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CONCEPTUAL RELATIONSHIPS
BETWEEN THE REVISED SNA AND MPS

Report of the Secretary-General

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CONCEPTUAL RELATIONSHIPS BETWEEN THE REVISED SNA AND MPS

I. INTRODUCTION

1. At its fifteenth session the Statistical Commission requested the Secretary General "in co-operation with the Conference of European Statisticians, to continue the study on the relationship between the SNA and the MPS in order to improve the conceptual framework and adjustment rules for purposes of linking corresponding concepts and with a view to developing common basic aggregates of special interest" (Resolution 2 (XV), paragraph 2).
2. Pursuant to this resolution the following report has been prepared and is submitted to the Commission for consideration at its sixteenth session. Before the Commission's session, the report will also be considered by the Group of Rapporteurs on SNA/MPS links of the Conference of European Statisticians. The report of the Group of Rapporteurs will be made available to the Commission.
3. With regard to future work on the subject the Commission may wish to recommend the publication of a methodological study consisting of a modified and extended version of the report in the light of the comments of the Commission, the Group of Rapporteurs on SNA/MPS links and the plenary session of the Conference of European Statisticians. This extended version might include an illustration of the use of the conceptual framework, based on the conversion of data in respect of the main aggregates from one system to the other in the case of one or two SNA and MPS countries. The Commission may also wish to recommend that data converted from one system to another be collected and published at periodic intervals, e.g. every five years, for a number of countries.
4. In developing the framework set out in this report account has been taken of the results of earlier work on inter-system comparisons, carried out under the auspices of the Conference of European Statisticians. However, this earlier work was based on the original versions of the systems. While many of the conclusions reached are still valid, the conceptual framework for inter-system comparisons which was developed is not sufficiently adapted to the structures of the revised SNA and MPS. The approach adopted in the present paper is based on method for inter-system comparisons developed in the report on "Progress in relating the SNA and MPS" (E/CN.3/362), which was submitted to the Commission's fifteenth session, and which is more suitable for this purpose.

5. The form of the conceptual framework, and the amount of detail to be provided in it, depends on the particular parts of the systems, and the aggregates and their sub-divisions for which inter-system comparisons are considered meaningful and desirable. This question is considered in section II of this paper. In the following sections, the conceptual framework is developed step by step. First, a general description of the system is given, and a broad comparison of their structures is made, by presenting them in the form of matrices (Section III). Then, a detailed analysis is made of the differences in the concepts and definitions in the two systems (Section IV). On the basis of the results of this analysis, the two matrices are further developed, with a view to showing separately the elements of the different entries, which are treated differently in each system (Section V). Finally, the conceptual framework is completed by the derivation of a table showing the composition of the aggregates in the two systems in terms of "elementary flows" (Section VI). In the remainder of the report proposals are made concerning the specific adjustment or other tables which countries might be recommended to compile for international purposes (Section VII).

11. THE SCOPE OF THE FRAMEWORK FOR INTER-SYSTEM COMPARISONS

6. The purpose of international comparisons of national accounting aggregates may be described in broad terms as the study and comparison of the results of economic activity and the means by which these results are achieved. This calls in the first place for comparable data on the levels and trends of the main indicators of economic development. For meaningful interpretation of these data, it is necessary, however, that data should also be available, on a comparable basis, permitting the study of the structure of the different aggregates, their inter-relationship, and the factors by which their levels and trends are determined.

7. The conceptual framework for inter-system comparisons should therefore provide for comparison and adjustments of as large parts of the two systems as possible and meaningful. In principle, it would be possible to introduce in each of the systems all sub-divisions needed for a complete transformation into the other system and then to draw up a framework for full inter-system comparisons. In practice such a framework is likely to be of little use, since because of the institutional differences between the countries using SNA and MPS respectively, the comparison of certain parts of the systems would be of relatively little analytical interest. It would seem that inter-system comparisons are meaningful mainly in respect of those transactions and

flows which relate to comparable functions and which are not too much affected by institutional differences between countries, and that the conceptual framework for such comparisons should be limited to the parts of the systems in which these transactions and flows are recorded.

In the light of these considerations, the conceptual framework developed in this report concentrates mainly on comparisons and adjustments of flows relating to the supply and disposition of goods and services; the formation of income and selected aspects of the redistribution of income; and does not deal with financial flows (finance of current and capital transactions; transactions in financial assets and liabilities). This means that the framework is concerned mainly with the following accounts and tables in the two systems: in SNA - the production, consumption expenditure and capital formation accounts, and selected aspects of the income and outlay accounts; in MPS - the material balance and related tables, the first and fourth section of the financial balance (production, primary distribution and utilization of the global product and the national income) and selected parts of the second and third section of that balance (redistribution of the national income).

III. THE MAIN CHARACTERISTICS OF THE TWO SYSTEMS

9. The most concise and probably clearest way of describing the structure and contents of a national accounting system is to present it in the form of a matrix. In the revised SNA, this form is used for presenting the system. The revised MPS does not include a conceptual matrix, but such a matrix can be derived from the different tables of the system without undue difficulties.^{1/} Because of the advantages of the matrix form of presentation for displaying the conceptual differences between different accounting systems, it is adopted in this report as the basis for the establishment of a framework for SNA/MPS comparisons and adjustments.

10. In the following parts of this section the SNA matrix is shown in its simplest form, and a corresponding MPS matrix is developed. The purpose of these matrices is to provide a general description of the systems in broadly comparable form. Many subdivisions and other adaptations which are necessary for detailed comparisons of the contents of the systems are not yet introduced. However, with a view to showing

^{1/} It should be noted that some countries which use MPS type of accounting systems have drawn up matrices for the purpose of describing their national system.

already at this stage the main conceptual difference between the two systems, namely that of the definition of the production boundary, a distinction is made between "material" and "non-material" activities in the SNA matrix, and flows relating to the provision of non-material services are separately identified in the MPS matrix.

The SNA matrix

11. The SNA matrix is set out in Table 1 below. It corresponds to that given in Table 2.17 of the revised SNA (symbolic representation of the system) except on the following points:

- (a) The rows and columns for commodities have been sub-divided into
 - (i) goods and material services; and (ii) non-material services;and the rows and column for activities of industries into
 - (i) industries in the material sphere and (ii) industries in the non-material sphere.
- (b) The rows and columns relating to the revaluation accounts and balance sheets, which are not relevant to the inter-system comparisons considered in this report have been deleted.
- (c) Certain rows and columns which are of no direct interest for inter-system comparisons have been combined.

12. The composition of the entries in the matrix can be derived from the description of the contents of the sub-matrices of the original matrix given in the annex to Chapter II of SNA.

The MPS matrix

13. The MPS matrix shown in Table 2 below is derived from the financial balance, which is the most comprehensive table of the system and therefore provides the most suitable basis for describing the system in matrix form. As in the case of the SNA matrix, the entries represent sub-matrices. It should be noted that in many cases the financial balance provides only the sums of the rows or columns of these sub-matrices. The other tables of MPS provide the data from which the elements of these rows and columns can be derived.

14. In table 3, a condensed version of the MPS financial balance (in which the redistributive flows are combined into four main categories) is given, which shows the relationship between this balance and the MPS matrix. The contents of the entries in the matrix can be derived from this table.

Table 1. SNA Matrix

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Production	Commodities (incl. commodity taxes)	Material products	1		T _{1.3}	T _{1.4}	T _{1.5}	T _{1.6}	T _{1.7}						T _{1.13}	T _{1.14}				T _{1.18}		
		Non-material products	2		T _{2.3}	T _{2.4}	T _{2.5}	T _{2.6}	T _{2.7}													
	Activities	Industries (material)	3	T _{3.1}	T _{3.2}																	
		Industries (non-material)	4	T _{4.1}	T _{4.2}																	
		Producers of government services	5	T _{5.1}	T _{5.2}					T _{5.7}	T _{5.8}											
		Private services; domestic services and producers of private n.p. services	6	T _{6.1}	T _{6.2}					T _{6.7}		T _{6.9}										
Consumption	Expenditure	Household goods and services	7												T _{7.12}					T _{7.18}		
		Government purposes	8													T _{8.12}						
		Purposes of private n.p. bodies	9													T _{9.12}						
	Income and outlay	Value added	10	T _{10.1}	T _{10.2}	T _{11.3}	T _{11.4}	T _{11.5}	T _{11.6}													
		Income transfers	11																			T _{11.18}
		Institutional sectors	12									T _{12.10}	T _{12.11}									
Accumulation	capital formation	Increase in stocks	13																	T _{13.17}		
		Fixed capital formation	14																		T _{14.17}	
	capital finance	Capital transfers	15																		T _{15.17}	T _{15.18}
		Financial assets	16																		T _{16.17}	
		Institutional sectors	17												T _{17.12}			T _{17.15}	T _{17.16}			
Rest of the world: current and capital transactions		18	T _{18.1}	T _{18.2}			T _{18.5}		T _{18.7}					T _{18.11}			T _{18.15}	T _{18.16}			T _{18.18}	

Table 3. MFS Financial balance (condensed version)

