

VOORBURG GROUP MEETING

ON

SERVICE STATISTICS



ROME 1998

Minutes

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Annexe

13th Meeting of the Voorburg Group, Rome 21st-24th September 1998

SESSION 1: OPENING ADDRESS

The 13th meeting of the Voorburg Group on Service Statistics was held in Rome, Italy, from 21st to 24th September 1998, hosted by the Italian National Statistical Institute. About 50 participants from national and international statistical or governmental institutions took part in the meeting.

The opening address was held by Mr. Paolo Garonna, Director General of ISTAT. In his speech he stressed the fast growing importance of services sector and the consequent increased need for improving detailed services statistics. The difficulty in improving investigation into the traditional branches of the service sector and analysing the more innovative ones requires designing suitable survey techniques. In doing so, the work has to be finalised towards improving international harmonisation and comparability of data.

ISTAT's commitment to the development of service statistics focuses on several activities, among which is important to underline the implementation of EU Regulations (on business registers, structural business statistics, short term statistics, on National Accounts and on sector specific statistics) and carrying out projects on specific services activities.

A particular attention is devoted to small and medium size enterprises, mainly operating in the service sector and representing a clear feature of the Italian economic system.

Italy wants to participate to the process of building knowledge in the field of service statistics and actively contribute to the discussion inside the Voorburg Group.

In this regard, the international recognition of the paramount role of the Voorburg Group in developing statistical definitions, classifications and methodology was emphasised.

SESSION 2: SPECIAL REPORTS

Leader: Paolo Garonna

FIRST PART

1. Shaila Nijhowne presented the Report of the CPC Sub-Group. Since the last meeting of the Voorburg Group in 1997, the Sub-Group has met twice, once in New York and once in Vienna. The next meeting will take place in November 1998 in New York after the meeting of the UN Expert Group on Economic and Social Classifications.

During 1997 the Sub-Group assisted UNSD in refining and finalising the explanatory notes and the concordance between CPC v 1 and the Provisional CPC, for publication.

Detailed notes on the classes that are split in the concordance will be finalised at its November 1998 meeting.

After its acceptance by the U.N. Statistical Commission in February 1997, CPC v 1 and its relationship to the Provisional CPC was subjected to close scrutiny by the Secretariat of the WTO, who examined its suitability as a basis for the new round of GATS negotiations due to start in the year 2000. UNSD and the Chairman of the Sub-Group addressed a meeting of the Committee on Specific Commitments of the WTO in October 1997 and explained the relationship between the provisional CPC and CPC v 1 and provided them with a Report and Technical note. The Sub-Group and Statistics Canada also assisted UNSD, by undertaking the preliminary work to provide the Inter-Agency Task Force on Statistics of International Trade in Services with a concordance showing the relationship between CPC v 1 and the categories in the Balance of Payments and the extended list of the BOP developed by OECD and Eurostat. This is now being finalised by the IMF.

Other work, that is in progress, identified the need to explain more clearly the CPC and its use in the SNA and Balance of Payments, and the handling of intangible assets in the classification. In considering the question of whether the aggregation structure of the classification should group products by industry of origin, demand or function, the Sub-Group had expressed the need to further examine the implications of a demand aggregation.

The Eurostat proposal that future revisions of the CPC should coincide with revisions to the HS was supported by the Group but if this proposal is accepted, a decision with respect to the nature of revisions that should be made to the services part of the CPC would have to be taken right away as the work on the goods and services part of the classification would have to be completed by the year 2000, to leave time for implementation.

2. The newly released publication of the *Central Product Classification (CPC), Ver.1.0* was presented to the Group by Mary Chamie of UNSD together with a note from the Director of the United Nations Statistics Division addressed to the Voorburg Group, recognising their contribution to the preparation of the CPC.

3. Mary Chamie and Ralph Becker of the United Nations Statistical Division then presented a short evaluation of CPC and ISIC in terms of their use implementation and possible future directions.

It was explained that general criteria for the evaluation of the CPC and ISIC are their ability and success in harmonising product and activity classifications as well as their ability to meet the needs of major theoretical frameworks, e.g. the SNA and BOP.

The evaluation also includes more specific questions about theoretical principles, the availability of conversion tools, indexes, technical guidelines (e.g. for aggregations) and services provided by international bodies to help and guide countries in the implementation process.

National classifications derived from ISIC are currently used in 130 countries, of which 50 have implemented ISIC Rev.3. Factors impeding universal implementation of the most recent version, such as lack of training facilities and guidelines or lack of resources have to be explored to ensure a more widespread implementation of ISIC Rev.3.

The planning and thinking process for future revisions has to run parallel to the implementation of the current version. Apart from technical issues of revising the classification, revision schedules and proper mechanisms for continuous updating and feedback have to be discussed.

SECOND PART

Presented Papers

1. *EU: Moving Services Statistics up the Agenda*, Pedro Díaz Muñoz and Bernard Langevin, Eurostat.

Main points

Growth, increased internationalisation and strong structural changes in service activities imply deeper information needs and, at the same time, more difficulties in obtaining sets of statistics adequate to the needs themselves.

Eurostat commitment to the realisation of an harmonised system which could fill the present gaps in service statistics has been focused on pilot studies, the re-structuring of the organisation (with the separation of short-term and structural statistics), the integration of the informative and disseminating systems and the strengthening of the role of Member States in outlining strategies and priorities to enlarge and fully implement the regulatory framework.

Discussion

The discussion focused on the issue of the quality of data, even though it was recognised as being a long-discussed problem in the field of service statistics. The adequacy of the structure of NSIs, to the feasibility of explicative sets of service statistics was also concern of participants. The organisational separation of structural and short-term statistics was considered, as it seemed that only Statistics Finland and ISTAT present this feature.

2. *Service in Lithuania: Statistical Work for improving Service Statistics*, Vilija Lapeniene, Statistics Lithuania.

Main points

The paper underlines the main priorities and problems dealt with by Statistics Lithuania in its work of improving service statistics. A wide range of activities, chiefly traditional ones as distributive trade, transport and hotels and restaurants, are surveyed in order to gather data on turnover and employment, but the inadequacy of coverage for business services is felt as a major issue.

