

**REPORT OF THE FOURTH MEETING  
OF THE VOORBURG GROUP  
ON SERVICE STATISTICS**

Ottawa, October 2-5, 1989

(With revisions and additions suggested by participants)

(1) Opening of the Meeting

The fourth meeting of the Voorburg Group on Service Statistics was held in Ottawa, Canada, from October 2, 1989 to October 5, 1989. A list of the participants is attached as Annex I. The documents discussed during the meeting are listed in Annex II. In the following, numbers of papers refer to the attached list of documents, names in brackets to the person who introduced the paper.

The participants were welcomed by Dr. Fellegi, Chief Statistician of Canada. Mr. Ryten from Canada was elected chairman, by acclamation.

Mr. Ryten provided a brief summary of the principles which brought the Voorburg Group together - to advance the knowledge available by exchanging information; to explore energetically opportunities to labour share; and to assist the United Nations and other agencies in the United Nations family, other international agencies and super-national agencies to draft and promulgate standards so that the cause of international comparability could also be moved forward.

(2) Trade in Services

#18 GATT (Hoekman)  
#12 UN/IMF (Patel)  
#11 OECD (Veil)

Presentation

The paper from GATT discussed policy makers requirements for the continuation of the current GATT round. The discussions have followed a five point agenda: definition of trade in services; concepts and rules applicable to international service transactions; sectoral coverage of the agreement; identification of existing arrangements; and measures and practices affecting trade in services.

The data needs include: classification; consistency and coverage; trade by origin and destination; disaggregation; transparency; deflated trade in services; consistency over time; concordances and a definition to separate goods from services.

The need to get data of trade conducted through affiliates was stressed.

The paper from the UN/IMF summarizes the replies to a survey of country practices to which replies from 63 countries (21 developed, 37 developing and 5 centrally planned) were obtained. Replies were organized under two major headings: the concept of services and borderline cases. The latter included the sub-headings of processing, repairs, construction, installation abroad, computer software, leasing, merchanting, franchising, revenue of the self-employed, author's fees, license fees, direct purchases, services connected with exports and imports of goods, and insurance. The conclusions reveal that there is considerable divergence in country practices, that documentation is still imperfect, and that more guidelines and generally speaking methodological material must be prepared especially for developing countries.

Mr. Patel also reported on another IMF paper which summarized the comments of 56 respondents (53 countries and 3 international agencies) on its Draft Classification of International Transactions in Services, which is based on the recommendations of the Balance of Payment compilers and regional and international organizations. The Draft Classification attempts to show how the CPC can be used in the context of standard BOP components.

The OECD paper on Analytical Classifications discussed trade in services under two headings: the basis for analytical classifications and a proposal for a new analytical classification using CPC building blocks. The chief objective of the classification, which focuses on the distinction between product and consumer services, is to bridge the gap between classifications geared to domestic production and those used for a description of the external sector.

#### Discussion

The Group welcomed the list of user needs detailed in Mr. Hoekman's paper and took note of the fact that the GATT Secretariat will send to agencies and to the host country a more precise version of negotiators needs where the references in the paper appear to be too general. The Group also noted with satisfaction the fact that the GATT Secretariat was helped in producing a classification of service products by the work leading to the adoption of the CPC.

The Group noted with concern the review of country practices given by Mr. Patel; in particular the contradiction that seems to exist between countries acceptance of international standards and their actual practice which seems to go counter to these standards. This is a troubling feature of attempts at making external sector statistics more comparable across countries. Individually and collectively the Group should try to help matters by calling for more complete coverage and better documentation on practices, possibly better documentation on departures from agreed concepts, and eventually for convergence on internationally agreed concepts.

The Group welcomes the progress on balance of payments standards of measurement and classification of services noted by Mr. Veil following the last meeting of the Joint OECD-Eurostat Meeting of Balance of Payment Experts. It notes with particular pleasure that in these discussions countries and agencies were mindful of the bridge that must exist between external trade and domestic production statistics.

But whereas it is important that overall external sector and domestic statistics be consistent in terms of coverage, and whereas it is important to recognize that trade negotiators may need supplementary information, it is probably not possible and in some views not necessary at this stage to agree on a perfect concordance between disaggregated data used in production statistics and their counterparts used in the balance of payments.

#17 United States (Whichard)  
#21 OECD (Veil)  
#24 OECD (Veil)

#### Presentation

The paper from the United States described several recent improvements to U.S. statistics on trade in services, including new data on transactions with unaffiliated foreign businesses and individuals in miscellaneous private services, new estimates of transactions in medical and educational services, and improved estimates of tourism transactions. Other improvements noted in the presentation included increased use of gross recording methods and development of information on sales of services by foreign affiliates.

