The 31st Meeting of the Voorburg Group opened with a welcome from Mr. Marko Kristof, Director General, Croatian Bureau of Statistics (CBS). Mr. Kristof welcomed the delegates, invited them to enjoy the City of Zagreb, and provided some history for the Esplanade Hotel and the relationship of the hotel to the Orient Express.

Mr. Kristof noted the counter cyclical nature of statistics, particularly that when the need for statistics is highest, funding tends to be the lowest. Despite this conundrum, official statistics are vitally important and must be visible and available when developing policy. Statistics connect countries and services are the heart of economic and job growth.

Mr. Kristof suggested that it would be a good idea for the United Nations Statistical Commission to make a proclamation asking politicians to provide greater support for official statistics. Greater support will allow a new vision (Vision 2020) that includes more communication and greater transparency within the statistical community and with the outside world.

Ms. Anka Javor, Head of the Service Statistics Department at the CBS, also welcomed the delegates and spoke of the importance of service statistics. Ms. Javor noted the importance of the Voorburg Group and similar groups that help build quality into statistical programs. Ms. Javor thanked the co-chairs for all of their assistance leading up to the meeting and noted that CBS is proud to host such an important international group.
David Friedman and Jakob Kalko thanked Mr. Kristof and Ms. Javor and also welcomed the delegates. There was a review of ground rules for the meeting and introductions were made by all delegates in the room. The discussions focused on cross cutting issues and possible paths for greater activity between meetings. The discussion also focused on the future of the Voorburg Group and potential paths to move forward.

The group was asked to provide potential topics to be addressed in future meetings. A wide range of topics was presented including the classification and measurement of e-commerce, methods for contract pricing, respondent contact issues, challenging classification issues, Internet based activities like advertising and subscription provision of services, the impact of the new EU FRIBS regulation, increasing cooperation and transparency between statistics producers and the national accounts, B2B vs. B2All basis for price indices, classification and treatment of large multinational enterprises, use of administrative and alternative data, quality measures (methods for producing quality measures and acceptable quality levels for official statistics), digital goods, sharing/new economy platforms, survey unit definitions and the relationship of current units to alternative data sources, quality adjustment in SPPIs, and the problem of price indices that are “too flat for too long”.

BREAK

After the break, John Murphy presented the country progress report and asked the group if it was meeting needs or if additional questions or changes to the process would be more useful for the participants.

There were several suggestions for change including creating a database of questionnaires in use by countries and the possibility of using something like survey monkey instead of the current spreadsheet process.
The Office Administrative and Support Activities sector paper was presented as an issues paper with elements of the sector paper. The issue paper distinction was made because there was not much information available and there was little experience presented. There were several comments and questions concerning the contents.

The US asked about the relative importance of fulfillment services noting that this seemed to be an odd activity under office administrative services. There was little information available about that inclusion.

The Netherlands asked about contract pricing and changes when each contract tends to be separate and unique. Austria noted that it is important to stay in close contact with respondents but constant change is also a significant burden for respondents. Model pricing is one possible solution that leave the contract fixed.

The co-chairs noted that there are simple and complex services and that a single method might not be “best” in many cases. More work is needed to review the types of services being provided and their characteristics and the choice of method should be based on that. They also noted that office administrative services is an outsourcing target for companies that are focusing more on core competencies and outsourcing administrative functions.

Austria noted that the industry is actually declining in their experience but that could be more due to truncation of secondary production or the primary service of a bundle resulting in classification elsewhere.

**Decision:** Adopt the Issue paper and reevaluate this based on the bundling and other relevant cross cutting topics.

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**Session: Sector Papers and Issues Papers**

**Session Leaders:**
- David Friedman, Voorburg Group co-chair (BLS-USA)
- Jakob Kalko, Voorborg Group co-chair (Statistics Norway)

**Presentation, Discussion, and Adoption of the Papers on**

<table>
<thead>
<tr>
<th>Convention and Trade shows</th>
<th>David Friedman, US</th>
<th>Papers USA Conventions</th>
<th>Presentation USA Conventions</th>
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<tbody>
<tr>
<td>Veterinary activities</td>
<td>Ruth Vizner, Israel; Jakob Kalko, Norway</td>
<td>Paper NOR Veterinary</td>
<td>Presentation NOR Veterinary</td>
</tr>
<tr>
<td>Office administration services</td>
<td>Christian Strock, Austria</td>
<td>Paper AT Office Admin</td>
<td>Presentation AT Office Admin</td>
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</table>
Lunch and Photo:

The sector paper for veterinary services was presented. There were no comments from the group. The Netherlands noted that the recommendation to use a combination of survey and administrative data is used in the STS as well as annual data.

India asked what variables are included in turnover. Chile noted that companies sometimes focus on commerce and that the sale of drugs could be primary while classified in veterinary services. The presenter noted that the most appropriate variable will depend on country practices.

The US noted that the relative size of the industry will vary across countries so it is not always a small industry in that context. The presenter noted that the recommendation is not to produce statistics but rather provides turnover guidance if it is important to a particular country.

Decision – adopt as a sector paper for turnover only. The paper will be modified to note the impact of veterinary medicines on the industry prior to final posting on the VG website.

The sector paper for Organization of conventions and trade shows was presented. Consider updating the tables based on the new CDF for changes once CDF is final.

Germany noted the issue of bundling with accommodation. One night stay is included while multiple night stays are treated as accommodation services. Germany also noted that there are different types of providers. Some provide space only, some provide staff only, and yet others provide both space and staff.
The US suggested that rather than addressing single night/multiple night stays as a classification issue, it might be a good idea to evaluate the problem within the context of the bundling discussion later in the meeting.

Also possible changes based on the bundling discussion rather than treating overnight stays as a classification issue.

