

40th Annual Meeting of the Voorburg Group on Service Statistics
September 21st to 25th, 2026
Hosted by: Statistics Netherlands. Den Haag, Nederland

Industry Paper: Travel Agency Activities Summary of Previous Sessions

ISIC Rev. 4 7911

Instituto Nacional de Estadística y Geografía
(INEGI)

Ariel Juárez

Presented by:

Araceli Martínez Gama. Deputy General Director of Economic Surveys

Ariel Juárez Morales. Director of Tertiary Sector Surveys

Ismael Bárcenas Tostado. Deputy Director of Services Surveys

Luis Centeno Martínez. Department of Documentation, Design and Construction of Services Surveys

The views expressed in this paper are those of the authors and do not necessarily represent the position of INEGI.

Abstract

This paper summarizes the main work presented to the Voorburg Group on the definition and classification of travel agency activities, the measurement of output, and the development of price indexes. The review highlights the importance of distinguishing between gross and net approaches to output measurement and of measuring the intermediation service through commissions, service fees, and margins arising from the difference between purchase and selling prices. It also examines the growth of online travel agencies (OTAs) and the decline of traditional commission arrangements. Finally, it summarizes methodological progress and the remaining challenges for producing high-quality statistics.

Contents

1. Introduction	4
2. Description and characteristics of the industry.....	5
2.1 Industry definition	5
2.2 Comparison of industry and product classifications.....	5
2.3 Market conditions	6
2.4 Industry-specific characteristics.....	7
3. Output measurement	8
3.1 General framework.....	8
3.2 Measurement issues	8
3.3 Methods used.....	9
3.4 Comparability with price indexes	9
4. Measurement of SPPI	10
4.1 General framework.....	10
4.2 Measurement issues	11
4.3 Price methods	11
4.4 Comparability with output data	11
5. Evaluation of measurement and future challenges	12
6. International progress	12
7. Conclusions	13
8. References.....	13

1. Introduction

The background to the analysis of travel agency activities within the Voorburg Group on Service Statistics dates back at least to 1995, when the 10th Meeting included The Hotel and Travel Agency Sector: Methodological Aspects Concerning the European Pilot Survey, A Feedback for the Eurostat Methodological Manual on Services, prepared by the Italian National Institute of Statistics (ISTAT). That paper addressed several methodological issues related to the statistical measurement of hotels and travel agencies. Later, at the 19th Voorburg Group Meeting, held in Ottawa in 2004, On the Measurement and Classification of the Services of Travel Agencies and Tour Operators focused on conceptual and measurement issues, particularly the net valuation of these services, while Additional CPC Product Detail: Travel Arrangement and Reservation Services proposed more detailed products in the Central Product Classification (CPC) for travel arrangement and reservation services. These three papers provide historical background on the topic within the Voorburg Group; however, they are not included in the 15 papers reviewed here, which were submitted between 2010 and 2018.

From 2010 onward, the 15 papers reviewed here show how statistical work on travel agency activities evolved within the Voorburg Group. At the Vienna meeting in 2010, Statistics Austria contributed a paper on the methodology, concepts, and results of tourism and travel statistics. In 2014, at the Dublin meeting, seven papers were discussed: INEGI of Mexico on turnover/output and basic economic statistics for travel agencies; the Statistics Bureau of Japan on the Japanese experience; Ireland's Central Statistics Office (CSO) on turnover and output measurement and on the Service Producer Price Index (SPPI); the U.S. Bureau of Labor Statistics (BLS) on the U.S. Producer Price Index (PPI) for travel agencies; the Australian Bureau of Statistics (ABS) on travel agency and tour arrangement services; and the Istituto Nazionale di Statistica (ISTAT) on the conclusions and observations from the session.

