW, directly sponsoring meetings of the regional commissions of the developing regions or financing the time and travel of some of the participants of the expert group on SNA Co-ordination.
- 10. In addition to the above-mentioned financial contributions, the contributions of experience and time by the experts and staff of the member organizations of the Inter-Secretariat Working Group on National Accounts should be noted. Many weeks were spent each year in preparing for and participating in expert group and regional meetings.

2. Conceptual development of the SNA

- 11. In May 1990, as agreed by the Inter-Secretariat Working Group on National Accounts, the Statistical Office of the United Nations Secretariat distributed a preliminary version of the draft revised SNA (available only in English) for comments to all national statistical offices and 180 national accounts experts throughout the world. A document prepared by the Working Group, entitled "SNA review issues", was also distributed. This document provides a more complete picture of the main features and changes of the revised system and highlights specific issues that were discussed in the expert group meetings, distinguishing those on which specific conclusions were reached from those that are still unresolved. The document was prepared as a basis for the discussion in the regional meetings and, for that purpose, was unofficially translated into French, Spanish and Arabic.
- 12. At its present session, the Commission has before it a somewhat expanded and further revised draft of the SNA. $\underline{1}$ / This material should be considered as work in progress, since it has not all been reviewed by the Expert Group on SNA

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Co-ordination, and where reviewed, some of the material does not incorporate all the recommended changes.

13. During the review process, papers have been prepared by members of the expert groups and staff of the member organizations of the Working Group to quide the discussion of conceptual issues. These papers include, among other topics: accounting structure reconsidered; reconciliation of SNA and OECD-IMF tax classification; from SNA to environmental accounting; recommendations concerning the distinction between market and non-market in SNA; treatment of research and development expenditures in SNA; mineral exploration; intellectual property and related rights in economic accounts; imputation for financial intermediation service charges; the treatment of insurance; the concept of income and the distinction between current and capital items; classification of financial assets and liabilitites; new financial instruments and the balance of payments; the flow-of-funds accounts, the SNA and the developing countries; treatment of statistical units in the latest drafts of SNA and the introduction to ISIC; introducing the concept of total consumption into the SNA; relationships between cash and accrual; changes in stocks and holding gains; cross-referencing the new SNA; social accounting matrices, income distribution and the SNA review; the residency of technical assistance personnel; three topics concerning the household sector: criteria to distinguish between employees and non-employees outworkers, classification of households units and criteria to distinguish between formal and informal. It should be noted that many of the resulting discussions are already embodied in the draft of the revised SNA. Some issues are still outstanding, as indicated in section II.A below, and many have been commented on at meetings of the regional commissions, as indicated in section II.B below.

3. Meetings

(a) Expert group meetings

14. Since the twenty-fifth session of the Statistical Commission in February 1989, three expert group meetings have taken place on the revision of the SNA. Two were meetings of the Expert Group on SNA Co-ordination, and one was a meeting of the Expert Group on Reconciliation of SNA and MPS Standards on National Accounting. The main functions of the Expert Group on SNA Co-ordination are to review the draft chapters and to discuss and make recommendations with respect to outstanding issues and any divergent views expressed by different expert group meetings. This expert group consists of a core of five national accounts experts from Chile, France, Federal Republic of Germany, India and the United States, who have participated in their personal capacity in all subject-field expert group meetings in order to insure consistency and continuity in decisions in different fields. In addition, the expert group includes eight other experts, from Argentina, India, Netherlands, Madagascar, the United Kingdom, the United States, the Soviet Union and Zimbabwe, who have also participated in their personal capacity in some of the subject-matter expert group meetings. The expert group also includes representatives from the member organizations of the Inter-Secretariat Working Group on National Accounts. The following meetings were held:

- (a) The Second Expert Group Meeting on SNA Co-ordination, sponsored by the Statistical Office of the United Nations Secretariat, was held in New York, from 12 to 21 July 1989. 2/ An expert from Canada was invited to participate at a half-day session devoted to the relation between SNA and the International Standard Industrial Classification of All Economic Activities (ISIC) statistical units. This meeting reviewed the outline of the revised SNA and five of the preliminary draft chapters. In reviewing chapter II, "An Overview of the System", the Group felt there was a need to link the accounts and tables with the overall system and to develop a matrix presentation in addition to the T-accounts. There was general agreement that the draft chapters available so far substantially fulfil the goal of clarification but that the text should be augmented by concise definitions. It was agreed that the consultants would revise and reformulate those sections where clear recommendations were made by the participants in the meeting;
- (b) The Third Expert Group Meeting on SNA Co-ordination, sponsored by the Statistical Office of the United Nations Secretariat, was held in New York, from 13 to 22 September 1989, 3/ as a continuation of the July meeting. This meeting focused on issues reflected in eight of the remaining chapters. The September meeting provided instructions regarding the revisions of the SNA chapters that it discussed, similar to those that were made during the July meeting;
- (c) The Expert Group Meeting on Reconciliation of SNA and MPS Standards on National Accounting, sponsored by the Statistical Office of the United Nations Secretariat in co-operation with the State Committee on Statistics of the Soviet Union, the Statistical Division of the Council of Mutual Economic Assistance, the Soviet Ministry of External Economic Relations and the Economic Commission for Europe, was held in Moscow from 4 to 9 December 1989. 4/ In addition to several of the experts members of the SNA Co-ordinating Group, experts from the following countries participated: Bulgaria, China, Cuba, Czechoslovakia, Ecuador, Finland, Hungary, India and the Soviet Union. The objective of the meeting was to examine the possibilities for improving harmonization between the SNA and MPS and how the SNA and MPS could be further integrated, that is, brought closer together theoretically and practically. The views and conclusions of this meeting are presented to the Commission in a separate report. 4/