<table>
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<tr>
<th>13:30 - 15:15</th>
<th>Session: Cross Cutting Topics - Part 1</th>
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<tr>
<td>Session: SPPI, timebased methods and the challenge of productivity</td>
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<tr>
<td>Session Leader: Marcus Friden, Sweden, Rohan Draper, Sweden</td>
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<tr>
<td>Session consist of one paper</td>
<td>Kat Pegler, UK; Dorothee Blang, Germany; Gert-Jan van Steeg, Netherlands</td>
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<tr>
<td>Paper Cross cutting issues</td>
<td>Presentation Cross cutting issues</td>
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Cross cutting topics – Time based methods and impact on productivity

(Terms to add to glossary - Value Pricing (add to glossary) meal – then pay what you think it was worth, FRIBS -framework of integrated business statistics)

The time based methods session included presentation of the materials and then small group breakout sessions to address the topics and encourage wide participation. Each group was provided a facilitator who reported on the results of the discussions.

Group reports

Group 1: The general consensus was that time based methods are ok if the output is properly reflected, such as price per one hour. One way to overcome potential problems is to use simple services in parallel to time based services. It may not reflect the bulk of turnover but could be used to estimate inflation. (simple – fill out one form for an accountant, file a deed for a lawyer, etc.)

Group 2 – didn’t really have the experience on time based methods to have a good discussion.

Group 3 – Time based methods are acceptable as long as it is legitimate use based on the company. If the company is not using the method, it is wrong to apply it. Problems included explaining it to respondents, incorrect reporting of pay, lack of homogeneous groups to use (inexperienced vs. experienced junior accountant). Rather than applying the method by industry, the decision to use time based methods should be made on a company by company basis.
Group 4 – Time based methods are better than nothing but care must be taken in the selection of unique services or packages of services. For example, time based methods can work well for services that are provided free – household production for example.

Group 5 – There is no alternative, sometimes time based methods must be used. Some alternatives that could help minimize productivity impacts are model based experience and time-based outputs. A model could reflect experience levels (e.g., 5 years, 10 years, etc.). There is always a risk of applying time based methods in industries where hourly rates are not really used. A move to unit values might help avoid problems in some industries.

Group 6 – Time based methods are still used because it is necessary even if not optimal. One way to implement is to set the period contract to set the hours and keep them fixed unless the hours change. There are additional problems. In one case, a survey encountered 50 – 60 skill levels in a company. They were group together to track only the top 5 or 6 rather than trying to cover all skill levels. This was also applied to covering only the most important products. Still, contingency work is a problem that has not been resolved.

Group 7 – Productivity is important and it should be accounted for but time use methods are a compromise. To minimize the impact of the compromise, it might be possible to ask productivity questions directly base estimates on that. Have to track the levels separately, not a mix of capabilities. Maybe associations or other players in the market can help adjust for changes in productivity.

Group 8 – The appropriateness of time based methods is dependent on the industry. Time based methods are better than nothing. No common products (like engineering). Problem when the respondents don’t understand the method. We need an efficient way to collect and split by bands of expertise. That will not address all the problems but it will mitigate.
Canada presented the joint guidance paper on bundling including the results of the session in Sydney last year. The paper provided questions on the definition of products, a typology of products that can be associated with the issue of bundling, and questions about how bundles should be treated in programs and classifications. The bundling guidance paper session also used small group discussion to engage the membership of the group directly.

Group Summaries

Group 1 expressed concerns over not identifying bundles in classification for areas such as telecom, transportation, office admin services where bundles are often transacted. There is a chance that a company would spend a lot of money into one part of the bundle and want to price it differently than rest of the bundle. There were also additional concerns about the ability of respondents to unbundle transactions and the resulting burden of asking respondents to do so.

Group 2 expressed the position that it is difficult to make a hard a fast rule. There could be different treatments for different industries and noted that it is necessary for the same concept to be used for turnover and prices. Group 2 noted that COICOP includes bundles but it might make sense to use bundles for consumer prices but not for producer prices.

Group 3 acknowledged that the issue of bundles is very difficult to address consistently in existing SPPIs.

Group 4 noted that from a classification standpoint, bundles shouldn’t be in the classification. However, that results in substantial concerns for implementation in services statistics. There are outstanding questions about the ability of respondents to provide unbundled data. Still classification systems need to be exhaustive and mutually exclusive. Bundling creates a problem with mutual exclusivity. In turnover it is good practice to ask about the presence of bundles. Communication is needed among statisticians to ensure that the turnover and prices are using the same definitions. Make sure your target for publication matches whether or not you should price bundles.

During the plenary discussion after the group reports, the issue of treatment in classifications was focused on. One classification expert noted that classifications have not considered the issue of bundling before. Classifications should be set based on a concept even if we know going into implementation that we may not be able to achieve the ideal concept in implementation. We should however set the bar in the appropriate location and strive to meet it. The task force proposed to not include bundles in output product classifications.

Members raised a question about mutual exclusivity. Product classification is demand based – what people are requesting in the marketplace. Each market transaction, from this standpoint, would only be in one place. While each transaction can be unique, classifications have to list each output only once. The same product cannot be included in more than one product category. Implementation is harder than classification. This is the case when goods and services are combined in the same transaction. The discussion also noted that national accounts prefer goods separable from services.

The membership was not able to reach a consensus on whether or not bundles should be included in classifications so the initial task force proposal will not be included in the guidance paper. There was a consensus reached on the definition of a products as produced and transacted, agreement to the
typology of products (simple service, composite service, and price bundle) along with the associated definitions, and agreement on the suggested treatment in turnover.

The task Force will remove the recommendation for classification and will remove number 8 about SPPIs trying to collect an unbundled price.

<table>
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<tr>
<th>Time TBD</th>
<th>Session: Strategic vision for the Voorburg Group - part 1</th>
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<tr>
<td></td>
<td>Session Leaders: David Friedman, Voorburg Group co-chair (BLS-USA)/Jakob Kalko, Voorburg Group co-chair (Statistics Norway)</td>
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The Strategic Vision session was presented by the co-chairs. The slides presented the objectives of the mission for group discussion and adoption. The discussion touched on the vision, mission, objectives, and tasks that could be undertaken to support the mission.

