**34th Meeting of the Voorburg Group on Service Statistics**

**Monday 30th September – Friday 4th October, 2019**

**Paris, France**



Opening Remarks & Meeting Agenda Overview | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/co-chair-slides-Paris.pdf)

Voorburg Group co-chairs: Participant introductions – **All**

The Co-Chairs opened the meeting with a welcome to all of the delegates and thanked INSEE for all of the hard work. The Co-Chairs introduced Christel Colin, Business Statistics Director, INSEE. Ms. Colin also greeted the delegates and provided some opening comments.

France has been very active in the Voorburg Group over the years. France hosted the 5th meeting in 1990 and the 13th meeting in Nantes in 2002. Although the business statistics section operates out of Lyon, INSEE chose Paris for the meeting to simplify the transportation for all of the delegates. This week, the Voorburg Group will be provided an overview of the statistics program at INSEE and have the opportunity to visit the Musée du quai Branly – Jacques Chirac and have a gala dinner, along with other activities.

Ms. Colin gave a special welcome to new participants. Since the Voorburg Group started in 1987, many countries have made significant progress in the coverage of services. In Europe, we went through SBS, STS and now FRIBS. The Trade and Services session is important to show the growth and the importance of these activities. Now the Voorburg Group is dealing with more difficult topics: the digital economy prices, platforms, advertising based industries, and new communications areas. The Voorburg Group is also revisiting sectors that have been deeply impacted by technology. Third party data sources are also being looked at and the potential is huge but experience is needed. Lastly, we will set the agenda for the next meeting and work on the strategic plan. Lots of discussion of cooperation, developing worldwide common practices, etc. The Voorburg Group does not act as an authority but rather a collaborative effort to share experiences. This requires commitment on the part of all those who present and participate.

Ms. Colin finished her remarks by offering thanks the co-chairs and INSEE staff. She expressed her best wishes for a fruitful meeting.

Ms. Murphy thanked Ms. Colin and introduced the Bureau. This was followed by introductions by each of the delegates. This was followed by a discussion of the agenda, logistics for various sessions, voting procedures for the future agenda and a presentation of the vacancies on the Bureau. One nominee with output focus would help keep the Bureau balanced. Finished with a thank you to all who prepared papers for slides, volunteered to be a session chair or discussant, and everyone who contributed to the materials and sessions for the meeting.

Country Progress Reports – **John Murphy**– **US Census** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Country-Progress-Report-1.pdf)

A delegate asked if there were other sources of alternative data being used beyond what was on the list in the slides. Mr. Murphy responded that 19 countries responded to the inquiry and the list was compiled from those responses. Another delegate added that there are additional sources of alternative data that are being used for CPI purposes

Session: Sector Papers   
**Session leader: Voorburg Group Co-chairs**   
ISIC, 71.1 (only presentation, no paper). **Jakob Kalko (VG)/Maja Dozet (Croatia)** | Slides: output | [Slides: SPPI](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Revisited-sector-paper_SPPI_711.pdf)

The discussion started with the UK providing some aspects of quality adjustment that they are focusing on: bundling architectural and engineering services issues with construction, co-production of architecture and engineering services, and data collection issues with getting data that will allow for practical adjustment based on those elements. These questions are not easily answered through a survey. It is possible that building information management (BIM) systems might have some useful metrics but it is not clear how to obtain that type of information.

Ms. Murphy asked the group about the plan going forward for a revisited sector paper? Mr. Kalko, the session leader will not be attending next year. There is not much change for the output side and Croatia did a very complete summary on the prices side. We need to add the UK experiences to a final paper for next year. There will not be any additional presentations on this topic but we will ask for an author so that a final paper can be posted to the website.

Break

Session: Issues Papers  
Data processing, hosting and related activities (ISIC 63.11). **Christian Stock (Austria)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/Issues-paper_data-processing_cloud-computing_Austria.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Presentation_data-processing_cloud-computing_Austria.pdf)

The discussion started with a delegate question about the units that are surveyed, establishments or enterprises, when developing indices. Austria responded that establishments are the basis. The next question related to latency as a price determining characteristic. It was noted that to reduce latency, a data center needs to be located near the user. The creation or expansion of data centers creates additional cost.

Canada asked if any countries have experience for an index of cloud computing alone? The UK has some experience. They looked at this with a team and published a research paper in December 2018. Developing price indices for the individual product lines and then how to adjust those into a UK price, getting weights for the products has been a key challenge.

The US BEA noted that a private firm does a cloud price index. The BEA evaluated the product and it is possible that it might make a good source.

The IMF offered that the US has created hedonic price indexes that drastically differ from some of the published data processing, hosting, and related services series. There does not appear to be much consistency in what is being included across countries. The terminology does not exist in any of the common classifications. The classification really needs to be changed or updated with consistent terminology. If we clarify the classification we can greatly improve the understanding of what is out there and maybe get a bit more coherent.