In 2015, at the Sydney meeting, the Federal Statistical Office of Germany (Destatis) introduced the sector paper on ISIC/NACE 7911 Travel Agency Activities; the Croatian Bureau of Statistics presented work on the impact of seasonality on SPPI calculation; INEGI of Mexico addressed turnover/output measurement for other reservation services; the U.S. Census Bureau reported turnover/output measures for those services; and Destatis circulated a discussion paper on turnover and prices for ISIC 7990. In 2018, at the Rome meeting, Statistics Canada presented Output Measurement of Travel Arrangement and Reservation Services, while Statistics Netherlands presented SPPI for Intermediaries. Together, these 15 papers form the basis of the review developed in the following sections, particularly regarding the definition and classification of the activity, output measurement, and the development of price indexes.

2. Description and characteristics of the industry

2.1 Industry definition

Under the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4), travel agencies are economic units whose principal activity is the intermediation of travel services, including transport, accommodation, excursions, and package holidays. Their role is to connect customers with service providers and assist with travel arrangements and bookings.¹

From a statistical perspective, the main characteristic is that travel agencies do not directly produce the travel services they sell. Their output is therefore the intermediation service and should be measured on a net basis, through booking or service fees, commissions, and other charges retained by the agency, rather than by the full value of the travel services sold.

However, identifying and classifying these activities remains challenging. In practice, it can be difficult to distinguish travel agencies from tour operators and other reservation service providers. This has become more complex with the growth of Online Travel Agencies (OTAs) and business models in which the same enterprise performs several functions. Technological change and the evolution of marketing and distribution arrangements have also transformed the industry.

In this context, ISIC Rev. 4 emphasizes the importance of classifying economic units according to their principal activity and the nature of their productive function. For statistical measurement, the intermediation service provided by travel agencies should therefore be clearly distinguished from the travel services produced by other industries.

2.2 Comparison of industry and product classifications

In general, industry classifications help identify the activities of travel agencies in a comparable way, although there are differences in their structure and level of detail. The main differences are listed below:

¹ International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4.
https://unstats.un.org/unsd/publication/seriesm/seriesm_4rev4e.pdf

Table 1
Industry classifications related to travel agency activities

Name	Acronym	Version	Country/area	Code/Class	Main difference
International Standard Industrial Classification of All Economic Activities	ISIC	Rev. 4 (2008)	International - United Nations	7911 Travel agency activities	International reference; distinguishes travel agencies from tour operators and other reservation services.
Statistical Classification of Economic Activities in the European Community	NACE	Rev. 2 (2008)	European Union	79.11 Travel agency activities	Closely aligned with ISIC for this activity.
North American Industry Classification System	NAICS	2012	Canada, United States and Mexico	561510 Travel Agencies	Identifies travel agencies under a specific NAICS code.
Japan Standard Industrial Classification	JSIC	Rev. 13 (2013)	Japan	7911 Travel operator / 7912 Travel agency	ISIC 7911 is split between JSIC 7911 Travel operator and 7912 Travel agency.
Australian and New Zealand Standard Industrial Classification	ANZSIC	2006	Australia and New Zealand	7220 Travel agency and tour arrangement services	Combines travel agency and tour arrangement services in the same class.

Regarding products, the Central Product Classification (CPC) and the Statistical Classification of Products by Activity (CPA) of the European Union distinguish between transportation and lodging reservations, cruises, and package tours. The North American Product Classification System (NAPCS) provides additional information on domestic and international reservations, business travel, insurance, and travel documentation.

2.3 Market conditions

This industry typically accounts for a small portion of the economy, although its size and structure vary considerably from one country to another. The report “Measuring the Output of Travel Arrangement and Reservation Services” from Canada (2018) indicates that NAICS industry 5615 accounted for 0.1% of GDP in 2016; Ireland’s report “Measuring Turnover and Output of Travel Agency Activities” (2014) recorded 210 enterprises and a turnover of 870.6 million euros in 2012; the U.S. “Producer Price Index for Travel Agencies” (2014) recorded 15,804 establishments and revenue of approximately 17,300 million U.S. dollars in 2007; while Australia’s Travel Agency and Tour Arrangement Services (2014) registered 4,897 enterprises in 2012–2013 and output of approximately 7,000 million Australian dollars in 2009–2010.

