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SNA Expert Group

Luxembourg, 23 - 27 January 1989

REPORT OF THE MEETING

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REVISION OF THE SNA

First meeting of the Co-ordinating Group Luxembourg 23 - 27th January, 1989

Introduction

- (1) Mr. Franchet, the Director of the Statistical Office of the European Communities, opened the meeting by welcoming the participants. He remarked that this meeting was something of a turning point in the process of the revision of the SNA. From 1982 to 1986 there had been a series of preparative studies. From 1986 onwards a number of expert group meetings had been held, organised by particular subjects. This was the eighth such meeting and differed from the earlier ones in being the first to bring the earlier discussions to resolution so that the conclusions could be incorporated in the new SNA Blue Book. Peter Hill has now been working nine months on producing the text and this is to be discussed at two further co-ordinating meetings and at a series of regional commission meetings. The importance of the system of national accounts as the 'primus inter pares' among the systems of economic statistics can hardly be over emphasised. The Statistical Commission of the United Nations which is due to meet early in February 1989 will wish to know what has happened at this meeting in order to give its endorsement to the ongoing work. He reminded participants that the European System of Accounts (ESA) was also due to be revised following the revision of the SNA and that this too emphasised the need to have strong statistical norms to be followed by groups of countries to ensure international comparability. In concluding he especially wished to welcome participants that had been to expert group meetings on the SNA revision only two or three times before and expressed both the hope and confidence that they would find themselves an integral part of the group entrusted with such an important task.
- (2) Heinrich Lutzel was then appointed Chairman of the meeting and he invited Jan Van Tongeren to say a few words on behalf of UNSO.
- (3) Following this welcome Jan Van Tongeren offered a welcome on behalf of Mr. Seltzer, the Director of the United Nations Statistical Office. He wished to express thanks both to Mr. Franchet and EUROSTAT for facilitating this extra meeting and also stressed the importance of the composition of this group whose function was to co-ordinate the conclusions that had been reached by earlier specialist subject groups in order to bring a rounded and complete view to the revised SNA as a whole. He then took the opportunity to introduce all the participants and explained which meetings they had previously attended.
- (4) Following this Peter Hill was invited to give all of the participants a report on the progress to date on providing the draft revision to the SNA. He started work in March 1988 but since then has had to spend between three and four months in meetings leaving a total of six or seven months available for drafting. It has now been agreed that the time available to him will be extended by approximately three months and this will leave him, after the present meeting, with four months to complete the draft. At present he hasapproximately 60% of the envisaged completed draft available in an early version. This probably constitutes between 300 and 350 pages. He expects there will be about another 250 to come. He explained the difficulty of drafting the Blue Book because the system is so inter-connected. It is very difficult to find a starting point and it is certainly not the case that it is possible to find a beginning and end and proceed in a linear direction from one to the

other. Nor is it possible to get the text right at the first draft. Some pages have already been revised three or four times and this process of continual revision will continue for some time to come. For example some of the text on institutional units and sectors distributed in Washington after the meeting on financial flows and balance sheets has been almost entirely rewritten in light of the results of that meeting. It is, therefore, important for participants to realise that such text as has already been distributed is essentially work in progress and this status will continue until late in the proceeding. One concern expressed by Peter Hill is that text which is preliminary, already obsolete and provisional should not receive a particularly wide circulation since comments that might be made on this will already, in many instances, be superseded.

- (5) In many ways the prime purpose of the UN manual is seen as being a handbook for compilers but it has become clear that the new SNA must pay more attention to users. At present there is almost no discussion of national accounting issues in mainline academic circles or in economic journals. National accounts has become cut off from economists as users and this alienation is regrettable. The present Blue Book is too technical and therefore one of the aims of the new Blue Book must be to explain why things are as they are as well as clarifying and simplifying the underlying conceptual framework.
- (6) The text must not only supply a detailed description of the conceptual framework of the system of national accounts but must be supported by a list of items indicating the components of particular flows. In this respect it is expected that the new Blue Book will resemble more closely the present ESA which many feel to be a model in this area.
- (7) On or about 1st April Peter Hill hopes to release to members of the expert group about 60% of the text. This will cover a description of goods and services, production, sectoring, input/output and discussion of most of the balance of payments and external sector. This text should then be discussed in detail at the second meeting of this group to be held in July. The remaining 40% of the text will discuss income and outlay accounts, financial accounts and balance sheets and will be distributed early in June. With respect to this latter part in particular close co-operation with the IMF is being undertaken on the classification and definition of financial instruments and institutions.
- (8) In addition to these two large sections of text the counterpart of the existing Chapter 2 describing the accounting structure of the SNA will be prepared by the UN Statistical Office. Work is also necessary to compile a glossary and other cross referencing information and discussions were under way to determine how best this might be provided.
- (9) In response to this introduction a number of participants expressed their grave concern that there may not be adequate time provided to discuss the text in the detail which it deserved. The process of discussing of how to proceed with the revision occupied part of the meeting's time on the Monday morning, again on Wednesday evening and last of all on the final Friday afternoon of the meeting. In addition several meetings of the inter-secretariat group were held in order to reach a concensus of how best to meet the concerns of all members of the group. As at the end of the meeting the plans for further discussion stood as follows.

- As explained above the first part of Peter Bill's Newt distributed on or about the 1st April. This will constitute the a meeting of this group to be held in New York from the 12th to the 21st July. The second part of Peter's text will be distributed on or about the last June. This will therefore be available to the participants before the July according but it is not expected that participants will have had an edequate amount of time to read, digest and comment on this text by the July meeting. Instead a second meeting will be organised, probably in Geneva from the 11th to 12th September, at which the second part of the draft will be discussed. Members of the inter-secretariat group will get together to prepare an annotated agenda for both meetings and participants are urged to submit comments in writing to members of the inter-secretariat group raising substantive points in the text that they would wish to see discussed. Also for the July meeting a draft of 'Chapter 2' on the accounting structure will have been prepared by Andre Vanoli and will be distributed in advance to participants as well as some of the indexing and cross referencing material, a further set of which will be available in time for the September meeting.
- (11) After the September meeting it will clearly be necessary for the text to be further revised to take into account comments arising from both the July and September meetings. This revision should be completed by the end of calendar 1989. At that point French and Spanish versions of the text will be prepared, a process which will take approximately five months. From about May 1990 onwards a series of regional commissions meetings will be held to canvas the opinions of other users of the system. At the time of the 1991 statistical commission meeting therefore the provisional text plus comments from the regional meetings will be available to the statistical commission which will determine how to take these into account to produce a final version of the new Blue Book in 1991.
- (12) In addition to these meetings on co-ordination there is to be one further specialised expert group on the links between the SNA and MPS. This is to be held in the Soviet Union later in 1989, probably in October. Comments from that meeting should be incorporated into the final draft in much the same way that comments from regional commission meetings will be incorporated.

Research and Davelopment

- Ina first substantive topic to be discussed by the group was the treatment of research and development expenditure in the national accounts and a paper of this title prepared by OECD was introduced by Derek Blades. He reminded the group that this topic had been carried over from the Production Account meeting held in Vienna in March 1988. The main point of concern expressed there was that R and D was not related to current output and it is not clear therefore why it should all be treated as intermediate consumption. Rather it was felt that some at least should be treated as capital expenditure. OECD had been asked to prepare a paper on this subject concerning both the theoretical and practical aspects because of their experience in collecting data on R and D under the guidelines in the Frascati manual (The Measurement of Scientific and Technical Activities, (OECD 1981).
- Six points for discussion were suggested in the supporting document beginning on page 9. The first of these was whether data would be available. It was felt it would be irresponsible to recommend that R and D expenditure should be incorporated in the national accounts if it was impractical to collect such data. The paper described the difficulties encountered by OECD in collecting R and D data and how these difficulties had been overcome. It was felt that it might be difficult to collect such data for countries outside the OECD area but equally there may not be very significant amounts of R and D being conducted in such countries. The second point was whether data collected according to the guidelines in the Frascati manual were suitable for SNA purposes. There were three criteria used in the Frascati manual that were not wholly consistent with SNA conventions. Firstly the sectoring is slightly different. Secondly the distinction between current and capital expenditure is not the same. Thirdly the Translati definition of research and development is restricted to a developm. . That is novel whereas the national accounts understanding of restarch and development may often incorporate the development of new products or processes devised using existing technology and knowledge. The third concern was whether R and D activity should be restricted to enterprises or whether research and development undertaken by non-market producers should be treated in the same way. The fourth query concerned the calculation of amortization in respect of R and D expenditure. Basically three possibilities were open. One was to assume that no amortization took place and that R and D remained an asset indefinitely (that is had an infinite service life). The second was to assume that it was amortized completely in the year of its discovery. The third alternative was to have a conventional service life which might be determined according, for example, to patent lives or product cycles. A fifth concern was how to classify R and D assets and distinguish them from other types of assets presently shown under capital formation in the national accounts. The last concern was how R and D assets should be included in net worth as shown in the balance sheets of the system.
- (15) Having introduced the subject in terms of how R and D information could be incorporated in the SNA as a form of capital Derek Blades also raised the possibility that at this stage the expert group could decide that the concept could be abandoned and the existing boundary of capital formation maintained intact. The Directorate of Science, Technology and Industry in CECD, who were responsible for compiling the OECD data were interested in the idea that the SNA would endorse the use of their data in compiling national accounts but they had some misgivings about the coverage of the data and comparability across time and country.