The US added that cloud computing is a lower level index in SPPI and the prices do not really change all that much. The US tries to quality adjust when the price changes however there could be missed quality change if the price does not change. The US has an hedonic model to hedonically estimate the price and will be glad to share it with the delegates once it is used in production.

The discussion finished with a question about the classification of data brokers. Should they be classified here in 6311 or perhaps elsewhere. Mr. Murphy described data brokers as simply collecting data into a database and selling it. The data could be coming from many different sources (e.g., social media, supermarkets, etc.) Mr. Murphy’s opinion is that data brokers should be classified in ISIC 5812: Directories and mailing lists. Data brokers are collecting data and selling access to the resulting databases. There is not currently a ruling or case law decision but the activity should be addressed in the pending review of ISIC for additional clarity.

Session: Issues papers continued  
Intermediation in the provision of services **(John Murphy, US Census)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Issues-Paper-Intermediaries.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Intermediaries-Issues-Slides.pdf)

Spain had a general classification question observation about where things are and in particular accommodation services vs arranging accommodation services. There is not a lot of agreement and clarification is needed. Mr. Murphy stated that it is Important to identify these in industries other than accommodation and transportation as well. There are many questions about where to measure the output of the platforms and providers. Should they be together as integral parts of the service or separated and collected in a platform industry? For national accounts purposes, it is important to link the intermediary services back to the core service but policy makers are very interested in the growth of the platform activities as a separate topic.

Finally, a delegate noted after the session that just renaming data processing and hosting as cloud computing could help focus the issue by itself.

Lunch

Export of services**(Jakob Kalko, co-chair Voorburg group)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Export_services_300919.pdf)

The discussion started with the UK offering to describe their experiences with export of services. Initial work should be done within the next several months and they might have something to present at the Voorburg Group next year. As for transfer prices, they are very hard to handle even for goods. The structures of enterprises are very complex. Prices are more difficult than output because of the value of transformation or similar that can be included (or actually excluded from the transfer prices).

In 2018, Poland started to modernize the price statistics. Poland collects the type of client and whether or not the client is resident of Poland. That allows comparisons of differences between prices to residents and prices to nonresidents. This is a work in progress and still pending validation of sufficient coverage. For programming services, respondents provide price data for 200 representative services and we know which were provided to nonresidents. Poland is working to develop a B2X methodology.

Sweden noted that this was a topic at the Nordic group meeting. Most countries were not aware of the case but the tax data was not available across countries and we could not even get a name and industry code from Tax to link it in the business register. Systems are not really designed to get the type of detailed tax declarations that we need.

Mr. Kalko summarized and noted that while there have been some developments in this area more work is needed.

Session: Cross Cutting Topic (1) – SPPIs by customer sector  
**Session leader: Andrew Baer (IMF)** [|slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/SPPI-by-Customer-Sector-Discussant-Remarks.pdf)   
Presentations **: Rohan Draper/Marcus Friden (Sweden)** | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG-2019_Sweden_SPPIs_by_customer_sector.pdf) |[slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG-2019_Sweden_SPPIs_by_customer_sector_ppt.pdf)**, Ildiko Hamvainé Holocsy (Hungary)** | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG_sectors-by-customer_Hungary_IHH_20190930_paper.pdf)|[slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG_SPPIs-by-customer-sector_Hungary_IHH_20190930_slides.pdf)**, Jean-Marie Fournier (France)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/VG-2019-French-contribution-SPPIs-by-customer-v-2808.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/PWP-VG-2019-French-contribution-SPPIs-by-customer-v-0905.pdf) – followed by small group discussions

Mr. Baer, of the IMF, presented summary discussant remarks. He discussed using CPI to represent B2C. Normally consumer prices are converted to basic prices by removing taxes. However as the situation has changed, so has the conversion to basic prices. Now one must consider adjusting for intermediation services – platforms – because what the customer pays is not what the producer receives. In addition to conversion to basic prices, there must be a review of the impact of imports in consumer expenditures. The CPI is probably not a good choice to estimate SPPI when there is little or no domestic production of a service that is consumed. COICOP to CPC concordance is hard. How much are we saving by making these types of splits in an industry like airlines? It might be simpler to collect BtoAll directly than go to a provider twice. Intermediated services are different and really should be treated differently.

Are we losing anything when transactions shift between customer types? Does a channel shift have impacts that will be missed in a B2All index?

French paper notes that SPPI by customer improves the calculation of NA using the expenditures approach. Mr. Baer asked for more information about use of national accounts for weighting SPPIs. In particular, is the weight based on output or value added?

Break

The discussion format took the form of small groups. Each group discussed the presentations and reported out.