Ireland’s Turnover and Output Measurement for Travel Agency Activities (2014) identifies the decline in commissions on airline ticket sales and the growth of direct internet sales as major

structural changes. Commissions, which had been around 9% of ticket prices, decreased and, in some cases, disappeared. Agencies responded by charging customers service fees and focusing more on hotels, package holidays, and services for business travelers. Croatia's Impact of Seasonal Character of Services on Price Index Calculation in Travel Agencies, Tour Operator Reservation Service and Related Activities (2015) highlights seasonality, as a significant portion of these services is concentrated in the second and third quarters.

Regarding market structure, Australia's Travel Agency and Tour Arrangement Services (2014) describes the industry as highly competitive, with a few large enterprises and a large number of small and medium-sized enterprises competing across market segments. It also notes the growth of online travel agency services. Croatia's Impact of Seasonal Character of Services on Price Index Calculation in Travel Agencies, Tour Operator Reservation Service and Related Activities (2015) also emphasizes significant seasonality, with a significant concentration of certain services in the second and third quarters of the year.

2.4 Industry-specific characteristics

ISIC Rev. 4 class 7911 covers agencies whose primary activity consists of selling travel, tour, transportation, and accommodation services to the general public and to business customers. This class includes the intermediation and sale of such services by travel agencies, but does not include the direct provision of transportation or accommodation services when this is the primary activity of the economic unit

Travel agencies may be rewarded for their services through booking or processing fees, commissions, change fees, surcharges, markups depending on the business model (the difference between the purchase price and the selling price), Global Distribution System (GDS) incentives, hourly rates, consulting services, and travel management services. Operations rely on global distribution systems, online reservation systems, online travel agencies (OTAs), and tourism service providers. Several papers emphasize the need to understand the business process before designing questionnaires on turnover or pricing.

Product composition and customer characteristics are important factors in statistical design. Statistics Canada's Output Measurement of Travel Arrangement and Reservation Services (2018) reports that, in 2016, 35.2% of travel agency sales came from packaged tour products, 33.8% from airline seats, and 15.7% from cruises, transportation, and lodging sold as individual products; the remainder came from service charges, travel insurance, and other sales of goods and services. The paper also distinguishes sales to individuals and households from sales to businesses and other clients. Ireland's Turnover and Output Measurement for Travel Agency Activities (2014) notes that the Annual Services Inquiry does not identify turnover by final user and therefore does not distinguish between consumer and business expenditure. In contrast,

the U.S. Producer Price Index for travel agencies (2014) differentiates between business and leisure travel and also includes travel management services for corporate clients.

3. Output measurement

3.1 General framework

The countries examined use a common measurement framework that combines economic censuses, tax or administrative records, and annual, monthly, or quarterly structural surveys, depending on the available information in each country.

The unit of observation varies by country: Mexico focuses on the establishment; Ireland, on the enterprise; Japan uses both; and the United States reports consolidated prices at the corporate headquarters when there are multiple business units, with the establishment being the unit of observation.

Regarding the production measurement, the recommended practice is to distinguish between gross revenue and net revenue or margins. The first reflects the commercial scale of the activity, while the latter better represents the intermediary's output and prevents double counting in the national accounts.

3.2 Measurement issues

The main issue is the mixing of gross and net records. Canada reports that this situation can distort the stratification by size and the survey weights, because similar enterprises may receive very different weights depending on whether they report gross or net revenue.

Gross revenue provides only a limited measure of production when the cost of goods sold is high. In Ireland, gross value added accounted for 7.6 % of revenue, while the cost of goods sold accounted for 88 %. Therefore, comparisons between industries based exclusively on gross revenue can be misleading.

Business heterogeneity, the coexistence of agency and purchase-and-resale models, the lack of data by product, the overlap with classes 7912 (Tour operator activities) and 7990 (Other reservation services and related activities), and the difficulty in distinguishing between enterprise operations and sales to final consumers all strengthen the measurement of output and its use in input-output tables or GDP.