(b) Regional meetings

- 15. Several regional meetings have also taken place since the last session of the Statistical Commission:
- (a) The five regional commissions of the United Nations held regional meetings to review and discuss the general orientation of the preliminary draft of the revised SNA; its main features, changes as compared with the 1968 SNA and outstanding issues; topics of special concern to the region; and aspects related to the implementation of the SNA. These meetings were organized as recommended by the Statistical Commission at its twenty-fifth session, and the views and conclusions of each region are presented to the twenty-sixth session of the Commission in separate reports. The following regional meetings were held:

- (i) Economic Commission for Africa (ECA), Addis Ababa from 16 to 25 July 1990; $\underline{5}$ /
- (ii) Economic Commission for Europe (ECE), Geneva from 10 to 13 September 1990. 6/ ECE had also organized a meeting from 16 to 19 May 1989, where experts in the SNA and from economies in transition developed a joint work programmme in preparation for the Expert Group Meeting on the Reconciliation of SNA and MPS Standards on National Accounting;
- (iii) Economic Commission for Latin America and the Caribbean (ECLAC), Rio de Janeiro from 18 to 28 September 1990; 7/
- (iv) Economic and Social Commission for Asia and the Pacific (ESCAP), for countries of the Asian subregion, in Bangkok from 15 to 24 August 1990, and for countries of the Pacific subregion, in Suva from 29 August to 7 September 1990; 8/
 - (v) Economic and Social Commission for Western Asia, (ESCWA), Tunis from 11 to 15 June 1990. 9/ The ESCWA meeting on SNA, which was scheduled to take place in Kuwait from 9 to 16 October 1990, was cancelled due to the Gulf crisis. Therefore, it was decided that the report of the Arab National Accounts Expert Group Meeting, that was convened in Tunis in June 1990 to discuss the revised SNA in preparation for the October meeting, would be presented to the Statistical Commission as representing the views of the region;
- (b) OECD organized two meetings of national accounts experts in Paris. One meeting, in June 1989, reviewed the progress of the SNA revision. Another meeting from 3 to 6 July 1990, discussed several issues related to the preliminary draft chapters of the revised SNA;
- (c) EUROSTAT organized two meetings of the Working Party on National Accounts in Luxembourg. One meeting from 3 to 5 April 1989, was in preparation for the Expert Group Meetings on SNA Co-ordination. Another meeting from 16 to 17 November 1989, discussed the conclusions of the two expert group meetings on SNA Co-ordination and several other issues related to the revision of SNA and the European System of Integrated Economic Accounts (ESA);
- (d) The Council for Mutual Economic Assistance (CMEA) organized three meetings to discuss the methodological problems of calculating gross domestic product (GDP) and related estimates in countries in transition: in Prague from 13 to 18 March 1989; in Budapest from 19 to 20 October 1989; and in Moscow from 11 to 14 December 1989.

B. Future work programme 1991-1993 10/

1. Meetings

(a) Expert Group on SNA Co-ordination

- 16. The following meetings of the Expert Group on SNA Co-ordination are scheduled for the remainder of the SNA review programme:
- (a) The Fourth Expert Group Meeting on SNA Co-ordination, to be held in Washington, D.C. from 3 to 7 December 1990, will be sponsored by the Statistical Office of the United Nations Secretariat and hosted by the World Bank. Its main objective will be to discuss and resolve outstanding issues;
- (b) The Fifth Expert Group Meeting on SNA Co-ordination, to be held in April 1991, will review the comments received from the 1990 round of regional commission meetings and the twenty-sixth session of the Statistical Commission. It will also review those chapters and annexes not previously discussed by the expert group and any remaining outstanding issues;
- (c) The Sixth Expert Group Meeting on SNA Co-ordination, to be held in early 1992, will review and discuss the October 1991 revised draft of the SNA, which will be the first draft to include all chapters and annexes and incorporate all the comments received from the regional commissions, the Statistical Commission and the Expert Group on SNA Co-ordination. At this meeting, the comments of the interregional meeting planned for the beginning of 1992 will also be reviewed (see section I.B.1 (b) below).

