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OECD-Eurostat 2003 INQUIRY ON NATIONAL COLLECTION OF SERVICES PRODUCER PRICES

Preliminary REPORT

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ABSTRACT

As a contribution to the development work of the Voorburg Group on services producer price indices and of the OECD-Eurostat Task Force, this paper reports the outcome of the 2003 OECD-Eurostat inquiry into countries' practices in the field of data collection of these prices. It also may be seen as an update of the accumulated record of previous annual inquiries.

In 2003, the questionnaire was sent to all OECD Member countries, EU candidate countries and countries associated to the Voorburg Group. Countries were asked to report on new collections, or plans for collection, of services producer prices since July 2002. A variety of supplementary information was requested by ISIC group of service activity. Countries were invited to indicate the CPC classes of products, within each ISIC group, for which prices are collected. Information was also sought on publication of services prices indices, their use as deflators and availability of methodological reports on work in this area.

Countries were also provided an opportunity to check and update directly the existing inventory tables. Several countries used this opportunity, and some updated the old tables as well as filled the questionnaire. Via this procedure, many errors in the inventory were identified and corrected.

Responses from 33 countries show a continued expansion of activity since July 2002 in those countries that undertake this work. The total number of countries that collect data is now 22 but, in addition to them, there are several countries where a preparatory work has already started. There is a large diversity in both service sector coverage and national practices. Most countries only attempt to cover a subset of service activities, with these prices. Services PPIs for **telecommunications**, **hotels and freight transport by road** are covered by the most collecting countries. **Computer services** and a variety of **business services** are also the subject of considerable development work and current interest.

Coverage of detailed services products varies among activity groups. In only a few cases are the service products of an activity group well covered and then it is only by small number of countries. There is also variation amongst types of prices collected and types of services priced though transaction prices of 'simple' services are reported most often. There is a fairly equal split between monthly and quarterly pricing frequencies.

More and more data are published, and used as deflators in the national accounts, with much useful detail provided by respondents. Nonetheless progress is slow due to the level of development work needed and constant concerns over conceptual correctness and data quality.

Comments of members of the Voorburg Group and the Eurostat-OECD Task Force on Services Producer Prices are invited.

Preliminary Report on the OECD-Eurostat 2003 Inquiry on National Collection of Services Producer Prices

INTRODUCTION

- 1. The inquiry into National Collection of Services Producer Prices became last year a joint venture between OECD and Eurostat. This has expanded the country coverage and increased the level of interest. It is hoped that this report will inform the discussions of the Voorburg Group and the joint Eurostat-OECD Task Force on Services Producer Prices, as well as provide useful reference material for those statisticians seeking to collect new service producer prices, and others seeking to understand the extent to which countries are improving measures of services output.
- 2. In order to measure the real output of services, including short-term indicators of output, it is necessary to develop a set of deflators appropriate to particular service products and activities. This need is accentuated by the growing weight of service sector output in GDP that is seen in most economies. Interest in this area is accentuated by analytical needs to understand the impact of the "new economy" on productivity growth and in particular in those service activities where investment in new technology has been high.
- 3. Mainly in this context there is a considerable effort being undertaken, in a significant number of national statistical agencies, to develop the collection of data on services producer prices. Some agencies have focused exclusively on prices of services provided to enterprises, while others have approached the subject more broadly through the development of services producer price indices.
- 4. The UN Statistical Commission in 1999 asked the Voorburg Group to focus on the measurement of these prices. The Voorburg Group has been working closely with the Technical Expert Group¹ on Producer Price Indices (TEG-PPI), which is charged with the development of a manual on producer price indices.
- 5. The Voorburg Group, in 2000, 2001 and 2002, asked OECD to continue with this study on national development work in the area of services producer prices and provide an information exchange role with a webpage².
- 6. Inevitably in this fast developing area of statistics both OECD, Eurostat and national statisticians have a concern about quality and international comparability of data. What further needs to be done, beyond that which is being taken forward by the Voorburg Group to identify and spread good practice and ensure a reasonable level of comparability of national economic statistics?
- 7. This report on the results of the 2003 inquiry, is an update of an annual inquiry into services producer prices collected by national statistical agencies. The inquiry was carried out by the Prices and Outreach Activities Division of the Statistics Directorate of the OECD in consultation with Eurostat. The report giving information on the state of activity of 36 countries, has a number of annexed tables and

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¹ The Technical Expert Group, set up by the Intersecretariat Working Group on Prices Statistics (IWGPS), is developing a Manual on Producer Price Indices. More information can be found at http://www.imf.org/external/np/sta/tegppi

² for more information go to <u>Price Indices</u>

explanatory notes. It is offered as a working and evolving document and as a contribution to the work of those concerned with services producer prices.