- (16) The Chairman summarised the atternative before the meeting in the following way. The first proposition was to retain the existing SNA conventions whereby all research and development is treated as intermediate consumption. The second alternative was to adopt the proposal that had been put forward by Peter Hill at the Financial Flows meeting whereby all research and development would be treated as final expenditure of a new kind which is neither final consumption nor fixed capital. The third alternative is the resolution adopted at the Production Account meetings that 'at least some' research and development should be treated as capital expenditure.
- (17) In the course of discussion it became clear that almost all participants felt some unease both with the existing treatment of research and development in the SNA and also with the proposals before the meeting. Several speakers commented that ignoring capital formation in intangibles was one of the aspects cited as a deficiency in the system of national accounts by some economists, many of whom had worked on the idea of developing measures of intangible capital over several years.
- (18) Although there was some considerable sympathy for the idea that at least some R and D should be capitalised several participants were deeply concerned about the wider ramifications of such a decision. In a sense recognising R and D as a form of capital suggested that the corresponding asset was 'knowledge' which is not presently recognised as a commodity in the SNA. If knowledge were to be recognised as a commodity then this would have far reaching implications for the treatment of education and the possible inclusion of the concept of a stock of human capital. Those concepts in turn could involve recognition of such other activities such as market research and vocational training as other forms of the creation of human capital. This would represent a major innovation in the national accounts which may well be desirable in the long term but it was felt that time was not available to consider the implications of such a development at this stage.
- (19) While most participants recognised these concerns as legitimate the balance of opinion was that it would be unduly negative to reject the incoporation of R and D as a form of capital formation because lack of time did not permit an exhaustive approach to the incorporation of the concept of human capital. The discussion therefore reverted to a consideration of how much research and development activity, as presently defined, should be incorporated as capital formation in the new SNA.
- (20) It was recognised that some forms of service output are in fact already capitalised, particularly the transfer costs of land and existing buildings and it was therefore felt that there was no reason in principle why the output of other service activities should not also be capitalised. The output of a service industry may be difficult to measure but it is not conceptually difficult to identify even if it has no link with a tangible good. Therefore the first objection that R and D could not be capitalised because it was the output of a service industry was not felt to be a valid conclusion.

- If any k and b were to be treated as capital it was felt that it would not be sensible or practical to distinguish or to attempt to distinguish between projects which were 'successful' and those which did not lead directly to income generation in future periods. A firm that is behaving rationally will presumably control the R and D budget so that in total the rate of return is acceptable rather than linking this rate of return to individual successful projects. It was remarked that all physical capital is included in gross capital formation, even assets which may be unused for one reason or another. There was therefore fairly general agreement that success was not a criterion that should be applied in separating some R and D into intermediate and some as capital expenditure.
- (22)Several speakers remarked that much R and D, particularly in developing countries, was undertaken by government. The case of agricultural $\ensuremath{\mathbb{R}}$ and D where government may pioneer new techniques and then encourage their dissemination over a much broader front was quoted as one example and large scale medical R and D projects as another. On the whole it was felt that there was no a priori reason to assume that R and D undertaken by enterprises should be treated differently from R and D undertaken by non-market producers, particularly government. The effect overall on GDP will be different. Transferring enterprise R and D from intermediate consumption to fixed capital will increase GDP whereas transferring government expenditure on R and D from final consumption to capital formation will change only the allocation of GDP by expenditure category and not the level of GDP. However, it will change the incremental capital-output ratio, which is widely used for analysing the efficiency of investment. The continuity of the series on fixed capital formation will be affected if R and D expenditure data are not separately available. Nevertheless it was felt that it it was appropriate to include any given type R and D as fixed capital then all R and D of that type should be treated in the same way egardless of whether a market or non-market producer undertook the expenditure.
- (23) The possibility was raised of using the enterprise's own judgement about what constituted investment as a measure of what to treat as capital formation. However, it was felt that such an approach would be unacceptable from the point of view of national accounts because of the impact of tax laws on the decision made by commercial companies about whether to treat expenditure as current or capital in any given period. After consideration therefore it was assumed that this possibility was not a viable course for SNA to follow.
- (24) Another question was raised concerning the coverage of R and D. In the Frascati manual a distinction is made between R and D in natural sciences and engineering (NSE) and in social sciences and humanities (SSH). NSE R and D covers that undertaken typically by enterprises, agriculture and medicine whereas SSH covers the softer subjects including economics. Again in discussion it was felt that there was little rationale that could be given for including one class of R and D and not the other and therefore a majority of the participants favoured the inclusion of both classes in capital formation.

- for including some R and D as capital formation and that once this case is admitted it is very difficult to draw a line and say that some forms of R and D should be included and some excluded. The decision therefore came down to one as to whether to include all R and D as capital or to exclude it all. The majority of the meeting felt that it would be appropriate to recommend that the SNA be changed so that all forms of research and development expenditure should hence forward be treated as capital formation in the SNA.
- (26) In his introduction Derek Blades had referred to differences between the definitions used in compiling data according to Frascati and the definitions that would be desirable from a national accounts point of view. It was noted that the Frascati manual is due to be revised and it was hoped that a process of discussion with the compilers would lead to the possibility of incorporating definitions in Frascati that were consistent with national accounts usage. It was felt that the Blue Book should explain what the appropriate national accounts definitions were in principle and make clear that if Frascati data were to be used these would be an approximation to the desired national accounts conventions.
- There was also some discussion on the question of amortization. If R and D assets were deemed to have infinite service lives and enter the balance sheets at nominal value at the time the expenditure was incurred this would imply a form of amortization dependent on the general rate of inflation. There was felt to be no logic in this but the alternative of constantly revaluing 'knowledge' would be that it would come to dominate all of the assets shown in the balance sheet. For these reasons it was felt that it was not appropriate to show R and D assets as having an infinite life length.
- (28) Equally there was little sympathy for the idea of treating R and D expenditure as being amortized in the year the expenditure was incurred since this was tantamount to saying it was, after all, current rather than capital expenditure. On balance, therefore, the meeting came down in favour of estimating service lives of R and D assets in a similar manner to those estimated for physical assets. It was expected that these life lengths would be determined by reference to patent lives, product cycles or perhaps to tax and book-keeping practices.
- (29) While it was agreed that the R and D assets will appear in the balance sheet of their owner, the question of how to classify them was postponed to be taken up under the discussion on the accounting structure later in the week. In fact pressure of time precluded this, and the matter remains to be determined.

Mineral Exploration

(30) The paper on this topic, prepared by Carol Carson, was introduced by her. Many of the aspects had been covered in the earlier general discussion on research and development and it was felt that in parallel with the decisions just taken it would be appropriate also to classify all expenditure on mineral exploration as capital formation whether the exploration w successful or not. The appropriate amortization period for such expenditures should be the average life of producing mines or wells. As background for her paper Carol Carson had compiled indications on the availability of data for a number of countries and it was clear that in this area compiling data presented fewer conceptual problems than did the compilation of R and D data. Although mineral exploration

is not research and development as understood in the Frascati manual because little novelty is involved the group felt that in national accounts usage the two activities were sufficiently parallel that similar treatment should be given both.

(31) It was noted that in relation to both R and D and expenditure on mineral exploration, the attribution of expenditure between foreign subsidiaries and parent companies may be affected by tax laws in the two countries involved. This was noted as yet another practical problem in implementing the concept that was felt to be theoretically appropriate.

Computer Software

- Derek Blades then introduced a note prepared by OECD entitled 'Two (32)loose ends: Software and Nuclear Fuel'. These also were topics that were left over from the expert group meeting on Production Accounts and Input/Output Tables. At that meeting it had been felt that software purchased independently as well as software purchased at the time the computer hardware was purchased should be capitalised if the expenditure involved was significantly large and if the product was expected to have a protracted life length. The same treatment should be given to software developed in house under the same conditions. At that stage, however, a number of uncertainties remained. One was the exact definition of software and the other was how far this treatment should be extended to databases. This paper produced by OECD attempted to address these problems. It was agreed that the definition worked out by OECD in a paper for a meeting of an ad hoc group of experts on information, computer and communication statistics should be adopted. This defined computer software to mean one or more of the following items:
 - (i) a computer programme
 - (ii) a programme description
 - (iii) the supporting material created for aiding the understanding or application of a computer programme.
- (33) It was also decided that a computerised database should be treated in much the same way as a computer programme: that is to say if it represented a significantly large expenditure and had a protracted life length then it should be treated as a product that led either to the generation of income or to cost saving in subsequent years and therefore should be capitalised. It was felt that both purchased databases and those constructed in-house should be so treated and that there was no need for the database to be marketable to qualify either.
- (34) The question of where software should be categorised in a classification by asset type was deferred to subsequent discussion, there being some difference of opinion as to whether software should be classified as a tangible or intangible asset.

Nuclear Fuel

(35) At the Production Account meeting there had been a mittalian taken that nuclear fuel rods should be included in fixed capital formation but further clarification needed to be sought on the appropriate terminology necessary to distinguish the physical durables from the mineral ores. OMCD have confirmed that nuclear fuel rods is the appropriate terminology and that these have an average life length of three years. It was pointed out that most energy economists tend to treat fuel rods as current because they wish to compare their costs with oil and coal, the fuels used in other power stations. However this was felt not to be an appropriate treatment to carry over into national accounts. Since the fuel rods have a life length exceeding one year they should, in principle, be treated as capital. It was noted, however, that it may be difficult to obtain direct information on the value of these rods in practice.

'Intellectual Property'

In the foregoing discussion, particularly on the treatment of R and B mineral exploration and software, the group laid much emphasis on the existence of a product which would lead to increased production, income generation or cost saving in subsequent periods. It was this nature of the product which made it appropriate to classify it as capital rather than current expenditure. In this connection, however, it was noted that a number of other intangible goods may satisfy the same criteria. In general these could be described as 'intellectual property'. Particular examples cited were films, TV series and sound recordings where ownership entailed the right to earn income from these products in subsequent years say by leasing or selling duplicate copies or a copyright where the item itself may be sold as a capital good. The group felt that based on the logic of the arguments developed in connect on with R and D etc it would be appropriate to treat such products also as capital formation. On the other hand there were severe misgivings about the extent of coverage that such an extension would imply. There was uncertainty about whether the term 'intellectual property' was specific enough to be included in the SNA and whether the full coverage (if an adequate definition is available) should be treated as capital formation. Caron Carson therefore offered to prepare a paper considering the coverage, characteristics and data problems relevant to the idea of 'intellectual property' for discussion at the July meeting.

