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

Review and development of the System of National Accounts (SNA)

Report of the Secretary-General

SUMMARY

The present report is a summary of the work on the System of National Accounts that has been under way in the Statistical Office since the twenty-first session of the Statistical Commission. In particular, it incorporates the views of an expert group convened in March 1982 to review SNA. The report discusses the major issues arising in the clarification, updating and harmonization of SNA and possible arrangements for organizing and scheduling its revision. The expert group recommended that a working group should be established to guide the preparatory work for the revision of SNA and the mobilization of the necessary resources. It considered that the revision should not be undertaken as a continuous adjustment, but rather should be aimed at implementation by a single target date, possibly 1990. To reach such a target, agreement would be needed some years in advance, say by 1985, and this implies that work must start in the immediate future. These recommendations and other questions are included as points for discussion by the Commission (para. 81).

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CONTENTS

	<u>Paragraphs</u>	Page
INTRODUCT ION	1 - 3	3
I. THE NATURE OF FUTURE DEVELOPMENT OF SNA	4 - 7	4
II. REVIEW OF MAJOR ISSUES	8 - 74	6
A. Consumption expenditures and total consumption	9 - 18	6
B. Non-market imputations	19 - 26	9
C. Development of balance sheets and reconciliation accounts	27 - 30	11
D. Treatment of pensions and life insurance	31 - 36	12
E. Accounting structure and sectoring	37 - 44	13
F. Integration of macro and micro concepts and classifications	45 - 49	15
G. Harmonization	50 - 74	16
1. External transactions	53 - 57	17
2. Public sector statistics and monetary statistics	58 - 62	18
3. Income distribution statistics	63 - 69	19
4. Activity classifications	70 - 74	20
III. ORGANIZATION AND SCHEDULING OF FUTURE WORK	75 - 80	21
IV. POINTS FOR DISCUSSION	A. ii	23

INTRODUCT ION

- 1. At its twenty-first session, the Statistical Commission:
 - "(a) Endorsed the report of the Expert Group Meeting on Future Directions for Work on the United Nations System of National Accounts ..., with general approval of the priorities stated therein;
 - "(b) Emphasized the role of SNA ... as a framework for the statistical system and as a point of reference in establishing standards for related statistics, and urged therefore that increased emphasis be placed upon the co-ordination function of the Statistical Office, which should continue to take a leadership role in that activity;
 - "(c) Considered that SNA, by reason of its comprehensiveness, should rank ahead of standards developed for particular fields of economic statistics; when such other standards are under review, the organizations responsible for them should endeavour to achieve consistency with SNA ... and, where differences remain, explain the reasons for them and provide a full reconciliation with SNA ...;
 - "(d) Urged that specific proposals be developed with regard to needed short-term clarification and updating of SNA, if possible for submission to the Commission at its twenty-second session, with the assistance of <u>ad hoc</u> expert groups on external transactions and possibly other topics;
 - "(e) Recognized the need, within the limits of available resources, to initiate research studies with a longer time horizon, in order to meet demands for new kinds of information;
 - "(f) Endorsed the use of the <u>Handbook of National Accounting</u> series as a vehicle for disseminating the results of future work on national accounts, including expanded and updated manuals on sources and methods and longer-term research studies and, in particular, requested the inclusion in the series of the draft manual on external transactions;
 - "(g) Welcomed the proposed co-operation of international agencies, individual countries and groups of countries in the work of further conceptual development of SNA, and endorsed the need for formalization of such co-operative and consultative arrangements in order to avoid conflicting and duplicative work." $\underline{1}$ /
- 2. The present report covers the work done in response to those requests. Three lines of endeavour have been pursued. The first, responding to points (b) and (c) above, continued the work on harmonization of statistical standards, with particular emphasis on public sector statistics, external transactions and the classification of economic activities. The second, responding to point (f), focused on the completion of the scheduled volumes of the Handbook of National Accounting. The third, with which the present report is mainly concerned,

responded to points (d), (e) and (g), and was concerned with short-term proposals, longer-term needs and the development of co-operative and consultative arrangements for the work on further conceptual development of SNA.

In the pursuit of these last objectives, an Expert Group Meeting on the Review and Development of the United Nations System of National Accounts (SNA) was convened at United Nations Headquarters, from 22 to 26 March 1982. The Expert Group considered a report entitled "The System of National Accounts: review of major issues and proposals for future work and short term changes" (ESA/STAT/AC.15/2), prepared by Professor Richard Ruggles of Yale University, acting as a consultant to the United Nations Statistical Office. That report and the final report of the Expert Group (ESA/STAT/AC.15/8) will be available as background documents during the session of the Commission. Subsequent to the Expert Group Meeting, the consultant's report was considered by an Ad Hoc Meeting on National Accounts convened by the Organisation for Economic Co-operation and Development in Paris, from 17 to 19 May 1982, and by a meeting of the Working Party on National Accounts and Balances of the Conference of European Statisticians at Geneva, from 1 to 4 June 1982. The present report incorporates the views of the three groups. Section I considers the nature of future developments of SNA, section II reviews the major issues and section III discusses the organizations and scheduling of future development. Finally, section IV contains questions the Commission may wish to discuss.

I. THE NATURE OF FUTURE DEVELOPMENT OF SNA

- 4. In considering the future development of SNA, the Expert Group concluded:
 - "(a) That major developments in SNA remained to be undertaken referring both to the problems discussed in the meeting, as well as others which had not yet been fully articulated or which might emerge in the future;
 - "(b) That there was a continuing need for the clarification, modification and extension of SNA;
 - "(c) That any major revision should not be undertaken as a continuous adjustment, but it should rather be accomplished by a single target date, possibly 1990. To reach such a target, agreement would be needed some years in advance of that date, say by 1985, and this implied that work must start in the near future;
 - "(d) That certain extensions of the system (e.g. non-market imputations) and a number of clarifications and minor modifications should be undertaken as soon as possible ...;
 - "(e) That work on the harmonization of the standards of the different international organizations should continue and should have a high priority;