	Production and primary distribution					Re-grouping of primary income	Balance of exports and imports	Redistribution								Mat. cost	Non-productive consumption	Cap. formation (net)	Losses
	Global product	Mat. cost	National income					Outgoings				Incomings							
			Total	Primary income of population	Primary income of enterprises			Transfers	Non-mat. services	Wages and salaries in non-mat. sphere	Other	Transfers	Non-mat. services	Wages and salaries in non-mat. sphere	Other				
Column of fin. balance	1	2	3	4	5	6	7	9, 10, 13, 14, 15, 18, 20	11,16	17	12,19	22,23, 26,27, 28,31 33	24,29	30	25,32	36	38	39	40
A. Material sphere	t _{2.1}	t _{1.2}	t _{3.2}	t _{4.3}	t _{5.3}	t _{4.3}	-	t _{6.10}	t _{7.10}	-	t _{9.10}	t _{10.6}	-	-	t _{10.9}	t _{1.2}	-	t _{17.10}	t _{18.10}
B. Non-mat. sphere	-	-	-	-	-	-	-	t _{6.11,} t _{6.12}	t _{7.11,} t _{7.12}	t _{8.11,} t _{8.12}	t _{9.11,} t _{9.12}	t _{11.6,} t _{12.6}	t _{11.7,} t _{12.7}	-	t _{11.9} t _{12.9}	-	t _{15.11,} t _{16.12}	t _{17.11} t _{17.12}	t _{18.11} t _{18.12}
C. Population	-	-	-	-	-	t _{13.4}	-	t _{6.13}	t _{7.13}	-	t _{9.13}	t _{13.16}	-	t _{13.8}	t _{13.9}	-	t _{14.13}	t _{17.13}	-
Total domestic	t _{2.1}	t _{1.2}	t _{3.2}	t _{4.3}	t _{5.3}	-	-	t _{6.10} to t _{6.13}	t _{7.10} to t _{7.13}	t _{8.11} to t _{8.12}	t _{9.10} to t _{9.13}	t _{10.6} to t _{13.6}	t _{11.7} to t _{12.7}	t _{13.8} to t _{13.9}	t _{10.9} to t _{13.9}	t _{1.2}	t _{14.x} to t _{15.x} t _{16.x}	t _{17.x}	t _{18.x}
D. Rest of world	-	-	-	-	-	-	t _{19.1} to t _{1.19}	t _{6.19}	t _{7.19}	-	t _{9.19}	t _{19.17}	-	t _{19.9}	-	-	-	-	-
E. Total	t _{2.1}	t _{1.2}	t _{3.2}	t _{4.3}	t _{5.3}	-	t _{19.1} to t _{1.19}	t _{6.x}	t _{7.x}	t _{8.x}	t _{9.y}	t _{x.6}	t _{x.7}	t _{13.8}	t _{x.9}	t _{1.2}	t _{14.x} to t _{15.x} t _{16.x}	t _{17.x}	t _{18.x}

Note: The entries in the table refer to the corresponding entries of table 2. In order to simplify the presentation entries corresponding to the sum of entries of a row or of a column of table 2 are identified as t_{x.6}, t_{x.7}... and t_{6.x}, t_{7.x}, etc.

IV. COMPARISON OF CONCEPTS AND DEFINITIONS IN SNA AND MPS

15. The matrices shown in Tables 1 and 2 of the previous section display the main structural differences between SNA and MPS, but they do not yet provide a basis for direct comparison of corresponding aggregates, because in many cases the composition of the entries in the cells of the matrix differ between the systems. For inter-system comparisons, entries in the two systems which differ in composition should be further sub-divided into components which can be separately identified in each system (referred to below as "elementary flows").

16. The following survey of concepts and definitions in SNA and MPS intends to give a relatively complete picture of the differences between the two systems. Each of these differences calls, in principle, for a sub-division of the flows in question into more detailed elementary flows. However, if all these sub-divisions were introduced the conceptual framework would be overloaded with many details which are of relatively little importance for actual comparisons. In developing the framework, therefore, only those differences were taken into account which are likely to be of quantitative significance. The other differences were disregarded, but then could be made the subject of separate adjustments outside the framework (i.e. the consequences of which are not traced through the systems as a whole) if in particular cases they are considered to have a significant effect on inter-system comparisons.

A. The transactor units in the systems

17. In SNA, two main classes of transactor units are used, one in connexion with the production, consumption expenditure and capital formation accounts, and the other with the income and outlay and capital finance accounts. In the production, consumption expenditure and capital formation accounts, categories of transactors are used which are designed to classify transactors according to the fashion in which they participate in the production and use of goods and services. Productive activities are systematically distinguished from consumption activities. Thus, public and private unincorporated enterprises are separated from government as a producer of government services and households as consumers and included among industries in the same category of producers as other units engaged in productive activities. The unit of observation used in grouping transactors into transactor categories and in classifying them by kind of activity is the establishment. In the income and outlay and capital formation accounts on the other hand, transactors are grouped into institutional sectors. In

these accounts, institutions are not sub-divided according to the functions carried out. Thus, government enterprises (insofar as they are not quasi-corporate units) are treated as part of the general government sector, and private unincorporated enterprises are included in the sector for households. The unit of observation and classification in respect of the enterprise sector is the enterprise.

18. In MPS there is also a dichotomy. In respect of the production and utilization of goods and material services, a functional distinction is made. Production of goods by households is included and classified under the same headings as similar production by enterprises. However, in the parts of the system dealing with the distribution and redistribution of the national income the "sectors"^{1/} distinguished are defined in terms of institutions, i.e. the sector population comprises households in their capacity of producers as well as that of consumers. Contrary to SNA, in MPS a single unit of observation and classification is used in respect of productive activities throughout the system, namely the enterprise.

19. There is therefore a difference between SNA and MPS in that in certain parts of the systems the establishment is used as the unit of observation and classification in SNA, and the enterprise in MPS. This difference, however, is likely to be of little practical significance, for the following reasons:

- (a) In centrally planned economies enterprises are to a very large extent organized on a kind of activity basis, i.e. the large majority of enterprises is engaged in a single kind of activity, often at a single location. In these cases the enterprise, therefore, coincides with the establishment in the SNA sense.
- (b) Cases exist where an enterprise comprises several establishments (in the SNA sense) engaged in different activities and/or at different locations. In these cases, the individual establishments often keep separate balance sheets and separate accounting records, and though they do not fulfil all legal requirements for being regarded as enterprises, they are not infrequently for statistical purposes treated as separate enterprises.
- (c) Enterprises engaged in more than one kind of activity at a single location, are also in centrally planned economies usually sub-divided into separate units, when (i) the relevant data relating to the different kinds of activity can be reported separately; (ii) the

^{1/} Units in the material sphere, units in the non-material sphere and population; it should be noted that the term "sectors" is not used in this sense in MPS.

activities in the different fields are quantitatively significant; and
(iii) they belong to different main groups of industries distinguished
in the industrial classification used (agriculture, industry,
construction etc.).

20. In practice, therefore, the enterprise unit used in MPS is very similar to the establishment in SNA. For this reason, and because adjustments are very difficult to make, it would seem that the difference in the units used should be disregarded in inter-system comparisons.

B. The borderline between resident and non-resident units

21. In SNA resident producers are defined so that all and solely production taking place on the domestic territory of a given country is encompassed (for details see paragraphs 5.100 to 5.102 of SNA). In MPS no explicit reference is made to the concept of resident unit, but the concept implicitly used is the territorial concept. From the indications given in MPS, it would seem that this concept corresponds to the SNA concept, except on the following points:^{1/}

- (a) Embassies, consulates, etc. which in SNA are treated as resident units of the countries which they are representing, are in MPS regarded as resident units in the countries where they are located;
- (b) International organizations are treated as non-resident units in SNA but probably as resident units in MPS.

22. In the conceptual framework developed in this paper these differences between the systems have been ignored. It is suggested, however, that they should be made the subject of separate adjustments in the case of comparisons between countries for which there is a significant quantitative difference between the two concepts.

C. Production

(a) The scope of productive activities

23. The quantitatively most important difference between the system is that of the boundary of production. In SNA with a few exceptions (e.g. illegal transactions) virtually all activities relating to the production of goods and the provision of

^{1/} It would seem that in some contexts, the currency in which the payment is made is the criterion for distinguishing resident from non-resident units, e.g. transactions in the domestic market against payment in foreign currency are treated as transactions with non-resident units.

services are treated as "productive". Only activities which are not conventionally commercialized (e.g. "cousin's" services) are excluded from the production concept. In SNA the production concept is limited to (i) goods and (ii) services related to the production, transportation and distribution of goods (usually referred to as material services)^{1/}. Other services (referred to as non-material services) are treated as outside the production boundary.

The following activities (in terms of the ISIC major groups or groups)^{2/} are treated as non-material activities in MPS:^{3/}

- 6340 Hotels, rooming houses, camps and other lodging places
- 6310 Financial institutions
- 8820 Insurance
- 831 Real estate^{4/}
- 832 Business services, except machinery and equipment rentals and leasing except 8324, engineering, architectural and technical services)
- 910 Public administration and defence
- 920 "Sanitary and similar services"
- 931 Educational services
- 932 Research and scientific services
- 9331 Medical, dental and other health services
- 934 Welfare institutions
- 945 Business, professional and labour associations
- 949 Other social and related community services
- 941 Motion picture and other entertainment services (except 9411 Motion picture production)

1/ Passenger transport, though not strictly falling under this definition of material services, is for practical reasons also treated as a material service.

2/ International Standard Industrial Classification of all Economic Activities, Statistical Papers, Series M, No. 4, Rev. 2.

3/ It should be noted that the term "non-material services" used here and in other parts of this paper includes certain services, e.g. financial and insurance services which at least in the context of the MPS financial balance are not normally referred to as non-material services.

4/ In SNA, a separate category "831* owner occupied dwellings" is distinguished. In MPS, the ownership of dwellings occupied by their owner is not treated as an activity (and no imputation of rents in respect of these dwellings is made).

- 942 Libraries, museums, botanical and zoological gardens and other cultural services not elsewhere classified
- 949 Amusement and recreational services not elsewhere classified
- 952 Laundried, laundry services
(part)
- 953 Domestic services
- 959 Miscellaneous personal services
- 960 International and other extra-territorial bodies

In addition there may be some other activities which are treated as non-material activities in MPS, e.g.

- (i) distribution of gas and water (part of ISIC 4102 and 4200);
- (ii) certain services incidental to transport (part of ISIC 7191) such as tourist agencies, tourist development services;
- (iii) storage of household goods (part of ISIC 7192);
- (iv) certain types of engineering, architectural and technical services, notably those which are not connected with construction (part of ISIC 8324);
- (v) part of veterinary services, namely those which are not connected with agriculture (part of ISIC 9332).

25. In order to enable the SNA matrix and the MPS matrix to be related one to another, distinctions are needed in the former between (i) goods and material services, and (ii) non-material services on the one hand and between (i) activities in the material sphere and (ii) activities in the non-material sphere, on the other. These distinctions were already introduced in the matrix shown in table 1 above. As can be seen from the preceding paragraph, they can be made largely on the basis of the ISIC. In a few cases sub-divisions below the ISIC four-digit level would in principle be required. The activities concerned are likely to be of relatively little importance. It would therefore seem that for the purpose of inter-system comparison in the context of SNA the whole of the activities covered by the ISIC groups concerned might be treated as activities in the material sphere.