3.3 Methods used

The methods observed combine censuses, surveys, and administrative records. For example, Japan uses a Monthly Survey of Service Industries along with an Economic Census; Canada combines surveys and administrative records; Mexico uses an Integrated System of Monthly and Annual Surveys; Ireland uses an Annual and Monthly Survey of Services; and the United States uses an Economic Census, as well as Annual and Quarterly Surveys of Services.

The most advanced statistical systems use data cleaning and imputation processes to ensure the consistency of income data. Statistics Canada, for example, converts gross amounts to net amounts when it identifies cost of sales at agencies that, as intermediaries, should report the remuneration they retain.

To improve measurement, several papers recommend collecting more detailed data by activity or product. Japan already collects revenue data by economic activity; the United States organizes its products according to the NAPCS; Mexico is considering incorporating modules based on the same NAPCS classification system into the country's Business Registry; and Germany recommends having more product-level information available for the national accounts and the Services Producer Price Index (SPPI).

3.4 Comparability with price indexes

Comparability improves when income data and the SPPI measure the compensation retained by the agency. In the United States, the Producer Price Index, the Economic Census, and the Bureau of Economic Analysis (BEA) use a harmonized concept of production. Comparability decreases when gross revenue is compared with the prices of a net service or when a deflator is used that does not reflect intermediation. In the absence of a sector-specific IPPS, Canada uses the Consumer Price Index (CPI) for all services, excluding taxes, which reduces accuracy and makes it difficult to estimate service productivity.

Several documents indicate that the weightings for price indices should be based more on gross value added or net income than on gross income, especially when resale costs account for a significant portion of economic units' results. Ireland specifically suggests weighting an SPPI for travel agency activities on the basis of gross value added (GVA) rather than turnover, because the high cost of sales means that turnover substantially exceeds the commissions and fees earned on sales.

Table 2
Comparability between revenue and price measures

Measure	Aspect measured	Advantage	Comparability issue
Gross revenue/turnover	Total value of sales	Easy to collect; useful for measuring commercial scale	May include the value of services produced by third parties and overstate the agency's own output
Net revenue or margin	Service fees, commissions, and margins retained	Consistent with net valuation of intermediation output and avoids double counting	Requires consistent gross/net reporting and an understanding of business accounts
Gross value added	Output less intermediate consumption	Better basis for weights and real-term comparisons	Usually available only annually and with a time lag
SPPI - fixed booking fee	Direct price of a repeated service	Directly reflects an explicit transaction price	Does not cover complex commissions or merchant-model margins
SPPI - percentage fee/commission	Commission rate applied to the booked value	Captures changes in both commission rates and product values	Requires an appropriate price index for the underlying service and quality control
SPPI - merchant-model margin	Difference between selling price and purchase/wholesale price	Suitable for online travel agency merchant-model transactions	Requires comparable bookings and reliable margin data
CPI as a proxy	Cost of travel or general services	Available when no SPPI exists	Does not directly measure intermediation output and may miss quality or productivity change

4. Measurement of SPPI

4.1 General framework

The IPPS for travel agencies should measure the price of the intermediary service, not the total price of the flight, hotel, or package. The documents distinguish between booking and processing fees, commissions, change fees, purchase and resale margins, and consulting or support fees. Coverage should include traditional and online agencies, business services, and, depending on the country, call centers related to reservations. In the United States, the information can be collected at corporate headquarters, even if there are multiple branch locations.

4.2 Measurement issues

The key conceptual challenge is that the price of intermediation depends on the cost of the underlying tourism service. As a result, the fee may vary even if its percentage remains unchanged. This situation is analyzed in studies from the United States, Australia, and the Netherlands.