Mission – there were conflicting opinions on the mission statement that was presented. On one hand, some felt that this statement as presented was too broad and that could lead to scope creep and lack of focus. On the other hand, several members felt that the mission was too focused on volume measures and missed the importance of the data for non-national accounts uses such as inflation indicators, etc. It might be reasonable for the mission statement to note or acknowledge the broader issues and the broader needs. Examples that were touched on included B2B, B2C, B2E, B2All and the different users and needs. The VG does a lot of collaboration with related groups and our mission should acknowledge that fact.

Turnover by products was also a problem – activities instead of products. Use of the term turnover was also questioned. Would it be better to talk about revenue, sales, output, etc.

Vision – The consensus of the members was that the VG does need a vision statement. The following phrases described how the group members see the VG: Hub of excellence, world leader, premier source. Development, sharing, maintenance, timely and relevant should be included in vision statement. Keep it simple and short. The vision statement should be something that describes the Voorburg Group even if you don’t read the mission.

Objectives – There was broad support for the need to reach out to other groups. Collaboration across different groups is important in order to identify changes and respond to them. There was considerable discussion of merging some of the objectives because they were interrelated. Still, the membership agreed that the objectives were broadly OK.

There were no suggestions for new objectives.

Tasks – There was consensus on the first tasks relating to the need to identify and evaluate alternative data sources. On the second task related to updating the content development framework, there was discussion about the need to address identified issues but also to implement a new CDF over time. Updating sector papers will require some thought. Who should do the update? Should it be the country that originally produced the sector paper or should it be done by whoever identifies a problem or calls
for an update? What are the priorities and who will be involved? These are questions for the Bureau to discuss.

There was additional discussion on identifying which sector papers would need to be updated. Would new subject matter (e.g., new products, new activities, changing in billing or charging practices, etc.) be the driver? Would a new or revised methodology be the driver (change in what is considered the best practice)? While a firm set of criteria were not formulated, in general, the group agreed that when subject matter content changes, there are missing elements in the current sector paper, data sources or methodologies changes, or other issues arose, the sector paper should be reviewed to ensure that it remains relevant.

Up to date and accessible documentation – The group agreed that maintaining the glossary was a good idea and that Canada would address accessibility with the website. The membership also agreed that a way to store the posters and related documentation would be good. The membership also expressed interest in a repository for questionnaires (although this could present a substantial workload and may not be achievable). The membership also felt that a feedback mechanism would be useful on the website. This was raised as a way to identify problems (e.g., disagreement with a definition, misclassified activity, etc. although again, the resource requirements for this are high.

Cross-Cutting Issues – The membership agreed that the guidance papers for cross cutting issues were a very valuable output and resource for NSOs. There was concern that the identification of these issues tended to occur organically during meetings only. One suggestion was that participants not only raise issues during meetings but also forward possible issues to the Bureau between meetings so that they could be circulated in advance to facilitate more useful discussions during the meetings.

Outside collaboration – There was consensus that we need to operationalize mechanisms for collaboration outside of the VG meetings.

Structure and frequency of the meeting – There were a wide variety of suggestions for the structure, location, and timing of meetings. One option suggested was parallel sessions although that has cause discontinuity in the past. The location of meetings should be rotated to increase participation geographically. The membership felt that increased use of technology could also help participation. For example, streaming meetings would allow participation for those who could not attend. The Bureau might also test virtual meetings to see if it might work for the larger group.

Units and Other Big Issues – The membership agreed that this was a necessary topic that could be addressed as a cross cutting topic. There was consensus that it is important and needs in depth thinking and discussion.

The connection between the tasks and objectives was OK but some additional clarity is needed. Maybe a separate task should be created to address collaboration or it won’t happen. We need to know who and what we expect out collaboration. Other needs identified in the discussion were:

- involvement from economists,
- involvement from national accounts
- publicity plan
analysis of legislation changes and the resulting impact

more equal focus on all aspects of classification, turnover, and output

Overall, the membership saw a need for concrete actions and outcomes. Should could be replaced by will to make the tasks and objectives more forceful. The proposed objectives should be broken down and should not overlap. For example, cooperation could be broken down based on countries with separate cooperation related to other groups and international organizations. This might require objectives and more detailed sub-objectives.

Lastly, the group decided to create a taskforce to develop a better way to organize the material so that the most recent and useful information easy to find for everyone. The taskforce met during the meeting and will also test virtual meetings to work on this and report back on how it worked. Canada will lead the task force with additional members from the ONS, United States and Italy (Lucy Opsitnik, John Jeremy, Andrew Baer and Salvatore Filiberti).

<table>
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<tr>
<th>Time</th>
<th>Session: Activities auxiliary to financial services, except insurance and pension funding (ISIC 66.1)</th>
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<tbody>
<tr>
<td>11:00 - 12:30</td>
<td>Session Leader: Mohan Chutani, India</td>
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- Minipresentations on Turnover/Output for Activities auxiliary to financial services, except insurance and pension funding
  - Siti Salwani Ismail, Malaysia; John Murphy, US
  - Paper MAL Paper USA 661 Turnover
  - Presentation MAL Presentation USA Activities Auxiliary for Financial Services
- Mini-presentations on PPI for Activities auxiliary to financial services, except insurance and pension funding
  - Bonnie Murphy, US; Lucy Opsitnik, Canada; Anupam Mitra, India; Aki Ono, Japan
  - Paper US Securities Brokerage Paper CAN Securities Brokerage Presentation IND Activities auxiliary for financial services Presentation JAP Securities

The session proceeded with presentations on turnover. The initial discussion after the turnover session focused on the frame and sample sources used when collecting turnover data. The frames were based on business registers in the US and Malaysia. In the US, the frame is primarily from tax data and Malaysia uses a variety of sources including regulatory reporting. Malaysia takes additional steps to eliminate duplicates across the various sources.
The second topic of discussion had to do with the treatment of “secondary” production, products that are often produced by other industries. Currently, the US collects a set of related products on the paper questionnaires but will be moving to a NAPCS implementation that will collect all products produced by a respondent. A new sample of smaller units will be used (previously non-mail cases) to allocate administrative data for non-sample cases using a hot deck imputation method. Malaysia also includes secondary production in scope of there turnover data.

