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

Report of the Expert Group Meeting on the Reconciliation of SNA/MPS Standards of National Accounting

SUMMARY

The present report contains the main conclusions on the possibilities for improving harmonization between the national accounting systems of SNA and MPS, emanating from the Expert Group Meeting held in Moscow from 4 to 9 December 1989.

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INTRODUCTION

1. The expert group meeting focused on the possibility of improving harmonization between the System of National Accounts (SNA) and the System of Balances of the National Economy (MPS) in order to improve international comparability. It was recognized that a major problem in undertaking international comparisons at the present time concerned converting data from national currencies into a common unit. That problem has been addressed in the context of the work on purchasing power parity (PPP) and, as such, was not to form part of the agenda for the meeting.

I. DIFFERENCES IN APPROACH

- 2. The initial work on harmonizing SNA and MPS started in the early 1960s. The first phase consisted of explaining the differences, but no changes were implemented in either system. At the twenty-fifth session of the Statistical Commission, all participants from the centrally planned economies expressed a desire to bring the systems together by a process of integration. Those discussions had continued through the various meetings held in 1989.
- 3. The differences between the two systems could be summarized under three headings:
- (a) Differences in economic theory, for example, differences in the definition of the sphere of production;
- (b) Institutional arrangements, for example, the different role played by banks in market economies and centrally planned economies;
- (c) Incidental differences, for example, the treatment of business travel. Some of the incidental differences were large and some small, but they almost always concerned areas where arguments for alternative treatments could be made for both systems, and it was largely a historical accident that different conventions had been adopted.
- 4. The proposal put forward was that differences due to economic theory should simply be accepted as a reflection of different economic perspectives. As far as institutional differences were concerned, it was hoped that SNA would be able to explain how to deal with non-profit-oriented banks and other different institutional arrangements. On the third issue, the incidental differences, since so many of them turned on pragmatic conventions, it was hoped that harmonization would eliminate most, if not all, of these.
- 5. There was some discussion about the implications of integration for the two systems. There was no proposal that one system should swallow the other. What was needed was a qualitatively new stage in macro-economics that would involve co-ordinating the basic sectors of the two systems. It was hoped that the need for building two systems would be removed. It was argued that the positive aspect of

the MPS is to clearly trace the use of physical resources in the course of production. The advantage of SNA is that it shows how production is tied to income and financial concepts. Integration should be seen as a global strategic task involving two-way traffic but where the end product was a set of macro indicators familiar to the proponents of both systems.

- 6. It became even clearer as the discussion progressed that the approach to integration adopted depended on the attitude adopted with respect to each of the types of differences outlined above. Several SNA experts explained that in the course of the review, one approach had been to question the rationale for decisions that had been made; for example, until now, military durables in SNA have been treated as current expenditure, whereas in MPS they are capital. However, it became clear that there was no very good rationale underlying the SNA convention, and the experts therefore felt that it was possible to suggest change in that area. It was felt that it might be appropriate to distinguish goods from material and non-material services, but the rationale for treating non-material services as non-productive was not clear to the SNA experts. If the concepts of material and non-material services were to be introduced in the SNA, it was felt that an adequate explanation of the distinction between them was necessary and that the risk of identifying non-material services and non-productive activity was considerable and, from the SNA point of view, to be avoided.
- 7. It was felt that the emphasis on institutional differences between the two systems could be overdrawn. For example, in the case of banks, conditions throughout the world are not such that there is a simple dichotomy between a commercial, profit-oriented bank and a State-run institution. Indeed, most countries have a banking sector which represents a compromise between those two extremes, although some countries are closer to one end of the range than the other. Nevertheless, methodology had been developed in order to deal with that range of banking activity within the SNA context, and it was intended that the explanations given in SNA for dealing with banks and their role as financial intermediaries should be adequate to cope with the wide variety of situations now prevalent throughout market economies. If necessary, an extension should cover the situation prevailing in the centrally planned economies as well.
- 8. Regarding the incidental differences, two approaches were proposed. Several participants felt that the differences should be eliminated as quickly and easily as possible, and that in some respects, it did not matter very much which of the two conventions was adopted. Other participants were concerned that to change a convention would introduce discontinuities with past practice; they therefore suggested that a bridge mechanism linking the existing conventions in both systems could be established. Several participants from the centrally planned economies that already compiled SNA aggregates said it was possible to compile SNA aggregates, such as gross domestic product (GDP), by using MPS conventions about intermediate consumption and by using SNA definitions. That, however, led to two estimates of GDP with basically minor differences, and it was not only resource—intensive for compilers but also confusing to the users. The proponents therefore felt that full harmonization was the preferred solution.
- 9. There was widespread agreement that the concepts and terminology of both

