VOORBURG GROUP 2025 AGENDA

MONDAY – SEPTEMBER 22, 2025

08:30-09:00	REGISTRATION – REFRESHMENTS
09:00-09:30	WELCOMING REMARKS – STATISTICS DENMARK
09:30-10.30	OPENING REMARKS, AGENDA OVERVIEW, INTRODUCTIONS

VG co-chairs: Marcus Fridén (Sweden) / Mathieu Thomassin (Canada)

Thank you to hosts and participants

Ground rules

VG Bureau introductions

Participant introductions

Agenda overview

Future agenda: provide suggestions to the co-chairs by Thursday

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1042.pdf

10:30-11:00	NETWORK BREAK
11:00-11:30	CHINA'S PRACTICES AND EXPERIENCE IN THE COMPILATION OF CHINA'S INDEX OF SERVICE PRODUCTION AND SPPI

Li Na (China), Jing Wang (China)

PRESENTATION:

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1047.pdf

DISCUSSION:

Xin Ha (Canada): Is ISP a subset of GDP of Services? What percent of services does ISP cover in terms of GDP? Is it an advance indicator of quarterly GDP?

Li Na (China): ISP does not include non-market activities due to lack of indicators. May add in the future if can find sources. ISP is approximately 80% of service GDP. ISP does not include seasonality.

Xin Ha (Canada): How is the data collected? And what is the mode of collection?

Li Na (China): 30% of data is from surveys, collected through online questionnaires. Other data is from other administrative sources.

Xin Ha (Canada): How do you deflate wholesale and retail industries without SPPIs, since only have SPPIs for transportation and postal.

Li Na (China): Use CPI, other SPPIs are being researched.

Peter van de Ven (ISWGNA): You discussed differences in coverage and indicators used. Is there a program or research underway to align statistics?

Li Na (China): SPPI and National accounts are in different departments. Use different sources of indicators. Working to improve ISP with increased coverage and incorporate more price indicators.

Andrew Baer (IMF): Is the projection work from the research group incorporated in the ISP? Are you deflating to get telecommunications volumes or using direct quantity measures?

Li Na (China): Using data from research institute as comparison and analysis, not as input. Telecom agency is giving the data in volume terms.

Lina Pedersen (Denmark): Are you using electricity/power data?

Li Na (China): Use data from surveys for compilation, data from research group for comparison and validation.

Kyeongwon Choo (Korea): What data do you have for retail services

Li Na (China): Retail services published by national bureau of statistics

Edwin Boey (Singapore): Why calculate ISP rather than an overall SPPI?

Li Na (China): SPPI is a newer project, and only includes 2 industries. There is more to do and learn. ISP work has been underway longer.

Christian Pucther (Austria): Suggest adding ISP to next year's agenda due to the number of questions

Young Jae Lee (Korea) : What is the unit of ISP. Do ISP and GDP show similar movement.

Li Na (China): ISP is indexed with a base of 100, published as percent changes. Seeing similar trends.

11:30-12:00	INDUSTRY PAPER ISIC 78 EMPLOYMENT ACTIVITIES (NAICS 5613)

PAPER ARIEL JUAREZ (MEXICO)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1010.pdf

PRESENTATION ARIEL JUAREZ (MEXICO)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1027.pdf

DISCUSSION:

Peter van de Ven (ISWGNA): Did you do analysis on what happened to the units and employees that were previously in this industry?

Ariel Juárez (Mexico): Most companies changed from sector 56 to another sector, most to Transport, Hotels, Restaurants. Data is still being investigated.

Xin Ha (Canada): Subcontracting in Mexico is now restricted to certain enterprises. What industries are those enterprises in?

Ariel Juárez (Mexico): Specialized services only, not the primary work done by the company.

Melanie Santiago (US): How did this impact your other surveys?

Ariel Juárez (Mexico): Working to update other surveys, but there are a lot, and it is still in planning stages.

Nicolas Studer (France): How are the data collected?

Ariel Juárez (Mexico): Online monthly surveys, personal visits, telephone

Mathieu Thomassin (Canada): Surprised to see how stable this industry was during the Covid pandemic as it was very volatile in Canada during this time. There will be another presentation this afternoon on outsourcing.

Peter van de Ven (ISWGNA): We have seen movement towards more self-employment, example is Uber drivers. Is Mexico seeing similar changes? Seeing a decrease in employment, and investigating whether this decrease includes people in self-employment or employment outside of the country.

Sebastian Rask (Sweden): Do you see any effects of this change in the expenditures and input/output ratios?

Ariel Juárez (Mexico): Similar movements between revenue and expenditures.

Markie Muryawan (UN): 2024 Economic Census confirmed the decline. What other resources did you use to check this decline while waiting for the EC?

