SESSION 1: MODEL SURVEYS; STRATEGIES AND THEORETICAL ISSUES

Chair: *Mr. Fred von Reibnitz (Australian Bureau of Statistics)*

Rapporteur: *Mrs. Ada Van Krimpen (Statistics Netherlands)*

The following papers were before the meeting:

1.1 The Development of European Statistics on Business Services (Jan van Laanen)

1.2 Role of Model Surveys - a Review (Paul Sullivan)

1.3 Towards the Development of Harmonized European Statistics on Services (Photios Nanopoulos, Marco Lancetti and Nicolaus Wurm)

Mr. von Reibnitz underlined the links between the Dutch and Eurostat papers and suggested that these be discussed together, followed by the Australian paper. In relation to the latter, he also drew a link to the Canadian paper 'The Voorburg Group's Tenth Anniversary: a Review of Achievements', to be presented during Session 8, which made some relevant observations about possible future directions for model surveys.

It was noted that the Eurostat paper focused on Eurostat's current activities and approved developments for the shorter term towards more harmonised services statistics. Eurostat's views regarding longer term directions would be canvassed in Session 8.

Mr. van Laanen underlined the comments in his paper about the importance of developing good statistical information on the business services sector, given its significance in the European economy. He stressed the importance of obtaining strong support from the enterprises concerned, and their industry associations, for the data sets to be collected. To raise that commitment he suggested that consultants from the relevant industry bodies be involved in the process, and that the strategy should be pragmatic and output-oriented. In terms of priorities he proposed the following subsectors within business services: computer and related services; labour recruitment and the provision of personnel; and industrial cleaning.

In relation to the Eurostat harmonisation program, the basic question was raised whether it was sufficient to concentrate on achieving harmonised output, or whether and to what extent the collection process also needed to be harmonised. Examples of sector-specific considerations were identified, in particular the urgent need for comparable statistics relating to Telecommunications, relevant to the liberalisation of these services in 1998. Attention was drawn to the importance of linking the data collection process to industry supervision processes as a way to derive statistical information at little additional cost.

On the question whether an output or input oriented approach to coordination should be adopted, the suggestion was put that, while some harmonisation of inputs (eg regarding scope, definitions, use of NACE etc) would be essential to achieving harmonised outputs, other aspects like number of respondents and dates of surveys were better not harmonised, given the variety of institutional arrangements in different European countries.

It was noted that a 'framework' regulation was in place based on a 'subsidiarity' approach which took account of the substantial institutional differences between Eurostat Member States (like

register- or survey-based approaches to data assembly/collection). Mr. Sullivan presented his paper, which gave an overview of the Australian experience with use of the model survey.

He highlighted the importance, in the Australian experience, of coverage development given the deficiencies of the Business Register for supporting appropriate statistical units for some industries.

Another feature of the Australian experience was the importance of catering for the data needs of industry-specific users, which the existing modules of the model survey did not directly support. The paper concluded by raising the question whether the present 'data model' emphasis continued to be appropriate, or whether the Group was willing to consider a shift of emphasis towards using the model survey more as a 'data collection model' and, if so, what additions or amendments to existing modules might be considered desirable.

At the Chair's invitation, Mr Ryten summarised the historical context which had led to the emphasis on the model survey as a flexible framework rather than a prescriptive set of guidelines. He pointed out that it had deliberately not been intended to directly support data collection per se. In that regard the model was not prescriptive regarding statistical units - to have attempted to do so would have inhibited progress. In relation to the proposition in the Australian paper, Mr Ryten suggested that the Group was not yet ready to adopt a 'data collection' emphasis for the model survey, despite the difficulties which the present more flexible approach created for inter-country comparisons; however he stressed the importance of continuing with those comparisons and searching for grounds for convergence.

In comments on the usefulness of the distinction between the data model and data collection model, the point was made that for the latter to be useful it was important to specify more precisely the purposes to be served by each module.

It was generally agreed that one of the major successes of the model survey so far had been in testing and improving the CPC.

A number of comments highlighted the limitations of the model survey modules for achieving internationally comparable data. Nevertheless, it was agreed that the modules had proved their usefulness as a framework for countries at early stages of developing a services statistics program.

There was also strong support for the usefulness of the model survey as a framework for summarising problems and issues found in relation to particular industries, and for sharing those experiences among Group members. The model survey had also proved valuable for structuring discussions with users, and for harmonising approaches across different service industries, particularly in launching surveys into industries not previously canvassed.

Given the need for sensitivity to data availability and respondent load issues, several discussants highlighted the importance of strong support from statistical users, and for the need to find a balance among the different needs; in the case of the European countries for example this involved the needs of the European Commission, of business users for industry-specific data, and the needs deriving from the national accounts. New surveys should not be started unless all of those needs had been articulated and balanced. This related back to the emphasis in the van Laanen paper on pragmatism and an outward orientation.

The Chair summarised the discussion as follows:

- There was an acceptance by Eurostat of the need for some caution about to the extent to which coordination of inputs can be prescribed. There was support among the Group for the subsidiarity approach in this respect.

- The Group did not appear to be ready at the moment to move in the direction of a data collection model.

- While inter-country comparability had not yet been achieved, this was still a desirable goal. The flexibility and lack of prescription in the model about collection aspects inhibited this to some extent.

- The model had proved to be successful for testing and improving the CPC.

- The model was helpful in identifying gaps in countries' statistical systems on services.

- The model had proved useful for summarising and sharing information about problems in adding to the set of industries surveyed.

- The model had proved helpful in structuring discussions with users.

- There was a need to add to the modules of the model to cater for data currently outside the core, but which were increasingly recognised as important. Examples included innovation and globalisation, both of which featured in the agenda for this meeting.

SESSION 2: MODEL SURVEYS; PRACTICAL ISSUES

Chair: *Mr. Peter Bøegh-Nielsen (Statistics Demark)*

Discussant: *Mr. Lothar Hake (Statistisches Bundesamt, Germany)*

Rapporteurs: *Mr. Paul Sullivan (Australian bureau of Statistics)*
              Mr. Wouter de Wreede (Statistics Netherlands)

The following papers were before the meeting:

2.1   Business Accounts Frameworks (Patrice Roussel)

2.2   European Union Pilot Studies and Surveys (Jeroen Jutte)

*2.3   Inter-Sectoral/Country Comparisons of Statistics on Services; General Problems
       (Peter Bøegh-Nielsen and Lothar Hake)*

*2.4   Intercountry Comparison of Service Industry Statistics in Voorburg Group Member
       Countries (Paul Sullivan)*

2.5   Bulgarian Practice in the Field of Statistics on Services (Reni Petkova)

*2.6   A European Pilot Survey on Audiovisual Services; First Conclusions and
       Recommendations for a Further Development (Uwe Reim)*

*2.7   Australian Experience in Conducting Surveys of the Audio Video Industries
       (Denis Ward)*

*2.8   The Horeca and Travel Agency Sector. Methodological Aspects Concerning the
       European Pilot Survey. A Feedback for the Eurostat Methodological Manual on
       Services (Claudia Cingolani and C. Pappalardo)*

2.9   Survey of Tourist Lodging Facilities in the Czech Republic (Jaroslav Novák)

*2.10   Update of Australian Experience in the Development of Surveys of Medical Services
       (Denis Ward)*

*2.11   Methodological and Practical Implications of the Pilot Survey on Transport Services
       Undertaken by Member States of the European Communities
       (Menno Breijman, Henk Koele and Cees Steenlage)*

2.12 Glossary on Enterprise Statistics (Eurostat)

In introducing the session the Chair Peter Bøegh-Nielsen identified 4 components to the
session:

1. Data and data items - papers 2.1, 2.12

2. Reports of model surveys and particularly as they relate to inter-sectoral comparisons -
    papers 2.2, 2.3, 2.6, 2.7, 2.8, 2.10, 2.11

3. Inter-country comparisons - papers 2.3 and 2.4

4. Country specific papers - papers 2.5 and 2.9

The Chair proposed that papers 2.5 and 2.9 be considered for information.

Mr. Hake, as lead discussant summarised the issues regarding **Part 1** of the session, and noted that it focused on the conceptual issues. He noted that a business accounts framework has the potential to reduce respondent load and improve data quality if it enables a transformation from accounting terms to statistical terms.

He also noted that the French paper (2.1) is rather specific, therefore he proposed that it not be discussed in detail but rather he proposed some questions for the author and for the meeting in general.

1. How long has the PCG been in existence and what is its legal status i.e. is it mandatory and how many forms exist?

2. How many items are specified and do they only relate to income and expense?

3. Does it include rules for the valuation of items?

4. What kind of frameworks exist in other Voorburg countries?

In response it was noted that France was somewhat unique in that the PCG was law and was enforced by law. It provided specification for both income and expenses and balances.

In Canada there is no legal obligation, but there is a generally accepted accounting practice (GAAP) produced by the Institute of Chartered Accountants. Statistics Canada also try to influence the Tax Office in its data collection related to the tax collection system. Most other participants noted similar arrangements in their countries, although it was noted that Finland has a system similar to France. The importance of harmonised accounting systems was noted and it was suggested that participants should report back on dialogue with national authorities regarding accounting systems.

