30th Voorburg Group Meeting on Services Statistics

Sydney, Australia
September 21 – 25, 2015

Sector Paper

ISIC/NACE 7911
“Travel Agency Activities”

Susanne Lorenz
Federal Statistical Office, Germany
Index of contents

1. Introduction ........................................................................................................................................... 3
2. Classifications......................................................................................................................................... 3
   2.1. Industry Classification .................................................................................................................. 3
   2.2. Product Classification ................................................................................................................... 4
3. Turnover Statistics ............................................................................................................................... 5
   3.1. Data Availability ........................................................................................................................... 5
   3.2. Collection of data............................................................................................................................ 5
   3.3. Data Issues ....................................................................................................................................... 6
   3.4. Recommended Approaches ........................................................................................................... 9
4. Service Producer Price Index (SPPI) .................................................................................................. 10
   4.1. Data Availability ............................................................................................................................ 10
   4.2. Source of SPPI data ......................................................................................................................... 11
   4.3. Target Coverage ............................................................................................................................ 11
   4.4. Pricing Method Used ...................................................................................................................... 13
   4.5. Weights .......................................................................................................................................... 15
   4.6. Main Issues in Price Measurement ............................................................................................... 15
   4.7. Recommended Approaches ........................................................................................................... 16
5. Treatment of this sector in the National Accounts ............................................................................ 17
6. Summary of Main Conclusions ......................................................................................................... 18

Appendix 1 – Overview of international progress .................................................................................. 19
Appendix 2 – Comparison of classifications .......................................................................................... 20
Appendix 3 – Bibliography ...................................................................................................................... 22
1. Introduction

This sector paper provides a summary of the experiences of Mexico, Ireland, Japan, Australia and the US as presented at the 29th Meeting of the Voorburg Group in Dublin, Ireland in September 2014. Topics addressed include the classifications being used, a summary of the different classification approaches in use, measurement of output, pricing of output, and recommendations of best practices when developing or revising statistics for travel agency activities. In most countries the industry with all its parts is completely covered by surveys on turnover. Service producer price indices (SPPIs) are produced by the U.S. and by Mexico.

These recommendations rely on the practical experiences of the presenting nations along with the discussions in the 29th Voorburg Group Meeting and are subject to constraints such as the availability of resources in a national statistical office; market conditions and prevailing practices in the country; and the availability of survey, census, or third party data.

This paper focuses on classifications in Section 2, turnover statistics in Section 3, Services Producer Price Indices (SPPI) in Section 4, summary of main conclusions in Section 5, treatment in the National Accounts, and provides a detailed table of international progress in the appendixes based on the results of the detailed status report compiled in advance of the 29th meeting.

2. Classifications

Travel agency activities include a wide range of services provided to both individuals and business customers. The services range from selling travel, tours and different kinds of transportation and accommodation services to offerings of travel management services for business customers. The services are provided by traditional travel agencies but also more and more by online travel agencies.

2.1. Industry Classification

Five industry classifications were considered in the mini-presentations:

- the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4) from the UN,
- the Standard Classification of Economic Activities in the European Community (NACE Rev. 2),
- the Australian and New Zealand Standard Industrial Classification (ANZSIC)
- the North American Industry Classification System (NAICS), and
- the Japan Standard Industrial Classification (JSIC).
In the above classifications the location of the industry within the hierarchies is different. ISIC, NACE and JSIC include the travel agency industry within section N – “Administrative and support service activities”, however JSIC names section N “Living-related and personal services and amusement services”. NAICS classifies travel agency activities in section 56 with other “Administrative and Support and Waste Management and Remediation Services” within the classification hierarchy. This does not create comparability problems unless data is presented at an aggregated level without the associated detail.

A great difference in the industry classifications is the level of detail presented for travel agencies. ISIC, NACE, NAICS and JSIC present one single class for travel agencies (ISIC 7911). ANZSIC combines two different activities into one single class: travel agencies and tour arrangement services (ANZSIC 7220).

Appendix 2, table 1 shows the details and explanations of the classifications discussed.

2.2. Product Classification
Product detail was provided based on

- the Central Product Classification (CPC Ver. 2),
- the Classification of Products by Activity (CPA 2008), and
- the North American Product Classification System (NAPCS - US).

The content of the above mentioned CPC and CPA is very similar. Both product classifications include two product classes to separately identify the kind of reservation services: one for transport (CPA 79.11.1/CPC 8551) and one for accommodation, cruises and package tours (CPA 79.11.2/CPC 8552). Both provide 5 detailed subclasses that break out specific types of transport reservations, ranging from airlines, railways, buses to vehicle rental. The CPC and the CPA differentiate the second class into 3 subclasses: reservations of accommodation, cruises and package tours. As a difference, the CPC includes also time-share exchange services.

The NAPCS structure is different from the CPC and the CPA structure. NAPCS classify the service of travel agencies into a class for reservation services and a class for trip planning services. The reservation services include product breakdowns from airline seats to package tours. NAPCS structure includes also domestic versus international reservations as well as detail for additional services provided by travel agencies including travel document services, travel insurance brokerage services and corporate travel management services.