**Group 1:**

Group 1 noted that 7 countries are doing B2All indices, 5 were focused on B2B, and 2 are still working with SPPI development. There is a lot of work necessary to expand coverage from business to all. It may be possible to use CPI to cover gaps but it really is not optimal to mix methods. Prices from a CPI would need to be adjusted for subsidies and value added taxes. Two countries reported compiling separate indices by class of customer while another collects separately but does not publish the results. Six countries do include exports within the scope of B2B SPPI but cannot identify export transactions separately.

**Group 2:**

Many of the participants in group 2 are doing B2All indexes already. There is also ongoing work to expand coverage.

Group 2 also noted that there are different prices for businesses and consumers in many cases. One country does collect class of customer in transactions but publishes only B2All, not disaggregated B2B and B2C.

Chile and Costa Rica are very interested in getting the class of customer indices but others just do not know or have never been asked.

Most include exports in B2B or B2All but do not provide separate B2X indices.

**Group 3:**

Group 3 was about half and half B2All and B2B. One country that was doing both B2B and B2C noted that the indexes were very close so maybe respondents are not giving what was asked for. EU countries are moving toward B2All because of FRIBS. Most used some CPIs and evaluated based on whether or not the prices are different (e.g., taxi prices are the same no matter the customer type). Most do adjust CPI for SPPI use based on tax. Two reported including separate indices, most also include exports in B2B but do not identify the difference in the data. Lack of HS codes for services and inconsistent taxation make it hard.

**Group 4:**

Most participants in group 4 were producing B2All indices. Some did split class of customer at the lower level. The bulk of countries did combine CPI and SPPI but split on whether that was done by prices or by the national accounts. The decision to use CPI was based mostly on budgetary considerations. In some cases, data were not adjusted when using CPI. Three countries reported separate indexes for internal use that were not separately published. Most include exports in the SPPI and National accounts does want the indexes for domestic and export to be split in the future.

Mr. Kalko summarized the situation and noted that there is more promise in collecting export prices than initially suspected. The session will result in an issues paper prepared by Mr. Baer, of the IMF, for presentation next year. Countries should contact Mr. Baer, of the IMF, to have their experiences included in the issues paper.

Input to future agenda **(Voorburg Group co-chairs)**   
Future Agenda | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Future-Agenda.pdf)

Mr. Murphy presented the summary of responses to the future agenda survey. In the presentation he proposed new categories to simplify the future agenda survey in the future.

Mr. Kalko explained the voting process. Each country will get eight votes that can be applied in any number to topics of interest. Each country can vote for up to eight topics or can apply multiple votes to a single or subset of topics. Voting will take place from Tuesday morning until lunch on Thursday. The idea is to get a feeling for the interest in the proposed topics. This is not a democracy because the Bureau has to consider who can provide presentations and how to fit topics into a unified agenda. Please vote for areas that you want to learn more about but also topics for which you can provide a contribution. Previously, transfer prices was a very popular vote getter but there really is no experience that we can learn from. It is hard to have a session with no contributions.

Tuesday meeting

Session: Industries – mini-presentations.Advertising (ISIC 7311)  
**Session leader: Christian Puchter (Austria)** | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Session-leader_Advertising.pdf)   
Output: **Agnieszka Matulska-Bachura (Poland)**   
SPPI: **Agnieszka Matulska-Bachura (Poland)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/01OctPoland7311AdvertisingPaper.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/01OctPoland7311AdvertisingSlides.pdf)**, Itsik Tal (Israel)** |[paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/7310-Advertising-Israel_final_paper.pdf)| [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/7310_Advertising-Israel_final_slides.pdf)**, Cristina Cecconi (Italy)** |[paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/01OCT.Cristina.Cecconi.Advertising_17sep-1.pdf)| [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/01OCT.Cristina.Cecconi.Advertising_PPP_24sep_slides.pdf)**, Yann Leurs (France)** |[paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/01OCT.Cristina.Cecconi.Advertising_17sep.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Voorburg_2019_7311_Advertising_Agencies_France_slides_final.pdf)  
Discussant: **Susanna Tåg** **(Finland)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/discussant_7310.pdf)

Discussion – A delegate asked Poland to provide some additional information about the response rates for the 10 plus employee units and the less than 10 employee units. Poland clarified that the large units have about a 70% response rate while the small units are only around 50%. The delegate further inquired about how Poland addresses nonresponse errors for the 30% of large units and 50% of small units. Poland uses other sources to impute for large units when possible but uses VAT in all cases as a last resort.

The United States BLS noted that there is much coverage and discussion of the media but asked if anyone does an index for the creative services because the US has trouble getting data. France collects by type of media but doesn’t really address creative services. Italy does not collect the creative services. Israel also does not do a separate index for the creative services. Poland also does not have a creative services index and has not seen a demand for that type of product. Austria does collect the creative services and uses an hourly charge out rate. Austria does have cooperation problems but mandatory reporting has helped.

