# Minutes

# 21st Voorburg Group Meeting on Services Statistics

Wiesbaden, Germany, 9 – 13 October 2006

# Contents:

1. Sun	nmary	2
2. VG	Report to the United Nations Statistical Commission (UNSC), Recommendations	
VC	G 2005 Task Force and Country Progress Reports	5
2.1	VG Report to the UNSC	5
2.2	Recommendations of the VG 2005 Task Force	5
2.3	Country Progress Reports	6
3. Cor	nmon Terminology Sessions	7
3.1	Session Summary	7
3.2	Discussions and comments from participants	8
4. Session on Freight Transport by Road		9
4.1	Session Summary	9
4.2	Discussant's Remarks (and questions)	10
4.3	Discussion Questions	11
4.4	Key Points for Input to Sector Paper Key Issues	14
5. Session on Management Consultancy		16
5.1	Session Summary	16
5.2	Discussant's remarks and questions	
5.3	Questions on Discussant's Remarks:	19
5.4	Key Points for Input to Sector Paper	
6. Strategy Session		23
6.1	Session Summary	23
7. Future Agenda Session		24
7.1	Session Summary	24
7.2	Next Steps	25

#### 1. Summary

Acting Chair: Mark E. Wallace (U.S. Census Bureau)

The 21<sup>st</sup> meeting of the Voorburg Group on Services Statistics was held in Wiesbaden, Germany, hosted by the Federal Statistical Office of Germany. Our German hosts provided a beautiful meeting facility and treated us to a wonderful "Host Country Day," including a scenic cruise down the Rhine River.

At this 2006 meeting, the Voorburg Group successfully met its objective of working toward an internationally comparable methodology for measuring the constant dollar outputs of services. The Group focused on the development of concepts, methods, and best practices in the area of services. The scope of the meeting sessions centered on turnover, classification, and prices, and sessions were structured around a review of output and price statistics for service industries with a concentration on creating comparable data across programs for the improvement of input data for national accounts.

In advance of the meeting, a task force developed a structured content development framework (CDF) for use by member countries in collectively addressing the development of services prices and turnover/output data, with links to classifications and national accounts. The CDF, completed and available for use by December 2005, specified a very structured approach for developing mini-presentations (separately done on prices and turnover/output) and sector papers (covering prices, outputs, and classification) for use in future Voorburg Group meetings. The CDF included specific headings to be covered in the mini-presentations and sector papers as well as guidelines for discussant remarks, facilitated group discussion, and the development of key points to be included in the sector paper to be developed in Year 2. Another very valuable aspect of the CDF was that it called for the inclusion of these discussion remarks from a national accounts perspective, which in turn led to the development of a relevant set of key guidelines based on differences in the various countries' market constraints. The CDF specified that the Group's discussion would focus on the quality assessment of different conceptual choices such as real world characteristics and market constraints and the cost-effectiveness of using particular pricing and turnover/output methodologies to best meet the needs of the national accounts. In addition, the CDF included helpful sample agendas proposed for use in the 2006 and subsequent meetings. Very importantly, the sector papers that will result from this CDF production process will constitute a major deliverable from the Group to participating countries over time.

The  $21^{st}$  meeting successfully implemented the CDF, with some minor modifications for next year. Sector papers for management consulting and road freight services will be prepared in advance of the  $22^{nd}$  meeting (2007) and will represent concrete deliverables for the Group represented by the United Nations Statistical Commission.

Road freight price index presentations were made by Matt Berger (Australian Bureau of Statistics), Bernhard Goldhammer (Federal Statistical Office of Germany), and Uwe Kirsten (Central Bureau of Statistics, Netherlands). Road freight turnover/output presentations were delivered by Bernhard Goldhammer (FSO Germany), John Murphy (U.S. Census Bureau), and Fred Barzyk (Statistics Canada). Jodi York (Statistics New Zealand) served as the discussant.

Fred Barzyk was the session chair and will be lead author of the sector paper that will be prepared based on the results of this year's session and will be presented at next year's meeting. For management consulting, price presentations were made by Denis Gac (INSEE France), Susanne Lorenz (FSO Germany), and Roslyn Swick (U.S. Bureau of Labor Statistics).

Management consultancy turnover/output presentations were made by Jean-Pierre Simard (Statistics Canada), Benjamin Camus (INSEE France), and Mark Wallace (U.S. Census Bureau). Michael Horrigan of the U.S. Bureau of Labor Statistics served as the discussant and Pam Davies of the United Kingdom's Office of National Statistics served as the session chair and will be the lead author of the management consulting sector paper that will be prepared based on the results of this year's session and will be presented at next year's meeting.

There also was a session that included presentation of country reports (including scorecards depicting country progress levels on the development of pricing and turnover/output statistics as well as, importantly, the respective alignment of turnover/output and prices for price deflation purposes for selected industries). Another session presented a pricing thesaurus, which identified the need for further work in this area as well as on a turnover/output document for future meetings. Follow-up work, additional input from national accountants, and a considerable amount of task force work will continue throughout calendar years 2006 and 2007.

#### **Next Steps**

The CDF will be used from this meeting forward. It provides a much more structured approach to developing mini-presentations, sector papers, and for organizing the format and conduct of the Voorbur g Group meetings. The consensus of the Group was that the CDF promotes work supporting the parallel development of turnover/output data and pricing statistics, with links to classifications and national accounts for member countries. Further, the structured presentations, discussions, and development of key points brought out very much useful information on the specific industries covered. Following the CDF presentation and meeting formats also helped to bring out many valuable cross cutting issues, that had not been addressed at previous meetings, that will help the Group as it moves ahead with future agendas.

There was a consensus that the scorecard approach was very useful and should be expanded to a greater number of service industries (beyond the six covered at this year's meeting). The Voorburg Group Bureau has strongly encouraged member countries to promptly respond to ensuing questionnaires that will be collecting information on pricing and turnover/output activities for service industries. The information collected from the countries on their price and turnover/output content development activities (or lack of activities) will help identify areas in which the Voorburg Group can provide the most benefits for the most countries in terms of developing their service sector statistics programs.

Further, there is an obvious requirement to better ascertain and document the specific service sector source data needed by the national accounts to improve measures of real GDP. National accounts are calculated from available source data; the better the source data, the better the national accounts.