An important goal is the improvement of business register, as a basis step toward the completion of a thorough statistical system for service activities.

3. *Service Industries and Competitiveness: Some International Comparison of Performance*
Bill Cave, UK Department of Trade and Industry.

Main points

The paper represent a progress report on work done in DTI to realise an international database of competitiveness indicators to cover service sector activities. It outlines the efforts to assess the comparative performance of national service industries, the quality of available data and draws some tentative conclusions. It also describes some useful developments in ONS and lists the core variables for the proposed database. For the DTI the fundamental competitiveness indicators are GDP per head, productivity and trade performance with selected explanatory variables

SESSION 3: A FRAMEWORK OF ANALYSIS FOR ICT ISSUES OF SUPPLY

Leader: Lea Parijo

Presented papers

1. *Business Services in Europe; the Information Technology Pilot launched in 5 countries*

Jan van Laanen, Statistics Netherlands & Samuli Rikama, Statistics Finland.

Main points

This paper tells about experiences in 5 European countries on the Information Technology Pilot. The paper deals with reasons for pilot surveys, project design before going to details on the questionnaire and hypotheses tested in the pilot surveys. The paper ends with concluding remarks and major findings in the pilots.

2. *ICT supply side: An Analysis of Some Statistical Sources in Italy*

L. Fenga, G. Perani, F. Riccardini, G. Trovato, ISTAT.

Main points

The OECD definition of the ICT sector includes the manufacturing and services sectors related to information and communications technologies. Including content industries as well, the definitions of information economy or information industries are defined.

ISTAT has carried out three surveys: the project for audio-visuals, the project on IT and the project on telecommunications. They are shortly presented in the paper. Moreover other non-specific statistical sources, such as the survey on innovations in services sector are analysed. The importance of definitions adopted, methodological problems connected with existing classifications are reported as well as gaps and initiatives to develop statistics are introduced.

3. *ABS Experience with Supply Side Surveys of Information Technology, and Telecommunications*

W. Pattinson & D. McGeachie, Australian Bureau of Statistics.

Main points

The paper outlines the current ABS strategy for the collection and compilation of ICT sector supply side statistics. It also sets out to provide some statistical evidence for the approach taken e.g.

enterprises, production, imports and exports of selected IT&T goods and services, and raises some issues for consideration.

4. *Information as technology change: the Productivity Paradox and a Cry for improved Service Statistics*

Erling Joar Flottum, Statistics Norway.

Main points

The paper takes the macro-economic approach of national accounts and deals with three related issues:

- Macroeconomic measures to monitor ICT development
- ICT development and labour productivity growth; the productivity paradox
- Statistical work for improving service statistics

5. *The economic account of the audiovisual sector in France*

B. Gentil, Centre national du Cinema & P. Greiner, Service juridique et technique de l'information et de la communication, France .

Main points

The economic account of the audio-visual sector has been designed in order to provide a full and coherent description of the sector and of the relations between the sector and its environment. The first objective of this account is to measure and follow up the evolution of all monetary flows circulating between the components of the sector, and between the sector and its economic environment. This paper gives some details about the structure of the audio-visual account and presents the key results as well as some indications on the measurement of the production of films and TV program production activities and the collection of data needed to fill in the account.

6. *The OECD's Statistical Panel: Results and Work Agenda*

Andrew Wyckoff and Alessandra Colecchia, OECD.

Main points

The paper briefly explains the role of the Statistical Panel, its major achievements in the field of information and communication technology statistics so far, and its future agenda. The definition of the ICT sector was approved in the Panel Meeting in June 1998.

7. *Content and communication, Some thoughts for the OECD project on content*
Jean-Marie Nivlet, Service juridique et technique de l'information et de la communication,
France.

Main points

The paper deals with discussions on the definition of 'content industries', and the problems noticed so far. Some very concrete questions are put by M. Nivlet on how to proceed with the definition.

8. *Towards a definition of ICT Commodities*
Olof Gärdin, Eurostat.

Main points

This paper gives some background information on the approach, an overview of the detailed ICT commodity structure and a proposal for respective commodities expressed in CPA and PRODCOM.

9. *A proposal for improving the relevance of statistics on the ICT and content industries*
Nick Rudoë, Department of Trade and Industry, UK.

Main points

Since NACE rev.1 was devised in the late 1980s the ICT and content industries have experienced rapid growth and change, much of which NACE is failing to measure. The paper proposes the creation of 'shadow' NACE 5-digit sub-classes for selected ICT and content industries, which would exist in parallel with the formal NACE structure. The proposal is aimed at ensuring that such developments in different member countries are made on a consistent basis, thus aiding international comparisons and at the same time preserving the integrity of NACE.

Summary

The nine papers in this session dealt with various issues of ICT supply; it was not possible to discuss all the details expressed in the papers. The session was divided in two parts: a summary of national experiences on ICT supply side surveys followed by a short summary of already made harmonising work on definitions concerning the ICT sector. The second part of the session aimed at future work with papers dealing with proposals on the definition of content industries, ICT commodities and a proposal for 'shadow' NACE 5-digit sub-classes.

The broadened scope of the Information Society was also mentioned in several papers, the ICT sector convergence with audiovisuals and other services sector activities supports the broadened framework.

The experiences in national reports may be summarised as putting following questions:

- nomenclatures: there is a need for further subdivisions concerning both activity and product classifications
- how to deal with the convergence - multimedia being one of the examples
- how to deal with non-marketed goods and services
- data collection strategy: do we need special surveys or may information be collected via standard surveys
- national needs and international harmonising work - do we have to take priorities?

The definition of the ICT sector was agreed by the OECD Statistical Panel after a long discussion on whether insulated wire and cable, radio- and TV activities and wholesale should be included or not, they were with certain remarks. The single definition of the ICT sector was considered somewhat inadequate and its links to CPC and the commodity based approach were taken under discussion. The Statistical Panel's definition on the ICT sector allows, however, the national statistical institutes to start the work to fulfil the needs for internationally comparable data. Mr Bøegh Nielsen presented the work in Nordic countries as an example of using the OECD definition.