Fixed Capital by Owner and User

The paper with this topic prepared by the Federal Statistical Office (37)of Germany was introduced by Heinrich Lutzel. The present SNA does not include explicitly data on capital stock. In the balance sheet assets are recorded but net of depreciation and at current prices. Capital stock information should be gross of disposals at constant prices or at current replacement costs and for analytic purposes should be linked to the user and not to the owner of the capital stock. The decision taken at the Financial Flows and Balance Sheet meeting in September 1988 on financial leasing means that leased assets would be treated as a sale on long credit which in turn means that from the point of view of statistical recording the user and owner of the asset will become the same. However the e remains a problem for operational leasing and the rental of buildings. The owner concept is obviously the basis that should be used for drawing up the accounts showing the financing of fixed capital formation, calculating operating surplus including the allocation of fixed capital consumption and estimating net worth in the balance sheets. However for production and the study of factors of production a user concept should be introduced as suggested in 'Guidelines on Tangible Assets' (UN publication M68).

(38) It distributed a daily participants stated that they felt both capital formation and displace stock should be analysed by user as well as by owner. In particular there intuits be a cross classification between owner and enterprise, between owner are distributed and user and establishment. In making the allocation to establishment attention should be paid to the nature of the capital asset and the production process in which it was involved. The suggestion in the apper was that assets should be attributed to a user if they were used for longer than a year in the production process. However one participant in particular mentioned that this may not be adequate for analysts wishing to look at the impact of mechanisation on particular industries: for example in agriculture where the use of heavy machinery may extend over only a comparatively short period.

Population and Employment Data

- On Tuesday morning the discussion turned to a consideration of the paper 'Population and employment figures for ESA and SNA' a paper prepared by EUROSTAT and introduced by Brian Newson. There are many uses and many users that link national accounts with employment and population data but the SNA, unlike the ESA, contains little explicit information on the appropriate way to make these links. Much of the data that is compiled in accordance with ILO recommendations makes to adjustment for part-time workers and definitions have been changed so as to include more people in the employed population. While recognising the considerable data limitations that exist in (he area of labour statistics it was Nekt appropriate to state that the SNA needs recommendations on population and suppleyment data to be included in the text and that there should be definitione given that are appropriate for use with SNA data: for example the definition of residency should be consistent between both sets of data. Secondly it is important to stress that for analytical purposes there should be estimated made to one volume of work based on person hours rather than on simple head counts
- (40) In discussion it was noted that labour statistics in general are subject to considerable political sensitivity and that in many countries one attraction of quoting head counts rather than person hours is that these give a more positive view of government employment policy. Despite this difficulty the group felt strongly that explicit volume measures were conceptually required for use in conjunction with national accounts aggregates and that this should be recommended in the new Blue Book. Some discussion took place as to whether person years might be more appropriate than person hours or whether full-time adult equivalents should be used but other participants reported that trying to implement these on an internationally comparable basis had proved to be very difficult and the preferred alternative seemed therefore to be person hours as a volume measure.

Valuing the Output of Financial Intermediation

The meeting then torned its attention to the vexed question of how imputed bank service charges should be valued in the SNA. This too was an item that had been laid over from the Production Account meeting. Jean-Etienne Chapron from OEGD introduced a paper entitled 'The imputation for bank service charges: measurement and allocation' to discuss a number of the points. Although in the paper and in discussion many references were made to banks, the output of banks and imputed bank service charge it was recognised that the Financial Flows meeting in September 1988 had suggested that the term 'bank' be dropped from the arm slue Book. The term 'depository institutions' will be used instead of 'banks' and the activity of banks will be described as financial intermediation. Inis activity is undertaken by financial intermediaries which

- The discussion on banks in the present Blue Book implies that intermediation between borrowers and lenders is the primary function of banks and it is therefore appropriate to calculate the output of the industry as the difference between interest received by the banks and interest paid by them. This rather simplified picture of banking activity is no longer appropriate in the late 1980's. The services provided by financial intermediaries can be grouped under three main headings: (i) providing a medium of payment; (ii) intermediation between borrowers and lenders; (iii) specialised financial services. Increasingly the third of these is being financed by direct fees levied in respect of the services provided and this part of their activity should obviously be measured in the conventional way of measuring service output. There remains the question however of how to add an adjustment for the service of intermediation per se and though the discussion focussed around this activity it was understood that this was to be in addition to direct fee services and not a replacement for them.
- (43) Although imperfect, it remained the view of the experts in earlier meetings that the output of intermediation was best measured as the difference between interest paid and interest received. The present SNA suggests that property income financial intermediaries receive as a result of investing their own funds should not be taken into account in calculating the imputed service charge but it goes on to recognise that in practice it may be impractical to separate this property income out and thus exclude it. The question was therefore raised in the paper before the meeting as to whether the new Blue Book should continue to make this recommendation or should simply accept that income from investment of own funds should be included with other property income in calculating the imputed service charge.
- (44) The point was also made that it is not just as simple as viewing banks as holding their own funds plus funds of depositors. Banks may also incur loans on their own behalf and the flows associated with these loans as well as bank's own funds should be excluded from the imputed service charge associated with intermediation between depositors and borrowers.
- (45) A further complication arises where banks may be borrowing in foreign currency. When the transactions are converted back to local currency after currency fluctuations have taken place this may often result in apparently negative service charges. In such cases it was felt that interest should be calculated on the basis of the original capital and not on its revalued level based on a new exchange rate. In this case what appeared as an interest payment was in part a capital loss.
- There was universal agreement that in principle the calculation of the imputed service charge of financial intermediaries should exclude the effects of property income earned and paid by them in respect of their own investments and loans. The question is how to recommend this should be done in practice. Because of the unity of the balance sheet it will not in general be possible to identify how much interest earned is due to the bank's own funds and how much is due to the deposits of customers. An alternative way of approaching the problem therefore is to take total interest earnings including the property income of banks but deduct not only interest paid to depositors but also the corresponding outgoing in relation to the bank's own funds. The suggestion in the paper before the meeting was that the appropriate deduction would be divided paid by banks. Discussion revealed however that this was felt to be unsatisfactory. Two banks whose transactions were equal in all other respects but one of whom retained more earnings than the other would therefore, according to this proposal, have

quite different imputed service charges. It was felt quite inappropriate that the measure of the service provided should be affected by how profit was allocated. An alternative proposal therefore was that both dividends paid and retained sarnings should be deducted along with interest paid. The group had some misgivings with this proposal also and suggested as an alternative that it might be possible to calculate the average cost of borrowed resources and apply this to the bank's own capital and add this adjustment to interest paid to lenders.

- (47) It was recognised that despite the increasing practice of charging directly for specific services the difference between interest paid and interest received at present still covers some free services as well as intermediation. Not all borrowers benefit equally from these free services and this may be reflected in different rates of interest being charged. In particular borrowing and lending between banks is likely to include less of a service charge than borrowing and lending to households, for example. As well as the degree of services incurred by various classes of borrowers there is also the question of risk so that, for example, government is generally regarded as being a very good risk and therefore borrows at a preferential interest rate compared with commercial borrowers.
- (48) At this stage in the discussion the participants were agreed that in principle payments relating to the bank's own funds should be excluded in the calculation of the imputed service charge but were unsure how to achieve this exclusion. Mr. Pettigrew offered to prepare a paper based on data for the Ul following the various proposals before the meeting. This paper would be available in time for the next meeting of this group in July as a basis for a specific recommendations. It is also hoped that Mr. Avondoglio will be able to prepare similar information for Venezuela. Until this discussion has taken place the draft of the Blue Book available in July will contain only a very skeleton ourline of this section.
- (49) In the case of international banking centres the role of income imputed to foreigners as reinvested profits also needs to be taken into account.
- (50) The meeting then turned to consider the position on holding gains and losses, provision for bad debts and loan defaults in banks' accounts. The way these are treated affects the way of recording interest in the income and outlay account. Some commentators have suggested that holding gains and losses and debt provision should be taken into account in the measurement of imputed bank services in order to bring the net operating surplus of financial institutions as shown in the national accounts closer to the net profit figures recorded in the financial institutions' own accounts. In the light of the discussion at the Financial Flows meeting in Washington, however, it was felt that this was not an appropriate treatment to be adopted in the national accounts where consistent rules have to be applied not just to financial institutions but to other economic units.
- (51) In the present SNA the financial institution sector is defined in such a way that only this sector can provide bank services. At the Financial Flows and Balance Sheet meeting it was agreed that it was possible to have unincorporated financial institutions and these would fall within the household sector when they could not be treated as quasi corporations. Given the intention to treat separately (at least conceptually) bank services paid for by a direct for and the process of intermediation it is possible to think of some

other units, for example part of government, undertaking some fine netal intermediation as a non-principal activity. In the light of these two decisions it was felt inappropriate to confine the imputation for service charge for financial intermediation to incorporated financial intermediaries. In principle all units undertaking financial intermediation should have an imputed service charge calculated in relation to this activity. In practice of course this may be difficult or negligible but in principle there is now no need to restrict the function of intermediation to the sector of financial institutions.

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- (52) The next point for discussion was the major issue of how the imputed service charge for financial intermediation should be allocated across sectors of the economy once determined. The first aspect discussed concerned the treatment of imported bank services. The meeting confirmed the decision made earlier that the logical consequence of treating some service charge as exports is that imported service charges will also be recorded. Within the balance of payments accounts these will then be treated as factor rather than non-factor services. This will alter the levels of GDP and GNP but will leave the current account balance in the balance of payments unaffected.
- (53) The paper introduced by Mr. Chapron contained in it an example of the allocation of service charges across sectors. This followed the proposal put forward in the Production Accounts meeting that the allocation should be done in proportion to the amount of loans, deposits, bills and bonds attributed to each sector. The meeting felt that this approach was over simplistic. It made no allowance for the fact that interest rates vary considerably across the class of customers and that the use of the services provided was not evenly distributed across customers. There was the further point that as far as international flows were concerned no allowance was made for the fact that much international lending to specific countries is at concessional rather then commercial rates of interest. Mr. Pettigrew offered to extend the paper he had mentioned before to a treatment of how the service charge might be allocated between sectors and the meeting agreed to postpone a decision on this until July.
- There was also discussion about the appropriate treatment of interest (54) paid by the household sector. Households may borrow money either to finance private consumption or to finance the purchase of a house or in relation to unincorporated businesses. It is because of the difficulty of disentangling accounts for these three types of activities that all are included in the household sector. Nevertheless with the proposed change in the treatment of interest service charges it is important to attempt to separate these since interest service charges'in relation to unincorporated enterprises and owner occupied dwellings would count as intermediate consumption where interest service charges in relation to final consumption would itself be treated as final consumption. A proposal in the paper presented to the meeting was that all loans to households should be considered as corresponding to their domestic life. This was not thought to be appropriate and for some countries, especially developing countries, it was felt that it would be possible to make a separation. In many countries it is possible to separate house mortgages from other loans but there may be a problem with interpretation. The banks are moving towards an interest in supervisory rather than analytic classifications and thus they may be able to distinguish that a loan is secured against a house rather than that it is being used for house purchase. It is hoped Mr. Pettigrew's paper may cast some light on this problem also.