A complete list of these product classifications is included in Appendix 2, table 2.
3. Turnover Statistics

3.1. Data Availability

There is good turnover data availability based on country responses to the detailed summary report compiled by the Voorburg Group. In fact, twenty-two of twenty-six countries that responded to the survey indicated that turnover data was available for the travel agency sector.

Table 1 – ISIC/NACE 7911 Travel Agencies: Availability of turnover information, 2014

<table>
<thead>
<tr>
<th></th>
<th>5-year</th>
<th>Annual</th>
<th>Monthly/Quarterly</th>
<th>no turnover</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>10</td>
<td>11</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

As Table 1 indicates, there is also broad availability of turnover data at both annual and sub-annual periodicity. In addition five countries collect or publish product level detail below the industry aggregate level. There is no EU legal requirement to collect product level information for this sector. Results of the survey “Detailed status report” are provided in Appendix 1.

Enterprises classified to travel agency activities tend to be numerous and small. In 2012, 84% of all travel agencies in Ireland had 9 or less employees, in Germany the figure was even higher.

3.2. Collection of data

Turnover data came from a variety of sources according to the presenters and the respondents to the detailed status report. Reported data sources included sample surveys, censuses, tax records, and input/output estimates.

Annual turnover data are usually collected using questionnaires that collect the turnover but also additional variables such as employment, expenses, cost of purchased goods and services, etc. Annual surveys are a mixture of census and sample based collections. In the EU countries, the Structural Business Statistics (SBS) surveys collect the above information according to the Eurostat SBS regulation (295/20081). Japan and Mexico reported about comparable surveys.

Sub-annual data (quarterly/monthly) are usually produced on a sample basis. In the EU countries, the Short Term Statistics (STS) survey is limited to turnover, persons employed, hours worked and gross wages and salaries data to provide short-term economic developments in compliance with the Eurostat STS regulation (1165/98). The survey objectives in Japan and Mexico are also to identify monthly trends in turnover and persons employed, the survey in Japan is not mandatory.

Five-year economic census in Japan figures out financial items by economic activities. In addition to turnovers the census collects type of legal organization, number of employees, income, and other financial items.

---

1 European Communities, 2006, Methodology of short-term business statistics, associated documents
major industry of establishment, cost of the entire enterprise, etc. In Mexico the situation is comparable; the results provide also detailed information on products.

3.3. Data Issues
The industry classifications make a clear differentiation between the service of an agent, the intermediation of travel services on behalf of the traveler, and the arranged product. NACE / ISIC classify the service of travel agencies into class 7911 “travel agency”; however the product, e.g. the sold package holiday is classified into class 7912 “tour operator”. So the measurement method for output of travel agency services is the net approach. The output is essentially treated as an intermediation service defined as the provision of travel service excluding the value of the travel being sold. Output can be considered as being derived from either a direct charge (booking fee or commission) or as the difference between the full payment made by the final purchaser and the total of the expenditures made on the various elements of transport and accommodation provided².

The industry classifications make also a clear differentiation between the service of an agent and other reservation services. Enterprises primarily engaged in reservations for hotels, for transportation, for car rentals or for other services are classified into NACE /ISIC class 7990 “Other reservation service and related activities”. Travel agencies offer also reservation services for instance for hotels, but achieve only a small turnover with these services. Primary activities of travel agencies have to be the intermediation of travel services, but a secondary activity can be the reservation service.

Travel service is offered by travel agencies (TAs) and by online travel agencies (OTAs)³. Germany has a special feature regarding the enterprise: a few travel agencies act primarily as an agent but offer also tours as a tour operator.

Beside the traditional travel agencies (TAs, OTAs) there is another group of enterprises which belong also to sector NACE/ISIC 7911 “travel agency”, the ticket consolidators. Consolidators are a kind of wholesalers which mainly sell airline tickets to retail travel agencies at a mark-up.

Ireland covered the huge change in commissioning the sale of airline tickets since the 1990’s when in the U.S. the commission paid to travel agents for flights was gradually reduced. In 2002 the commission was completely capped. In Europe a similar process began in 1997; nowadays the commission for airline tickets is entirely eliminated.

The three countries reported about the changing sales channel: more and more turnovers were gained from online travel agencies. The traditional travel agencies lost significant importance.

---
³ For instance online travel agency Expedia in Europe.
Ireland reported about the booking behavior of the Irish people: it is common to book flights and accommodation directly from the service provider, but package holidays are still booked from a travel agent or tour operator in the majority of cases.

The discussions in the 29th Voorburg Group Meeting focused on OTAs which could be potentially covered insufficient: some could be misclassified into web-portals or into other classes. Also the nationality of the OTAs should be observed. The meeting also stated that there is a lack of information about the share of B2B and B2C in overall turnover of travel agencies which is desirable for input-output calculations.