Service quality is also challenging to control: two apparently similar reservations may require different levels of effort, complexity, or consultation, and a variation in the service booked should not be confused with a change in the agency's price. Furthermore, seasonality may prevent prices from being available for the base period. Croatia shows that some services are only offered during certain quarters, which makes it necessary to estimate missing prices or modify the comparison structure.

4.3 Price methods

For flat booking or handling fees, the preferred method is to directly use the prices of recurring services. This is typically the case for reservation fees or management fees, and it is the simplest and most robust approach when an explicit fee is available. For percentage-based commissions, they recommend the percentage-rate method or a form of price modeling: the fee is observed, and the value of the booked trip is adjusted using an appropriate index for the underlying service.

For merchant-model margins of OTAs, the U.S. paper identifies unit value, based on the average margin for a specified type of booking, as the preferred method. Australia also discusses component pricing for complex, or add-on services and approaches based on margin prices. For strongly seasonal services, Croatia was experimenting with estimating missing prices based on information provided by the informant or on prices observed for similar services.

4.4 Comparability with output data

The SPPI is fully comparable with output when both are based on the net value of intermediation, that is, the fees, commissions, and margins retained by the travel agency. The U.S. paper states that the output concept is consistent across the PPI, the Census Bureau, and the BEA the PPI is used as a deflator for travel agent services.

In countries without an SPPI, comparability is incomplete or indirect. Canada uses a general services deflator; Ireland does not compile an SPPI for travel agency activities; and Mexico reported that travel agencies were not included in the producer price index calculation.

5. Evaluation of measurement and future challenges

Measurement quality is higher when a national statistical office (NSO) adopts a net revenue or margin approach for class 7911, while retaining a gross measure as complementary information. A major limitation is the shortage of dedicated SPPIs, which can require the use of the CPI or other proxies and reduce the quality of volume indices. This situation is evident in Canada and Germany and is also observed in Mexico and Ireland.

The main challenges ahead include the classification of digital platforms and intermediaries; the treatment of enterprises acting as both travel agencies and tour operators; the measurement of unobservable margins; data by product and customer type; and seasonality. The papers reviewed do not allow us to determine whether, after 2018, Canada, Mexico, or Ireland implemented an IPPS for class 7911, nor if there is a stable international classification for online agencies and digital intermediaries.

6. International progress

The most far-reaching precedent is Statistics Austria's paper on an integrated system of tourism and travel statistics. Although it does not directly measure heading 7911, it provides guidance on how to coordinate surveys, the balance of payments, and tourism satellite accounts.

In 2014, papers from Mexico, Japan, Ireland, Australia, and the United States established a common baseline: greater coverage of income than of prices, the coexistence of traditional and digital agencies, and the need to consider the industry as one of intermediation. In 2015, Germany summarized best practices; Croatia incorporated seasonality in SPPI compilation; and the papers on class 7990 (Other reservation service and related activities) highlighted the expansion of related services and internet-based platforms. In 2018, Canada examined the integration of survey and tax data and the distinction between net and gross measurement, while the Netherlands examined the classification and pricing of intermediaries; both papers provide useful elements for current measurement challenges.

7. Conclusions

This review of the papers presented at the Voorburg Group confirms the importance of measuring travel agencies as providers of intermediation services. The full value of the travel services sold should be distinguished from the fees, commissions, and margins retained by the agency. This distinction is essential for measuring the output of the industry appropriately, avoiding double counting, and improving comparability between output and price statistics.

The papers analyzed also show that important areas for improvement remain in the statistical measurement of this activity. Among the main ones are:

- Greater availability of detailed turnover/output information by product and client type
- Treatment of enterprises that operate as both travel agencies and tour operators
- Measuring margins associated with purchasing transactions
- In particular, the development of dedicated SPPIs for travel agency activities, since their absence can limit measurement in real terms and require the use of proxy indicators.

As an area for further research, it would be useful to update the review to cover developments after 2018, especially considering the expansion of online travel agencies, digital platforms, and new intermediation models. It will be important to examine how NSOs have adapted their classifications, data collection instruments, and output and price measurement methods to these business models, and to identify practices that can support more harmonized and internationally comparable methods.