Also, the Group was in favor of improving the Pricing Thesaurus by attaching concrete examples to each of the seven pricing methods. It also identified the need to develop a short document citing various issues concerning turnover/output (e.g., the synonyms used by various countries, relationship of turnover and output to value added statistics and the production perspective of GDP, why turnover by product data is of essential importance to the input-output accounts and for deflation purposes, and gross versus net valuations).

In addition, in this very first year of implementing the CDF, the Group realized, as it developed key points for input to the sector papers for Road Freight and for Management Consulting, that many of the key points cited were of a general nature. Many points applied to the service sector as a whole as opposed to merely the specific industry at hand. This, then, signified the need to develop a paper, including theoretical and practical issues and key points of a cross-cutting nature that included the general points brought out in this year's discussion. The Group agreed that the availability and use of such a general issues reference document would preclude the need to rehash all of the same general points for each new industry covered in future meetings.

In this context, several task force assignments were made to prepare for next year's and subsequent meetings. One task force will formulate questionnaires and collect country information and disseminate scorecards on 40-50 high priority (as identified by the task force) service industries. Another task force will develop concrete examples to accompany each of the seven pricing methods included in the Pricing Thesaurus, and will improve existing definitions of each of the seven pricing methods. A third task force will develop key issues and questions to be addressed by national accountants and will identify three national accountants to be invited to prepare and deliver presentations covering these issues at the next meeting in 2007. And yet a fourth task force will develop the general issues/ key points reference paper for service sector content development.

All of these task force assignments will be completed before next year's meeting. The 2007 meeting is already taking shape as potentially one of the most productive meetings in the Group's history. It will include major deliverables, including greatly expanded country progress reports and the adoption of two sector papers (Freight Transport by Road and Management Consulting). It will include price and turnover/output mini-presentations on two new industries/sectors (IT and Computer Services and one industry still to be named as of this writing). The meeting also will include two special sessions. One session will contain three presentations and a discussion of the papers prepared by selected national accountants addressing the key issues and questions posed by the Group. The other special session will include a presentation and discussion of the general issues paper.

# 2. VG Report to the United Nations Statistical Commission (UNSC), Recommendations of the VG 2005 Task Force and Country Progress Reports

Session Leader: Mark E. Wallace (U.S. Census Bureau)

# 2.1 VG Report to the UNSC

No separate report to the UNSC was made after the 2005 VG meeting. Rather, the results of the meeting were documented in the OECD's report on services statistics to the UNSC. Five major points in this report pertained to the work of the VG:

- The VG focus shall essentially be one of developing concepts, methods, and best practices in the area of services
- The VG scope will continue to be turnover/output, classification, and prices
- The VG must provide tangible results and recommendations on conceptual and practical aspects of the development of services statistics. There is a need to better define the nature of the service that we are trying to measure with turnovers and prices. There is a need to integrate the national accounts perspective with measurement issues in turnover, prices, and classification
- Next steps for the VG would involve making changes to the workplan, its development process, and the format of the meeting
- The VG would keep what worked well in the past (e.g., mini-presentations), but provide more structure to the mini-presentations in order to identify the best practices that would feed into the final (sector) papers.

# 2.2 Recommendations of the VG 2005 Task Force

Coming out of the VG 2005 meeting in Helsinki, it was agreed that the VG would be centered on the parallel development of the classification, turnover/output, and prices for services. Ultimately, as a concrete deliverable of the VG to its participating countries and international organizations, the VG would produce sector papers, on a time schedule, for selected industries deemed of value to the VG.

In this context, a task force was established to do the following work by the end of December 2005:

- Develop and establish a structured Content Development Framework (CDF) for producing turnover/output data and pricing statistics, with links to classifications and national accounts. PPI would play a major but equal role with turnover/output data. The CDF would lead to the development of a set of guidelines to be included in a series of sector papers covering individual service industries.
- Identify particular service industries upon which the mini-presentations and sector papers should focus over the next few years

By the end of 2005, the CDF was complete. It outlined very specifically headings and topics to be included in the mini-presentations and sector papers. Another valuable aspect of the CDF was

that it called for the inclusion of discussants' remarks from a national accounts perspective which, in turn would lead to the development of key guidelines based on differences in the various countries' market constraints. The CDF specified that the VG's discussion should focus on the quality assessment of different conceptual choices, e.g., real world characteristics and market constraints and the cost-effectiveness of using particular PPI and turnover/output methodologies. The process is intended to provide feedback to classifications and national accounts when necessary. Further, the CDF has greatly expanded the role and responsibilities of the Session Leaders. Under this new meeting format, the Session Leaders lead facilitated discussions following the mini-presentations in Year 1, and author the sector papers and present them to the VG in Year 2.

The CDF also recognized the need to develop a pricing thesaurus, including common terminologies for prices, so we could all speak the same language in terms of pricing methodologies. This thesaurus, then, was available for use in the preparation of the minipresentations on prices. The first step in preparing this thesaurus was to reference the OECD/Eurostat SPPI Guide, with the intent to consider North American and Asian input so as to make this a truly international effort. The thesaurus was complete in the Spring of 2006.

#### 2.3 Country Progress Reports

The CDF had suggested that the VG would focus its mini-presentation and sector paper work on the following six industries over the next few years:

- Freight Transport by Road (ISIC 4923)
- Management Consultancy (ISIC 7020)
- General Cleaning of Buildings (ISIC 8121)
- Storage and Warehousing (ISIC 5210)
- Passenger Rail Transport (ISIC 4911)
- Coastal Water Transport (ISIC 5011 and 5012)

Accordingly, it seemed prudent to utilize this year's progress report questionnaire as a means of getting a head start on assessing the various countries' experiences (or lack of experiences) with measuring turnover/output and prices for these industries. In August, the questionnaire was distributed to the 30+ countries signed up for attendance, asking for various details on their work with these industries. As it turns out, 24 countries responded, but only 22 in the prescribed format. Compilation of the results of the questionnaire for the six industries showed there is a lack of activity going on in prices and turnover/output in many of the VG member countries. A score of '1' was assigned for an industry in which the country had PPI details greater than or equal to the CPC level of detail, and the two (prices and turnover) aligned with each other (i.e., the price data could be reasonably used to deflate the turnover data). On the other end of the spectrum, a score of '5' was assigned for an industry in which the country had no coverage, even at the industry level, for prices and/or turnover, therefore making any kind of an alignment impossible. And a country would be given a score of '3' if it had both industry level prices and industry level turnover data and they could be aligned.