At this point some definitions and accruals to global distribution systems (GDSs) and internet booking engines (IBEs): A GDS is a database and a kind of computer reservation system used to store and retrieve information and conduct transactions related to air travel, hotels, car rentals, package holidays, cruises or train journeys. This information is supplied by the associated service providers. Worldwide well-known GDSs are Amadeus, Sabre and Travelport with Galileo and Worldspan. Travel agencies usually use a GDS for their service, the intermediation of travel services on behalf of the costumer. Many customers who book their travel via the Internet use an OTA with the help of an IBE. An IBE is an online travel portal, an application to make reservations for flights, hotels, holiday packages, insurance and other services via the internet. An IBE is the center piece of each OTA but also of other online reservation providers such as hotel reservation services.

The following figure gives a review of the interaction between participants, users and operator of the global distribution system; users such as enterprises offering other reservation services are not considered.
Global distribution systems (GDS), internet booking engines (IBE), but also enterprises offering other reservation services and meta-search engines are not subject of this sector observation. This sector paper relates only to travel agents (TAs) and to online travel agents (OTAs), blue marked.

For measuring the turnover of the travel agent sector correctly the understanding of the cost and reimbursement of the global distribution system is essential. In general a special feature of the GDS is that the service providers, the travel agents (TAs or OTAs) and also the customers have to pay for the use of the GDS service.

Users of the GDS are the customers, who pay a service fee – mostly for flights or for hotel bookings – to the travel agency. A travel agent, also a user of the GDS, pays a monthly subscription fee for the use of the GDS. But depending on increasing bookings, the cost of travel agents can decline. Travel agencies get an inducement fee for frequent use. Often the inducement fee is higher than the subscription fee, which means the subscription is free of costs.

Some service providers (mostly airlines and hotels) pay the GDS for the possibility that users (online reservation providers, but also TAs and OTAs via IBE) have worldwide access to their data. The payment is a booking fee, which is a flat fee for each passenger and segment. Some service providers e.g. tour operators or cruises pay a commission for each booking to the travel agent.

---

4 eTourism: processes and systems – Information management in tourism (in German: „eTourismus: Prozesse und Systeme – Informationsmanagement im Tourismus“), 2. Edition, Publisher: Prof. D. Axel Schulz, Prof. Dr. Uwe Weithöner, Prof. Dr. Raman Egger und Prof. Dr. Robert Goecke, de Gruyter, Oldenburg, 2015, page 213.
The following figure gives an overview of the cost and the reimbursement within the global distribution system in Germany; users such as enterprises offering other reservation services are not considered.

Figure 2 – GDS: Cost and Reimbursement Modell in Germany

![Diagram](image)

Abbreviation: Service Provider e.g. airlines, hotels; GDS = Global Distribution System; TA = Travel Agency; OTA = Online Travel Agency (simplified view: OTAs have to pay the subscription fee to the Internet booking engine)

Further considerations of this sector paper focus on commissions, service fees and other fees earned from travel agencies (TAs, OTAs), blue marked.

3.4. Recommended Approaches

For developing turnover statistics, the NSOs may follow the approaches listed in table 2 below. The category tells the quality of the achieved data – not every statistics need a “best”. If “speed” is the major requirement for data (e.g. for STS), then a “good” solution may do. And, of course, respondents’ burden and resources at hand are important factors to consider when choosing the appropriate method. As realized by the detailed status reports and the mini-presentation on turnover for ISIC N7911, country practices differ for annual and sub-annual statistics, i.e. SBS and STS. It’s obvious that for estimation of growth rates the collection of product turnover detail is not required. On the other hand the observation of structural changes within the industry is important for the concepts and regularly scheduled revisions of SPPIs.

---

5 Ibidem, page 233.
Table 2 – Options for Developing Turnover Statistics – Travel agency activities

<table>
<thead>
<tr>
<th>Category</th>
<th>Data Source</th>
<th>Level of Detail Collected</th>
<th>Frequency</th>
<th>Cost</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>Survey/ Census</td>
<td>Industry turnover and product turnover detail</td>
<td>Annual and/or sub-annual collection (monthly or quarterly)</td>
<td>Most expensive</td>
<td>Largest response burden Due to the variety of services provided, what is to be collected in this sector must be considered carefully</td>
</tr>
<tr>
<td>Good</td>
<td>Survey/ Census</td>
<td>Industry detail only</td>
<td>Annual and/or sub-annual (monthly or quarterly)</td>
<td>Expensive High response burden</td>
<td>Industry detail may not be sufficient to identify important products, Timely data</td>
</tr>
<tr>
<td>Minimum</td>
<td>Administrative data (tax data, industry association data etc.,)</td>
<td>Industry detail only</td>
<td>Annual</td>
<td>Least expensive Little or no response burden</td>
<td>Suitability for turnover measurement must be checked carefully Least timely</td>
</tr>
</tbody>
</table>

Administrative data can be used to collect revenue and expense details but care needs to be taken to ensure the concepts are similar for key items such as cost of goods sold and sales of goods purchased for resale.⁶

4. Service Producer Price Index (SPPI)

4.1. Data Availability

Although data availability for turnover was high, only two of the twenty-six countries that completed the detailed status report survey indicated the availability of SPPIs for travel agencies. The mini-presentations of SPPI were held by the U.S., Australia and Ireland. The U.S. calculates and publishes an SPPI for travel agencies, Australians SPPI is under construction and Ireland researched the sector in detail and gave an overview of the results. In the EU countries, the sector “travel agency activities” is presently outside the scope of the European Union short-term statistics (STS) regulation.