(b) Gross output

26. In SNA, gross output is defined:

- (i) in respect of commodities: as the gross value of the goods and services produced;
- (ii) in respect of other goods and services: as the costs of producing the goods and services in question.

Global product, in MPS is defined essentially in the same terms, except of course that it includes only goods and material services. The concept of gross output and global product are in principle also affected by the differences in the transaction units used in the systems, but, as already pointed out, these differences are not likely to affect inter-system comparisons to any significant extent.

27. SNA gross output and MPS global product differ on the following points:

(i) Gross output of the catering trades

In SNA, the treatment of restaurants and cafés is the same as that of goods producing industries, i.e. gross output is defined as the gross value of the food and beverages sold, and input of "raw materials" (cost to the producer of the food and beverages sold) is treated as intermediate consumption. In MPS, the treatment of restaurants and cafés is similar to that of the distributive trade, i.e. only the gross margin realized in the sale of food and beverages is included in gross output (and the cost of food and beverages consumed is therefore not included in material cost).

(ii) Foreign trade

Contrary to SNA practice, in MPS foreign trade is distinguished from domestic trade. This is partly connected with the fact that in countries with centrally planned economies, the major part of foreign trade is carried out by specialized enterprises, and that there are restrictions with regard to transactions to foreign currencies. Gross output of foreign trade in MPS is, however, exactly the same as the gross trade margins realized in imports and exports in SNA. Using the notation of MPS gross output of foreign trade is defined as

$$(I_B - I_A) + (E_A - E_B) = (I_B - E_B) + C_A$$

in which:

I_A = Imports, converted to domestic currency by means of the official exchange rate

I_B = Sales of the imported commodities on the domestic market

E_A = Exports, converted to domestic currencies, by means of the official exchange rate

E_B = Purchase of commodities for export on the domestic market
 C_A = Net exports, converted into domestic currency by means of the official exchange rate ($= E_A - I_A$)

Note: In some countries with centrally planned economies, gross output of foreign trade is calculated in a different way. Instead of the official exchange rate, a computed exchange rate is used for converting net export. The "corrected" net export - which may be denoted by C_B - is calculated as follows:

- when $E_A < I_A$:

$$C_B = (E_A - I_A) \times \frac{I_B}{I_A}$$

- when $E_A > I_A$:

$$C_B = (E_A - I_A) \times \frac{E_B}{E_A}$$

In both cases the gross output of foreign trade equals $(I_B - E_B) + C_B$. It should be noted that the use of a computed exchange rate instead of the official exchange rate affects both the trade margin and net exports, but not the combined result of the two, since, irrespective of whether "corrected" or "uncorrected" magnitude are used gross output minus net exports equals $I_B - E_B$.

(iii) Waste materials sold by producing units

In SNA the sales value of waste materials which are by-products of the manufacture of commodities is included in gross output. In MPS it is not included in gross output, but deducted from intermediate consumption.

(iv) Waste materials bought from households

In SNA only dealers' margins and other transfer costs in connexion with the purchase of waste materials from households are included in gross output; in MPS the total value of the waste materials is included.

(v) Interest on credit sales

In SNA interest on credit sales is, at least in principle, separated from the selling price and treated as a transfer. In MPS interest on credit sales presumably enters the value of gross output.

(vi) The treatment of tips

In SNA tips are regarded as a payment for services, and included in the value of production. In MPS, they are probably treated as redistribution (transfer) payments and excluded from the production value.

28. Of the differences mentioned, those relating to the treatment of output of the catering trades and to sales of waste materials by producing units affect only gross output and not the measures of output net of intermediate consumption in the two systems (gross domestic product in SNA, national income in MPS). As for inter-system comparisons measures of net output are likely to be of greater interest than gross output, the difference in the concepts of gross output on these points are not taken into account in the conceptual framework. The other differences mentioned affect both gross and net output. However, as they are likely to be of little quantitative significance it is suggested that they should also be disregarded. The only inter-system adjustment proposed in respect of gross output is, therefore, that which relates to the treatment of non-material services.

(c) Intermediate consumption, consumption of fixed capital

29. In SNA the most important production aggregate is the gross domestic product, which is defined as gross output minus intermediate consumption. In MPS more emphasis is given to the concept of national income, which is net not only of intermediate consumption but also of consumption of fixed capital.

30. In addition to the differences already mentioned in connexion with gross output, intermediate consumption as defined in the two systems differs on the following points:

(i) Expenditure by enterprises and other units on cultural, sport and similar facilities for their employees

In SNA, these expenditure items are included in intermediate consumption in MPS in final consumption.

(ii) Travel expenses in connexion with business

In SNA reimbursements for travel expenses and other similar types of expenses incurred by employees in connexion with the business of their employers are treated as intermediate consumption. In MPS these travel and similar types of expenses (insofar as they relate to goods or material services) are treated as final consumption.

(iii) Expenditure on uniforms

In both systems the aim is to distinguish between dress uniforms and working uniforms. Expenditure on the first type of uniform is in principle treated as an income payment in kind (and included in final consumption) and expenditure on the latter type as intermediate consumption. There may, however, be some differences between the two systems as regards the practical application of this principle, e.g. as regards military uniforms used mainly for military exercise.

31. The first two differences mentioned may be of some quantitative significance, and have therefore been taken into account in the conceptual framework for inter-system adjustments. The differences in the treatment of uniforms, however, is likely to be of lesser importance and has therefore been ignored.

32. Capital consumption is, in principle, treated in the same way in the two systems (except that in MES, in accordance with the definition of the production boundary, capital consumption in the non-material sphere is treated as final consumption, and is not deducted in calculations of net output, whereas in SNA the measures of net output are net of all allowances for capital consumption). On the following specific points, however, there are differences between the two systems:

(i) Differences between the actual and the written off value of scrapped assets

In SNA the sales value of scrapped assets is treated as negative fixed capital formation. If this value differs from the written off value of the assets concerned, the difference is regarded as a capital gain or loss and not recorded in the production, consumption and accumulation accounts of the system. In MPS, however, such a difference is added to or deducted from the depreciation allowances during the year in which the asset is scrapped.

(ii) Capital formation in respect of afforestation and improvements to land and in respect of roads, bridges and similar structures

In SNA no capital consumption allowances are charged in respect of afforestation, improvements to land, and roads and similar structures, whereas in MPS it is recommended that depreciation on these items should be included in capital consumption.

(iii) Normal losses

In SNA, all normal losses (i.e. other than "unforeseen" losses) are included in capital consumption. It would seem that in MPS some normal losses are treated as a special category of utilization (shown under "losses" at the use side of the financial balance) which is excluded from depreciation or other intermediate consumption.

32. The framework for inter-system comparisons developed in this paper takes account of the first two differences. The differences in the treatment of normal losses is likely to be of less quantitative significance, and have therefore been disregarded.

(i) Valuation of production

34. In SNA two types of valuation are recommended: at producers' prices (ex production unit) or at purchasers' prices. In each case prices may be exclusive of all net indirect taxes (indirect taxes minus subsidies) - factor values - or exclusive of net commodity taxes - basic values - or inclusive of all net indirect taxes - market prices. In MPS a distinction is also made between valuation of producers' prices and at consumers' prices, but in both cases the valuation corresponds to the SNA valuation at market prices. In some countries using MPS valuation at market prices excluding turnover taxes is also used (in particular in respect of the main production aggregates). This basis of valuation is near to valuation at factor cost in the SNA sense, but because of a number of differences between turnover taxes and indirect taxes, not the equivalent of it.

35. It is proposed that for the purpose of inter-system comparisons valuation at market prices should be adopted. In this connexion it should be noted that certain taxes which in SNA are considered indirect taxes (import duties paid by households; some other taxes paid by households, such as taxes in connexion with the ownership of dwellings) are treated in MPS as direct taxes. As the differences are likely to be relatively unimportant, it would seem that they do not call for special adjustments.

36. While in SNA it is recommended that goods produced for the producers' own consumption should be valued at producers' prices, in the context of MPS these goods (notably in State and co-operative units) are, at least in some countries, valued at explicit cost. This difference, which is likely to be small, has not been taken into account in the framework for inter-system comparisons.

D. Final consumption

(a) Total final consumption

37. The differences between total final consumption expenditure in SNA and total final consumption in MPS result mainly from the differences in the production concepts adopted in the two systems. The most important difference is that in MPS final consumption is limited to goods and material services, whereas the corresponding concept of SNA includes non-material services as well. In MPS payments for non-material services are recorded as redistribution (transfer) payments, and only the material input used up in rendering these services is included in final consumption.^{1/} Other differences in the concepts of final consumption arising from differences in the production concepts relate to the treatment of:

- (i) sales of waste materials by households;
- (ii) interest on credit sales;
- (iii) expenditure by enterprises on cultural, sport and similar facilities for their employees;
- (iv) travel expenses in connexion with business;
- (v) import duties and certain indirect taxes paid by households.

These differences are described in paragraphs 27, 30 and 35 above, and the extent to which they should be taken into account in inter-system adjustments is discussed in paragraphs 28, 31 and 35.

38. A further difference between SNA and MPS is that in the former expenditure on fixed assets used for military purposes is treated as final consumption expenditure, whereas in the latter it is included in fixed capital formation. This difference is likely to be of sufficient importance to be taken into account in inter-system comparisons. While no provision is made for an adjustment in respect of this item in the conceptual framework, it would seem desirable that in actual comparisons such an adjustment be made, insofar as the countries concerned are able to provide the necessary data.

^{1/} As has been pointed out in paragraph 24, imputed rents on owner occupied dwellings, which are included in the SNA concept, are not recorded in MPS.

(b) the categories of final consumption

39. In both systems, three categories of final consumption are distinguished: in SNA (i) final consumption expenditure of households; (ii) government final consumption expenditure; and (iii) final consumption expenditure of private non-profit bodies serving households; and in MPS (i) personal consumption of the population; (ii) consumption of institutions serving the population; and (iii) consumption of institutions satisfying the community needs of the society.