In introducing the Glossary it was noted that it was far from a final product and reaction from members as to whether it sees value in such a Glossary was sought. It was also noted that the intention was to develop the Glossary in multi-media software with a hypertext approach, which would enable quick cross referencing between the framework, the Glossary and the guidelines for data collection. It was observed that last year the Group had discussed a framework for service statistics and it had been noted that it required three elements:

- a dictionary or glossary of terms

- an understanding of or framework fro business accounting practices

- recommended survey methodology, and these needed to be interlinked and in turn linked to the SNA. As such this was a useful start enabling international comparability.

The chair summarised this part of the session as follows:

a) as far as the existence of legally based business accounting frameworks is concerned large differences exist between countries;

b) there is a need for further information on this topic other than France;

c) understanding of accounting practices/frameworks are an important basis for the links between businesses and statistical offices;

d) the development of a Glossary of business statistics was a longer term project.

It was noted that Eurostat would welcome comments from participants on the glossary and their participation in the development of the glossary. The chair concluded that this was to be decided in the discussion of next years program in the closing session.

Part 2 of the discussion related to the reports of model/pilot surveys and particularly as they relate to inter-sectoral comparisons.

The chair introduced this part of the session by giving a brief introduction to the pilot survey-concept as it is carried out by Eurostat and the Member States. As shown in the Eurostat paper by Mr. Jutte (2.2) the questionnaires for the pilot surveys on business services, audio-visual services, hotel and travel agencies and transport services consist of a number of modules which to a large degree are identical across sectors. As opposed to the model survey concept of the Voorburg Group, the pilot surveys modules are originally designed as a data collection model. The pilot surveys are organised so that one Member State takes responsibility of coordinating the survey and analysing the results obtained. Within this framework Statistics Denmark has at the 1993 and 1994 meetings reported on business services and for this meeting the statistical office of Germany is reporting on the methodological results of the pilot survey on audiovisual, the Italian statistical office on the results of the pilot survey on hotels and travel agencies and StatNeths is reporting on the preliminary results of the pilot survey on transport.

In summarising the papers, Mr. Hake noted that the papers highlighted the difficulties in developing inter-sectoral comparisons. As an illustration of these difficulties the problems related to employment were taken up.

The employment status as full time/part time employment, contract employment, freelancers and volunteers, differs largely between sectors and countries. The Hake/Bøegh-Nielsen paper (2.3) further expanded upon this issue and highlighted the significant differences in the breakdown of full time and part time employment in different industries and different countries which makes inter-sectoral and inter-country comparisons difficult.

In discussion of the issue the difficulties with contract and freelance workers in the audio visual industry was particularly noted. It was recognized that the variations in the proportion of full time/part time employees would impact any derived ratios of turnover/employment and similarly contract work would impact on value added/employment ratios.

A possible solution to the full time/part time issue was to measure hours worked but it was noted that measurement of hours worked presented particular survey problems as the information often was not available in the enterprises.

The difficulties encountered with the measurement of full/part time employment in the hotel sector especially in relation to the seasonal employment was also noted which makes it preferable to collect the employment information on a quarterly basis. In discussion of the specific reports on experiences with model surveys there was considerable interest in the report of the medical survey from Australia. It was observed that the problem of detail in the Eurostat paper on the audio-visual surveys may have been resolved by asking for more detail as that was the French experience, i.e. businesses were readily able to provide greater detail than less detail.

Part 3 of the session related to inter-country comparisons for which two papers were listed: one by Bøegh-Nielsen/Hake (2.3) and one by Sullivan (2.4).

SESSION 2

The Bøegh-Nielsen/Hake paper highlighted the fact that every country has its own history of statistical development and legislative frame which impacts that development and these in turn impact the extend to which inter-country comparisons can be undertaken. Particular influences noted in the paper included the extend of sole proprietors in service industries which could be influenced by financial requirements for incorporation, the full time/part time employment ratios etc.

The **final part** of the session was the information papers from Bulgaria and the Czech Republic on their experiences in service industries collections.

SESSION 3: MODEL SURVEYS; REVIEW OF MODULES

Chair: *Mrs. Berit Olssen (Statistics Sweden)*

Discussant: *Mrs. Heli Jeskanen-Sundström (Statistics Finland)*

Rapporteur: *Mr. Fred Gault (Statistics Canada)*

This session dealt with two modules mainly, which were treated separately: employment and innovation.

EMPLOYMENT

For this part the following papers were before the meeting:

3.1 Employment Qualifications in the Services Sector: a Note on the Possible Use of a Two-Stage Sample (Robin Green)

3.2 Labour Input to the Services Statistics (Emmanuelle Avon)

3.3 U.S. Labor Market Data and Issues in Comparing Goods and Services (Marilyn Manser)

3.4 Human Capital in Professional Services (Samuli Rikama)

3.5 Service Occupations in Austria (Norbert Rainer)

Introduction and Contributed Papers

During its previous meetings, the Voorburg Group has discussed the need for statistics on employment qualifications and, in general, the importance of human resources in the service sector. At this meeting, there are five papers discussing the different aspects of these topics.

Most of the papers include interesting statistics on service sector employment and its qualifications. However, as the Group's earlier experience has shown, it is very difficult to make any country by country comparisons with the existing service sector employment figures.

In the papers written for this session, there are three important common issues which need more attention:

- analytical needs,

- classifications and

- data collection.

These issues are, of course, closely linked to each other. As to the analytical needs, these are related both to the macro- and to the microeconomic analysis.Among those topics mentioned in the written contributions are, e.g.

- the relations between economic performance of businesses and employment structure

- productivity of service sector and its relations to employment qualifications

- the growth of the service sector and its implications for employment structure

- the impacts of cyclical fluctuations on the service sector employment

- job-insecurity within different occupations and sectors

- the level of education and its implications on wages and salaries and on job insecurity in different service areas.

As to the classifications, the concept of service occupations were used in several papers. Similarly, the concept of professional services, high-tech service occupations, and high-tech service industries need more clarifications and some common definitions. Other classification issues which were raised are classification of education and the classification of work activity - work status.

Discussion of the data collection issue started already at the Williamsburg meeting, where a question of a need for a specific employment module was raised. The papers presented to this meeting discuss both of the use of population censuses and of the special business surveys and panels. The experience shows that the question of data collection is closely linked to the analytical needs and also to the respondents' - whether they are individuals or businesses - ability to provide statistical offices with the relevant data.

After the introduction, the following points for discussion were raised:

1. As to the employment issues of service statistics, are the analytical needs so numerous and are there so large a variety of these needs, that one employment module of the Model Surveys could not be enough?

2. What would be the questions which are relevant to ask directly to the businesses (and thus to be included in Model Surveys) and what questions are to be addressed to individuals while making surveys?

3. Is there a real need for new classifications or for re-structuring the old ones? Is it possible to find definitions for the new concepts presented in this session?

4. Thinking about the future work of this Group, would it be useful to elaborate some kind of handbook or manual concentrating on the accounting of human resources in the service sector?

Discussion

In discussion the following issues were considered:

- the purpose of developing statistics on employment

- productivity

- the growth of services and the employment issues

- job security

- level of education

- the correspondence between education and occupation

- the need for a framework

The Group was unanimous about the importance of employment issues related to services statistics.

Some participants thought that listing of all the various policy issues related to employment in the service sector could be useful in order to go further in developing these statistics.

A common occupational classification was agreed to be an issue, along with common definitions. In respect to education, number of years of formal education was felt to be a good common criterion for its measurement.

Different means of data collection were considered. Australia and the US conduct two stage surveys. The U.S. usually surveys businesses and individuals separately. An Australian approach involved contacting businesses, getting them to sample their employees according to specified rules, and reporting information to the ABS about the employees. Other countries (Canada and Austria) use their census as a data source. There was no consensus on which was preferable. However, the Group thought it useful to share the experience in this field of participant countries.

It was important to be able to address the 'good job-bad job' polarization question in service industries, which raised the question of whether the employment module was adequate for this purpose. Discussion was deferred to the Friday session of future work.

INNOVATION

For this part the following papers were before the meeting:

3.6 *Innovation in Service Industries: the Measurement Issues (Fred D. Gault and Bill Pattinson)*

3.7 *R&D in a Service Economy: Canadian Statistics (Fred D. Gault)*

3.8 *Innovation Statistics (Michael Åkerhlom and Jeroen Jutte)*

3.9 *Innovation in Selected Australian Industries (Bill Pattinson, John Ovington and Elisabeth Finlay)*

3.10 *Services R&D in the OECD Database (Alison Young)*

Introduction

At the 1994 meeting of the Voorburg Group in Sydney, Australia, the Group agreed to add a module on innovation to the model surveys for service industries but it deferred a decision on the questions which were to constitute the module.

In 1995 the OECD and the EU, jointly, agreed to revise the 'OECD Proposed Guidelines for Collecting and Interpreting Technological Innovation Data', also known as 'The Oslo Manual'.

The revision was to include guidelines for the measurement of innovation in service industries, as the original manual had concentrated on manufacturing.

The revision of the Oslo Manual provided an opportunity for the Voorburg Group to contribute to the guidelines on the measuring of innovation in service industries and to provide suggestions for the questionnaire which will form part of the next manual and which will be used in the next round of the EU Community Innovation Survey (CIS).

The questionnaire will also provide a starting point for a subsequent discussion on the questions which are to constitute the innovation module in the model surveys.

Contributed Papers

Three papers were contributed on innovation and there were two related papers on the performance of research and development in service industries. The two R&D papers, by Young and Gault, made the point that the measurement of R&D, which is a component of innovation, was not uniform across industrialized countries, this was principally an issue of coverage.