Conclusions and recommendations are based on an extremely small set of experiences and on the discussions in the 29th Voorburg Group meeting but are useful to consider. Results of the survey “Detailed status report” are provided in Appendix 1.

4.2. Source of SPPI data
In Germany there are several consumer price indices (CPIs) for the arranged product offered from different service providers:

- CPI for passenger transport by air,
- CPI for passenger transport by railway,
- CPI for passenger transport by waterway,
- CPI for rental cars,
- CPI for accommodation services
- CPI for package holidays and cruises.

Travel agencies make reservation services for all of the above-named products. But these CPIs do not meet the needs for measuring prices for the service of travel agencies. Price data for this sector should be collected via dedicated SPPI survey programs. The prices can be collected directly from travel agencies or in some cases obtained indirectly from the service providers.

The U.S. reported about their sampling strategy, which is to collect consolidated price information for all of companies local operations at the headquarters. The reason is that big travel agencies may operate multiple local branch offices, but pricing data can typically be obtained at travel agency company headquarters.

4.3. Target Coverage
Travel agents are primarily engaged in selling travel, tours, transportation and accommodation services on a wholesale or retail basis to the general public and commercial clients. Travel agencies that provide services to business customers may also offer travel management services including travel budgeting or detailed travel reports. All services are offered by traditional (non-internet exclusive) travel agencies (TAs) or by internet exclusive online travel agencies (OTAs).

The output of this industry is the provision of assistance with travel arrangements and bookings. Conceptually, price collection in this sector can be divided into three types of transactions: Service fees so called booking or handling fees, commissions with overrides and other fees. The transaction type depends on the kind of service:

1. Service fee: Booking-/handling fee
   In the past, as described in chapter 3.3, the sale of airline tickets was commissioned. Nowadays for flight bookings TAs or OTAs invoice the customer with the ticket price plus
a booking fee or handling fee at the time of booking\footnote{An example from Germany: the amount of the booking fees of travel agencies for flight tickets depend on the airline, the tariff, the destination and the kind of ticket: e-ticket or paper.}. The payment for the ticket is then transmitted to the airlines; the booking fee is the turnover of the TAs or OTAs.

2. Commissions/Overrides

Another service e.g. the sale of package tours or of accommodations acted by travel agencies is paid by commissions. There are two systems for commissions:

First, the so-called \textit{Agent model} that could be described as follows: A TA or OTA sells a travel product, e.g. a package tour to Spain, to a customer. After the travel product is provided to the customer, the travel provider (e.g. tour operator Thomas Cook) submits the commission for the purchased service to the TA or the OTA. The commission is often an agreed percentage of the booking price. In addition some service providers (e.g. tour operators, cruises) reward high sales with incentives, so called \textit{overrides}. Overrides are a kind of commission paid quarterly or annually to TAs or OTAs. Overrides are often graduated according to level of sale.

In Germany the commission depends on the status of the travel agency and on the kind of service provider. The status of a travel agency can be differentiated between agent and sales representative. An agent deals with a multiplicity of different service providers and acts as agent. That means an agent is entitled to accept consumers offers to buy and forward the bid to the service provider. However the doing of a sales representative is based on a contract with a service provider which allows acting on behalf of the service provider.

Depending on the kind of service provider the commission is a percentage from 4 to 15 \% of the price in Germany. Among the commissions there are also overrides for high sales. In the past there were also penalties for low sales (in German: “malus system”). That means that low turnovers in one year led to a payback of commissions in the following year. Big service providers (tour operators) made use of the malus system to control their sales figures. But the big tour operators abolished this system completely.

Each service provider has its own model for commissioning, for instance: TUI Germany pays travel agents a basic commission referring to 22 turnover classes. Change over time can appear in the commission rate and the turnover classes. Further TUI rewards high sales according to a “performance-model”. This model is based on 7 classes according to TUI’s profit margin in each travel product. That means sales of high-margin products are rewarded. Concluding, in Germany the commissions of a travel agent
depend not only on the turnover made with travel products of each service provider but also on the profit of the service providers’ product.