An examination of the country scores for each of the six industries illustrated numerous data gaps – areas where the countries need to improve the content of their services programs. This simple scorecard, done for just six industries, effectively identifies areas where the VG can collectively focus. It shows countries with expertise and countries needing assistance in terms of content development. It was realized that the use of these scorecards, developed for a greatly expanded set of service industries beyond the six covered at the VG 2006 meeting, would be a very useful tool for assessing VG country progress and could serve as a concrete VG deliverable on an annual basis. Therefore, it was determined that for future VG meetings, expanded country progress report summaries will be prepared to help the VG to see where it can be of most assistance to most countries and to assess member country progress in service sector content development for prices and turnover statistics.

#### 3. Common Terminology Sessions

Session Leaders: Seppo Varjonen (on C.T. for Pricing Methods) Kuniko Moriya (on C.T. for Pricing Methods and Implications for Turnover/Output Methods)

#### 3.1 Session Summary

- 1. The sessions covered presentations and discussions on common terminologies for pricing methods, development of agreed-upon common terminologies for pricing methods and implications for turnover/outputs methods.
- 2. The main author of the Thesaurus, Aurél Kenessey was credited for the excellent work in developing further the conceptual framework for SPPI compilation.
- 3. Definitions for pricing methods and other terms in the Thesaurus were discussed one by one. Several proposals were made to improve the definitions. It was seen as particularly important that distinctions between methods come out as clearly as possible although it was noted that perfect definitions are difficult to achieve. There will always be borderline cases in practice that are hard to classify. To help in achieving this target it was agreed to accompany the methods with concrete examples. It was also seen desirable to describe in which situations methods are appropriate to be used.
- 4. It was pointed out the importance of making use of experiences in producing PPI and turnover/output for verifying the definitions of services and their classifications.
- 5. Through the discussion, the necessity of the creation of a Thesaurus for turnover/output as that for pricing methods was recognized. The inclusion of several terms, such as "turnover" and "gross value vs. net value", in the Thesaurus arrived at a consensus.
- 6. The importance of having a publication of the Thesaurus as an output of the Voorburg Group was confirmed. It is to explain clearly the pricing terminologies to the stakeholders and to establish international standards.

#### **3.2** Discussions and comments from participants

- 1. For individual pricing methods the following points were raised where further developments are necessary:
  - **Component pricing** was discussed at length because it is often not clear how it differs from other pricing methods, particularly from model pricing and pricing based on working time. It should be pointed out that it differs from model pricing because of relying on "hard" data whe reas expert estimation is needed in model pricing. If charge-out rates and other time-based prices are used, the method would be time-based pricing rather than component pricing. Use of list prices for components is often not an ideal solution but the method would still belong to component pricing if they are used.
  - The description of **contract pricing** should be amended. It should be added that the method has to be used with caution to avoid new contract bias. It should be also explained that when survey data include "contracts" this does not presuppose that contract pricing is used. In contract pricing quantity of services provided in each period should be the same throughout the contract period.
  - The description of **direct use of prices of repeated services** is too simple when stating that no calculations are necessary. This is not quite true because some estimation might be needed if the quality of services changes over time. As in the case of component pricing, list prices should be mentioned in the description.
  - It should be explained more clearly in the description of **model pricing** that estimation of required working time is characteristic for the method and of crucial importance.
  - No proposals for changes were made for the **percentage fee** method.
  - For **pricing based on working time** it was decided to use the term overhead costs and mark-up instead of the term "factor". It was also noted that the use of detailed staff categories in the estimation does not make any difference in the classification: the method would still belong to the category 'pricing based on working time'.
  - In the **unit value** method amendment is needed in the sentence stating that heterogeneity of service products may result in a bias. Instead it might be better to bring out that service products should be sufficiently homogeneous.
- 2. For individual data types in surveys the following points were raised where further developments are necessary:
  - In the description of **expert estimate**, the last sentence "The pricing statistician therefore has less control over how the price that enters SPPI calculation is established." is subjective and it was agreed to delete this sentence.
  - As for the section of **input prices**, it was proposed to replace the term "mark-up" with "profit margin and overhead". Another possibility is to use the term mark-up

but explain that it includes profit margin and overhead. An amendment reflecting those comments was agreed.

- The utilization of the term **list price** in the descriptions of **component pricing** and **direct use of prices of repeated services** is controversial because when a list price is the same as the transaction price it could be called transaction price rather than list price.
- Regarding the term **revenue and amount sold**, it was proposed to replace the word "amount" with "quantity". It was agreed on continuous discussion on the process of revising the Thesaurus.

#### 4. Session on Freight Transport by Road

Session Leader: Fred Barzyk, Statistics Canada Discussant: Jodi York, Statistics New Zealand

#### Mini-presentation on prices:

Matt Berger, Australian Bureau of Statistics Bernhard Goldhammer, Germany Uwe Kirsten, Central Bureau of Statistics, Netherlands

#### **Mini-presentation on turnover/output:**

Fred Barzyk, Statistics Canada Bernhard Goldhammer, Germany John Murphy, US Census Bureau

#### 4.1 Session Summary

Themes:

Uniqueness of international markets and conditions help to shape the industry. Each country has to tangle with their peculiarities.

- For example, Australian geography (geographic isolation, large area and low population density) make things easier in terms of number of carriers. No exports of trucking services?
- In Germany, market is dense (more carriers) and sub-contracting is popular, as is spot market for return trips. Also, it is very difficult to separate out freight forwarding as an activity.
- In the Netherlands, issues surrounding ferry boat (multi-modal) where do we draw the line for inclusion/exclusion in road transport?
- In Canada, the industry is heavily surveyed for turnover, financial data and other regulatory reasons (safety and vehicle usage). Now in line for a SPPI survey, so we are expecting resistance.
- In the US, the industry also performs other significant secondary activities, such as warehousing and storage and packaging.

In all countries, dealing with small carriers is difficult. Response burden is an issue. Each has its own issues to contend with.