The prices presentations followed. Note: Add terms from US slides to the glossary. Example – wrap accounts and details, 12b-1 fees, etc.

There were some potential classification or industry differences that came out of the presentations. In particular some of the countries included discretionary wrap (portfolio management) while other did not. Also one country presentation included investment banking but excluded any households. Overall, the presence of absence of investment banking, floating debt, IPO services and similar indicated some classification discrepancies.

The discussant remarks focused first on value based prices. There is a unit that should be fixed (the OECD manual includes a good discussion of this). Share values can be very volatile so fixing the total value can hold the change in volume not a price decline. Canada and the US seem to treat the volatility as price, not volume. Canada’s unit value and tiered pricing increases the homogeneity. This is good as long as the prices collected on value based transactions and not fee based.

The biggest challenge is that industry and product try to break these up into discrete areas. For example, brokers cannot tell you monthly how much was brokerage and how much was investment advice when the fee is 0.5% of assets under management. It can and does change each period.

Another problem is that classification places brokerages and dealers in different industries. Canadian and US regulation address broker/dealer as one thing.

India is using a consumer approach that looks at the total cost of the trade to the buyer when the money actually goes to several different institutions.

Lastly, administrative data is very important. Since the crisis, there is a strong focus on better data under regulatory regimes and what we collect for prices and turnover might already be collected. The amount of activity is high, the values are very large, and tracking details within that is a strong burden on the respondents. Countries should consider working with regulators to a greater extent to minimize duplication of effort.

Membership discussion and questions focused on specifics from the presentations. Japan was asked how the tax hike impacted the index. The tax increase was a tax on consumption but the CPI was used as a deflator. The US was asked about concentration in the industry and units of observation. The US uses essentially a KAU. While this is not always the case, it was done to increase coverage of all products. The discussant noted that consistency between prices and turnover is important and a mismatch of units could result in suitability of use problems.

Additional questions were raised about quality change and consistency on the time series. Currently it appears that the assumption is that there is no significant quality change in the services being measured.
Finally, there were questions about how the opportunity cost was being calculated in spread. India reported that they use data from the national stock exchanges for top stocks (biggest 30, 50, 100 depending on the exchange) and track the spreads over time.

This is ready for a sector paper. Turnover is relatively straightforward and multiple measures for prices will be presented. India and the US will collaborate on the sector paper.

<table>
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<tr>
<th>15:45 - 17:00</th>
<th>Session: Motion picture, video and television programme production, sound recording and music publishing activities (ISIC 59.1 and 59.2)</th>
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<tr>
<td>Session Leader:</td>
<td>Barbro von Hofsten, Sweden</td>
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<tr>
<td>Minipresentations on Turnover/output for Motion picture, video and television programme production, sound recording and music publishing activities</td>
<td>TBD, New Zealand; Robbert de Ruijler, Netherlands; Kazuhiro Yazaki, Japan</td>
</tr>
<tr>
<td>Minipresentations on PPI for Motion picture, video and television programme production, sound recording and music publishing activities</td>
<td>Ruth Vizner, Israel; Rohan Draper, Sweden; Yann Leurs, France</td>
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<tr>
<td>Discussant:</td>
<td>Christian Puchter, Austria</td>
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The session on motion pictures, video programming and sound recording included turnover presentations from New Zealand, the Netherlands, and Japan. This was followed by the prices presentation. A main take away from the presentations is that the CPI is often used as a deflator because it is the only thing available.

A question about the classification of streaming services came up during the discussion. Sweden excludes streaming services but will add them in the future. France includes the services. The discussion also touched on the similarities with R&D. Each product is an original and the value or revenue that can be derived from the motion picture is not known when the production occurs.

Sources of revenue include advertising from websites and subscriptions as well. The discussion also touched on measuring originals vs. tracking repeated services only. Sweden noted that they believe it is possible to track repeated services because they can get defined specifications from companies.
France noted that the price index declined because physical media got cheaper and streaming also reduced price. It did take some time for these changes to stabilize at a lower price level.

The session ended with the streaming question unresolved.

**Action:** VG Secretary to ask UNSD about streaming services. (Post meeting note: John Murphy followed up with UNSD regarding streaming services. At this time, UNSD rules streaming services into 6311 and CPC 83159 as Internet Broadcasting. The only time that a streaming service might be classified to 5920 is if a publisher is streaming their own catalog. This area needs additional discussion and possible reinterpretation to resolve the differences. It is not clear if NACE and ISIC are in line with this interpretation.)

The agenda was revised during the meeting to allow discussion and to make most appropriate use of the time available.

<table>
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<tr>
<th>Time</th>
<th>Session: Cross Cutting Topics - Part 2</th>
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<tr>
<td>09:30-15:30</td>
<td>Session: Experiences starting measurement in services</td>
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<tr>
<td></td>
<td>Session Leader: Ramon Bravo, Mexico</td>
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<td>Presentation Summary MEX</td>
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<td>Experiences in starting measurement of services</td>
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<td></td>
<td>Sanda Colić, Croatia; Agnieszka Matulska-Bachura, Poland; Raman Savithri, India</td>
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<td></td>
<td>Paper CRO Presentation CRO Presentation IND Experience in starting of measurement of service</td>
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<td>Paper POL Presentation POL Presentation POL</td>
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Wednesday began with presentations from Mexico and Croatia on starting a program on services statistics.

There were considerable congratulations from the membership for the success of the programs presented. In particular members commented on the considerable progress in a short period of time and use of reference materials such as the VG Group website and the OECD Manual.

The discussion included specific questions for Croatia. Croatia noted that they vary their methods based on particular industries – including time based methods, transaction prices, percentage fees and others as appropriate for the service being surveyed. They also had to address confusion and questions directly with respondents. Often it is necessary to translate what they report to CBS into classification language and what it is called in NACE. Croatia also noted that their SPPI is mandatory but that they use persuasion rather than the law to engage respondents and obtain participation.