systems had to be universally understood and, as far as possible, the same terminology should not be used with a different interpretation in the alternative system. Where conceptual differences persisted, it would not be possible to fully integrate the concepts; but at a practical level, acceptable approximations could be made on both sides which could lead to an integrated framework rather than that of a single integrated system.

10. It was felt that it would be useful to define non-material services explicitly in terms of the revised international standard industrial classification (ISIC). The Statistical Office of the Council for Mutual Economic Assistance (CMEA) was requested to undertake an identification of the components of non-material services. It was hoped that that list would be included in the annex to the revised SNA which discussed links between the SNA and MPS.

II. PRODUCTION BOUNDARY

- 11. Gross output is the central production concept in both SNA and MPS. Although there is a great deal of common ground in the definition of the concept between the two systems, there are some points of difference that require clarification. In all, five areas were identified. They were as follows:
 - (a) How many household activities should be included within each system?
 - (b) What is the theoretically correct approach to illegal transactions?
- (c) Given the growing concern with environmental activities and their treatment in accounting systems, it was highly desirable that important differences did not emerge between the two systems. That concern covered both natural growth products and environmental activities, such as pollution control;
- (d) SNA precisely distinguishes resident from non-resident units in order to separate domestic from rest-of-the-world activities. There are no corresponding guidelines in MPS;
- (e) The SNA distinguishes changes in the value of stocks due to price movements from changes in volume, whereas at present, the MPS tends to ignore the price effect. The full implementation of these differences are spelt out in background document on the differences and definitions between SNA and MPS (ESA/STAT/AC.36/2, paras. 14-22).
- 12. Regarding household activities, it was explained that in the new SNA the criterion for including household activities within a production boundary would be much clearer and simpler. Basically, all home-produced goods that are capable of being sold on the market would be included, but in practice they will only be included if home-produced goods constitute a significant proportion of the total availability of the goods. Services produced in the home without payment would not be included in the accounts. Those proposals were not expected to lead to dramatic changes in practice but rather to easier implementation of the recommendations.

- 13. Some concern was expressed by MPS experts about a recommendation to be included in the new SNA that illegal activities should in principle be included within the production boundary. SNA experts explained that throughout the SNA review, a distinction had been drawn between what was the conceptually correct recommendation to make and what would be implemented in practice. It had been felt that there was no reason in principle for excluding illegal activities. Almost every type of activity had at some stage been illegal under some régime or other, and even now there was no international agreement on which activities were legal and which were illegal. It was therefore agreed that there was no reason to exclude illegal activities on conceptual grounds from the production boundary, although it was recognized that in practice it would be extremely difficult to make good estimates for many of those activities.
- 14. In MPS, the distinction between domestic and rest-of-the-world transactions was not yet clear; it was an area that needed to be developed. It was felt that the SNA guidelines would form a good basis for a discussion of that topic in a subsequent CMEA meeting.