- "(f) That 14 years after the publication of SNA, progress in the developing countries in the compilation of various accounts and their availability for use in development planning and policy was far from satisfactory."
- 5. In addition to the above general conclusions, the Expert Group considered a number of specific proposals for short-term changes in SNA. The proposals were derived from (a) the report on external transactions in the national accounts, prepared in 1980, which had been reviewed by experts and circulated to national statistical offices; and (b) proposals on other topics that had met with general approval at expert group and regional meetings. Although some of the specific proposals received considerable support, in almost all cases questions were raised concerning the more detailed aspects of the proposals, and further clarification was urged. As a consequence, no specific proposals for short-term changes in SNA are introduced in the present report.
- 6. There was general agreement in all groups considering the problems that the proposed work on clarification, updating and harmonization of SNA would not require a revision of the magnitude of the one adopted by the Statistical Commission in 1968, 2/ but there was less consensus on the precise nature of the changes required. On the one hand, a number of participants emphasized the need for stability in the system. From the point of view of both producers and users, change is costly and may destroy the continuity of long-time series. The value of SNA in providing an integrated conceptual framework is generally recognized and, for most purposes, countries find the present system accommodating enough to meet their needs. On the other hand, there was also substantial support for the view that a fundamental re-examination of SNA is needed. Conditions relating to both the demand for and supply of data have changed substantially since 1968. Governments and other users demand much more disaggregation and detailed data for the analysis and evaluation of the behaviour of the economic system and the formulation of public policy relating to it. Increasingly, the computer, coupled with improved sampling methods and the use of administrative records, makes it possible to obtain such disaggregated data.
- 7. For these reasons, some of the participants argued that the function of the national accounting system should be to provide the comprehensive framework within which disaggregations of the major components and/or satellite accounts can be produced as desired, rather than to set out a pre-determined set of detailed cross-tabulations that are expected to meet all needs. If it is based on such principles, the national accounting system can be both stable and yet flexible and responsive to changing needs and conditions. Those viewing the problem in these terms generally favoured a reduction in the complexity of the core accounts that provide the comprehensive framework for the major constructs of the system, and urged that more consideration be given to such fundamental issues as clarifying the principles underlying the recording of transactions for the transactors of the system and the relation between macro and micro concepts.

II. REVIEW OF MAJOR ISSUES

The report considered by the Expert Group (ESA/STAT/AC.15/2) contained an examination of numerous questions that have been raised about SNA at previous sessions of the Statistical Commission, interregional and regional meetings on national accounts, previous expert group meetings held by the United Nations and meetings held by other international organizations. Not all of the issues raised, of course, were of equal importance. On the basis of the priorities assigned by the 1982 Expert Group and the subsequent Working Party on National Accounts and Balances of the Conference of European Statisticians, seven major topics requiring attention in the forthcoming revision of SNA have been identified. These are: (a) consumption expenditures and total consumption; (b) non-market imputations; (c) development of balance sheets and reconciliation accounts; (d) treatment of pensions and life insurance; (e) the accounting structure and sectoring; (f) integration of macro and micro concepts and classifications; and

(g) harmonization. Each of these, in turn, will be discussed below.

A. Consumption expenditures and total consumption

- Over the past 30 years, there has been a marked increase in the extent to which governments provide goods and services to individuals free or virtually free. This is particularly true in the field of health care. The institutional arrangements for both delivering health care and paying for it are highly varied, and the same result can be achieved in ways that appear quite different in national accounting terms. There are also many other areas where the same sorts of problem are encountered.
- For some purposes, the analyst is interested in consumption expenditure flows and, for other purposes, in total final consumption. Both concepts are needed, but SNA is not entirely clear in portraying them. Questions arise both in distinguishing between these two concepts and in measuring each of them, as well as in integrating the two different concepts into the accounting structure.
- In terms of definition, what particularly needs to be clarified are those situations where the government reimburses households for expenditures the households have made. For instance, when individuals are reimbursed for health-care expenditures but are free to choose the practitioner providing the care, SNA considers that the individuals are the purchasers and the financing by the government is a transfer payment. But where the government restricts "free choice" by arranging for or specifying the terms or standards of furnishing the care, SNA considers the government to be the purchaser and the expenditures are included as part of government intermediate consumption expenditures, even if the government's role is limited to providing reimbursement for the costs involved.
- 12. In practice, this "free choice" criterion is often difficult to apply. For instance, reimbursement may be limited to specific kinds of expenditures for which evidence (for example, a doctor's bill) is provided; this constitutes a limit on free choice, but it is not clear whether SNA intended to consider it so. Furthermore, even if conceptual distinctions can be made between different

institutional situations, it may not be possible or even useful to identify them statistically. As a consequence of these difficulties, it has been suggested that criteria need to be developed to distinguish more clearly between "cash benefits", to be treated as transfer payments, and "benefits in kind", to be treated as government final consumption expenditures. One possible solution would be to limit cash benefits to benefits that households receive without having to produce evidence of actual expenditure. Goods and services provided by the government either directly or through reimbursement of expenditures, for through arrangements with other suppliers of goods and services which supporting evidence is required, would all be classed as benefits in kind.

- 13. A further conceptual problem arises with some subsidies. In some cases, the government may provide subsidies to producers as a method by which the government shares the costs of certain consumption items. Such a consideration underlay the recognition in the United Nations income distribution guidelines that total consumption of the population should include housing and pharmaceutical subsidies. In such instances, the argument has been made that the subsidy should not be treated as a deduction from producers' costs, but as a government consumption expenditure that partially pays for goods and services consumed by households. In this connexion a question was also raised about the treatment of the deficits of public enterprises such as local transit systems. While the Expert Group generally recognized that this topic was an important one, some participants felt that it represented a major modification of SNA and that it would be quite difficult to integrate the proposed treatment into the main body of the accounts.
- 14. A final conceptual question in this area relates to benefits in kind that employers provide to their employees. All benefits in kind provided by government to individuals (except if they are free to choose) are considered in SNA to be part of government final consumption expenditures in accordance with the transactor/transaction principle whereby transactions are recorded in terms of the transactors making them. But the benefits in kind that employers provide to their employees are not treated in the same manner. Thus, health care provided to employees is treated as part of both the employees' income and their consumption expenditures, even when the employees do not actually make the expenditures and do not have free choice. An alternative treatment would be to consider that the employer, in order to provide benefits in kind to his or her employees, makes final consumption expenditures similar in nature to the expenditures made by government on behalf of individuals. These enterprises final consumption expenditures could be recorded as part of the compensation of employees (as benefits in kind), but not as part of wages actually paid out to employees. They would appear, along with household and government final consumption expenditure, in the final uses of gross domestic product (GDP). This would not alter the total of final consumption expenditures, of course, since household consumption expenditures would be reduced by an amount equivalent to the increase recorded for enterprise final consumption expenditures. Again, the Expert Group recognized the problem raised here, but felt that the explicit recognition of final consumption by enterprises would raise a number of complex problems that required further study.
- 15. Problems also arise in the accounting treatment of consumption expenditures and total consumption, as well as in their specification. SNA now focuses on the