#### Discussion

Several countries expressed an interest in statistics on sales of services through foreign-owned affiliates operating in their own countries and/or their own affiliates located abroad; a few were actively attempting to develop information on such sales. The idea was broached that if a

group of countries undertook such surveys each might only need to deal with foreign affiliates operating inside their own country rather than also with their own affiliates operating in other countries. However, the Group also noted that in order to construct a consistent matrix of such trade it will be necessary to supplement the IMF's Balance of Payments Manual guideline on direct investment. At this stage the guideline does not mention a minimum share of capital ownership to define direct investment abroad.

#3 Netherlands (Bloem)  
#10 Eurostat (Roman)

### Presentation

The paper from the Netherlands argues that the registration of net processing flows is in general the most appropriate to describe Dutch conditions. However, when processing amounts to a complete production process, a gross registration would be more appropriate. The recommendations appear to reflect user preferences. They are in accordance with the rules in the current version of the SNA but they seem to be in conflict with those of the ESA.

The paper from Eurostat suggests that, for purposes of surveying trade in services, banking sources are not adequate whereas direct surveys of transactors are comprehensive, feasible and not excessively expensive. If these recommendations are adopted, they might be generalized to derive data for intra-community merchandise trade flows.

### Discussion

The proposal made by the Netherlands recognizes that there is no perfect solution for registration of flows connected with processing. However, it aims at minimizing imputation and distortion of technical coefficients while at the same time maximizing the usefulness of resulting statistics and in particular of the I-O make and use tables. There were comments that suggested that while this may be appropriate in the Dutch context its applicability across the board should not be taken as given. It was also noted that in other fora, and in particular in the OECD the problem was discussed and a decision on registration taken. The Dutch paper recognizes that its proposal will have to be discussed in the framework of the ESA with which it is not compatible.

The Group listened with interest to a description of Eurostat's intention to recommend that direct surveys be taken of transactors. Such surveys would have strong similarities with some already taken by Community countries (France and the Netherlands). While there was not time to discuss in detail matters of coverage and cost, the Group would be interested to hear more about Eurostat's thinking when the formulation of the survey gets to be more concrete.

**FOURTH VOORBURG GROUP MEETING**  
**Day 2 - Tuesday, October 3, 1989**

(3) **Quantity and Price Indices of Services**

#25 Norway (Flottum)  
#14 UNSO (Drechsler)

**Presentation**

The Norwegian paper reports on a survey of country practices with respect to quantity and price measurement in ISIC 6 - wholesale and retail trade, restaurants and hotels, and ISIC 7 - transportation and communications. The results to date reflect replies from 21 developed countries and 25 developing countries.

According to those results deflation and extrapolation approaches to estimate constant price value added in these two industry groups are almost equally distributed among responding countries. Further, the differences in approach between industrialized and developing countries are small, although developing countries resort to the single deflation approach more frequently than developing nations.

The objective of the study is to develop international guidelines on price and volume indices for the industries under review. A number of choices are presented for discussion, e.g., flexibility versus uniformity; detailed versus general guidelines; and the degree to which current practices should influence guidelines.

The UNSO paper reviews the methodological work going on in respect of quantity and price indices in particular service industries and visualizes the various options in continuing the work in this field. It outlines some general methodological problems which must be resolved, and arrives at similar choices to those presented in the Norwegian paper.

**Discussion**

The two papers generated discussion particularly on the issue of flexibility versus uniformity in the intended guidelines. The Chairman noted that this and related issues were at the heart of the Voorburg Group's work, and requested that the subject be brought back to the table on Thursday for further discussion before attempting to come to any conclusions.

#26 Canada (Ansmits)

**Presentation / Discussion**

The Canadian paper presents a proposal to test the use of the model pricing technique to collect prices in the case of certain complex services. The technique is one that STC has successfully adopted in the framework of the construction industry and now intends to test for applicability to architectural and engineering design, consulting, and advisory services.

There were some measurement issues raised; for example, if architects' honoraria fluctuate pro-cyclically, it was not clear how this could be handled. But there was general interest in the proposal and expectation that in due course the Group would hear more about it.