#### 4.2 Discussant's Remarks (and questions)

Discussant remarks:

First observation is that there are trends that seem to be universal in the road freight industry. The industry is stratified into (1) a small number of very large companies working on long-term contracts and offering a variety of specialized services such as supply chain logistics and (2) large numbers of small firms or owner-operators who subcontract to the larger firms and compete for ad hoc freight on the spot market. The industry is very competitive, and larger firms are responding to these pressures with increased efficiency: turning to larger trucks, double-stacked containers and GPS tracking.

The countries chosen for this session reveal the degree to which SPPI choices are conditioned by certain national factors. First is geography and relative openness or closure of the market. Australia is an enormous country with no international road freight, whereas European borders are very permeable and international competition is very strong. Larger countries like Australia, the US and Canada have state or regional markets that have to be considered, whereas these nodes seem less important in Europe. The level of regulation or deregulation of road freight versus other types of transportation, as well as the entry barriers for international competition determines who is in the market.

A second factor, related to levels of regulation is data requirements for organizations such as Eurostat or national ministries of transport, which determine what data sources are available for the construction of an SPPI. If respondents are already recording travel time, distance and cargo information for other organizations, this is likely to influence the pricing method for the SPPI. Alternatively, statistics produced by other organizations may provide good sources for turnover data.

The big questions in this industry seem to be who is shipping, how they're shipping it (i.e. type of freight), and possibly what is being shipped. There is disagreement on the relevance of this last issue, given the strong correlation between freight type and cargo.

The bad news is that even on what is at first glance a fairly straightforward service, there is disagreement on service definitions. Australia includes all activity of firms classified to the road freight transport industry, Germany is tracking road freight services provided by firms classified to road freight transport or freight forwarding, the Netherlands measures only road freight activity by firms classified to road freight transport.

What level of detail do you really need for this industry, and what can realistically be expected of the respondent? The Netherlands distinguishes between national and international transport, as well as 6 vehicle types. Germany tracks 9 vehicle types and 4 distance types, for a total of 36 service subtypes. Australia currently distinguishes 10 groups, but is introducing a new industrial classification that adds 30 commodity types & 26 subtypes. This assumes extensive knowledge

on the part of the carrier, which may not be true in all cases; the US has specifically found that carriers have trouble identifying containerized cargo.

Turnove r data is sourced from a wide variety of places: five-yearly economic censuses, annual and quarterly economic surveys, origin and destination surveys for cargo, and surveys of industries served by road freight transport. The available data is grouped by ge ography into regions, states, and even metro areas. It is subdivided by national and international services, types of freight, and in the case of Germany, industry of origin. There are many possible sources, collected for a wide variety of purposes, and most of them are not quite right for our needs.

Because of the great interest in road transport data for planning purposes, there are a number of administrative sources that should be considered. In a federal system, there may be rich data available at the state level. In the EU, gaps can be filled in with aggregated data from Eurostat. It is worth looking at the German experience on this. Road Freight transport statistics are collected by all EU states by nation of vehicle registration rather than territory of operation. Data must be aggregated by Eurostat and returned to member states, which introduces a time lag, but in the end they have turnover data for all vehicles operating in Germany except those that are registered outside of the EU.

In closing, I'd like to highlight a few questions. First, I was surprised to see no use of customs data; is this an underutilized source that we should be exploring? Secondly, how much does the respondent really know? Are we asking for more detail than it is realistic, and thereby compromising data quality? Are price trends for different products homogenous and if so are we wasting resources collecting data broken down by so many cargo types? And finally, how do we handle secondary products within the road freight industry and road freight transport activity performed by other industries? Do we deflate all activity of the road freight industry the same, or we deflate road freight activity as one regardless of the industry performing it?

Discussant's questions:

- 1. How do we make the best "sausage ingredients" how do we get the best data for the purposes of national accounts?
- 2. No customs data in any of the turnover presentations.
- 3. How much does the respondent know? Who should we be asking?
- 4. Are price trends homogeneous for different commodities?
- 5. Secondary products how to address these in price indexes?

#### 4.3 Discussion Questions

(CAN) – First question is if you have any questions for any of the presenters.

(USA) – Netherlands noted national PPI is used to deflate. Is only the product road freight transport deflated or the entire sector?

(EU) – A question for ABS. For calculation of the index, do you go to the full 44 levels or is that just internal detail – so do you calculate details at 44 levels? And for Canada, as you switch from

TCOD and other survey data to the price survey – did business know that the other data existed and accept participation even if it is cheaper to use the existing data sources?

(ABS) – To the 44 levels: the 9 or 10 primary aggregates are aggregated to create the primary industry total. In December, we will be creating numbers at all 44 levels in order to create a better index but not for deflation. The revenue data will come from the volumes and the revenues from a variety of other surveys.

(CAN) – The TCOD survey was redesigned to meet the needs of data users but we (SPPI) were not part of the redesign – they don't ask pricing questions so we set up the survey of prices. Yes, they know that they are providing responses to many different StatCan surveys already but they also understand the need for longitudinal price data. In the future, we'd like to get the pricing included in the TCOD but there are still problems because each TCOD survey could have different providers and different quotes. This creates many problems with the unit values that can be derived and the sampling differences create problems. We try to minimize the burden, so we ask for about 5 quotes from each respondent.

(UK) - 65% of revenue is generated by the major products and the general freight is 63%. (CAN) - Yes, the SCTG is not mutually exclusive, it includes other commodities listed separately.

(SWE) presented a question about the buyers and sellers of freight and which of them are surveyed. Germany responded that they survey the carriers not the shippers.

(CAN) asked the EU if there was any difference in the content of the turnover and how comparable the price indexes are. (GER) responded that there is no difference between the turnover statistics but the prices indexes are different – Germany included freight forwarders for example while Netherlands excluded the freight forwarders. National markets still play a role.

(USA) - Does NACE include freight forwarders in the industry? Why are freight transports by trucks on ferries excluded from the revenue in the Netherlands?

(GER) – STS regulations say exclude the freight forwarders but we found out that the freight forwarders also carry freight themselves. If we did not do that, we could not cover the market.

(GER) – All the big companies are listed in freight forwarding. German national accounts need both parts, carriers and freight forwarders. Freight forwarders do all kinds of things related to transport and logistics.

(SWE) – This issue is even more complicated for Sweden, because the National Post has a large unit that provides road freight. The Post is not classified in the Freight Transport By Road sector.

(USA) – Are Freight Transport by Road and Freight Forwarding not different products and is there double counting?