40. The distinction between final consumption expenditure of households and other final consumption expenditure in SNA corresponds in principle with that between personal consumption of the population and other final consumption in MPS (except of course for the limitation of the MPS categories to goods and material services). The further sub-division of non-household final consumption, however, is based on different principles in the two systems: in SNA the criterion for the sub-division is the type of transactor providing the goods and services in question (government or private non-profit bodies); and in MPS it is the nature and the purpose of the goods or services furnished. While, in principle, it would be possible, by including more detailed breakdowns of final consumption in each system, to re-arrange SNA data according to the MPS categories and MPS data according to those of SNA, it would seem that because of the institutional differences between the countries using the systems, this would be of relatively little interest. It is therefore proposed that inter-system adjustments and comparisons should be limited to final consumption of households on the one hand and other final consumption (or total final consumption) on the other.

Final consumption of households

41. Apart from the differences mentioned in paragraph 37 above, which all affect the coverage of final consumption of households, the SNA concept of final consumption expenditure of households and the MPS concept of personal consumption of the population differ on the following points:

- (i) In SNA two concepts are employed: final consumption expenditure on the domestic market (expenditure of resident or non-resident households on domestic territory of the country); and final consumption expenditure of resident households (i.e. including expenditure abroad by resident households and excluding expenditure on the domestic territory by non-resident households). In MPS only one concept is used, which corresponds to the first SNA concept (possibly with some minor differences, e.g. the exclusion of expenditure on the domestic market against payment in foreign currency).

- (ii) In SNA expenditure of government services on goods and services accruing to households are treated as a transfer to households and included in their final consumption expenditure, if the households are relatively free to select the unit which is to furnish the goods and services in question and the terms on which they are to be supplied. In MPS, the criterion for the allocation of expenditure is that of the unit which actually pays for the goods and services in question. Expenditure by the government on goods and services accruing to households, irrespective of whether they have a free choice or not, is recorded as expenditure of institutions serving the population (as final consumption of these institutions, if the expenditure relates to goods or material services, and as redistribution payments, if it relates to non-material services).^{1/}
- (iii) In MPS, depreciation on dwellings (whether owner occupied or not) is allocated to personal consumption, whereas depreciation on fixed assets used in other parts of the material sphere is included in the other final consumption categories.
- (iv) In SNA, the provision of food, beverages and tobacco to members of the armed forces is treated as an income payment in kind, and the value of these goods is included in one of the other categories of final consumption.

42. It is proposed that, insofar as SNA is concerned, inter-system comparisons should be based on the concept of consumption expenditure in the domestic market. While the SNA matrix shows final consumption expenditure of resident households, it also provides the elements from which final consumption expenditure in the domestic market can be derived. The small differences between the SNA and MPS concepts referred to at the end of paragraph 41(i) are not likely to call for special adjustments.

43. The differences in the principle of allocation of expenditure and in the treatment of depreciation on dwellings mentioned in paragraphs 41(ii) and 41(iii) respectively are quantitatively more important, and provision for the adjustment for these differences is therefore made in the conceptual framework. In principle, an adjustment should also be made in respect of the difference in treatment of food, beverages and

^{1/} It should be noted, however, that the total value of goods and material services accruing to the population can be obtained from MPS by counting the categories of personal consumption and consumption of institutions serving the population.

tobacco provided to members of the armed forces (paragraph 41(iv)). The elementary flows to be distinguished for this purpose are not shown in the conceptual framework, but it is recommended that countries which are able to provide the necessary data should make a separate adjustment for this item.

Other final consumption

44. Total consumption of institutions serving the population and of institutions satisfying the community needs of the society, as defined in MPS, corresponds essentially to the material part of final consumption expenditure of government and private non-profit bodies in SNA, plus the material input of those units in the non-material sphere which are classified in SNA to industrials. There are a number of further differences between the two systems on the following points: (i) the treatment of expenditure on military equipment (paragraph 38); (ii) the allocation of expenditure by government on goods and services accruing to the population (paragraph 41(ii)); and (iii) the allocation of expenditure on food, beverages and tobacco to members of the armed forces (paragraph 41(iv)). The extent to which these differences should be taken into account in the conceptual framework for inter-system adjustments is discussed in paragraphs 38 and 43 above.

(c) Total consumption of the population

45. In MPS "total consumption of the population" is used as a supplementary concept. This concept covers the consumption of non-material services as well as of goods and material services, and includes both goods and services bought by the population out of its own income, and goods and services provided free of charge or at reduced prices. There is no corresponding concept in SNA.

46. Since the definition given in the MPS on the total consumption of the population is not exhaustive, it is not possible at this stage to determine exactly the differences between this concept and the SNA final consumption expenditures of households. In any case, total consumption of population is broader in scope than the SNA concept in that it includes all the expenditure by non-households (government, private non-profit institutions) on goods and services accruing to households (i.e. not only those where the households are free to choose the unit by which they are to be furnished). There might, however, be some further differences. It is possible that some types of services, which are covered by the SNA final consumption of households, are not included in MPS total consumption of population: e.g. insurance services, lottery and other gambling margins; or there might be differences in the ways in which the value of these services is determined.

E. Capital formation

47. In both systems the aggregates for capital formation and their main components, capital formation in stocks and fixed capital formation, play an important role. However, as in respect of production, in SNA more emphasis is given to the gross concept of capital formation (i.e. before deduction of allowances for capital consumption) whereas in MPS the net concept is more often used.

48. Since capital formation covers only goods and material services, the conceptual differences between SNA and MPS are less important than in the case of production and final consumption concepts. They result mainly from differences in the treatment of particular items of production and in the delineation of capital formation versus other categories of final utilization.

49. In accordance with the definition of resident units adopted or implied in the systems (paragraph 21 above) capital formation of embassies, consulates, etc. is treated as capital formation of the country of location in MPS, but as that of the country represented by the embassies etc. in SNA. Similarly, capital formation of international organizations is included in capital formation in MPS, but excluded in SNA. In most cases this difference is likely to be of minor importance. It has therefore been ignored in the conceptual framework.

50. There are the following further differences between SNA and MPS as regards the concepts of fixed capital formation and capital formation in stocks in the two systems:

(i) Work put in place or structures, road, dams, ports and other forms of construction

This item is included in fixed capital formation in SNA but in capital formation in stocks in MPS.

(ii) Expenditure on military equipment

In SNA, expenditure on military equipment is treated as final consumption expenditure, whereas in MPS it is included in fixed capital formation (see paragraph 38 above).

(iii) Refined gold imports and other monetary gold

In MPS, all changes in stocks of gold, whether for monetary purposes or not, are included in capital formation in stocks. In SNA, gold ingots and other monetary gold (i.e. gold other than gold ore, unrefined gold and gold for industrial use) are treated as financial assets. This implies that when non-monetary

gold is converted into monetary gold, an imputed commodity export is recorded, which is balanced by an imputed acquisition of financial assets. Changes in holdings of monetary gold therefore do not affect capital formation as defined in SNA.

(iv) Treatment of afforestation and other land improvements

Expenditure on afforestation and other land improvement is treated as fixed capital formation in both SNA and MPS. However, there may be a difference between the systems as regards the treatment of transactions in land, after improvement. In SNA, the total value of the land after improvement is recorded in the capital finance accounts, and fixed capital formation is not affected. In MPS on the other hand the value of the improvement (i.e. excluding the value of land before improvement) is probably recorded as negative fixed capital formation of the seller and positive fixed capital formation of the purchaser.

(v) Dealers margins and other transfer costs in respect of transactions in land, mineral deficits and similar non-reproducible assets

In SNA these margins and transfer costs are included in fixed capital formation; in MPS they are presumably excluded.

(vi) Treatment of losses

A distinction should be made between "unforeseen" losses (losses due to floods, earthquakes, unforeseen obsolescence, etc.) and "normal" losses (normal amount of accidental damage). In SNA unforeseen losses are treated as capital losses. They are taken account of in the balance sheet accounts, but do not affect capital formation. In MPS, on the other hand, such losses are charged against the capital formation, i.e. they are deducted from capital formation, during the year when they occur and they are shown as a separate use category "losses". The treatment of normal losses is in principle the same in both systems, i.e. they are accounted for in capital consumption (losses in fixed assets) or intermediate consumption (losses in stocks). There may, however, be some minor differences between the systems as regards the distinction between unforeseen and normal losses, in that certain losses, which in SNA are regarded as normal losses, are treated as unforeseen losses in MPS (and recorded in the category "losses").

51. In the conceptual framework provision is made for adjustments for differences in the treatment of work put in place on construction projects and of unforeseen losses. In principle, the differences in the treatment of expenditure on military equipment and of monetary gold also call for adjustments. They have not been introduced in the conceptual matrix but it is proposed that countries should make them, if the necessary data can be provided. The other differences mentioned are likely to be of lesser importance, and could therefore probably be left out of account in inter-system comparisons.

52. The differences described in the previous paragraph relate to both gross and net capital formation. The concepts of net capital formation are furthermore affected by the differences in the treatment of capital consumption. These differences have been discussed in paragraphs 32 and 33 above.

F. Losses

53. As mentioned before, MPS distinguishes a separate final use category for losses. There is no corresponding category in SNA. The differences in the treatment of losses in the two systems have been described in paragraphs 32(iii) and 50(vi) above.

G. Exports and imports

54. The concepts of imports and exports are affected by the delineation of the resident units in the systems. As pointed out in paragraph 21 above, there are some differences on this point between SNA and MPS, but it is not proposed that these should be accommodated in the framework for inter-system adjustments. They could be made the subject of separate adjustments in cases where they are of sufficient quantitative significance.

55. In accordance with the definition of the production boundary in the systems, imports and exports in MPS are limited to goods and material services, whereas in SNA non-material services are included as well. The conceptual framework provides the elementary flows on the basis of which adjustments for the difference can be made.

56. The SNA and MPS concepts of imports and exports differ on the following further points:

- (i) In MPS direct imports and exports by households are not included in imports and exports. They are recorded as part of a redistribution flow relating to the balance of receipts in foreign currency from foreign tourism. In SNA these direct imports and exports are included in imports and exports.