Ariel Juárez (Mexico): With Ministry of Labor and Social Insurance.

Andreas Pedersen (Denmark): Does this change more accurately reflect the sector?

Ariel Juárez (Mexico): Yes, the number of units in the frame for this sector was very high and is now much lower. Previously published this information by state, but now don't have enough activity to do so.

12:00-13:15	LUNCH BREAK
13:15-13:45	CROSS CUTTING TOPIC (PART 1) GUIDELINES DOCUMENT ON APPROXIMATIONS OF DEFLATORS WHEN SPPIS ARE NOT AVAILABLE

PAPER DOROTHEE BLANG (GERMANY) KATHERINE CHANT (UK)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1014.pdf

PRESENTATION DOROTHEE BLANG (GERMANY) KATHERINE CHANT (UK)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1030.pdf

DISCUSSION:

Rohan Draper (Denmark): Is there a feedback loop when you identify a gap in coverage or an SPPI that isn't suitable, do you communicate that lack or the external sources that you are finding to the price offices?

Dorothee Blang (Germany): Asked National Accounts how they are dealing with the gaps, then incorporating that feedback into the SPPIs.

Katherine Chant (UK): Improvements to the price statistics take time and resources, so the feedback from National Accounts is not always able to be incorporated.

Alexandra Schindlar (Austria): When using indices from other countries, do you take the raw index of the other country?

Katerine Chant (UK): In the case of the US Software index, don't make further adjustments. For those used for trade, make currency adjustments.

Peter van de Ven (ISWGNA): Only guidelines mentioned in the presentation were European ones. Are you asking for a manual for SPPIs? If so, should it go to the IWGPS?

Dorothee Blang (Germany): It is a work in progress.

Andrew Baer (IMF): SPPIs have been included in the PPI manual, though it may be good to consider whether they should be separate. National Accounts is brilliant at estimating things. Price Statistics observes things. Should there be more estimating in price statistics?

Dorothee Blang (Germany): Trying to publish more complete SPPIs. Estimating can be helpful to publish more complete statistics.

Andreas Pedersen (Denmark): It would be interesting to see an analytical series comparing the statistics with and without proxies.

Sebastian Rask (Sweden): When there isn't an appropriate SPPI, is there anything in the guidelines or from your countries of using output prices vs. input prices?

Katherine Chant (UK): Covered somewhat in the paper of using inputs as a C method. Doesn't distinguish between using output price indexes of the inputs or input price indexes.

13:45-14:15	INDUSTRY PAPER PRICE INDEXES FOR POST SECONDARY EDUCATION

PAPER MELANIE SANTIAGO (US):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1015.pdf

PRESENTATION MELANIE SANTIAGO (US):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1019.pdf

DISCUSSION:

David Brackfield (OECD): How are international students included? Are athletic type scholarships reflected in the revenue and prices?

Melanie Santiago (US): Tuition and fees paid by international students are included in the out-of-pocket revenue. For public universities they are included in the out-of-state price calculation. Scholarships from within the university system are indirectly reflected as lower revenue in the out-of-pocket tuition and fees. Scholarships from government sources are directly included in the government grants and contracts. Scholarships from other sources are directly included in the out-of-pocket tuition and fees as paid on behalf of the student.

Peter van de Ven (ISWGNA): Have you validated the outcomes with other statistical measures such as employment and productivity?

Melanie Santiago (US): Those are the validations we are working on now.

Xin Ha (Canada): How did you validate the data source, compare to other public data? How does your definition compare to the definition used by SNA?

Melanie Santiago (US): We validated the institution level data directly with some of the institutions themselves as part of our research when we were discussing the price methodology. Comparability with SNA is still unknown, we will look into it with our other validations.

Andreas Pedersen (Denmark): Revenue from government is often considered out of scope, why are you including it here?

Melanie Santiago (US): US BLS considers government provided goods and services as out of scope, but we consider all sources of revenue received by private establishments to be in scope. In education, as in health care, we combine all sources of revenue paid for the specific service in our prices, whether it is paid by the consumer, another business, or the government.

14:15-14:45	CROSS CUTTING TOPIC (PART 2) VOLUME INDICATOR OF TRADE IN SERVICES STATISTICS

PRESENTATION DAVID BRACKFIELD (OECD)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1037.pdf

DISCUSSION:

Peter van de Ven (ISWGNA): Didn't hear anything about digitalization in the presentation, which adds another layer of international trade of services (for example, cloud services). Will this be addressed in the manual?

David Brackfield (OECD): There is a section on digitalization and digital trade. Price issues are probably not there due to the complexity of the issue and difficulty in providing solid advice.

Peter van de Ven (ISWGNA): Digital services may be a good topic for Voorburg in the future.