E/CN.3/1983/5 English Page 8

Consumption expenditure concept, although provision is made in the <u>Provisional</u> Guidelines on the Statistics of the Distribution of Income, Consumption and <u>Accumulation of Households</u> for the supplementary concept of total consumption of the population. 3/

16. It has been proposed that it would be useful to explore the possibility of integrating both concepts into the standard accounting framework through the use of a dual classification, as follows:

Expenditures for	Expenditures of						
	General government	Private non-profit institutions	Enterprises	Households	Total		
Individual consumption							
Collective consumption							
Total		· · · · · · · · · · · · · · · · · · ·			Total consumption of the population		

Adding across the rows would then yield total individual consumption and total collective consumption, and adding down the columns would yield total final consumption expenditures of, respectively, general government, private non-profit institutions, enterprises, households and the total economy. Some of the calls, of course, might be empty. Before such a dual classification could be implemented, however, it would be necessary to arrive at a consensus on the definitions of the various categories, a consensus that does not yet exist.

- 17. The Expert Group agreed that this set of issues is real and important and that it needs to be tackled. The Group pointed out that consideration of the total consumption of the population should be placed in the context of the discussion of sectoring and microdata, to which it is intimately linked, since there is major interest in the distribution of total consumption among socio—economic groups and its breakdown by kinds of goods and services. In this context, the aggregate of total consumption services as a control total to which different breakdowns must aggregate.
- 18. In particular, the Expert Group emphasized that services provided to households by government are an important part of this set of problems, and that it was desirable to obtain information relating to such services as quickly as possible. The Group considered, however, that for the immediate future this could

be done in the form of supplementary tables. There were differences of view about the longer-run treatment, and many felt that experience with supplementary data was needed before any decisions could be taken.

B. Non-market imputations

- 19. Non-market imputations have always been recognized as a necessary component of the national accounts. The chief non-market elements now included in SNA are subsistence agricultural activities in developing countries and space rental of owner-occupied housing in developed countries. The 1968 SNA was quite specific regarding the scope and definition of non-market activities to be included in output. Its decisions primarily reflected two criteria: (a) what was directly comparable to production taking place in the market, and (b) what it was considered feasible to measure, given the statistical resources.
- 20. A number of participants in the Expert Group urged that non-market imputations in the developing countries be extended to include all other non-market activities not already mentioned in SNA for which basic information existed that would permit annual estimates to be made. It was pointed out that household surveys in developing countries are now providing such data. Although there was agreement that non-market imputations for own-account activity should be considered an integral part of the accounts in developing countries, there was strong support among the experts for making an explicit distinction between market transactions and non-market imputations that would help to distinguish between the formal and informal economy; this also suggests that several different major concepts of aggregate output might emerge.
- 21. In developed countries, the largest existing imputation is usually that for the services of owner-occupied housing, and in this case SNA departs quite far from the transactor/transaction principle of recording transactions. It may be questioned whether this departure is necessary or appropriate. SNA treats owners of dwellings as proprietors of fictitious unincorporated enterprises engaged in the business of renting their houses to themselves. An imputed space rental value is included in household consumption expenditure and in the receipts of the fictitious enterprise. The fictitious enterprise, in turn, pays the repair and upkeep and property taxes and makes charges for consumption of fixed capital. Its operating surplus is then returned to the household as imputed entrepreneurial income.
- 22. One of the consequences of this procedure is that in an inflationary period when rents are rising, similar increases in housing costs (and corresponding increases in imputed income) are attributed to homeowners, even if the actual costs associated with owning have not changed appreciably. The homeowner's actual situation may be more analogous to that of a renter in a rent-controlled dwelling. In that case, the accounts record the actual rent, not its shadow market price. It would similarly seem reasonable that the accounts should show explicitly the actual transactions involved in home owning, in such a manner that the actual consumption expenditure attributed to households is not distorted. What is really being imputed is consumption of fixed capital and entrepreneurial income; showing these imputations explicitly would make it possible to analyse the total consumption of

housing services as well as the expenditures for it. It may be doubted whether most owner-occupiers consider that their housing cost includes capital consumption, or even more certainly, a return to themselves as owners. Their behaviour is much or even more likely to be influenced by what they actually must spend. For studies of demand, market analyses and the like, it is this actual expenditure that is relevant. Also, it is important to know, for the determination of taxation and fiscal policy, what part of indirect taxation is actually paid by households in the form of property taxes.