III. INCOME CONCEPTS

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

IV. GROSS OUTPUT

- 16. Just as the production boundary is similar between the two systems, so is the concept of gross output. Again, however, there are specific areas where differences occur. The first of these is in respect of statistical units. The MPS does not have a unit that corresponds exactly to the SNA concept of establishment, although it is felt that the differences may reflect institutional arrangements as much as conceptual and perhaps terminological differences. Clarification is also required as to whether the definitions of principal and secondary production and ancillary activities are identical between the two systems.
- 17. One area where there is a difference between the two systems is in the consolidation of establishments to the same enterprise. The SNA consolidates

intra-establishment output but not intra-enterprise output, whereas MPS does consolidate the latter. This matter should be explored in the context of reconciling the definition of production units and output in the two systems. An area where this is a particular problem is in defining the gross output of agriculture. As well as reconciling the two systems, it was deemed desirable to take into account the recommendations of the Food and Agriculture Organization of the United Nations (FAO) in their economic accounts for agriculture.

- 18. The MPS treats the gross output of restaurants, cafes and the like as the margin added to the value of the products consumed. This treatment was used in the 1953 SNA, but the treatment was subsequently changed because of the need for integration. This difference affects gross output but not value added since similar differences exist in the definition of intermediate consumption in this case. It was suggested that the MPS experts might consider the rationale underlying the change from the 1953 to 1968 SNA and consider adopting this in MPS.
- 19. Another difference between the two systems concerns the treatment of tips and gratuities. These are treated as part of compensation of employees in SNA but as transfers in MPS. It was agreed that this was a typical case of an incidental difference where arguments could be made on both sides, but it was suggested that perhaps the MPS might follow the SNA convention. Another difference between the two systems concerns the treatment of second-hand goods and waste materials purchased by enterprises from households. In SNA these sales by households are regarded as negative consumption, but such a concept does not exist in MPS. It was recognized, however, that these products do not constitute current period production, and some adjustment to the accounts needed to be made to recognise this fact. As a result, it was again suggested that perhaps MPS might follow the SNA convention.

V. SUBSIDIES

20. Both SNA and MPS have difficulties in dealing with government intervention in an industry to ensure that a product is available to consumers at a price far below cost or at no cost. The different approaches to dealing with the problem does not reflect a difference between the two systems but rather one of economic interpretation. The traditional approach has been to treat the payment by government to the industry to cover their losses as a subsidy. This then affects the value of GDP at market prices and makes international comparison particularly difficult. An alternative approach is to treat the payment by government to industry as a purchase of the goods and services concerned, which would then be part of general government final consumption expenditure and then of actual final consumption of households. This eases the problems of international comparability but at the expense of imputing sales to government which would be included in the market price valuation of the company's output. This topic has given rise to extensive discussion in the course of the review of SNA, and as yet no solution has been reached. It was clear from the discussion in the present expert group meeting that similarly strong feelings were held by different CMEA countries and that consensus would be difficult to reach. Because no resolution could be reached during the meeting, it was suggested that when the SNA revision process has reached

an agreed solution, that solution should be studied by CMEA countries to see if they also could adopt it. Obviously the concerns and conditions of the CMEA countries will be taken into account by the SNA experts in attempting to reach an agreement for that system.

VI. DISTINCTION BETWEEN INTERMEDIATE AND FINAL CONSUMPTION

- 21. A number of incidental differences between the two systems were discussed under this heading, the first of which concerned business travel expenses. These are treated as intermediate consumption in SNA and as final consumption in MPS. Despite these recommendations, however, it is clear that not all countries implement the recommendations of the systems they use. After some discussion it was agreed that, in principle, the costs of travel and accommodation should be regarded as intermediate consumption and that all other business travel expenses, mainly representing an allowance for food, should be treated as final consumption. Although this decision was accepted in principle, it was recognized that almost every country would have difficulty implementing it in practice because data at such a detailed level was not available.
- 22. In the case of uniforms it was agreed that when uniforms are normally worn away from work they may be treated as income in kind, but otherwise they should be treated as intermediate consumption by the employer.
- 23. A more extended discussion took place on the question of expenditure by enterprises and other units on cultural, sporting and similar facilities. The SNA treats such expenditure either as income in kind or intermediate consumption of the producing units concerned. In MPS, these all tend to be treated as final consumption. During the course of the revision of SNA, there had been discussion about whether to introduce the concept of final consumption for enterprises, and this had been rejected for a number of reasons. The decision about whether such expenditure should be treated as income in kind or intermediate consumption depends on whether the expenditure primarily benefits employees or is mainly for the benefit of the employer. Payments primarily of benefit to the employees, especially if they are large, should be treated as compensation in kind. A further characteristic of income in kind is that the benefit can be attributed to an individual employee. Payments that are primarily of benefit to the employer should be treated as intermediate consumption. It was agreed that housing, free or lowprice meals and sporting and other facilities open to family members should be treated as compensation of employees in kind. On the other hand, especially nourishing meals provided to workers doing strenuous work, working clothes, washroom and shower facilities, medical and first aid services provided to employees at their place of work for work-related injuries should all be treated as intermediate expenditure. It was agreed that this distinction would apply to both systems.
- 24. One item on which conclusion was not reached was the treatment of food provided to inmates of prisons, hospitals and other institutions. Further discussion on this subject is necessary before a final decision can be made.