Markie Muryawan (UN): Have a draft of chapter 7 and would like feedback. Will ask Marcus and Mathieu to circulate it to the Voorburg group for comment. Also need to discuss with Ottawa group.

Andrew Baer (IMF): Large data gap for import and export indexes for price services. Why is SPPI the generic rule for imports when it reflects domestic production? Wouldn't a SPPI for travel be better than CPI?

David Brackfield (OECD): This is the feedback they are looking for.

14:45-15:15	NETWORK BREAK
15:15-15:45	CROSS CUTTING TOPIC (PART 3) MEASURING OUTSOURCING OF SERVICES

PAPER AGNIESZKA MATULSKA-BACHURA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1004.pdf

PRESENTATION AGNIESZKA MATULSKA-BACHURA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1034.pdf

DISCUSSION:

Xin Ha (Canada): Are you looking at domestic outsourcing or foreign, or both?

Agnieszka Matulska-Bachura (Poland): Both, but in the aggregate. Next steps of work will possibly be to look into separating them.

Dorothee Blang (Germany): Question about the definition of outsourcing. When is it oursourcing vs purchasing a service? Use value of services purchased as a proxy for outsourcing. Looked at value and as

percentage of remuneration. Demand for services survey is conducted every 5 years can specify what type of services are purchased, and can look at the share of specific services as a percentage of total services purchased.

Peter van de Ven (ISWGNA): Can you explain the results in simpler terms?

Agnieszka Matulska-Bachura (Poland): When the value of services purchased rises, productivity goes down. But when you take into account the relation between the value of services purchased as a share of operating costs, productivity goes up. Depends on the size of the business, the kind of business activity, and the kinds of services purchased.

Peter van de Ven (ISWGNA): Why are the results this way? What is the economic explanation?

Agnieszka Matulska-Bachura (Poland): The economic explanation is in the research history.

Mathieu Thomassin (Canada): The last paragraph of the paper is what he would take away. Would there be similar results in other countries?

Agnieszka Matulska-Bachura (Poland): Would be interesting to see if other countries show similar results or if Poland is a special case.

TUESDAY – SEPTEMBER 23, 2025

08:30-09:00 CROSS CUTTING TOPIC (PART 4)
DEVELOPMENT OF FINAL DEMAND-INTERMEDIATE DEMAND PRICE INDICES

PAPER XIN HA (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1001.pdf

PRESENTATION XIN HA (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1011.pdf

DISCUSSION:

Questions for the group: Any other countries exploring FDID indexes? Any advice from countries who have already developed these types of indexes?

Yuka Kiho (Japan): BLS divided intermediate demand into 4 stages, why do only 3?

Xin Ha (Canada): This is the commodity approach. The 4 stage BLS model is by production flow.

Yuka Kiho (Japan): Divided into 4 stages, but have not analyzed this to confirm that the 4 stage approach is best. Would be interested to see any results from Canada as the production flow approach is developed.

Peter van de Ven (ISWGNA): What does the national accounts department produce? At Statistics Netherlands they produced supply use tables in current prices and prices of the previous year. Does Stats Can also produce SU tables in price of previous year? If yes, how do these results compare? If no, is there some advance work for compiling SU tables in price of previous year?

Xin Ha (Canada): Previous year is constant dollars. SU tables are produced in both current year and constant dollars, but it is done by a different office. This work is not intended for NA, more for external users and comparability with other countries and pass through analysis.

Melanie Santiago (US): Have you considered any aggregations that take out the more volatile components?

Xin Ha (Canada): Still evaluating publication levels. Will publish the high level groupings shown in the presentation, but still deciding

Andrew Baer (IMF): India and Egypt are both working on FDID aggregations as well. What are you using for trade prices?

Xin Ha (Canada): Using retail and wholesale trade price indexes based on margin prices.

Edwin Boey (Singapore): How do you fill in for gaps in coverage? Do you use something else or exclude the weights?

Xin Ha (Canada): Looking into other sources for gaps in coverage, alternative data, other surveys. In the meantime, weight for not covered areas are excluded from the calculation.

Edwin Boey (Singapore): Would you consider using implicit price deflators from National Accounts?

Xin Ha (Canada): They looked into it, but found the implicit indexes don't meet their requirements.