The 2003 Inquiry

- 8. The questionnaire together with the existing inventory tables was sent out first time on 18 June 2003 to all 30 OECD Member countries, eleven other EU candidate countries and several other countries associated with Voorburg Group meetings. The set of countries were completed on the basis of the participant list of the forthcoming Voorburg Group meeting, and those countries received the questionnaire on 20 July, 2003. On the whole, the questionnaire was sent to 47 countries.
- 9. It was requested:
 - a) information on whether or not countries collected services producer prices
 - b) if yes a report on recent developments in national collection of services producer prices since July 2002

including:

i.new price surveys with details;

- ii. plans for future price collection
- iii. discontinued price surveys:
- iv. details of publication of services PPI data
- v. methodological publications/papers
- vi. details of use of services PPIs as deflators by national accountants
- c) a PPI contact name for exchange of information
- d) any comments on the entries in tables 2 and 3 of the 2002 report concerning collection of prices classified by activity (ISIC³ rev 3) and prices classified by product (CPC⁴ v 1.0) respectively;
- 10. Responses were received from 33 countries. The cumulative responses to this and the previous inquiries are summarised in tables 1, 2 and 3.
- 11. Table 1 "State of Inquiry Services Producer Prices" provides a simple summary of cumulative national responses to the inquiry.
- 12. Table 2 "Summary of Responses to Inquiry on Prices by ISIC Activity" provides summary information by ISIC rev 3 (3 or 4 digit) activity, on which countries collect data, what type of prices are collected, the frequency of collection, the type of service priced, and the start date.
- 13. Table 3 "Summary of Responses to Inquiry on Prices by CPC Product" sets out, for those countries that have been able to provide it, information on price collection by 3 or 4 digit ISIC activity and product. Products are classified by CPC version 1.0 as far as possible, but some products have not been definitively classified.

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³ International Standard Industry Classification of All Activities Revision 3 (UN)

⁴ Central Product Classification version 1.0 (UN)

- 14. Other appendix tables provide a list of country codes, notes to table 2 and 3, a list of nominated national contacts, table 4 new publications of data and methodology, table 5 why and for who data are collected and table 6 information on the use of services PPIs as deflators in the national accounts.
- 15. To provide some historical background, the 1997 questionnaire asked countries to indicate for ISIC Rev. 3 service groups or classes, the type of price collected (i.e. whether list, transaction, mark-up price, other), the frequency of pricing, the number of price quotations per period, the type of service priced (simple service, composite service, service bundle, other), the start date of data collection.
- 16. The 1998 questionnaire introduced the correspondence between those ISIC groups or classes for which services PPIs are collected (listed in the response to the 1997 questionnaire) and the CPC⁵ version 1.0, at the five or occasionally four digit level. Respondents were requested to indicate for which CPC classes price data are collected, or to describe which service products are observed where they do not fit CPC classes.
- 17. At the request of the Voorburg Group contact names were sought and in 2001 a special question was asked on why these data are collected and for which users.
- 18. The focus over recent years has evolved from prices of services provided to enterprises to services producer price indices (PPIs), which is broader in scope. In fact some countries collect the former and some the latter. But this change of focus accords with a stated aim of the Voorburg Group to contribute services material to a new PPI manual.

RESULTS

Summary Table 1

- 19. Table 1 (in the Annex 2, Tables) sets out which countries have responded to the OECD inquiry in 2003 and in previous years and attempts to categorise their activity in the domain of collection of services producer prices. It indicates which collect price data on these services, which use CPI as a proxy for such prices, which have indicated future plans for data collection, and those countries that have provided CPC product details relating to prices collected.
- 20. Out of the countries which have responded to OECD since 1997, 22 of them report that they collect services producer prices (Australia, Austria, Belgium, Canada, Switzerland, Czech Republic, Finland, France, Germany, Hong Kong (China), Japan, Korea, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States). Austria and Belgium reported having started to collect services PPI data for the first time in the 2002 inquiry. However, preliminary work has started also in several other, particularly European countries on the auspices of Eurostat.
- 21. 13 countries have reported that they do not as yet collect services producer prices (Brazil, Denmark, Estonia, Greece, Ireland, Latvia, Lithuania, Luxembourg, Macao, Malaysia, Romania, Slovak Republic and Slovenia). Out of 30 OECD countries 8 appear to compile no services producer prices indices. These are all in Europe with five in the EU. There are nonetheless increasingly encouraging signs of recognition among these countries that this is an important statistical development theme.