VII. INTERMEDIATE CONSUMPTION AND CAPITAL FORMATION

- 25. It was proposed to change the treatment of military durables in SNA so that all items which had a comparable civilian use would be treated as fixed capital rather than intermediate consumption. Only weapons and their means of delivery would continue to be treated as current intermediate consumption. This change in treatment brings SNA much closer to the treatment accorded in MPS.
- 26. At the present stage of the revision of SNA, it is proposed to extend the definition of capital formation to include expenditure on research and development and expenditure on mineral exploration. However in the course of review, several fundamental questions about the definition of assets and their treatment in the accounts had arisen. Further work was to be undertaken in that area in connection with the SNA review. It was agreed that the results of the work would be passed on to CMEA countries for their consideration.

VIII. CONSUMPTION OF FIXED CAPITAL

- 27. In the area of consumption of fixed capital, there appears to be an important difference between MPS and SNA. The problem is described in paragraphs 57 to 65 of the background paper on the differences in concepts and definitions between SNA and MPS (ESA/STAT/AC.36/2). In the discussion however, it was apparent that some of the differences between the two systems may be due more to practical considerations than theoretical constraints. The SNA estimates how much fixed capital is used up in the course of production in a year and what the replacement cost for this capital would be. The MPS on the other hand estimates the annual depreciation of assets based on the historic cost of the assets. Because for many years prices changed very slowly in the centrally planned economies, the difference between historic and replacement costs would not have been extreme. In more recent years, when it became apparent that historic costs did not represent the full cost of using capital in a given year, it became more common to do periodic revaluations of capital stock. It became apparent in the discussion that there was a close similarity between the concepts sought in both systems; both seek to measure the use of fixed capital. The MPS does this by means of a statistical survey of capital stock and the rate at which it is consumed. The SNA recommends an analytical approach using the perpetual inventory method. According to this method, a model is built which accumulates fixed capital as acquired and estimates consumption using assumptions about the life length of various types of assets and the relative price increases that should be applied to them. However, it was noted that in many countries using SNA, this approach is not adopted but rather figures recorded as depreciation in commercial accounts are used. It thus emerged that much of the difference between the two systems was whether an analytical approach should be used or whether an attempt should be made to measure capital consumption directly by means of a survey, which is the approach taken with every other aspect of the economic accounts. While direct measurement was held by many to be desirable in theory, grave reservations were expressed about the possibility of determining realistic data in this way.
- 28. Several participants pointed to the importance of consumption of fixed capital

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

IX. LOSSES

29. The MPS has a much more explicit and comprehensive set of guidelines for the treatment of losses than does SNA. In MPS, explicit allowance is made for loss of output, stocks and assets. In SNA, loss of output and stocks are implicitly included in intermediate consumption, but for assets the assumptions underlying the perpetual inventory method take account of average accounting losses only and not explicit occurrences. It was agreed that this area should be the subject of further study to see whether a consistent treatment could be implemented in both systems.