(b) Interregional and regional meetings

- 17. Based on experience drawn from the regional commissions meetings in 1990, the Inter-Secretariat Working Group on National Accounts has considered the possibility that an interregional meeting should be held at the beginning of 1992 to review and discuss the revised and complete draft SNA. In addition to representatives from countries in all regions, the experts participating in the meetings on SNA co-ordination would be invited to attend the meeting.
- 18. This interregional meeting could be supplemented by individual meetings of the regional commissions, depending on the availability of resources. These meetings might focus on implementation of the revised SNA. For example, ECE has already included in its programme of work for 1991-1992 a session of the Conference of European Statisticians on the implementation of the revised SNA and on special problems related to the region.

2. Revisions of SNA drafts and consultancies

19. Substantial work on the draft chapters and annexes of the revised SNA currently before the Statistical Commission will be necessary in order to incorporate the Commission's comments and recommendations as well as those from the

1989 expert group meetings on SNA co-ordination and from the meetings of the regional commissions. These revisions will require extensions of the earlier consultancy contracts. Also, other consultancies will be needed to solve the critical outstanding issues (see section II.A below) and to prepare an index, glossary and/or parallel text and other elements of the final publication.

20. The revisions will involve changes in and elaborations of the concepts and definitions now in the SNA draft. They will also include changes that are needed to integrate the accounts and tables with the text and to arrive at compatibility between the texts of chapters and annexes. Furthermore, it has been agreed that additional chapters and annexes need to be incorporated. The following additional chapters and/or annexes are either planned or already under preparation: accounting rules and transactions, population and employment, SNA matrix, and relations between SNA and balance of payments statistics and money and banking statistics.

3. Handbooks and compilation guides

- 21. In view of the importance of handbooks and related guides for the implementation of the revised SNA, the Working Group has reiterated that they should be published simultaneously with the revised SNA in 1993 and that they must be compatible with the system. There are seven handbooks presently at various stages of development, ranging from some for which outlines have been prepared to a few for which several chapters already are in draft:
 - (a) National accounts compilation and reconciliation;
 - (b) Household sector accounts;
 - (c) Enterprise accounts;
 - (d) Input-output tables;
 - (e) Accounting under inflationary circumstances;
 - (f) Application of the SNA in countries in transition;
 - (g) Environmental accounting.
- 22. In addition, there are a number of handbooks, including those on regional accounts, quarterly accounts and uses of accounts in planning and analysis, that are still just proposals even though some of them are of particular interest for certain regions. There is also a handbook on International Comparison Programme (ICP) methodology in preparation, which is linked closely to SNA and is further discussed in document E/CN.3/1991/17.
- 23. The Working Group agreed that the handbook on SNA application in countries in transition (previously referred to as SNA/MPS links) will receive high priority. Although it must be updated because of the rapidity of developments, an outline has

been prepared by two consultants. In addition, the Statistical Office of the United Nations Secretariat has hired a consultant to review the revised SNA draft to see where further explanation or adaptation would facilitate application of the SNA to transition economies.

- 24. The first draft of the handbook on environmental accounting has been completed by a consultant to the Statistical Office of the United Nations Secretariat, and shortly it will be circulated for comments. The proposed integrated economic and environmental accounting framework is partly a modification and partly an extension of the SNA. To gain experience concerning the implementation of the framework, one pilot project is presently being carried out by the Statistical Office in collaboration with the World Bank and the Statistical Office of Mexico. The results of this and possibly further country studies will form an important part of the handbook.
- 25. The Statistical Office of the United Nations Secretariat has completed the first draft of the handbook on input-output tables. Shortly, it will be circulated for comments. The Statistical Office has also prepared an outline for the handbook on national accounts compilation and reconciliation. The outline was circulated to the Working Group for comments, and the Statistical Office is presently working on the further elaboration of the outline into separate chapters.
- 26. The Statistical Office is exploring the possibilities of preparing a handbook on the household sector in co-operation with the United Nations Population Fund (UNFPA), which is interested in using household sector accounts to link economic statistics and population data. The intention is to include satellite accounts that would cover the wider household activities in the production boundary, the links between SNA and Social Accounting Matrices (SAMs) and questions regarding the informal sector. The World Bank has offered to support work on this handbook by making available materials that the Bank has developed in the course of its activities related to the Living Standards Measurements Study programme.
- 27. The handbook on enterprise accounts is becoming increasingly important in view of the institutional sector accounts emphasized by the revised SNA and also as an important tool for the application of the revised SNA in transition countries. For the preparation of the Handbook on accounting under inflationary circumstances which includes both constant prices accounting and inflation accounting, the Statistical Office of the United Nations is seeking assistance from developing countries experiencing this phenomena in its national accounting.
- 28. IMF is in the process or is planning to revise the manuals on balance of payments (BPM), money and banking statistics (MBS) and government finance statistics (GFS). These revised manuals will be supplemented by compilation guides that are very close in content to the handbook series on national accounting. Therefore, it will not be necessary for the Statistical Office of the United Nations Secretariat to develop handbooks in these areas.