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⁵ The correspondence between ISIC and CPC and fuller descriptions of CPC products are available *at the UN Classifications web pages at* http://esa.un.org/unsd/cr/registry/regcst.asp?Cl=3&Lg=1.

Producer price indices by service activity

- 22. Table 2, provides information by ISIC activity and country on producer price collections. It is an updated version of a table that was first presented to the Voorburg Group in 1998.
 - Columns 1 and 2 list, ISIC rev 3 codes and descriptions of activity groups (three digit level) or classes (four digit level).
 - Column 3 provides the codes of countries which report collecting services PPIs for that activity.
 - Column 4 gives details of the *type of price collected*. Three types of prices are identified, list prices, transaction prices, mark-up prices and a residual category "other" is provided for those prices which do not correspond to any of the three differentiated types:
 - -- A *list price* is a price or tariff published by the service provider which can be collected by simply reading the list; list prices are gross of any discounts which some customers may be able to negotiate.
 - -- A transaction price is the price actually charged by the producer after deduction of any discounts.
 - -- A *mark-up price* is calculated by the statistical office by adding a mark-up, reported by the service provider, to the estimated cost of hours of work. This type of price is used for services consisting mainly of labour inputs.
 - -- some countries have also identified the type "model price", where a well specified hypothetical job is priced.
 - Column 5, *frequency of pricing*, indicates whether prices are collected monthly (M), quarterly (Q) or annually (A);
 - Column 6 shows the *number of quotations* per period.
 - Column 7, *type of service priced*, three types of services are identified, a simple service, a composite service, a service bundle; a residual category "other" is provided for those services which do not correspond to any of the three differentiated types.
 - -- A *simple service* is a standard service. These may, in some cases and where appropriate, be measured in physical quantity units such as ton-miles, number of hours.
 - -- A *composite service* is a service composed of a number of simple services which are necessarily produced together due to existing regulations, security measures or production processes. The customer is not free to choose to purchase only some of the components of a composite service. Either all are purchased together or none are purchased at all.
 - -- A *service bundle* is composed of a set of services negotiated between the service provider and the customer. The bundle of services provided may differ according to the customer.
 - In column 8, start date, the actual or planned date for data collection of prices is indicated.
 - In column 9 information is flagged on publication and use of the price index as a deflator in the national accounts.
 - *Explanatory notes* on table 2 give additional information on coverage, type of price collected and type of service priced.

- 23. The most popular service PPIs i.e. collected by the most countries are: Telecommunications; Hotels and short stay accommodation; Freight transport by road. For the following activities (given in ISIC order), at least 10 countries either collect prices or the development of an index is underway:
 - Hotels, camping sites and other provision of short-stay accommodation (ISIC 551) 15 countries
 - Transport via railways (ISIC 601) 11 countries
 - Freight transport by road (ISIC 6023) 16 countries
 - Sea and coastal transport (ISIC 611) 11 countries
 - Scheduled air transport (ISIC 621) 12 countries
 - National post activities (ISIC 6411) 12 countries
 - Telecommunications (ISIC 642) 17 countries
 - Real estate activities with own or leased property (ISIC 701) 10 countries
 - Renting of land transport equipment (ISIC 7111) 13 countries
 - Renting of construction and civil engineering machinery and equipment (ISIC 7122) 10 countries
 - Legal activities (ISIC 7411) 12 countries
 - Accounting, book-keeping and auditing activities; tax consultancy (ISIC 7412) 13 countries
 - Architectural and engineering activities and related technical consultancy (ISIC 7421) 13 countries
 - Advertising (ISIC 743) 11 countries
 - Building cleaning activities (ISIC 7493) 10 countries.
- 24. The frequency of pricing for the activities listed above is predominantly monthly and quarterly with a few cases of annual or six-monthly. Monthly prices predominate in ISIC sections G I and O, with quarterly pricing predominating in the other sections except section H where the shares are almost equal. The type of price collected is a transaction price or, slightly less frequently, a list price; mark-up prices, and other prices are less common. Margins are identified as the target price for certain industries such as wholesale and retail, particularly by the US and Australia. The type of service most frequently priced is a simple service. Composite services and, to a lesser degree, service bundles are also priced, sometimes in conjunction with a simple service. The number of price quotations varies widely between countries within each ISIC group and from one ISIC group to another. Most responding countries started collecting data on services PPIs during the 1990s, but a few countries (Germany, Japan, Mexico, New Zealand, USA) have at least some data which go back longer.
- 25. It is not always clear, where countries collect producer prices of services that might be supplied to consumers or enterprises, whether or not they make a differentiation between the two types of customer in the prices collected.
- 26. These results serve only as a starting point to define standard practices for data collection on services PPIs. It would appear that there is a broad preference for measuring simple services, transaction prices and for monthly or quarterly data (almost evenly split).