X. HOUSEHOLD CONSUMPTION

30. One of the by-products of the earlier work on SNA/MPS links was the introduction of a concept of consumption in the new SNA to be called "actual consumption of households", which is effectively the same as the total consumption of the population concept of the MPS. It was felt that both systems needed to include items corresponding to consumption expenditure and actual consumption as now defined in the revised SNA, with the appropriate terminology. Further, these concepts should be brought into line as far as possible by eliminating as many incidental differences as possible. The major difference that was seen to remain between the two concepts was the treatment of individualizable legal services. The reason that they are not presently included in actual household consumption in the SNA is pragmatic. It was decided to identify those individualizable expenses of government that should be treated as actual consumption of households by selecting appropriate headings in the Classifications of Functions of Government (United Nations publication Sales No.E.80.XVII.17) particularly those that related to health and education expenditure. It is recognized that in a number of countries individuals who cannot pay legal fees on their own behalf receive legal aid from the government, and this ought also to be treated as individualizable consumption. However, at present this legal aid is extremely difficult to separate out. It had been noted in the course of the SNA review that some changes to the Classifications of the Functions of Government would be desirable, especially in relation to the

treatment of actual consumption of households. That was another area where, if a change could be agreed to, the corresponding change to consumption would follow.

XI. CAPITAL FORMATION

31. It was noted that at present the treatment of unfinished construction in SNA and MPS is different. The MPS regards it as a change in stock, whereas SNA treats it as fixed capital when a contract for sale existed during the construction process. Discussion revealed a number of problems with that approach, for example, in the calculation of consumption of fixed capital, and it was agreed that the SNA treatment should be reviewed with a view to adopting the MPS approach.

XII. TRANSACTIONS WITH THE REST OF THE WORLD

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

XIII. INTEGRATED ACCOUNTS

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

XIV. FUTURE WORK

34. On the final day of the meeting, the discussion turned to a consideration of the future work programme in order to bring SNA and MPS closer together. It was noted that in the week immediately following the meeting, there would be a CMEA meeting in which the results of the expert group meeting would be discussed further. Staff from the Statistical Office of the United States Secretariat would participate in that meeting. The agenda would include the methodology for compiling GDP in MPS countries; a draft of the methodology exists, but considerable work still needs to be undertaken before this could be finalized. The second major item on the agenda was the long-term project concerning an integrated framework for MPS and SNA. It was hoped that participants at the CMEA meeting would endorse many of the recommendations put forward at that meeting.

- 35. A number of consequences of the CMEA meeting would be reflected in the SNA work. First, the main draft of the revised SNA would be changed, where necessary, to reflect changes suggested at the meeting and also to make clear how the concepts and conventions of SNA could be applied to centrally planned economies. The special circumstances that need to be covered include the treatment of banks, multiple exchange rates and the net measurement of capital formation.
- 36. The Statistical Office would also continue work on producing a handbook relating to the links between the two systems. The previous publication, Comparisons of the System of National Accounts and the System of Balances of the National Economy (United Nations publication, Sales No. E.77.XVII.6), had been useful in its time, but it was felt that a more extensive manual with detailed explanations of how SNA may be applied in centrally planned economies was now appropriate. The new Handbook will include reconciliation tables similar to those in the present manual for use by countries that continue to rely primarily on MPS.
- 37. It was noted that the CMEA countries should be given an opportunity to review the draft SNA to ensure that areas of particular concern to them were adequately described; there should also be an opportunity for feedback from the CMEA countries to be absorbed within the redrafting process for the new SNA manual.
- 38. The exchange of opinions during the expert group meeting revealed many detailed areas where general agreement could be reached by experts familiar with MPS and SNA. Equally, however, it had to be noted that there were a number of difficult outstanding issues where agreement could not as yet be reached. More work needed to be undertaken in order to reach consensus. The meeting endorsed the view that it was opportune to find ways to bring the systems closer together, and it was important not to postpone that work.
- 39. Reference was made to the high standard of documentation that was made available to the meeting, a list of which appears as an annex to the present report. Many of the specific points concerning differences between the two systems are found in the second of these papers (ESA/STAT/AC.36/2), but the high level and usefulness of all of the papers was noted.

