Organisation for Economic Co-operation and Development

STD/CSSP/WPTGS(2018)3

Unclassified **English - Or. English**

28 February 2018

STATISTICS DIRECTORATE
COMMITTEE ON STATISTICS AND STATISTICAL POLICY

Working Party on International Trade in Goods and Trade in Services Statistics

Result of the 2018 WPTGS Stocktaking Questionnaire

21-23 March, OECD Boulogne, 46, Quai Le Gallo, 92100 Boulogne Billancourt, Room BB1

This note provides a summary of the results of the Stocktaking Questionnaire sent out in preparation for the 2018 WPTGS meeting. The questionnaire aimed at collecting information from WPTGS economies on four topics: measuring digital trade; inclusive growth; organisation of national statistical information systems; and data requests from policy makers. Replies were received from 36 WPTGS economies covering a combined 54 statistical organisations.

Contact: David Brackfield, E-mail: David.Brackfield@oecd.org

JT03427409

2018 WPTGS Stocktaking Questionnaire - Summary

1. Introduction

1. At the March 2017 Working Party on Trade in Goods and Trade in Services (WPTGS) meeting, the Bureau concluded that there are several areas of work where more information about current practices and already ongoing or planned work by WPTGS members was needed and that would benefit from a 'Stocktaking' Questionnaire. Four areas in particular were highlighted:

i. Measuring Digital Trade;
ii. Inclusive Globalisation;
iii. Organisation of National Statistical Information Systems; and
iv. Data requests received from policy makers.

2. In addition, given the continued success of bilateral trade asymmetry meetings, organised alongside the WPTGS meetings, the questionnaire invited countries to participate in the 2018 series of meetings as well.

3. The questionnaire was sent to WPTGS members on 18 December 2017 and included 31 questions (see Annex A). As of 27 February 2018, responses have been received from 36[1] WPTGS countries (32 OECD members) representing 54 statistical institutions.

4. This note presents a synthesis of responses. The following section provides an overview of main findings and conclusions, before describing the detailed answers on a question-by-question basis (including the links to relevant work).

2. Measuring Digital Trade

5. The Internet and digitalisation are fundamentally changing the way people, businesses and governments interact. This has led to a new era of globalisation underpinned by the movement of data across national borders, changing the nature, patterns and actors in international trade in goods and services. While digitally related transactions are not new, the current scale of transactions and the emergence of new (and disruptive) players transforming production processes and industries is unprecedented.

6. To develop internationally comparable statistics on Digital Trade, the OECD developed a conceptual measurement framework and conducted a first stocktaking survey, both of which were presented at WPTGS in 2017. IMF conducted the same stocktaking among non-OECD countries, and the combined results, reflecting the replies

[1] Unfortunately, given the lateness of response it wasn't possible to include in the analysis the completed questionnaire from one country

of more than 70 countries, were discussed at the TFITS Expert Group Meeting on Digital trade (October 2017), the IMF BOPCOM 2017 meeting, and the Eurostat BOP Working Group (November 2017). The conceptual framework was also used in discussions on measuring the Digital Economy involving National Accounts experts.

7. Feedback from all these meetings concluded that the current conceptual framework, and working definition of digital trade (all cross-border resident/non-resident transactions that are either digitally ordered, online platform enabled, and/or digitally delivered) provided solid foundations on which to build further. Important measurement challenges remain however, which the stocktaking questionnaire explored, with the aim of providing inputs to the future construction of a Handbook on Measuring Digital Trade.

2.1 Digital (online) ordering

2.1.1 Cross-border ecommerce transactions in goods and services

8. The definition of cross-border ecommerce follows the existing definition of ecommerce and includes all international trade transactions that classify as "the sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders."

9. The definition provides further clarification regarding the nature or transactions that should be covered: "The goods or services are ordered by those methods, but the payment and ultimate delivery of the goods or services do not have to be conducted online. An ecommerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations. To be included are orders made over the web, extranet or electronic data interchange. To be excluded are orders made by phone, fax or manually typed email."

10. While this definition remains appropriate and robust, some concerns have emerged particularly concerning new types of transactions. The questionnaire included eight questions covering these concerns. Respondents typically agreed with these clarifying questions (and by proxy the existing definition), confirming a common understanding of cross-border ecommerce. However whilst there was broad unanimity regarding more detailed transactions, some differences did emerge:

- 100% agreed that ecommerce should cover 'in-app' purchases (Q1a)
- 94% agreed that ecommerce should include bidding platforms (Q1b)

11. In detailed responses, it was highlighted that treatment of ecommerce transactions involving 'bidding platforms' remains difficult given the lack of current understanding on how these platforms operate (e.g. are they intermediaries or actual suppliers) and their wide range of activities e.g. financial markets and securities.