4. Further funding for the SNA review

- 29. In view of the programme laid out above, the Inter-Secretariat Working Group on National Accounts has concluded that the remaining work on the SNA review programme will require more extensive substantive co-ordination and management support. In order for the revised SNA to be presented to the Statistical Commission in 1993 for adoption, and if work on a selection of handbooks is to proceed in parallel, it will be necessary to mobilize resources quickly from the member organizations of the Working Group and from other organizations, countries or foundations.
- 30. As indicated in subsection I.A.1 (b) above, the Statistical Office continues to attach the highest priority to this work programme and will seek the budgetary and extrabudgetary funds required for a timely and successful completion of the SNA review programme. EUROSTAT has offered to further support the SNA review process by funding one expert group meeting if needed and otherwise by providing additional funds for SNA consultancies. The other member organizations of the Working Group, which have also made substantial contributions to the SNA review process in the past, have already given indications of possible future funding commitments. For those organizations that will not be in a position to provide additional funds, they are being asked to rearrange their funding to place it where it is most critical in terms of scheduling and among various components of the overall project.
- 31. As already mentioned in subsection I.A (a) above, the United States Bureau of Economic Analysis has made available the services of Ms. Carson as a contribution in kind to the SNA review process. Her services have been committed for one year beginning June 1990.
- 32. The Statistical Office, on behalf of the Working Group, plans to send to selected countries a letter requesting funding for those parts of the programme for which there is presently no funding. These are mainly for consultancies in order to revise the text, review terminology, prepare an index, a glossary and/or parallel text and finance the development of a selection of handbooks. Further information on funds needed and requested will be provided in the report of the Secretary-General on updated information on the work of the Statistical Office of the United Nations Secretariat (E/CN.3/1991/30).

II. REPORT ON SNA SUBSTANTIVE ISSUES

A. Outstanding issues

33. Four issues that have system-wide implications require further detailed study before the SNA can be finalized. These are the treatment, coverage and valuation of assets; the links between SNA and environmental accounting; the adaptation of SNA to transition economies; and the proposed distinction in the SNA between market and non-market producers and products. There are some other outstanding issues, such as the treatment of multiple and, in particular, black and parallel market exchange rates.

(a) Assets

- 34. Some agreements have been reached with regard to assets. Balance sheets and reconciliation accounts, which were developed and incorporated in a separate publication, 11/ have been fully integrated with the sector accounts of the system. It is proposed that the 1968 asset boundary be extended in one direction and clarified in another. The extension (which is tentative, pending discussion of the related outstanding issues) concerns intangible assets. The intangible assets, which would be the result of production of services instead of goods, would include software, mineral exploration cost, research and development expenditures and literary-artistic work. There is also a need to clarify the treatment of a broad range of new financial instruments.
- 35. However, several outstanding aspects require further examination. First of all, there is the need to study in detail the ramifications of the incorporation of intangible assets on such 1968 SNA concepts as output, intermediate consumption, depreciation and other value-added components, capital formation, property income and acquisition of intangible assets. Also, the coverage of natural assets in the revised SNA needs to be determined precisely. Furthermore, the valuation of intangible and natural assets, which are generally not valued in the market as such and therefore require indirect methods, must be dealt with. Finally, the operational coverage of financial assets must be further refined.

(b) Environmental accounting

- 36. Past expert groups generally agreed that environmental accounts should be developed in parallel with the SNA. However, it has been agreed that product and income aggregates adjusted to take account of environmental degradation will not be introduced in the main accounts but developed as a very important example of satellite accounts. This treatment is felt to be the most appropriate in order to allow more freedom for progressive development and experimentation with these statistics without disturbing the main aggregates of the national accounts.
- 37. There are still several outstanding questions. No agreement has yet been reached on the exact links between those satellite accounts and the central framework of the SNA. Should some features that are relevant to environmental

accounting be incorporated in the central framework of the SNA? For example, the central framework may identify separately environmental protection services, and expenditures by government and enterprises for the purpose of environmental protection. Also, the SNA asset boundary may be defined the same as a separately identified part of the asset coverage of environmental accounts (economic assets) in order to facilitate linkage. Furthermore, there is the question as to whether some of the cost identified in environmental accounting – for example, depletion allowance – should be incorporated as an intermediate cost in the SNA.

(c) Use of SNA in transition economies

- 38. In principle, SNA concepts should apply to countries with different social systems, including transition countries. However, it has been observed that the organizational structures of those countries suggest some changes in emphasis in the SNA. For instance, the question of implicit subsidies is much more important in countries in transition than in countries with market economies.
- 39. The SNA text may identify some of the specific features of those countries and provide special guidance on how to apply SNA concepts, for example, the treatment of banks and the valuation of housing services, including those of owner-occupied dwellings, and the valuation of other highly subsidized goods and services. Further study is needed to clarify the extent of this problem of adaptation and the specific issues that are involved.