09:00-10:30	INDUSTRY PAPER ISIC 829 BUSINESS SUPPORT SERVICE ACTIVITIES NOT ELSEWHERE CLASSIFIED

SESSION LEADER CHRISTIAN PUCHTER (AUSTRIA)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1036.pdf

OUTPUT PAPER MARIAH NILSSON (SWEDEN)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1008.pdf

OUTPUT PRESENTATION MARIAH NILSSON (SWEDEN)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1035.pdf

OUTPUT PAPER JOSIPA KALČIĆ IVANIĆ (CROATIA)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1038.pdf

OUTPUT PRESENTATION JOSIPA KALČIĆ IVANIĆ (CROATIA)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1046.pdf

SPPI PAPER ALEXANDRA SCHINDLAR (AUSTRIA)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1003.pdf

SPPI PRESENTATION ALEXANDRA SCHINDLAR (AUSTRIA)

SPPI PAPER BEATA CEBULA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1020.pdf

SPPI PRESENTATION BEATA CEBULA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1021.pdf

SPPI PAPER THÉOPHILE DESOLLE (FRANCE)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1039.pdf

SPPI PRESENTATION THÉOPHILE DESOLLE (FRANCE)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1023.pdf

DISCUSSION:

Informal discussion during the break.

10:30-11:00	NETWORK BREAK
11:00-11:30	CROSS CUTTING TOPIC (PART 5) ESTIMATING AGE-RELATED DEPRECIATION IN OFFICE RENTS

PRESENTATION KIMIAKI SHINOZAKI (BANK OF JAPAN):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1022.pdf

DISCUSSION:

Andrew Baer (IMF): How will you implement this on an office rent price index?

Kimiaki Shinozaki (Bank of Japan): Annual percentage depreciation rate for quality adjustment each year is output of the model. Not incorporated into the SPPI yet.

Peter van de Ven (ISWGNA): Was a similar analysis done for the residential market?

Kimiaki Shinozaki (Bank of Japan): There is a lot of literature analyzing both types of properties. BoJ compiles SPPI for office rents. The Ministry of Internal Affairs and Communications (MIC) captures the residential market as *House rent* in the CPI. MIC is also currently conducting research to improve the accuracy of quality adjustment for Housing rent.

Xin Ha (China): Are you looking into using these depreciation rates in calculating total factor productivity?

Kimiaki Shinozaki (Bank of Japan): These results could possibly be used to enhance TFP, but not sure how to incorporate the results.

11:30-12:15	CROSS CUTTING TOPIC (PART 6) THE UPDATE OF THE 2008 SNA: IMPACT ON THE MEASUREMENT OF SERVICES

PRESENTATION PETER VAN DE VEN (ISWGNA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1013.pptx

DISCUSSION:

Informal discussion over lunch and throughout the week.

12:15-13:30	LUNCH BREAK

IMPLEMENTING A DATA DRIVEN MODEL FOR AUTOMATED DYNAMIC OUTLIER DETECTION DURING DATA VALIDATION

PAPER MELANIE SANTIAGO (US BLS)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1006.pdf

PRESENTATION MELANIE SANTIAGO (US BLS):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1016.pdf

DISCUSSION:

Xin Ha (Canada): Does this decrease the number of prices staff review? Did you use open source software or something developed internally?

Melanie Santiago (US): We expect it will, as the suggested thresholds are generally higher than our current thresholds, but we don't know for sure since prices can be flagged for review for many other reasons. We will monitor this as the model is used. We used open source for the model and dashboard. Originally started in Python, but switched to R to integrate with the dashboard.

Andreas Pedersen (Denmark): Denmark has a similar process for identifying outliers, but it is not done in ARIMA or include a seasonal component. Do you expect the seasonal parameters to significantly affect the thresholds?

Melanie Santiago (US): Not in all areas, but there are some industries and products that have a significant seasonal pattern that this model will account for.

Rohan Draper (Denmark): Would large price changes that are included in indexes skew the model?

Melanie Santiago (US): US BLS does not exclude large price changes that are validated, though they may not be used for missing price imputation. So large changes would be included as input data for future runs of the model.

Mark Lomax (Netherlands): is the model run on raw data or clean data (Before or after data validations?)

Melanie Santiago (US): The model should be run on the clean data as we want to exclude unverified or invalid price changes.

PYTHON DASHBOARD FOR OUTLIER DETECTION USING ROBUST VARIANCE ESTIMATION

PRESENTATION TRYM LANGBALLE (NORWAY):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1048.pdf

DISCUSSION:

Alexandra Schindlar (Austria): I presented something similar this year for CPI, putting in the prices for a longer time period reduced errors significantly. Seasonal items are still problematic. Do you have any experience with that?

Trym Langballe (Norway): This doesn't include seasonal components, though it may be useful to do so. It detects outliers that are different from the trend.

<table>
<tr><td>14:30-15:00</td><td>CROSS CUTTING TOPIC (PART 8)
PRODUCING PPIS USING REPRODUCIBLE ANALYTICAL PIPELINES</td></tr>
</table>

PAPER XIN HA (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1002.pdf

PRESENTATION XIN HA (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1012.pdf

DISCUSSION:

Théophile Desolle (France): Do you know the package r target? If so, can you compare it with DVC? How long is the process for adoption of RAP?