The paper of kerblom and Jutte, from EUROSTAT, reviewed the experience of the CIS and plans to include the services sector in the next round. To explore the questions of which service industries to survey and which questions to ask, EUROSTAT commissioned Statistics Netherlands and a German collaboration (The Zentrum fr Europaeische Wirtschaftforshung, ZEW, and the SV-Wissenschaftsstatistik) to interview 10 firms, each, and to provide a report which kerblom and Jutte summarized.

The definition of innovation used in the interviews was adapted from that of the Oslo Manual. It was the following.

Innovations in the services sector comprise new services and new ways of producing or delivering services as well as significant changes in services or their production or delivering. An innovation has been implemented if it has been introduced to the market (product innovation) or used in producing services (process innovation).

Distinctions were also made between product and process innovations.

Product innovations are services whose intended use or performance characteristics differ significantly from those already produced. Innovation should be results of the use of new knowledge.

Process innovations are new or significantly improved ways of producing or delivering services.

There were several findings from the interviews.

- The concept of innovation, as adapted for service industries, was understood. However, many respondents found the distinction between product and process innovation difficult to make.

- There was some difficulty reporting on the performance of R&D as a component of the innovative process.

- There was perceived to be a greater problem in distinguishing the innovative part of customized production in the services sector than in manufacturing.

- There were difficulties in identifying the costs of service innovation. These included the cost of R&D, of training, investment in telecommunications and computer infrastructure, market research, and strategic planning.

Åkerblom and Jutte recommend that the revised Manual include a separate chapter on services and that there be a specially adapted definition for service industries.

The paper by Pattinson et. al. reported on the survey by the Australian Bureau of Statistics of innovation in selected Australian industries, including service industries.

The survey demonstrated that the respondents in service industries understood the concept of innovation and were able to report on both technological and non-technological innovation.

There was also a problem identified in distinguishing between product and process innovation.

Non technological innovations included the implementation of:

- advanced management techniques,

- significantly changed organizational structures, and

- new or substantially changed corporate directions.

These organizational changes were not tied directly to new or improved products or processes and therefore to the market place.

However the initial results from the ABS survey had shown that business were able to recognise and report on non technological change and that it was significant.

As such the ABS was continuing with analysis of the data and was proposing to continue to measure non technological change.

Finally, there was the paper by Gault and Pattinson which raised for discussion questions of direct relevance to the inclusion of service industries in the revised Oslo Manual.

Discussion

In discussion, it was proposed that there should not be a separate definition of innovation for service industries. The thinking was that service industries should be treated on the same footing as other industries and that any differences should be brought out through examples or other qualifying material. This would suggest that there not be a separate chapter devoted to services, unless each sector had a separate chapter.

Identifying the difference between product and process innovation was recognized as a problem for some service industries and the revised manual would have to make this point.

Organizational change was considered and it was noted that the definition used in the Oslo Manual included organizational change so long as it was tied to commercialization through process or product innovation. The inclusion of organizational change that was not linked directly to commercialization was currently not seen as innovation. However, there was a case for reconsidering this matter in the revised manual.

It was suggested that the word 'innovation' was emotive and that it might be preferable to develop a taxonomy for inputs and outputs for use in surveys and then to use the survey responses, classified using the taxonomy, to deduce changes in inputs and outputs which could then be attributed to innovation. This approach would, of course, require on-going measurement and analysis and, depending upon the complexity of the taxonomies, cold be costly. On the other hand, the taxonomies need not be elaborate and the method could be extended to analyse labour characteristics. If, for example, there is a change from low skilled to higher skilled workers, this might signal innovative activity.

In developing a manual on the measurement of innovation, it was suggested that there be many examples. Members of the Group were invited to provide examples from their own experience of innovation in service industries.

Finally, the question of why the measurement of innovation was useful was considered. Two points were presented. The first was that understanding the characteristics of innovative firms was useful to policy makers trying to promote competitiveness, especially if these characteristics were seen to vary by firm size, industry or geography.

The second point was that firms in service industries form part of the national system of innovation (NSI), and measurement of innovative activity in all sectors, public and private, and the linkages within and between the sectors was necessary to the understanding of how the system of innovation functioned. This was relevant as NSIs vary from country to country and confer different competitive advantage, and understanding them was a first step in improving the competitive position of the country.

SESSION 4: BUSINESS BEHAVIOUR

Chair: ***Mrs. Nancy McBeth (Statistics New Zealand)***

Discussant: ***Mrs. Marilyn Manser (USA - Bureau of Labor Statistics)***

Rapporteur: ***Mr. Wouter de Wreede (Statistics Netherlands)***

The following papers were before the meeting:

4.1 The Analysis of Business Behaviour in Australia (Bill Pattinson)

4.2 Economic and Social Performance of New Enterprises and Entrepreneurs in the Service Sector (Peter Bøegh-Nielsen, Kjartan Bjönsson and Søren Leth-Sørensen)

4.3 Business Characteristics and Performance in the Global Market (Janice McMechan)

4.4 Small Business Growth in New Zealand 1990-94 (Frank Nolan)

4.5 The Underground Economy in the Service Sector (Maria Mantcheva)

For this session, the papers 4.1, 4.2 and 4.3 were presented for discussion. The remaining papers were considered as background papers.

After the introductory remarks made by the chair, the lead discussant summarised the main papers for discussion and briefly described the main points of the background papers.

The following points for discussion were drawn to the meetings attention.

- the development of microdata sets to explore business behaviour;

- the availability of these sets to users;

- the difficulties in obtaining and analyzing data on the services sector, crowded as it is with small and medium-sized enterprises (SME's) which are underrepresented in longitudinal matches or matches of microdata from separate surveys;

- how best to utilise longitudinal data, and linkages between surveys to analyse these small and medium firms.

Since different data are collected in different countries, no general answers present themselves to the questions and problems in analysing data on services.

Invited by the chair, Denmark stressed the importance of a business register and access to administrative data as prerequisites for results such as those presented in the paper on Economic and Social Performance of New Enterprises and Entrepreneurs in the Service Sector (4.2). In Denmark, the business register covers all economic sectors. It is frequently updated by using administrative sources. Each firm has a unique identification number, allowing not only an enterprise approach to assess activity and turnover, but also an entrepreneurial approach, obtaining data on sex, age, education, work experience, gross income (from the Tax register), unemployment (from the unemployment register) and marital status of self employed persons/entrepreneurs.

Difficulties for the Australian Bureau of Statistics (ABS) in using administrative data were described. The ABS uses Taxation as the main source of the births of employing businesses.

This source had deficiencies for identifying business deaths, in the quality of industry coding (being rectified by the Tax Authority) and in the lags in bringing updating information into the Business Register. The quality of the Register needed to be enhanced as a frame for detailed surveys of service industries for which additional work was needed in coverage development and delineation. Canada remarked that record linkage (of administrative and complementary statistical survey data) at Statistics Canada was carried out with regard to both large enterprises and SME's.

France described how administrative sources were used to include employment in the business register (there exists at least two comprehensive sources among which one has to select the most relevant), but the register does not record full-time vs. part-time employment. INSEE plans also to develop a multiple database on local units; the core will be drawn from the register, after assessment of the best possible administrative source on employment.

Connectivity of data for record-linkage for use at the local level is also planned, where studies on manufacturing industries are frequently carried out while studies on trade and service enterprises were still rare. In another matter, INSEE, being informed of the creation of new enterprises no more than one week after the administrative declaration has been made, is able to draw samples of such entities for further studies. Three surveys have already been launched (1987, 1990 and 1995) to study the conditions of creation and the survival of new enterprises.

The starting point is made of a survey carried out on a sample of enterprises to know more about the conditions of creation and the characteristics of the enterprise and of the entrepreneurs. Survival is studied each year, through the use of the business register. So far, the results of the 1990 survey on the creation and survival after 3 years are very comparable to the findings of Denmark.

Attention of the meeting was drawn to the recent findings of Statistics Sweden on the development of turnover and number of employees: the strongest growth is shown by the good old manufacturing business. Services firms want to be small. It was noted that this was also true in France, in so far as creating one's own firm is seen as a substitute for finding a job. In other circumstances the number of employees may well grow.

Statistics Finland has undertaken to construct a special database of enterprises (with linkage of various administrative and survey data). Incorporation of the services sector is scheduled next year. However, it was noted that construction and maintenance of this database is labour-intensive.

Discussion also focused on the legal issues surrounding this type of study. For example, is linkage of data from different sources/surveys legitimate? Is linkage over time, i.e. for longitudinal studies legitimate? Hong Kong also noted that some firms may not give the appearance of expansion, because they tend to create new, separate firms when updating new activities (e.g. a property developer creating a new firm to deal with a new project).

Answering some questions on the relevance of union membership and the number of size-classes as key elements for determining survival and growth of businesses, Australia noted that these characteristics were valued by clients who commissioned the Australian survey.

Closing the discussion, the chair concluded that the topics debated were new to most statistical agencies.

Problems of coverage (SME's) had been made clear, with the need for a good business register seen as important. Another conclusion is that most employment growth springs from the manufacturing sector.

A good business register is important. Denmark and France are lucky in having ample access to administrative data. Fundamentally, their findings are the same. Statisticians should be aware of and careful with both the legal issues and the perception of respondents.