The group next focused on the issue of measurement and sources of information. Several delegates raised questions about net or gross measurement, as well as the potential for double counting based on the presentations. Each of the presenters noted that they are careful to avoid double counting but that there are different practices in each country so the measures taken tend to be unique. Presenters noted a mix of practices for measurement. Some obtained gross data and commission rates, others received a net figure. In each case, the presenters noted that the practices in the prices program matched the practices in the turnover data. Finally, two of the presenters noted that they use third party data to weight the indexes.

There will be a revisited sector paper that includes the results of the group discussion prepared for presentation next year.

Break

Session Cross Cutting Topic (2) -Digital advertising activities in service industries (outside of advertising industry)  
**Session leader: Dorothee Blang (Germany**)  
Presentation: **Moegi Inoue (Bank of Japan)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/NEW_Digital_Advertising_Moegi_BOJ_.pdf)

The Bank of Japan presented the slides with a follow-up by Germany. The initial questions raised before broad group discussion focused on the confrontation of the industry view and the product view. Since this session was about advertising outside of the advertising industries, there are many questions about where the products show up and in what sectors. Who is providing the advertising time and space that is not included in things like broadcasting and publishing? How should substantial revenues for advertising be addressed when the entity is classified in another sector or area (social media, reservation services for houses or cars, etc.)? With that as a foundation, the group discussion followed.

A delegate thanked Bank of Japan for the excellent presentation and noted that the quality characteristics portion was fascinating. Does Japan have access to a large data set of quality characteristics or does that come from each individual site? Japan goes to the advertising agencies because they can analyze the data by industry but tries also to get the quality score from individual sites.

Another delegate raised questions about sampling practices and in particular, what is used as a sampling frame. Germany – on sampling – how do you sample – or in other words, what is your frame? Japan looks at this during initiation, does research, and referenced the information from the biggest agencies in Japan. The delegate next asked about the classification of some units. JSIC had created a platform industry that includes many entities that would be classified elsewhere under ISIC. The US noted that although seemingly unrelated business types are classified to a single platform industry in Japan, the industry is broken out in details for essentially who they are serving. For example, the slides show splits by things like accommodation, real estate, etc. That avoids part of the potential problem with a platform industry because the services can be linked back to the industry that they serve.

India asked if Japan has a regulatory requirement that data be provided to the statistical agency because they have no such requirement and do have problems getting the information in India. Japan noted that they also have problems because the survey is not mandatory. Considerable effort is put into obtaining cooperation. If cooperation cannot be obtained, they sometimes have to change the initiation strategy and try to find a different source for data. It is a struggle.

Finally, a delegate asked about how click through rates are used in Japan. Japan would need to adjust the quality but rarely has to take substitutes or replace one advertising agency for another. Japan normally has a broader product but does sometimes have to substitute one agency for another.

Session Cross cutting topic (3) New short term indicators on Services – FRIBS  
**Session leader: Jakob Kalko. VG co-chair**  
Presentation: **Thomas Jaegers (Eurostat)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/Estat-Voorburg-2019.pdf)

Eurostat presented the slides and then a group question session followed.

The first question noted that FRIBS says that wholesale should be deflated. Is there a large difference between deflated production and value added? Eurostat responded that the guidelines have to work for 28 countries. If a country can deflate value added they should do that.

France inquired about the type of deflator that should be used for wholesale trade. Eurostat responded that countries should use what they have. The goal is not to have new indicators but rather to find a method to deflate wholesale. As a practical matter, many members of the EU are reluctant to develop new deflators.

Lunch

The agenda was modified to move the IMF presentation and begin the afternoon with short term accommodations.

Session: Industries- minipresentations. Short term accommodation (ISIC 5510)  
**Session leader: Dorothee Blang** (**Germany**) | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Sessionleader-5510.pdf) Output : **Ramon Bravo (Mexico)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/october1st_ramon_bravo_isic5510_18062019.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/october1st_ramon_bravo_isic5510_13092019.pdf)**, Babro Von Hofsten (Sweden)** | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Turnover_output-5510-Sweden_paper_v2.pdf) | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Turnover_output-5510_Sweden_presentation_v2.pdf)   
SPPI: **Dragos Ifrim (Canada)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/TASPI-Voorburg2019_final_paper.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/TASPI-Voorburg2019-slides.pdf)**, Ildiko Hamvainé Holocsy (Hungary)** | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG_I5510_Prices_Hungary_20191001_paper.pdf) | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/VG_I5510_Prices_Hungary_20191001_slides.pdf)**, Maria Velasco Gimeno (Spain)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/01Oct.ShortTermAccommodation.Spain_.pdf) | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/HPI_SPAIN_VOORBURG-GROUP-003.pdf)   
Discussant: **Ulla Virtanen (Finland)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/Voorburg_Paris_ISIC5510_Discussant_final.pdf)

The session began with the presentations from Mexico and Sweden.