(ii) Purchases and sales abroad by resident units of goods which do not cross the border of the country concerned

In MPS, the purchases of these goods are included in imports and the sales in exports. In SNA, in the case of commercial trade, only the gross margins on the transactions are recorded and treated as exports of services.

(iii) Gold

In MPS no distinction is made between monetary and other gold. All transactions in gold with the rest of the world are included in imports and exports. In SNA, transactions in non-monetary gold (gold ore, unrefined gold and gold for industrial use) are treated in the same way as in MPS. Gold ingots and other monetary gold, however, are treated as financial assets and transactions in these assets with the rest of the world are not included in imports and exports (see paragraph 50(iii) above). On the other hand, when monetary gold is used for non-monetary purposes, or non-monetary gold is converted into monetary gold, this is recorded as an import or export respectively of goods and services (even though the gold does not cross the border of the country).

(iv) Licenses

In MPS purchases of licenses from, and sales to non-residents are included in imports and exports. In SNA they are not included in imports and exports, but treated as transactions in royalties or intangible assets, depending on whether the transaction represents a once-for-all transfer of the legal title or not.

(v) Gifts sent abroad or received from abroad by households

In SNA, these gifts are included in imports and exports, but in MPS they are probably not covered.

(vi) Adjustment to a change of ownership basis

In SNA, a special item is provided for, which permits adjustment of imports and exports from the time of recording normally used in foreign trade statistics, to a change-in-ownership basis, which is the general basis of recording transactions in the system. In MPS, such an adjustment is not provided for explicitly.

57. In the conceptual framework, an adjustment has been provided for the difference in the treatment of direct imports and exports of households. The difference in the treatment of gold may also be quantitatively significant. Though no adjustment is provided for in the conceptual framework, it is suggested in actual comparisons that a separate adjustment should be made if the necessary data can be made available. The other differences in the treatment of imports and exports are likely to be less important, and have therefore not been taken into account in the conceptual framework.

H. Value added - primary incomes

58. In both systems the starting point for the analysis of income is income from productive activities: in SNA, value added; in MPS, primary income. Value added as defined in SNA is gross of consumption of fixed capital, whereas MPS primary income is net of it. However, as in each system capital consumption is separately identified, this difference does not hamper inter-system comparisons.

(a) Total value added - primary income

59. Both SNA value added and MPS primary income are defined as gross output minus intermediate consumption (in the case of MPS, also minus capital consumption). The differences between the two concepts therefore correspond to those already described in connexion with the concepts of production and intermediate consumption in parts B and C of this section. The main difference is that MPS primary income is confined to income originating in the material sphere, whereas SNA value added includes income from non-material as well as from material activities. In MPS income-flows relating to non-material activities are treated as part of redistribution. Other differences between the two concepts arise from differences in:

- (i) the delineation of resident units (see paragraph 21 above);
- (ii) the treatment of sales of waste materials by households (paragraph 27(iii));
- (iii) the treatment of interest on credit sales (paragraph 27(v));
- (iv) the treatment of tips (paragraph 27(vi));
- (v) the treatment of expenditure by enterprises on cultural, sport and similar facilities (paragraph 27(i));
- (vi) the treatment of travel expenses in connexion with business (paragraph 30(ii));
- (vii) the treatment of capital consumption (paragraph 32);

60. The extent to which these differences should be taken into account in the conceptual framework have been discussed in paragraphs 21, 28, 31 and 32 above.

(b) The components of value added and primary income

61. The components of SNA value added are (in addition to capital consumption): compensation of employees; operating surplus; indirect taxes (net of subsidies); those of MPS primary income are: primary incomes of the population; and primary incomes of enterprises. SNA compensation of employees corresponds in principle to MPS primary incomes of the population; and SNA operating surplus plus net indirect taxes to MPS primary incomes of enterprises. There are however differences between the corresponding concepts as regards the allocation of particular items of income.

(i) Social security contributions

In SNA social security contributions paid by employers on behalf of their employees are included as compensation of employees; in MPS they are treated as redistribution payments out of the primary incomes of enterprises.

(ii) Employers' contributions to pension funds on behalf of their employees

In SNA employers' contributions to pension funds, actually paid or imputed, if no actual contribution is made, are included in compensation of employees. In MPS contributions actually made are treated as redistribution payments out of the primary income of enterprises. In cases where there is no actual payment, no contribution is made.

(iii) Net incomes of unincorporated enterprises (personal plots)

In SNA these incomes are included in operating surplus; in MPS in primary incomes of the population.

62. These differences have been taken into account in the conceptual framework for inter-system adjustments, except that for employers' contributions to pension funds the framework provides only for adjustments in respect of contributions actually made. It is proposed that adjustments for imputed contributions, if any, should be made separately.

1. Redistribution of income

63. Both SNA and MPS provide for a detailed further analysis of the redistribution of value added and primary income respectively, which leads to disposable income in SNA and final income in MPS. Pending the development of a system of statistics of the distribution of income, consumption and accumulation, which is complementary to SNA and MPS, no proposals for adjustment tables relating to these concepts are made in this paper, and the differences between the SNA and MPS concepts therefore need not be discussed.

V. THE ELEMENTARY FLOWS IN SNA AND MPS

64. The next step in the preparation of the conceptual framework for inter-system comparisons consists of the further development of the matrices of SNA and MPS, with a view to separating the components of the various flows which are treated differently in the two systems. The sub-divisions and other adjustments to the matrices needed for this purpose are discussed in the following paragraphs.^{1/}

A. Differences in the scope of production

65. The differences between the systems as regards the boundary of production call for (i) a systematic distinction between material and non-material activities in the SNA matrix and (ii) the separate identification of the relevant aspects of flows relating to non-material activities in the MPS matrix.

66. The distinction between "material" and "non-material" was already introduced in the production accounts (accounts for commodities and for activities) of the SNA matrix presented in table 1. The distinction is defined in terms of the ISIC, the activities covered by the ISIC major groups or groups listed in paragraph 23 above being regarded as non-material activities. As already pointed out, some of the ISIC groups listed include certain activities, which in MPS are regarded as material activities. These activities are likely to be of minor importance, and it is therefore suggested that they should be ignored in inter-system comparisons. The distinction between material and non-material made in the production accounts of SNA should also be introduced in the consumption expenditure accounts for household goods and services.

67. A further problem arising in the context of SNA that non-material services may be rendered, as a secondary activity by units whose main activity is of a material character, or that establishments engaged in material production may have secondary activities in the non-material sphere. It will often not be possible for the purpose of inter-system comparisons to separate such secondary activities from the main activities of the establishments concerned. It is therefore proposed that the units in question should be classified to the material or non-material sphere, according to their main activity, and that the whole of their output should be treated as material products or non-material products accordingly. This implies that in the matrix of table 2, the entries $T_{3.2}$, $T_{4.2}$, $T_{5.2}$ and $T_{6.3}$ are zero, and can be deleted.

^{1/} As already pointed out, in developing the framework for inter-system comparisons, account has been taken only of those conceptual differences between the systems, which are likely to be of some quantitative importance, and other differences have been disregarded. The ways in which the latter differences might be taken into account in separate adjustments are considered in Section VI below.

68. In the MPS matrix shown in Table 2, non-material services are shown as a separate heading under "redistribution". In the context of the MPS financial balance the term non-material services does not cover all services rendered by the non-material sphere, and excludes in particular services of the banking system and insurance services. Insurance services are shown under a separate heading of the financial balance, whereas banking services are included, but not shown separately, under other headings. For purposes of inter-system comparisons, it is desirable to combine all services, other than material services under the same heading. In the extended MPS matrix, the row and column for non-material services are therefore defined to include in principle all services other than material services.

69. There are also differences between SNA and MPS as regards the measurement of the results of certain activities:

- (i) In SNA, ownership of dwellings is treated as a separate activity, and imputations are made for rents of owner occupied dwellings. It is desirable that for purposes of inter-system comparisons, a similar imputation should be made in the context of MPS. The adjustments required have not been introduced explicitly in the MPS matrix, but it is suggested that in actual comparisons separate corrections should be made for this item.
- (ii) In MPS the flows relating to banking services relate to actual receipts and payments only, whereas in SNA they include imputed service charges. As the banking imputation may be difficult to make in the context of MPS, it may be necessary in SNA and MPS comparisons to exclude the banking imputation from the SNA data.
- (iii) A similar problem also arises in respect of insurance services (life insurance) in that in MPS there is no imputation in respect of changes in actuarial reserves. In the matrices this difference has been disregarded but it is suggested that in actual comparisons it should, if possible, be taken into account in a special adjustment item.

70. In order to enable MPS data to be adjusted to SNA concepts, sub-divisions in the MPS matrix are needed which permit the separation of the elements of gross output and value added of units engaged in non-material activities. As in SNA gross output is calculated differently for industries and for other producers - including operating surplus for industries, and in terms of cost excluding operating surplus for other producers - a distinction should be made in MPS between units which are

classified to industries in SNA and units which belong to the SNA category of other producers. In the developed MPS matrix, the headings for units in the non-material sphere serving community needs have therefore been sub-divided into "commodity producing units" and "non-commodity producing units".

B. Differences in the treatment of expenditure of enterprises and other units in connexion with the provision of cultural, sports etc. facilities to their employees

71. In SNA these expenditure items are included in intermediate consumption, together with the corresponding input items in respect of productive activities of the units concerned. In MPS, the expenditure in question is routed through the non-material sphere (units serving the population), and material expenditure in connexion with the services rendered therefore appears as consumption of these units.

72. In the SNA matrix therefore, an adjustment is necessary which permits the separation of expenditure on cultural etc. facilities from other input and a distinction within these expenditure items, between material and non-material cost. This has been done by introducing a dummy account for activities which receive the material products and non-material services, entering into the cultural etc. services provided from the commodity accounts, and distributes them between the different categories of producers. In principle, it would be necessary to separate also wages and salaries and other components of value added which are attributable to the provision of cultural services, but as these items are likely to be of minor importance (and it may be difficult to make the adjustments in practice), they have not been taken into account in the matrix.