Closing the session, the President Mr. Ryten thanked the chair and the discussant. The following question shall be taken to the Business Roundtable: suppose you have to get results on business behaviour, would the approach of Denmark and France be fit for you, though additional surveys may be necessary and legal impediments may have to be remediated.

SESSION 5: CENTRAL PRODUCT CLASSIFICATION (CPC)

Chair: *Mrs. Shaila Nijhowne (Statistics Canada)*

Discussant: *Mr. Norbert Rainer (Austrian CSO)*

Rapporteur: *Mr. David Knight (United Kingdom CSO)*

The following papers were before the meeting:

5.1 Report of the CPC-subgroup

5.2 The Scope and Coverage of the CPC (Shaila Nijhowne)

5.3 Trade Services in a revised CPC; Some Further Considerations (Norbert Rainer)

5.4 CPC for Insurance Services (Gabe H. de Vries)

5.5 Preliminary Proposal for Revising CPC on Telecommunication Services (Olov Gärdin)

5.6 Data Collection and Classification Concerning Information, Telecommunication and Leasing Services in Japan (Yoshinori Kan)

5.7 Recommendations for Changes to the Transportable Goods Part of the Provisional CPC

CPC For Transportable Goods

Detail for transportable goods.

The paper with Recommendations for Changes to the Transportable Goods Part of the Provisional CPC was the result of the deliberations of the Classification Sub-Group of the Voorburg Group. During its work on the services part of the CPC it was realised that there appeared to be nobody to suggest changes to the transportable goods part of the provisional CPC.

The Provisional CPC uses the six-digit categories of the HS as building blocks and HS has been amended with effect from January 1996. Given the relationship between the CPC and the HS, it is necessary to revise the CPC to realign it with the HS. The necessary changes have been identified by the Sub-Group. It has also recommended certain other changes to improve

(a) the homogeneity of CPC classes or subclasses and

(b) the assignment of CPC categories to ISIC four-digit industries from an industry-of-origin point of view.

Only a few changes have been recommended, with only 125 of the 1136 sub-classes being modified.

The meeting agreed that the Voorburg Group would recommend to the UN that these proposals be included in the next revision of the CPC and that they be made available to users of the CPC (as provisional changes) as soon as possible, to ensure the relevance of the CPC.

Higher levels for transportable goods and SITC

The meeting was informed that when the goods part of the CPC was created, links were also maintained with SITC Rev.3. No officially rebased SITC Rev.3 has been made public by the UN. In the absence of such a document, it was not possible to realign the rebased CPC with the SITC. The Voorburg Group was asked to consider whether it wishes to make any recommendation to the UN with respect to the SITC Rev.3 and the work required to correlate it to other systems.

The meeting was informed that to the knowledge of the Classification SubGroup of the Voorburg Group, there were no known users of the higher levels of the CPC for transportable goods (apart from Australia who had used the 3-digit level as a starting point for their own goods classification).

Since the detail of CPC and the higher aggregates of the SITC both appeared to be in considerable use, it may be useful to explore the idea of incorporating the higher aggregates of SITC into the CPC, even if the SITC may need to be updated to better reflect current trade patterns. The advantages would include a move to a known classification considered to be analytically useful, at the higher levels and one which could be related to industry at the lower levels.

The meeting was asked to express their opinion on the utility of studying this possibility. Members pointed out that a first condition was to verify if there were any users of the aggregates of the SITC and if they had any expectation of its maintenance. Also for data collection and publication, statistical agencies were more and more moving to, as detailed a classification as possible namely HS. The meeting was informed that the whole subject had been discussed in a somewhat confused way for the last six years, and any chance of success depended on clearly stating aims and means.

One way to crystallise the situation was to ask what classification system was available to link foreign trade statistics with domestic production? It was thought that there were no other such systems and that, possibly, this fact gave strength to the proposal to replace part of the CPC with the SITC.

In view of the feeling of several members that time series data based on SITC were in great demand, the meeting agreed that the Classification SubGroup should study the possibility of combining the higher levels of SITC and the detail of CPC and present their findings to the Voorburg group at a later meeting. It was suggested that the UN Task Force on International Trade Statistics could be consulted in the matter.

CPC For Services

Detail for services

The report of the CPC-subgroup was an interim report on the continuing work of the Sub-Group on the detail of CPC for services. A first report had been presented to the 1995 meeting of the UN Statistical Commission and was presently being circulated by the UN for comments.

The meeting agreed that the Voorburg Group would transmit to the UN, the final report, version 1 by June 1996 in order for the UN to process it in time for the 1997 session of the Statistical   Commission.

Structure for services

The paper by Mrs. Nijhowne set out a number of questions about the scope of the CPC. The provisional CPC presently consists of both products and services and assets. The questions posed to the Voorburg Group were: should the CPC cover assets (tangible and intangible, produced and not produced) as well as goods and services; in what order should they appear; should assets appear separately as an Annex; should the relevant table in SNA 1993 be used as the basis for the list.

Many members of the Voorburg Group agreed that mixing goods and services and assets was confusing, and stated that it would be preferable, if assets remained a part of the CPC, but as an annex.

The meeting requested the sub-group to study this and other possible improvements to the structure of the services part and present the result to a later meeting of the Voorburg Group.

Several members stressed that any proposals must have a strong methodological justification. Some underlined that the CPC was a product classification and not an extension of ISIC and that a separate product classification was needed, for example, for market analysis. On the other hand, other members pointed out that the grouping of products by activity, as used in the CPA, had a sound methodological base, and any changes to the structure of the CPC should be at least as convincing.

Further Work On CPC

The meeting concluded that, when the Voorburg Group transmits its recommendations for changes to the detail of the CPC it would inform UNSTAT that it does not regard the structure of either the goods part or the services part of the CPC as final. The Group will therefore consider proposals for revisions to the structure at its future meetings and forward them to UNSTAT.

Other Questions

1. CPC Telecommunications services

A preliminary proposal for revising CPC-Telecommunications services was considered by mr. Grdin. Rapid growth in these services meant that neither the CPC nor the CPA was fully up to date. Eurostat envisaged a restructuring to reflect better the telecommunications market and to give greater stability over time. The proposal was much more detailed than the current CPC and offered possible improvements, for example making the distinction between public and private (access, not ownership) clear.

2. CPC Insurance services

A proposal on CPC Insurance services was presented, made possible by agreement on insurance services within the CPA. The paper by Mr. de Vries suggested that it was desirable to rationalise the CPC and the CPA in this area. The proposal provided detailed suggestions for breaking down insurance services. Data reporting consistent with European legislation would be possible under the proposed format.

3. Data collection and classification concerning information, telecommunications and leasing services in Japan

A Japanese paper was presented on data collection and classification concerning information, telecommunications and leasing services in Japan. It was noted that, in Japan, interest in the CPC was now increasing following the SNA recommendation that the CPC should be adopted in respect of goods and services transactions. The paper raised a number of questions about specific CPC items.

4. CPC Trade services

Mr. Rainer's paper raised certain issues concerning trade services.

It suggested that neither the CPC nor the CPA are wholly satisfactory, outlining conceptual differences and making recommendations for a new CPC. As this would involve a major reorientation of the CPC, the opinion of the Voorburg group was sought. The key issue was the definition of trade services and it was suggested that, perhaps, two classifications were needed, one covering trade services, the other, goods traded, the latter as an annex to the CPC. A possible approach to trade services at a broad level was indicated but much remained to be done at the detailed levels. For goods traded, desirable qualities were that a new classification (annex) should be applicable to all goods traded and that it should be a classification rather than a simple product list, allowing a hierarchy to be developed.

In this context mention was made that the same type of issue arises for goods transported for which there was also a need for a classification.

The four papers were transmitted to the sub-group for consideration in its further deliberations of the detail of the CPC (for services).

SESSION 6: PRICES AND QUANTITY MEASURES IN SERVICES

Chair: **Mrs. Marilyn Manser (USA - Bureau of Labor Statistics)**

Discussants: **Mr. Bert Balk (Statistics Netherlands) ,**
                Mr. Jacob Ryten (Statistics Canada)

Rapporteur: **Mr. Peter van de Ven (Statistics Netherlands)**

The following papers were before the meeting:

6.1 Price and Volume Measures of Services; Impressions of the Adequacy of Current Approaches (Henk K. van Tuinen)

6.2 Australia's Early Experiences in Developing Producer Price Indexes (PPIs) for Service Industries (David Collins)

6.3 National Accounts in the Netherlands: Deflation of Value Added in Service Industries (Feike Drost, Ary in't Veld and Piet Verbiest)

6.4 Prices in the Health Industry (Bram de Boo and Jan Smit)

6.5 Draft for a Swiss Insurance Index (Angelo Zanetta)

6.6 A Methodological Overview of U.S. Producer Price Indexes for Services (James J. Gorko and Bonnie H. Murphy)

In opening the session Ms. Manser, Chair of the session, noted that this meeting was like most previous ones in having a number of papers dealing with p's and q's. She noted that the papers presented in this session dealt with very differing subjects.

Mr. Ryten, lead discussant of the Dutch contributions (Van Tuinen (6.1), Drost et al. (6.3) and De Boo et al. (6.4)), briefly introduced the papers. In doing so, he posed three general questions:

- Why were the papers being presented to the Voorburg Group?

- What is the difference from the treatment of the topics discussed in the past?