- 23. Problems also arise in connexion with consumer durables. SNA does not recommend that imputations be included in the accounts for the services of consumer durables, including automobiles that households own. But when the institutional setting changes slightly so that household appliances are included as part of the cost of housing (owner-occupied or rented), or automobiles are rented or provided as benefits in kind to employees, their services are included in the measurement of both output and household consumption expenditure; indeed, it would be difficult statistically to exclude them. In view of the growing importance of consumer durables in many countries, it is increasingly difficult to justify the differing treatment of durables and houses.
- 24. A final question regarding non-market imputations relates to the services provided by government infrastructure and durables. SNA does include an imputation for the services of government buildings, but it is argued that other parts of the infrastructure have an indefinite life if properly maintained and that the maintenance expenditure measures the value of the service provided. With fluctuations of government budgets, however, it is evident that there may be periods when the infrastructure is undermaintained, and others when basic improvements are introduced which should be counted as additions to the capital stock. An argument can, therefore, be made that all government capital stock, and not only its buildings, should be assigned a finite lifetime and amortized.
- 25. Despite this pressure to open up the boundaries of what is defined as consumption to include additional kinds of non-market activity and the services of durables, there has at the same time been strong resistance to losing sight of the transactions-oriented base of the national accounts. This reluctance stems not only from the belief that the basis for valuation of market transactions is more apparent and the data are likely to be relatively much firmer, but also from the perception that market transactions are often the vehicle for implementing economic and social policy. There is serious concern that the pursuit of comprehensive measures of well-being should not be allowed to destroy the usefulness of the system for analysis of fiscal and monetary policy. A solution that would respod to both sets of concerns might articulate the sector accounts in terms of the actual market transactions taking place, and display non-market transactions separately in such a way that new kinds of information on non-market activity will be available within the accounting framework, without impairing the more traditional uses of the system.
- 26. The Expert Group agreed that even in developed countries an explicit distinction should be made between market transactions and non-market imputations, and recognized that this would become more important if more non-market imputations

were introduced into the accounts. In the discussion of the treatment of owner-occupied housing and consumer durables, several participants suggested that consistency of treatment of these two items would be desirable, particularly in so far as major items of consumer durables such as automobiles are concerned. Others thought that the estimates for consumer durables might be carried in supplementary accounts on an experimental basis. It was pointed out again that extending the coverage of non-market imputations might entail the emergence of several major concepts of aggregate output, the most restrictive one relating to market transactions and broader ones including different categories of non-market imputations.

C. Development of balance sheets and reconciliation accounts

- 27. During the last decade of high inflation, it has become clear that the transaction flows in the national income accounts cannot by themselves provide an understanding of the impact of the rapid change in prices on the different sectors of the economy. Thus, for example, it is generally recognized that the high nominal interest rates that have accompanied the inflation are in part compensation for the erosion in purchasing power of the fixed claim assets to which the interest relates.
- 28. In order to interpret the statistics satisfactorily, particularly during periods of high inflation, data on the levels of assets and liabilities held by each of the institutional sectors in the economy and their revaluations over time need to be made available within a framework integrated with the accounts relating to transactions. SNA clearly envisages such a complete and integrated set of balance sheets and reconciliation accounts, but the guidelines developed in 1977 4/were considered to be provisional since few countries at that time had compiled balance sheets and reconciliation accounts that were integrated with the flow accounts.
- 29. In the past few years, a number of countries have embarked on work in this area. The practicability of constructing sector balance sheets in both current prices and constant purchasing power that are fully integrated with the flow accounts has been demonstrated, although widespread implementation of balance sheets and revaluation accounts may be expected to be slow owing to data availability problems. No fundamental changes in SNA are required, but some modifications may be needed to ensure consistent recording of the transaction flows, the levels of related assets and liabilities and the corresponding revaluations. Initially work on sector balance sheets might focus on the household sector, where the need appears to be the greatest from the point of view of users. Ultimately, estimates of all sectoral gains and losses on the holdings of assets and liabilities should be provided on a regular basis, in purchasing power terms as well as current prices.
- 30. The Expert Group gave high priority to this topic and agreed that countries should be urged to pursue work in this area, subject to the availability of resources. They welcomed the proposed broadening of volume 5 of the forthcoming Handbook of National Accounting to encompass balance sheets as well as financial

flows. The continuing work of EEC and OECD in this area was appreciated, but the hope was expressed that other international organizations would also be involved so that one group of countries would not get out of step with the rest. The IMF expression of interest was noted with satisfaction.

D. Treatment of pensions and life insurance

- 31. The SNA treatment of life insurance and pension cotributions and benefits is the conventional national accounting one. Contributions to pension funds and life insurance premiums paid by employers are shown as part of compensation of employees, and the investment income earned by pension and insurance reserves is considered to be imputed interest income of households. The gross addition to pension and insurance reserves, therefore, appears in household saving. Households' equity in the reserves of life insurance and pension funds is shown as a household asset and a liability of financial institutions, and the change in this equity appears in the household capital finance account. Receipts of pension benefits and life insurance annuities, however, are considered to represent only a change in the form of household assets and not a current income flow.
- 32. This treatment was originally devised during the 1930s, when these forms of deferred compensation were less common and, for the most part, were restricted to the upper end of the income distribution where a calculation of income which did not include the net change in asset position might not be unrealistic. Over the years, however, this treatment has become increasingly inappropriate. In some countries, pensions and annuities have become very widely dispersed throughout the population and constitute the major source of income for a growing segment of it. What counts, to the pensioner, is the monthly check, not the reserves of the pension fund or insurance company that pays it. The pensioner's claim to a share of the fund's assets is purely hypothetical; he or she has no control over it and no access to it. For such uses as studies of consumer behaviour or analyses of levels of living or income distribution, household income should reflect what the households themselves consider to be their income.
- 33. It has, therefore, been proposed that private pension benefits (as is the case with social security benefits) should be considered to be part of household current income, recorded in the income and outlay account. This, however, raises questions about how to treat accumulated pension and insurance reserves in order to preserve consistency between the income and outlay accounts and the corresponding balance sheets. It would not be consistent, for instance, to treat total pension and insurance reserves as a household asset and at the same time to treat total payments of benefits out of such reserves as household current income.
- 34. One possibility would be to leave the reserves of pension funds and life insurance companies with the financial institutions involved, rather than attributing them to households. It would then be appropriate to count pension benefit payments out of these funds as current household income. This would, of course, not alter GDP, but it would show the distribution of household income flows more realistically. It would also bring the handling of private pensions much closer to that of public social security contributions and benefits, and it would

be more consistent with the transactor/transaction principle of recording transactions. The whole of social security contributions is treated as, essentially, a direct tax on households, and the whole of the benefit as a contribution to household income. Rights to future social security benefits are not capitalized, and they are not considered to be a household asset.