8. References

1. Laimer, Peter. 2010. Tourism and Travel Statistics at Statistics Austria: Methodology, concepts and results. Voorburg Group Meeting, Vienna. File: Tourism and Travel Statistics at Statistics Austria 2010.pdf.
2. Bravo, Ramón / INEGI. 2014. 561510, Travel agencies: turnover/Output, basic economic statistics. 29th Meeting of the Voorburg Group on Service Statistics, Dublin. File: 561510, Travel agencies turnover Output, basic economic statistics 2014.pdf.
3. Ishihara, Hideo. 2014. Mini-presentation: Travel Agency Activities in Japan. 29th Voorburg Group Meeting on Service Statistics, Dublin. File: Mini-presentation Travel Agency Activities in Japan 2014.pdf.

4. Keating, Joseph. 2014. Turnover and Output Measurement for Travel Agency Activities. 29th Voorburg Group, Dublin. File: Turnover and Output Measurement for Travel Agency Activities 2014.pdf.
5. Keating, Joseph; O'Hanlon, Niall. 2014. Service Producer Price Index for Travel Agency Activities. 29th Meeting of the Voorburg Group, Dublin. File: Service Producer Price Index for Travel Agency Activities 2014.pdf.
6. Frawley, Katie / BLS. 2014. United States Producer Price Index for Travel Agencies. 27th Voorburg Group Meeting on Service Statistics, Dublin. File: United States Producer Price Index for Travel Agencies 2014.pdf.
7. Luo, Qinghuan; Girazova, Sonja; presented by Terry Bradley (ABS). 2014. Travel agency and tour arrangement services. 29th Voorburg Group Meeting on Service Statistics, Dublin. File: Travel agency and tour arrangement services 2014.pdf.
8. Politi, Mauro. 2014. Session Travel Agency Activities Discussant's Remarks on Minipresentations. 29th Voorburg Group Meeting, Dublin. File: Session Travel Agency Activities (ISIC 7911) Remarks on Mini-presentations 2014.pdf.
9. Lorenz, Susanne. 2015. Sector Paper ISIC/NACE 7911 Travel Agency Activities. 30th Voorburg Group Meeting on Services Statistics, Sydney. File: SIC NACE 7911 Travel Agency Activities 2015.pdf.
10. Dozet, Maja; Kalčić Ivanić, Josipa. 2015. Impact of Seasonal Character of Services on Price Index Calculation in Travel agencies, tour operator reservation service and related activities. Poster session. File: Impact of Seasonal Character of Services on Price Index Calculation in Travel agencies 2015.pdf.
11. Bravo Zepeda, Ramón / INEGI. 2015. Other reservation service and related activities (ISIC 7990): 561590 Other reservation services (turnover/Output, basic economic statistics). 30th Meeting of the Voorburg Group on Service Statistics, Sydney. File: Other reservation service and related activities (ISIC 7990) 561590 (turnover Output, basic economic statistics) 2015.pdf.
12. Murphy, John / U.S. Census Bureau. 2015. Other Reservation Services: Turnover/Output Measures in the US. 30th Voorburg Group Meeting, Sydney. File: Other Reservation Services Turnover Output Measures in the US 2015.pdf.

13. Oertel, Jutta / Destatis. 2015. 7990 other reservation service and related activities – Discussion on Turnover and prices. 30th Meeting of the Voorburg Group on Service Statistics, Sydney. File: other reservation service and related activities - Discussion On Turnover and prices 2015.pdf.
14. Statistics Canada. 2018. Output Measurement of Travel Arrangement and Reservation Services. Voorburg Group Meeting, Rome. File: Output Measurement of Travel Arrangement and Reservation Services 2018.pdf.
15. Lomax, Mark / Statistics Netherlands. 2018. SPPI for Intermediaries. Voorburg Group Meeting, Rome. File: SPPI for Intermediaries 2018.pdf.