XV. CONCLUSIONS

- 40. The objective of the meeting was to examine the possibilities for improving harmonization between the national accounting systems of SNA and MPS. That would improve international comparability, but it was recognized that there was a problem in converting data from the various national currencies into a common unit for international comparisons of levels of aggregates. For that purpose the calculation of (PPPs) was strongly recommended. Harmonization of SNA and MPS would facilitate calculation of PPPs and international volume comparisons.
- 41. Differences between MPS and SNA arise from three sources: differences in economic theory, institutional differences and "incidental" differences due to the fact that the systems were designed independently.

- 42. It is both possible and desirable to design an integrated framework which permits the derivation of the major aggregates of both SNA and MPS from the same coherent system of balances. This approach, based on the co-ordination of the relevant definitions and classifications of both systems, ensures a compatability of the figures of net material product (NMP) and GDP for the given country. The latter is essential for those countries that intend to use both SNA and MPS aggregates for economic analysis. The expression "integration of the two systems" may be easily misinterpreted; therefore the term "integrated framework" is preferable.
- 43. Even within countries using SNA, there are wide variations in institutional arrangements (for example, in the role of banks). The revised SNA is intended to give guidance on how to adequately account for all variations in institutional arrangements in measuring economic flows, including the arrangements prevailing in centrally planned economies.
- 44. "Incidental" differences have arisen largely due to the adoption of different conventions to resolve "borderline" problems. These can be resolved by changing the conventions in one system or the other, or both.
- 45. Many participants favoured the "harmonization" approach, and would remove as many differences as possible between concepts in the two systems, since a uniform treatment of transactions (e.g. business travel expenses) would substantially facilitate the work of those statistical offices which regularly compile both SNA and MPS aggregates. Some participants, however, preferred the "reconciliation" approach, which would preserve the differences between the concepts in the two systems and establish bridges (adjustment items) between those concepts.
- 46. Non-material services should be identified in terms of the revised ISIC. The Statistical Office of the CMEA Secretariat was requested to undertake this work. The full list of non-material services will be given in the annex of the revised publication dealing with SNA/MPS links.
- 47. The MPS has been extended to include supplementary systems of indicators of non-material services, income, consumption, and so on. To date these supplementary systems have not been fully integrated with the original system of material balances. The integration could be undertaken within a framework using the approaches in SNA as a model.
- 48. Guidelines need to be developed in MPS for the definition of residency for embassies, foreign subsidiaries, and so on. It is agreed that such guidelines should be based on those of the revised SNA.
- 49. Illegal activities should, in principle, be included in MPS as in SNA, although in practice there are substantial difficulties in making estimates that include these activities.
- 50. It was recognized that the distinction between production and redistribution in MPS differs from that in SNA; if the identity of MPS is to be maintained, the distinction should remain. At the same time in designing an integrated framework

for countries using both SNA and MPS, definitions of property income and transfers of the revised SNA should be taken into account.

- 51. The SNA and MPS treat sales of second-hand goods and waste materials from households to enterprises differently. It is agreed that MPS treatment of these items will be aligned with that of SNA.
- 52. In SNA the gross output of enterprises is obtained by combining gross output of constituent establishments, while MPS eliminates intra-enterprise turnover. Further work is required to explore this issue, and it should be done in conjunction with a reconciliation of the production units in the two systems.
- 53. The definition of gross output in agriculture needs clarification in SNA. It would be desirable to align both systems with each other and with the recommendations of the Food and Agriculture Organization of the United Nations (FAO) in its handbook on economic accounts for agriculture.
- 54. Tips or gratuities are treated as elements of factor services in SNA and as transfers in MPS. It was agreed that that was an incidental difference and that the MPS treatment would be reconsidered and most likely aligned with SNA.
- 55. The appropriate value to be attached to highly subsidized consumer goods and services (e.g. housing and medicine in some countries) for inclusion in total consumption of households is difficult to determine for both MPS and SNA. The commodities could be valued at the prices actually paid by households or at cost. The difference between these two valuations is, for convenience, described as a subsidy, but there is no universal agreement that it is the correct technical term to describe these payments in either system. At present the SNA position is undecided, but it is possible that the payments by government to the producers may be treated as purchases of the good or service consumed. The payments would thus form part of consumption expenditure of government and part of actual consumption of households. It is suggested that the eventual position adopted by the SNA be studied with a view to adopting a parallel solution for MPS.
- 56. It was suggested that the integrated "broad" version of the MPS will include both consumption expenditure and total consumption of the population. As far as possible, these two aggregates will be made consistent with, respectively, "consumption expenditure" and "actual consumption" as defined in the revised SNA.
- 57. As regards business travel expenditures, most participants agreed that expenditures on transportation and accommodation should be treated both in SNA and MPS as intermediate consumption of the employer, while all other business travel expenditures should be treated, in principle, as compensation of employees.
- 58. When uniforms are provided free to employees they should be treated as income in kind only if they are worn normally outside the place of work. Otherwise, they should be treated as intermediate consumption. This recommendation will be included in both SNA and MPS.