The ABS definition in IT&T (ICT) -industries is a two-step approach including a) whole classes of industries b) partial classes defined according to products (commodities) produced by the enterprise. The same approach was also discussed on the Nordic project, where it for several reasons was postponed to future. The Australian paper also gave examples of the results of using different definitions on IT&T.

The two papers with macroeconomic approach in the context of national accounts showed some difficulties in the services sector statistics when using SNA. The productivity paradox aroused questions how to improve our methods to catch relevant data.

The second part with concrete proposals aroused the discussion what should be included and what to omit, would the proposals fulfil our users' needs and what will be the right strategy for future work. Many questions asked by M. Nivlet received no immediate answers. The relation to CPC classification was asked to be taken into account. The general impression was to continue our efforts in finding a proper framework for describing the ICT sector with the extension to the information society.

Conclusion:

During the discussion following issues were regarded important for future work:

- Classifications must be elaborated; the work with the content industries definition is urgent
- The issue of non-marketed goods and services need to be clarified
- The supply side statistics must be developed in close context with demand side statistics

OECD will continue the harmonising work within the Statistical Panel, Eurostat will continue its compendium on the information society statistics and new national surveys are under planning in several national institutes.

SESSION 4
CROSS CUTTING ISSUES : A FRAMEWORK OF ANALYSIS FOR ICT ISSUES OF DEMAND
Leader: Patrice Roussel

Presented papers

- 1 *ABS-ICT demand statistics*
W.Pattinson, D.McGeachie, Australian Bureau of Statistics;
- 2 An analysis of some statistical sources for Italy
L.Fenga, F.Riccardini, G.Trovato, ISTAT;
- 3 *The households use of ICT goods and services : Towards a framework for internationally comparable statistics*
W.Pattinson, J.di Gregorio, Australian Bureau of Statistics;
- 4 *Computerisation and changes in firm organisation : A survey on accounting services industries*
C. Cases, INSEE.

A Data collection strategies (papers 1,2)

Starting from the Italian and the first Australian papers, the session pointed at a strategy for the collection of ICT demand statistics. The Australian evidence was that indicators on demand interesting the penetration and use of ICT goods and services were becoming even more important than elaborating supply indicators.

As statistical agency, ABS is under pressure to develop annual supply and demand statistics about the computer and telecommunication goods and services / households, businesses and government use of IT statistics / short term indicators on the demand for computer and telecommunication goods and services.

For resources availability reasons, ABS conduct supply side surveys every two years with demand side surveys in the intervening years. It is also in the process of developing some short term indicators.

ISTAT is taking benefit from all available business surveys for measuring penetration and use of ICT goods and services. A multipurpose yearly survey on households collects data relating to that field, while an annual report is produced every year on diffusion of IT in the government by a specific National authority.

The Australian and Italian examples demonstrated the variations that arise in developing data collection strategies for ICT issues.

B The household use of ICT goods and services (papers 2, 3)

Whatever the strategy, every country should elaborate internationally comparable statistics from data which could nevertheless incorporate regional peculiarities.

On behalf of OECD's ICCP statistical panel, the ABS agreed to summarise practices in member countries with respect to their surveys on household use of IT. This was seen as a first step towards developing a framework for such statistics.

The results to date show that the data items which are the most likely to be available for international comparison were about computer access, use of peripheral equipment, internet access, activities undertaken via home computer and from any site. The analysis notes that not many countries have indicators about electronic commerce nor electronic banking, shopping, gambling and the like.

Italy, France and Finland undertook to provide correction / input to the tables.

C The government use (papers 1, 3)

For Italy, yearly reports are produced on automation progress of central government, and of "non-economic institutions". Those reports deliver indicators on different aspects relating to IT diffusion, as technological resources, human resources, expenditures for IT.

ABS does include government uses in a general survey on firms and government which is undertaken every 2 years and which concentrates on various issues linked to IT use. The current survey is also focusing on measuring the new phenomena of the internet and electronic commerce.

D The firms use (papers 2, 4)

As ISTAT explained, several business surveys may be used for collecting information relating to ICT use and equipment. Either the ICT producers activity may be splitted by type of clients, or the client industries may be asked for delivering additional information on purchase and / or use of ICT goods and services.

Another way of data collection consists in specific surveys on ICT issues like audiovisuals and telecommunications surveys which Eurostat supported in the frame of pilot studies.

The Nordic countries have jointly designed a questionnaire which will be used for a co-ordinated survey to be undertaken in the coming weeks in Denmark, Finland, Norway and Sweden.

INSEE experimented a joint firm and employee survey in a specific service industry, the accounting service industry, with the aim of measuring computerisation progress and the impact of computerisation in terms of changes in firm's organisation.

As a first conclusion, the experience confirmed the feasibility and the usefulness of that type of survey that sheds light on firm computerisation and on organisation. By focusing on a specific sector the survey can be a more appropriate for a detailed measurement of practices in hard and software equipment, and the joint survey techniques should bear a very soundly perception on the impact of new technologies diffusion (Statistics Canada did once already).

The outcome of the discussion around this survey was that the following steps should be :

- Measurement of the impact of computerisation on firms' economic performances.
- Monitoring of computer uses, to be done quarterly according the rapid evolution of techniques in that field
- Longitudinal analysis of education structure of employment

SESSION 5 OTHER CROSS CUTTING ISSUES

Leader: Mr. Peter Bøegh Nielsen

Presented Papers

1. *How can we measure Demand for Services by Enterprises? A Draft Proposal for a Model Questionnaire*
Peter Bøegh Nielsen and Samuli Rikama, Statistics Denmark and Statistics Finland;
2. *Measuring the Services Economy*
Carole Ambler, USA Bureau of the Census;
3. *Activities of the European Commission on Services to Industry and Future Plans*
Ole Guldberg, EU Commission;
4. *The Treatment of Industrial Services in Statistics*
Michel Beekman, Statistics Netherlands;
5. *Cross-cutting Features of the Italian Retail Trade Sector*
Paola Anitori and Roberto Gismondi, ISTAT;
6. *Outline of the 1994 Survey on Service Industries*
Keiko Horie, Statistical Training Institute, Statistics Centre, Management and Coordination Agency.