Finally, Croatia noted that they work very closely with both turnover and classification when developing new indexes.

Poland’s presentation on their experience with the Index of Service Production (ISP) noted that the entire ISP, covering all of the industries that are in the Framework of Integrated Business Statistics (FRIBS) is currently being calculated monthly. They are using a Laspeyres methodology and use turnover
data for weights. Poland is implementing new methodologies and updating questionnaires basing many of their changes on the work of the Voorburg Group. Eurostat regulations indicate what must be done but the information from the Voorburg Group is invaluable in detailing how it should be done.

The session continued (later) with a presentation by India.

**NSOP – nonscheduled operators (add to glossary)**

**ULIPS – (add to glossary)**

The presentation on insurance evoked lively discussion on the methodology and source data that India uses. Canada noted the disaggregation to savings and asked if it was then considered savings. India informed the membership that their regulator has recommended a different method that does not separate the savings and insurance components. They are attempting to implement that at this time. India also noted that the death benefit less the payments made is the value of the protection that is provided. The surrender value is treated as the value of the payments. Because there is no surrender value for the first several years additional valuation work is needed to address that problem.

The membership also asked about the meaning of the red and blue lines in the chart addressing non-life insurance. The Netherlands asked if that was a representation of gross vs. net. India responded that the red line was recommended by the regulator and the blue line is closer to the recommended practice in calculation. The red line represents operating expenses, profits, and commissions. That includes more than just the protection product – so the lines do not represent gross vs. net.

<table>
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<tr>
<th>09:00 - 10:45</th>
<th>Presentation by CBS:</th>
<th>Marko Krištof, Director General of the Croatian Bureau of Statistics, Andrea Galić, CBS; Dubravko Škrlec, CBS; Maja Pekeč, CBS</th>
<th>Croatian statistical system_Voorburg Group 2016 ISIS Croatia 2016 Presentation social media</th>
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Country day presentation: Presentation by CBS:

Marko Krištof, Director General of the Croatian Bureau of Statistics, Andrea Galić, CBS; Dubravko Škrlec, CBS; Maja Pekeč, CBS

The country day presentation started with a history of Croatia and official statistics. Work started 141 years ago when Croatia was part of the Austro-Hungarian Empire. On Aug 1, 1875 the statistical office was born. There was autonomy for collection and dissemination. Eventually, the statistical office was combined with the Austro-Hungarian statistical office and Yugoslavia.

In 1991, Croatia became an independent country and then also an independent agency. During the socialist era, Croatia collected data but all of the data was centrally processed in Belgrade so Croatia had to develop methods and capacity themselves. In 2013, Croatia joined the EU and had to prepare for meeting the statistical regulations (over 300 acts). Croatia did have aid from EU funds so managed to implement all of the relevant standards.
Croatia is now focusing on maintaining and improving quality and working with communication and interaction with other statistics producers in Croatia. (National Bank for example). There is a move to shift statistics to the CBS to make sure that they are independent.

Zagreb also has several city statistical agencies or programs. The national statistical law was set in 2003 and was a leader at the time and it ensured that CBS would remain independent. The Central Government regulation says the Director General (DG) is to be named by the government and there can be conditions. Also the DG has to be ready to leave when the administration changes. CBS is attempting to shift reporting responsibility to Parliament to increase independence from the administration. CBS also has the ability to charge for work that is done for others and the funds go to the central budget. New laws are proposed to keep the income in the statistical office to improve programs. The new laws will also allow CBS access to data free of charge in some cases if they can use that data to reduce company burden. As CBS acquires more IT resources, it may be possible to use retail or mobile data directly.

CBS is also working closely with other EU candidate countries to help them develop capacity. CBS has the advantages of being cheaper and having more commonality in language than other countries offering assistance.

CBS does face difficulties because there are many different systems currently being used for web surveys. Efforts are underway to harmonize procedures and develop standardized systems. CBS does have substantial IT resources and does not have to depend on outsourcing. Still, the CBS central webpage is old, frame based presentation that was developed in house. Available resources have been applied to improvements in processing rather than the central website. In five years, CBS went from 9 million pages of printed questionnaires per year to about 1 million printed pages a year by using web collection and administrative data. There are some shortcomings with administrative data because there are multiple population databases that are independent and not coordinated.

The Mission and Vision of the CBS guided by the Official Statistics Act was presented. The top level strategy is influenced by budgets and new needs or requirements resulting in three year plan within CBS. CBS does not collect all of the official statistics for Croatia. The Ministries of Finance, Agriculture, Public Health, Environment for example also collect official statistics.

Croatia has a Statistical Council established under the Official Statistics Act. The Statistical Council is a professional advisory committee that provides advice to CBS.

An overview of human resources in in CBS shows a decline in total personnel between 2010 and 2016, falling to 532 from 618. Demographically, 75% of the staff are of age 41 or older and almost 80% of the staff are women. Young employees make up less than 25% of the staff and the average age is 49.

Croatia next provided an overview of the Integrated Statistical Information System (ISIS). The goal of the ISIS initiative is to standardize and harmonize both business processes and metadata. Moving control of the systems from IT to statisticians was one of the most important changes. CBS has shut down older mainframes and is using more modern infrastructure. CBS coordinated with Statistics Sweden when developing new models and environments.

A central metadata repository is the core of the ISIS. The metadata feeds the survey processor and warehouse browser that allow editing and tabulation. Statisticians can do this without intervention
from IT. The ISIS capabilities for interactive editing and imputation were presented. The system also includes classifications and general statistical classification models. It also provides the annual plan to tie everything together. ISIS prepares the required Eurostat reports and is available in several languages so almost anyone can use it.

Croatia presented some of the outreach examples that use social media. Growth of social media users is about 10% a year. There are about 2.3 billion social media users worldwide and 393 million in EU. The main social media platforms are Twitter and Facebook. An important difference with social media is that it allows two way communication. Social media allows CBS to share information from others and others to share their information. Social media also provides a good platform for data visualizations, allows much easier targeted promotion, and allows CBS to collect feedback and user opinions. CBS tries to respond within one hour if possible and despite normal work hours, CBS strives to do this 24/7.