(d) Market versus non-market

- 40. The expert groups have agreed to introduce two changes in terminology:
 (a) the distinction between "industries" and "other producers" of the 1968 SNA has been replaced by the distinction between "market producers" and "non-market producers"; and (b) the distinction between "commodities" and "other goods and services" has been replaced by "market products" and "non-market products". In doing so, the expert groups have agreed that the distinction between "market" and "non-market" was fundamental to the SNA. The distinction affects valuation and institutional sectoring. This distinction between market and non-market producers is made in addition to an ISIC classification of production accounts by activities. As regards valuation, non-market products are valued at cost as opposed to market prices that are used for market products.
- 41. The criteria to distinguish between the two groups of products and producers are still being discussed. It has been suggested that non-market producers are those who cover less than 50 per cent of their cost by the revenue from sales of their products. However, it has not yet been decided whether such a distinction could also be made within legally defined corporations or whether corporations should always be considered as market producers. Furthermore, no agreement has yet been reached on how to treat the difference between the revenue and the cost as a subsidy or as a part of government consumption. In the former case it would not affect GDP, while it would increase GDP in the latter case.

B. Review of the revised SNA by the regional commissions

- 42. The main features of the revised SNA were discussed during a round of regional meetings held between July and September 1990. They were discussed on the basis of a document prepared by the Inter-Secretariat Working Group on National Accounts. The main features are presented below, and a brief summary of the comments received from the regional meetings on each of the features is included. As mentioned in paragraph 15 above, the views and conclusions of these regional meetings are presented to the Commission in separate reports. Also, as indicated in paragraph 16 (b) above, the April 1991 Expert Group Meeting on SNA Co-ordination will review the regional comments in detail.
- 43. During the regional meetings it was emphasized that the system is in principle not different from the 1968 SNA. It has the same comprehensive overall content as its predecessor, covering both production analysis through its production accounts by activity groupings of establishments and input-output tables and income, flow of funds and balance sheet analysis through its institutional sector accounts.
- 44. The features that appear to be developing from the SNA review process are consistent with the mandate of the Statistical Commission, as indicated in paragraph 2. The resulting system is much clearer and more internally coherent than its 1968 predecessor, it is to a very large extent harmonized with related systems of statistics, and it introduces a number of features that reflect new analytical and policy concerns. While clarification results generally in simplification in one sense, it does not necessarily result in a less comprehensive system. The objective of simplification in terms of short-cut methods, reduced system and so on will be achieved mainly through handbooks that will be prepared in conjunction with the revised SNA.
- 45. Participants at only one of the regional meetings (ECE) commented on the general orientation of the SNA. It was suggested that chapters might be restructured in order to make the relationship to the sequence of accounts more transparent. It also was recommended that the rationalization of concepts to be included in the revised SNA be accompanied by a parallel text similar to ESA and by a bibliography of background and supporting references.

1. Integrated presentation of the system

- 46. The 1968 SNA is presented in two distinct ways in the form of accounts and in a matrix format. The two alternative presentations are not clearly linked. In order to explain the system, it is proposed that the revised SNA include an integrated account presentation similar to the general table of transactions of ESA together with a matrix presentation. The two presentations would be clearly linked.
- 47. Most participants in the regional meetings agreed with this new orientation of the system, which in their view provided a very good overview of the system. Detailed discussion of the matrix presentation is still pending, as the matrix version has not been fully elaborated.

2. <u>Integration of analyses of production versus income and</u> financial analysis

- 48. An effort was made to further integrate the analysis of production based on establishment data, and the analysis of income and financial flows and balance sheets based on the classification of institutional units. Therefore, it is proposed that the revised SNA include production accounts by activity groupings and institutional sectors and also a cross-classification of value added and its components by economic activities and institutional sectors. In particular, it is planned that the revised SNA will provide separate production accounts for corporate units included in the corporate sectors and for small-scale production units included in the household sector.
- There was no major disagreement concerning the integration of different types of analysis. However, countries that did comment expressed views that were related to the basic data organization and compilation procedures. The implementation of the proposals would require that their establishment surveys be reoriented in order to identify the institutional sector dimension of production and their compilation procedures be extended to include institutional sector data (in which most countries had no experience). Also, it was mentioned that in order to facilitate the links between the two types of statistics, international guidelines on industrial statistics should be adapted to the revised orientation of the SNA, as industrial statistics are an important input into the compilation of SNA regarding economic activities. Furthermore, developing country experts stressed the need for SNA to provide a distinction between formal and informal production activities. In their view, the formal-informal distinction is needed to supplement the distinction between establishments of corporate and household units of production, as the latter would not be able to reflect unequivocably all the nuances in the organization of production in their countries.