- 2% agreed that ecommerce should include the sample if purchased online but not the subsequent trade deal if it is made offline (Q1c)

12. In detailed responses it was noted that IMTS 2010 indicates that samples should not be included in international trade transactions. An argument was also made that there should be harmonisation across the total transaction, if, for example, the main trade is treated as offline then the whole trade (including the sample) should be treated as offline

- 88% agreed that when a trade transaction is concluded via offline ordering processes, but subsequent follow-up orders are made via digital ordering systems, only the follow-up orders should be considered as ecommerce (Q1d)

- 71% agreed that ecommerce should not include purchases made via online chat functions (Q1e)

13. In detailed responses it was noted that the treatment of purchasing of goods or services via online chat functions (e.g. WeChat) remains an open question, given that some of the big players now have this functionality e.g. Facebook Marketplace, and the fast technological developments, e.g. AI robots can now handle orders via online chat.

- 88% agreed that ecommerce should not include offline transactions formalised using digital signatures (Q1f)

14. More generally a number of respondents did highlight challenges regarding practical measurement as opposed to conceptual desirability, noting that to achieve full conceptual alignment could have significant impacts on respondent burdens.

15. Several countries have undertaken cross-border ecommerce studies, including Finland, Germany, Israel, and Lithuania. Belgium, Ireland and the United States have formally established groups/taskforces to investigate cross-border ecommerce in their statistical organisations. Many other countries indicated that this was part of future plans and investigations. In discussing future work, the use of credit card data was a common theme with for example Russia and Slovakia already having and using this data.

16. Denmark and Ireland highlighted the potential use of a new EU data source, the Mini One-Stop-Shop (MOSS Scheme). MOSS allows enterprises to supply certain online services (telecommunication; television and radio broadcasting; and electronically supplied services) within the EU without the need to register for VAT in each EU country being supplied.

2.1.2 Digitally ordered cross-border merchandise trade

17. Customs authorities often specify a minimum value and/or a minimum amount of duties and taxes below which no duties and/or taxes will be collected. The recent and ongoing increase in cross-border digital trade may have led to an increase in the share of below-the-threshold trade, and countries are reviewing their estimation methodologies. Two important new data sources have emerged that may allow for these estimations to be improved: (simplified) electronic customs declarations that enterprises engaged in ecommerce may use to facilitate customs clearance and trace packages across borders; and postal data (with similar information) such as collected internationally by the United Postal Union (UPU).

18. Among the respondents, 12 indicated that such an electronic customs declarations for enterprises engaged in below-the-threshold ecommerce was used in their country, and that this source was investigated or used in their statistics. Seven countries indicated an interest in participating in a pilot study, in collaboration with the OECD, UPU, UNCTAD and WTO, on comparing UPU data on postal packages and small value transactions as a potential data source for cross-border merchandise ecommerce transactions. Many others expressed an interest in the results, even if they could not actively participate due to resource constraints.

2.2 Digital intermediaries

19. An important characteristic of digitalisation is the advent of digital intermediaries such as Airbnb, Uber, Amazon, eBay or Alibaba, that facilitate (cross-border) digital trade in goods and services. Better understanding their role in international trade is an

important policy objective. This requires first of all statistics on the share of international trade (in goods and in services) that is ordered via platforms. In addition, particularly when transactions are facilitated by a non-resident digital intermediary, a breakdown should be made between the payments for intermediation services (trade in services) and the value of the good or service that is provided.

2.2.1 Identifying transactions with non-resident digital intermediaries

20. Last year's stocktaking questionnaire indicated that imports facilitated by non-resident digital intermediaries were difficult to (separately) identify, but that new data sources, such as credit card data, were being explored. Countries were asked if recent improvements had been made in measuring payments to non-resident digital intermediaries. While only Poland and Slovakia indicated that concrete progress had been made in capturing these payments, in general any mention of investigation tended to be focused around the use of credit card data, although there is an understanding that this may not deliver all details that are required. Ireland, the Netherlands and Spain mentioned the possibility of capturing these transactions in their international trade in services surveys (under the EBOPS category – Trade-related services), noting however the difficulty in capturing data from non-resident intermediaries. Questions were also raised in regards to the industry classification of intermediaries.