(GER) – We consider the output to be Freight Transport by Road and there is a possibility of double counting by hitting the freight forwarder and the freight carrier.

(CAN) - can Matt or Bernhard provide more information on fuel surcharges?

(ABS) – As an example: The industry used to charge 10 dollars to transport a pallet of beer from the brewer to the store. Now they charge 8 dollars for the transport and 2 dollars needed for diesel. It is still a revenue and price being charged but they have explicitly included a separate fuel charge rather than renegotiating each time the cost of fuel changes.

(UK) – Fuel charges can go down and up, so it is a critical factor.

(NZL) – The German paper noted a tax on trucking.

(GER) – It is about 0.15 cents per kilometer. It is included in the price rather than as a separate charge. The price we want the companies to quote includes the toll; it is not a separate thing. We do not ask for fuel surcharges, taxes, etc. separately but we ask our respondents to include them in the reported price.

(USA) – Do other EU countries have a highway tax?

The Netherlands do not, but CBS asks the companies to include such tolls if they are charged elsewhere. (GER) also noted that because the distances traveled are much smaller, fuel surcharges are not as necessary as in the USA or Australia.

(CAN) asks about the coherency of price and quantity measures since  $V = P \times Q$ . Is comparable coverage provided?

(ABS) – Good point. Are the price and quantity defined the same? Do National Accounts deflate by using a price change? If something is out of scope for turnover the assumption is that the missing component moves the same as the part that is in scope. National accountants are now looking to see how robust that assumption is.

(CAN) – When firms outsource, do prices and turnover capture this at the same time? The assumptions really begin to fall apart.

(USA) – In PPI, we find that the outsourcing questions are needed in order to make sure that we are collecting domestic production rather than imports (ask about how or if things are reported on customs forms).

(NZ) – How well does the price data play with the turnover data?

(USA) – It is a question about whether or not national accounts has a concern about calling a capital intensive product and a less capital intensive product as the same thing. Germany says that separate data might be needed. Is there a way to address secondary products so that prices for commodities were collected regardless of the provider?

(CAN) - Are the PPIs by commodity or industry? And how do you work together?

(USA) – In our case, they are by industry and when there are differences, we follow the turnover.

(USA) told that afterwards, the turnover data is corrected and the price statisticians are enforced to redo their industries. He also addressed the 2007 census forms and the cooperative process used to determine the product inquiries.

Next, there was a long discussion of secondary production by industries that lead to the question whether indexes should be based on industry or commodity. ABS, Japan, and Canada are more commodity based, not industry based as it is the case in the USA.

The German participants told that they sample from their business register which is by industry. Then the enterprise is asked for the products it offers. So it is necessary to contact the industry in order to create a product or commodity based linkage. The units also do change fairly often between the sectors. The industry classification should be changed. The price index for 6024 including secondary production, but leaving apart large parts of the commodity (Freight Transport by Road) market would interest no one but national accounts – people are interested in the price index for road freight transport as an activity. Different users want different things.

(USA) notes the importance of the products for service industries and what level the VG should pursue because of its importance for sampling issues as well. The main question is how the appropriate products should be determined.

#### BREAK

(CAN) moves on to the quality framework of PPIs presented by Irwin Gerduk last year. He runs through the A, B, and C methods and then begins to address some potential improvements for QF, namely the inclusion of sampling and response, etc. which presents a trade-off between the methods and the reliability. Can a method which gives you a very bad response rate really be an A method? Methodology is a component to the measure of quality, but there are other important ones.

#### 4.4 Key Points for Input to Sector Paper Key Issues

- 1. Industry vs. product dimension
  - a. Role in the development of National Accounts, industry vs. product
  - b. Desirable to develop separate turnover by product detail and separate price indexes for important secondary products (warehousing, storage & packaging
  - c. Difficulty in constructing frame for products
  - d. Aggregation considerations, Total industry (domestic & exports) vs. total domestic only
- 2. What is in scope for this industry, truck transport alone, or other related services? a. Need to define the scope
- 3. Is transaction pricing is feasible?
  - a. Contract pricing
- 4. SPPI for National Accounts or for inflation? Who are the end users?a. Are deflators possible for product groups
- 5. Total availability of detailed product turnover,
- 6. Turnover for the National Accounts or other users?
- 7. Quality adjustment is not complex issue

- a. Comparison with hourly wage rates is often consistent.
- 8. Data sources for turnover
  - a. Alternatives (see FSO), go up or down levels
  - b. Sample, census, administrative records
  - c. Definition of turnover what is included when measuring turnover (tax and Stats differ).
  - d. Trade in services or pass through
- 9. Definition of turnover (what should we include?) movement of goods from A to B by road
- 10. Alignment of prices and turnover
  - a. Different frequencies, classifications universes and missing variables or data.
- 11. Industry diversifying, political and geographical changes impacting trucking.
- 12. Prevalence of bundling in the industry (see scope)
- 13. Trade-off between response burden and index quality? How much does the respondent actually know about commodities shipped?
- 14. Spot market vs. regular market
  - a. Methodology for treatment and consideration where important

(USA) asks how the guidance for these 14 points will be developed. It looks like we have headings but no guidance on what should be done on each of these.

(Canada) replies that (CAN) will point that out in the paper which is then circulated internationally and open to feedback.

(USA) asks whether that catalogue can form the headings for all sector papers. At least, if the topics are continuously raised, a standard could be set. (USA) says they could also be used to modify the mini-presentation.

The discussion concludes with comments about using national NA standards rather than the SNA standard. Canada and Germany say that the SNA is really accepted as the norm and widely used. (SWE), however, notes that each country has different industries and products in their individual national accounts presentations. (Germany) replies that SNA consists of concepts and definitions as a framework. It is supposed to be the orientation for everyone, but different countries do different things to meet the targets.

The OECD has working groups on national accounts and for the last 10 years, the organisation has been trying to see how to implement the SNA 93. VG has no consideration of the joint work with the SNA. In the future, a VG and national accounts meeting might be scheduled to facilitate the exchange between both groups.