- the discussion then turned to consideration of how far the imputed bank service charge should be allocated among consuming units. One possible simplification was to suggest that categories of final demand should be identified separately but that as far as intermediate demand was concerned an attempt should be made only to separate market from non-market producers and unincorporated from incorporated enterprises. A number of participants felt that this might be all, in practice, that many countries could achieve but this should not appear in the Blue Book as a possible recommendation since this would discourage a full breakdown. It was felt that in principle it was correct to encourage countries to allocate intermediate consumption across all kinds of activities so that the interest charges paid could appear as intermediate consumption.
- A related problem concerned the degree of consolidation that should be shown in the accounts. This is particularly acute in respect of the financial institutions sector. Three possibilities exist, (i) to consolidate out all interest payments and interest receipts among the sector, (ii) to do no consolidation and (iii) to consolidate only at the level of the sub sectors agreed in the Financial Flows meeting. Some consolidation is already implicit in the recommendation that the imputed service charge be calculated as the difference between interest receipts and interest payments. Given the extent and variability of the amount of refinancing that goes on within the sector there was some sympathy for the idea of extending consolidation in this account although it is a practice not generally to be recommended throughout the Blue Book. On the other hand, given the desirability of establishing full accounts for the sub sectors agreed at the Financial Flows meeting it was felt that consolidation should not be carried out between these sub sectors. Nor across the division between public and private sub sectors of the economy. Again Mr. Pettigrew's paper should throw some light on the various alternatives on consolidation that will be open.
- (57) A similar problem on consolidation related to the government sector in respect of on-lending that may be undertaken, for example from central to local government. This could be particularly important given that under the new recommendation an increase in government interest payments will lead to an increase in GDP unless this is offset by interest receipts or imported service charge for financial intermediation.
- (58) These points concluded the discussion on the treatment of the output of financial intermediation. Two points, however, that had been raised at the Production Account meeting were not discussed and remain outstanding. The first of these is the time of recording interest payments and the second is the appropriate treatment for taxes and subsidies levied in respect of interest. Should these be treated as taxes on production or taxes on income?

Insurance

(59) Andre Vanoli then introduced his paper 'A further look at the treatment of insurance in the SNA'. This paper had been tabled at the Financial Flows meeting in September 1988 but due to pressure of time could not be discussed in full and had therefore been referred forward to this meeting.

- (60) The first question to be discussed was whether premiums should be recorded as they are paid or as they are earned and whether claims should be recorded when agreement is reached or when the accident occurs. It was agreed that the correct time of recording was as premiums are earned and when accidents occur and that any adjustment between these sums and estimates of premiums paid and claims paid should appear under the heading of insurance technical reserves.
- At present the SNA recommends that claims should be recorded first as payments to the policyholders and secondly as transfers from policyholders to injured parties. While this is in line with the law on liability it was not felt appropriate for the national accounts and the SNA should be changed so as to show the claims being paid directly to the units which are the ultimate beneficiaries. This represent a change to the SNA but brings it into line with the practice recommended in ESA as is the case on the proposals above on time of recording.
- (62) On Wednesday morning the discussion turned to the first issue of substance on insurance that had not been discussed at the Financial Flows meeting. The present SNA determines the output of casualty insurance as being the difference between gross premiums paid and the payment of claims. This assumes that no reserves are built up by the insurance companies in relation to casualty insurance but this is clearly not the case. These reserves remain a liability of the insurance company but are used to generate income and the existence of this income causes the level of gross premiums charged to be lower than they would be if there were no such investment income. By ignoring the investment income very often the gross operating surplus for casualty insurance appears to be negative. This is clearly unrealistic and an unsatisfactory entry in the national accounts. The alternative therefore is to add some part of this investment income to the measure of insurance services. The question before the group was how this was to be done. The proposal in the paper is that insurance services should be defined as gross premiums earned plus the net income from investment of technical reserves less technical charges. The net investment income represents the difference between the income from all investments and the costs incurred for such investments including interest paid by the insurance companies in connection with re-insurance. Technical charges are defined as the claims due plus the changes in technical reserves. By adopting this approach the same principle can be used for casualty and life insurance though in this case technical reserves include not only the change in actuarial reserves but also the reserves for with profits insurance less the capital gains and losses allocated to the insured.
- (63)At a meeting of the national accountants within the common market countries this paper had been discussed and about half of them were in favour of the proposal as presented. The other half were inclined to view the investment income as being analogous to bank output and felt it should be treated in a similar way. This latter option, however, would not solve the problem of anomalous measures of gross operating surplus and valued added for insurance services and possibly for constant price measurements. It should be recognised that management of financial resources is intrinsic to the activity of insurance and therefore should be treated as part of their output. A question was raised about the parallel with bank output where it had earlier been decided that investment from the bank's own funds should not be included in the measurement of output. It was pointed out that in this case the funds being invested are not the property of the insurance company but represent a liability of theirs. Any income from the own funds of the insurance company should be excluded as is the case with financial institutions.

- respect of the technical reserves should be treated. There was some uncertainty about now technical reserves are recorded in company accounts and to what extent holding gains and losses are included in the figures recorded there. It was thought that for life insurance it should be possible to identify the holding gains and losses attributed to insured persons and these should be deducted from the calculation of insurance services as indicated above. For casualty insurance it was felt that in practice it would be difficult, if not impossible, to identify holding gains and losses. On the other hand, it was possible that such gains and losses did affect the figures as recorded. It was agreed, therefore, to adopt the proposal above as the working hypothesis for the time being but the matter will be reviewed in July especially when those in OECD concerned with the measurement of insurance industry have had a chance to consider this paper and comment on it.
- (65) There was then discussion about where the holding gains and losses allocated to insured persons should be shown in the accounts. At present the SNA says that all of the reserves of pension funds should be treated as reserves of the insured persons. M60 makes a division and says that the reserves of the pension funds in excess of the liabilities to contributors should be treated as assets of the pension funds. After some discussion it was agreed that the M60 treatment is to be preferred and should be adopted for the new SNA. The holding gains and losses should be shown in the reconciliation account.
- (66)There was then discussion on how claims on casualty insurance for capital losses should be treated. Payments by insurance companies under casualty insurance are treated as current expenditure and in the case of small claims will be current income for the recipients. There is a question, however, about whether an insurance payment in respect of a large capital loss should show as capital inflow. This raised the old problem of whether transfer payments need to be treated symmetrically between recipient and payer, a point that was raised subsequently in the meeting in the more general context. The point that was being made here was that if some claims should be seen as being capital inflows then perhaps net insurance premium should be seen as capital outgoings. This would, however, have the undesirable effect of apparently inflating savings unnecessarily. It was noted that in this respect the macro economic solution adopted by the SNA may give undesirable results for data compiled either at a micro- or meso-level. After some inconclusive discussion it was agreed that the problem being addressed here was a much more general one about how to distinguish current from capital transactions and that while agreeing to treat the payments here as current transactions the matter should be raised again when this topic was discussed later in the meeting.
- (67) There was then discussion about how imports should be adjusted from a c.i.f. to an f.o.b. basis taking into account the decisions made above on insurance. At the expert group on the External Sector it had been agreed that it would not be possible in general to get an f.o.b. value for each category of imported goods so that a global adjustment would have to be made. The proposal being made now was that in order to calculate insurance services in respect of imports the income from investment of reserves should be ignored. The appropriate service charge would then be calculated as gross premiums less the value of imports lost in transit and these would be approximated by the claims.

The Sectorization of Social Security functions

(68) A brief note on this topic prepared jointly by the last and the last was introduced by Jonathan Levin. At the expert group neeting on Public Sector Accounts it was concluded that it is important to have both data for social security funds separate from other parts of government and data for each level of government, including the social security funds associated with the level. This established two classifications of government that should have equal priority within the Blue Book. It was also envisaged that a cross classification would be undertaken so that for each of three levels of government (central, local and state government) there would be information on social security funds for each and other government expenditure for each. This clarification was accepted by the meeting.

Technical Assistance

- Mohinder Gill introduced a summary of the comments received by the IMF on the paper 'The residence of technical assistance personnel' that had been presented to that meeting. The problem was whether technical assistance personnel should be regarded as residents of the donor country or of the recipient country and whether their output should contribute towards domestic product of the donor or recipient country. At the external sector meeting the participants had been split fairly evenly between the two options with some strong views held on either side of the argument. This difference of opinion was reflected in the comments that had been collated in the paper before the meeting.
- (70)In discussion parallels were drawn between technical assistance personnel provided under a bilateral agreement with staff of international organisations, with diplomatic staff and with expatriates working in commercial enterprises. Diplomatic staff are considered to be residents of their own country and contribute to that country's GDF. The argument in favour of treating technical assistance personnel in parallel stems in large part from recognising that like diplomatic personnel they have a contract of employment with a particular government other than that of the constry where they are physically present. It was recognised that in some countries the presence of large numbers of expatriates makes a significant contribution to the size of GDP if they are to be regarded as residents of the recipient country and that this might be grounds for excluding them. On the other hand it was felt that no such argument is put forward to exclude the output of aid personnel of international organisations nor for expatriates in the enterprise sectors. On this latter the practice was to deem that a resident company was established if activities spread over one year, even where a subsidiary company was not formally registered. On balance the conclusion of the meeting was that the parallel between aid personnel and expatriates in market production was stronger than the parallel with diplomats and they should, therefore, be treated as residents of the recipient country and as contributing to gross domestic product in that country. It was expected that where expatriate earnings are large relative to earnings of the country's own nationals then it would be in the country's interest to show these figures separately. Technical assistance personnel who are resident for less than one year will continue to be treated as at present as residents of the donor country and contributing to the donor country's output. Their assistance will feature as a grant in kind in the balance of payments matched by imported services while the funding of longer term personnel will show in the balance of payments account as a current transfer with no associated service.