- In opposition to this view, it has been suggested that accumulated pension and life insurance rights do have value to households, and that the value should be shown. It may be questioned, however, whether the total of the accumulated reserves involved is the appropriate measure. That total does not represent either the present value of future household entitlements or the cash surrender value of those entitlements. As a general principle, furthermore, SNA does not include in the balance sheet the present value of future streams of income; thus, social security rights are not capitalized. SNA does, however, include all assets that have a current market value, and some pensions and insurance rights do have such a value, especially where the employee has made direct contributions. An alternative possibility, therefore, would be to include in the household balance sheet only that portion of the total reserves that reflects the current market value to households, leaving the balance of the reserves in the financial institutions' If such a division of reserves between households and financial balance sheets. institutions were made, a corresponding division would also be needed in the benefit payments. Those paid out of reserves attributed to financial institutions should then be reflected in current household income, but those paid out of reserves attributed to households would continue to be shown only in the capital finance account.
- 36. Both the Expert Group and the OECD $\overline{\text{Ad Hoc}}$ Meeting on National Accounts expressed support for a reconsideration of the treatment of pensions and life insurance in the course of the revision of SNA and urged that the necessary technical studies be undertaken promptly.

E. Accounting structure and sectoring

- 37. The accounting structure of SNA is based upon a dual classification of transactors. One set of accounts is given for establishment-type units classified by kind of economic activity, and a different set of accounts is given for enterprise-type units classified into institutional sectors based on financial role and behaviour. Although the Expert Group generally considered that the dual sectoring of SNA represented a major forward step, it also agreed that it was useful to introduce production accounts for institutional sectors as has been done in EEC's European System of Accounts (ESA) and in the revised United Nations OECD National Accounts Questionnaire. The Group also expressed the view that the forms of presentation of ESA and SNA could usefully be brought into closer alignment.
- 38. Various problems have arisen in the application of the SNA sectoring rules. Most occur because the SNA definitions are insufficiently precise to result in consistent interpretation. In some cases, however, questions have arisen about the appropriateness of the concepts themselves. The chief problems that have been encountered relate to (a) private unincorporated enterprises, (b) public

E/CN.3/1983/5 English Page 14

unincorporated and departmental enterprises and (c) private non-profit institutions serving households. It is, of course, not surprising that these should be the trouble spots: they are the borderline cases where decisions must be made on separating one sector from another.

- 39. In an attempt to accomodate widely differing institutional arrangements in different countries, the 1968 SNA introduced a new kind of enterprise concept, midway between corporation and unincorporated enterprise, called quasi-corporation. The concept was intended to recognize that there are some enterprises which, without being formally incorporated, behave in most respects like corporations and should be included with them in a new sector called "corporate and quasi-corporate enterprises".
- 40. SNA gives directives on which enterprises are to be considered quasi-corporations. In order to be so classed, the incomes and outlays of the enterprise and all the tangible and financial assets and liabilities connected with the business should be controlled and managed independently, and complete separate repords should be available for all of these items. But this rule has not in practice been easy to apply, and country practices are quite varied. Some countries include only public quasi-corporations in the corporate and quasi-corporate sector, relegating all others to the household sector. Some countries make no attempt at all to indentify quasi-corporations. A few countries move the other way, putting all unincorporated enterprises into the quasi-corporate category.
- 41. Despite the lack of country compliance with the SNA recommendations, there was general support among national statisticians for retaining the admittedly vague and imprecise specifications. It was suggested that as a partial solution unincorporated enterprises might appropriately be shown as a separate subsector of the household sector. Nevertheless, the problem SNA was trying to address is a real one, and an attempt should be made to clarify it.
- 42. With respect to general government departmental enterprises, SNA is also open to widely differing interpretations. SNA's intent, in distinguishing general government and producers of government services, was to ensure that producers of government services excluded those government departments, establishments and similar units that sell to the public or furnish to the government itself goods and services of a kind "which are often provided by business establishments" (SNA, paras, 5.10-5.12). It was considered that such units should be treated like business establishments, especially for purposes of valuation of their output and test classification by kind of activity. As the complexity of both government operations and private business operations has increased, however, it has become increasingly difficult to decide what ancillary activities are of a type often provided by business establishments.
- 43. Very few of the countries responding to the United Nations/OECD National Accounts Questionnaire seem to find the category of departmental enterprise useful; the others do not appear to use it. Among those who do use it, furthermore, the contest of the country ing these units vary widely, seldom matching those of SNA. A criteria for identifying these units vary widely, seldom matching those of SNA. A similar division appeared among the participants in the Expert Group and other

meetings, some viewing the concept as useful and others as not useful. Several noted that it was difficult for users to understand. The inadequacy of the present SNA criteria was generally recognized, but no suggestions for improving them emerged beyond the suggestion that provision of a list of acceptable types of activity would help. As a step towards clarification, the Expert Group suggested that a study of existing country practices be undertaken.

44. Finally, treating non-profit institutions as a major sector presents difficulties for many countries, since data are generally unavailable. Given the relative size of the non-profit sector, most countries do not consider it worthwhile to invest the statistical resources needed to obtain the required data, and non-profit institutions are by default included in some other sector (if they are not omitted altogether). In many cases, it is not clear just where they are included, since this largely depends on the nature of the statistical sources used. Most participants agreed that data for this sector were difficult to obtain and usually of small quantitative importance, and several favoured reversion to the former practice of including them in the household sector (where they might appropriately be shown separately, either in a subsector or satellite account). Some participants, however, did not consider it useful to distinguish among enterprises on the basis of their profit/non-profit status, and favoured including non-profit enterprises with profit-making ones.