3. Production boundary

- 50. While there are no major changes proposed, the revised SNA will be more precise in its definition of the production boundary. It will include the production of all goods, including natural growth products, whether produced for the market or not. The production of services is included only if factors of production are remunerated.
- 51. Participants at the regional meetings generally had no difficulties with the intent of the clarification. However, in several of the discussions, it was pointed out that the production boundary thus defined is too heavily dependent upon the definition of services as distinct from goods, yet the concept of services is not clearly defined. Examples of applications of the revised definition of the SNA production boundary that were seen as creating difficulties concerned water-carrying and the preservation of agricultural products and fish for own account household consumption. Overall, experts from developing countries thought that the production boundary should be reviewed carefully, because the International Labour Organisation (ILO) definition of employment is linked to the SNA production boundary. The production boundary also should be more clearly defined with regard to informal activities, including those of an illegal nature.

52. The proposal to include natural growth products at the moment of growth was welcomed in countries with high inflation (Latin America). Other countries pointed to difficulties, such as how to record losses during growth before harvest. Some of those losses would have to be dealt with as adjustments to growth, while others should be treated as exceptional losses and recorded as a capital loss. The distinction between the two differs by region. Developing countries faced with the consequences of droughts would tend to include more adjustments in production than countries where fluctuations in growth and harvest are dampened by more advanced methods of agricultural production.

4. Valuation

- 53. Much attention has been paid to improving the valuation principles that govern SNA. The following recommendations have been made:
- (a) The recommended exclusion of product taxes (including value added-type taxes) from the value of output and therefore value added of producers is to improve the economic meaning of the latter;
- (b) The recommended distinction between market and non-market producers and products is to clarify the valuation of non-market products as distinct from market products. The non-market products would be valued at cost instead of using as a basis for valuation the prices obtained in the market;
- (c) With regard to the valuation of government output, it was recommended that this include an imputed value of rent on government-owned buildings and depreciation of government-owned infrastructural assets, such as roads, dams and bridges;
- (d) With regard to external transactions, it was recommended that the total of imports be valued at a f.o.b. value similar to what is now used in the balance of payments and the detail of imports by products continue to be valued at c.i.f. values;
- (e) The resolution of the outstanding issue of how to treat black and parallel market and multiple exchange rates would contribute to more precise guidelines on the valuation of external transactions in terms of local currency.
- 54. In the regional meetings, participants raised several concerns. They wanted an unequivocal decision regarding product flows basic values or producers' values and reconsideration in particular of the latter valuation in view of the coverage of VAT-type taxes. Most participants agreed with the market versus non-market distinction, but were waiting for further recommendations with regard to the treatment of the difference between prices paid and cost incurred (subsidy or government consumption). Extensions of the cost of government output generally were not favoured, either because of data considerations or because countries felt that the extensions would unnecessarily increase the government contribution to GDP. Participants had no major disagreement with the f.o.b. valuation of imports and urged final recommendations regarding the valuation of external transactions in view of the increasing importance of parallel markets in foreign exchange and the revenues obtained from such transactions.

5. Residence and breakdown of domestic sectors

- 55. Expert groups confirmed that the overall criterion for residence would be the centre of interest, and the main operational criterion would be the one-year rule. In addition to these general rules, specific guidelines were established for technical assistance personnel, students, offshore banks, direct investment enterprises and international organizations. As regards the breaking down of domestic sectors into subsectors, the expert groups recommended the inclusion of non-profit institutions serving households as a subsector of the household sector and the introduction of households subsectors for socio-economic groups based on the type of income earned.
- 56. There were many examples presented of units that required further refinement of the residence criteria. These concerned mainly construction, transport, commercial and electricity-generating activities incorporated in an international non-financial enterprise that was managed jointly by different countries. Representatives of countries in which offshore banks were located thought that the inclusion of those units within their national accounts would unrealistically increase their countries' GDP and that implementation would be difficult because it would not be easy to get the required data from such units.
- 57. There was general acceptance of the inclusion of non-profit institutions as a subsector of the household sector. There were many reactions to the proposed socio-economic breakdown of the household sector; reconsideration of alternative breakdowns based on criteria other than type of income earned was urged.

6. Income concepts

- 58. The revised SNA places greater emphasis on income concepts than does its predecessor. They are brought out as balancing items by subdividing the sequence of accounts at several places. Gross national product, which will be called gross national income, is also integrated in the accounting framework. With regard to income of production factors, two concepts have been introduced as balancing items: entrepreneurial income and mixed income. Entrepreneurial income is a concept which is particularly useful for the analysis of corporate sector accounts, as it is defined to be close to income before taxes. The mixed income concept replaces the operating surplus concept for small-scale production units operated by household sector units; it includes not only components for remuneration of capital and entrepreneurship, as they are included in the operating surplus of the corporate sector, but also components for the remuneration of labour in family production units.
- 59. Entrepreneurial income was generally considered as a useful income concept; however, doubts were expressed regarding the applicability of this concept to production units in the household sector. Presenting mixed income separately from operating surplus was welcomed by some experts from developing countries, as that would more adequately describe income generated by production factors in their countries. Other experts thought that the two separate terms would not be needed, since the unincorporated production units of the household sector would always

include the contribution of the owner, which typically covers labour and capital contributions.