2.2.2 Exports via digital intermediaries

21. From the view point of suppliers, digital intermediaries provide an opportunity to access foreign markets in a relatively low-cost way, which can help connect SMEs in particular to international markets. When asked if they could identify the number of enterprises (and the value of the trade) using digital intermediaries (resident or non-resident) to access international markets, countries generally responded that while some information is collected on the use of digital intermediaries e.g. via ICT, retail trade, or international trade surveys, a distinction between resident and non-resident channels was not possible from these sources. Singapore has started to explore the feasibility of using big data to identify enterprises using digital intermediaries.

2.2.3 Digital intermediaries in travel services

22. Travel services are among those where online platforms have been particularly disruptive (e.g. Airbnb, Booking, Expedia, etc.). Contrary to most other services transactions, which are measured via enterprise surveys, travel services are often captured by surveying the demand-side (tourism expenditure surveys), which could include breakdowns between services booked online versus non-digital purchases. The results from the stocktaking survey indicated few countries are able to determine if the trade was digitally ordered or booked through on online digital intermediates. Spain indicated that in 2016, 78% of inbound tourists booked accommodation services digitally, and 40% of outbound tourists booked accommodation (excluding hotels) using an online intermediation platform.

2.3 Digitally delivered transactions

23. Digitally delivered transactions are consistent with what is described by the TGServ Task Group as ICT-enabled services, i.e. services products delivered remotely over ICT networks. They involve downloadable products, such as software, e-books, data and database services, which are often also digitally ordered, but also include services

that are ordered 'analogously', but delivered online, such as consultancy services, or certain intra-firm cross-border transactions, including those involving data.

24. Last year's stocktaking questionnaire indicated that in particular fully digital products (digitally ordered and downloadable) may not always be well-captured in trade in services statistics. At the same time, new data sources were actively explored to better measure such flows.

25. When asked, nine countries reported progress in measuring digitally downloadable products since last year. Denmark and Ireland highlighted their experiences in using the European MOSS data, while credit card data and online payment methods (e.g. PayPal) were also mentioned as possible sources by countries.

26. Three countries stated that they have, or will have, information on digitally downloadable products but that a breakdown between cross-border and domestic transactions would place too much burden on respondents. Six countries reported starting work on measuring trade by Mode of Supply – in particular Mode 1 may shed light on digitally delivered products. For example, Israel is currently testing a new Mode of Supply questionnaire and the United States has added questions on Mode 1 to its international services questionnaire which will go into the field in 2018.

2.4 General Questions

27. Among the recent studies published by countries aimed at quantifying the impact of digitalisation on international trade (and related aspects e.g. the sharing economy), Statistics Canada reported to have published a study on the sharing economy[2] covering services offered by Canadian individuals and services consumed by Canadian individuals in 2017. Statistics Netherlands estimated transactions of Airbnb for the 2015 benchmark revision of the national accounts and in 2016 published research on *Measuring the internet economy in the Netherlands*[3].

3. Inclusive Globalisation

28. The 2017 WPTGS meeting concluded that inclusive globalisation is an important new topic for statistical development. It requires in particular an assessment of how variables such as the number and quality of jobs, average wages and wage inequalities, are related to international trade and international investment in different countries, industries and business functions. As a first step towards providing such insights, statistics can be developed that describe how these job and wage related variables vary across different types of companies (for example, trading/non-trading enterprises, foreign affiliates and domestic controlled enterprises, small versus large enterprises), across countries and industries.

29. Such statistics can be compiled by linking business and trade statistics with information on employment and employees (e.g. in business surveys or labour force surveys), preferably at the micro (enterprise) level. This part of the stocktaking questionnaire asked about the extent to which such work has already been carried out by statistical organisations as part of the development of (new) official statistics, or could be carried out in the future.

[2] http://www.statcan.gc.ca/daily-quotidien/170228/dq170228b-eng.htm

[3] https://www.cbs.nl/-/media/_pdf/2016/40/measuring-the-internet-economy.pdf

30. When asked how information on wages and salaries at the individual firm level consistent with the corresponding output information used in the national accounts was compiled, respondents (around half) replied that producing this information is generally done via linking survey data (e.g. structural business statistics) with administrative records (e.g. tax records). This linking was often complex given the different nature of the statistical units involved, and is simplified when a single identifier is used for individuals and enterprises or a large register on enterprise-employee links is available.

31. Several countries noted that the inclusion of firm trading status and/or foreign ownership in the linking exercise could be problematic (due to the complexity of the linking exercise involving multiple sources, as well as potential legal constraints), and potentially incomplete.