F. Integration of macro and micro concepts and classifications

- The Expert Group Meeting on Future Directions for Work on the United Nations System of National Accounts, which met in April 1980, noted in its report that progress in the development of the Framework for Social and Demographic Statistics (FSDS) had been slower than initially hoped, and that one of the most promising approaches appeared to be starting from the national accounts. In this context, the national accounts are conceived of as a frame not only for macro-data but for micro-data as well. The ultimate objective is an over-all statistical system embracing economic, social and demographic data. In approaching such a system, the Group suggested that working outward from the national accounts was appropriate, since the national accounts were in a much more advanced state of development. In order to serve this purpose, some adjustments and accomodations may be needed in the national accounts. Some of these have been discussed above in connexion with the more consistent application of the transactor/transaction principle to the treatment of benefits in kind, owner-occupied housing and pensions. Many of these adjustments are needed, of course, not only for the integration of social and economic data but also to improve the usefulness of the accounts for economic analysis.
- 46. The 1982 Expert Group gave strong support to the view that the national accounts should serve as a framework not only for macrodata but also for microdata, and that the ultimate objective should be the development of integrated statistical systems embracing economic, social and demographic data. Many participants emphasized the importance of microdata in making possible the disaggregation of the national accounts. In particular, emphasis was placed on the desirability of developing appropriate household micro-data sets that would allow disaggregation of

household data in terms of socio-economic groupings of the population. The flexibility of microdata for obtaining a variety of different socio-economic disaggregations was emphasized. By providing control totals for the microdata, the macro aggregates of the national accounts play an important role in ensuring consistency and improving the quality of microdata.

- 47. The major problem recognized by the Expert Group was in finding ways to make more progress in this area. It was agreed that more attention should be given to ensuring that the classifications used for the national accounts and for microdata were consistent. Some participants considered that in some instances macro concepts should differ from micro concepts, and that it would be sufficient to be able to derive adjusted control totals that would match the microdata. Others thought that it would in some cases be desirable to re-examine the SNA concepts and definitions to determine their appropriateness for integrating macro and microdata, and to consider whether changes might be made in SNA both to promote integration and to make better use of microdata in constructing the national accounting aggregates.
- 48. The Expert Group agreed that new requirements for economic data were emerging in the social fields and that these posed special problems of accounting for example, in maintaining consistency between administratively based statistics in these fields and the national accounts. One approach that was suggested was to concentrate on the definition of selected principal aggregates such as national health expenditures.
- 49. The Expert Group also noted that the integration of economic and social statistics has had high priority for some years, but that different strands are just now coming together. Ways should be found to set forth the changes in SNA that such integration points to. This was considered to be clearly the function of a continuing group, but it was also felt that the Statistical Office should be encouraged to look at methodology in this area and to develop guidelines. The Expert Group indicated that it is important that the walls and compartmentalization between the different aggregations of economic and social data employed in the national accounts and in other economic and social uses be demolished.

G. Harmonization

- 50. The Statistical Commission has repeatedly stressed the importance of harmonization of international statistical standards and the primary role of SNAs in this endeavour. This point of view was endorsed by all of the groups discussing the question. In terms of practical steps towards implementation, it was recognized that the work was likely to proceed in two stages, the first involving the identification of existing differences (reconciliation) and the second involving their removal (harmonization) as far as analytical needs would permit. It was, however, generally considered that the second step was essential; constructing reconciliation (or "bridge") tables is by itself not sufficient.
- 51. Both the Expert Group and other commentators considered that changes in standards that would promote harmonization might appropriately be implemented in advance of the over-all revision of SNA, provided that consensus could be reached.

Subsequent discussion of specific proposals suggested that this might be possible in some minor instances, but where there are broader implications the second state, harmonization, would need to be implemented as a part of the over-all system review.

52. Over the past two years, work on harmonization has been pursued in several different fields. Those that have received the most attention are reviewed below.

1. External transactions

- 53. As was reported to the Statistical Commission at its twenty-first session, the Statistical Office has for some time been engaged in an attempt to clarify the content of the external transactions components of the national accounts, develop the methodology required for their preparation and improve their comparability with the balance-of-payments statistics collected by IMF. The Bureau of Statistics of IMF has co-operated actively in the latter effort. In pursuit of these objectives, a report was prepared by a consultant to the Statistical Office,
 Mr. P. N. Atcherley, formerly of the Australian Bureau of Statistics, which discusses problems that arise in harmonizing the national accounts and the balance of payments, identifying the sources of difference and presenting a number of alternatives for achieving a closer treatment.
- 54. The proposals made in the Atcherley report have been extensively reviewed by experts consulted during its preparation, by national statistical offices and interested international organizations and by the 1980 and 1982 Expert Groups. Several conclusions have emerged from the reviews.
- 55. The first is a very substantial clarification of the nature of the differences between SNA and the IMF Balance of Payments Manual (BPM). The IMF Bureau of Statistics and the United Nations Statistical Office have jointly constructed a bridge table setting out the differences and, in the course of the work, it has become apparent that in some cases what is needed is clarification of one or the other standard, rather than change. In a few instances, the differences are trivial and can be eliminated without damage to either standard. But in other cases, real differences of philosophy exist. They relate, for the most part, to the need for distinctions between current and capital transactions and between transactions and revaluations, and to the weight to be given to practical problems of data compilation.
- 56. The second conclusion relates to the difference of philosophy. Both the Expert Group and the written comments stressed the importance of harmonization as a general principle. But in the discussion of specific proposals, there was very great reluctance on the part of national accountants to accept any changes in SNA that compromised its basic structure, even when they could be expected to be of minor quantitative importance and to simplify compilation. Balance-of-payments experts, on the other hand, attach more importance to practical compilation considerations, especially where SNA concepts are not needed for balance-of-payments analysis. Further progress on harmonization will require a solution to these issues.
- 57. The final conclusion relates to timing and the instruments of implementation. Many of the proposals for short-term changes received substantial support, but in

very few cases can the extent of the support be construed as consensus. Questions were raised, in particular, about possible repercussions of <u>ad hoc</u> short-term changes elsewhere in the system. On the whole, therefore, it seems preferable to include the proposed changes for harmonization with BPM as a part of the general review, so that their full ramifications can be taken into account.