Secondly, the “Merchant model” which is often used by OTAs: This is the case when an OTA occurs as merchant. For instance: a hotel offers a non-commissionable negotiated rate to an OTA. Typically, the rate is anywhere between 20 – 50% off the hotel’s non-restricted/ published best available rate. The OTA accepts the deal and makes an online offer for the hotel room which can be sold unbundled or packaged with air travel and/or car rental. The hotel’s brand may display to the customer or may be hidden until the reservation is confirmed (so called: opaque). For merchant model transactions, OTAs bill travelers/customers when bookings are made. Hotels typically bill the OTA upon customer checkout. The commission for the OTA is the difference of the purchase price to sales price, the markup. With these transactions, OTAs do not commit to purchase the travel inventory before travel customers are found, so they never have to sell the booking at a negative margin. The commission is typically higher than in the agent model.

3. Other fees
Further transaction prices are “other fees” which cover various other services. Travel agencies serve business customers with travel management services, travel budgeting, detailed travel reports or other consultation service. The U.S. reported about telephone booking services of OTAs for more complex travel bookings. As written in chapter 3.3 travel agencies can receive inducement fees from the GDS for high bookings per segment (itineraries). The price setting depends on the provided service. The price could be based on fee per booking, price per transaction or hourly rates.

4.4. Pricing Method Used
For service fees (handling/booking fees), the U.S. differentiates the price collection into a specified type of travel service, e.g. domestic air or international air, hotel or car reservation and also into a specified booking method, e.g. via travel agent, by telephone, on the internet without assistance or on the internet with assistance. The price is usually a flat handling/booking fee according to the service, a real transaction price. The pricing method used is direct use of prices of repeated services. Ireland confirmed this practice.

For commissions relating to the agent model, the U.S. chose a typical booking for a particular travel service selected during the initial collection period. Two elements are collected: the commission-earning base price (exclude taxes) and the commission rate. In the following
months the respondent is asked to estimate the commission rate for the selected travel service. Also the commission-earning base price is adjusted based on the change in the U.S. detailed PPI for the selected type of travel service in the following months. The preferred type of pricing method is a model price.

Ireland suggested the percentage fee method for measuring the commission fee, if these fees are based on percentage rates. This method should reflect changes in commission rates and in product values. Both parts may be collected from different sources: the percentage fee may be collected by survey, while the value of the product transacted should be adjusted using a suitable price index for the type of travel service being booked.

Override commissions are typically paid to travel agencies quarterly or annually. For Overrides, in the U.S., the preferred type of price is a model price. During the initial data collection period an override agreement with a specific travel service provider is selected. Therefore the following information is collected each period: the value of gross bookings, the minimum value of gross bookings and the override commission rate. In subsequent months, the respondent is asked to update the minimum value of gross bookings and the override commission rate. The value of gross bookings is escalated by the U.S. price index data for the type of travel each period.9

For commissions relating to the merchant model, the preferred pricing method in the U.S. is the unit value. Therefore the average margin for a specific type of travel booking are collected e.g. average margin for hotel bookings of a specified quality in a specified area or air travel bookings for a specified travel class on flights for a specified origin and destination pair. The average margin is typically calculated by dividing the total turnover earned from margins for the specified type of bookings by the total number of these bookings occurred in the pricing period.

For other fees, actual transaction prices are preferred from the US. These could be hourly rates, fee per booking or per transaction. The paper10 from the U.S. provides some examples: hourly rates are collected for hotel negotiations, for on-site reservationists or for consultative services; daily rates are collected for on-site meeting planners. The price for travel management reports or for visa and passport services is usually a fee per transaction.

The Australian Bureau of Statistics (ABS) reported about their preferred pricing methods for the intermediation service: the price concept of margin on services. This method is similar to the ABS approach to pricing retail trade margin services on goods. There were two options described: Firstly to collect data on mark-up (as percentage), commission and fees as well as

---

8 Estimation only the commission rate has been easier for respondents because rates are relatively standard and change infrequently. Details see mini-presentation on PPI for Travel Agencies, NAICS 561510, ISIC 7911, Paper for the Voorburg Group meeting 2014, US Bureau of Labor Statistics, page 10.
10 Ibidem, page 12f.
sale values of original products sold by product details. Option 2 is the use of the ABS’s quarterly business indicators statistics data (sales, incomes, profit) as a proxy for net margin and the collection of some administrative summary data from travel agencies. The main advantage of option 2 is that the existing data from QBS can be re-used.

Furthermore the ABS prefers to measure **add on services** using the **component pricing** approach. These services can be travel management services for large Australian businesses which are usually based on negotiated contracts. Therefore typical usage pattern are selected, which can be broken down to a number of standard components: e.g. domestic air ticket bookings, international air tickets, accommodations, transaction fees, and travel management.

4.5. **Weights**

The U.S., at the moment the single producer of an SPPI for travel agencies, indicated that turnover data by products was available from the five-year economic census. The SPPI for travel agencies was structured into indices for flight bookings (domestic/international), hotel and car rental bookings, cruise and packaged tour bookings and other services.

Ireland mentioned that a SPPI for travel agency activities should be weighted on the basis of Gross Value Added (GVA) rather than turnover. Some figures for Ireland: In 2012 the GVA was 7.6 per cent of total turnover; the cost of sale\(^{11}\) accounts for 88 per cent of total turnover. Most of the turnovers in this sector reflect the high cost of sales; in contrast the GVA approximates commissions and fees earned on sales.