New Surveys

27. Activity in the collection of services producer prices continues to expand. Computer and related activities was a prime growth area in the past year. For all services activities 49 new price surveys have been reported as launched, since July 2002 or are to be launched in 2003. They cover⁶:

⁶ Some services were registered as new already in the 2002 inventory. On the other hand, the list does not cover service indexes that are planned for 2004 although the developing work might have started.

- Hotels; camping sites and other provision of short-stay accommodation (ISIC 551) ESP, FIN
- Freight transport by road (ISIC 6023) ESP, FIN, NOR
- Scheduled air transport (ISIC 6210) AUT
- National post activities (ISIC 6411) AUT, FIN, SWE
- Courier activities other than national post (ISIC 6412) AUT, FIN, KOR
- Telecommunications (ISIC 642) ESP, FIN, NLD
- Other credit granting (in ISIC 6592) KOR
- Investment Advice (in ISIC 6719) USA
- Insurance Agencies and Brokerages (in ISIC 6720) USA
- Renting of land transport equipment (ISIC 7111) FIN, KOR, NLD, NOR
- Renting of construction and civil engineering machinery and equipment (ISIC 7122) FIN
- Renting of office machinery and equipment (ISIC 7122) FIN, KOR
- Computer and related activities (ISIC 72) SWE (5 surveys), FRA (2 surveys)
- Legal Activities (ISIC 7411) AUT, FIN, SWE
- Accounting, bookkeeping and auditing activities; tax consultancy (ISIC 7412) FIN, NLD, SWE
- Market research services and public opinion polling (ISIC 7413) FIN
- Business and management consultancy activities (ISIC 7414) FRA (2 surveys)
- Labour recruitment and provision of personnel (ISIC 7491) FIN
- Investigation and security activities (ISIC 7492) FIN
- Building cleaning activities (ISIC 7493) FIN
- Engineering services (ISIC 742) SWE
- Advertising (ISIC 743) FIN
- Labour recruitment/provision (ISIC 7491) FIN
- Public order and safety activities (ISIC 7523) KOR
- Washing & dry cleaning (ISIC 9301) FIN

Producer price indices by service product

- 28. Table 3 indicates the CPC classes of products, or other service products, which may not be matched to the CPC, for which prices are collected. CPC classes are listed so as to show the correspondence with the ISIC groups given in Table 2.
- 29. To understand the links between Tables 2 and 3, it should be noted that only those ISIC groups or classes for which price collection by product has been identified, by at least one country, appear in table 3.
- 30. Table 3 is laid out as follows:
 - Columns 1, 2 and 3 are identical in principle to those in Table 2. ISIC Rev.3 codes and headings are given in columns 1 and 2. Codes of countries which collect data on these service activities are given in column 3.