Xin Ha (Canada): Not familiar with r target. Adoption is ongoing. It started in 2021, but it takes time to get buy in from staff to learn new skills, you need to show people that it is a better way of working. But we have made a lot of progress.

Melanie Santiago (US): Who monitors for changes to the available and approved packages? And how do you manage the costs of the environment? We are using RStudio and POSIT, and it is expensive.

Xin Ha (Canada): Program analysts monitor for these changes. Stats Canada is using Conda, which is a free open source environment.

Andreas Pedersen (Denmark): can you share the code? Denmark is doing a similar project. Also why use both R and Python?

Xin Ha (Canada): A pipeline will be developed in either R or Python, not a mix within one pipeline. An advantage of RAP is it developed to be fast

David Brackfield (OECD): Stats Canada is usually a risk averse organization. Was there concern or investigation into the risks of using open source software and platform?

Xin Ha (Canada): Management was very supportive. Like other agencies under significant resource constraints and the move towards open source is a cost saving measure.

Markie Muryawan (UN): Since there is no IT in your division, who maintains the code base? Do you have dedicated people or can anyone do it? The data still needs to be collected, so how is it stored and transferred to RAP?

Xin Ha (Canada): The analysts in the division write the code and maintain it. IT is needed to support and maintain the environment. RAP ingests the collected data from whatever database it is stored in.

Andrew Baer (IMF): Is there a process for aggregating the data coming from the different pipelines? How does it get coordinated in a real-time production environment.

Xin Ha (Canada): You may have separate pipelines for mining, wholesale, retail. You could have another pipeline that then ingests the outputs from those indexes and calculates an aggregate.

Eveli Šokman (Estonia): Estonia is using R basic for flexibility. Also using R to calculate weights. Does Canada use the pipelines for calculating weights? Are you doing elementary and time series in R? How do analysts check the data?

Xin Ha (Canada): Weights are from the Business Register, which is produced by a different Stats Canada program and is also used for sampling. The Business Register contains weighting information. RAP is used for calculating product relatives, elementary indices, higher level indexes, and chain linked index. The pipeline can contain scripts that create tables for analysts to analyze the data. Or could keep it simple and just do calculations and allow others who want to analyze the data to create their own tables.

Rohan Draper (Denmark): Are you calculating the relatives and then pushing them back to the imputations?

Xin Ha (Canada): Depends on the analyst and pipeline. The packages do allow for flexibility in using outputs to recalculate.

Edwin Boey (Singapore): The adjustments for raw survey prices are done outside of this pipeline?

Xin Ha (Canada): Yes, adjustments to price data are made outside of the pipeline. The pipeline could spit out outliers for review and the analysts could adjust the microdata and rerun the calculations in the pipeline.

Edwin Boey (Singapore): Singapore has a more one size fits all system that is designed to be more user friendly. Is that a concern for Stats Canada?

Xin Ha (Canada): Legacy system runs a similar way. Review/adjust price data, run calculations, review outputs, adjust price data, etc. The main difference is that the legacy system is usually press a button vs running code and is maintained by IT. As there is turnover there can be gaps in documentation or understanding of how the system operates (black box). RAP requires documentation that allows for transparency and transition of knowledge.

15:00-15:30	NETWORK BREAK
15:30-16:00	CROSS CUTTING TOPIC (PART 9) HOW ADMIN DATA ARE USED TO DERIVE THE OUTPUT MEASUREMENT FOR SHORT TERM ACCOMMODATION

PAPER MAJA DOZET (CROATIA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1007.pdf

PRESENTATION MAJA DOZET (CROATIA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1040.pdf

DISCUSSION:

Peter van de Ven (ISWGNA): Is there any subset of turnover that is missing from the data? Such as Air BnB or Booking.com? Is there underreporting in this area for VAT?

Maja Dozet (Croatia): In Croatia these services are not in the accommodation sector, they are in sector 82. In new revision they will go to 55.40 Intermediation service activities for accommodation, but not yet. Even individuals are supposed to report into the eVisitor system. No measure of what might be missing.

Mathieu Thomassin (Canada): Canada also uses an administrative source. These short-term rentals by individuals are often not reported in the official system, even if required to do so. We will talk more on this topic tomorrow morning.

WEDNESDAY – SEPTEMBER 24, 2025

09:00-09:05 SUGGESTED TOPICS FOR 2026 MEETING

Provide topics of interest for 2026 meeting on the papers provided on your tables.