73. In the MPS matrix, expenditure on cultural etc. facilities provided to employees of units in the material and the non-material sphere need to be separated from other redistributive flows. This has been achieved by distinguishing under the heading of transfers a separate item for this expenditure (covering both material and non-material expenses) and by introducing a dummy account, which collects the total amount spent by units in the material and non-material sphere, and distributes them between non-material services and consumption. As in the case of SNA, no account has been taken of wages and salaries etc. paid in respect of these kinds of services.

C. Differences in the treatment of reimbursements of travel cost, etc.

74. In SNA, these payments are also treated as part of intermediate consumption. In order to separate them from other inputs, a dummy account has been introduced, which is similar to that established for expenditure on cultural, sports, etc. facilities.

75. In MPS, reimbursements of travel cost are regarded as part of wages and salaries, and material expenses incurred by employees in connexion with official travel is included in their consumption. In the adjusted MPS matrix, reimbursements of travel cost are shown as separate items under primary income of the population and wages and salaries in the non-material sphere. Moreover the heading "consumption of the population" has been sub-divided into (material) expenses for travel reimbursed by employers; and other consumption of the population.

D. Differences in the treatment of consumption of fixed capital formation

76. In MPS consumption of fixed capital formation is included in material inputs of the material sphere and the non-material sphere. In order to permit adjustment of the data to SNA concepts, material inputs should therefore be sub-divided into consumption of fixed capital and should therefore be shown separately. A further sub-division of this item is necessary in order to separate the adjustments for scrapping of fixed assets and capital consumption in respect of afforestation, roads, etc. which in SNA are not included under this heading.

77. In the SNA matrix, consumption of fixed capital is already shown as a separate heading. As in the production, consumption and accumulation accounts of the system, no allowance is made for adjustments in the value of scrapped assets and capital consumption in respect of afforestation, roads, etc. the operating surplus is gross of these items. In order to provide a basis for comparisons with MPS concepts, they need therefore to be separated from this heading.

E. Differences in the treatment of capital formation

78. The adjustments arising from these differences are:

- (i) in the SNA matrix: the separation of the counterpart of unforeseen losses in fixed assets and in stocks from fixed capital formation and capital formation in losses respectively; and
- (ii) the separation in both systems of work in progress, in construction (which in SNA is treated as fixed capital formation and in MPS as capital formation in stocks).

F. Differences in the treatment of final consumption

79. In SNA expenditure by producers of government services or other producers on goods and services accruing to households, are included in final consumption expenditure of households, if the households are relatively free in choosing the units which are to furnish the goods or services in question; in MPS, on the other hand, the allocation of consumption is based on the criterion of the actual payment for the goods and

purchases. The SNA matrix already provides the elements from which SNA data can be adjusted to the MPS concepts. The adjustment of MPS data to the SNA concepts, however, calls for a further sub-division in the MPS matrix of the non-commodity producing units of the non-material sphere into units whose expenditure on goods and services is included in the SNA concept of final consumption expenditure of households, and other.

80. As in MPS consumption of fixed capital in respect of dwellings is allocated to personal consumption, this item should be separately identified in the SNA matrix. In the MPS matrix the separation of capital consumption from other intermediate consumption (see paragraph 76 above), already enables this item to be identified.

81. In order to permit not only the adjustment of SNA data to MPS concepts and vice-versa, but also the derivation from both systems of data corresponding to the concept of total consumption of the population (i.e. goods and services accruing to the population, irrespective of the source of finance), provision has been made in the adjusted SNA matrix, for a sub-division of producers of government services and of producers of private services into (i) serving households and (ii) serving community needs. In the MPS matrix this distinction is already made. This delineation between the two categories is discussed in section VII below.

G. Differences in the treatment of the elements of value added

82. As in SNA income of unincorporated enterprises is treated as part of the operating surplus, and in MPS as part of the primary income of the population (or wages and salaries in the non-material sphere), it is necessary to show this item in the two matrices under a separate heading.

83. A separate heading is also required for employers' contributions to social security and pension funds, which in SNA is included in compensation of employees, and in MPS in primary income of enterprises (or part of the operating surplus, in the case of units in the non-material sphere).

H. Differences in the treatment of direct imports and exports of households

84. In order to permit adjustment to SNA data, the "rest of the world" needs to be sub-divided in the MPS matrix, with a view to showing those transactions separately.

* * *

85. The adjusted SNA and MPS matrices, showing the elementary flows in the two systems are set out in tables 4 and 5 below.

VI. THE RELATIONSHIP BETWEEN CORRESPONDING AGGREGATES IN THE TWO SYSTEMS

86. The developed matrices of SNA and MPS set out in tables 4 and 5 provide the elementary flows of the two systems which can be grouped alternatively into the main aggregates of SNA or those of MPS, and therefore provide a basis for direct comparisons of the composition of these aggregates.

87. Tables 6a and 6b set out below complete the conceptual framework for inter-system comparisons. They show the relationship between the concepts of gross expenditure and its components in the two systems from the expenditure and the income sides respectively. The tables are derived from the developed matrices of the system, and the entries shown in the different cells refer to the rows and columns of the matrices in which the corresponding items appear.^{1/} The top half of the tables indicate the composition of corresponding aggregates in terms of the elementary flows of SNA, and the entries therefore refer to those of the SNA matrix of table 4. The bottom half does the same, but in terms of the MPS flows as shown in table 5.

^{1/} The figures before the / relate to the row numbers of the matrix in question, those after the / to the numbers of the columns. 12/21,25 therefore refers to the entries at the intersections of rows 12 and columns 21 and 25 of the relevant matrix; similarly 11,16,17/21 refer to the entries at the intersections of rows 11, 16 and 17 and column 21.

Table 6a Relationship between SNA and MPS (gross output, intermediate and final expenditure)

SNA	MFS	Material inputs	Consumption		Net fixed capital formation	Capital formation in stocks	Losses	Exports minus imports	Purchases of services	Redistribution					Direct exports of households (net)	Total	
			Population	Units in non-material sphere serving the population						Units in non-material sphere serving comm. needs	Cost of non-commodity services						
											Material consumption	Non-material consumption	Minus: sales of services	Expenditure on cultural etc. facilities			Wages and salaries incl. soc. sec. contribution
(1) In terms of SNA flows																	
Intermediate consumption	1/3	1/10	1/4, 5, 7, 9, 33/5	1/6, 8, 33/6					2/3-10 34/5, 6						1/3-10 2/3-10 33/5, 6 34/5, 6		
Final consumption expenditure of households		1/11							2/12 1/						33/11 34/12 -11/33 -12/34	1, 5, 7, 33/11 } 2, 3, 7, 34/12 } = -11/33 } 11, 12/24 -12/34 }	
Other final consumption expenditure															5, 6/13 7, 8/14	5, 6/13 } = 7, 8/14 } 12, 14/24	
Gross fixed capital formation	17, 18, 22/2	21/4	18/4, 5, 7 22/4, 5, 7	18/6, 8 22/6, 8	1/29 -17/3 -18/3-8 -21/4 -22/3-8	1/28	1/27									1/27-29	
Capital formation in stocks						1/26	1/25									1/25, 26	
Exports minus imports								1/33 -33/1, 5, 6	2/34 -34/2, 5, 6						11/33 12/34 -33/13 -34/12	1, 11/33 2, 12/34 -33/1, 5, 6, 11 -34/2, 5, 6, 11	
Total	1, 17, 18, 22/3	1/10, 11 21/4	1/4, 5, 7, 9 18/4, 5, 7 22/4, 5, 7 33/5	1/6, 8 18/6, 8 22/6, 8 33/6	1/29 -17/3 -18/3, 8 -21/4 -22/3-8	1/26, 28	1/25, 27	1/33 -33/1, 5, 6	2/3-10, 11, 34 -34/2 4-8, 20/2						5, 7/11 5, 7/12 2, 6/13 7, 8/14	- 3, 20/1 4-8, 20/2 5, 7/11 5, 7/12 5, 6/13 7, 8/14	
Gross output (MFS)			1/3-11, 25-29, 33 -33/1) = 3, 20/1												
(2) In terms of MPS flows																	
Intermediate consumption	1/5	1/27	1/29	1/30					8/6 14/19-25 16/20-22, 24, 25 -1/27							1/5, 29, 30 8/6 14/19-25 16/20-22, 24, 25	
Final consumption expenditure of households		1/28							1/27 14/26 -8/6 -16/20-22, 24, 25	29/22	14/22	-22/14	12/22	11, 16, 17/22	37/13 -13/37	1/27, 28 11, 12, 14, 17, 29/27 14/26 37/13 -8/6 13/37 -16/20, 21, 24, 25 -22/14	
Other final consumption expenditure										29/21 30/25	14/21, 25	-21, 25/14	12/21, 25	11, 15, 17/21 11, 16, 17/25		11, 12, 14, 16, 17, 29/21 11, 12, 14, 16, 17, 30/25 -21, 25/14	
Gross fixed capital formation	2-4/5	4/28	2, 4/29	2, 4/30	1/31 -2-4/31	1/32	1/34									1/31, 32, 34	
Capital formation in stocks						1/33	1/35									1/33, 35	
Exports minus imports								1/36 -36/1	14/36 -38/14						13/37	1/36 13/37 14/38 -36/1 -37/13 -38/14	
Total	1-4/5 1, 4/28	1, 27 1, 4/28	1, 2, 4/29	1, 2, 4/30	1/31 -2-4/31	1/32, 33	1/34, 35	1/36 -36/1	14/19-25, 38 -38/14 20-22, 24, 25/14	29/21, 22 30/25	14/21, 22, 25	-21, 22, 25/14	12/21, 22, 25	11, 16, 17/21 11, 16, 17/22 11, 16, 17/25	-	Gross output (SNA) 5/1 20, 24/14 11, 12, 14, 16, 17, 29/21 11, 12, 14, 16, 17, 29/22 11, 12, 14, 16, 17, 30/25	
Gross output (MFS)			1/5, 27-36 -36/1) = 5/1												

1/ Plus purchases of non-commodity services

2/ Minus sales of non-commodity services

Table 6b Relationship between SNA and MPS (gross output, intermediate consumption and value added)