- 59. Participants could not agree on the appropriate treatment in SNA and MPS of food provided to immates of prisons, hospital patients and persons living in institutions. More study and a continued exchange of views are required.
- 60. Expenditure by enterprises which benefits employees can be distinguished according to whether the benefit is mainly for the employer or employee. Payments that are primarily of benefit to the employers should be treated in both systems as intermediate consumption. Payments that are primarily of benefit to the employees, especially if they are large, are to be treated as compensation in kind to employees. Where there is no clear distinction, the purpose of the expenditure should be the determining factor. As examples of this principle, the following enterprise expenditures will in general be treated as compensation of employees in kind and/or final consumption of households in both SNA and MPS: housing, free or low-price meals, and facilities open to family members. The following types of expenditures will in general be treated as intermediate expenditures of enterprises: nourishing meals provided to workers during strenuous work, working clothes, wash room and shower facilities, medical and first aid services provided to employees at their place of work for work-related injuries and illnesses.
- 61. The concept of consumption of fixed capital currently differs between SNA and MPS. The concept in SNA approximates as closely as possible the opportunity cost of using the asset in production; in calculating the opportunity cost the SNA estimates are based on the replacement value of the asset in question. The concept in MPS is based on the requirement that the accumulated value of fixed capital plus the value of scrap be equal to the invested value; the MPS estimates are based on the historical value of assets that are, however, periodically revalued. It was agreed to consider the inclusion in a future MPS a concept of consumption of fixed capital that would reflect the opportunity cost of using the asset as in SNA.
- 62. It was agreed that the integrated framework of MPS would include income, product and capital formation concepts defined both gross and net of consumption of fixed capital.
- 63. In discussing the treatment of losses on stocks, it was agreed that normal losses would be treated in both systems as corrections to output and intermediate consumption, depending on whether these are losses of finished or intermediate products. Losses due to calamities are treated in SNA in the "other changes in volume accounts" and in MPS as "compensation for losses" which is included as a separate element of final demand. Further study is needed to determine whether these two treatments can be harmonized.
- 64. There is a difference in the treatment between SNA and MPS of work-in-progress in construction. The revised SNA records it as capital formation when a contract for sale exists during the construction process, while MPS treats it always as change in stocks. Discussion of this item, however, revealed several difficulties implied by the proposed treatment in the revised SNA, particularly with regard to the calculation of consumption of fixed capital. It was therefore agreed that the SNA treatment should be reviewed with the objective of harmonizing SNA and MPS treatments.