(4) Country Plans and Programs

- #5 New Zealand (Archer)
- #8 United States (Marcus)
- #9 United States (Aanestad)
- #4 Finland (Jeskanen-Sundström)

Presentation / Discussion

There were presentations from three countries on the approach they adopted in order to survey and improve their coverage of the service industry. The approaches adopted fall into three distinct categories:

New Zealand - Very extensive use of the Goods and Services Tax (GST) which appears to be very efficient guarantor of coverage and equally efficient source of updates. The recent mix of 5 year census with annual and sub-annual surveys seems to provide extensive information with a focus on supporting national accounts.

United States - An example of what can be done with a revision of the industrial classification every 10-15 years, a broad full-count census effort once every five years, followed by annual sample surveys with more current data. There is no challenge provided in the presentations, but only demonstration of what was done in the current Census (1987), a recognition of the multi-purpose nature of the Census, and an indication of new problems which have come to light. For example, there were problems in obtaining small area statistics, and in defining the nature of the employed in service industries. The Group was pleased to learn that some progress was made in respect of linkages to merchandise trade, secondary services, and in own-account services information. Both in the case of New Zealand and the United States, the Group noted that deregulation of certain service industries resulted in a temporary loss of information, since no alternate arrangement for data had been made, in spite of the fact that users' interest in continued data was clearly present.

**Finland** - Steps have been taken to improve the coverage of certain service industries by the use of a mixed approach consisting of data derived from taxation sources and enterprise surveys.

Improvements in the coverage of the Finnish General Register of Enterprises and Establishments (GREE) and the Standard Industrial Classification of Finland were essential to these subsequent improvements in service industry coverage. Also, given the extensive use of income statement and balance sheet data acquired via tax sources, the use of common enterprise identification numbers and uniform industrial classification in various registers is essential.

(5) Statistics on Individual Service Industries

- #1 Australia (Sarossy)
- #7 Sweden (Isacsson)

Presentation

The paper describes recent considerations in the Australian Bureau of Statistics sparked by user pressures for more activity (as opposed to industry) statistics, and changes in the make-up of the economic units providing much of the raw data. These pressures have led to a recasting of the definition of establishment, a re-examination of ancillary units, and a redefinition of primary, secondary and own-account activities, recognizing new classes of transactors and transactions. The example given in the paper suggests that activity statistics should include data or estimates for own-account services.

As background to the paper, there were references to the relative stagnation of goods production and vibrancy of services, the increasing concentration of ownership and growth of conglomerates, the growth of new modes of ownership and control through franchising, the explosion in credit and financial services, and the effects of deregulation all of which challenged the traditional measuring and relevance of such concepts as own-account.

The Swedish paper outlines the current treatment of services production within the manufacturing sector, in the Swedish context. It itemizes a number of recent changes, in coverage in the census of production (ISIC 2 and 3) and describes a new production survey for the service sector (ISIC 6-9). The paper raises a number of questions regarding the treatment of problem areas such as changes in the location of production via unbundling or contracting out, how to measure services imbedded in goods (e.g., software), etc.

### Discussion

The discussion drew attention to the severe problems faced by statistical agencies when they try to use a single classification system to deal with the demands of multiple users and uses. Attention was drawn to some differences in terminology between the language used in some of the papers, and the accepted terminology as used in the current ISIC and SNA manuals (e.g., own-account versus ancillary unit production).

#2 Canada (Nijhowne)

### Presentation

The paper presents for discussion an elaboration and definition of the CPC classes for Telecommunications Services. Proposals to elaborate some classes, to merge two classes in a wider class and to adopt a different breakdown for one class are presented in the form of an alternative to the CPC at the three and four digit level. Within this alternative structure, classes are listed at the five and six digit level to detail the content of the main classes and thus aid in defining them. Delegates were requested to send their comments to the author before the proposal is forwarded to the UNSO.

### Discussion

The paper was welcomed particularly as the CPC is a provisional classification and that efforts to further refine the content of CPC classes are essential if the classification is to become truly useful.

## FOURTH VOORBURG GROUP MEETING

Day 3 - Wednesday, October 4, 1989

### (6) Finance and Insurance

#15 United States (Parker)

#16 United States (Parker)

### Presentation

The U.S. papers on the measurement of banking output were produced for discussion as part of preparations for the 1990 benchmark revision to GNP figures for the United States. They argue that services to depositors are part of banking output, even if many of these services have no price, and recommend the use of a hedonic approach as a means to estimate prices of services provided by the banking industry.



## Discussion

Several participants noted that the U.S. papers on the measurement of banking output described a potentially useful application of hedonic price indexes. It was also noted that additional clarification would be useful on the definitions of gross output and of gross product in a nominal framework both for the proposed measures of the banking industry as well as for their impact on other industries.