MPS	Material input	National income		Non-material sphere				Total
		Population	Enterprises	Expenditure on cultural etc facilities provided to employees	Material consumption	Non-material services	Wages and salaries	
SNA								
(1) in terms of SNA flows								
Intermediate consumption	1/3	10/3	2,9/3	9/4-8	1/4-8 33/5,6	2/4-8 34/5,6	10/4-8	1/3-8 2/3-8 9/3-8 10/3-8 33/5,6 34/5,6 }
Value added								
- Compensation of employees		15/3	16/3				15/4-8	15/3-8 16/3-8
- Operating surplus (incl net indirect taxes)	17,18/3	19/3	20/1,3		18/4-8		19/4	17/3 18/3-8 19/3,4 20/1-4
- Consumption of fixed capital	22/3				21/4 22/4-8			21/4 22/4-8
Total	1,17,18,22/3	10,15,19/3	2,9,16,20/3 20/1	9/4-8	1/4-8 18/4-8 21/4 22/4-8 33/5,6	2/4-8 34/5,6	13/4-8 15/4-8 19/4	Gross output (SNA): 1/3-8 2/3-8 9/3-8 10/3-8 15/3-8 16/3-8 17/3 18/3-8 19/3-8 19/3,4 20/1-4 21/4 22/4-8 33/5,6 34/5,6 }
	Gross output (MPS) 1,2,9,10,15-20,22/3 20/1 } = 3,20/1							3,20/1 4-8,25/2 5,7/21 5,6/13 7,8/14 }
(2) in terms of MPS flows								
Intermediate consumption	1/5	8/6	12,14/19	12/20-22,24,25 29/20-22 30/24,25 -2/29,30 -4/29/30	14/20-22,24,25	16/20-22,24,25		1/5 8/6 12/19-22,24,25 14/19-22,24,25 16/20-22,24,25 29/20-22 30/24,25 -2/29,30 -4/29,30 }
Value added								
- Compensation of employees		9/6	11/19				17/20-22,24,25	11/20-22,24,25 9/6 11/19-22,24,25 17/20-22,24,25
- Operating surplus (incl net indirect taxes)	2,3/5	7/6	10/6 -11,12,14/19		2/29,30		15/20,24	2/5,29,30 3/25 7,10/6 15/20,24 20,24/14 -11,12,14/19 -11,12,14-17,29/20 -11,12,14-17,30/24 -4/28
- Consumption of fixed capital	4/5				4/28-30			4/5,28-30
Total	1-4/5	7-9/6	10/6	12/20-22,24,25	29/20-22 30/24,25 4/28	14/20-22,24,25	15/20,24 16/20-22,24,25 17/20-22,24,25	5/- 20,24/14 11,12,14,16,17,29/21 12,14,16,17,29/22 11,12,14,16,17,30/22
	Gross output MPS 1-4/5 7-10/6 } = 2-4/5 6/5 } = 5/1							-12,14-17,29/20 -12,14-17,30/24 -4/28

VII. PROPOSED ADJUSTMENT AND SIMILAR TABLES

88. The purpose of this section of the report is to present proposals concerning the tables for adjusting SNA data to MPS concepts and vice versa, that countries might be recommended to compile at periodic intervals.

A. Adjustment tables relating to the main aggregates in the two systems

89. Tables 6a and 6b set out in the previous section of this report may themselves constitute a suitable form for the presentation of inter system adjustments of the main aggregates of SNA and MPS. An alternative form of presentation is given in tables I, II and III below. This form may have the advantage that it permits the various adjustments to be specified in more detail, and that it permits more easily the inclusion of additional adjustments, for differences between the systems which are not taken into account in the general framework, in cases where these differences are of some quantitative importance^{1/}.

90. In tables I, II and III the flows and adjustment items are again defined in terms of the entries of the SNA and MPS matrices shown in tables 4 and 5. The tables can be derived directly from tables 6a and 6b.

^{1/} e.g. differences in the definition of resident units, the treatment of sales of waste materials, military equipment, food and beverages provided to members of armed forces, monetary gold, re-exports, gifts to and from abroad (see section IV of this paper)

Table I. PRODUCTION

SNA flows	Description of flows	MPS flows
A. GROSS OUTPUT		
3, 20/1 + 4-8, 20/2 + 5, 7/11 + 5, 7/12 + 5, 6/13 + 7, 8/14 3, 20/1 4-8, 20/2 5, 7/11 5, 7/12 5, 6/13 7, 8/14	<u>1. Gross output as defined in MPS</u> + 2. Value of non-material services sold + 3. Cost of non-commodity services produced (excluding cost of cultural, sports etc. facilities provided by enterprises to their employees) (a) Material consumption (b) Non-material consumption (c) <u>minus</u> sales of services (d) transfers in connexion with the provision of cultural, sports etc. facilities to employees (e) wages and salaries, incl. employee's contribution to social security and pension funds = 4. <u>Gross output as defined in SNA</u>	5/1 + 20-22, 24, 25/14 + 29/21, 22 + 30/25 14, 21, 22, 25 - 21, 22, 25/14 + 12/21, 22, 25 + 11, 16, 17/21 + 11, 16, 17/22 + 11, 16, 17/25 5/1 20, 24/14 11, 12, 14, 16, 17, 29/21 11, 12, 14, 16, 17, 29/22 11, 12, 14, 16, 17, 30/25
B. INTERMEDIATE CONSUMPTION		
1, 17, 18, 22/3 - 17, 18, 22/3 + 1/10 + 1/4-9 + 33/5, 6 + 2/3-9 + 34/5, 6 + 3/10 1/3-10 2/3-10 33/5, 6 34/5, 6	<u>5. Intermediate consumption as defined in MPS</u> - 6. Consumption of fixed capital in the material sphere (including capital consumption in respect of afforestation, roads etc. and adjustments for the scrapping of fixed assets) + 7. Material part of travel cost reimbursed by employers + 8. Material consumption of units in the non-material sphere (including material part of expenditure by enterprises for the provision of cultural etc. facilities) 9. Input of non-material services (a) purchases of services by the non-mat. sphere (b) non-material part of expenditure on travel reimbursed by employers = 10. <u>Intermediate consumption as defined in SNA</u>	1-4/5 - 2-4/5 + 1/27 + 1/29, 30 + 14/19-26 + 8/6 + 16/20-22, 24, 25 - 1/27 1/5, 29, 30 8/6 14/19-25 16/20-22, 24, 25
C. GROSS DOMESTIC PRODUCT (SNA) / NATIONAL INCOME (MPS)		
3, 20/1 - 1, 17, 18, 22/3 + 4-8, 20/2 + 5, 7/11 + 5, 7/12 + 5, 6/13 + 7, 8/14 - 1/10 - 1/4-9 - 33/5, 6 - 2/3-10 3, 20/1) 15/3-8 4-8, 20/2) 16/3-8 5, 7/11) 17/3 5/7, 12) 17/3 5, 6/13) = 18/3-8 7, 8/14) 19/3, 4 - 1/3-10) 20/1-4 - 2/3-10) 21/4 - 33/5, 6) 22/3-8 - 34/5, 6)	<u>11. National income as defined in MPS</u> (item 1 minus item 5 above) + 12. Value of non-material services sold (item 2) + 13. Cost of non-commodity services produced (item 3) + 14. Consumption of fixed capital in the material sphere (item 6) - 15. Material part of reimbursed travel cost (item 7) - 18. Material consumption of units in the non-material sphere (item 8) - 19. Input of non-material services (item 9) = 20. <u>Gross domestic product as defined in SNA</u> (item 4 minus item 10)	5/1) = 6/5 - 1-4/5) + 20-22, 24, 25/14 + 11, 12, 14, 16, 17, 29/21 + 11, 12, 14, 16, 17, 29/22 + 11, 12, 14, 16, 17, 30/25 - 21, 22, 25/14 + 2-4/5 - 1/27 - 1/29, 30 - 14/19-25 - 8/6 - 16/20-22, 24, 25 + 1/27 6/5 2-4/5 20, 24/14 11, 12, 14, 17, 29/21 11, 12, 14, 17, 29/22 11, 12, 14, 17, 30/25 - 1, 29, 30 - 8/6 - 14/19-25 - 16/20, 24

TABLE II. UTILIZATION OF PRODUCT

SNA flows	Description of flows	MPS flows
A. FINAL CONSUMPTION OF HOUSEHOLDS		
1/10, 11 21/4 -21/4 -1/10 +2/12 + 5, 7/11 + 5, 7/12 1, 5, 7, 3/11) 2, 5, 7, 4/12)	<u>1. Personal consumption of the population as defined in MPS</u> - 2. Consumption of fixed capital in dwellings - 3. Material expenditure in connexion with reimbursed travel + 4. Purchases of non-material services by households (excluding non-material part of expenditure on travel reimbursed by employers) + 5. Cost of services rendered free to households, where the household is relatively free to choose the unit which is to furnish the services (a) Material consumption (b) Non-material consumption (c) Minus sales of services (d) Transfers in connexion with the provision of cultural, sports, etc. facilities (e) Wages and salaries, including employers' contributions to social security and pension funds = 6. <u>Final consumption expenditure of households in the domestic market as defined in SNA</u>	1/27 1, 4/28 - 4/28 - 1/27 + 14/26 + 1/27 - 8/6 - 16/20 - 22, 24, 25 + 29/22 + 14/22 - 22/14 + 12/22 + 11, 16, 17/22 1/27, 28 11, 12, 14, 17, 29/22 14/26 - 8/6 - 16/20, 21, 24, 25 - 22/14
B. OTHER FINAL CONSUMPTION		
1/4-9 18/4-8 22/4-8 33/5, 6 -1/4 - 18/4 - 22/4 - 1/9 + 15/5-8 + 16/5-8 + 10/5-8 + 2/5-8 + 9/5-8 - 5, 7/11 - 5, 7/12 - 5-8/2 1/5-8) 2/5-8) 9/5-8) 10/5-8) 15/5-8) = 5, 6/13 16/5-8) 7, 8/14 33/5, 6) - 5, 7/11) - 5, 7/12) - 5-8/2)	<u>7. Other final consumption as defined in MPS</u> - 8. Material consumption of commodity producing units in the non-material sphere - 9. Material expenditure of enterprises in connexion with the provision of cultural, sports, etc. facilities + 10. Wages and salaries, reimbursement of travel cost and other non-material inputs of non-commodity producing units in the non-material sphere (a) wages and salaries, incl. contributions of employers to social security and pension funds (b) Reimbursements of travel cost (c) Input of non-material services (d) Expenditure of the units on cultural etc. facilities for their employees - 11. Cost of free services provided to households (where the households are relatively free to choose the unit which is to furnish the services) - 12. Sales of services = 13. <u>Other final consumption expenditures as defined in SNA</u>	1, 2, 4/29) = 29/20-23 1, 2, 4/30) = 30/24, 25 - 29/20 - 30/24 - 29/23 + 11/21, 22, 25 + 17/21, 22, 25 + 16/21, 22, 25 + 14/21, 22, 25 + 12/22, 23, 25 - 11, 12, 14, 16, 17, 29/22 + 22/14 - 21, 22, 25/14 11, 12, 14, 16, 17, 29/21 11, 12, 14, 16, 17, 30/25 - 21, 25/14