In the world today, use of social media is not a choice. The only choice is how well statistical agencies use social media.

All of the recent progress has occurred despite an 8-year-long government hiring freeze. The Director General finished the presentation by thanking each of the CBS participants that contributed to the presentation.

<table>
<thead>
<tr>
<th>10:00 - 12:30</th>
<th>Session: Cross Cutting Topics - Part 3</th>
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<tbody>
<tr>
<td><strong>Coordinators/Session Leaders:</strong></td>
<td>Anka Javor, Croatia</td>
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<tr>
<td></td>
<td>Kat Pegler, UK</td>
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<tr>
<td><strong>Poster session:</strong></td>
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<tr>
<td>1) Initialization</td>
<td>Marcus Friden, Sweden; Maja Dozet / Josipa Kalčić Ivanić, Croatia; John Jeremy, UK</td>
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<td></td>
<td>Poster SWE Initialization Poster CRO Poster UK</td>
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<tr>
<td>2) Alternative data</td>
<td>Caisa Bergman, Sweden; Susanna Täg, Finland; Gert-Jan van Steeg, Netherlands; Jutta Oertel, Germany; Ruvani Ratnayake, ABS (ABS will not be attending the meeting, someone else will present their poster)</td>
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The poster session was broken into two parts. There were three posters in the first session and five posters in the second.

**Initialization in the Swedish PPI, Marcus Fridén**

Most of the discussion centered around sampling issues, frequency (annually or less), number of sampled enterprises, number of products per enterprise, non-response and so on, rather than on the questionnaire design itself, how the questions are asked and how they are phrased.

There were also a lot of questions on how the scanning worked, if errors in the scanning were frequent, and how data gets into the database. Some raised the question on online-forms for initialization but it didn’t seem that many other countries had that either.

**Impact of seasonal character of services on the price index calculation in travel agencies, tour operators and other reservation services, Maja Dozet and Josipa Kalčić Ivanić**

Voorburg Group members provided comments and feedback on how to estimate missing prices resulting from the seasonal nature of the industry. Suggestions were:

- For quarters when the product is not available in the marketplace, the last available price could be carried forward and used in the index.

*This method could tend to add to the amount of seasonal movements in the indices, particularly when there is high general inflation. For this reason, using an imputation method for the missing prices is better than simply carrying forward the last available price.*

- A way of dealing with these strongly seasonal services could be to change the focus from short-term quarter-to-quarter price indices to year-over-year price comparisons because there is a good chance that seasonal services that appear in third quarter, for example, will also appear in subsequent third quarters, so that the overlap of products will be maximized in these year-over-year quarterly indices.

*It has been recognized that making year-over-year comparisons provides the simplest method for making comparisons but due to standard data processing procedure of SPPI compilation in Croatia, this method is not applicable.*

- Price movements of 65% of Reservation services for accommodation and Tour operator services for arranging and assembling tours, which were provided in all quarters of the year, could be used with expert judgment for imputation of 35% of missing prices.

*Instead of simply carrying forward the last available price of seasonal services that are not sold during a particular quarter, it is possible to use this alternative imputation method to fill in the missing prices.*
Improvements to methods of price recruitment into UK Services Producer Price Indices, John Jeremy

- The majority of the feedback consisted of people saying that they really liked the approach and would like to implement in their country (though usually were unable to for a variety of reasons).
- There were questions about whether ONS would be comparing the Services Turnover Survey results to any other data sources. John wasn’t sure, as he was not actually working on the project, but he will find out and update VG members via Slack.
- A number of people were interested in updates on progress on the way towards implementing the sample method changes. Again, these can easily be provided.
- A representative of Bosnia & Herzegovina had concerns over whether we should simplify the process. He had seen work done in Denmark that showed that the process used to calculate weights that represent an industry, rather than just the sample, were unnecessary. John will try to find this information and see if this should affect anything we do.
- The USA reported that they contacted every single respondent when they were recruiting new items. Their team is far larger than that of the ONS though!
- Sweden use the same method as the one ONS was proposing. John will contact them to see if he can get any information about how they run this process, problems etc.
- An interesting comment came from Germany who stated that they liked the approach, but could not do as ONS was proposing as they cannot take a sample from another sample. This was to reduce burden on respondents.

Accounting data automatically generates the Swedish SBS questionnaire, Caisa Bergman

- The question about legal issues was raised. In some countries, this solution is not possible because the legislation does not allow it.
- The response from enterprises to this solution? Almost all companies that use this option are satisfied. The time to fill in the questionnaire has been reduced by half.
- Are there differences between data submitted to the Tax Office and the data in the SIE-file? Statistics Sweden has noticed that the content in the tax data and in the SIE-file differ for some enterprises. They plan to investigate why this is the case. One theory that came up at the meeting was that it can be a question of different units.
- Future plans? Statistics Sweden plans to continue this work and try to collect data from the accounting systems as far as it is possible.

Alternative data sources for price statistics, Susanna Tåg and Anna-Riikka Pitkänen

Statistics Finland presented a poster about the main outputs of a project which goals are to study, develop and test the capabilities to utilize scanner data and web scraping in statistics production. During the poster session participants’ questions and remarks focused on the following topics:

Scanner/sales data

- Many participants were interested in the level of detail of data. For instance the data on daily consumption goods is aggregated on a day level for each product and the data delivery is agreed to be monthly.
• Scanner/sales data may involve some additional costs to NSOs (e.g. setting-up costs). However, that is not always the case, because it can be beneficial from the informants’ point of view to have an automated data transfer instead of manual work.

• Pharmaceutical data is interesting also for the use of SPPI and NA because it is possible to calculate a margin from that data. It is possible that other countries have similar kind of data on pharmaceutical products because those are subject to many laws and regulations.