ISIC

- Mr. Beekman previously of the Classifications Unit at the United Nations Statistical Office and who happened to be attending a meeting in EUROSTAT came to discuss with the SNA meeting the introductory text for the revised draft of ISIC. An earlier version of this draft had been discussed by the expert group on the Production Accounts in Vienna. That meeting had expressed the hope that it would be possible to adopt identical definitions on such concepts as establishment, enterprise, primary, secondary and ancillary activities and the definition of statistical units. Further, it had been hoped that identical text might be used in both the SNA and the ISIC draft. Since that meeting, however, a revised version of the ISIC draft has been prepared and is before the Statistical Commission meeting in February 1989. The participants were concerned to note that not only had the comments made by the earlier expert group not been taken into account in preparing the revised draft of ISIC but that the status of the present draft and the fact that it was due to be approved by the Statistical Commission suggest that it was now too late to achieve identical definitions. Given the considerable effort that has been $\mathtt{mad}e$ in the process of reviewing the SNA and the links with associated systems it would be especially disappointing if it was not possible to achieve harmonization in this particular area.
- A major cause of difference was the approach being taken by the two Throughout the SNA expert group meetings much emphasis has been laid on defining the concepts that are theoretically correct and accepting later that approximations may have to be made to these concepts in the light of practical circumstance. This approach has been endorsed repeatedly as the best way of explaining the system to users and can of itself give guidance on whether and when approximations should be accepted. If the approximations are built into the definitions then the rationale for these is not always clear nor is it easy always to decide what approach should be adopted when conditions are somewhat different. In contrast those concerned with the ISIC draft had been very heavily influenced by the practical problems that they faced typically in compiling business registers and therefore had deliberately chosen not to separate the in principle definitions from the in practice ones. One particular instance of this is that in talking about an establishment the ISIC draft uses the expression engages in 'one or predominantly one' kind of activity where the SNA would prefer to say engages in one type of activity. A point of major concern was the definition of establishment. At present the ISIC draft says 'the establishment is defined as an autonomous part of an enterprise which engages in one or predominantly one kind of activity at a single location'. For the SNA the establishment is defined simply as a unit that engages in one kind of activity at a single location. In discussion it was not at all clear to the participants of this meeting what ISIC intended by introducing the notion of autonomy. A number of instances were quoted where even large enterprises do not have full autonomy over all of the business decisions before them. For example where car production is separated between a number of enterprises, one producing parts, another producing bodies and so on, there must be centralised decisions taken about the relative levels of output of each of the components and this would seem to impinge on the autonomy of these enterprises. Nevertheless it seemed clear that such enterprises should be regarded as such both by ISIC and by the SNA. Not only was it not clear to the meeting what the concept of autonomy implied but it was felt that it would water down the definition of an establishment in a way that was unacceptable to the SNA. It was therefore urged most strongly that this qualification should, if at all possible, be removed from the definition of establishments as it presently exists in the ISIC draft.

(73) The participants also noted that they felt that the present draft did not reflect the increasing interest in services nor the evolution of aspects of the service industry. It was felt, therefore, that some more work in this area would be necessary at some time in the future. It was also noted that there was a growing interest in what might be called the demography and structure of enterprises and the present draft did not provide an obvious entree to such studies. Lastly a question was raised about whether co-ordination with definitions used in employment statistics had been sought and although the answer was uncertain it seemed that this had not been sought. This too was noted as a disappointment by the group.

Household Sector

- (74) Three papers were considered under this topic. The first 'Comments on household sector classifications' had been prepared by the ILO Bureau of Statistics. The second 'Three topics concerning the household sector' had been prepared by Lourdes Ferran and considered criteria to distinguish between employee and non-employee out workers, the classification of household units and criteria to distinguish between formal and informal activities. The third paper was one by Anne Harrison on social accounting matrices and income distribution and attempted to explore the implication for the new Blue Book of recommending that more detailed household accounts should be provided in the context of a social accounting matrix.
- meeting on the Household Sector. The proposal now before the meeting was that an out worker should be considered an employee if there exists an explicit or implicit contract or agreement of employment and the remuneration received depends basically on the time worked or the amount produced. An out worker would be considered an own account worker if either there was no contract or agreement of this type and the decision on markets, scale of operation and finances are in the hands of the out worker or there is no contract and (s)he owns or rents the capital equipment used in the production process and in addition to either of these two conditions the remuneration is a function of receipts or profits of the value of sales. The meeting accepted this clarification without difficulty.
- (76) At the Household Sector meeting on the question of sub sectoring the household sector it was agreed that at the first level the classification should be a three way split between entrepreneurs, employees and others. In the paper before this meeting it was suggested that this should be extended to include five categories of households; (i) employees, (ii) employers, (iii) own account workers, (iv) rentiers and pensioners and (v) other transfer recipients. Many participants were unhappy with grouping rentiers and pensioners together and felt that these should be separated. This would bring the total number of sub sectors to six and while each of them had important characteristics it was felt that there may be some imbalance between the role, for example, of rentiers and employees. A compromise position was suggested whereby the number of sub sectors should be established at four: employees, employers, own account workers and other and this last category should then be sub divided into at least three at a lower level in the hierarchy: rentiers, pensioners and other transfer recipients.

- (77) There was considerable discussion about how far it was sensible to suggest standard sub sectoring of the household sector. Participants from both the World Bank and the International Monetary Fund explained the growing interest in those institutions in monitoring the social dimensions of adjustment programmes and in poverty studies. Ine importance of such work was acknowledged by all participants but felt that the categorization of household types which may be appropriate in countries where such studies were being undertaken might not necessarily be appropriate, say, for countries of the European Community. On the other hand it was felt that not to include any recommendation on sub sectoring households would be a major omission from the Blue Book.
- There was also extensive discussion about how households were to be allocated to one sub sector or another. At the time of the Household Sector meeting the advice from the ILO was that allocation had to be done according to the characteristics of a single reference person and that meeting had been led to expect that some clarification on these grounds could be expected from κ meeting due to be held in October 1987. However, no such clarification has been forthcoming and the information from the ILO now seems to have altered in tenor somewhat. The suggestion now is that it may after all be possible to categorise households according to income levels. Such a characteristic is an ex-post rather than an ex-ante criterion and while it may be used for analysis it may not necessarily be used for survey design. As with discussion on ISIC the participants felt that it was very important that consistent recommendations be made by the ILO and the SNA. It was therefore regarded as a matter of some urgency that further discussion should take place with the ILO to see whether progress could be made in reaching agreed definitions. Unlike the case with ISIC, however, the timing issue is different. The indications are that the ILO may not reach decision until about 1992, that is after the SNA is due to be finalised.
- (79) Pending these further discussions with the ILO the meeting provisionally agreed that the household sector should be sub sectored into four groups: employers, own account workers, employees and others and that for the present the classification will be based on the income of the reference person as agreed at the Household Sector meeting.
- Again because of uncertainties about what the ILO position would be it was difficult to come to formal agreement on what should constitute the difference between formal and informal activity. The paper presented to the meeting suggested that informal should relate only to non-agricultural activities and that the unit of enumeration should be a productive unit in the national accounts sense. Further, an informal productive unit should be one that does not employ salaried employees on a regular basis though it may employ unpaid family workers and salaried employees on an irregular basis. What indications there were from ILO suggested that these proposals may not be wholly acceptable to them. From a report that had recently been presented at an ESCAP meeting by ILO it was suggested that agriculture should be divided between formal and informal, that the basis of defining informal would be via the labour force and not via production units and that they would work with a minimum number of employees rather than having none. The conflict of information coming from ILO simply underlined the need to undertake more extensive discussions with that organisation.

- (81) A number of participants spoke in favour of emphasising the construction of social accounting matrices in the new Blue Book. It was pointed out, not for the first time, that Table 2.1 of the present Blue Book in fact constitutes a social accounting matrix but because of the lack of disaggregation of the household sector and the lack of emphasis that is given to this possibility it is not always realised that the existing framework provides the infrastructure necessary to articulate the link between income generation and consumption. There was general agreement that this aspect of the full accounting system should receive considerably greater emphasis in the new Blue Book. This emphasis will also explain that disaggregation of income, consumption and the transfers among and between household sub sectors are necessary in order to study distribution and re-distribution of income at the household level.
- (82) An ambiguity in the present structure of the system was revealed in the discussion about levels of classification in the household sector. As presently agreed both households and non-profit institutions will comprise the household sector. It could therefore be argued that the first level of sub sectoring would be simply to disaggregate these two and that what had been under discussion above was therefore already a second level of the hierarchy of classifications. There was fairly general agreement that information relating to all households but excluding private non-profit institutions was necessary in the new system.

The Environment

On Thursday morning discussion turned to the consideration of the paper 'Environmental accounting and the SNA' which contained a cover note prepared by UNSO as well as a report of a joint UNEP World Bank expert meeting on Environmental Accounting and the SNA held in Paris on the 21st and 22nd November, 1988. Ramesh Chander began by introducing this paper and explaining that at the meeting in Paris the main conclusion had been that environmental accounts should exist as satellite accounts to the SNA and that this should be specifically mentioned in the chapter in the Blue Book dealing with satellite accounts. Work on environmental accounting was not sufficiently advanced to incorporate it explicitly in the main SNA at the moment but because of the growing importance and interest in this field it was felt appropriate that adequate allowance should be made for ancillary analyses to be undertaken consistent with the overall SNA framework. Jan Van Tongeren added that the paper that constituted the annotated agenda for the Paris meeting was, in effect, an outline for how a draft handbook on preparing environmental accounts might be developed. A future work programme was explained by Ernst Lutz of the World Bank who explained that once the draft manual was completed it was hoped to experiment with implementing the accounts elaborated there in a few developing countries. In the light of experience the manual would be revised and it would then become one of the handbooks in the series accompanying the SNA.