The Canadian presentation included additional content not covered in the paper or slides. The additional content presented the modernization program for PPIs and the four pillars of the program.

1. Data quality – can we be compliant with published quality standards like ISO or similar? Document your processes.
2. Timeliness of data – BLS is no more than 10 days after the reference month but Canada is one month after the reference month.
3. Relevance – is late data relevant? User consultation process – they are working with the accounts to see how we can meet their needs but also meet the needs of external users
4. Training of Staff with a five point plan: a) basic index theory and quality adjustment (four modules), b) on-the-job training, c} subscription to data camp to help with things like R and Python, d) subject matter also works with math stats on estimation and basket updates to know the more technical knowledge, and e) increased focus on analytical work regarding the indices.

The presentations continued with the presentations from Hungary and Spain.

Ulla Virtanen from Finland presented the discussant remarks. The industry discussed is labor intensive and the importance to GDP varies greatly between countries. Many countries cover the industry and many exceed the EU requirements based on national importance. There are challenges with black market activity, private market transactions that are difficult to track, and an increasing amount of activity on intermediaries. The impact of intermediaries was large for some countries but Sweden and Finland see almost 1/3 of their listings from private parties (households).

Administrative data can work well but when something in the administrative data changes, problems result. There is also a growing problem with multinational enterprises. Joint agreements with the multinational enterprises and several countries could benefit both the countries and the respondent burden.

Web scraping is being used in several cases but can present legal or moral obstacles. Web scraping technology is readily available but there are also anti-scraping technologies that web sites can use. Purchase of data is an option but purchased data often needs significant validation and needs to be edited to remove duplication. Large data sets also require manipulation skills and it can be hard to retain staff trained in data science.

Another option is using alternative data to augment survey data. Dynamic pricing mechanisms create additional pricing hurdles. Compilers also need to be aware of regional and seasonal variations, the impact special events on demand, and shifts in the ratio of business to consumer use.

There are also still many outstanding questions about how to address quality changes in accommodation services.

Overall, the biggest concerns of those who responded to the survey were household production, AirBnB, and the prevalence of household production.

The discussion began with the observation from one delegate that the activities of intermediaries and the resulting household production is really a national accounts problem and outside the scope of business statistics. Another delegate countered that it is a business statistics problem because enterprises can and do offer properties through intermediary services and a large presence of household production can influence prices. The UK agreed that businesses use the intermediary services and business to consumer transaction occur frequently. The Netherlands questioned the problem because receipts for services with an intermediary are included in business revenues already. France questioned the discussion because the intermediaries are really reservation services rather than accommodation services. A US delegate responded that the reference is important because there is an impact on supply and capacity. In addition, different countries have different rules for recognizing short term accommodation receipts received by households. In the US, any revenue from a household for accommodation for less than 14 days a year is not subject to business tax requirements.

None of the delegates offered any current practices for addressing quality changes such as the addition of Wi-Fi.

Germany asked Canada if the API data being used was transaction data. Canada responded that it is not but study has shown that the API data tracked very closely with the transaction data. Germany noted that the API data does not have everything and timing can also be a problem. Canada decided to settle on a two week period because certain days or lags are inherent in the data. With the API, data can be collected many times.

One US delegate asked about the impact of outlet substitution bias with a shift from traditional accommodations companies to intermediaries. Another US delegate agreed and noted that there is indirect evidence of this based on the market value of a taxi medallion in New York. Values have dropped considerably with the growth or ride sharing services so there must outlet substation taking place.

The UK offered the differences for STS and national accounts. In the national accounts, some of the rentals from households to other households are brought back into the account. Now, there are actual market transactions. This is not as big a problem for ride sharing because private cars are not capitalized in the household accounts.

The final point of the discussion was a problem when there are separate building owners and managing units. Sweden creates a single unit to avoid that problem. The IMF noted a particular problem with Real Estate Investment Trusts that own properties such as hotels and hire a hotel brand to manage and operate the facilities.

Session: Cross Cutting Topic (4) – **Modern Methods**  
– PPI visualization tool – **Marcus Friden (Sweden)**  
– Transformation of the process of GDP calculation in the UK and Practical demonstration of new deflator tool. **Rebecca Keane-Craig Taylor (UK)** |[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/UK_National-accounts-transformation-and-deflator-quality_slides.pdf)

The new methods session began with a demonstration of the Swedish PPI visualization tool. The tool was developed in house by the prices program. It is a fairly simple drag and drop tool that is used not necessarily for editing (which is in the estimation system) but for quick visual validation. The reports show response rates, exchange rates, type of price reported, and there are codes for things like QA indicator, estimation methods, and similar information.

The tool also can provide disaggregated individual reports to help identify outliers and items that had a major impact. The tool also allows for comparisons across related industries such as forestry products and paper products for quick visual validation analysis.

The delegates had a number of questions about the use of SAS. Sweden reported that they used what they had available which happened to be SAS. Their estimation system took five years to develop and it is not a SAS based system.