32. At the same time, nearly ten countries considered that the inclusion of trading status or foreign ownership should not pose too many problems. It was highlighted that the Nordic countries are currently working on this type of linking and are now exploring expanding this to cover social statistics (e.g. wages, age, gender, etc.). Also the United States BEA, with the Census Bureau and the Bureau of Labour Statistics, is working on linking various microdata to produce estimates of employment by type of ownership, establishment level industry, region, and occupation. Several European countries mentioned their work in coordination with Eurostat on the International Sourcing Survey as an example of data on inclusive globalisation. France[4], Ireland[5] and the United States[6] provided references to national publications on the topic.

4. Organisation of the Statistical Information System

33. The measurement challenges posed by globalisation and by digitisation do not only often require new data sources, but also new methods of working and organising the statistical information system, including for example, 'large case units' or similar coordinated approaches for measuring large and complex (multinational) enterprises, special units to build expertise on big data as a source for official statistics, and/or new approaches to fundamentally integrating the data collection and compilation methods of previously fragmented statistical domains.

34. Among the responses, intensifying collaboration, especially between statistical offices and central banks, was the most common approach towards better measuring globalisation and digitisation, including for example data sharing (both formally, e.g. supported by a MOU, and informally), joint studies (for example investigating MNEs), sharing ideas, data consistency checking, classification harmonisation, data coherence and general coordination. Such collaboration in some countries also involved national customs authorities, Ministries of the Economy, tax administrations.

35. The creation of Large Case Units (LCUs) is an increasingly popular approach to dealing with the measurement challenges posed by globalisation and digitisation. Among the respondents, thirteen LCUs are either in existence or being established:

[4] http://www.cepii.fr/BLOG/bi/post.asp?IDcommunique=587

[5] http://www.cso.ie/en/releasesandpublications/ep/p-fdi/fdi2015/

[6] https://www.bls.gov/opub/mlr/2011/10/art1full.pdf,
https://www.bea.gov/international/ai1.htm#BEACENS,
https://www.bea.gov/papers/pdf/wp2015_paper_with_tables.pdf

- Statistics Finland, 4 employees covering 20 enterprise groups;
- Banque de France, 21 employees covering 600 enterprise groups;
- Hungarian Central Statistical Office, 5 employees;
- Central Statistics Office of Ireland, 6.5 employees covering 60 enterprise groups;
- Italian Statistics Office (Istat), covering 140 enterprise groups;
- Statistics Netherlands, covering 300-350 enterprise groups;
- Statistics New Zealand;
- Statistics Norway, 3 employees;
- Department of Statistics Singapore;
- Statistics Sweden, 15 employees covering 50 enterprise groups;
- Statistics Denmark (in development, targeting 50 enterprise groups);
- Luxembourg (in development); and
- Spain (in development).

36. The scope of activities of LCUs varies. In some, the LCU collects all statistics from the covered enterprise groups and is the single point of contact for respondents. In others the unit has different experts for different statistics who liaise to ensure consistency. LCUs may also identify enterprise groups for profiling and coordinating future work.

37. The exploration of Big Data is also more systematically organised, e.g. via dedicated centres or positions. Several countries have already established Big Data projects/centres, including :

- Central bank of Estonia (Eesti Pank) has a Big Data position in its balance of payments team;
- Banque de France has created "Le Lab Banque de France", a centre of expertise for digitalisation, Big Data and open innovation;
- German national statistics office (Destatis) where Big Data is part of a section investigating new data sources;
- Central Statistics Office of Ireland has a dedicated Big Data statistician that recently conducted a project on Tourism Statistics using Mobile Phone Data;
- Statistics Netherlands has a Big Data unit with 12 people looking at a range of topics; and
- Department of Statistics Singapore has a Big Data unit exploring potential data sources.

38. Other countries are currently investigating possibilities, including for example Denmark, who is establishing a formal network of people to investigate Big Data, the French national statistics office (INSEE) who are creating a centre for innovation focused on Big Data (the "SSP-lab") and the United States Census Bureau who have initiated a Big Data Program.

5. Data requests from policy makers

39. It is important for statistical work programmes, and as a consequence, the WPTGS agenda, to be aligned with policy interests and needs, to ensure the continued relevance of statistics and to be able to develop the information that is necessary to support evidence-based policy making. The OECD Secretariat aims to facilitate this alignment as much as possible at the international level, by keeping abreast of discussions in the many policy-oriented bodies of the OECD and elsewhere. However, national

priorities may vary. The last part of the WPTGS stocktaking questionnaire therefore aimed to provide an inventory of policy questions received by national statistics offices and central banks related to international trade and globalisation, in order to help ensure that the WPTGS compass continues to point in the right direction.