(84) Several of the participants of the present meeting had also attended the Paris meeting on the environment and reported back that there had been a very strong feeling put forward in that meeting that environmentalists were saying that the concept of gross domestic product is wrong in principle and would prefer instead a measure of sustainable product. The feeling of the present meeting was that that was too strong a statement but that it would be appropriate for the Blue Book to stress that GDP was not a measure of welfare and care needed to be taken in the interpretation of the accounts. Some participants felt that environmental accounting was still at a very preliminary stage and that questions of identifying, defining and measuring environmental issues had still to be resolved. Once this was done then it would be possible to develop a totally coherent accounting framework. Other participants stressed that it was important that national accountants make a contribution to the field of environmental accounting. By emphasising the coherent data framework of the SNA then it should be possible to develop measures that are complementary to rather than competitive with major SNA aggregates.

Definition of Income

- The next item on the agenda was the paper 'The concept of income and the distinction between current and capital items' written and introduced by Peter Hill. In the present SNA current transfers are defined as those made out of income but income itself is not defined and therefore there is a circularity in this definition of current transfers. Most of the considerations of income have started from Hicks' definition that income is what can be consumed in a period and still leave one as well off at the end of the period as at the beginning. In this form this is an ex-ante definition of income. However, national accounts were essentially an ex-post enumeration of transactions and Peter Hill argued that an ex-post alternative to Hicks' definition of income as being actual consumption plus the change in net worth was consistent with such an overall ex-post framework. In this case income is defined not as the maximum amount that can be consumed which maintains the initial capital intact but the maximum which maintains the initial capital and net transfers of capital received in the period. Unless such a definition is accepted he believes it is logically impossible to have capital transfers. The attitude of a rational individual to capital received is to acquire a capital asset with it, not to regard it as income. What was being put forward here was that what distinguished a current from a capital receipt is that a current receipt is a type which a recipient expects to go on receiving regularly in the future. In his view there was no need to be more precise about the definition of current receipts. A capital transfer is one where there is no reason to suppose that another similar flow will be forthcoming. This proposition had been put forward at an OECD meeting in Paris and rejected but was put forward again here because Peter Hill felt that capital transfers could only be defined in relation to income and it was the expectation about whether a flow was regular or not that determined whether the recipient regarded it as income or a capital inflow.
- (86) The participants had sympathy with the definition of ex-post income as articulated and agreed that the definition be used for purposes of explaining the concept of income in the Blue Book. On the other hand the idea of defining capital transfers simply in terms of regularity met with a considerable amount of opposition. It was argued that defining capital transfers in this way simply moved the circularity of definition from current transfers to capital and that a more independent definition of capital transfers was needed. It was also felt unsatisfactory to apply the criterion of expectation of regularity simply to the recipient of a transfer. If one looked at the expectation on the part of the payer the conclusion might be different. The case of inheritance taxes was an example where the recipient would regard the transfer as current but

conventionally to date this has always been regarded as a capital transfer by households since it is the payment that is not expected to recur. Further, there is a difference between micro and macro expectations; for example government would regard the transfer of inheritance tax from a single individual as being an irregular occurrence but from the population at large the receipts would be regular.

- (87) While the distinction put forward might enable income to be separated into current and capital elements this definition could not be used for expenditure. Many firms undertook regular expenditure on the same sort of equipment and yet this was capital; for example replenishing a fleet of cars for a car hire firm. In clarification Peter Hill said the distinction between current and capital based on regularity was to be applied only to transfers; this should be regarded as a definition only to tidy up a loose end that had not previously been well defined.
- (88) Even this was not very sympathetically received. A number of instances were quoted where existing capital transfers would be reclassified because they were small and frequent, for example terminal benefits of savings plans, or were large and frequent such as repeated assistance from government to public corporations. On the other hand instances were quoted of large and infrequent payments that should not be treated as capital transfers, for example famine relief. Other instances were quoted of large and infrequent receipts, for example payment on life insurance policies or lottery winnings, which are not shown in the accounts at all because these are netted out at the macro level.
- (89) As the discussion developed it became clear that the main criteria that people felt should be used to distinguish capital transfers was the purpose for which the transfer was made. However, this was not the sole criterion. In total four criteria could be cited (i) purpose, (ii) source of funding, (iii) the size of the transaction and (iv) the frequency with which it was made. It was noted that there could be some conflict between these criterion and one of two alternatives had to be adopted. The first was to say that because of the difficulty of identifying capital transfers the concept should be abandoned altogether and all transfers should be treated as current. Earlier expert group meetings, however, had rejected this approach and had determined that capital transfers should persist in the system. In order for this to be done a hierarchy among the four criteria cited above needs to be determined and difficult borderline cases need to be examined and explained.
- (90) The meeting then considered the paper 'Current and capital transfers' prepared by OECD which in particular concentrated on the identification and treatment of international capital transfers, a matter that had been unresolved at the External Sector meeting. Here much of the concern was concentrated not so much on income but on savings. If a government was in receipt of a large transfer from abroad should this always be regarded as an increase in savings or should some such transfers be treated as capital and therefore excluded from savings? In discussion it became clear that identifying capital transfers internationally was no easier than doing it domestically. Further, there was the complication about where capital transfers would show in the balance of payments account, since the capital account of the balance of payments corresponds to the capital finance part of the domestic accounts. Again the discussion produced a list of examples where function seems to be the main criterion for determining that the transfer was capital in nature. The possibility of defining capital transfers by enumeration was raised but though

this was felt to be inappropriate as a definition it was felt it would be helpful to include an extensive list of examples of capital transfers in the Blue Book.

- (91) The question of where to place capital transfers in the balance of payments account was not resolved. The position adopted by the balance of payments compilers was that all transfers should appear in the current account although some will be designated capital transfers. National accountants were uncomfortable with this suggestion and thought that they would need to exclude capital transfers from the current account balance thus deriving a different total from that shown in the balance of payments account. The point was made that at present there are a number of different measures of income and money supply available to analysts so why should there be a concern about having two versions of the balance of payments current account balance? This point was noted but not enthusiastically supported given the overall concern with harmonization of alternative systems.
- (92) A recurrent point during the discussion had been the difficulty of dealing with transfers that appeared to be current on one side and capital on the other and the point had been raised of whether it would be possible to introduce asymmetries in handling of such transfers. Some participants felt that this was a violation of a very fundamental principal but others thought the matter should be examined and it was agreed that a paper would be produced for consideration in July which would study the implications of introducing asymmetries; how a reconciliation of the consequencing imbalances may be achieved; what the consequences, cost and benefits of such a system would be.

Holding Gains and Losses

The discussion then reverted to the second part of Peter Hill's paper on the concept of income and the distinction between current and capital items which dealt specifically with how to deal with holding gains and losses, particularly in times of acute inflation. If it is appropriate to make a distinction between current and capital transfers on the basis that some transfers are to be regarded as income and some not, then it would seem appropriate that a similar division might be made between holding gains. These can be viewed as being of two types. The first is where the holding gains result from changes in relative prices and are related to goods with a market price such as tangible assets, shares etc. The second sort of holding gain relates to assets whose nominal values are fixed in money terms and the holding gain results from changes in the general price level. In general these latter are predictable, therefore, it is argued in the paper, they should be treated as current income. The first type of holding gains should appear only in the reconciliation account but the second should go into the flow accounts. However the proposal is not to alter the recording of nominal interest flows but to show the second type of holding gain as a separate item (specifically as an imputed transfer) between sectors which would allow the calculation of imputed real interest flows. Such a proposal is a radical departure from the present SNA but in conditions of hyper inflation such as are typically experienced in Latin America the question is whether the present SNA guidelines produce accounts that are analytically useful. The question therefore is which solution is least uncomfortable. To complement this presentation Andre Vanoli presented some tables for Brazil which had been presented at the Regional Commussion meeting on national accounts held in Buenos Aires in November 1988 showing the sort of calculations that were made there in order to make a money correction to nominal interest flows.

- (94) The response to the paper was mixed. Many participants felt that the paper presented an interesting intellectual construct which could be very useful in analysing flows under conditions of hyper inflation. However introducing these changes as a standard part of the Blue Book would represent a major fundamental change in the existing system and it was felt that this was some way beyond the remit of this Statistical Commission. It was also felt that introducing such adjustments would be very sensitive politically and might even encourage inflation. Indexation transactions often have two parts; one related to capital and one to interest. The question is whether the return on capital is regarded as capital itself or as interest. It is important to analyse the economy from a behavioural point of view and it was argued that if the recipient views indexation as an interest payment he will regard it as income and spend it but in conditions of low inflation money illusion persists and the difference between nominal and real interest often is not perceived.
- (95) The participants from Latin America reported the discussion that had taken place at the ECLAC meeting in November. There is a distinction to be seen between trying to record what happens at market prices, that is before making any adjustments, and trying to analyse the effect of what happens, for which adjustments such as those put forward would be necessary. The view at ECLAC had been that both presentations were necessary but that the recording of the accounts under the present conventions should be the starting point and this should remain the main recommendation in the Blue Book, though emphasis should be laid on the need to undertake further analysis when conditions dictated this was appropriate. The concern was also expressed that in conditions of very high inflation all of the current price figures are distorted and therefore correcting only the interest flows was not a comprehensive approach to the problem.
- The conclusion of the meeting was that holding gains and losses should not be introduced into the income flows. However it was felt that it would be appropriate to suggest that they should be distinguished between those that are due to general price increases (basically monetary assets) and those that are due to changes in relative prices (intangibles etc) but both types of holding gains should appear in the reconciliation account. The text would show how the first of these could be used in association with the normal flow accounts in order to make adjustments but this would not be part of the central system. It was also felt important that either a chapter of the Blue Book or a separate handbook should deal comprehensively with all the problems associated with hyper inflation.