- Do the papers represent an advance?

More specifically, with respect to Drost et al., Mr. Ryten noted that the Voorburg group had previously agreed that double deflation is appropriate. He pointed out that in De Boo et al. the growth rates of intra-mural health care were significantly smaller than those of extra-mural health care, and he wondered whether this might be caused by a bias resulting from the different methods used in compiling the figures. In discussing the paper by Van Tuinen, he stated that he is always bothered by a theory-free approach. In his opinion, the alternative methods proposed for CPI measurement (unit value method, surveys of consumers' perceptions of price and quality changes, and institutions' perceptions of price movements and quality changes) are in fact not alternatives but rather ancillary tools for the compilation of CPIs.

On the general questions, Mr. Verbiest answered that the paper was a state of the art article on volume measurement in National Accounts. Services have a high and increasing share in GDP, and a good measurement of their volume is increasingly more important for GDP growth. Therefore, an important goal of the next (SNA-)revision of Dutch National Accounts is an improvement of the methods used.

In answering the question of the chair about what was meant by the authors' conclusion that the measurement of volume growth of banking services could be improved, Verbiest answered that the double deflation method would be preferable. However, due to the difficult conceptual issues in relation to imputed banking services, he did not expect any methodological changes during the next revision.

In answering the general questions, Mr. De Boo said that the interest of the Dutch government in the growth rates of health care was the main reason for writing the paper. As a consequence of this interest, CBS wants to improve the methods for the volume measurement of extramural health care by introducing a direct volume measurement instead of using a deflation method. Concerning the specific question on the possible bias, he could not answer at this moment; further investigation of this issue is needed.

Mr. Van Tuinen answered that his paper was addressed to price statisticians as well as national accountants. The message for the first group was to compile price indexes using simple methods and without arbitrary adjustments for quality changes. The present methods for calculating CPIs are not understandable for users and they are highly disputable.

Furthermore, the problems regarding adjustments for quality changes become larger due to the short life cycle of products, the increasing share of services, etc. As a consequence, in the paper it is proposed to use a representative product for monthly CPIs and to analyze quality changes by analyzing specific fields (e.g. health care, transport) every 10 years. The message for the second group was to inform their users that the volume figures, especially for services, are not useful for analyses of productivity.

After this discussion, Mr. Balk as lead discussant introduced the other three papers. Taking together the papers by Collins (6.2) and by Gorko and Murphy (6.6), which treat many of the same topics, he gave a general introduction to the stages in the compilation of a PPI. He praised the paper by Gorko et al. for its discussion of the selection of respondents and repriceable items and the paper by Collins for its treatment of cooperation and confidentiality of respondents. He indicated he would like to see some validation of the results (e.g. implied volume indices of output, implied productivity and comparison with input price/volume measures). Furthermore, he wondered whether a monthly periodicity as in the paper by Gorko et al. is not too much. Regarding the Swiss paper (6.5), he agreed that the National Accounts concept of insurance is not a good starting-point for the inclusion of insurance in the CPI. He explained the Netherlands' solution to this problem.

In answering the questions on the paper by Collins, Mr. von Reibnitz stated that an evaluation by users still had to be made. Furthermore, he noted that he was not convinced by Van Tuinen regarding the possibilities for productivity measurement. On the other hand, he agreed with Van Tuinen that methods used to adjust quality changes should be analyzed only every now and then.

Ms. Manser answered in relation to the remarks on the paper by Gorko et al. that a validation of the results has not been done up to now.

Many of the indexes only became available in August 1995, but she agreed that such an analysis would be useful in the future. Regarding the monthly periodicity she answered that, in the U.S., there is considerable user interest in monthly data and another periodicity has not been a point of discussion. She also stated that the use of a short period improves the quality of the figures (more goods are the same).

In relation to the Swiss paper, Mr. Zanetta agreed with Mr. Balk that for insurance the institutional approach is questionable. In the future, the methods will be directed more to goods. The ultimate goal will be a separate index for insurance. The floor was then opened for discussion. The following issues were raised:

Ms. Manser stated that the overstatement of the CPI as suggested by Diewert and by Wynne and Sigalla is largely a consequence of the functional form (fixed weighting scheme, formula used for the elementary level indexes, etc.). Therefore, these papers do not support ignoring the conceptual approach. The U.S. favors an approach to try to measure constant quality for a certain basket of goods and services as closely as possible.

Agreement with the U.S. was expressed by France (INSEE). Furthermore, the magnitude of the bias from the introduction of new goods as suggested by

Diewert was questioned. Finally, it was noted that CPIs can serve many different purposes, sometimes even conflicting ones; therefore, it is necessary that statistical offices develop conceptual frameworks for each purpose, and subsequently implement them in practice. How these indexes can be used is up to the users. The task of a statistical office is to thoroughly explain the methods used for the compilation.

Mr. Ryten suggested that one should not discuss conceptual issues too much; instead, one should start compiling price indexes and afterwards discuss the problems one encounters. Furthermore, he drew attention to the failure of any of these papers to mention the product classification (CPC).

Others also favored a practical approach in the compilation of price indexes, and some participants supported the call for attention to the question of usefulness of the product classification for constructing price indexes.

The differences between PPIs, CPIs and indexes for deflating national accounts were stressed by Eurostat, and the introduction of modules for price indexes was suggested.

In addition, a representative of Eurostat stated that he was impressed by list of services covered by the U.S. PPI. However, no distinction was made between CPIs and PPIs; in his opinion, a difference in periodicity of CPIs (monthly) and PPIs (annually) is needed. As an example, difficulties in relation to trade margins were mentioned. In response, it was noted that, with the exception of health care, all services paid for out-of-pocket by the consumer are covered in the U.S. CPI. The CPI data are not presently used in the compilation of PPIs. In the U.S., PPIs are used for national accounts purposes and contracts, so it is necessary to match the periodicity with these demands.

Mr. Van Tuinen responded to the remarks made on his paper that, in his opinion, there was much common ground regarding the choice of a practical approach which is less ambitious in adjusting for quality changes (e.g. with Ryten and the paper by Collins).

He disagreed with the French delegate: at present, the methods for compiling CPIs are far too difficult and therefore hardly possible to explain to the users. In relation to the bias in the CPIs

through the introduction of new goods, he suggested that account should be taken of the opinion of the consumers with respect to the products involved.

The chair then closed the session by saying that, because of the different topics in the papers presented, a summary of the discussion was very difficult. The chair concluded however that there was agreement about the necessity of quality adjustment, but not about the way in which these adjustments should be made.

SESSION 7: NETHERLANDS DAY

Chair: **Mr. Willem de Vries (Statistics Netherlands)**

Rapporteur: **Mr. Hans Dukker (Statistics Netherlands)**

The following papers were before the meeting:

7.1 *Replacing Business Surveys by Tax Registers (Huib van der Stadt)*

7.2 *Forecasting performance: The Case of the Dutch Business Services (Harry Bierings)*

7.3 *Data for the Service Sector. Priorities for the Dutch National Accounts.*
    (Gerrit M. Zijlmans)

7.4 *Towards Statistics on Insurance Brokers (Gabe H. de Vries)*

7.5 *Inbound Tourism: from Border to Accommodation Survey (Roel Wittink)*

7.6 *Measuring Crime: Trends and Coherence in Crime Statistics (John G.C. Kester)*

7.7 *Statistical Problems in Case Studies on Commercial Services in the Netherlands (Henk Vreeswijk, Ministry for Economic Affairs)*

After giving an overview of the papers, the chair invited comments on the following points:

- harmonisation of service statistics in the European Union and comparability between the EU and other economic areas such as North America and Japan, necessitated by globalisation (7.7);

- the usefulness of aggregated expectations as a leading indicator for the performance of the business services sector (7.2);

- the views expressed in the papers dealing with specific service industries (7.3 - 7.6), and the balance between information collected from households as consumers of services, vs. information obtained from businesses and institutions as producers;

- how to make substantial changes in statistical programmes, bearing in mind that filling in gaps in services statistics has been recognized as a high priority for so long;

- filling in the gaps while reducing response burden by collecting data via EDI and from administrative registers. Reducing the administrative burden on businesses is a current political issue in many countries. Statistics Netherlands (SN) has to contribute to a reduction of 10% in this field before 1998, preferably without substantially reducing output quality and quantity. It has estimated that the Netherlands business community spends about 250 person-years annually on completing CBS-questionnaires, excluding Intrastat (about 150 person-years), and the agricultural sector (about 50 person-years).

- EDI-effects on staff: other types of personnel, with other qualifications may be needed, since the more traditional statistical work is disappearing.

The discussion focused on the following:

1. Response burden in general.

On the pure merits of this issue, statistical agencies have no cause for a defensive attitude, since the real bulk of this burden is purely administrative. Likewise, statistics have never been the greatest threat to privacy. Companies may resist filling in questionnaires rather easily, since failing to answer doesn't have the same consequences as e.g. a refusal to pay taxes. They might even invent the myth of being crushed by a load of questionnaires, spawned by the feeling that the same questions are asked (more than) twice or in different questionnaires, or because they have already answered to some other government agency, or are asked for something else than they have in their books. Even when administrative records are amply used as a source of statistics - as in Denmark and France - complaints remain. Having to answer the same questions over and over again is felt as tiresome and repulsive. When data asked for apparently have no meaning to respondents themselves, then even five minutes are too much time for filling in a form.