The lead introduced the session on other cross cutting issues by stressing that the need for a demand or market approach again bringing the cross cutting issue into focus. Examples of cross cutting issues are ICT or tourism as the most classical example. The contributed 6 papers fall into two groups, 4 papers addressing the issue of demand for services, namely the papers 5.1 - 5.4, and 2 papers transmitting information and experiences on national surveys, namely papers 5.5 and 5.6.

The discussant started by stating that almost all official statistics on services are supply side oriented. However, demand side statistics can give insight in the use of services by enterprises and would enable the identification of services creating value added to industrial production.

Furthermore, it would be possible to detect all services of a certain kind offered to enterprises, no matter the activity class of the providers. So the proposed model survey on demand for services by enterprises has a functional approach and not an institutional.

The need for demand side studies are expressed not only for input/output tabulation purposes but also by policy making users as the EU commission. Mr. Ole Guldborg's paper describes the user needs in more details and he supplemented his paper by informing the Group that the EU Commission has just approved a communication on business services policy underlining the need for prompt action in the field of statistics on demand for services by enterprises.

The main paper of the session, the Bøegh Nielsen/Rikama paper introducing a draft proposal for a model survey on demand for services was presented. The proposed questionnaire consists of a quantitative part including a breakdown of purchases into different services groupings. However the emphasis is on the qualitative aspects of the outsourcing or contracting out activities of enterprises.

The Ambler paper describes the US experiences with collecting information on purchased services. Ms. Carole Ambler stated that this survey has caused problems in terms of getting reliable and comparable information from the enterprises in the past. However, the US Bureau of Census is re-examining this program for 2002 and will try to integrate better the program measuring coverage of all sectors across the economy using harmonised definitions.

The following discussions showed the interest of the Group in the demand side issue. The need for this kind of information for input/out tabulation was expressed by several users. Mr. Paul Sullivan reported that in Australia information about purchased services have been collected for a long period.

Ms. Sheila Nijhowne informed about surveys launched in Canada in 1966 and 1973 on purchased services as an important input to the input/output tabulations. Current surveys operated with about 14 main categories of services inputs aggregations of CPC classes. Statistics Canada offered to report about their experiences and results at the next Voorburg Group meeting.

Mr. Erling Flottum reported about the Norwegian experiences in relation to the revision of their national accounts stating that the services inputs have been the most difficult part to measure.

Mr. Lothar Hake raised the question of the coherence between the proposed groupings of services and the accounting systems of the enterprises. He suggested to look into requirements of the 4th EU Directive on accounting in order to ease the respondent burden of the enterprises.

Following this issue Mr. Patrice Roussel stressed the issue of using harmonised systems by international organisations as the OECD and UN in order to further the comparability of survey results across countries.

Mr. Paul Cheung raised the issue of how to survey multinational co-operations and how to identify the role of multinational ownership in the outsourcing process. He asked if the affiliate trade would be treated as purchases of services.

Mr. Jacob Ryten stated that the demand side approach is very important and it is crucial to focus on the problem of comparability by using the same classifications and aggregations across sectors and

across countries. He listed a number of reasons for carrying out demand side surveys on the use of services by enterprises, emphasising the aspect of relative efficiency of the enterprises (in-house-outsource rational), shortage of skills of the employees and identifying barriers to international trade in services.

Ms. Paola Anitori presented the paper on the Italian experiences with analysing the retail trade by breakdown of turnover by products. The paper suggested the use of a typology of specialised and non-specialised retailers and gave a number of examples of problems related to the use of CPA.

Mr. Niels Langkjaer reacted on the paper by stating its value for the further work on developing the CPA classification and one of the few examples of a detailed feed back from users of the classification.

Ms. Keiko Horie reported the Survey on Service industries carried out each 5 year in Japan.

The chair concluded the session by taking the many positive comments as a confirmation of the strong interest in demand side studies as also stated in the previous session 4. The issue concerning demand for services by enterprises was given major interest by countries as Canada, USA and the EU including a number of member states.

SESSION 6: SHORT -TERM INDICATORS

Leader: Jan van Laanen

Presented papers

1. *Measuring services economy in Singapore*
Paul Cheung, Statistics Singapore;
2. *The impact of the new Council Regulation 1165/98 on short term statistics in trade and other services*
Berthold Feldmann, Eurostat;
3. *Tests and changes in the domestic trade statistics*
Henrik Romanov, Statistics Sweden;
4. *Issues arising from new short term and structural enquiries in Ireland*
Joe Madden, CSO;
5. *Is it necessary so, to survey very small firms?*
A.M. Maria
6. *Short term services indicators*
Janice McMechan and Jacques Marcil, Statistics Canada
7. *User needs with respect to short-term statistics in trade and services*
Thom Werkhoven, Statistics Netherlands
8. *Short term indicators of the service sector for measuring the business cycle in Germany*
Lothar Hake, Statistisches Bundesamt
9. *The impact of the new short-term business statistics regulation*
Roberto Gismondi. ISTAT
10. *Short-term indicators using administrative sources.*
Ron McKenzie. Statistics New Zealand.