### **#22 Canada (Collins)**

The Canadian paper presents a product classification for the finance and insurance industries. This classification is put forward for consideration as an alternative to the current CPC for those industries.

## Discussion

The origin of the discussion of finance and insurance was in the Group's opinion, expressed at the first meeting, that for each service industry, there should be a description of its operation and products, so that the value of its output could be decomposed into price and quantity components.

The Group welcomed the initial proposal for the CPC for the finance and insurance industries and considered studying the Canadian counter-proposal. Eventually it should decide which of the two is more useful. But the decision should start with an understanding of the industry model, followed by the question of whether or not it is possible to collect data for every one of its components. The work of the Group requires agreement on what the production model of each industry is before raising the question of how the industry will be treated in the SNA and in the BOP.

For this reason, a contribution to the deliberations of the United Nations Statistical Commission would be made if and when the Group could agree on whether the existing CPC proposal was suitable, or whether it required amendments in the light of experience.

## **(7) General Methodological Issues (Part I)**

- #27 Canada (Hill)
- #28 France (Trojan)
- #19 France (Picard)
- #29 France (Picard)
- #34 Eurostat (Roman)

## Presentation

The Canadian paper presented the results of a comparison of questionnaires from eight countries for a number of service industries. The questionnaires were compared from two

points of view: (i) how well they covered the data elements required for the calculation of value added; and (ii) how far they want in requesting revenue breakouts.

Paper #28 from France described a technique used to transform enterprise data, classified according to principal activity, into data classified by product. The paper also outlined the Unified System of Enterprise Statistics, which is based on co-ordinated processing of fiscal files and an annual survey of firms.

Paper #19 also from France described the use of the Value Added Tax files to estimate sales and investment expenditures of firms. It also described difficulties encountered and how these have been overcome through a system of supplementary surveys. Initial results, after the introduction of a sample survey of small companies (5300) and new business (800) were presented in item #29, a copy of an INSEE publication "Informations Rapides."

The Eurostat paper presented an update on plans to develop a European system of enterprise statistics on services, and gives a rough sketch of future plans.

#### Discussion

The discussion of the Canadian paper focused on the possibility of expanding the comparison. There was general agreement on the need to add qualifications and additional explanations. There would also be benefit if the comparison could be supplemented with information on purchases from and sales to abroad.

The French contribution responds to the concern expressed at the Third Voorburg Group Meeting, to use turnover information, especially when available from tax records. While several countries reported difficulties in using turnover information from tax sources, the French papers suggest ways to make use of such information. For short term indicators, there is also a description of how to offset the weaknesses of administrative data with supplementary surveys.

The Eurostat statement of intentions to carry out surveys to obtain enterprise statistics for service industries, with the use of standard tools, will be followed with interest by the Voorburg Group.

FOURTH VOORBURG GROUP MEETING

Day 4 - Thursday, October 5, 1989

(7) General Methodological Issues (Part II)

#23 Japan (Aida)

Presentation

Paper #23 from Japan presented a picture of the changes in the Japanese economy over the last two decades, and the significant growth of service industries. To obtain comprehensive data on services, the Japanese Statistics Bureau conducted a survey as of July 1, 1989 of 500,000 establishments sampled from the Establishment Directory, which is based on the 1986 Establishment Census. The paper provided details on coverage and procedures for both the 1989 survey and the 1986 Establishment Census.

#6 Sweden (Köll)

Presentation

The Swedish paper presented arguments for a broader concept of investment, as well as an outline of Swedish experience and data from 1987 and 1988 surveys of capital investment in manufacturing industries. The purpose of the paper was to ask for suggestions from participants on how to refine the concepts and measures.

Discussion

Participants noted that the following were unresolved issues: (i) the problem of estimating the service life of R&D, marketing or education/training investments; (ii) the fact that current R&D expenditures data carry no information regarding success or failure, and the question of whether this information is necessary or not; (iii) the question of how to get constant dollar estimates.

The Group was informed of the views on investment of the UN Expert Group engaged in the SNA revision. Current recommendations suggest the inclusion in Gross Fixed Capital Formation of mineral prospecting (whether successful or not), software expenditures and R&D expenditures other than market research. While the first two have not caused too many difficulties, the third (R&D) has led to further discussion.