40. In total, twenty two countries listed sixty-six data requests from policy makers. While listing all of these separately is not feasible, some broad themes did emerge:

41. First of all, policy makers showed a strong interest in better understanding how international trade agreements (e.g. CETA, NAFTA, etc.) are relevant for the economy as a whole and for particular sectors and industries. This also includes questions on upcoming changes to existing agreements: many offices received requests related to Brexit. Trade in Enterprise Characteristics (TEC) data was a common resource for countries to provide insights for such requests, as was TiVA and detailed international merchandise trade data.

42. A second topic of interest for policy makers in many countries is cross-border digital trade and ecommerce. Countries were asked about the size of this phenomena, the contribution of foreign digital intermediaries to the national economy and cross-border online shopping.

43. The third most important topic was international trade in services. Policy makers were interested in: international trade in services by industrial sector and by partner country; in services by mode of supply; in the numbers of enterprises involved in intentional trade in services; and in trends over time. Detailed services trade statistics, and Services Trade by Enterprise Characteristics were among the main statistics used to answer these questions, which in some cases required the statistical organisation to bring together data sources or create new indicators.

44. Finally, some statistical offices received a request for data on whether firms engaged in international trade perform better, and/or provide better jobs, than firms without international trade. In this case, existing statistics on enterprise performance, employment and wages were compared between firms with and without international trade.

6. Reducing Trade Asymmetries

45. The previous WPTGS meetings (from 2015 onwards) were accompanied by a series of bilateral trade asymmetry meetings. Feedback from participants has consistently been very positive. 17 countries have asked to participate in the 2018 bilateral trade asymmetry meetings.

Detailed responses by question

Measuring Digital Trade

Digital (online) ordering

Cross-border ecommerce transactions in goods and services

Q1a. Conceptually, cross-border ecommerce transactions should include 'in-app' purchases – i.e. orders that are made via mobile applications (since these apps (or components of these apps) reflect 'systems specifically designed for the placement/receipt of orders').

- Agree: 34 countries
- Disagree: 0 countries

Q1b. *Conceptually, cross-border ecommerce transactions should include purchases made via online bidding platforms (since these platforms reflect 'systems specifically designed for the placement/receipt of orders').*

- Agree: 32 countries
- Disagree: 0 countries
- Do not know/no opinion: 2 countries

Q1c. *Conceptually, when a sample is ordered online but the subsequent (larger) trade deal involves offline interactions and ordering procedures, ONLY the sample is considered to be a cross-border ecommerce transaction.*

- Agree: 28 countries
- Disagree: 5 countries
- Do not know/no opinion: 1 country

Q1d. *Conceptually, when a trade transaction is concluded via offline ordering processes, but subsequent follow-up orders are made via digital ordering systems (including EDI), ONLY the follow-up orders are considered to be a cross-border ecommerce transaction.*

- Agree: 30 countries
- Disagree: 1 country
- Do not know/no opinion: 3 countries

Q1e. *Conceptually, cross-border ecommerce transactions should NOT include purchases made via WeChat or similar online chat functions (as these do not reflect a system specifically designed for placing orders, but are manually composed messages similar to emails).*

- Agree: 24 countries
- Disagree: 1 country
- Do not know/no opinion: 9 countries

Q1f. *Conceptually, cross-border ecommerce transactions should NOT include offline transactions that are formalised using digital signatures.*

- Agree: 30 countries
- Disagree: 1 country
- Do not know/no opinion: 3 countries

Comments:

While there was broad agreement in all areas, some additional remarks made by respondents suggest that further deliberations of clarifications are needed in some specific areas:

Both Germany and the Netherlands raised the issue of the impact on measurement and administrative burdens that might occur in compiling the level of detail implied in the questions. Germany stated that at present there is "no possibility of identification" while the Netherlands stated that "… measuring the mode of order placement will cause a considerable increase in administrative burden".

France, Ireland and Mexico commented that 'apps' are simply a version of a website and specifically designed to facilitate ecommerce therefore it is logical to include their transactions as ecommerce.

While the majority agreed with transactions undertaken via bidding platforms being included as ecommerce, Spain raised the issue that the online bidding platforms may be acting as intermediaries which in turn contact the bidders/suppliers of the products. New Zealand suggested that the term "bidding platforms" is somewhat vague. For example, would these platforms include all auction houses that operate an online bidding capability e.g. auction bidding for things like art, housing, collectables etc.? Would bidding platforms extend to financial markets, purchases of securities, raw commodities? In any case it may be worth considering whether or not the full product value is included here, or only the margin made by the platform itself that is considered purely 'digital' production.