Web Scraper

• There are many challenges in web scraping. For example, administrators can block web scrapers, web sites change irregularly and it is difficult to observe quality changes. To avoid problems, “netiquette” should be observed not to burden the web sites unnecessarily. It is also a good practice to tell an informant (e.g. enterprise) about web scraping in advance. It is also possible to get an alternative interface to the informant’s data instead of public website. All in all, it is good to co-operate with the informant about the web scraping of their websites.

• The weighting of data from web scraping was discussed. If there is not any other sources available, the product level weights (e.g. by CPA) may need to be asked directly from the informant.

• It was discussed that it can be difficult to obtain the prices that are actually paid by the buyer. For instance, airline companies usually have corporate programs for business travelers which affect the prices.

Obtaining alternative data sources

• They also discussed their findings in the project. When starting to look for alternative data sources and negotiations with possible data providers, it is preferable to try to obtain scanner/sales data when possible because usually it is comprehensive. If it is not available, then an interface with the data provider’s data is one option. In addition, a web scraper is also an alternative to retrieve data.

• Index compilation needs to be adjusted when using different kinds of data, like scanner data. It is not anymore possible to do quality adjustment by observation. In the project, also an index compilation methodology for utilizing the new data acquired was designed and coded. The index compilation method is based on the principle of pair-comparison.

Generating ideas for (really) alternative SPPI methods, Gert-Jan van Steeg

Summary of comments received from VG members:

• Specify the activity/service line for which you collect price changes;

• Ask specific reasons for price movements;

• Beware that responses may depend heavily on who is questioned;

• Predefine a list of possible reasons for price changes;

• Only use this method in case of non-response to traditional questionnaires (last resort) and in combination with a reminder;

• Use ‘nested’ questions: first ask if the price has changed (y/n), then if yes ask if quality has changed and estimate by how much;

• Method cannot be used as a main method, only as a fall back option;

• Quality change: ask questions that are specified for each industry, e.g. did prices change as a consequence of a. construction costs, b. labour costs etc.;
Method will work better in some industries than in others. Industrial design: maybe ok; securities brokers: probably not.

During the presentation, it was noted that that a CDF for sector papers was presented but not a similar presentation or proposal for mini-presentations. Content Development Framework Revision

Group 1 – Communications aspects – using a framework like the generalized statistical business model.

Membership noted that it would be good to have concentration and integration earlier than the order presented. The group also noted that while there are many users of data and many uses of the data, it is important not to ignore things like contract escalation.

The discussion also focused on issues related to B2B and B2C. Various participants provided their experience and it was clear that the basis for price indices differs amount the membership. In cases where the price indices are limited to B2B, CPI is still used in many cases where an SPPI is not available. Questions were raised about the appropriateness of fitness for use of CPI to deflate B2B. Sometimes that is the only thing available and it is probably better than a generic deflator or nothing at all. Another point in the discussion was the ability to use supply/use tables to identify important products and the importance of understanding the characteristics of imports and exports.

The group agreed that a set methodology for presenting concentration was needed but a method was not presented during the meeting. That will be addressed in the next phase of work on the CDF.

The reliance one a set standard of good, better, best is problematic. The VG should present alternatives in terms of strengths and weaknesses rather than a subjective good, better, best. Alternative data sources may provide good, better or best results – the answer is not always a census or direct collection of price information. This should really be an industry by industry decision as well as a country by country decision.

Most important challenges and changes in the industry could be combined.

Group 2 – summary comments. The group liked the four chapters, felt that it is important to include national accounts practices (not only theory but what national accounts is actually doing and their data sources), and that it would be useful to include questionnaires as examples from each country.

Group 3 – most important thing is identifying and reporting challenges and problems. Best practices should only be applied in sector papers . Good, better, best should be removed and instead focus on what is done and what the strengths and weaknesses are. Each country should also provide an
evaluation of how well their efforts are working. This could include a discussion of variances, sampling error, non sampling error, and data confrontations with other sources. Turnover papers might be better by sector or by type of pricing. There is too much detail in the sector paper proposed. Too much information and there should be fewer categories. Papers should also look at other uses such and productivity.

Group 4 – more general discussion on sampling methods and units. Definition of output should be at the very beginning of the paper. For presentation, session leaders should summarize as much as possible. Issues of bundling and reselling could be a secondary survey rather than always having N/A. Other uses are important (contract escalation, etc.) Drop evaluation of methods from the papers and allow the discussant to do this.

Country Score card presentation

Canada responded to the various criteria used to define a yes answer. Does this only refer to direct measures or should it also include indirect measures – such as the output estimated in input/output tables from administrative (e.g. tax and employment data) or other sources rather than collection of turnover or prices? Canada only answers yes for direct measures of turnover and SPPI. If an indirect method was used, Canada would respond no but all industries and activities are reflected in the Supply-Use tables. Not sure how other countries are answering these questions. Canada finds that the answers provided now are helpful in knowing who does direct measures. It is important to know which countries have direct experience.

David Friedman – is it important to have a measure of effectiveness for the Voorburg group and to what extent is that informed by this scorecard survey. We need something that shows productivity of the group –may be useful to our directors even if it not as useful to Voorburg Representatives. There are really two purposes. It might be useful to fill this out using survey monkey. Need to get questions down to the bare minimum. Detailed report is helpful filling out the Data availability section of the sector papers.

US and others noted that if questionnaires or survey instruments are collected, the questionnaires should be in the country’s original language and the burden should be on the user to translate them.

Germany –the questionnaires are updated frequently and they may not be useful if the ones posted are outdated. Lot of burden if they are not going to be used by Voorburg information users.

|------------------|-----------------|-----------------------------|----------------------------------|

The discussion of the guidance paper focused mostly on different uses require different data. For example, it was broadly agreed that product based data is better for short term indicators because actors can and do leverage producers in other industries. The United States noted that their press releases focus almost exclusively on products rather than industries. The group also noted that national accountants use products in input-output analysis regardless of what they call their categories.
Industry is a more useful approach for things like productivity analysis but contract escalation works better with product data.

There was concern expressed by some members that businesses in the services sector cannot provide turnover by product. That might not be a problem but the ability to assign overheads, expenses, wages and similar things to products is not normally done.