4.6. **Main Issues in Price Measurement**

Commissioning can be very complex depending on the service provider and on the travel product sold. A single travel agency has to deal with different commission models. Care should be taken to get the information about changes not only of the commission rate but also of changes of the turnover-scale and changes of the overrides.

Commissions based on the agent or on the merchant model are measured differently. The observation of changes in invoicing of a single online travel agent (OTA) should be done carefully, particularly for OTAs acting both as agent and as merchant.

---

\(^{11}\)According to the Irish questionnaire “Annual service inquiry”, Question 5, Note 3: “Cost of Sales equals Purchases for Resale plus Opening Stock minus Closing Stock. Purchases for Resale are purchases of goods for resale to third parties without further processing. It also includes purchases of services by ‘invoicing’ service companies, whose turnover is composed not only of agency fees but also the actual amount involved in the transaction, e.g. transport purchases by travel agents.” Details see:  
The price changes of the observed percentage fee have also to reflect changes of the value of the booked travel. A methodological question in pricing the travel agency sector is how to adjust the value of the product transacted. The product value could be adjusted using a suitable price index for the type of travel service being booked or both the percentage fee and the product value could be surveyed.

Australia reported about the challenge to collect actual and useful data from travel agencies especially data that meet the requirements for pricing margin services.

Quality adjustments are rarely applied for travel agency services. It should focus on the service itself and not on the product, the booked travel.

4.7. Recommended Approaches
For developing service producer price statistics, the NSOs may follow the approaches listed in the table below.

Table 3 – Options for developing SPPI for travel agencies

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing method</th>
<th>Data type in the survey</th>
<th>Quality and Accuracy</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best</strong></td>
<td>Prices of repeated services</td>
<td>Data are real transaction prices based on the type of travel service being booked Types: service fees, fee per transaction, commissions as flat rates</td>
<td>Real transaction prices give an accurate price index that is representative for the industry</td>
<td>Relatively high. Much work is needed to maintain constant quality.</td>
</tr>
<tr>
<td><strong>Best</strong></td>
<td>Percentage fee/ Margin fee</td>
<td>Data are real transaction prices based on the type of travel service being booked Types: Commissions as percentage, Margins as ratio between selling and acquisitions prices</td>
<td>Real transaction prices ( \ldots ) The type of travel service being booked must be sufficiently homogeneous. The price changes have to be split into two parts: change in percentage / margin fee and in change of the price of the product sold. An appropriate adjustment method of the value of the product transacted has to be chosen.</td>
<td>Relatively high. Much work is needed to maintain constant quality.</td>
</tr>
<tr>
<td>Category</td>
<td>Pricing method</td>
<td>Data type in the survey</td>
<td>Quality and Accuracy</td>
<td>Cost</td>
</tr>
<tr>
<td>----------</td>
<td>----------------</td>
<td>-------------------------</td>
<td>----------------------</td>
<td>------</td>
</tr>
<tr>
<td>Best</td>
<td>Unit value</td>
<td>Data are real transaction prices based on the type of travel service being booked. Types: <strong>Commissions</strong> calculated from consistent revenue on commissions and quantity</td>
<td>Real transaction prices ... The type of travel service being booked must be sufficiently homogeneous. Disadvantages: data are often lagged by one period</td>
<td>Relatively high. Much work is needed to maintain constant quality.</td>
</tr>
<tr>
<td>Best</td>
<td>Component prices</td>
<td>Data are real transaction prices (negotiated contracts) broken down to a number of standard components. Types: <strong>Travel management services</strong></td>
<td>Real transaction prices ... Representativeness should be observed frequently</td>
<td>Relatively high. Much work is needed to maintain constant quality.</td>
</tr>
<tr>
<td>Good</td>
<td>Model Pricing</td>
<td>Output is predominantly unique; the respondent is asked to update the model for a specific type of travel booking each period. Types: <strong>Commissions Overrides</strong></td>
<td>Detailed specifications allow time-consistent comparisons</td>
<td>Relatively high. Much work is needed to maintain constant quality.</td>
</tr>
</tbody>
</table>

5. **Treatment of this sector in the National Accounts**

In the U.S. and in Europe, the System of National Accounts does only provide general guidance on measuring the output of the travel agency sector. According to the European system of accounts, ESA 2010\(^{12}\), “the output of travel agency services is measured as the value of service charges of agencies (fees or commission charges) and not by the full expenditures made by travellers to the travel agency, including charges for transport by third parties”.

In the German National Accounts the database for the output of NACE 7911 “travel agencies” are the yearly results of the structural business statistic survey (SBS). In this sector both output

---

\(^{12}\) European system of accounts, ESA 2010, chapter 3.60.