09:05-09:30 CROSS CUTTING TOPIC (PART 9) CONTINUED
HOW ADMIN DATA ARE USED TO DERIVE THE OUTPUT MEASUREMENT FOR SHORT TERM ACCOMMODATION

PAPER MATHIEU THOMASSIN (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1028.pdf

PRESENTATION MATHIEU THOMASSIN (CANADA):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1029.pdf

DISCUSSION

Stefan Wiethoff (Germany): Discussed need for housing at a national level and that the number of housing used in STR would not greatly impact the overall housing crisis. Is there any information about the need for housing in the tourist areas?

Mathieu Thomassin (Canada): There are studies on more local areas, but our group did not study that or prices.

Ariel Juárez (Mexico): Combining different sources can be difficult. What technique did you use for combining the sources to not double count the same establishments?

Mathieu Thomassin (Canada): The purchased database already screened for duplication across multiple platforms. Canada then used the database to assign proportions for the geographic areas.

09:30-10:10 HOST PRESENTATION – STATISTICS DENMARK

THE NATIONAL SUPPLIER OF INDEPENDENT STATISTICS AND DATA TO SOCIETY
Magnus Nørtoft, Statistics Denmark

THE HISTORY OF ADMIN BASED STATISTICS IN DENMARK
Lars Thygesen, Former Director of Sales and Marketing Statistics Denmark

10:10-10:30   NETWORK BREAK

10:30-11:45 HOST PRESENTATION – STATISTICS DENMARK

ADOPTING STANDARDS TO ENSURE HIGH QUALITY IN PRODUCTION OF STATISTICS
Anne Andersen & Karin Blix, Statistics Denmark

DISCUSSION:

Markie Muryawan (UN): It seems the GSBPM is geared towards surveys, do you make any adjustments for using Admin data? Users are using AI to access statistics. Is there any discussion about how AI will access and interpret the data?

Karin Blix (Denmark): GSBPM is generic. Admin data needs to be prepared before entering in the system, and there may be parts that aren't needed (sampling vs universe), but the overall framework is flexible enough to be used for admin data. When there are multiple sources it is even more important to use a consistent framework like the GSBPM.

Anne Andersen (Denmark): Looking to improve the user interface for the Statbank and testing how to provide the data in a way that AI can access and interpret the information correctly.

Andrew Baer (IMF): Noticed you have a director of sales and marketing and get 40% of funding from sponsored surveys and products. Can you talk more about what does that sales and marketing entails and how you have been successful with that.

Lars Thygesen (Denmark): Was director of Sales and Marketing for 6 years. This had developed over time along with the use of admin data. There used to be a small amount of statistical services, primarily sales of information from the business register and interview services. Research services also are a large part. These services can provide more detail than what you can get from the StatBank.

Magnus Nørtoft (Denmark): Looking at it from a broader perspective with the mission and vision in mind, this is a way to stay relevant to users. Can contribute to many sectors in addition to the government sector. As a government institution, can't earn profit on services, so must charge expenses only. With access to the administrative data there is a lot of knowledge in the databases.

Anne Andersen (Denmark): This is also part of the accessibility principle that the data they have should be put towards the benefit of the country, but the legal mandate is only for producing the core statistics. The outside funding allows them to create official statistics that are not in their mandate. Outside sources are paying for the time it takes to create the data, but not for the data itself. The data is provided to all.

SMALL NUMBERS, BIG PROBLEMS: CONSTRUCTING LIFE TABLES FOR DANISH MUNICIPALITIES

Ilya Kashnitsky, Statistics Denmark

BEYOND THE NUMBERS: ANALYSIS AT STATISTICS DENMARK

Magnus Nørtoft, Statistics Denmark

11:45	LUNCH AND COUNTRY DAY

THURSDAY – SEPTEMBER 25, 2025

08:30-09:30	BUREAU MEETING – VG BUREAU MEMBERS ONLY
09:30-10:00	CROSS CUTTING TOPIC (PART 10) MEASURING GROSS VALUE ADDED IN CONSTANT PRICES

PAPER SEBASTIAN RASK (SWEDEN)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1024.pdf

PRESENTATION SEBASTIAN RASK (SWEDEN)

DISCUSSION:

Xin Ha (Canada): Do the price indices used to deflate the outputs align well with the input concept? Does Sweden have a lot of input price indices or are you using output indices as proxies?

Sebastian Rask (Sweden): Sweden has specific industry deflators for inputs. Both import price indices and price indices for domestic supply.

10:00-10:30   CROSS CUTTING TOPIC (PART 11)
INTRODUCING ADMINISTRATIVE DATA WITHIN THE SURVEY ON TURNOVER IN SERVICES

PAPER MARIAGRAZIA MOSCHETTA (ITALY):

PRESENTATION MARIAGRAZIA MOSCHETTA (ITALY):

DISCUSSION:

Lina Pedersen (Denmark): Why don't you see the electronic invoices as a total count since they are obligated by law?   Can you see both the price, amount, and description in the invoices?