The US noted that they do collect product data in some annual surveys but that data is not carried back to the business register so sampling based on products would be difficult. Sweden noted that their SBS for the basis for supply and use tables.

The possibility of using VAT data in the EU for product delineations was raised. Germany noted that they do wish to have product level data but a choice has to be made up front for industry or products. It is not feasible to draw samples that would be reflective of both. Germany also noted that their VAT data is not available by product.

Canada presented the possibility of 2 phase sampling or pre-contacting for products provided. Canada does not include product data in their business register. The UK reported that they do a survey for products and then subsample from that. Israel uses a combination of industry and product to meet the most needs with the decision made on a case by case basis. The United States offered that their international price program is exclusively based on products.

The discussion moved to whether or not programs should allocate data for things like products or geography or present the data at the level collected/tabulated and let users allocate as needed. Many countries are using a kind of activity unit and either do not present geographic level detail or allocate data to the levels needed for detailed geography below the national level. Some are rather mechanical based on employment or wages, other are a bit more complex with development of models.

This paper will represent a first draft of the guidance. All these questions might be good to include in a survey. Updates will be made and another version will be presented next year.

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<tr>
<th>Session: Strategic vision for the Voorburg Group - part 2</th>
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<tr>
<td>Session Leaders: David Friedman, Voorburg Group co-chair (BLS-USA)/Jakob Kalko, Voorburg Group co-chair (Statistics Norway)</td>
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Strategic Plan Session 2.

Decision – Mission as is but change producer prices to producer price indexes. Mission approved as modified.

Decision - Vision – change producer prices to producer price indexes. Vision approved as modified.

Objectives – remove survey-based from point A.

Decision – Accept the objectives with the removal of the survey-based and just saying statistical measurement.

Tasks
The membership agreed not to include formal technical cooperation in the VG tasks because it really is the job of NSOs and International bodies who actually do these things. Poland wants to know redesigning will lead to premiere source – changes to say to help make the Voorburg group the premier source.

Task 1 (add indexes) Task 3 (add indexes). Task 7 like Eurostat and OECD.

Task 9 rather than consensus the group will provide advice and input to changes.

Decision – adopt as modified above for 1, 3, 7, and 9.


The group will consider calling the content development framework something else as work advances to re-address existing areas of study (like revised sector papers).

The United States presented the updated glossary for 2016. The work involved reviewing sector papers since the last update and adding recommended changes. The presentation also included an updated version of the thesaurus. The membership wanted to add a link to the old thesaurus but that is not possible because the Bureau could only locate a .jpeg image from the last version in 2007. Discussion on the thesaurus and whether or not it should be updated on a continuing basis. The membership noted that the OECD/Eurostat guide to SPPIs references the 2007 version and therefore we must keep that posted in some way.

Turnover, output, and revenue should be in the preferred terms used in the glossary (Sweden and Canada will send their definitions)

The thesaurus will be left on the website and the 2016 updates will also be posted. There are no additional updates planned for the thesaurus at this time but the glossary will be updated each year going forward.

Final day work and wrap-up

The bureau announced the nominations for new members. Mexico, the United States, and Chile were nominated and approved by the membership. The membership welcomed Ramon Bravo, Bonnie Murphy, and Erika Barrera to the Bureau. The membership also approved Mary Beth Garneau to replace David Friedman as a co-chair for the Bureau. She will share duties with Jakob Kalko.

Updates to approved sector papers are due no later than 15 January 2017

Secretary drafts meeting notes and sends out to Bureau members and session leaders for review. Full minutes will be provided to the Bureau in draft form by the end of November 2016. The draft minutes will be circulated for comment and the final minutes will be posted the VG website.

The Co-chairs notify webmaster when OK to update permanent VG website with all updated content from the 2016 meeting. The Bureau requested that everyone make sure that they send the updated presentations to CBS for posting on the 2016 site because that is the source for updating the VG.org website.

The Bureau will prepare a Progress Report for UNSC to submit to UNSD and suggest any needed updates the UN City Group webpage.
The Bureau will finalize the Strategic Plan to reflect decisions made at the meeting this year and estimate the timing of tasks for 2017 to 2021. A final draft of the strategic plan as modified during the meeting will be circulated to the Voorburg Group membership and the review should focus on major errors or omissions rather than minor changes or suggestions to wording. The goal is to have the final plan available by the end of calendar 2016.

The Bureau will make a final decision on the Detailed Status Reports no later than 15 December 2016.

An upcoming topic will be e-commerce with a basic plan to have several papers by volunteer participants that will then be consolidated and presented by the session leader. The goal is to generate a guidance paper on e-commerce.

The CDF group will continue work with the current members. Canada, the UK, Italy, and the US will work on the redesign of the VG website.

The Bureau will also establish a plan to keep documentation up to date, establish criteria for cross-cutting issues, and determine the structure and frequency of future meetings.

Assignments on Slides

The new CDF will be tested on investment banking and securities dealing. Turnover – USA (Census – Andrew), TBD, TBD. SPPI – Canada, USA (BLS), possibly Japan. Session Leader – TBD, Discussant – TBD. All volunteers should strive to get active input for national accountants on this topic.

There will be a revisited sector paper on telecommunications with a focus on 61.2, wireless telecommunication because of the substantial changes in pricing practices that are occurred since the last time this was reviewed. Papers – Germany, Hungary, USA (BLS), Session Leader – Austria.

There will be a poster session on quality indicators. Session Leader – TBD, Posters – Italy, Sweden, Canada, Germany, USA (BLS).

There will be a poster session on Globalization. Session leader (tentative) – Austria. Posters Finland, Hungary, Israel, Sweden.

There will be a cross cutting topic of e-commerce issues. Session leader – Chile. Papers – Canada, Mexico, USA (Census).

The group will also consider a session revisiting real estate for 2018 addressing topics like frames for rental property, UNSD rulings on activities like short term rental of private house and the growth of companies that facilitate such transactions.

The meeting ended with a presentation from India, host of the 2017 Voorburg Group meeting.