2. Public sector statistics and monetary statistics

- 58. The need for harmonization of the guidelines on public sector statistics issued by various international organizations has repeatedly been stressed by the Statistical Commission. Work has been under way for a number of years on the attempt to bring volume 4 (public sector statistics) of the forthcoming United Nations Handbook of National Accounting into closer harmony with the IMF manual Government Finance Statistics (GFS), while still recognizing the differing needs served by the two.
- 59. Revised versions of both manuals have been prepared and differences between them in matters of definition, classification etc. have been significantly reduced. Where differences remain, they have been pointed out in the manuals and the basis for them explained. There remain broad differences in approach reflecting the different uses intended for instance, SNA includes imputed items and uses accrual accounting, whereas GFS relates only to cash transactions but the Handbook views the cash accounts as a starting point and discusses how they can be adjusted to obtain the more comprehensive accounts required for SNA. The Handbook, furthermore, includes a discussion of public financial institutions, whereas GFS is limited to general government and non-financial public enterprises. The Handbook also covers constant price statistics, not covered in GFS. For the core items of the accounts that do appear in both GFS and SNA, however, the Handbook relies heavily upon the discussion of sources and methods that appears in GFS, and suggests that the two manuals should be regarded as complementary.
- 60. The staffs of both the Bureau of Statistics of IMF and of the United Nations Statistical Office have been mindful of the frequently reiterated desire, particularly on the part of users concerned with the national accounts, for a single set of guidelines covering both financial and national accounting statistics. It is considered that the present revised versions of volume 4 of the Handbook of National Accounting and Government Finance Statistics represent major progress towards achieving that goal. Before attempting to produce a single volume, however, it seems desirable that some years of experience with the new versions of volume 4 and GFS should be allowed to accumulate, in order to see where there may be remaining difficulties.
- 61. In the field of flow-of-funds and monetary statistics, less progress on co-ordination and harmonization has been made than had been hoped for (see E/CN.3/541, para. 17). Volume 5 of the Handbook of National Accounting will cover capital finance, flow of funds, changes in assets and liabilities, balance sheets and related areas. A preliminary draft dealing with sources and methods for compiling SNA table 24 has been prepared; it is intended that the coverage of the publication will be broadened in the revised draft.

62. The IMF is working on a manual covering the monetary statistics that are published in <u>International Financial Statistics</u>. The Expert Group urged that the draft manual be discussed with the United Nations Statistical Office and other interested organizations prior to its completion.

3. Income distribution statistics

- 63. Income distribution statistics were a part of the programme of further development of SNA laid out by the Statistical Commission in 1968. Following a series of meetings and consideration by the Commission, Provisional Guidelines on Statistics of the Distribution of Income, Consumption and Accumulation of Households was published in 1977. 5/
- 64. In a parallel development, work was undertaken on the development of the United Nations Framework for Social and Demographic Statistics (FSDS), reflecting the changing emphasis of policy to include social as well as purely economic aspects of the distribution of the well-being of the population. A number of publications dealing with the conceptual aspects of these questions have been prepared. The increasing policy importance of social programmes has led to a demand for information not only on the size distribution of income, but also on the interrelationships between government and households, on the position of specific demographic groups and on distributions by region and type of community. As was pointed out in paragraphs 45-49 above, it has become increasingly clear that what is needed is a framework that will accommodate both aggregate systems such as SNA and the increasingly available sets of microdata that are the basis of distributional analyses. The recent conceptual work of the Statistical Office has been aimed in this direction.
- 65. Since 1980, the Development Research Center of the World Bank has been engaged in an ambitious Living Standards Measurement Study (ISMS). ISMS is set up as a four-year study in three phases, covering (a) analysis of existing data and development of a conceptual framework, (b) new field work, both experimental and of a substantive nature, to test survey design and questionnaire content and (c) analysis of test data to demonstrate their uses in levels of living for development policy. For further details on LSMS, see E/CN.3/1983/21, which has been submitted to the Statistical Commission at its present session.
- on conceptual issues regarding income distribution statistics and national practices. The ILO, the World Bank, OECD, the United Nations Statistical Office and several regional commissions have been active in data collection in this field. What emerges clearly from all the studies are the practical difficulties of obtaining conceptually valid international comparisons of income distribution data. A Survey of National Sources of Income Distribution Statistics, which compares the concepts used in 60 countries with those recommended in the Provisional Guidelines (see para. 63 above), gives a good indication of the difficulties. 6/
- 67. Comparisons with aggregates from other statistical sources often indicate underestimation in income distribution data. This is especially true for income

items that are difficult to measure in sample surveys, such as, property income and entrepeneurial income. In addition, national practices differ with respect to the treatment of income in kind, payment of taxes and transfers. In an ongoing joint ILO/World Bank project, an effort is being made to adjust the existing data in order to obtain aggregate national accounts data. The adjustments are being made on the tabulated data and are subject to crude assumptions.

- 68. The problems discussed above in connexion with the measurement of consumption also arise, of course, in measuring its distribution, often in even more intractable form. With respect to benefits in kind, it is often the case that, from the point of view of the recipient, cost is a poor measure of value; the recipient may not be aware of cost and may place quite a different value (or no value) on the benefit. In the case of entitlements, potential recipients may use them in varying degrees, and future entitlements such as social security benefits and job tenure are even more difficult to evaluate. Work on these questions is at a very early stage, and as yet no consensus has emerged.
- 69. In order to improve the consistency of international income distribution data, it would be highly desirable for the international agencies interested in this field of statistics to produce a joint and consistent set of standards.

4. Activity classifications

- 70. In activity classifications, the chief questions of harmonization among the international organizations arise between the United Nations, the Statistical Office of the European Communities (EUROSTAT) and the Council for Mutual Economic Assistance (CMEA). The United Nations activity and commodity classification, the International Standard Industrial Classification of All Economic Activities (ISIC) and the International Classification of All Goods and Services (ICGS), differ significantly from those developed by EUROSTAT (namely the General Industrial Classification of Economic Activities within the European Communities (NACE) and its closely related classification for use in input-output tables (CLIO)), and both of these differ from the Classification of the Branches of National Economy of the CMEA Member Countries (CBNE) used by the centrally planned economies. This has long been a source of frustration to both compilers and users of the data.
- 71. At its nineteenth session, the Statistical Commission approved a general long-term programme of work on harmonization of economic classifications, leading to the eventual production of a combined trade/production commodity classification. One of the first steps set out was a revision of ISIC. The Commission recommended the establishment of a consultative panel to provide advice and guidance over the time span covered by the work programme. Accordingly, a United Nations Statistical Office/Statistical Office of the European Communities Joint Working Group on World Level Classifications was formed (with generous financial support by EUROSTAT); it met in November 1977, June 1979 and May 1981. In addition to the United Nations Statistical Office and EUROSTAT, the Group includes representatives of other international organizations, regional commissions and about 10 countries. Considerable emphasis has been placed on continuity of participation by the same individuals.