However real or only imaginary, response problems have to be fought. Some sound pieces of advice were:

- Think first which data you have to collect.

- Make sure that questions are understood by respondents.

- Do not ask what you cannot get. Focus on management information, needed by companies themselves. Perhaps a new balance has to be struck between what you can get and some concepts and definitions used at present.

- Make sure that what you ask can easily be recognized as coming from your agency.

- When useful, ensure more access to administrative sources.

- Feedback of statistical results that matter to companies is essential. Show them the relevance of what they do in the public interest, thus countering ill feelings about the burden you ask them to shoulder. Be aware that organizing feedback is neither easy nor cheap.

2. Using administrative records (mainly tax) helps to reduce response burden, but also offers some mixed blessings.

Problems pointed out were:

- Insufficient coverage, e.g. because only enterprises with a fairly big turnover are entered into an administrative register.

- Loss of autonomy and flexibility. Tax authorities may gradually reduce the number of information items needed, leaving you empty-handed in crucial areas.

- Lack of quality care about information items incorporated in tax records for statistics only.

- Narrowness of information, e.g. when the total amount of VAT paid by a company is not broken down to production activities, or when tax files do not shed any light on the structure of conglomerates, and are only useful as a basis for sampling frames on medium sized enterprises.

- Time-lags, because records can only be obtained after assessment by the tax authorities.

- Linkage with survey data.

In some cases, imputing instead of questioning offers a way out. Annual reports of bigger firms may also be helpful, but surveys may be needed again, e.g. to comply with various EU regulations. Respondents may well give answers to the tax authorities that differ from those given to the statistical agency. Their anxiety of data interchange between the agency and the tax authorities must be countered. A very close working relationship with the tax authorities is needed while preserving integrity, also bearing in mind the needs of the business community. Datasharing between separate government institutions is not always keenly embraced by respondents. Consultation of enterprises in Canada had shown that about 50% of them would prefer filling in two separate forms.

3. EDI.

Tapping management and administrative information systems may offer tempting prospects of reducing response burden to zero, but so far, experiences in various countries are rather mixed. First problem is to win enterprises over to this new medium. Even then, supplying data for statistics is at the bottom of their priority list. Only big and medium sized companies are ready for electronic questioning, which may be rather complex. Translation of data extracted from company records into the information needed can be difficult e.g. because of the great variety of commercial book keeping software. Using electronic questionnaires is only effective in frequent surveys, since respondents have to learn certain routines.

If the focus of interest moves, it is difficult to introduce other questions. The medium is rather inflexibile, a point to bear in mind too for those who are developing message formats in statistical working groups of the Western European Edifact Board. EDI can be efficient for getting current information, depending on the type of survey conducted, but there are limits to what you can ask. It doesn't necessarily reduce response burden, because this depends on what a firm has to report on various items. The amount of time gained by using EDI - e.g. since the accounting statement of companies is obtained at the same moment it is sent to the tax authorities - may best be used for further surveys on the behaviour of enterprises, getting a better understanding of the movement in the economy. Moving pragmatically, looking what you want and what you have got, also using a proxy approach and translation of data available, may be the best policy. Keeping it simple also is. Good results may e.g. be obtained by using minimal transformation of spreadsheet data. This is sensible and convenient.

4. EDI-effects on staff.

The need of changing staff competence was felt to be a general question, answered by making gradual adaptations in an evolutionary process. Retraining programs had been launched successfully in several countries, ranging from graphical analysis for small area statistics, economics, national accounts, English and on the job training to Total Quality Management projects involving all types of personnel. Permanent education is felt as a must, also for university graduates. Retraining this category may implicate a veering between skilling and unskilling: more analytical than supervisory training on the one hand, broadening experience on the other.

Of course, there are difficulties to overcome: the amount of time to invest, taking away fears for changes etc., but many have worked very hard to upgrade their education.

Central data editing has vanished in most countries, but been retained in Canada, because it is most cost-effective and gives the best work environment. The costs of boredom, no allegiance to a particular subjectmatter activity, and loss of knowledge in depth are fought by adequate documentation, better training and continuous improvement of procedures.

5. Comments on the separate papers showed that views and conclusions expressed in paper 7.1 were similar to those of several other countries. From the viewpoint on short term statistics paper 7.2 was warmly welcomed. The value of additional information obtained by questioning individuals as a complement to institutional data was found to be clearly shown in papers 7.4 and 7.5. The approach towards observation of inbound tourism was deemed promising within the EU as a whole, since border controls are disappearing. Of course, the supply side shouldn't be neglected; its role in terms of investment and employment can be conspicuous. The question was raised whether activities of local transport, restaurants, retailers, etc. should also be included in the definition of tourism or not.

Closing the discussion and thanking the discussants, the chair concluded that alleviating response burden is an issue in most countries. EDI and the use of administrative registers can help, but this is a complex area. EDI-effects on staff were less dramatic than expected, since accommodations could be made gradually. On the other hand, SN is now moving at high speed towards an EDI-environment.

SESSION 8: 10TH ANNIVERSARY

Chair:　　　*Mr. Jacob Ryten　(Statistics Canada)*

Discussant:　　*Mr. Keith Francombe　(Central Statistical Office, Newport, UK)*

The following papers were before the meeting:

8.1　The Voorburg Group's Tenth Anniversary: A Review of Achievements　(Jacob Ryten, Shaila Nijhowne and Samuli Rikama)

8.2　The Voorburg Group's Achievements and Eurostat work on Service Statistics (Jean Albert and Anne Dejardin)

8.3　Technological Change in Services and Implications for Statistics　(Denis P. De Melto)

8.4　Likely Changes in Services; Impact on Data Collection　(Hugues Picard)

8.5　Expected Changes in Services Statistics: a Look into the "Crystal Ball" (Photios Nanopoulos and Marco Lancetti)

The session to mark the 10th meeting of the Voorburg Group was convened to achieve two things:

- to recall the circumstances in which the group was created and review its achievements; and

- to discuss the key challenges that the Group should be prepared to face over the next ten years.

The papers by Ryten e.a. and by Albert and Dejardin were concerned with the past and the present and the other three with the future. There was also a presentation by Eurostat of a "Voorburg Group Infobase" covering all the papers prepared for the Group's meetings from its inception onwards with ready access to each by author, title organization and meeting.

Before giving the floor to presenters and opening it for discussion, the chairman read out a letter sent by Ivan Fellegi, Chief Statistician of Canada, congratulating the Group on the occasion of its tenth meeting. As one of the principle campaigners for the Group's creation and alone among Directors general of national Statistical Institutes to foresee its potential contribution, Dr. Fellegi recalled the circumstances that led to the Group's first meeting and the difficulties in reaching consent among his peers that such a meeting should take place. The letter acknowledged the indispensable support provided at the right moment by Professor W. Begeer, then Director General of Statistics Netherlands who suggested that his offices in Voorburg be the first meeting's venue. The full text of the letter is reproduced as an annex to the report of this session.

The chairman noted the following in connection with the circumstances surrounding the Group's first meeting:

- contrary to the general belief, the Voorburg Group was originally created in the image of the Round Table on Business Frames, the first meeting of which preceded the Group's first meeting by half a year. The success of the round table prompted Michel Beekman then with the Statistical Office of the United Nations and Terry Gigantes and Anna Ansmits of

Statistics Canada to suggest to the chairman the creation of a group to help UNSO complete the services part of the Central Product Classification;

- the membership of the Voorburg Group at its first meeting decided to give themselves a name and, in recognition of the generous hospitality they had received from Statistics Netherlands, they agreed they should call themselves the Voorburg Group.

On this occasion, the Group had to consider why its work was relatively unknown - in spite of the fact that alone among all Groups of the same type it had a solid record of concrete achievements and what was in its power to do in order to rectify the situation.

The following concrete suggestions emerged as a result of discussion:

- members would find the best possible way to publicize the availability of the Voorburg Group's Infobase, if possible recorded in CD-ROM;

- volunteers among the membership will contribute to the drafting of a short booklet highlighting the nature and significance of the Voorburg Group's achievements since its inception;

- papers invited and contributed to the Voorburg Group meetings will be more action oriented and will be preceded by a short statement of the paper's conclusions and how those conclusions represent either the discovery of a problem or else a step forward in the Group's collective knowledge; and

- the Group will undertake to progressively improve the quality of the Infobase through its continuing use.

The group was also asked to consider the conclusions in the papers by France, Eurostat and Industry Canada. Some of the conclusions related to predicted changes in industrial organization and technology that are very likely to have major impact on the way that statistics on services are collected and compiled. Other changes related to emerging policy needs that would require quick response on the part of statistical agencies. In particular, some of those needs made it clear that Eurostat, the Voorburg Group and possibly other organizations would have to deliver on detailed survey results much more quickly than in the past.

The conclusions of the papers by P. Nanopoulos and M. Lancetti and by D. De Melto are also shown as annexes to the report of this session.

Annex I to Session 8

Letter By Ivan Fellegi, Chief Statistician of Canada

As we well know it (of course from the literature, not from personal experience), paternity is often a highly contested issue. If one could selectively acknowledge parenthood for prodigies, there would probably be many more volunteers. I am in the lucky position of being able to say that I always proudly acknowledged my involvement in the birth of the Voorburg Group and that furthermore I have nothing to be ashamed of in helping to create this prodigy. Although, I must admit, the period of courting was inauspicious.