Mariagrazia Moschetta (Italy): Not easy to get agreement between agencies to share the data. There is now a continuous data flow to use for the survey, but it is only recent. Don't know about the specific variables available.

Théophile Desolle (France): In France they are going to have electronic invoicing as well. Wondering if the e-invoicing would also be used for SPPI in Italy?

Mariagrazia Moschetta (Italy): Not at the moment as the turnover group is the first division using this data. Still analyzing it. So possibly in the future, but not now.

Mathieu Thomassin (Canada): What do you do when there are businesses in the register but not in the invoicing data? Do you impute?

Mariagrazia Moschetta (Italy): The simulation was done for both situations where they could match and without matches, but they are going to substitute to introduce the invoicing data only where they saw matches.

Mathieu Thomassin (Canada): Since you have admin data, will you continue to sample or use the population?

Mariagrazia Moschetta (Italy): Researching this, but it would be a big methodological change to implement.

10:30-11:00   NETWORK BREAK

11:00-11:30   INDUSTRY PAPER
ISIC 61 TELECOMMUNICATIONS SERVICES

PRESENTATION PELLE ALBERS (NETHERLANDS):

DISCUSSION:

Xin Ha (Canada): Is the microdata you receive from the telecom providers at the individual level or more aggregate?

Pelle Albers (Netherlands): Data is received at the company level, it includes revenue for all parts of the bundled contract together. The unit values are derived at the industry level for wired, derived the unit values at both the industry and company level for wireless.

Xin Ha (Canada): Have you looked at adjusting for quality based on speed?

Pelle Albers (Netherlands): The assumption is that speed is represented in volume change because speed is about bandwidth and it allows you to consume a bigger volume.

Alexandra Schindlar (Austria): We did a lot of research in telecommunications for CPI, SPPI is also using unit values, but for CPI use a consumer profile method and changed to a product view, now web scraping data from a website where all telecommunications tariffs are published each month. Do hedonics using speed, type of connection, description of the package as quality indicators in the hedonic model. Speed is significant in their model. It is worth looking at the products themselves to get the information on the monthly packages. Do you get this data monthly or on some other basis? What is the timeliness of the data.

Pelle Albers (Netherlands): Get the revenue and volumes on a quarterly basis from the telecom regulator. Getting the data online would only be for new contracts.

Alexandra Schindlar (Austria): Austria uses a methodology to keep the existing contract and price in the computation for 24 months, based on the typical length of the contract.

Pelle Albers (Netherlands): Discounts are very prevalent in this industry,

Andrew Baer (IMF): Very little marginal cost to the provider of providing additional data. There are also many unlimited plans that are not based on how much data is provided or used. There are other components of the unlimited plan. If paying a subscription fee for an unlimited amount of music each month, would a price of revenue by number of songs played be a valid way to price it?

Pelle Albers (Netherlands): There has been some discussion about this in relation to subscriptions to streaming services. IF the streaming service does not update their library, the value would decrease over time.

Andrew Baer (IMF): There may be something in the middle that includes how prices are actually transacted, and transacting on a per volume of data is not how services are transacted.

Pelle Albers (Netherlands): Volume is a way to value other aspects of the contract, such as connection speed.

| 11:30-12:00 | INDUSTRY PAPER
USE OF NON-PUBLIC DATA SOURCES FOR COMPILING SPPI FOR ISIC 4922 OTHER PASSENGER LAND TRANSPORT – TAXI OPERATION |

PAPER AGNIESZKA MATULSKA-BACHURA (POLAND), BEATA CEBULA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1005.pdf

PRESENTATION AGNIESZKA MATULSKA-BACHURA (POLAND), BEATA CEBULA (POLAND)

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1031.pdf

DISCUSSION:

Xin Ha (Canada): For each city are you only proposing the 10 kilometer distance or are you collecting more products?

Agnieszka Matulska-Bachura (Poland): The future plan is to include other tariffs. For now, Poland collected information for one product which is provided by different companies.

Xin Ha (Canada): Is the difference between the index calculation formulas that the unit value takes all observations in current and base period and the Jevons indexes are matched observations?

Agnieszka Matulska-Bachura (Poland): Yes.

Xin Ha (Canada): You are only looking at Taxi services, not ride hailing, since it is web scraping. Is there a plan to look at ride hailing in the future?

Agnieszka Matulska-Bachura (Poland): Yes, many European countries are looking to obtain information about intermediary platforms. Some intermediary information is being used in accommodations and will likely use the same approach in this area. This exercise was to test how to organize the process and develop the models, not to introduce into official statistics yet.