Delegates asked about production efficiency gains. Sweden noted that it has not had a large impact on production efficiency but does make it easier to find outliers in a visualization.

The US offered to provide their visualization tool to any country that requested it. The tool was also developed in house at BLS. Canada is almost ready to report on their experience with using the US tool.

The session continued with the presentation of the UK Practical Deflator demonstration.

The discussion after the slides began with a question about use of the number of observations as a quality measure and whether there have been any conclusions drawn about the relationship of the number of observations and the index variance. UK responded that both are included but the comparisons have not yet been completed.

Sweden asked about the resources needed to develop a deflator team. The UK responded that they have about 20 staff in research and development and are hoping for four to five staff members for the production team.

A delegate noted that when there was a large revision, national accounts tends to point to price index and deflator problems. The UK is still in an early phase of transformation and work is still being done to determine the right data for deflators. Currently, the deflator and quality measures are not completely integrated though separate measures are available. The deflator team is working with national accounts to help determine when the choice of deflator is actually an issue for the resulting data.

As a final point in the discussion, Finland is focusing on establishing a deflator group. They find that it is necessary to learn a common language for volume and price statisticians. The current deflator tool manages metadata but is still missing quality measures. The delegate noted that Finland can learn from the UK, US, Sweden, and others from their reports on the development of quality indicators that has been reported at various Voorburg Group meeting in the past.

Wednesday meeting

Session: New approach to SPPI measurement. Telecommunication **(Craig Taylor,** **UK**) | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/02Oct.Telecommunications.UK_.Paper-002.pdf) | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/02Oct.Telecommunications.UK_.Slides.pdf)   
Session: Development of new SPPI in Portugal, Freight Transport by road. Room-paper | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/SPPI_Freight_Transport_by_Road_Portugal.pdf)

The Wednesday morning session started with a presentation by the UK on a new approach to measuring telecommunications in the SPPI.

The discussion started with a question about how the approach could be used in related areas. For example, when forcing more water through a pipe, the customer might improve the tap. The UK noted that they have to address the data challenges before they can address the information content that is being transmitted using the data. Telecom is really content blind when pushing data. The software and equipment are important to them, not what they are moving. Digital value is not really additive but multiplicative – if you enter a zero, then the total is zero.

Chile asked about the impact of transmission speed. The UK responded that latency is a key aspect but compression is also involved. The UK is not addressing compression but as for latency, the more you consume, the faster it must be coming. Adding an additional adjustment for latency could therefore overemphasize the latency aspects.

The session wrapped up with a concept that is new to the Voorburg Group – a room document. The Group was presented with a room document from Portugal on freight transport by road. The delegates were asked to read the paper and provide any comments or questions directly to the authors in Portugal and the co-chairs of the Voorburg Group. If the process is successful, additional room documents may be considered for future meetings.

Business statistics in France – orientations and new challenges (**Christel Colin, Business Statistics Director, Insee)** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/voorburg-group-2019_CC.pdf)   
Field surveys to collect PPIs: the benefits of close contacts with enterprises by engineers-surveyors (**Olivier Dunand, Insee** | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Voorburg_2019_Olivier-Dunand-V4.1.pdf)  
Measurement issues in intellectual property products **(Virginie Andrieux, Insee)** | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/presentationV_redevances_11_09_19.pdf)   
Reflecting complex global production arrangements in the balance of payments **(Tatiana Mosquera, Banque de France)** | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Voorbrug-group_reflecting-complex-global-production-arrangements-in-the-BOP.pdf)

The host presentations from INSEE were presented in order and all questions and observations were presented to the entire panel after the presentations.

The discussion began with some observations from delegates on the treatment of intellectual property products (IPP) royalties. One country noted that they get IPP royalties from tax data but treat it as other revenue. Another delegate noted that they have an IPP registry but once the IPP sells, they lose the ability to track or analyze the further flows. It is a problem for prices but less of a problem in the area of tracking franchises.

On the issue of FRIBS, a delegate noted that INSEE is well on the way but asked if the business register is enterprise based, how will they implement the Kind of Activity Unit (KAU) requirement? INSEE responded that they have all of the units in the register and will use a NACE based KAU when required.

On the topic of engineer-surveyors, a delegate asked if each survey required a separate visit or if all surveys were coordinated into one company meeting? INSEE responded that it depends on the complexity and number of surveys. Sometimes there is a consolidated meeting. Other times multiple meetings are required. A delegate asked INSEE if their surveys are voluntary or mandatory and INSEE indicated that surveys are mandatory.

The IMF asked how INSEE recruits knowledgeable individuals? INSEE responded that they look for experience. It was easier when unemployment levels were higher but we do rely on private sector industry workers who have business experience. Most are on contract with INSEE – we recruit people who know how to talk to business. Engineer Surveyors are the face of INSEE – they are the ones with direct contact with companies. Finding the right contact within a company is important and it is also important we interact in order to get a winning solution for both the company and for INSEE.