The question on samples resulted in five countries disagreeing with the premise. Hungary pointed out that the IMTS 2010 states samples should be excluded from international trade statistics. Denmark stated that it depends on the actual product that is purchased. If the product is digitally delivered, such as software or gambling services, this should also be considered ecommerce, even though it is ordered "manually". France considered that if the main transaction is done offline then the sample should be integrated in the offline order. In addition France considers that all cross-border transactions should be reported homogeneously, so, for example, if the main transaction is offline then all subsequent transactions should be offline even if facilitated through a website.

Israel, Mexico and Switzerland, while agreeing, raised points for discussion. Israel and Switzerland suggested that as sample costs will most likely be negligible compared to the actual trade deal, on a practical level it might not be worth distinguishing between them. Mexico (and Poland who disagreed) questioned how the subsequent trade would be made, the premise here being if the sample is ordered online why wouldn't the subsequent (and larger) trade be?

The question regarding whether transactions undertaken using online chat functions (e.g. WeChat) should be considered as ecommerce raised a number of questions/comments from respondents. France thought the case was clear; it was a digitally facilitated purchase. Belgium thought that this is an open question and could be considered

ecommerce, asking for example what about "Facebook Marketplace". Russia also posed this question about Instagram and Facebook, stating that while these are not specifically designed for placing orders the volume of trade could be significant (and therefore needs considering).

Canada pointed out that if we are talking about a method of payment rather than a way to order then it should be excluded. New Zealand asked if this distinction will remain reasonable in the future, for example, what about multi-purpose applications that include social media and also include an ecommerce function such as Facebook Marketplace.

Continuing with the online chat question, Israel (and France) pointed out that there are already AI robots handling orders via online chat. Japan questioned how to differentiate "… between 'in-app' transactions and 'WeChat' ones". Switzerland considered this a borderline case as did Mexico and Ireland, with Ireland stating: *Although Chat functions on websites are not designed solely for the purpose of facilitating the placement of orders, they do have the capability of being used to do so. It may be necessary to reconsider the possibility that orders made on both Chat functions and emails are ecommerce transactions. Although they are not automatic transactions, as they require some human interaction on the enterprise side, they are conducted over the web or extranet and perhaps should be considered as ecommerce transactions*.

Q1g. *In addition to the questions above, concerning the additional guidance in interpreting the definition of ecommerce in the context of international trade, are there other points of clarification that you believe should be made?*

- Yes: 6 countries
- No: 27 countries

Q2. *Have you recently undertaken any special studies to estimate cross-border e-commerce trade transactions or are you planning to do so in the near future? Please note this question was also included in last year's survey, but considering rapid developments in this area an update of the work by your organisation would be very useful, even if unchanged from last year's response.*

- 30 responses

Comments:

Most countries felt there wasn't a need for additional or further guidance. Israel thought that more detailed examples would help and suggested that an example n classifying transactions taking place on different parts of the Facebook platform (e.g. messenger, wall, etc.) would be a good start. Denmark stated that items that are digitally delivered online should always be considered ecommerce, even if the actual monetary transaction happens physically in a store. They also suggested that in order to secure consistency across statistical domains, a comparative exercise should be carried out, taking stock of the definitions used in trade, business and economic statistics.

Mexico, one of the countries that thought additional guidance was needed, stated that further clarification was needed on the role of the digital intermediaries providing the platform to suppliers/users (for example, UBER, Airbnb, etc.). Russia would like to see more discussion on cross-border ecommerce transactions in B2B and B2G segments. And finally, Argentina wanted a better understanding on the relevance of the ecommerce distinction considering that the "e" is going to be involved in virtually every aspect of people's lives in the very near future.

For question 2, which was also asked in last year's stocktaking questionnaire, four countries replied that they have undertaken studies, and one country is currently undertaking a study.

Statistics Finland published a working paper: *Digitalisation and GDP - How Digitalisation is Visible in Economic Statistics (1/2018)*. The Israeli Central Bureau of Statistics, in October 2017, published: *Estimates of Expenditures of Israeli Households for On-Line Purchases from Abroad*. Destatis (the national statistics office of Germany) used Trade by Enterprise Characteristics (TEC) data to estimate values for cross-border ecommerce trade transactions. This was done by analysing data on imports and exports of enterprises classified under NACE code 47.9.1 [Retail sale via mail order houses or via Internet], Destatis being aware that the significance of this estimation is limited. Statistics Lithuania in 2017 undertook a pilot test to estimate cross-border ecommerce sales as a proportion of total sales by country groups. Finally, the Bundesbank (the central bank of Germany) is currently conducting a study and expects first results by July 2018.