TABLE II. UTILIZATION OF PRODUCT (cont'd)

SNA flows	Description of flows	MPS flows
C. FIXED CAPITAL FORMATION AND LOSSES		
1/29 - 17/3 - 18/3-8 - 21/4 - 22/3-8 + 1/27 + 1/28 + 21/4 + 22/3-8 + 17/3 + 18/3-8 1/27-29	<u>14. Net fixed capital formation as defined in MPS</u> + <u>15. Losses in fixed assets as defined in MPS</u> + 16. Work in progress in construction + 17. Consumption of fixed capital + 18. Consumption of fixed capital in respect of infrastructure, roads, etc. + 19. Adjustment for scrapping of fixed assets = <u>20. Gross fixed capital formation as defined in MPS</u>	1/31 - 2-4/31 + 1/34 + 1/32 + 4/31 - 2/31 - 2/31 1/31 32 33
D. CAPITAL FORMATION IN STOCKS		
1/26, 28 + 1/25 - 1/28 1/25, 26	21. Capital formation in stocks as defined in MPS + <u>22. Losses in stocks as defined in MPS</u> - 23. Work in progress in construction = <u>24. Capital formation in stocks as defined in SNA</u>	1/32, 33 + 1/35 - 1/32 1/33 35
E. EXPORTS AND IMPORTS		
1, 33 - 33/1, 5, 6, + 2, 34 - 34/2, 5, 6, + 11/33 + 12/34 - 33/11 - 34/12 1, 11/33 2, 12/34 - 33/1, 5, 6, 11 - 34/2, 5, 6, 12	<u>25. Exports minus imports as defined in MPS</u> + 26. Exports minus imports of non-material services + 27. Direct exports by households minus direct imports = <u>28. Exports minus imports as defined in SNA</u>	1/36 - 36/31 + 14/38 - 38/14 + 13/37 - 37/13 1/36 13/37 14/38 = 36/1 - 37/13 - 38/14

Table 11. INCOME

MPS flows	Description of flows	MPS flows
A. COMPENSATION OF EMPLOYERS (SWA)/PRIMARY INCOME OF THE POPULATION (MPS)		
10/15, 19/3	1. Primary income of the population as defined in MPS	7-5/6
- 30/3	2. Expenditure on travel etc., reimbursed by the employer	- 8/6
- 19/3	3. Operational surplus of units of mixed enterprises in the material sector	- 7/6
+ 16/3	4. Employers' contributions to soc. security and pension funds	+ 11/19
+ 16/3-5	(a) material sphere	+ 11/20-22, 24, 25
+ 5/2-6	(b) non-material sphere	+ 17/20-22, 24, 25
11/3-4	5. Wages and salaries in the non-material sphere	9/5
10, 13-8	6. Compensation of employees as defined in SWA	11/3, 22, 24, 25 17/2, 22, 24, 25
B. OPERATING SURPLUS (INCLUDING NET INDIRECT TAXES) (SWA)/PRIMARY INCOME OF ENTERPRISES (MPS)		
2, 9, 16, 26/5	7. Private income of enterprises as defined in MPS	10/6
- 17/3	8. Capital formation in afforestation, roads, etc.	- 3/5
+ 19/3	9. Net income of unincorporated enterprises in the mat. sphere	+ 1/6
2/3	(a) manufacturing in the material sphere	- 14/19
3/3	(b) expenditure on cultural, sports, etc. facilities for employees in the material sphere	- 12/19
- 16/3	10. Employers' contributions to social security and pension funds in the material sphere	- 11/19
0/3	11. Adjustment of scrapping of fixed assets	+ 2/5
+ 18/4-8	(a) in the material sphere	+ 2/29, 30
- 19/4	(b) in the non-material sphere	+ 15/20, 24
+ 21/3-4	12. Net income of unincorporated enterprises in the non-material sphere	+ 20, 24/14 - 11, 12, 14-17, 29/20 - 11, 12, 14-17, 30/24 - 4/28
17/3	13. Operating surplus in the non-material sphere (incl. net indirect taxes)	2/5, 29, 30
10, 17-8	14. Operating surplus incl. net indirect taxes as defined in SWA	3/5
19/3-4		7, 10/6
17, 1		15/20, 24
		20, 24/14
		- 11, 12, 14/17
		- 11, 12, 14-17, 29/20
		- 11, 12, 14-17, 30/24
		- 4/28
C. CONSUMPTION OF FIXED CAPITAL		
11/3	17. Consumption of fixed capital as defined in MPS	2/5, 29, 30
18/3-8		3/5
21/4		4/5, 28-30
22/3-8		
- 17/3	18. Capital formation in afforestation, roads, etc.	- 3/5
18/3-8	19. Adjustments for the scrapping of fixed assets	- 2/5, 29, 30
21/4	20. Consumption of fixed capital as defined in SWA	4/5, 28-30
22/3-8		

B. Supplementary tables

91. In addition to the adjustment tables proper, it would seem desirable in the context of inter-system comparisons to provide for one or more tables relating to concepts which are not used as such in the systems (or not in both systems), but which may be regarded as of particular interest for comparisons between countries with different systems.
92. An example of such a concept is that of total consumption of the population, which covers the total value of goods and services (non-material as well as material) accrued to households, irrespective of whether the expenditure on the goods or services is financed out of the income households or otherwise. This concept is not used in SNA. It does not appear in the main tables of MPS either, but is referred to in the text of the MPS document as a supplementary concept. For the purpose of inter-system comparisons, however, some adaptations of the MPS concept may be desirable.
93. Table IV below suggests the form in which a supplementary table on total consumption of the population might be presented. Several aspects of the definition and coverage of the concept of total consumption of the population need further consideration. Table IV in its present form should therefore be regarded as tentative.
94. The main question regarding the definition of the concept, that needs to be considered is that of the range of services to be included. The concept, as implicit in table IV, includes all services which are provided by units in the non-material sphere serving the population, as defined in MPS, i.e. in particular personal services, housing services, cultural services, sports, health services, educational services and social security. It excludes such services as public administration, defence and research and scientific services. The subdivision of producers of government services and private services into units serving households and units serving community needs, made in the extended SNA matrix shown in table 4 is in principle based on the same criterion. While in MPS certain banking and insurance services rendered to the population are covered in the concept of total consumption, no precise indications are given as to the extent to which these services are included. The MPS concept of total consumption seems to include expenditure by enterprises and other units on cultural, sports and similar facilities provided to their employees. This treatment is also proposed in table IV. On the other hand, this table excludes expenditure on travel etc. for which employees are reimbursed from the concept of total consumption, whereas this item is presumably included in the MPS concept.

95. For international purposes, it would be desirable to relate the coverage of total consumption of the population to the ISIC (or the classifications of purposes of government and purposes of private non-profit bodies serving households of SNA), as well as to the relevant classifications of MPS. As already pointed out, this question needs further consideration before more specific proposals can be made. More detailed precision of the coverage of the concept used in MPS would also be needed.

96. Another concept for which it might be desirable to provide a supplementary table is that of disposable income. This concept is used only in SNA, but it can also be derived from the MPS concept of final income. This question might be considered in the context of the further work on the supplementary system of statistics of income distribution, in which the Statistical Commission is engaged.

TABLE IV. TOTAL CONSUMPTION OF THE POPULATION

SNA Flows	Description of flows	MPS Flows
A. As derived from MPS data		
1/10,11 21/4	1. <u>Personal consumption of the population as defined in MPS</u>	1/27 1,4/28
-21/4	- 2. Depreciation of dwellings	4/28
- 1/10	- 3. Material expenses on travel, reimbursed by employers	- 1/27
+ 2/12	+ 4. Household consumption of non-material services financed out of their own income (a) commodity type services (b) other services	(+ 14/26 (+ 1/27 (- 8/6
+ 5/11-13 - 7/11,12,14	- 5. Cost of goods and services accruing to households, financed by others (a) units, other than those providing cultural sports etc. facilities to their employees (b) cost of cultural etc. facilities, provided by units to their employees	(- 16/20-22,24,25 + 11,12,14,16,17,29/21 + 11,12,14,16,17,29/22 - 21,22/1/
+ 1,2/9		+ 14,29/23
1/9,11 2/9,12 5/11-13 7/11,12,14	= 6. <u>Total consumption of the population (in the domestic market)</u>	1/27,28 11,12,14,17,29/21 11,12,14,17,29/22 14,29/23 14/26 - 8/6 - 16/20,24,25 - 21,22/14
B. As derived from SNA		
1,5,7/11 2,5,7/12	1. <u>Final consumption expenditure of households in the domestic market as defined in SNA</u>	1/27,28 11,12,14,17,29/22 14/26 - 8/6 - 16/20,21,24,25 - 22/14
+ 1,2/9	+ 2. Cost of cultural, etc. facilities provided by units to their employees	+ 14,29/23
+ 5/13	+ 3. Cost of goods and services accruing to households financed by others (where households are not free to choose the unit from which the goods or services are to be obtained)	+ 11,12,14,16,17,29/21 - 21/14
1/9,11	= 4. <u>Total consumption of the population (in the domestic market)</u>	1/27,28 11,12,14,17,29/21 11,12,14,17,29/22 14,29/23 14/26 - 8/6 - 16/20,24,25 - 21,22/14