The preliminaries formally started in 1986 during the Conference of European Statisticians' seminar for heads of statistical agencies, held in that year in Paris. The idea, however, grew out of some discussions back in Ottawa, mostly between Jacob and me, about how we could productivity focus the attention of the statistical community on a joint effort to improve our statistical output in the area of service industries, with a focus on the services that are not related to goods and therefore were most undeveloped. We knew quite well that the task was not one of routine development. Instead, it involved considerable research about the nature and outputs of the industries concerned, as a prerequisite to the development of the required classification systems and model surveys.

There were a few instances in the past where a comparable challenge had to be faced by the international statistical community. The development and implementation of the SNA during the postwar years comes to mind as one example. The situation in 1986 differed from that prevailing when earlier possible models were worked upon: the relevant resources were not available in any of the international (or supranational) organizations; their budgets were already then under considerable pressure, so that it was not reasonable to expect that the missing resources could be acquired; no single country could serve as a lead for others to follow partly because their own resources were also under pressure, but also because no one's country could be expected to have or acquire expertise about all the relevant service industries in need of development -- even though different countries could well contribute knowledge in respect of those industries that are particularly well-developed there. As usual, good problem analysis leads one at least half way to a good solution: why not bring together countries to contribute, each in their field of relative advantage, to a solution designed to serve all? Such an approach, suitably adapted, would overcome all of the hindrances to proceeding along "established" lines.

Without having solved all the possible problems, we thought the approach had sufficient promise to warrant putting it forward to a select group of our colleagues. Here again, given that what we had in mind was participation on the basis of capacity to contribute, we thought the idea should be put forward to a limited number of heads of national statistical agencies and, of course, to representatives of the international organizations concerned. With the naivet of one who has been the head of a statistical agency for less than a year, I had no notion about "preparing the ground" and convincing a few key players ahead of time. Instead, I just invited for lunch my nominees (but they shall remain nameless), and presented the idea to the about what subsequently became the Voorburg Group.

I expected the merits of the suggestion to be so blindingly obvious that most of them would be swept along enthusiastically. But, frankly, this is not what happened and, in retrospect, it is clear why.

The idea was too far out of the ordinary in those days, and people needed some time to get used to it. So I received a polite reception (after all, Canada paid for the lunch), but a lot of skeptical questions and even more bewildered silence.

Fortunately there was one person present who came to the rescue: Professor Begeer, who at that time was the head of the Dutch statistical office. He was sufficiently open-minded to allow that the idea had some merit, it should be tried out, and that he would be glad to host the first meeting of the Group. Not only did his intervention carry the day, but by offering a venue he also provided a name. So, as the name-giver, Professor Begeer should be recognized as the godfather of the Group.

The Group has fully lived up to the expectations of its founders -- and not only to the probably very modest expectations of the other participants at the 1986 lunch. Indeed, I understand that at the present meeting the finishing touches will be put on the Central Product Classification for Services, preparatory to its submission to the UN Statistical Commission for final acceptance. But if this were not enough, it has to its credit a long list of other achievements:

- *The development of model surveys for a number of the conceptually most difficult service industries such as computing, telecommunications, audio-visual services, insurance, advertising thereby contributing not only workable and tested methodologies, but also making a signal contribution to international comparability.*

- *Proposals for the estimation of prices for difficult service activities.*

- *Development of guidelines for the estimation of output at constant process for selected service activities.*

- *Use of model surveys to undertake systematic development of key ratios for selected service industries.*

- *Guidance on the treatment of service exports and imports within the current account of the balance of payments.*

As is often the case with the first born, it serves as a model for subsequent children of the same family. And since the basic idea of the Voorburg Group turned out to be universally seen as productive, other groups were formed to work in other domains in the same collaborative manner. As the oldest, the Group contributed its methodology for consideration by the others: labour sharing that allows each participant country to contribute in an area of its comparative advantage; an agenda that is established each year for work during the next year; the acceptance of one lead country and two or three associate countries for each project to ensure a broader perspective and a built-in invited discussant role; research work during the year with help from associates and full discussion at plenary once a year; building on the lack of formality that goes with its standing as an informal but well-structured group of experts whose output is subject to formal discussion and acceptance by the official world statistical system represented by the UN Statistical Commission; and first and foremost -- no free rides, participation is on the basis of contributions.

I wish to take this anniversary to thank all members of the Voorburg Group, past and present, for their excellent contributions during the last ten years and for their willingness to pioneer a new model for international statistical co-operation. Also for allowing to keep my head high among my colleagues ten years after that notable luncheon event in Paris.

Annex II to Session 8

Conclusions of the papers by P. Nanopoulos and M. Lancetti and by D. De Melto

Nanopoulos/Lancetti

The technological trends, the evolution of ethics, the changes in the organisation of international systems will deeply modify the context of statisticians work. Changes in administrative, business and household's record keeping will influence the statistical record keeping, the date structures and methodology. Changes in the collection of data should reduce the response burden.

Increasing capacities in the storage, treatment and analysis of data and in their dissemination will give to the statisticians the opportunity to better serve users' needs for more, faster and better information. This evolution will have important consequences for official statistical systems, allowing optimists to dream of "a golden era of official statistics" but at the same time allowing competition from the private sector to create significant threats.

Services at present are lacking of a comprehensive economic theory for their analysis. Nevertheless the emerging trends of some services characteristics can guide our analysis of expected changes.

From the SNA and other sources we have elements to continue gradually building a comprehensive statistical system capable in the future of following the changes in the services economy. Several interrelated multidimensional approaches have to be followed to cover a services economy that becomes more and more flexible and virtual.

Increased standardisation of administrative sources and registers will give to the statisticians the information energy necessary to answer user's requirements.

Statisticians have to find a new role by handling information concepts and values with flexibility and adaptability. They have to be able to find the necessary investment by better understanding the cost of statistical actions. Knowledge of the information market will be essential for surviving. In the next two decades, scientists are promising spectacular changes. Are our systems able to follow and report on these changes? Not for the moment, because the means we have today are not adapted for following such rapid changes. We hope and strongly believe that Information Technologies will give statisticians the "information energy" to take up this challenge.

De Melto

I was asked to try to identify from a user perspective, the kinds of services statistics which would be required in the future to better understand the service sector and its performance, particularly in the light of the significant impacts which technological advances were having on the sector and its role in the economy. I identified the following major

priorities and tried to indicate the rationale behind the choices.

1. A significantly expanded, more detailed product classification system for services.

2. Statistics on prices for these services products.

3. Output measures for these products in current and constant dollars (and possibly physical output numbers).

4. *Statistics on services exports by detailed service products.*

5. *Statistics on services outputs of goods producing industries by detailed service products.*

6. *Statistics on purchases of services by goods and services industries, by detailed service products.*

7. *Statistics on the information inputs to innovations in service industries which are broader and more meaningful than just R&D spending.*

8. *Surveys of the innovation process in service industries which identify broadly the information investments of service firms and their costs, as related to major innovations, the sources of technologies, information and ideas for these innovations, and link the innovations to outputs and sales of services in domestic and international markets.*

This is a very tall order and attempting to produce such statistics would be resource intensive and costly. One argument is that if we don't continue down this road, and accelerate the pace, our ability to understand the micro-economy and our faith in our macro-statistics may continue to erode. I recognize that progress is being made in a number of the areas set out above, but progress is discouragingly slow.

A second related question is whether it is feasible to produce these statistics at all? In a sense, what the above wish list for services data represents is a demand that the kind of detailed statistics currently available for the goods industries be made available for service industries. If it can be done for the goods producing industries, why can't it be done for services industries? This is a very real question. I have tried in the paper to identify many of the problems which make describing the service sector so much more difficult and information demanding than is the case for the goods industries. It may well turn out that the nature of services in some industries may preclude the development of meaningful measures.

If it is deemed that such a fundamental program is unfeasible or too costly for governments to sanction, second best approaches combining elements of the above wish list would be feasible. One approach would be to take more of a "lines of business" rather than "services product" approach and try to draw enhanced, more meaningful data from existing manufacturing and services surveys based on these services lines of business, supplemented by enhanced information on the markets into which they are being sold, along with more data on services inputs drawn from goods industries surveys. In addition, the enhanced and new information identified in points seven and eight above would help to develop a better understanding of the service industries from a conceptual, even if not from a very satisfactory statistical systems viewpoint.

SESSION 9: GLOBALISATION

Chair: *Mr. Obie Whichard (USA - Bureau of economic Analysis)*

Discussant: *Mr. Erwin Veil (OECD)*

Rapporteur: *Mrs. Lieneke Hoeksma (Statistics Netherlands)*

The following papers were before the meeting:

9.1 Examining Business Services in a Global Economy (Janice McMechan and Carey Olineck)

9.2 Internationalisation of Services: Unusual Services (Jean-Marie Nivlet)

9.3 Trade in Services in Globalisation Context: Issues of Definition and Measurement (Erwin Veil)

9.4 The Status Quo of Establishment Trade in the Netherlands (Robert Goedegebuure)

9.5 An Ownership-Based Disaggregation of the U.S. Current Account, 1982-93 (Obie Whichard and Jeffrey Lowe)

9.6 Registration of International Trade in Services (John M. Thoolen)

Mr. Whichard opened the session by noting that while international trade had been among the topics on which the largest number of papers had been given at previous meetings of the Voorburg Group, this marked the first session with the title of "globalisation". He remarked that globalisation was a broader concept than international trade, in that it usually entailed the internationalization of production as well as sales. Thus, globalisation included sales through foreign affiliates in addition to the cross-border transactions that comprise ordinary international trade.