- Columns 4 and 5 list the product codes and headings of the CPC version 1.0 corresponding to the ISIC headings given in columns 1 and 2.
- Column 6 indicates the acronyms of countries which are able to identify service products for which prices are collected, in terms of the CPC.
- •Column 7 indicates service products for which prices are collected but do not fit the descriptions of CPC classes. Services which do not match the CPC are described in the terms used by respondents. The description of the service is aligned either with the CPC class to which it comes closest or on a separate line when a correspondence with CPC is not possible.
- Explanatory notes at the end of table 3 provide additional information on coverage and type of price.
- 31. Countries were asked to provide information if possible on products priced, using either the CPC or a description where the CPC classification is inadequate. Most countries do not actively or directly use the CPC, and this unfamiliarity consequently may make a few respondents reluctant to complete the product section. To date 17 countries have provided information on products being priced (Australia, Canada, Finland, France, Germany, Hong Kong, Japan, Korea, Netherlands, New Zealand, Norway, Portugal, Poland, Spain, Sweden, United Kingdom, United States).
- 32. A crude count of CPC products and "other service products" priced shows that there are 182 CPC service classes corresponding to the 60 ISIC groups for which product prices are collected and identified. Prices for over 160 "other service products" are also collected. If these are added to the CPC classes, under the assumption that all "other services" correspond to different products, a total of over 300 service products are priced by the fifteen respondent countries altogether. In fact these "other products" are in most cases either combinations of CPCs or part of one or several CPCs. This does not mean, of course, that each of the countries collects data for 300 service products. For countries individually, the number of products priced varies between five or less for Spain, Norway, Finland, Poland and Korea, and over 100 for Japan and New Zealand with Australia and USA pricing almost as many products.
- 33. The figures above give a rough indication of the extent to which producer prices of services are measured. The following table A gives a better idea of the distribution and extent of price collection by identified product for the 17 countries responding in table 3. For fuller details refer to table 3 and the accompanying notes. The actual number of products priced when indicated by CPC is not a precise or strictly comparable indicator of price collection activity and numbers should be treated with appropriate caution. We can see that eleven countries are collecting prices by identified product for a broad range of business services (at least four of the ISIC groupings) These are AUS, CAN, FIN, HKG, JPN, KOR, NLD, NZL, SWE, GBR and USA.

Table A Number of reported CPC and distinct other products priced by country and activity

| ISIC | AUS | CAN | ESP | FIN | FRA | DEU | HKG | JPN | KOR | NLD | NOR | NZL | PRT | POL | SWE | GBR | USA |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Group | | | | | | | | | | | | | | | | | |
| 45 | | | | | | | | 2 | | | | | | | | | |
| 50-52 | | | | | | | | 1 | | | | 1 | | | | 1 | 18 |
| 55 | 1 | 1 | 3 | 1 | | | | | | | | 2 | 7 | | 1 | 6 | 1 |
| 60-63 | 20 | | | | | 3 | 4 | 27 | | 4 | 1 | 28 | | 6 | 1 | 6 | 17 |
| 64 | 2 | 1 | | 1 | | 5 | 3 | 5 | 1 | . 2 | | 4 | | 2 | . 5 | 5 | 6 |
| 65-67 | | | | | | | 2 | 11 | | | | 3 | | | | | 11 |
| 70 | 3 | | | | | | | 5 | | | | 4 | | | 1 | 3 | 4 |
| 71 | 6 | | | 2 | 2 | | | 10 | 2 | 2 3 | | 6 | | | 3 | 4 | 6 |
| 72 | 5 | 5 | | | 7 | | 2 | 4 | 1 | | | 5 | | | 6 | 3 | 2 |

| 73 | ; | 6 | | | | | | | | | 1 | | | | |
|----|-----|----|---|---|----|----|----|---|---|---|---|--|---|----|----|
| 74 | | 39 | 7 | 1 | 23 | 10 | 32 | | 1 | 2 | | | 6 | 27 | 15 |
| 75 | i | | | | | | | 1 | | | | | | | |
| 80 |) | | | | | | | | | | 1 | | | 1 | |
| 90 | -93 | | | | | | 7 | | | | 1 | | | 8 | 1 |