Three countries stated that small groups or taskforces have been recently established to look into cross-border ecommerce estimates. The National Bank of Belgium is establishing an international taskforce to investigate possible new sources. The Central Statistics Office of Ireland has set-up a cross divisional digital economy coherence group that will examine the inclusion of online sales in official statistics. And finally, the United States Customs and Protection (CBP) have an ecommerce working group under the Commercial Customs Operation Advisory Committee. In addition, the United States Bureau of Economic Analysis (BEA) is currently in the scoping phase of a long-term project to measure various aspects of the digital economy, including cross-border ecommerce.

In answering question 2, a number of countries referenced the use of debit/credit card data in their attempts to measure cross-border ecommerce. Canada's project to collect credit card data, both of Canadians abroad and purchases in Canada by foreigners, is progressing. Russia makes estimates for both cross-border ecommerce imports (Russian banks and electronic money system operators provide credit card data) and exports (based on a survey of 10 banks covering 90% of the amount of purchases of non-residents from Russian Internet stores). Slovakia surveys banks for cross-border credit card payments and Sweden continues to use credit card data for their estimates.

In 2016 the New Zealand Tax Office (IRD) instituted a tax on "remote services", Statistics New Zealand is currently exploring the potential use of this underlying IRD tax data in providing better estimates of household cross-border purchases of digital services.

Latvia mentioned Eurostat's ongoing work on the Methodology Manual for Statistics on the Information Society which is part of an EU regulation on the same topic. Three European Union member states (Lithuania, Spain and Slovenia) mentioned the ongoing EU annual survey on "ICT Usage and eCommerce", however all acknowledged the limitations of the survey and resulting data.

Finally, both Denmark and Ireland mentioned "MOSS", namely the European Commission run Mini One-Stop-Shop (MOSS Scheme). MOSS allows enterprises to supply services (telecommunication; television and radio broadcasting; and electronically supplied services) within the EU without the need to register in each EU country being supplied. Ireland outlined that it is capturing cross-border ecommerce data (VAT payments) from MOSS, while Denmark is still looking into the import of electronically delivered services to private consumers by the use of MOSS VAT.

Digitally ordered cross-border merchandise trade

Q3. *Is a system using electronic customs declarations for enterprises engaged in ecommerce as described above already in use at Customs Authorities in your country?*

- Yes: 13 countries
- No, but it will be implemented in the near future: 5 countries
- No: 13 countries
- Do not know: 3 countries

Q4a. *Are there specific rules or criteria that enterprises must meet in order to fill out such electronic customs declarations?*

- Yes: 11 countries
- No: 6 countries

Q4b. *Have you already explored this data source for statistical purposes?*

- Yes: 11 countries
- No: 7 countries

Comments:

Around half of the responding countries indicated that their Customs Authorities have electronic customs declarations for enterprises engaged in below-the-threshold ecommerce or will introduce such a system soon. Of those countries that have electronic customs declarations, half indicated that there are specific rules or criteria that enterprises must meet in order to fill out such electronic customs declarations and eleven countries have investigated this data source. However, countries also stated that in most cases ecommerce cannot be directly distinguished in the transaction.

In addition, Argentina stated that while at the moment their Customs Authorities do not have electronic customs declarations for enterprises engaged in below-the-threshold, in the future they expect this to change.

Most countries that stated that their Customs Authorities have electronic customs declarations for enterprises engaged in below-the-threshold commerce outlined the system being used. For example Japan uses the Nippon Automated Cargo and port Consolidation System (NACCS), Ireland has the Automated Entry Processing (AEP) system and Switzerland has the "e-dec easy" system. EU member states also listed the Economic Operators' Registration and Identification System (EORI) - any trader who interacts with Customs Authorities in any member state of the EU is allocated a unique reference number that is valid across the EU and serves as a common reference number for the trader's interaction with any EU customs union.

In Belgium a working group has been set up to investigate in which way simplified customs procedures can respond to the increasing ecommerce activities. The working group is limited to representatives of the Belgian private sector and Belgian Customs.

In regards to the below-the-threshold trade, the Customs Authority in Finland is planning from 2020 that *all* postal consignments will need to be cleared while in the United States the law has been changed to increase the *de minimis* from $200 to $800.

In countries were the Customs Authorities have electronic customs declarations for enterprises engaged in below-the-threshold commerce there are normally specific rules that need to be followed. In Latvia the enterprises must be a member of UPU (as in

Greece) and use a special system, in Norway a customs license is required, in Slovakia enterprises must have a qualified electronic signature, in Switzerland enterprises can only use the system if they are "Authorised Consignees" while in New Zealand enterprises must register to obtain a Customs client/supplier code.