7. Further integration of balance sheets and accumulation accounts

- 60. As a consequence of the integration of balance sheets and accumulation accounts with the other sector accounts of the system, the revised SNA will include a new concept called changes in net worth. This concept will be the flow counterpart of net worth that was included in the balance sheets of the 1968 SNA. The changes in net worth will cover all changes changes as a result of income generation, distribution and use (savings and capital transfers), and changes in net worth due to external influences, such as finding or depleting mineral deposits and destruction by natural and man-made disasters, and also due to inflation.
- 61. In line with the incorporation of this concept, it has also been agreed that the revised SNA should emphasize more strongly the net concepts of product (net domestic product), and income (national income and national disposable income), that is, product and income net of depreciation. The gross concept will be maintained, however, because of data problems in the derivation of depreciation estimates.
- 62. The incorporation of the accumulation accounts into the system was generally welcomed as an element which would clarify the relation between flow and stock accounting.
- 63. There was no objection to the emphasis on net concepts. However, in some meetings, it was emphasized that international organizations using GDP and GNP should change to the net equivalents.

8. Asset boundary

- 64. There appeared to be a general acceptance of the inclusion of software as an asset, even though some think of it not as an intangible but rather a tangible asset. There was also considerable support for including mineral exploration costs, because they are already included in enterprise bookkeeping practices in some cases; some, however, think that only successful expenditures should be capitalized, while others think that care should be applied to the allocation of such intangible assets between the countries where the exploration takes place and the countries where the company is resident. There is much less support for the inclusion among intangible assets of research and development and literary-artistic works, because enterprise accounting has not generally recognized these as assets.
- 65. There is general support for including environmental accounts as a satellite system in SNA and agreement that the asset boundaries of the main and satellite systems should be compatible. However, further discussion is needed on such questions as: Would the asset boundary include fish stock in the ocean, or include national parks? What would be the exact delineation between forests that are exploited in a controlled manner and "wild" forests where less controlled exploitation takes place?

66. There has been little discussion of the coverage of financial assets, presumably because few countries have experience in this area and because it has not been discussed conclusively in the expert groups. One issue that was raised concerns the valuation and treatment of swaps and similar arrangements used in the liquidation of external debt.

9. Financial transactions, transactors and accounts

- 67. A special effort has been made to integrate more adequately the complexity of financial instruments, markets and institutions operating in those markets. In this context, expert groups have recommended that the output of financial intermediation activities be distributed to its uses. Furthermore, the complexity has been recognized by an explicit definition of financial instruments and a classification in which all such instruments do find a place. Finally, it has been recommended that the financial corporations sector be expanded to include financial auxiliaries (such as commodity and securities brokers, flotation companies and guaranteeing agencies) and that SNA would also recognize unincorporated financial "enterprises" such as money lenders, which operate in rural areas of many developing countries.
- 68. There has been a mixed reaction to the allocation of financial intermediation services to uses, mainly because the criteria for allocation have not yet been fully developed. The incorporation of financial auxiliaries in the financial corporations sector was generally accepted, provided financial units which work exclusively for their parent companies would be classified in the same sector as the parent company. The definition of output of financial intermediaries with regard to money lenders was questioned, because the latter are not really intermediaries but mainly operate with their own funds. There is generally no major disagreement with the proposed classification of financial instruments.

10. Price and quantity measures, inflation accounting

- 69. The draft revised SNA pays more attention to the separate price and quantity measures of national accounts aggregates and has incorporated the recommendations developed in a separate manual. 12/ In the constant price measurement of product flows, SNA will deal in particular with chain indices in comparisons over time and will also discuss the derivation of price and quantity measures for comparisons between countries. In the derivation of income measures that are corrected for inflation, the revised SNA explicitly includes recommendations for the incorporation of the terms of trade effects and will also make explicit real holding gains that might be used as supplements to income.
- 70. The participants in the regional meetings generally agreed with the renewed emphasis on price and quantity measures and inflation accounting, which are particularly helpful in countries where national accounting is carried out under high inflation circumstances. Some participants favoured chain indices because they were up to date, while others thought that the compilation of such indices would result in an unacceptable burden on data collection and compilation

activities of statistical offices. No discussion was devoted to the incorporation of ICP methodology into SNA. There were also different opinions about the type of deflator to be used in the derivation of the terms of trade effect. And finally, in countries with high inflation, it was thought more appropriate to correct interest payments (and, therefore, income measures) for the compensation for real holding losses on monetary assets that is included in interest flows. The general feeling was that the revised SNA should be more flexible and present alternatives that countries may apply under different circumstances. There was general support for the much more precise elaboration of changes in stocks and work-in-progress, which would recognize volume and price components; it was found particularly useful for countries experiencing high rates of inflation. It was pointed out, however, that separate information on price and value changes in stocks cannot be easily obtained from available statistical sources.