In chapter 3.62 the definition of the service of travel agents and tour operators is made: “Travel agency services and tour operator services are distinguished by the fact that travel agency services amount only to intermediation on behalf of the traveller, while tour operator services create a new product called a tour, which has various components of travel, accommodation and entertainment.”
and intermediate consumption are reduced by the goods of resale. Goods of resale are for instance flight tickets. Such goods are not produced by travel agencies, but are sold unchanged to the final consumer. In Germany the deduction for goods of resale is a percentage rate which is difficult to determine. There are not much information about the share of “goods of resale” particular about the existence of “mixed enterprises” (that means a travel agency acts both as a travel agent and as well as a tour operator) or about changes in turnovers for goods of resale of travel agencies specialized for business customers. The German National Accounts use an expert estimation for the determination of the percentage rate. Additional information about turnovers by products corresponding to the CPA classification would be helpful.

In case of an available SPPI for travel agency services, the SPPI is used as deflator to determine real output for the product travel agent services. Otherwise similar indices for deflation are applied. This index should reflect the price development of the intermediation on behalf of the traveller and not of the sold tour.

6. Summary of Main Conclusions

The travel agency sector generates usually a small part of the economy. The industry has undergone substantial change although turnover is still generated via commissions and fees. All presenters reported about the growing number of online travel agencies. Traditional stationary travel agencies (TAs) compete more and more with online travel agencies. Traditional travel agencies face with well-informed customers who have already researched most of the information on the internet or other sources. It is essential for TAs to have access to the global distribution system but also use other sources of information.

The best turnover and pricing mechanisms for travel agencies are highly dependent on the structure of the market in a given country. The net approach, the mix of agent and merchant model, the availability of the observed price (especially margins), the measurement of the related value of the product transacted, and the other conditions must be considered when preparing for data collection.

Overall, as is the case with many services industries, production of turnover and price statistics is complex. A complete understanding of the processes of travel agency services in the country being studied is necessary. The Voorburg Group cannot provide a single best course of action but provides examples for consideration and adaptation as appropriate. Ultimately, NSOs should discuss the methodology with their national accountants to determine the most appropriate approach for their country.
Results of the 2014 detailed status reports of 26 VG-members:

<table>
<thead>
<tr>
<th>ISIC/NACE 7911 Travel Agency Activities</th>
<th>number of countries having:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey Categories:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td></td>
</tr>
<tr>
<td>a. PPI details ≥ CPC</td>
<td>2</td>
</tr>
<tr>
<td>b. PPI details ≥ CPC soon</td>
<td>0</td>
</tr>
<tr>
<td>c. Turnover details ≥ CPC</td>
<td>5</td>
</tr>
<tr>
<td>d. Turnover details ≥ CPC soon</td>
<td>0</td>
</tr>
<tr>
<td>e. Industry prices calculated</td>
<td>2</td>
</tr>
<tr>
<td>f. Industry turnover collected</td>
<td>22</td>
</tr>
<tr>
<td><strong>Ratings of</strong></td>
<td></td>
</tr>
<tr>
<td>1. Detailed turnover and prices well aligned</td>
<td>1</td>
</tr>
<tr>
<td>2. Detailed turnover and prices well aligned soon</td>
<td>0</td>
</tr>
<tr>
<td>3. Industry-level turnover and prices aligned</td>
<td>1</td>
</tr>
<tr>
<td>4. Industry-level turnover and prices aligned soon</td>
<td>2</td>
</tr>
<tr>
<td>5. Other-no industry coverage for prices and/or turnover</td>
<td>22</td>
</tr>
</tbody>
</table>
### Table 1: Comparison of Industry Classifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative and Support Service Activities</td>
<td>Administrative and Support Service</td>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>Administrative and Support Services and Waste Management and Remediation Services</td>
</tr>
</tbody>
</table>

**General Level**

<table>
<thead>
<tr>
<th>Section</th>
<th>N 79 Travel agency, tour operator, reservation service and related activities</th>
<th>72 Administrative Services</th>
<th>56 Administrative and Support Services</th>
<th>N 791 Travel agency, tour operator activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>First main - Level of detail</td>
<td>722 Travel Agency and Tour Arrangement Services</td>
<td>5615 Travel Arrangement and Reservation Services</td>
<td>791 Travel agency</td>
<td></td>
</tr>
<tr>
<td>Second main - Level of detail</td>
<td>7912 Tour operator activities</td>
<td>56152 Tour Operators</td>
<td>7911 Travel agency activities</td>
<td></td>
</tr>
</tbody>
</table>

#### 7911 Travel agency activities

**NACE**: This class includes:
- activities of agencies, primarily engaged in selling travel, tour and accommodation services on a wholesale or retail basis to the general public and commercial clients.
**ISIC**: This class includes:
- activities of agencies primarily engaged in selling travel, tour and accommodation services to the general public and commercial clients.