Other information

- 34. Current use of services PPIs used as deflators in national accounts. The question has been included only in the inventories for 2002 and 2003. Countries were asked: "If some services PPIs are used as deflators in your national accounts, can you please provide any details as to how they are used and the extent of the use". Answers for both inventories are combined below.
- 35. Response have been received from thirteen countries, twelve of which have at least some services PPIs already used as deflators of output in the national accounts. It appears that well-established series are nearly always used as deflators. The full responses including some very detailed ones are described in table 6 of the Annex 2, Tables.
- 36. Why are data collected and who are the principal users? Thirteen countries responded to this question in 2001. Eleven explicitly mention use by National Accounts, other common responses were as a deflator of output, for monitoring of price movements and inflation, as a short-term indicator of economic activity, for business use and as part of a national strategy on improving measures of prices or output. Full responses can be found in the Annex 2, Tables (table 5).
- 37. **Quality adjustments**: Australia, Germany, Japan, Mexico, Netherlands, New Zealand, United Kingdom and United States, have provided explanations on how quality adjustments are dealt with when pricing services. These are copied in Annex 1 of this report.
- 38. **Price indices**: Information provided indicated that price indices used are generally Laspeyres type indices, but that has not been tested after 2001.
- 39. **Data Publication**: The amount of published services PPI data has grown significantly since last year as more price series mature and get established.
 - The Bank of Japan publishes a monthly Corporate Service Price Index (CSPI) with 8 major component and 39 sub-group component series, available on the BOJ website⁷. For the monthly index release, it publishes a Monthly Report on the third working day counted from the 21st of the following month, in principle. At the same time, the Long-Term Time-Series Data are revised, which cover all index series of the CSPI. Further, we provide Explanation of the CSPI, and Notice. All publications are available at the Statistics corner for Prices of the Bank of Japan website (http://www.boj.or.jp/siryo/siryo_f.htm).
 - The US publishes established monthly services price indices as part of its PPI publication. Data are available from the Bureau of Labor Statistics website. They include price indexes for retail margins, railroad transportation, motor freight transportation and warehousing, United States postal service, water transport, air transport, pipelines, security dealers, health services and legal services.
 - The UK price series when established are published alongside other goods product PPIs and an experimental top level CSPI, with subcomponent series, is published quarterly on the ONS website www.statistics.gov.uk/cspi and in "Economic Trends", which is also a quarterly publication.

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⁷ A list of relevant websites URLs is provided with the national contacts in the tables Annex

- Australia: Services PPIs are contained within the following ABS publication: Producer Price Indexes, Australia (ABS Catalogue no: 6427.0) Tables 22 - 25. More detailed service industry data is available on the ABS website (www.abs.gov.au) under Publications, Producer Price Indexes Australia cat. no. 6427.0 and Time Series Spreadsheets 6427.0 Tables 22-25 and 45 - 46.
- New Zealand publishes an extensive range of services producer prices on the SNZ website alongside other PPIs and are planning to publish trade in services price indices for 4 broad sectors. A quarterly Producers Price Index release is published on the Statistics New Zealand website.
- The Bank of Korea publishes about 20 services PPI components monthly in "Monthly prices" and "Monthly Bulletin". Indices are available also on its website.
- France publishes PPIs for car rental services (short-term rental only), rental of construction and civil engineering equipment, engineering services, security services, cleaning services and accounting services in Bulletin mensuel de la statistique (INSEE) also on http://indicespro.insee.fr Indexes for advertising and computer services are available probably before the end of 2003.
- Germany publishes price indices for Transport via railways, Water transport, Air transport and Post
 and telecommunication. They are published annually. Monthly data are available in the data shop of
 destais (payable).
- Hong Kong, China publishes 11 quarterly PPI series with base year 2001=100 in the Monthly Digest
 of Statistics published by the C&SD, Hon Kong, China. Previous set of series published from July
 2000 base 1999.
- Poland publishes about 20 transport and communications PPIs monthly in "Prices in the National Economy" and in "Statistical Bulletin". Annual data are published in the "Statistical Yearbook of the Republic Poland" and in "Prices in the National Economy in 2002".
- Canada publishes a traveller accommodation price index
- Spain publishes the hotel price index "Indice de precios hoteleros" which can be found at http://www.ine.es/prensa/prensa.htm.
- Sweden publishes, in *PR 10 SM*, annual PPI for hotels (55.1), scheduled air transport of passengers (62.1) and real estate activities on a fee or contract basis (70.2). A quarterly web publication is planned and car rentals (71.1) are expected to be included.
- Norway publishes architectural, civil engineering and hotel prices on <u>www.ssb.no</u>
- Switzerland includes service prices in the monthly publication of the Swiss Federal Statistical Office: Indice des prix à la production et à l'importation.
- Czech Republic has a monthly publication 'Price indices of market services in business sphere" (in Czech language) that contains information on trends in price indices of market business services, graphs and comments. Indices calculated in a derived way from the constant base December 1999 are also shown. That concerns indices with previous month = 100, corresponding period of the last year = 100, 2000 =100, ratio of two rolling averages of the December 1999 index. On quarterly basis, selected average prices of services for CZ-CPA 70, 71, 72 and 74 are usually published. The publication is available also electronically and it is on the CSO web site www.czso.cz
- 40. **Methodological documentation:** Some significant documentation (in addition to the papers provided to the Voorburg group), mainly in English, on their services prices work is available from a number of countries including the following:
 - •New Zealand's "Producers Price Index Concepts, Sources and Methods and Index Detail".