Summary

- Common denominators in many contributions according to Mr. Gismondi (discussant for 5, and 7) are: response burden, quality (precision) and timeliness. The quality aspect not only is confined to statistics *sec*, but also has to do with meta-information (how are the data produced and what are the outstanding data collection problems?). Mr. Cheung adds the coverage element: do we really have to survey all sectors? He (as many others) is in favour of leaving out those sectors that are very small in terms of turnover and employment respectively in terms of their impact on short term turning points.
- Mr. Madden (4) comments on a few items of his contribution i.e.: the comparability problem of quarterly data with the annual structural survey (consistency of the time series) and: benchmarking of results with the structural surveys.
- Do we care about short term indicators in real terms or are nominal figures sufficient? The discussion that followed was linked to Hake's contribution (8) and to his central question (discussed by Mr. Rikama): do we really need the short term indicators for services required by the new Eurostat Regulation on short term indicators to measure business cycles? It was remarked that both Hake's paper and the INSEE paper (5) provide a good starting point for discussion: are adequate short term indicators only those which positively correlate with GDP as a whole, or does it also include those ones which have a significant trend cycle of their own? Mr. Ryten stressed the need to concentrate first on the basic questions: what do you want to measure? If you want to measure i.e. productivity changes you need deflators (which at the moment most countries cannot produce for most services sectors).
- Mr. Werkhoven (adding a few remarks on his contribution): short term indicators for services call for a solid justification. This leads to questions such as: are new short term statistics effective? Do they provide users with a better insight in the current stage of the economy? And is this the information most strongly needed by the users? He wants to continue with his enquiry into users needs, probably under the aegis of Eurostat and the OECD.
- Mr. Hake: try to make use to the maximum possible extent of existing sources within and outside NSIs (trade associations and research institutes. Germany - and many other countries- cannot afford to launch large new surveys.
- Mr. Feldmann (discussant of 9) raises the issue of timeliness vs. quality. Large users such as the ECB in Frankfurt are in bad need for quick results, even at the cost of some loss in quality. Some countries are a little confused. In the discussion it was remarked that for users there is no real trade-off between the two. Mr. Ryten illustrated this using the well known indifference curves. It is often a matter of a little more of the one (timeliness) vs. a little less of the other (necessary revisions).

- Use of (IRS) registers: many papers provide interesting information about development going on. The experiences of countries are different. Mr. McKenzie in his contribution (10) is very enthusiastic about this approach, while others such as Mr. Romanov (3) and Mr. Madden (4) do have more reservations about the usability of tax registers. With respect to the remark made by Mr. Hake (shouldn't you first start with a comparison between register based statistics and survey based statistics) it was reacted that this is only useful if leads and lags are different. The timing of the turning point really is the only thing that matters.
- How to continue? How to prevent substantive papers from only being used marginally, i.e. only during this session? Mr. Ryten remarks that a number of years ago issues such as the ones we have been discussing in today's session already were on the Voorburg Group's agenda *and* on the agenda of meetings sponsored by the OECD, so that there was some kind of dovetailing. Since these OECD meetings of experts on service statistics have stopped, his concern is that we seem to be discussing in a kind of vacuum. Many years ago the OECD asked: do services and goods have different business cycles? This question still hasn't been answered, neither by the OECD, nor by the Voorburg Group. Mrs. Chadeau of the OECD sees some light at the end of this tunnel: OECD is prepared to organise a new meeting of services statistics experts in 1999. Many of this session's contributions could be used as an input for this meeting. In this way, the link should be re-established.

SESSION 7:
PRODUCER PRICES: BUILDING ON THE OECD INITIATIVE AND BEST PRACTICE
Leader: Irwin Gerduk

Presented papers

1. *Prices of Services to Enterprises*
Ann Chadeau, OECD;
2. *PPI Experiences in Formulating Product Lines in the Service Sector*
Irwin Gerduk, U.S. BLS;
3. *Pricing the Outputs of the New Zealand Electricity Industry*
Andrew Mitchell, Statistics New Zealand;
4. *The Development of a Corporate Services Price Index for Computer and Related Services*
John Kinder, UK Office of National Statistics;
5. *Producer Price indexes for Property/Casualty Insurance and Life Insurance*
Arlene Dohm and Deanna Eggleston, U.S. BLS.

Summary

Initially, the discussion centred around some concepts fundamental to producer price index surveying of the service sector. The terms “simple service”, “composite service” and “service bundle” required further elucidation with examples. The relationship of the unique service to a classification system was discussed, stressing the inability for the pricing expert to decompose a bundled service or composite service in order to price a component of that service. This precludes establishing a classification system that defines categories to equate to components of a service.

Discussion of the differences among different countries PPI programs clarified confusion as to the coverage and structure of the various programs. The OECD paper had attempted to categorise pricing experiences regarding transactions to establishments, not to households. However, many countries include transaction to both types of buyers and do not publish separately by type of buyer. It was mentioned that this did not signify that prices were expected to be identical to both classes of buyer.

An issue was raised by Mary Chamie as to whether the unique service should be defined in terms of the outcome of the service or the activities performed. The response was that outcomes, such as

restoring good health to an ill patient, was relevant in a cost of living survey but not a producer price survey. The requirement for an appropriately defined PPI transaction is that constant quality is maintained when repricing the unique service. That requires that the same activities are performed and priced each repricing period. It does not encompass the qualitative aspects of the service.

The phenomenon in having three stages of processing included in a single industry in electricity production causes serious classification problems. Eurostat was concerned with this issue. Is electricity generation and distribution the same product? The wholesalers and retailers have no physical plant. Does this make them brokers who belong in finance?

The major issue for discussion became the role of the pricing expert in the Voorburg Group. Was the expectation that the pricing experts would restrict their activity to posting methodology papers on how they measured producer prices in specific product areas? Was Voorburg an appropriate forum for discussing technical pricing issues? Was the involvement of pricing experts meant to result in a library of best practices for specific product areas? Or was the goal to develop a library of any practices with no judgement or valuation of which approaches and methodologies may be superior. Opinions varied on all points, and no resolution of this issue was achieved during the session.

Specific suggestions for the more expansionary view for PPI in Voorburg included some sort of norm setting for countries to refer to and/or some sort of best practice identification to guide countries in formulating their own new measures in these areas more efficiently. Jacob Ryten explained that the risks of doing this were twofold: 1) This would become a judgmental process which would jeopardise the cooperative spirit of Voorburg, and 2) This would divert Voorburg from its main mission of improving CPC and national income accounting statistics. Statistics Canada voiced a concern that insufficient work has been accomplished internationally to date to even consider identifying best practices. There appeared to be agreement that PPI price experts could probably benefit from having an international forum to exchange technical information, but it was an unsettled question as to what that forum might be.

SESSION 8:ITALY DAY
Leader: Enrico Giovannini

Presented papers

1. *The ASIA Project (Setting-up of the Italian Business Register)*, Giuseppe Garofalo, ISTAT.