12:00-13:15	LUNCH BREAK
13:15-14:00	CROSS-CUTTING TOPIC (PART 12) CHANGES IN THE SERVICE INDUSTRIES IN UPCOMING CLASSIFICATION REVISIONS, NACE REV.2.1 CLASSIFICATION (ATECO 2025)

PAPER ANNARITA MANCINI (ITALY):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1009.pdf

PRESENTATION ANNARITA MANCINI (ITALY):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1025.pdf

DISCUSSION:

Mark Lomax (Netherlands): How does this notification system work for the companies changing their codes? Is it the responsibility of the company to select the new code?

Annarita Mancini (Italy): It is up to the enterprise to identify the code. There are very few updates from the enterprise when asked to verify their code. It may be too much of a burden for the smaller enterprises.

14:00-14:30	NETWORK BREAK
14:30-15:00	CROSS-CUTTING TOPIC (PART 13) NEW HANDBOOK FOR MEASURING MARKETING ASSETS IN THE NATIONAL ACCOUNTS

PRESENTATION ANDREW BAER (IMF):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1045.pdf

DISCUSSION:

Théophile Desolle (France): Could there be a project for the chatbot to include national manuals in addition to the IMF manuals?

Christian Puchter (Austria): Possibly the Voorburg papers instead, since those are in English? Or could the chatbot translate?

Andrew Baer (IMF): This is good feedback to back to the IMF to see what is possible.

15:00-15:30	CROSS-CUTTING TOPIC (PART 14) PROTOTYPE CHATBOT

PAPER EDWIN BOEY (SINGAPORE):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1017.pdf

PRESENTATION EDWIN BOEY (SINGAPORE):

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1018.pdf

DISCUSSION:

Andreas Pedersen (Denmark): Have you had any experience doing any open-source models instead of subscribing to a service?

Edwin Boey (Singapore): No, even using the subscription service it was a long process to develop, so no plans to do it themselves

Xin Ha (Canada): Did you purchase an organizational subscription? Are there limits to the number of queries? What is the ultimate goal?

Edwin Boey (Singapore): Not an organization subscription. Have a specific number of questions and will need to ask for more money when it runs out. Not sure how many queries are included in the $100. Goal was to use this internally to more easily search and reference the documents on the Voorburg website.

Melanie Santiago (US): Is this referencing all documents on the Voorburg website?

Edwin Boey (Singapore): Text from papers and presentations from 2005 forward.

Markie Muryawan (UN): Will the manuals or classification systems be added since not everyone knows how the different systems correspond? Will the meeting notes, agendas, reports be added to the Voorburg website so that they can be searched as well? What about as documents become outdated?

Edwin Boey (Singapore): The chatbot doesn't distinguish on time. The bot identifies which text/paragraph is most relevant to the question and displays the associated documents. Could explore including the classifications, but right now it only pulls from the Voorburg website.

Andreas Pedersen (Denmark): We could start creating a price documentation database that includes manuals, classifications, country documents, that is continuously maintained. Denmark would be interested in such a project. RAG might be a better method than a LLM so it wouldn't need to be continuously trained.

Christian Puchter (Austria): Thanks to all the presenters of the last session. These chatbots from Singapore and IMF may be useful for writing the sector papers.

Rohan Draper (Denmark): This might help with identifying what type of metadata we could be attaching to our documents to facilitate the use of these tools.

Andrew Baer (IMF): Would Singapore want a link to this from the IMF compiler's hub or how else can we integrate these tools?

Edwin Boey (Singapore): Don't even have a domain name yet, so there are more steps needed before this could be shared more widely.

Andrew Baer (IMF): Countries developing SPPIs are very interested in seeing the questionaires of other countries. If those could be shared and put into the compiler's hub it would be very useful.

15:30-16:00	BUREAU MEETING – VG BUREAU MEMBERS ONLY

FRIDAY – SEPTEMBER 26, 2025

09:00-09:15	MODERNISING CPI PRODUCTION: PPI AS AN OFFICIAL USER

Rohan Draper (Denmark)

09:15-09:30	ALTERNATIVE DATA SOURCES IN OFFICIAL STATISTICS

Rohan Draper (Denmark)

9:30-10:15	2026 MEETING PLAN

VG co-chairs: Marcus Fridén (Sweden) / Mathieu Thomassin (Canada)

VG Governance and Bureau Representation

Future Agenda

Assignment of Sector Papers

Designation of Industries and Assignments for VG 2026

Designation of Papers on Cross-cutting topics for VG 2026

https://www.voorburggroup.org/Documents/2025%20Copenhagen/Papers/1043.pdf

10:15-10:45	NETWORK BREAK
10:45 -12:00	CONCLUDE VG 2026 MEETING PLAN

Designation of Assignments for VG 2026

Meeting Arrangements for Next Year

Closing Remarks