- •The Bank of Japan has published a methodological paper "Revision of the Corporate Service Price Index (CSPI) to 1995 base" and "Quality Adjustment of Price Indexes" on the Bank of Japan website http://www.boj.or.jp/en/siryo/siryo_f.htm
- •From Germany two papers on "Recalculating the Price Indices of Postal, Postal Banking and Telecommunications" I. Beuerlein 1995; and "Revision and rebasing of sea freight indices on base 1995" Statistisches Bundesamt (now in English).
- •Australia's ABS has published "Producer Price Index Developments" an information paper 6422.0 on 25 March 1999 available from the ABS website http://www.abs.gov.au/ and provided general metadata to the OECD IIS inquiry. Recent methodological papers can be found in the Voorburg and Ottawa group websites (http://www.insee.fr/en/nom_def_met/colloques/ottawa/ottawa_papers.htm).
- Methodological synopses are available on Data Processing Services, Television Broadcasting Stations, Gasoline Service Stations, Boat Dealers, Recreational Vehicle Dealers, Investment Advice and Insurance Agencies and Brokerages. Other recent methodological documents on the Investment advice industry, the Liquor store hedonic model, and the Prepackaged software and data processing. The US Bureau of Labor Statistics has published "Producer price indexes for Engineering Services" Roslyn B. Swick and "Producer price indexes for accounting services, legal services and advertising agency services" Irwin B. Gerduk. Some research papers including those on data processing services and TV broadcasting stations may be available on request to the BLS.
- The UK Office for National Statistics has provided "Corporate Services Prices: Publication of a Prototype Index" Nick Palmer BP&S Division July 2000
- The Bank of Korea has provided a methodological paper describing the services part of the Korean PPI as at Q2 2000
- INSEE, France has published "The French producer price indices and business service price indices" in the collection INSEE METHODES no. 89 October 1999 and has more information on the *indicespro* website
- Poland's Central Statistics Office publishes a concise methodology of the services PPI survey in "Prices in the National Economy" (monthly and annual publication).
- A number of Voorburg Group service producer prices case studies and background papers are available at the Statistics Canada and INSEE's Voorburg Group websites.
- Sweden has published reports on Car rentals, Computer services, Architectural and other Engineering services, Accounting and Auditing services and Legal services. The papers are available in English on http://www.scb.se/statistik/pr0801/pr0801eng.asp

More details on recently available methodological data are presented in Annex 2, Tables (table 5).

Some Concluding remarks

41. Responses to the 2003 OECD-Eurostat Inquiry on National Collection of Services Producer Price Indices show a continued expansion of activity since July 2002 and in 2003 in those countries that undertake this work. In several new countries PPIs for services are under development.

- 42. There is a large diversity in both service sector coverage and national practices. Most countries only attempt to cover a subset of service activities, with these prices. Services PPIs for **telecommunications**, **hotels**, **freight transport by road** are covered by the most collecting countries. **Computer services** and a variety of **business services** are also the subject of considerable development work and current interest.
- 43. Coverage of detailed services products varies among activity groups. In only a few cases are the service products of an activity group well covered and then it is only by small number of countries. There is also variation amongst types of prices collected and types of services priced though transaction prices of 'simple' services are reported most often. There is a fairly equal split between monthly and quarterly pricing frequencies.
- 44. More and more data are published, and used as deflators in the national accounts, with much useful detail provided by respondents. Nonetheless progress is slow due to the level of development work needed and constant concerns over conceptual correctness and data quality.
- 45. Country practices are still very varied and while the proposed the shared experiences and principal papers on prices of the Voorburg Group and the new PPI Manual may help in harmonising practice, further actions are likely to be needed in this fast developing area, from international agencies and Eurostat, to identify the priority needs for harmonisation, if any, and promote a greater degree of convergence towards good practice.
- 46. The use of the CPC as an internationally accepted product framework in services output and prices work, while inadequate in some respects, should be encouraged and any identified CPC deficiencies addressed in the 2007 revision process.
- 47. Comments from delegates on the accuracy of the report and possible improvements are invited.

ANNEX 1

Quality adjustments - Comments by:

Australia

In compiling the price indexes we attempt to identify and adjust for changes in the quality of the services priced. This involves regular contact with respondents.

Where changes in services are detected we seek both qualitative and quantitative data e.g. cost data. In general, the quality adjustment reflects the change in the costs of providing the service.