Main points

This paper is a synthesis of the methodological manual of the ASIA project (Italian Business Statistical Register). The Asia register aim at listing and updating elementary units of Italian businesses and collect data on their economic features and evolution in time. The main conceptual aspects, the productive process and the statistical methodologies of input, estimation and check of data adopted were presented. Besides some tables quantifying the obtained results were shown. The Asia register is fundamental for producing services statistics.

2. *The Intermediate Census on enterprises*, Corrado Abbate, ISTAT.

Main points

The paper describes the 1996 intermediate census carried out by ISTAT and realised with two goals, that is check the quality of the business register and collect qualitative on enterprises. The census has been conducted in two steps, according to the reference data: 31 December 1996 for the short form survey and 31 December 1997 for the long form.

The short form survey realised mainly through an ex-ante integration of administrative data, should lead to a major coverage, a minor burden for the enterprises, and an increased timeliness.

By the long-form survey a greater coverage of medium-large sized enterprises, but also the collection of that kind of information on small and very small sized enterprises which is insufficiently investigated by other statistical surveys are expected, size of enterprises are mainly in operating in service sector.

3. *The Satellite Register on Service Sectors: Conceptual and Operational Aspects*, Giuseppe Garofalo, ISTAT.

Main points

A synthesis of the steps taken to build satellite registers on service sectors, namely on large retailing distribution, transports, financial intermediation and hotel and MNO activities, was presented. After some brief considerations on the concept and methods related to service activities, the functioning of satellite registers and their links with the main register was explained.

4. *Statistical Survey of Scientific Research and Technological Innovation in Services: Methodological Problems from ISTAT Survey*, Giulio Perani, ISTAT.

Main points

The survey carried out by ISTAT on innovation technology on services was presented. Comment on the used methodology, which referred to the indications of the OECD-EUROSTAT Oslo Manual, were given. Some remarks on service firms as innovators according to the survey and the manual have been sketched.

5. *The Bank of Italy Survey on Large Food Retailing Firms. Motivations, Methodology and Results*, Guido Pellegrini, Bank of Italy.

Main points

A survey on a sample of large foods retailing firms was presented. That survey is meant to provide the Italian central bank with timely information for forecasts on business cycles. The retailing sectors has been chosen for its importance in terms of employment and national product, and as a sector where it is possible to better observe the transmission of inflation. The main features of the survey have been described and a the result of an econometric model linking margins with variables such as distributive channels, products and dimensions of firms was shown.

6. *An information system for enterprise statistic integration (SISSI project)*, Alberto Sorce, ISTAT.

Main points

The idea to realise an integrated database arises from the need an on- line easy access to all available information on the activity of enterprises. This should allow, *inter alia*, to avoid duplications with consequent remarkable savings in collection and analysis of data. The paper describes the architecture of the data-base, its interactions with the information system on enterprises and other information systems of ISTAT and the advantages it brings in the process of production and analysis of statistical data.

Discussion

The papers on the ISTAT business register and on the 1996 intermediate census prompted a discussion on many issues. The importance of the use of administrative sources for setting up business registers was stressed as a tools to increase timeliness of data and reduced both costs for statistical institutes and the burden for enterprises. The Italian experience was compared with that of other Countries, namely the Canadian one, based on a single identification number. The problem of confidentiality in relation with the availability of a great deal of information on the registers was tackled.

Participants discussed numerous aspects related to the innovation in service sector. It was considered whether it is feasible and efficient to integrate surveys on innovation both for manufacturing and services. This led to examine the problem of balancing the exhaustiveness and the feasibility for enterprises in term of response burden of questionnaires. The measurement of technological innovation was also discussed. In particular it was asked what criterion should be referred to, that is innovation in respect to the context of adoption or innovation in the context of production. It was agreed that consider the adoption of production rather than its production can be more appropriate to estimate the impact on productivity.

SESSION 9: NON-MARKET ACTIVITIES

Leader: Shaila Nijhowne

Presented papers

1. *A model framework for Education Statistics.*
Shaila Nijhowne, Statistics Canada.

Main points

The paper presents a framework for the compilation of production statistics for Education as defined by Division 80 of ISIC Rev 3. For purposes of compiling statistics on the product outputs of each industry, existing CPC v 1 categories are assigned to each ISIC four-digit industry and a certain expansion is proposed. For the primary and secondary education industries an additional category for educational services for special needs was recommended. For post-secondary education the paper proposes a separation of general post-secondary education and university education. It also suggests that for two industries, post-secondary and university education and adult and other education, the classification of field of knowledge in ISCED that has been further expanded into fields of training by EUROSTAT can be used to further detail each CPC category to collect more detail on product outputs.

The various modules of the framework list the variables to be used. The first module lists the variables needed to estimate the value of output namely tuition fees and other revenues. Tuition fees for distance learning are separated. The paper suggests that it should be possible to collect tuition fees and /or enrolment by product. A module on operating expenses details the goods and services for which operating expenses should be compiled including the primary inputs of taxes and subsidies, labour income and depreciation. Finally there are modules that detail categories to be used for numbers employed and capital expenditure.

The paper discusses the fact that the industry is composed of both private and public institutions that operate for profit and not for profit. Tuition fees may not apply to public institutions though some of the other revenue items may be applicable. Whereas the total output of educational services of private institutions charging tuition fees can be valued in terms of those tuition fees, the total output of public institutions will have to be valued as the sum of costs. Alternatively, a market price calculated using the tuition fees and enrolment of private institutions belonging to each industry could be applied to public institutions, with the following caveat. Because the teacher pupil ratios and facilities in terms of buildings and equipment per pupil may be very different between private and public institutions, the market price derived from the tuition fees and enrolment in private institutions would need to be adjusted for labour (teacher- pupil) and capital (facilities-pupil) ratios, before being used to value public educational services.

In the discussion that followed Irwin Gerduk mentioned the need to take account of that portion of interest income earned from endowments used for providing scholarships and bursaries to students or to subsidise tuition fees, in the measurement of output. Ron Mckenzie mentioned that it would not be enough just to calculate prices as the ratio of tuition fees over enrolment, as quality changes would have to be taken into account.