He added that globalisation analysis often was conducted in the context of services transactions, since the need for proximity to the customer often necessitated the use of foreign affiliates as vehicles for delivering services to international markets. Expansion of the coverage of trade negotiations to include services delivered through foreign affiliates also has focused attention globalisation issues and, more specifically, on direct investment as a mode of supply.

For purposes of discussion, he divided the six papers to be presented in this session into two groups:

A. What is globalisation?

B. Application of globalisation.

After having given a brief summary of the papers in a given group, Mr. Whichard invited the authors to elaborate.

Group A comprised the papers 9.3, 9.4 and 9.2.

Mr. Veil noted that globalisation was differently interpreted: notably the Netherlands preferred a wider concept including transit trade, while other countries limited themselves to cross-border trade and delivery through direct investment enterprises. He felt that the narrower concept of globalisation was more appropriate.

He then went on to discuss the different foreign-affiliate groups that might be taken as relevant for purposes of globalisation analysis. He noted that Eurostat had settled on affiliates that are majority-owned by foreign direct investors. He further noted Eurostat's use of the first foreign parent and not the ultimate beneficial owner as the basis for identifying bilateral partners for establishment trade. This is in line with the OECD Benchmark Definition of Foreign Direct Investment.

Also classifications should in his opinion be product-based not activity- based, although the latter is the tendency with respect to foreign affiliates, as data for them usually are collected on an industry basis.

Mr. Veil concluded by explaining that Eurostat and the OECD are converging their efforts in this area. The subject field is underdeveloped and much work, both conceptual and empirical, remains. He was very pleased with the U.S. model, which will serve as a major model for future work in this area.

Mr. Goedegebuure explained that the Netherlands considers globalisation in a broader framework. Due to its geographical location the Netherlands has traditionally focused more on imports, exports and transit trade.

He sees globalisation as being made up of five components of which trade in goods and transit trade are best developed in the Netherlands. There are some restraints with respect to establishment trade.

He further remarked that globalisation is a very new subject in the Netherlands. Staff at Statistics Netherlands have been reading up and have consulted users and come to the conclusion that there is no clear concept of establishment trade. They also feel that establishment trade in goods is just as important as establishment trade in services, and that it seems a bit overdone to develop the latter if the former is ignored. However, Statistics Netherlands does see globalisation as an important subject.

Mr. Nivlet's paper sets out the analysis of foreign-controlled enterprises in France with the aid of the available data. It explains that it was not very difficult in France to measure establishment trade. Also, some of the issues that are of concern to globalisation theorists turn out not to be so important in practice. For example, the particular affiliate group selected for analysis may not be of critical importance, since most affiliates are majority owned and controlled. However, they are also interested in the concept of non-equity "networks," particularly in the field of professional services. Also, measuring the performance of foreign enterprises compared with national enterprises is necessary to identify the key variables to quantify the stakes of internationalisation.

The second group comprised papers 9.5, 9.1 and 9.6.

Mr. Whichard explained the attempt made in his paper to construct a supplemental disaggregation of the U.S. current account along ownership lines. He indicated that the disaggregation is conceptually consistent with the standard disaggregation but focuses on whether the transactions are between unaffiliated or affiliated parties rather than on the types of goods or services traded. The new disaggregation also adds to the conventional measure of

direct investment income details on affiliates' sales, expenses, and other deductions that, taken together, determine the income.

Mr. Meguerditchian described the results to date of a Statistics Canada "Globalisation Initiative," in which data for foreign-owned business entities have been developed by linking establishment data to enterprise data. Information on several indicators has been developed, including employment, R&D, and sales, and differences between foreign-owned and domestically owned entities have been analyzed. He noted that the variety of indicators available allowed a wider range of issues to be addressed than if information were available on establishment trade alone.

The chairman identified a point for discussion: Is establishment trade too narrow a concept for globalisation analysis? How do you describe employment, sales, etc. of foreign-owned businesses, and how do the characteristics of these businesses compare with those of domestically owned businesses?

Mr. Thoolen described changes in the division of labor between the statistical office and central bank in the Netherlands that might be appropriate as a result of changes in the detail required for services. He asked if the problems encountered in the Netherlands in the collaboration between the central bank and the statistical office as regards the collection, definitions, priorities and analysis of data also occurred in other countries.

When all the papers had been presented, the chairman invited Eurostat to give the meeting an update of the its taskforce on establishment trade. It was noted that the dialogue between the central banks and statistical offices was very important in this respect. Eurostat envisages a pilot study in two stages:

a. collect available data, develop methodology, decide who collects what;

b. choose variables to measure services statistics.

Also the ambiguous position of the European Union was pointed out. In a global perspective, intra-EU trade is measured as a whole; thus, the intra-EU transactions are ignored. Not all countries are equally happy with this.

The Eurostat representative further wondered how detailed classifications should be. The banks pleaded for less detail while the statistical offices had not expressed an interest in taking on responsibilities for the collection of extra information.

The chair asked for any more relevant remarks. As none were forthcoming, the session was closed.

CLOSING SESSION

Chair: *Mr. Jacob Ryten (Statistics Canada)*

Rapporteur: *Mr. Michel Beekman*

Mr. Ryten referred to a Bureau meeting that took place on Tuesday evening. He announced that the Bureau had lost one of its members, Hugues Picard, who was transferred to a different position in INSEE. After thanking Mr. Picard for his dedication over the years, he announced that Mr. Picard would be succeeded by Mr. Patrice Roussel, also from INSEE, who agreed to become a member, and that Mr Paul Sullivan (ABS) would serve as a permanent member as well. The Group welcomed both Mr. Roussel and Mr. Sullivan.

Mr. Ryten informed the Group that the CSO of the UK had agreed to have the meeting in 1996 in Newport, Gwent in Wales. The proposed date is from 16 to 20 September. The organization will probably be in the hands of Mr. Keith Francombe. The Group welcomed this proposal.

Then Mr. Ryten noted that the Bureau discussed ways to streamline future meetings to make the Group more effective and result-oriented. This discussion resulted in a number of proposals to the plenary.

The Bureau's conclusions are shown in appendix IV this report. Some of the Bureau's suggestions are already referred to in the report of session 8. The chairs of the meeting in Newport were asked to try to enforce these suggestions, which, if successful, will be incorporated in the Group's Internal Guidelines.

In the context of the Group's effort to become more result-oriented, Mr. Ryten noted that the Bureau had agreed to propose a number of key items for the agenda of the next meeting. The two main items were Employment and related matters and Business Accounting Frameworks, to which the Glossary and the CPC could be added. The latter should remain on the agenda for the next few years. Also the special session for the host country will stay on the agenda; in Newport the suggestion is "The Queen's Day" or any title that the organising country deems appropriate.

Mr. Ryten then asked for comments and suggestions for the two remaining blocks on the agenda. After some discussion, a provisional agenda was agreed upon. This, including the lead countries and their supporters, is reproduced as appendix IV to this report.

The session on Prices and Quantities ought to be linked to the CPC as it currently exists. Countries could be asked what the ingredients for their PPI's are, and whether or not they fit with the CPC. The exercise should focus on business services, to see if and how in some cases, such as hotel services where services are sold to businesses and consumers, comparisons could be made between the PPI and the CPI.

The first of the two proposed sessions for Employment is intended to tell the Group what we do and don't know about employment; reference was made to the paper by Peter Bøegh-

Nielsen. Different subjects, such as skills, education, status, distribution over enterprises can be touched upon; it could be a stock-taking activity to see where the gaps are. Also, classifications could be discussed: what do we have and what would we like to have.

The second session could be on policy issues and agendas in different countries. Does one look at the difference between good and bad jobs or does one focus on training. These issues could be made explicit in order to teach statisticians where to put their top priorities.

With respect to the short booklet highlighting the nature and significance of the Voorburg Group's achievements since its inception, referred to in the report of session 8, the delegate from Finland volunteered to take the lead in such a monograph. Several delegation offered their support. In this context the Infobase by Eurostat could be of help. Others proposed to make monographs per subject, such as "10 years of P's and Q's in the Voorburg Group".

The draft reports of sessions 1 to 5 and 7 were reviewed, and comments were given in writing to the secretariat. There was a brief discussion on the policy with respect to the CPC and its revision(s). The conclusions of this discussion are laid down in the report of session 5.

With respect to the CD-ROM by Eurostat it was decided to treat distribution bilaterally between Eurostat and participants.

Finally Mr. Ryten thanked the Statistics Netherlands for its hospitality, for the organisation and services, and asked Mr. de Vries to convey his thanks on behalf of all participants to the Director General.

Mr. de Vries then expressed his great pleasure in hosting the meeting. He thanked the technical staff, secretaries and hostesses, the catering staff and the organiser, Mr. Beekman for their contributions, and Mr. Ryten for his overall steering of the meeting.

Mr. Beekman thanked both Mr. Ryten and Mr. de Vries for their leading role and all chairs, discussants and rapporteurs among participants and staff for their assistance. He included the technical and administrative staff who helped make the meeting a success, and thanked all participants for their papers and discussions.

Wishing all participants a safe trip home, Mr.Ryten closed the meeting.