#### 5. Session on Management Consultancy

Session Leader: Pam Davies, UK Office for National Statistics Discussant: Michael Horrigan, US Bureau of Labor Statistics

#### Mini-presentation on prices:

Benjamin Camus, INSEE, France Susanne Lorenz, Peter Roemer, Germany Roslyn Swick, U.S. Bureau of Labor Statistics

#### Mini-presentation on turnover/output:

Jean-Pierre Simard, Statistics Canada Benjamin Camus, INSEE, France Mark Wallace, U.S. Census Bureau

#### 5.1 Session Summary

Themes

Remark of the organiser:

The presentation of Pam Davies got lost during the meeting and could not be reconstructed. Therefore the presentation is not included in the minutes.

(Presentation specific questions)

#### **France presentation – prices**

(GER) – France asks for hourly rates for activity or qualification? Answer – our field officers see every company and we discuss and decide on a company basis what will be the basis for the charge out rate. It depends on their records and what we think will work best.

#### **Germany presentation – prices**

(CAN) – trucking and management consulting are in pilot – close to publication. In this case, in development, once you decide on a questionnaire do you do any cognitive testing to see if the questions will work? Did your respondents say that model pricing would be too difficult and therefore you chose chargeout rates? Answer – we did talk to many people and to the association – this was the best in practical terms.

(CAN) – continued – we could collect the A method but the results would be no response. The score card does not account for this.

(UK) – companies tell us that they have different competences – our best go to the big companies and government while different competence go to other clients.! Germany said that the qualifications and productivity do not change – but UK sees that this varies across customers and can cause mix problems during the year – getting price change based on quality changes.

(GER) – advising the public sector is not good for the companies in Germany – not cost effective because of lower chargeout rates – so none really specializes in government consulting. We do know that there are problems but doing anything else would be overload for the respondents if we also needed to add a customer dimension. We think over time, the basis productivity stays constant. Bernhard also noted that different chargeout rates are included for different qualifications.

#### **US Presentation** – prices

(SWE) – about realization rates – Is this part of competition, comparing with lower list prices, better realization rate means better profit. If that is the case, how often do companies report changes in the average realization rate? (US) – not a lot of experience yet, but the realization rate is a form of discount – they do update them but will they continue to do them over time. France might have more experience (France said that they do not collect realization rates). They do seem to collect hours and payment so a realization rate can be developed.

(ABS) – realization rates in Australia are a performance indicator for staff. Staff aim to have high realization rates because it is their own performance measure. (US) – there are problems with defining the output – this month a junior staffer, next month a senior partner is the consultant. Is that the same product?

(GER) – small companies are left out of our sample – Roslyn Swick (US) – we also have problems deciding when we can truncate small firms or low percentage revenue producers. Over time, small firms shifting out do not raise as much concern than big. We spend more time working with big companies but we also do give small firms a chance for selection.

#### BREAK

#### **Canada Presentation – turnover**

(GER) – how do you differentiate between scientific and technical consulting and engineering services? (CAN) – we have separate categories for the engineering and IT is not included.

#### **France Presentation – turnover**

(GER) – association produces its own index? (INSEE) – they were publishing a cost index rather than a price index. Syntec produces cost indices to use for their contracts – escalation by cost. Therefore our index needs clarification whenever you deal with associations and contracts.

#### **U.S Presentation – turnover**

(ABS) – question for future national accounts discussion – exports of management consulting services – are these considered intermediate or final demand. (US) – good question for a national accountant which I'm not. (SWE) – if management consulting services are exported there should be an export price index. National accounts would probably use that if it was available. In Sweden right now, NA uses the domestic SPPI but we don't have lots of export data.

(CAN) – when you bring the NA people over, the income and expenditure group – and an I/O group. I/O wants SPPI while the income and expenditure folks don't care quite so much. The BOP is very focused on this and interested in what is going on.

(GER) – How do we get more details out of management consulting? Will your respondents really know how to define their services. (US) – yes, based on the NAPCS development process.

LUNCH

## 5.2 Discussant's remarks and questions

#### **Discussant Presentation**

Michael Horrigan (US) presented the discussant remarks as outlined below:

Conceptual framework

- Definition of output
- Determination of the price level
- Sources of change in price level
  - Wages
  - Project realization rates

Sources of possible measurement error

- Changes in labor productivity
- Changes in the average labor mix across all projects in a given industry
- Changes in the project mix or client mix

Turnover Data, Industry Structure and (Mis)Classification Issues

- Industry Structure / NAICS and NACE
- Classification comparability
- Presence of non-payroll firms
- Consultation and implementation
- What is the problem with IT?
- Changes to turnover definitions
- Switching across product and industry lines

Each topic was presented with details and when appropriate a mathematical expression of the questions and implications raised. The conclusions and questions from the discussant included:

There is general agreement that the primary output of management consulting firms is the provision of objective information, advice, and guidance to businesses on general management issues and when requested, assisting in the implementation of their recommendations. The outputs are typically written or verbal reports on studies, advice, and recommendations.

The Sector paper should include perspectives on likely measurement error in addition to the best theoretical and practical recommendations of data collection. An important issue is how good

labor hour estimates are when attempting to collect constant quality outputs. Measurement error can occur when there are changes in labor productivity or when a realization rate changes because of a mix of clients.

There were also questions about how comparable the industry classification being used actually were at the detailed level. One issue of considerable importance in this area was whether or not implementation is included as consultancy. Additionally, the discussant raised questions about practices that might be correlated with the size of firms. Related to this was whether or not sampling frames include non-payroll firms.

Finally, the discussant raised a number of questions related to the stability of establishments within both product and industry classifications. Is there evidence of niche firms and general firms? Is there any evidence of firms using loss leader consulting services in order to obtain more lucrative implementation engagements?

At the end of the presentation, there were a number of questions from the assembled group.

#### 5.3 Questions on Discussant's Remarks:

(GER) – the labor productivity question can result in a major error over time if we do not account for increases in labor productivity. This exists elsewhere, but we really don't have the good information to see it. Maybe we could try to estimate these changes?

(US) – labor productivity is inherently part of the price change. If it changes slowly, it is not going to have a material impact. If however it is correlated with the average realized rate, there can be problems.

(US) – switching from average to product specific rates is a problem but for now, we don't know how often this will occur. In other industries where we have tried to do this, we found out very quickly if we need to use specific realization rates. We should know before this is published but we'll see. Usually, companies decide at the early reporting stage.

(US) – specific rates might have more variance but less of a mix bias. Concerned about the potential problem of only changing from average rates to specific rates for certain classes of establishments might be a problem.