1. *Conceptual basis for classifying services in the M.N and O sections of the CPC, by discussing the case of the Health Sector.*

Bart Bakker, Statistics Netherlands.

He expressed the opinion that by defining a service “Hospital services”, the CPC defines the output of the Health sector in terms of industry output rather than product output. As hospitals produce services of very different kinds, it is not possible to measure the volume of the services in “natural units”

In order to answer policy relevant questions, such as

- Should government produce the services, or should they be produced by non-market producers, market producers or perhaps by the households themselves?
- What institutions should be subsidised by government.

Statistics Netherlands has developed a supply and demand model. For the model, services need to be classified from a demand point of view.

This is because, to answer the questions, the purposes of the services are particularly relevant. To decide whether the services provided are real alternatives, it is necessary to know what are the intended effects of the services. The services must be viewed as fulfilling certain needs in society and the classification has to be demand based such that services fulfilling the same need are grouped together.

To illustrate the difference between classifying health services using supply side as compared to demand side criteria, take the case of hospital services and household aid at home. Hospital services can be split into hotel services, nursing services, surgical operations and laboratory services. An industry of origin, supply side classification would classify all the hospital services in one category and the household aid services in another. A demand based classification would classify services around treatments of particular maladies or diseases, for instance appendicitis. The consumer wishes to be cured and is not particularly interested in how the services are produced or by whom. The detailed services should therefore be organised around the treatment of “appendicitis”. This should lead to a standard package of services with e.g. one surgical operation, two days of hotel service, two days of nursing service and five days of household care at home. It will of course be necessary to compile data on the volumes and prices of the detailed services to integrate them into a single service, but if the data are available, it will be possible to address the policy issues named above.

In the discussion that followed, Irwin Gerduk of the US remarked that the residential facilities of hospitals and other health care institutions should not be equated with or described as hotels but rather, treated as part of the composite service of health services

2. *ABS Survey of the Community Services Industry.*

Paul Sullivan, Australian Bureau of Statistics.

The paper describes a survey undertaken by ABS of the community services industry, a subdivision within Division O- Health and Community Services. The purpose of the survey was : to measure the size of the industry, identify the relative contributions of the for profit and not for profit sectors in the industry, measure the significance and role of government in the industry, identify the source and application of funds by community service providers, provide information on service delivery in terms of types and value of services provided and their output and compare data for the different States and Territories. The paper describes the approaches taken to collect and generate this information. The approach had been developed to serve the needs of an assessment of the extent of support in terms of subsidies and grants that should be provided to institutions in this sector of the economy

The Survey was designed to produce information on : the number of organisations involved in community services, employment in the industry broken down by male/female and full time/part time, the number of volunteers working in the industry, sources of income-government grants, donations, sales of services etc. items of expenditure and operating surplus, where applicable.

As the Provisional CPC and the ISIC Rev 3 Australian and New Zealand Standard Industrial Classification (ANZSIC) did not present commodities and activities of interest in the same aggregations and in areas to the level of detail required by major external users, ABS developed its own classes. They are presented in the paper with a concordance to CPC version 1 and ANZSIC.

3. *MNO Activities*

Fabiola Riccardini, ISTAT.

Within the European framework of the pilot studies foreseen by Eurostat and Istat, to improve structural business statistics, three economic activities were considered because of their distinctive peculiarities. These activities, allocated to the M-N-O sections of NACE classification, are characterised by:

- coexistence of *mixed* entities as public and private, profit and non-profit, market and non-market;
- heterogeneity of the type of the activities (in particular for the section O).

A first attempt to analyse existing statistics and national methodologies related to M-N-O activities, at the European level, has been developed by a survey conducted by ISTAT and a questionnaire that

has been forwarded to 8 Member States (Denmark, France, Germany, Ireland, Italy, Spain, Sweden, and The Netherlands)

The paper addresses the issue of finding and improving common definitions of these sectors and their outputs by reporting on issues related to definitions, classification systems, statistical units, relevant variables and providing the results of the survey conducted by ISTAT for the Task Force on M-N-O activities.

The main measurement problems to investigate those sectors derive from the following needs:

1. to improve common definitions of the non-profit sector and its classification;
2. to harmonise definitions of statistical units;
3. to develop business registers and to integrate them in a satellite register on those sectors;
4. to identify significant variables able to explain the economic behaviour of the units observed;
5. to elaborate methodologies for mixed sectors (market, non-market, and government units).

The major issue discussed in the paper related to the difficulty of defining and identifying the statistical units of the non profit institutions within these sectors, for cross country comparison; the difficulty of measuring their output, and the narrowness of the definition of the institutional sector described as non profit institutions serving households (NPISH) in the SNA and ESA95 . The paper examined the legal, functional and economic/financial definitions that could be used, and examined the usefulness of the structural operational definition proposed by John Hopkins University the basis of which is not the purposes that organisations serve or their sources of income but rather their basic structure and operations

The paper concluded that the classification of institutional sectors used by ESA95 and the National Accounts approach seems not to be sufficient to give a complete picture of these activities and in particular of the non-profit sector that is underestimated with exception of the NPISHs.

4. The representation of ESA95 non market production within an Input-Output table Alessandra Coli. ISTAT.

The National Accounts Department of ISTAT has recently compiled the I/O table for 1992. The estimation process is based on the ESA95 directives. The paper gives a very concise description of the methods of analysis used in order to estimate the production activity of general government and Non profit Institution serving households (NPISH).

The first step of the estimation process is the definition of *institutional units* belonging to each sector and successively the definition of the corresponding universes. Units whose main activity is aimed at the production of non-market products belong either to the general government sector or to NPISH. The final destination depends on the legal nature of the unit: a public producer is assigned to general government sector (public non-profit institution are part of general government) while a

private producer is classified in NPISH sector. In both cases data sets have been built where the single unit (public entity or non profit institution) is observed from several points of view and according to the maximum level of detail supplied by available data sources.

The second step is the estimation of the monetary transactions engaged by the sectors, for the production and purchase of goods and services. Thanks to more detailed information the sectors' monetary outlays can be analysed, according to the following variables:

- ◆ the institutional sub-sectors identified by ESA95;
- ◆ the type of activity (nace-rev.1 classification);
- ◆ the type of economic transaction (intermediate costs, compensation of employees, gross capital formation etc.);
- ◆ the valuation of output (non market, market and sold at economically not significant prices)

Moreover, the employment underlying each economic activity carried out by institutional sub-sectors is known.