- 65. It was agreed that legal services should be categorized either as individualizable legal services or legal services of a collective nature. The first group would include payments by government for defense lawyers in those instances where the defendants do not have the means to pay for these services themselves. These services should be included in total consumption of the population (actual consumption of households in SNA). It was noted that in order to apply this treatment, the <u>Classification of Functions of Government</u> would have to be amended in order to identify individualizable legal services separately.
- 66. Several differences between SNA and MPS were noted in the residency concept in the coverage and treatment of individual items of the external account and in the treatment of multiple exchange rates. The CMEA is at present revising foreign trade statistics and their links with MPS, and in this context it was agreed that amendments to MPS would be considered that would bring both systems closer together in this respect.
- 67. Strong interest was expressed by countries utilizing MPS in developing concepts of income, capital finance flows, revaluation and balance sheets in an integrated framework. It seems feasible that such an integration could be done on the basis of the SNA model.
- 68. The main text of the revised SNA should include all changes to SNA that have been agreed to in this meeting with regard to incidental differences between MPS and SNA. It will also explain some of the main ways in which the system can be adapted to the special circumstances of centrally planned economies. These adaptations include the treatment of non-profit banks, multiple exchange rates and net measurement of capital formation.
- 69. The annex on SNA/MPS links in the revised SNA will describe the main differences and will identify non-material services in terms of the ISIC (Rev.3).
- 70. The form of the handbook on SNA/MPS links will be different from the present United Nations publication Comparisons of the System of National Accounts and the System of Balances of the National Economy, Sales No. E.77.XVII.6. It will deal in more detail with adaptations of SNA to the special circumstances of centrally planned economies and will also include a framework for practical integration of SNA and MPS aggregates for use by countries that apply SNA and MPS in parallel. It will also include the reconciliation tables of the United Nations manual (Series F, No. 20) for use by countries that continue to rely primarily on MPS.
- 71. The CMEA countries will review the draft SNA to ensure that it meets their requirements.
- 72. It was agreed that the conclusions of the present meeting would be discussed in a CMEA meeting on national accounts and balances to be held from 12 to 15 December 1989. It would be followed by further meetings to implement the conclusions.

Annex I

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Annex II

LIST OF DOCUMENTS

Document number	Title or description
ESA/STAT/AC.36/1	Agenda
ESA/STAT/AC.36/2	Differences in concepts and definitions between the System of National Accounts (SNA) and the System of Balances of the National Economy (MPS)
ESA/STAT/AC.36/3	Possibilities of improvement of international comparability of major macroeconomic aggregates of CMEA member countries
ESA/STAT/AC.36/4	Integration of the System of Balances of the National Economy (MPS) and the System of National Accounts (SNA)
ESA/STAT/AC.36/5	Selected problems of the SNA/MPS relationship, statistical units, income statistics
ESA/STAT/AC.36/6	Adaptation of the System of National Accounts to countries with differing economic and social systems
ESA/STAT/AC.36/7	Total consumption of the population in the System of National Accounts and the System of Statistical Balances of the National Economy
ESA/STAT/AC.36/8	Possibilities of integration of the System of National Accounts (SNA) and the System of Statistical Balances of the National Economy (MPS)
ESA/STAT/AC.36/9	Report of the fourteenth session held in Geneva from 16 to 19 May 1989
ESA/STAT/AC.36/10	National accounting in Hungary (with special reference to the joint use of SNA and MPS)
ESA/STAT/AC.36/11	Use of aggregates of the System of National Accounts (SNA) in Poland
ESA/STAT/AC.36/12	Evaluation of the experience of the Federal Statistical Office, Czechoslovakia in the experimental work on the GDP-type indicator for Czechoslovakia
ESA/STAT/AC.36/13	Comparison of the balance sheets of Bulgaria and the national accounts of Finland
ESA/STAT/AC.36/14	Methodology used in converting Finnish data from SNA to MPS

Document number	Title or description
ESA/STAT/AC.36/15	Some experience in conversion of basic aggregates in economic balances of Yugoslavia according to the United Nations system of National Accounts (SNA)
ESA/STAT/AC.36/16	Transformation between SNA and MPS using input-output tables
ESA/STAT/AC.36/17	Some considerations on the integration of categories of income, expenditures and household consumption of material goods and services in the SNA and MPS
ESA/STAT/AC.36/18	Productive and non-productive spheres: quantitative approximation for Ecuador
ESA/STAT/AC.36/19	Estimates of net material product in the Indian economy, 1978-1979
ESA/STAT/AC.36/20	Experiences on the integration of global balances of the economy and national accounts