(US) – referencing table two looking at relative size and payroll size. (US) added some information about the availability of size range data and the fact the consulting and bundles of consulting and implementation are in, but separate implementation is out.

(SWE) – we talk about labor productivity but what about multifactor productivity? In other professional services – individuals will change – an auditor with four years of experience has five years the following year. Should you then substitute in a four year to keep that constant. In Architecture, the change from drawing to CAD/CAM systems was a major productivity change. This was a major change of productivity that might impact prices greatly.

(US) – so would you suggest that we also have a capital tools variable in the spec? By hand or CAD?

(CAN) – switching business lines in relation to firm size. Is there longitudinal data? At Stat Can we do not have this data right now but it is an important factor. We use admin data for small guys and only sample the big guys. Is it a reasonable assumption that the big guys products and be applied to the small guys?

(ABS) - SWE's CAD example, the architect has a different production function but is the design of the building really any different? User perspective of quality or producers perspective of quality? (US) - if there is not a change in the output, the change is not removed.

(CAN) – the problem is not knowing how to measure the quality change for a very complex service. Change in labor mix – more skilled input makes a more complex output. We are asking in engineers about % of time from senior partners – if you want a good doctor, you go to house because of the quality of the service.

The mix is not always a quality change – but sometimes you need the better people for more complex problems.

(US) – there is a correlation between the labor mix and the quality of the product produced so that is why you might want to use project specific rates to avoid mix problems.

(SWE) – in consulting, past work by clever and experienced people can be used by less clever and experienced people in the future – so the mix of better/more complex might not always hold.

(US) – classifications – do we need concordances or some more formal way to avoid the alphabet soup problem. Does everyone even know what the CPC is?

(ABS) – apart from the discussion of average realization rate, this generalizes to any charge out rate. Applied to accounting and legal, etc. Our discussions are an attempt to address that issue.

(US) – ran through the questions on his slides.

(NOR) – the list of things to be in sector papers is long and some are very general. We need to have a methodological paper discussing these more detailed issues separate from the Sector paper.

(JP) – math was a good way to present – it is a clear presentation of the thought process. As (US) pointed out, three countries said different but did the same thing – we need common terms and that should be in the papers.

(ABS) – switching across product lines? A management consultant doing HR today and Environmental tomorrow? Is that an issue – if a service provider is doing substitution there is a substitution bias – should we focus more on the services than we already do in goods?

(US) - I was focusing more on developing a sampling strategy might use that and also help target the proper aggregation level for publication.

(US) – occurs more often in services than in goods – manufacturers have fairly high capital requirements but that is not the case for mgt. consulting.

Additional discussion before doing the slide of key issues.

(IRL) – much was methodological today while things on Tuesday were more general. Maybe we should write cross cutting issues papers first and take care of the common parts and then link the sector papers to them as almost satellites.

(US) presentation – have not absorbed everything – we need to develop prioritization but I don't think that productivity is really a major issue. I wouldn't want to scare people off or imply that productivity is the most important thing. We need solutions not just raising issues – maybe A, B, can C solutions – maybe a cheap and dirty indicator is better than no indicator at all.

(UK) agrees that we need to have sector specific issues and resolutions in the sector papers and not go over the same problems each time.

(GER) – many of the arguments were cross cutting and should be treated that way. Maybe we need to follow-up these issues with the Eurostat/OECD manual. Also, theory is good but we also need to be sure that we address practical issues and practical compromises. Also burden issues need to be considered and the fact that our registers are a horror for smaller companies. Is the weight of small companies relevant or should for practical reasons we exclude them. Need both practical and theoretical in a balance.

(SWE) – treatment of small companies – have to pay attention when they have a significant part of the industry output. Since 2002/3, we sample some of them to represent all of the others. We try to rotate the small companies (20%) so the burden is not too big.

(US) – yes, there are problems with having large discussions on theoretical issues that will have a minimal impact. What is probably more relevant is switching, sampling, and what to do with small companies. In France, they do not see joint bundling as a big problem (advice and implementation) while the US does do this. US sees this differently. Most important and practical issue is do you use an average realization rate, specific project realization rates, or a mix of the two.

GER) – for the joint or bundled projects, it is best to see from real experiences. We saw project of needs perception, system design, and implementation or integration. We could not separate.

The comments below were the points for consideration when preparing the sector paper. In this draft, to provide some additional framework to replace the slides lost during meeting, I have placed each of the comments under a topic from the discussant outline (JBM)

# 5.4 Key Points for Input to Sector Paper

## **Conceptual framework**

- 1. Definition of output
  - (ABS) defining what we mean by implementation.
  - (CAN) issue of the quality assessment framework compared to the EU manual
  - (US) Can we identify any intermediate or final demand products that should be separated?
- 2. Determination of the price level
- 3. Sources of change in price level
  - (UK) issues and challenges for measuring price levels and price changes (with price levels and price changes sometimes being different things). To address price levels, there is one set of issues and if you want to address price changes there are other issues.
  - (US) Choice of realization rate (average or project specific or mix of the above).

#### Sources of possible measurement error

- 4. (CAN) quality change assumption from using realization rates
  - (Austria) relationship between charge out rates and labour quality.
  - (US) mix of labour and how well it proxy's the quality of output and some indication of how quickly mix changes basis for quality adjustment.
  - (US) what additional pieces of information could be collected to help inform your view of the index. Are there one time things that could help evaluate our methods.

#### Turnover Data, Industry Structure and (Mis)Classification Issues

- 5. Industry Structure / NAICS and NACE
  - (CAN) Sector paper should highlight the relationships between the classifications. Concordances – list out the current details. Industry and product
- 6. Classification comparability
- 7. Presence of non-payroll firms
  - (NOR) treatment of the small businesses.
- 8. Consultation and implementation
  - (Netherlands) what sample size is needed to accurately cover this industry (number of businesses in the population vs. needed sample).
  - (UK) Tradeoff between pricing method and feasibility of collecting information (sometimes you use a lesser method to balance burden and reliability of the data or some can provide the info but many cannot).
  - (NOR) sample size is not just the number of businesses but also some coverage of industry and that can vary from country to country. Consider how the market works (or the concentration of producers).
  - (CAN) under sampling we might also want to discuss the frame issues.
  - (NOR) the sector paper should sketch out some type of mixed strategy some simple B or C methods while others will have more resources and go for an A method. Some countries cannot fulfill the key issues with the resources that we have.
  - (US) Criteria for how frequently turnover by product data should be collected. To what degree do business conditions change and if quickly it might be needed more often.