Another delegate asked how analysis is disseminated and whether there is a marketing strategy. INSEE said that there is not really a marketing strategy but data series and analysis are posted on the website. For sectoral studies, we reach out to associations and professionals while we work to get their input. There are also press conferences, releases, etc. as appropriate.

Lastly, the UK asked whether the flow of funds between affiliates is measured by transfer prices. INSEE responded that they are trying to address both intra and external flows.

Thursday meeting

Session: Industries – Publishing – ISIC 58.12 and 58.13 **Session leader: Yann Leurs (France**) |[slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/5812-13_Publishing_diaporama_session_leader.pdf)   
Output: **Mathieu Thomassin** **(Canada)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/03Oct.Publishing5812_5813.Canada.Paper_.pdf) |[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/03Oct.Canada.5812_13_OutputMeasurement.pdf) , **Melanie Santiago (US Bureau of Labor Statistics)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/US-VG-2019-Publishing-Newspapers-Periodicals-Directories-and-Mailing-L.._-002-1.pdf) |[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/US-VG-2019-Publishing-Newspapers-Periodicals-Directories-and-Mailing-L.._-004.pdf)   
SPPI: **Melanie Santiago (US Bureau of Labor Statistics)** , **Maja Dozet (Croatia)** | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/SPPI-Publishing-activities-Croatia.pdf) |[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/J-58-Publishing-activities-Croatia.pdf) , **Cristina de la Fuente Jimenez (Spain)** | [paper](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Publishing-Spain-paper.pdf) |[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/Publishing-Spain-slides.pdf)   
Discussant: **Eveli Sokman, Estonia** |[slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/5812-13_Publishing_discussion_Estonia.pdf)

The publishing session included an introduction and the presentation of output and prices experiences. Estonia followed with discussant slides.

The discussion began with some observations about the changing nature of publishing. One delegate asked if the internet should be a different form of publishing or if it is just a different mode of providing published content. Another delegate noted that things like social media sites create space, households provide content and the space is sold to advertisers. Both delegates noted that despite the consumption of content by households, the sale of advertising is really a B2B activity.

Another brief discussion point related to data brokers and their place in publishing. By collecting facts, aggregating them across sources, and selling organized results, is this really database or directory publishing?

The UK noted that they are finding that the data developed from users of social media is becoming more valuable than the content or service being provided. Companies are beginning to stop charging for the underlying service to get more data from more users. That debate needs to occur because the classification change is a bit of a problem. Overall, the group appeared to agree that additional work and study is needed on the trend of greater monetization of data collected by on-line providers.

Session : Future plan and progress following the VG strategic plan **Session leaders: VG co-chairs** |[slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/VG-Bureau-Update-and-Progress-on-the-Strategic_2019_draft.pdf)   
Report on feedback for future agenda (Monday)  
Status of achievements in the strategic plan  
[Updated glossary](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/Glossary-of-Voorburg-Group-2019-Update.pdf)

The Bureau Co-Chairs presented the achievements made by the Group under the strategic plan. The Co-Chairs will post the summary slides on the website.

IMF Data for Decisions Project on SPPIs. **Andrew Baer** | [slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/IMF-Presentation-Voorburg-Group-2019.pdf)

The IMF presentation rescheduled from Tuesday was presented.

The discussion started with observations from a delegate with experience in creating new programs and surveys. One big issue is data collection. The delegate asked if the IMF was planning on providing strong guidance in that area. IMF said yes, they evaluate what is available and try to get the best data available. The IMF is focusing on countries that already have PPIs so the assumption is that there are some data collection infrastructure resources available.

Another delegate asked if the Voorburg Group could assist an influx of newly working countries during the annual meetings? The Co-Chairs noted that the steps are being taken. The Group addresses cross cutting topics like big data, classification, digital economy, etc along with targeting areas of interest for newly working countries in sectors such as transportation. The work of the group is documented and available to provide assistance to countries that have just begun SPPI development.

Session: Cross-cutting Topic (5)– Practical experience in using third party data sources (other than administrative and tax data). Poster session  **Session leader: Erika Barrera (Chile**)  
**Mariah Nilsson (Sweden)** | [poster](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/3OCT.Mariah.Nilsson.DigitalAnnualReports.poster.pdf) | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/3OCT.Mariah.Nilsson.DigitalAnnualReports.paper_.pdf) , **Bonnie Murphy (US BLS)** | [poster](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/03OCT.Bonnie.Murphy.AlternativeData.poster2.pdf) | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/03OCT.BonnieMurphy.USBLSAlternativedata.paper_.pdf) , **Ana Aizcorbe (US BEA)** | [poster](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/4OCT.Ana_.Aizcorbe.RidesharingData.poster.pdf) , **Anthony Dawson (Ireland)** | [poster](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/07/01Oct.Anthony.Dawson.3rdPartyInsurance.poster.pdf) | [paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/08/01Oct.Anthony.Dawson.3rdPartyInsurance.paper_.pdf)

Poster session on Practical uses of alternative data sources. The delegates broke into groups and rotated through each of the poster presentations. Each presenter provided an overview and report of the questions asked and topics of discussion.