With respect to education, the leading subject of this session, the output supplied by NPISH and general government, the relative production costs and the amount of labour employed is known. Moreover whether output is valued as market, non-market or sold at economically not significant prices can be pointed out.

Obviously these estimates are affected by the definitions and limits imposed by ESA95. For example NPISH does not cover the universe of non-profit institutions that belong to institutional sectors (general government and enterprises). As a consequence, only a part of the non profit universe has been analysed so far.

SESSION 10: DISCUSSING THE FUTURE

Leader: Paolo Garonna

Presented papers

1. *The Voorburg Group looks at its Future*, Jacob Ryten;
2. *Discussing the Future of the Voorburg Group*, The Bureau of the Voorburg Group
3. *Closing Session: Discussing the Future and the Future and the Agenda for 1999 Meeting*, Paul Sullivan, Australian Bureau of Statistics;

Interventions

Mr. Jacob Ryten emphasised the importance of a session focused on the future activity of the Voorburg Group and underlined what was stated as the central mission of the Group itself at the moment of its creation, that is a better estimation of the real product of the service economy.

The feeling that this objective has not been accomplished was expressed and participants have been prompted into considering three points: 1. the means of attaining the central objectives; 2. the accountability of the Group; 3. the instruments that represent the framework of the activity of the Voorburg Group and which coincides with the rules about membership, the presence of a Bureau not ruling on matter of substance but on mechanisms to discuss the substance, and the lack of a permanent organisation to carry out the work between meetings. All those points are to be made the issue of discussion, revised and renewed, should this reckoned to be necessary.

Mr. Patrice Roussel and Mr. Peter Bøegh Nielsen introduced the proposals of the Bureau for the future activity of the Voorburg Group.

More continuous teamwork between meetings was underlined as a key tool to increase efficacy and efficiency with respect to its central objectives. It was suggested that the meeting should be considered as that occasion in which the results achieved are delivered by participating Countries and reported to the Statistical Commission of the United Nations. That mechanism should allow to focus on discussion and avoid dispersing the attention of participants over too many papers and too many topics.

The co-ordination of the new way of carrying out the activity was emphasised as requiring a better organisation and a more visible Bureau which rely upon for all the affairs of the Group.

Members of the Bureau are Mr. Albert Meguerditchian, Statistics Canada being one of the Country promoting the first meeting of the Voorburg Group, Mr. Jan van Laanen, as representative of the first Country to host the Group, Mrs. Fabiola Riccardini as representative of the present host Country, Mr. Patrice Roussel, INSEE, France another Country founding father of the Group, and Mr. Peter Bøegh Nielsen, representative of the past host Country and elected chairperson of the Bureau. A permanent web site will be run by Statistics Canada as a way to contact the Bureau and as a central collector and distributor of information on the activity of the Group.

The guidelines of the Group will be revised and updated.

The Bureau has devised a three year agenda including a set of topics to be discussed in the middle run and built upon three pillars, that is prices, non-market services and employment. Issues the Bureau considered worth of being examined and of responsibility by the Group was, *inter alia*, ICT and content industry, CPC and international trade in services.

Membership will be open to all Countries active on the matters covered by the activity of the Voorburg Group.

The 14th Voorburg Group meeting will be held in Christchurch, New Zealand, October 11th-15th 1999 and Statistics New Zealand is looking forward to hosting the meeting.

Invitations will be sent out no later than the end of this year, in order to allow the forming of the groups which will be working on next year agenda. Participating Countries have been invited to not only submit papers, but to also propose strategies to be included in the three year agenda, whose discussion will constitute a part of the 14th meeting.

Discussion

Mr. Garonna opened the discussion stressing the need for the Voorburg Group of a transformation, in order to adapt to the changes both in the service sector economy and within the Group itself during its existence. Yet, not only should this transformation rely upon links with the past experience, but also embed some discontinuity which is essential to break the routines and stimulate innovation. It is responsibility of the Group to operate a feed back on what has been done in the past, in order to decide what must be continued and what must be broken off.

Another point raised by Mr. Garonna was the necessity to attentively consider what is done in the field of service sector statistics by other organisations in the international community, as to avoid overlapping and possibly develop synergies.

He ended his intervention underling the importance of the future working programme of the Group. The Bureau listed some topics to focus on, but it did not emerged any articulated programme with defined priorities and scheduled output. Mr. Garonna underlined the importance of a more articulated agenda.

The proposals of the Bureau raised also questions and comments from participants. Many of them concerned the proposed organisation of the activity of the Group. In particular, the attention focused on the functioning of the sub-groups and on the way the work between meetings should be carried out. The possibilities suggested referred *inter alia* to the opportunity to have plenary session discussing an issue and sub-groups sessions discussing specific issues at the same time during

seminars and to the setting of e-mail groups, possibly opened also to non-participating bodies. Some of participants expressed concerns about the capability of sub-groups to thoroughly analyse topics and about the contrast between expertise and continuity within sub-groups.

The need to structure the list of items introduced by the Bureau in a program with its priorities and its wished outputs was also emphasised.

Furtherance of the Group was, on the whole, assumed for granted, with the only exception of Mr. Paul Sullivan who expressed the view that the Group had gone as far as he could in attaining its objectives. The concept of a "market place for ideas" which could be used to stimulate creative solutions and to draw and share experimented knowledge was stressed by participants.

Price indicators, CPC and international trade in services were also at issue. With regards to the second and third topics, Mrs. Chadeau reported on the activity of the inter-agency task force on statistics on international trade in services and summed up the steps of the drafting of the so-called "Manual on international trade in services", which also shown the efforts to link the CPC with the balance of payment classification and the FATS classification with ISIC rev.3.

As the reactions of participants to the proposal of the Bureau were positive overall, Mr. Peter Bøegh Nielsen considered them approved.

Annexe

The 13th Voorburg Meeting Agenda