- (GER) we only do sample surveys, not a census maybe some discussion of the relative strengths and weaknesses.
- (NOR) document is not addressing the quarterly turnover data and methods to spread this down to product level when you use administrative data sources. What are the best methods.
- 9. What is the problem with IT?
  - (SWE) Difference between management consulting and IT consulting
- 10. Changes to turnover definitions
  - (SWE) EU regulations to some extent determine how often turnover data is collected.
  - (IRL) The timing requirements for turnover collection is general the EU regulations should not direct the world. We might be starting as a from a different point but the timing is part of a larger question sometimes.
- 11. Switching across product and industry lines
  - (JP) add switching business lines

(ABS) – Methodology paper for general issues.

(CAN) – How would a methodological paper differ from the Eurostat/OECD manual? (UK) said the manual is a first step but there is clearly a need for more than what is included in the manual. (ABS) - VG is about service sector GDP whereas the manual is only about PPIs, there is a different scope here and the other issues need to be considered.

#### 6. Strategy Session

Session Leader: Mark E. Wallace (U.S. Census Bureau)

### 6.1 Session Summary

First, it was recognized that the new organization and format for the meetings specified in the Content Development Framework (CDF) was a great success. Therefore, this format of selecting 3 countries for PPI and turnover mini-presentations, discussants' remarks from a national accounts perspective, facilitated group discussions of the mini-presentations and the discussants' remarks, and development of "key points" for inclusion in the sector papers should be continued. This format served to bring out many cross-cutting general issues that had not been raised at previous meetings.

Secondly, it was recognized that a considerable amount of work had been accomplished between the VG 2005 and VG 2006 meetings. Accomplishments cited were the creation of the Content Development Framework (CDF) by December 2005 and the pricing thesaurus developed by March 2006 and finalized in May 2006. Therefore, building on the success of the VG over the past year, it was the consensus of the VG 2006 meeting participants that we should plan on doing a considerable amount of work prior to the VG 2007 meeting next year.

Specifically, VG work identified for completion before the VG 2007 meeting includes:

- Development of a document describing issues concerning turnover/output, building on language that will be available later this year in the soon-to-be-released Index of Service Production from the OECD. Also, the pricing thesaurus needs improvement. Specific examples will be attached to each of the seven pricing methods and improved definitions will be crafted as needed
- Expanding the country progress reports in terms of industries covered and data collected and disseminate the results. The resulting scorecards will be useful for tracking progress in terms of countries' content development, identifying priorities for where content improvements can be made, and for assigning mini-presentations to countries with known expertise. Integral to this work will be identifying the top 40-50 industries/industry groups upon which the VG should focus over the next several years
- Development of a general issues reference document (documenting key points of a general nature brought out in the specific VG 2006 industry sessions on Freight Transport by Road and Management Consultancy. This will help us to avoid rehashing these general issues for each new industry covered.
- Development of a set of key issues and questions to be addressed by national accountants. Over the course of the last few meetings, questions continue to surface regarding the needs of the national accounts and this will address that

Details concerning the implementation of this work were left for discussion during the Future Agenda Session.

### 7. Future Agenda Session

Session Leader: Mark E. Wallace (U.S. Census Bureau)

# 7.1 Session Summary

A proposed agenda for next year's meeting was presented, consisting of the following:

Monday morning: opening remarks, country progress reports, and presentation and discussion of the sector paper on Freight Transport by Road (to be presented by the 2006 session leader, Fred Barzyk)

Monday afternoon: Formally adopt Freight Transport by Road sector paper, and discuss and then formally adopt the session paper on Management Consultancy (to be presented by Pam Davies, the 2006 session leader)

Tuesday morning: Present, discuss, and formally adopt a paper covering general, cross cutting issues with respect to content development for service industries (incorporating theoretical and practical general issues and key points brought out in the VG 2006 discussion of content development for Freight Transport by Road and Management Consultancy).

Tuesday afternoon: Delivery of 3 PPI and 3 turnover/output mini-presentations, discuss and develop specific key points for an industry to be proposed by the VG 2007 host country, South Korea.

Wednesday: Host Country Day

Thursday morning: Delivery of 3 presentations and discussion of papers prepared by national accountants, addressing key issues and questions posed by the VG, followed by the development of key points for posterity

Thursday afternoon: Deliver of 3 PPI and 3 turnover/output mini-presentations, followed by discussion and develop of specific key points for ISIC Sector 62, IT and Computer Services.

Friday morning: Strategy and Future Agenda Sessions.

## Task Force Assignments

Three task forces were established to prepare for this ambitious meeting plan for VG 2007:

- Task Force '1': Scope down the number of service industries to a reasonable and manageable number and collect and disseminate information on those industries from each country. (to be completed by August 2007)
- Task Force '2': Develop concrete examples to accompany each of the seven pricing methods included in the pricing thesaurus (to be completed by December 2006)
- Task Force '3': Develop key issues to be addressed by national accountants, and identify three national accountants to be invited to deliver presentations covering answers to those issues (to be completed by December 2006)

In addition to these task forces, assignments were made to:

- Develop a short document, based on language contained in the soon-to-be-released Index of Service Production, citing various issues concerning turnover/output (to be completed by March 2007)
- Develop a general issues paper
- Line up PPI and turnover/output presenters of mini-presentations for the industry to be designated by South Korea
- Line up PPI and turnover/output presentations for the ISIC Sector 62 session.
- Develop a conference evaluation form

### 7.2 Next Steps

The South Korean representative invited the VG to the next meeting in South Korea.

Chun Park II of South Korea plans to contact us by early November to lock in the specific dates for the VG 2007 meeting in Seoul. It is expected that the meeting will be held during either the

second or the third week of October 2007. South Korea will be identifying their designated industry for coverage at the VG 2007 meeting at about that same time.

Due to the additional work the VG is taking on, the VG Bureau was expanded for 2007. The VG Bureau for 2007 will consist of Louis Marc Ducharme, Mark Wallace, Pam Davies, Benjamin Camus, Matt Berger, Kuniko Moriya, Peter Roemer, and Chun Park II.