The Swedish position is not to suggest a need to change SNA concepts at this time; the data on software, marketing and R&D are additional information to the normal investment estimates; Government is not yet covered in the Swedish

survey, but will be in the near future; data on service life will be collected and will make the figures more useful for analysts. There was no need for a different set of concepts for service industries although the relative weight of the intangible investments was expected to be higher for services.

In the U.S., the Bureau of the Census is conducting a survey of record-keeping practices of business, in which companies are asked whether they can report expenditures on R&D, marketing and education and training, and whether these costs are capitalized.

The vice-chairman summarized the discussion by noting the full agreement that research in this area should continue with the proviso that the data necessary to apply current SNA concepts should remain available. The Group should not be constrained by the SNA concept of investment, but should bear in mind the concept's role both in the SNA coordinating framework and in business accounting. The Group considered that the expanded notion should be described by a word other than "investment."

#13 UNSO (Drechsler)

#### Presentation

The UNSO paper on the concept of services attempted to answer the basic question of how to draw a boundary between goods and services and questioned whether there is a need for such a boundary. The paper suggested that the absence of a clear distinction between goods and services does not seem to impede progress on other conceptual or measurement issues, and data gaps are being filled.

#### Discussion

It was suggested that a "money supply" approach be used with a number of definitions (S<sub>1</sub>...S<sub>n</sub>) with successively wider boundaries.

Another suggestion was to distinguish between an analytical and an enumerative definition, avoiding the former and dealing as simply as possible with the latter.

It was noted that for trade negotiations some form of definition is essential. However, it would be up to the negotiators to establish the boundaries in agreements and statistical definitions might not help.

The discussion was summarized by noting agreement to set aside the issue of a single definition for services, with its implied resolution of the goods-services boundary issue.

(8) Future Work of the Voorburg Group

(i) Guidelines

There were several proposals for guidelines: a paper with S...S definitions; a paper on quantity and price guidelines for trade in services; and possibly others. The Chairman suggested that it would be useful to have a sharing of the work on guidelines for quantity and price indices, along the lines of the original work sharing which produced the CPC proposals, but this suggestion was not followed through.

There was concern that if the Voorburg Group became involved in the approval process related to the preparation of formal guidelines, it would lose some of its value, and some participants might be forced to rethink their countries' contributions to the Group.

Several participants stressed the need for a better focus to the Group discussions, and a need to circulate papers well in advance.

It was suggested that each participating country prepare a brief note outlining particular interests in services statistics, the major problems faced and the areas chosen for resource concentration over the next few years. The Netherlands volunteered to consolidate these notes for presentation at the next meeting.

There was discussion of the need for an alternative forum for discussion of technical issues, a forum such as an Expert Group. Some participants cautioned against narrowly focused discussions, and reiterated that the advantage of the Voorburg Group was its breadth of perspective in an area where there are both data gaps and conceptual difficulties.

The Chairman agreed with the general thrust of these comments but suggested that too broad a front might lead to difficulties in arriving at conclusions. He agreed with participants who stressed the need for the resolution of some conceptual problems before formulating guidelines and suggested that the Group not worry at this stage about passing on recommendations to international agencies for eventual approval.

(ii) Venue for the Next Meeting

On behalf of INSEE, M. Picard volunteered to host the next meeting of the Voorburg Group.

One factor influencing the date of the meeting is the need to transmit a document to the UN Statistical Office by early October 1990, for consideration at the

UN Statistical Commission Meeting in January 1991.  
Subject to confirmation the week of September 17, 1990  
was proposed.

(iii) Response to the UN Statistical Commission Request

After discussion the Canadian proposal to present a model survey (paper #35) was accepted, with a note of caution regarding the proposed industry. Some participants felt that the Computer Services Industry might be too difficult to handle, particularly since the outline suggested a "product" rather than an "activity" approach, and referred to coverage of "own-account" as well as purchased services. Alternatives will be suggested after the meeting.

(iv) Proposed Agenda for Next Meeting

The proposed agenda for the Fifth Meeting of the Voorburg Group was:

	<u>Time Allocation</u>	<u>Topic</u>
1.	1/2 day	The "Bloem Survey" report (Problems, interests and concentration of resources)
2.	1 day	The Canadian Proposal (2-3 participants to be identified)
3.	1/2 day	CPC Revision Proposals <u>or</u> Reports on Experience with CPC Use
4.	1/2 day	Discussion of intangible forms of capital expenditures
5.	1/2 day	Earmarked for a specific problem area, <u>if</u> suggested
6.	1/2 day	Follow-up on Fourth Meeting Topics: - Veil Paper on S,...S. - Flottum Paper on Quantity and Price Indices