#### 7912 Tour operator activities

This class includes:
- arranging and assembling tours that are sold through travel agencies or directly by tour operators. The tours may include any or all of the following:
  - transportation
  - accommodation
  - food
  - visits to museums, historical or cultural sites, theatrical, musical or sporting events

#### 7911 Travel agency activities

This class includes:
- arranging and assembling tours that are sold through travel agencies or on their own account are classified in Industry 561500, Tour Operators; and
- providing guide services, such as archeological, museum, tourist, hunting, or fishing are classified in Industry 713990, All Other Amusement and Recreation Industries; and
- providing reservation services (e.g., accommodations, entertainment events, travel) are classified in U.S. Industry 561599, All Other Travel Arrangement and Reservation Services.

#### 7912 Tour operator activities

This class includes:
- arranging and assembling tours that are sold through travel agencies or directly by tour operators. The tours may include any or all of the following:
  - transportation
  - accommodation
  - food
  - visits to museums, historical or cultural sites, theatrical, musical or sporting events
### Table 2: Comparison of Product Classifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85 Support activities</td>
<td>79 Travel agency, tour operator and other reservation services and related services</td>
<td></td>
</tr>
<tr>
<td>855 Travel arrangement, tour operator and related services</td>
<td>79.1 <em>Travel agency and tour operator services</em></td>
<td>5615 Travel arrangement and reservation services</td>
</tr>
<tr>
<td></td>
<td>79.9 Other reservation services and related services</td>
<td></td>
</tr>
<tr>
<td><strong>Details</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8551 Reservation services for transportation</td>
<td>79.11 <em>Travel agency services</em></td>
<td>5615.1 Travel arrangement and reservation services</td>
</tr>
<tr>
<td>85511 Reservation services for air transportation</td>
<td>79.11.1 Travel agency services for transport reservations</td>
<td>5615.11 Reservation service for passenger transportation</td>
</tr>
<tr>
<td>85512 Reservation services for rail transportation</td>
<td>79.11.12 Reservation services for railways</td>
<td>5615.1113 Reservation service for rail seats</td>
</tr>
<tr>
<td>85513 Reservation services for bus transportation</td>
<td>79.11.13 Reservation services for buses</td>
<td>5615.1112 Reservation service for bus seats and airport</td>
</tr>
<tr>
<td>85514 Reservation services for vehicle rental</td>
<td>79.11.14 Reservation services for vehicle rental</td>
<td>5615.1114 Reservation service for vehicle rental</td>
</tr>
<tr>
<td>85519 Other transportation arrangement and</td>
<td>79.11.19 Other travel agency services for transport</td>
<td>5615.1116 Reservation service for ferry transportation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5615.1112 Reservation service for bus seats and airport shuttle</td>
</tr>
<tr>
<td>8552 Reservation services for accommodation, cruises and package tours</td>
<td>79.11.2 Travel agency services for reservation of accommodation, cruises and package tours</td>
<td></td>
</tr>
<tr>
<td>85521 Reservation services for accommodation</td>
<td>79.11.21 Reservation services for accommodation</td>
<td>5615.112 <em>Lodging</em> reservation service</td>
</tr>
<tr>
<td>85522 Time-share exchange services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85523 Reservation services for cruises</td>
<td>79.11.22 Reservation services for cruises</td>
<td>5615.1115 Reservation service for cruises</td>
</tr>
<tr>
<td>85524 Reservation services for package tours</td>
<td>79.11.23 Reservation services for package tours</td>
<td>5615.113 Reservation service for <em>packaged tours</em></td>
</tr>
<tr>
<td>8554 Tour operator services</td>
<td>79.12 Tour operator services</td>
<td>5615.12 Trip planning services</td>
</tr>
<tr>
<td>8556 Tourism promotion and visitor information services</td>
<td>79.90.1 Tourism promotion and visitor information services</td>
<td></td>
</tr>
<tr>
<td>8555 Tourist guide services</td>
<td>79.90.2 Tourist guide services</td>
<td></td>
</tr>
<tr>
<td>8553 Other reservation services</td>
<td>79.90.3 Other reservation services n.e.c.</td>
<td></td>
</tr>
<tr>
<td>85531 Reservation services for convention centres, congresses and exhibitions</td>
<td>79.90.31 Time-share exchange services</td>
<td>5615.37 <em>Condominium timeshare exchange service</em></td>
</tr>
<tr>
<td>85539 Reservation services for event tickets, entertainments and related services</td>
<td>79.90.39 Reservation services for event tickets, entertainments and related services</td>
<td>5615.37 <em>Condominium timeshare exchange service</em></td>
</tr>
</tbody>
</table>

*Table 2: Comparison of Product Classifications*
Appendix 3 – Bibliography

Mini-presentations on turnover:


Mini-presentations on SPPI:


Classifications:


**National Accounts:**


**General:**


Prof. D. Axel Schulz, Prof. Dr. Uwe Weithöner, Prof. Dr. Raman Egger and Prof. Dr. Robert Goecke, de Gruyter, 2015. eTourism: processes and systems – Information management in tourism („eTourismus: Prozesse und Systeme – Informationsmanagement im Tourismus“), 2. Edition, Oldenburg (Germany), 2015