11. Final consumption and final consumption expenditure

- 71. It has been proposed to supplement the 1968 SNA concept of final consumption expenditure of households and governments, which is based on payments, by an alternative concept called actual final consumption. This concept differentiates between consumption by government and non-profit institutions on the basis of the distinction between collective and individualizable consumption.
- 72. There was general support for the incorporation into SNA of the concept of actual final consumption. It was thought to be a useful concept for analysis. In one of the regional meetings (ECLAC), it was suggested that actual final consumption of households should also reflect final consumption expenditure in the enterprise sector.

III. IMPLEMENTATION OF THE REVISED SNA

A. General observations

- 73. There was much discussion at the meetings of regional commissions on the implementation of the revised SNA. Most of the countries agreed that the integrated framework of the system represents remarkable conceptual and analytical progress. However, serious concerns were about the actual possibilities of implementing the system in the short and medium term. Among the obstacles mentioned were the difficulties in compiling the necessary basic statistics, the constant mobility of technical personnel and the growing need to concentrate the small operational capabilities of statistical offices in elaborating mainly short-term indicators. Nevertheless, it was generally agreed that each country would compile the revised system in different stages at their own pace, consistent with their needs and capabilities.
- 74. At the meetings it noted that, in addition to handbooks that would guide national experts in the implementation and use of the system, technical assistance in various forms would be essential. Seminars, workshops and training courses at regional and country level; bilateral, regional and international technical

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assistance; and further development of a compilation methodology using micro computers by the Statistical Office of the United Nations Secretariat should assist in implementing the revised SNA.

B. Specific problems identified in regional meetings

- 75. The implementation of the system in countries with high inflation would pose special problems, as national accounts would have to be compiled more frequently than every quarter. Any expansion of the system would present very difficult resource problems, particularly for those countries.
- 76. A special problem is faced by countries with transition economies, which need not only to elaborate new data series but also to link them with past data series, which are generally based on MPS guidelines. It has been suggested that these countries should use the past MPS/SNA conversion methodology to make the past series comparable with the new series and carry out special studies in order to understand how to link past and present series based on different valuation principles.
- 77. Another difficulty was mentioned that would be encountered when implementing the institutional orientation of the revised SNA is that enterprise units change more in composition than do establishment units. Statistical coverage of such units is therefore more difficult. Also, increased privatization and dismemberment of State enterprises have led to a greater number of producer units from which data needs to be collected.

IV. POINTS FOR DISCUSSION

- 78. In the light of the present progress report, the reports of the meetings of the regional commissions, the report of the Expert Group Meeting on Reconciliation of SNA and MPS Standards on National Accounting and the interim draft of the revised SNA, the Commission, at its present session, may wish to comment on the following:
- (a) Do the interim draft chapters of the revised SNA generally conform with the objectives of the revision process? (see para. 2);
- (b) Does the Commission agree with the orientation of the regional commissions on further developments of the SNA (as indicated in the separate regional meetings reports and summarized in paras. 42-71 of the present report)? Would it like to give additional guidelines in particular, on such issues as the presentation of environmentally adjusted aggregates and the relation of the revision process to countries in transition? (see paras. 36-39);
- (c) Does the Commission endorse the revised timetable? (see paras. 5 and 16-20);

- (d) Does the Commission recommend approaches for securing additional funding for the completion of the revised SNA in 1993 other than those planned by the Inter-Secretariat Working Group on National Accounts? (see paras. 29-32);
- (e) Would the Commission continue to assign highest priority to work in the revised SNA, including the production of handbooks? (see paras. 21-28).

Notes

- $\underline{1}$ / Draft of the revised System of National Accounts (SNA) (PROVISIONAL, ST/STAT/SER.F/2/Rev.4).
- $\underline{2}$ / Report of the Second Expert Group Meeting on SNA Co-ordination held at New York, 12-21 July 1989.
- 3/ Report of the Third Expert Group Meeting on SNA Co-ordination held at New York, 13-22 September 1989.
 - 4/ E/CN.3/1991/11.
 - 5/ E/CN.3/1991/7.
 - 6/ E/CN.3/1991/6.
 - 7/ E/CN.3/1991/9.
 - 8/ E/CN.3/1991/8.
 - 9/ E/CN.3/1991/10.
- 10/ Funding for these activities is to be provided by the member organizations of the Inter-Secretariat Working Group on National Accounts as well as from extrabudgetary support for the SNA review programme. With respect to work proposed for support by the regular budget of the United Nations for 1992-1993, resources for such work will be included in the proposed programme budget for the biennium 1992-1993 currently under preparation.
- 11/ Provisional International Guidelines on the National and Sectoral Balance-Sheet and Reconciliation Accounts of the System of National Accounts, Series M, No. 60 (United Nations publication, Sales No. E.77.XVII.10).
- 12/ Manual on National Accounts at Constant Prices, Series M, No. 64 (United Nations publication, Sales No. E.79.XVII.5).