Germany

Quality adjustments in producer price statistics for services are restricted to cases where a substitution is necessitated because a priced item is no longer offered on the market.

When a replacement of a priced item is necessary, a stipulated procedure for quality adjustment is applied:

- 1. First there is a search for a new variety, which is of the same quality as the one to be replaced or which has only minimal differences in the relevant quality characteristics. The prices of the old and the new variety are then directly compared, that is, the price change is equal to the difference of the observed prices.
- 2. If a new variety with relevant quality differences has to be selected, there are two possibilities. Either an expert makes an explicit estimation of the money value of the quality difference and this money value is subtracted (quality improvement) respectively added (quality deterioration) to the observed price of the new variety. Or, if an expert judgment is not available, the new variety is brought into the index showing no price change from the previous month. The implication of the link method is that all of the difference in the price between the two varieties is due to quality difference.

Japan

The sample prices are replaced when they cease to be representative of the selected service, the contract terms are changed, or the surveyed companies are required to change. In such replacements of sample prices, any price difference between the new and old services will be adjusted as below so that only the fundamental price change, which excludes the price change attributed to quality change, will be reflected in the indexes. (a) The new sample price will be linked with the old one without adjustment (direct comparison), as long as the difference in quality between the two services is negligible. (b) The new sample price will be linked so as not to raise or lower the index (treated as no change), if the price difference between the two services is entirely attributed to quality. (c) The new sample price will be linked so as to reflect the price change unrelated to any quality change, if the price difference between the two services differs from that associated with a change in quality. However, if it is difficult to compare the difference in quality between the two services. the price treated unchanged.

The production/supply cost method, which specifies the price difference corresponding to the quality difference, on the assumption that the cost for the quality change equals the price difference due to its

quality difference, is mainly used to specify the part of the price difference corresponding to the quality change out of the total price difference between the two services.

Mexico

The quality adjustments made reflect the change in the cost of the service provided.

Prices are adjusted for quality changes in the following: 551 Hotels; 552 Restaurants, bars and canteens; 642 Telecommunications; 660 Insurance and pension funding; 7111 Renting of land transport equipment; 809 Adult and other education.

The Netherlands

In both Dutch PPI's, road haulage and car leasing, quality changes are implicitly dealt with by splicing in a new item replacing an old item. For the road haulage PPI, respondents provide occasionally an explicit estimate for the split between pure price change and price change reflecting quality change.

New Zealand

Several strategies are used to minimise the effects of changing quality on price movements:

- 1. The items to price are generally for simple services and are clearly defined so that changes in quality can be more easily identified and quantified.
- 2. Respondents are contacted to ensure that questionnaires specify commodities that they are able to price.
- 3. When quality changes are noted by the respondent, or a change in price occurs, the respondents are contacted. In most cases the respondents are happy to provide further information that is useful in deciding how to deal with the quality change.

Process when a quality change occurs, then:

1. Obtain overlapping prices, which allows a price change for the relevant periods to be calculated. Where overlapping prices are not available then a price change is decided based on available information.

2. Either:

- 2a. In most cases no change in price is recorded and the commodities are treated as being different and the 'new' commodity is spliced in to replace the old one.
- 2b. If the respondent notes that the change in quality and a change in price has occurred then either a butt or a "splutt" (partial splice/butt) is performed. The price change is estimated.

United Kingdom

Our approach is to seek a detailed specification for each service priced. Contributors are then asked to notify us if any aspect of the specification changes. (An example would be more intensive cleaning services under an office cleaning contract). In addition, when we identify a price change, we check with contributors

that there has been no change in specification. Where a change in specification has occurred, we ask contributors to estimate the full costs (including profit) incurred, or saved, by the change. Price relatives are adjusted so that they do not reflect changes in charges that are due to specification changes.

United States

In general, the Producer Price Index is not quality adjusted for changes in technology. The PPI's detailed specification pricing enables quality adjustment for changes in the service provided. When price determining features of the detailed service specification change, a value of the change is ascertained and a calculation is performed to account for this value in relation to the prices or price change reported. If that value of quality adjustment cannot be obtained or is not appropriate, then overlap prices are requested. The overlap prices are from the same time period for the same service but before and after the service change. The PPI uses net transaction prices, which generally allow the quantity to be held constant. For changes to the input mix of the services priced, the prices are linked showing no price change or linked showing only the amount of price change that is not related to the input mix change, if that can be determined.

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