Changes in Stocks

- (97) The meeting then went on to discuss the paper on changes in stocks and holding gains, part of the draft prepared by Peter Hill dealing with this particular aspect of the effect of inflation on the measurement of stock building. The value of stocks in the SNA are determined by valuing stocks at the point of their entry into or withdrawal from stocks at the prices prevailing at the times of these transactions; that is on a perpetual inventory basis. The implication of this change in the value of goods held in stock is not spelt out in the present SNA and is widely misunderstood. The purpose of this chapter is to explain the implications in detail and suggest ways in which adjustments may be made. In particular it draws a distinction between the correct SNA measure of stock change and a measure of stock change based on volume estimates which is frequently used as an approximation to the true SNA measure.
- (98) Many participants expressed their appreciation of this text as clarifying an area of the SNA which is presently widely misunderstood. There were some reservations, however, about including so much detail on the area in the Blue Book given that the practical problems of measuring stocks were such that the conceptually correct approach could almost never be implemented in practice.
- (99) Extensive discussion of the paper was curtailed due to lack of time. In particular the topic concerning the valuation of agricultural output which can be very important for a number of developing countries was not discussed and must be returned to at some future time.

Accounting Structure

- (100) On Friday morning Jan Van Tongeren introduced the paper 'The SNA accounting structure reconsidered'. This paper was a revised version of a paper first produced for the expert group on the SNA structure in July 1986 and subsequently presented in a revised version at the IARIW meeting in August 1987. There were a number of aspects to the paper but because of shortage of time the discussion centred firstly around the format and role of the accounting structure in the Blue Book and secondly comments on the proposals about the main tables.
- There would be three sorts of tables appearing in the Blue Book. There would be simple tables amplifying the discussion on particular areas such as production accounts and income and outlay accounts. There would be an overall framework like the existing Table 2.1 and there would be a third set of tables which presented the standard accounts of the system. It was expected that the tables in the new Blue Book would contain data entries so that users would be able to see where entries were expected and where cells were by definition empty. The third set of tables for standard accounts of the system would obviously be related to the international reporting questionnaires but should not be designed with international reporting as the prime consideration.

- (102) Several participants made the point that at present many users found it difficult to relate the comprehensive presentation of the overall system in Table 2.1 with subsequent tables. As a result some users by-pass the discussion in Table 2.1 and never gain a complete overview of the system. Further, because they do not understand the way the tables inter-relate they choose those tables which seem most 'relevant' and compile these only. It was felt to be very important that the new Chapter 2 should be aimed at such a level that it was possible for someone new to the area of national accounts to gain an understanding of the inter-connections of the system. The Blue Book cannot be all things to all people and it would be impossible to span the entire range from elementary and introductory text book to a comprehensive detailed reference manual but one of the major problems with the existing SNA is the alienation that many readers feel with the method of presentation in the early chapters.
- (103) Several participants felt that one of the problems of understanding the system at present was due to the matrix presentation. It was suggested that T accounts were much easier to understand and that therefore if the presentation concentrated on this format of the accounts users would find it easier to follow the arguments put forward. While there was some considerable sympathy with this point of view, there was also a strong feeling that the matrix presentation is a very powerful and coherent way of explaining the inter-connectiveness of the system and that as agreed in earlier meetings both presentations should be preserved. The suggestion was made, however, that it might be more appropriate for the matrix presentation to appear at the end of the Book rather than at the beginning so that users who had worked through the individual components of the system could then see how they interact rather than having to make the attempt to grasp a large inter-connected system at the outset.
- It was difficult within the confires of the Blue Book to think in (104)terms of increasing the readers' understanding by simplifying the system. This introduced approximations which in the end caused difficulties. What had to be done was to ensure that there was clarification of the concepts and these were presented in a readily understood form. It was recognised that some readers will find this easier through text and some through tables and the Blue Book should cater to both needs. There was also some discussion about the physical presentation of the Blue Book and it was felt with the new advances in printing technology and the use of innovative typographical features the Book could be made more accessible with indication given to users as to which parts are more difficult and could perhaps be by-passed at a first reading. It was emphasised again that the Blue Book should be aimed not just at the compilers of national accounts but for users and for those concerned with a wider range of economic statistics who wish to use the SNA as the overall framework under which they could develop ancillary systems. The opening part of the Blue Book must explain the use of the system as well as an overview of the accounting structure.
- 1 of the paper. Table 1 is a supply and use table and Table 2 showed institutional sector accounts. Only one Table 1 had been shown in the Annex but it was been envisaged that such a supply and use table would exist for each institutional sector in accordance with the recommendation made at the Production Account meeting that production accounts should be compiled by institutional sectors. While the participants endorsed that conclusion they had reservations about whether the detail given in Table 1 was necessary or even feasible at an institutional sector level. In general it was felt that the information shown on production accounts in Table 2 was adequate. The only point at which a cross classification was needed between institutional sector and establishment was felt to be in relation to value added. A further version

of this paper is to be presented to the meeting in July and it is hoped by then to include numerical examples for Table 1 by institutional sector so that a group had a clearer feeling for exactly what was being suggested before taking a firm decision on this.

- aggregate level. Annex 2 showed the classification of transactors and text would eventually be supplied to explain where cross classifications between different types of sectors were required. This would imply among other applications that there would be a three dimensional classification for the accounts relating, for example, to income appropriation and distribution. By expanding the categories of the household sector and these two parts of the income and outlay account and collapsing much of the rest of the table one could draw attention to those aspects of the social accounting matrix that had been canvassed earlier as being of considerable importance in studies of poverty and examining the effects of structural adjustment on economies. In a similar way the entries related to assets and liabilities could be presented in three dimensions leading to a detailed flow of funds table with assets distinguished by type and identified by creditor and debtor.
- (107) Annex 2 shows a number of classifications. Firstly of transactions, secondly of transactors and then supplementary classifications. These constitute such classification systems as ISIC, COFOG, classification of household goods and services etc. There was extensive discussion about the layout and entries in the tables in Annex 1 and the contents of the lists in Annex 2. On a number of points participants remarked that they did not feel the conclusions from earlier meetings had been fully taken into account in the preparation of these tables and it was agreed that there needs to be a very careful cross check between earlier decisions and the layout of these tables to ensure consistency.
- (108) The tables as presented are very similar to those that are shown in the present Blue Book and the innovations that have been suggested for the new Blue Book in distinguishing, for example, between actual and imputed transactions and between monetary and non-monetary ones do not show in the tables as presented at the moment. This aspect was one that needed to be considered and highlighted in the revised version.
- (109) Considerable thought still needs to be given to terminology and to how these classification hierarchies are to be identified. On terminology the use of 'other' abounds and on occasion this can be used more than once in identifying an item at a low level in the hierarchy which is obviously confusing to the users. A simple numeric scheme has been used to identify level of the hierarchies including decimal points. These latter are necessary because some of the numbers go above nine. This leads however to very ungainly references such as 3.1.1.1.10 and it was hoped that some more congenial terminology and numbering systems could be introduced.

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- (110) Several participants commented on the apparent imbalance in Table 2 of Annex 1 between information relating to the capital accounts which occupied nearly two pages and to production account information which was contained in less than half a page. While recognising that at present some countries may concentrate too many resources on production account to the exclusion of the capital account several participants felt this to be rather too great a reversal in balance between the two.
- (111) Table 2 combines items that are presently shown in the balance sheet and reconciliation accounts and this was felt to be appropriate. Doubts were expressed, however, as to whether it is necessary to have change information embedded in the balance sheet as well as in the capital accounts as presently shown.
- (112) There was a question raised about the incorporation of VAT information and in response Peter Hill explained that he felt it would be helpful to first of all treat the question of valuation in the absence of VAT and then discuss it when VAT was introduced.
- (113) The importance of presenting the accounting framework in a way that was comprehensive and comprehensible and in agreement with earlier decisions was such that it was impossible to treat all of the points arising in open discussion. It was therefore agreed that all participants would be asked to forward their detailed comments on the paper as it stood to Jan Van Tongeren and to UNSO with copies to Peter Hill and Andre Vanoli so that these could be incorporated into a revised version of the paper to be discussed at the meeting in July 1989.

Reconciliation of Tax Classifications

Jonathan Levin introduced a paper 'Reconciliation of SNA and (114)OECD IMF tax classifications'. This paper aimed to eliminate some outstanding differences between the two sets of tax classifications. Basically the differences were of two types. The first relates to inheritance tax which the national accounts regard as capital but OECD/IMF treats as current. Unless and until the SNA treatment of capital transfers was changed it was felt it was not possible to reach harmonization on this topic. However as agreed at the Expert Group meeting on the Public Sector accounts inheritance tax will be called a tax in the SNA. The other matters concerned much smaller items under the heading of 'compulsory fees'. Some of these are treated as taxes and some as payments of services and the difference between the two is at present not the same in SNA and OECD/IMF. Many of the items are small such as licences to hunt, fish and shoot. Classification of them had, nevertheless, occupied a great deal of time in OECD/IMF meetings and in the end it had been agreed that only a convention could be used to decide which category they should fall in. It was therefore agreed that on these items the SNA should follow that convention which implies that motor vehicle licences and licences to hunt, fish and shoot would be treated as taxes and all other compulsory fees would be treated as payments for services. With the exception of the current or capital nature of inheritance tax, therefore, there should be consistent treatment between the SNA and GFS on classification of taxes.

Issues Outstanding

(115) Despite extending several of the sessions it was impossible to cover all of the items on the agenda in the time available. The items that were not covered due to lack of time covered introducing the concept of total consumption into the SNA, implications for the income flows for households and general government, how to treat intermediate consumption of non-market services provided free of charge by government to market producers, wages and salaries on entrepreneurial income, the treatment of natural growth and the relationship between cash and accruals.