Summaries of Poster Sessions Reports

Bonnie Murphy– BLS: One question was did BLS break time series? No, the BLS used the overlap method. How much data is used in the weighted average basis for volume traded in dollars? BLS noted that they removed very little data in production. Another question was about free or cheaper alternatives to the BLS data source. BLS said that the regulator had legal issues so we couldn’t get the data for free. The US does not have statistical act guaranteeing access so BLS must purchase the data. Another question revolved around getting informed consent. The BLS noted that the data were provided to a second party for resale so there is a transitivity of informed consent. There is no sharing of turnover data from the Census Bureau. BLS tries to mitigate the cost and supply risk by using long term contracts with stable providers. Another question asked if BLS could get a discount by cleaning the data for the provider. BLS said no, that is not an option because legal protections are in place for both sides. The methodology changed from single transaction to weighted average. This results in less work overall but the work on the analyst goes up, data collection and respondent burden goes down.

Anthony Dawson – CSO Ireland: Essentially CSO does pay for the data that they are using because they are paying for the access service. Norway noted that they are not allowed to use purchased data. CSO agreed that this is new for them as well. The new data sources required work with management. The data won’t meet the requirements of the SNA or SPPI so probably an experimental issue or research paper because of the lack of comprehensive coverage. Issues of quality and item substitution (only new quotes) have not been resolved. All of CSO’s time has been spent trying to work out a map to actually get third party data. We are not the main target of their interest. Once we said we could pay, they were much more helpful.

Mariah Nilsson – Sweden: The annual reports are a work in progress. This idea could also work in other countries. All agreed that good relations with data agencies and enterprises are important. The work so far has resulted in ideas for new statistics and possible ways to improve our BR with business characteristics, ownership, structure, etc. The issue of security was discussed in the Statistics Sweden data warehouse. Data collected at the legal unit and then in-house is rolled up to the enterprise level. Sweden hopes to return in the future with an update on results.

Ana Aizcorbe – US: For Uber, most of the time was spent on clarifying representativeness of data and evaluating potential selection biases. Four big takeaways were: 1. There could be a large bias because we have not yet studied elasticities of substitution between taxi and Uber rides: 2. Use in CPI v. PPI – If taxi and Uber rides are perfect substitutes, the data might be OK for CPI but not necessarily clear if good for an SPPI; 3. Data source only has coverage from residents in NYC. No tourist data available in the dataset. We need to think more carefully about what we are missing. 4. This is different from the usual problems in SPPI production – not really QA but really trying to decide if taxi and UBER are both the same product or are they different products.

**Dennis Matthijs (Netherlands)** Cost-efficient approaches to build ISPs |[paper](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Cost-efficient-approaches-to-build-ISPs_paper.pdf)|[slides](http://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/09/Cost-efficient-approaches-to-build-ISPs_slides.pdf)

Now casting has resulted in very small adjustments to the monthly when the quarterly comes in. Data used is part monthly, but most is quarterly. We are developing relationships or coefficients of how the partial relates to the whole. This could also be applied to other areas and model more frequent data without increasing surveys.

Next Idea was to measure volume directly using register data. The goal is to find register data for unit production. For example, employment hours of temp firms could be drawn from the wage tax declaration rather than collecting turnover by survey.

The ONS offered the Netherlands some results from a very similar project that they undertook.

Friday Morning

Session: 2020 meeting plan  
**Session leader: Voorburg Group co-chairs** | [slides](https://www.voorburg-paris2019.insee.fr/wp-content/uploads/2019/10/Friday-slides_Paris.pdf)   
VG Governance and Bureau Representation  
Assignment of Sector Papers  
Designation of Industries and Assignments for VG 2020  
Designation of Papers on Cross-cutting topics for VG 2020

Jakob and Bonnie presented the slides. Notes on topics and volunteers are on the updated Friday slides.

The meeting continued with a movie that was prepared by Finland announcing that the next meeting will be held 21-25 September, 2020 in Helsinki Finland.

The Group thanked Jakob Kalko for his service as Co-Chair and presented him a gift. Mr. Kalko gave a brief thank you speech and thanked all whose work has helped to make the Group a success.

Thanks and gifts were presented to the hosts for all of the planning and organization that resulted in a successful meeting in Paris. The Co-Chairs also gave a special thanks to Yann for all of the work behind the scenes to get everything in and organized.

End

Faithfully submitted by John Murphy (retired), Secretary of the Voorburg Group