- 72. The Working Group first focused on those parts of the classification in which the activity results chiefly in the production of transportable goods. The objective was to produce standardized intermediate-level categories of activities so that data collected according to any one of the three classifications involved (ISIC, NACE and CBNE) would be equivalent to data obtained through use of either of the other two classifications, at that intermediate level. Some 57 intermediate-level activity categories were proposed in relation to transportable goods. The Working Group has now begun to consider non-transportable goods and services, and similar intermediate-level activity categories have been proposed in this area.
- 73. The Group has also considered problems of harmonizing classifications of activities and products. An immediate result of the work has been the formulation of proposals for somewhat modifying the Harmonized Commodity Description and Coding System (HS) of the Customs Co-operation Council so as to take more careful account of the industrial-origin criterion in its dissections. The Group is now considering categories of goods proposed for use in both production and international trade statistics and having a strong link with a revised ISIC. Construction of the combined trade/production commodity classification remains the ultimate objective of the United Nations Statistical Office. Limited resources, however, have necessitated an extended timetable. A progress report on the harmonization of international economic classifications has been submitted to the Commission at its present session (E/CN.3/1983/15), and an evaluation of the work on the co-ordination of international economic classifications is included in a report which has also been submitted to the Commission at its present session (E/CN.3/1983/26).
- 74. The Expert Group considered that the harmonization of classifications was one of the most important problems. The Group expressed concern at the limited resources available within the United Nations Statistical Office for this work, and considered that there was a danger of lack of representation of other regions since the major share of the technical work was done within EUROSTAT. Concern was also expressed that in the work under way on the revision of SITC (see E/CN.3/1983/12, submitted to the Commission at its present session), too little consideration was being given to co-ordination of production and trade statistics and co-ordination with ISIC. However, at the Expert Group Meeting on the Third Revision of the Standard International Trade Classification, held at United Nations Headquarters in March 1982, while some of the participants favoured the changes proposed in SITC to improve co-ordination, others considered that some of the proposals would cause serious problems for trade statistics.

III. ORGANIZATION AND SCHEDULING OF FUTURE WORK

75. The Statistical Commission played an important role in establishing the initial SNA and in its 1968 revision. In doing so, it relied heavily on ad hoc expert groups and was assisted by regional advisory groups on national accounts, in particular the Working Group on National Accounts and Balances of the Conference of European Statisticians. But conditions have changed and, for the work ahead, there are a number of reasons why the existing arrangements are inadequate.

- 76. The increasing recognition of SNA as the framework for statistical systems in both developing and developed countries and as the basis for international standards for related statistics has meant that the scope of future work has been increased by an order of magnitude. Although it is considered important that the United Nations Statistical Office should continue to take an active co-ordinating role, new arrangements are needed for the organization and scheduling of future work. It is apparent that those international organizations and regional commissions that are directly involved in the development of systems and standards need to be brought together on a more active co-operative basis. The burden of work can then be shared, and conflicting or duplicative efforts can be avoided. In terms of implementing a common set of standards, furthermore, representation of those involved is essential.
- 77. In addition to the international organziations, the participation of experts from different countries is needed. On many topics, countries can draw on their own experts to appraise the usefulness of proposed changes and to assess the feasibility of their implementation. In addition, the support and agreement of country experts is essential to the acceptance of the proposed standards by individual countries.
- 78. Finally, an important requirement is the continuity of participation. The Expert Group felt that future work could be accomplished more efficiently if a working group were established by the secretariats of the international agencies concerned and if the group met once a year. The group could be supported by experts and consultants and would have the task of directing the work on the major developments in SNA highlighted in the present report. This view was reinforced by the recognition that a significant knowledge resource now exists not only within the United Nations system but also within other international organizations.
- 79. In the absence of non-United Nations regional organizations and highly qualified secretariats in developing countries, the Expert Group was of the view that within existing resources a programme of work for the promotion of SNA in developing countries should be organized by the United Nations Statistical Office, in collaboration with the regional commissions and academic institutions in developing countries, to meet their needs and circumstances. Progress on this work could be reported to the working group proposed in paragraph 78 above.
- 80. The Working Party on National Accounts and Balances of the Conference of European Statisticians stressed the importance it attaches to the co-ordination of the work of international organizations, both within and outside the United Nations system. It noted with interest that an inter-secretariat group has been created by the United Nations Statistical Office, EUROSTAT and OECD to co-ordinate their work. It considered that this group could constitute the core of the working group and suggested that experts from national statistical offices should be associated with its work. The Working Party emphasized the need for early clarification of a detailed work programme on the revision of SNA, with a specific indication of the role of national statistical offices.

IV. POINTS FOR DISCUSSION

- 81. The Commission may wish to consider the following, bearing in mind the conclusions of the Expert Group Meeting on the Review and Development of the United Nations System of National Accounts (SNA):
- (a) Does the need exist for revision of SNA and, if so, what should be the character and scope of such a revision?
- (b) What priorities should be assigned to the particular topics, and are there additional topics that should be considered?
 - (c) What periods should be designated for scheduling the proposed revision?
- (d) Given the fact that there exists an inter-secretariat group (United Nations Statistical Office, EUROSTAT and OECD), should it be entrusted with the revision, should it be enlarged to include representatives of national statistical offices and other international organizations or should a new expert group be established to undertake the revision?
- (e) Given the limited resources available within the United Nations, how should the programme of work for the promotion of SNA in developing countries be organized?

Notes

- 1/ Official Records of the Economic and Social Council, 1981, Supplement No. 2 (E/1981/12) para. 52.
- 2/ A System of National Accounts (United Nations publication, Sales No. E.69.XVII.3).
 - 3/ United Nations publication, Sales No. E.77.XVII.11, paras. 5.7-5.10.
- 4/ <u>Provisional International Guidelines on the National and Sectoral Balance-Sheet and Reconciliation Accounts of the System of National Accounts (United Nations publication, Sales No. E.77.XVII.10).</u>
 - 5/ Op. cit.
 - 6/ United Nations publication, Sales No. E.81.XVII.7.