LIST OF DOCUMENTATION PREPARED FOR THE MEETING

(1)	Treatment of R & D expenditures in the national accounts
(2)	Mineral exploration
(3)	Two loose ends: software and nuclear fuel
(4)	Fixed capital formation by owner and user
(5)	Population and employment figures for ESA and SNA
(6)	The imputation for bank service charges: measurement and allocation
(7)	Treatment of insurance.
(8)	Sectorization of social security funds
(9)	Summary of comments received on the paper 'The residence of technical assistance personnel'
(10)	Final draft of the revised ISIC
(11)	Comments on household sector classification
(12)	Three topics concerning the household sector
(13)	SAMs, income distribution and the SNA review
(14)	Environmental accounting and the SNA
(15)	The concept of income and the distinction between current and capital items.
(16)	Current and capital transfers
(17)	Material for the discussion on inflation accounting
(18)	Changes in stocks and holding gains
(19)	SNA accounting structure reconsidered
(20)	Reconciliation of SNA and OECD IMF tax classifications
(21)	Introducing the concept of total consumption into the SNA implications on the income flows for household and general government
(22)	How to treat intermediate consumption of non-market services provided free of charge by government to market producers
(23)	Wages and salaries and entrepreneurial income
(24)	Extract dealing with enterprises and establishments from production accounts for industries and the input/output table
(25)	Relationship between cash and accruals
(26)	Cross referencing the new Blue Book

REVISION OF THE SNA

First meeting of the Coordinating Group

Luxembourg 23 - 27 January 1989

SUMMARY AND CONCLUSIONS

Capital

1. The existing concept of capital should be extended.

Research and Development

- 2. Expenditure by all sectors on all types of R & D will be treated as capital outlays.
- 3. In the SNA a broader definition of R & D will be given than in the Frascati manual, but it is expected that in practice the data compiled according to the narrower principles in the Frascati manual will have to be used. This will include R & D expenditures on both NSE (Natural Sciences & Engineering) and on SSH (Social Sciences and Humanities), as defined in the Frascati manual.
- 4. The R & D assets will be amortized over periods determined by considerations such as patent lives, commercial accounting practices or in accordance with tax legislation.
- 5. These assets will appear in the balance sheets of their owner.

Mineral Exploration

- 6. All expenditures on mineral exploration will be treated as capital formation whether or not the exploration is successful.
- 7. The appropriate amortisation period will be the average life of producing mines or wells.

Software

- 8. The decision taken in the Production Account meeting to treat as capital both purchased software and that developed in house if the expenditure is significantly large and if the product is expected to have a protracted life length was confirmed.
- 9. The term "software" is to be defined in the SNA as comprising computer programmes, programme descriptions and supporting materials.
- Significant expenditures on the purchase, development or extension of computer databases that are expected to be used over several years, whether marketed or not, will be treated as capital.

"Intellectual Property"

The extension of capital formation to include the items discussed in recommendations 2-10 pointed to the possibility of treating the acquisition or own account production of other "intellectual property" such as films, TV series and sound recordings as capital formation. A paper considering the coverage, characteristics and data problems relevant to this possibility will be prepared for the July meeting.

Nuclear Fuel Rods

12. Since these have a life length of about 3 years they should in principle be treated as capital in the SNA.

Fixed Capital by Owner and User

13. In the main accounts and balance sheets capital formation and capital stock will be classified according to owning sector based on institutional units as units of classification. Additionally, the SNA will recommend classifying capital formation and capital stock by kind of activity, based on establishment as units of classification. This should be done for both using and owning kinds of activity.

Population and Employment

Population and employment data consistent with SNA definitions of residency, timing etc are needed for use in conjunction with SNA aggregates, and this should be emphasized in the new Blue Book.

Data expressed in person hour worked rather than simple head counts should be derived where possible as measures of the "volume" of labour inputs.

Valuing the Imputed Output of Financial Intermediation

- Estimates of the output of financial intermediation should be made for all units involved in financial intermediation.
- 17. The imputed output of financial intermediation is to be measured by deducting from property income received by financial intermediaries the interest paid on deposits, bonds and bills issued. In principle income from the investment of their own funds should be excluded from the measure of their output. A further paper containing numerical examples will be prepared for the July meeting showing how this exclusion is to be achieved and will review the treatment of payments and income on marketable securities.
- 18. Measurement of the output of financial intermediaries should not be adjusted for capital gains and losses, provision for bad debts and debt write-off.
- 19. Attribution of some imputed service charges of financial intermediation to exports implies that imports of such charges should also be recorded where appropriate.
- 20. The paper mentioned in paragraph 17 will also address how the allocation of imputed service charges of financial intermediation between categories of final demand and intermediate demand and the calculation of such imported services is to be undertaken. This includes the separation of attribution to households as producers and as consumers.
- 21. The paper will also consider to what extent data for each of the financial corporation subsectors should be consolidated. There should be no consolidation between the sub-sectors agreed to at the Financial flows meeting nor between public and private sub-sectors.
- 22. In principle the attribution of imputed service charges of financial intermediaries to intermediate demand is to be allocated among all producers.
- 23. The questions of time of recording of interest flows and whether taxes on interest are taxes on production or on income were deferred.

Insurance

24. For both life and casualty insurance, the service charge will be defined as:

Gross premiums earned

- + net income from investment of technical reserves
- Claims due
- Changes in technical reserves and reserves for with profit insurance net of the Capital gains and losses allocated to the insured included in these technical reserves.

- 25. The reserves of pension funds in excess of liabilities to contributors will be treated as assets of the pension funds and not of the contributors
- 26. Allocated capital gains and losses should appear in the reconciliation account.
- 27. All insurance premiums and claims for casualty insurance are to be recorded as current transactions.
- 28. To re-establish the identity between net premiums and claims in respect of casualty insurance, the net income from investment of technical reserves will be shown as distributed to policy holders and returned by them to the insurance enterprise, as is done for life insurance.
- 29. Service charges on imports are to be calculated as gross premiums less value of imports lost in transit (which can be approximated by claims).

Sectorisation of social security funds.

30. General government will be subsectored two ways of equal rank: central, state local government excluding social security funds, and social security funds; central, state and local government including social security funds each broken into social security funds and other.

Technical Assistance Personnel

31. Technical assistance personnel who are resident for more than one year will be treated as resident in the recipient country and their output as part of the output of the recipient country. The payment by the donor is treated as a current transfer. This treatment applies equally to personnel supplied by international organisations.

ISIC

- 32. The definition of statistical units should be identical in SNA and ISIC.
- 33. For SNA purposes, autonomy should not be a criterion for defining an establishment.
- 34. The introduction to the revised ISIC should make a clear distinction between the ideal definitions from rules for their application in practice.
- 35. Terminology such as primary, secondary and ancillary activities should be identical in ISIC and SNA.

36. The definitions of units may need to be adapted in the light of ongoing work on service industries.

Household sub-sectors

With regard to the classification of outworkers, an outworker should be considered an employee if

there exists an explicit or implicit contract or agreement of

employment

a)

and b) the renumeration received depends basically on the time worked or amount produced.

An outworker should be considered an "own-account worker" if

either c) there is no contract or agreement of this type and the decision on markets, scale of operation and finance is in the hands of the outworker

or d) there is no contract and he owns or rents the capital equipment used in the production process

and e) the remuneration is a function of receipts or profits of the value of

the remuneration is a function of receipts or profits of the value of sales.

- 38. In the household sector households will be sub-sectored into four groups: employees, "own-account workers", employers, and other.
- 39. In the first draft of the Blue Book, the criterion for household classification will be the income of the reference person. This will be reviewed when the ILO basis of classification is defined.
- 40. Further consultation with ILO will take place on the distinction between formal and informal sub-sectors with the intention of reaching a common definition for use by ILO and the SNA.

SAMS

41. The 1968 Blue Book includes the link between income generation and household consumption but this needs to be emphasised and further articulated in the presentation of the accounting structure, of the production, income and outlay and capital formation accounts. (See also recommendation 54).

Environment

- 42. The Blue Book should discuss the interpretation of the main national account aggregates in relation to environmental degradation, depletion and defensive expenditure as they affect the production boundary and classification of assets in the balance sheets etc which would clarify links to a future framework of environmental accounts.
- 43. National accountants should actively co-operate with environmental economists in developing satellite accounts consistent with the SNA framework.

Definition of Income

44. The definition of income as the maximum amount that can be consumed in a period while maintaining initial capital and net capital transfers received in that period intact will be used for purposes of explaining the concept of income in the system.

Capital Transfers

- 45. The concept of capital transfer will continue to exist in the SNA. A transfer is distinguished as being capital rather than current in nature according to several criteria: i) purpose ii) source of funding iii) size and iv) frequency. Since these may be in conflict a hierarchy among them needs to be established.
- 46. International capital transfers are to be distinguished according to the same principles as domestic capital transfers. In this case purpose may be the main criterion but it is not the sole one. A list of examples of capital transfers is to be provided in the SNA. The placement of capital transfers in the balance of payments account was not determined.
- 47. A study is to be prepared for the July meeting exploring the advantages and disadvantages of allowing a transfer to be treated as current by one party (sector) to the transaction and as capital by the other party. The study will also examine how the resulting imbalances are to be reconciled.

Holding Gains and Losses

48. Holding gains and losses will be identified in the system in the reconciliation accounts where gains and losses on financial and nonfinancial assets will appear in conjunction with one another.

49. Holding gains and losses on monetary assets will not be treated as income. They will not be integrated in the income and outlay accounts but will be shown as a memorandum item. A handbook dealing with all the problems of hyper-inflation will, inter alia, describe how to prepare separate tables integrating this information on holding gains and losses

Changes in stocks

50. Changes in stocks in the SNA are valued by cumulating entries to, and withdrawals from stocks at the prices prevailing at the times the entries or withdrawals take place and this remains the correct theoretical treatment in the system despite the considerable practical difficulties of implementation.

Accounting framework

- 51. The opening chapters of the new Blue Book should serve as an introduction to the system for users as well as compilers. These chapters should not be aimed at specialists in national accounts.
- 52. T-accounts are easier to understand than accounts in matrix form, although the matrix is useful for providing an overview of the system. Both types of presentation are therefore required.
- 53. The physical presentation of the new Blue Book is important. Modern typographical techniques should be used to guide readers through the text.
- 54. Supplementary tables and matrices will be included containing three dimensional classifications of household income and expenditures as included in social accounting matrices and of flow of funds.
- 55. The suggested accounting framework will be further elaborated and illustrative numbers will be included for the July 1989 meeting.
- 56. The draft of the tables and classifications which constitute the system will be reviewed taking into account the comments made in this meeting, those made in writing to UNSO and taking into account the decisions from previous meetings.

Tax Classifications

57. In the SNA the distinction between those compulsory fees to be treated as taxes and those to be treated as payments of services will be identical with the distinction in the OECD-IMF tax classification. This implies that by convention motor vehicle licenses and licenses to hunt, fish and shoot will be treated as taxes; all other compulsory fees will be treated as payments for services.

Participants at SNA Expert Group Luxembourg 23 - 27 January 1989

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