Greece, Ireland, New Zealand, Norway, Spain, Switzerland and the United States all stated that they currently use this data in their statistics to make estimates for below-the-threshold cross-border trade. However, as stated earlier, there is no real way to determine if this cross-border trade is ecommerce.

Q5. *OECD, UPU, UNCTAD and WTO are currently conducting a pilot study to examine the use of UPU's postal data as a potential data source for cross-border merchandise ecommerce transactions. Would you be interested in participating in a pilot study, in collaboration with the international organisations involved, that would compare UPU data on postal packages and small value transactions (aggregate by trade partner and product) with your below-the-threshold estimations?*

- Yes: 7 countries
- No: 23 countries

Comments:

Seven countries are willing to take part in a pilot study comparing UPU data on postal packages and small value transactions: Argentina, Belgium, France, Ireland, Israel, Poland and the United States. Ireland was especially interested in B2C trade, France saw relevance as distance selling often leads to VAT fraud and serious breaches in reporting declarations for statistical purposes and Israel already has plans to conduct a study on the real value of these below-the-threshold parcels.

In addition, a number of countries were 'maybes' or would like to be involved in discussions on the outcomes. In some cases, the maybes, wanted to know more about the project to see what they could bring to the table. A number of countries mentioned that while interested, current resource constraints meant they couldn't participate.

Digital intermediaries

Identifying transactions with non-resident digital intermediaries

Q6. *Have you made any improvements in the last 1-2 years towards better measuring payments made to non-resident digital intermediaries?*

- Yes: 3 countries
- No: 30 countries

Comments:

Overwhelmingly countries have not made any further progress in the last few years in better measuring payments made to non-resident digital intermediaries. However, countries did provide, in some cases detailed, comments, on future or proposed plans. Belgium, Estonia, Finland, France Israel, Latvia and Mexico all mentioned the possibility of using credit card data to capture the transactions of non-resident digital intermediaries. In addition, Latvia pointed out that ECB will revise regulation ECB/2013/43 with the aim of incorporating credit card data for balance of payments compilation.

Iceland has discussed internally about estimating these digital intermediary services using tax records. In Korea, Research is underway to reflect these transactions better in the

national accounts. France has settled a voluntary-based agreement with banks to collect statistics for payments on behalf of households, first data being reported as from Q4 2018, with analysis on an experimental basis planned to be conducted in 2019-2020.

Ireland, the Netherlands, Poland and Spain thought that these intermediation fees could be captured in their international trade in services surveys via the "Trade related services" EBOPS category (but not possible to spilt digital and non-digital) or in travel services. Canada and Hungary mentioned issues in getting access to these non-resident digital intermediaries since they might not have a local presence.

Finally, Spain believes that more clarification is needed here. For example a general agreement on the industry to which digital intermediaries belong. Are they, as intermediaries, just providing intermediation services, on the contrary, providing a particular kind of service (transport, accommodation, etc.)?

Exports via digital intermediaries

Q7. *Can you identify, in, for example, your enterprise surveys, how many enterprises use digital intermediaries (either resident or non-resident) to sell their products to foreign markets, and how much trade is involved?*

- Yes: 5 countries
- No: 27 countries

Comments:

An issue here was identifying the resident/non-resident split, with a number of countries stating that they collect information on digital intermediaries e.g. via an ICT survey but can't make the distinction. Canada and Mexico capture this information in their retail trade surveys but stated that it wasn't feasible to distinguish a resident "third-party website" from a non-resident one.

Singapore is starting to explore the feasibility of using Big Data to identify enterprises using digital intermediaries.

Digital intermediaries in travel services

Q8a. *Are you able to identify, within your tourism expenditure surveys, if the various travel services have been digitally ordered (i.e. booked online, as opposed to non-digital purchases via e.g. a travel agent or otherwise)?*

- Yes: 11 countries
- No: 22 countries

Q8b. *Are you able to identify, within your tourism expenditure surveys, if an online intermediation platform was used for digitally ordered travel services?*

- Yes: 5 countries
- No: 11 countries

Comments:

A limited number of countries indicated that they ask travellers details regarding how their travel was booked, e.g. digitally ordered. For Italy (non-package travel) and the United States this only involves accommodation, for France only on the inbound tourist side and only for transport and accommodation, and for Slovenia it is only asked every third year. In Spain, for 2016, the Tourist Expenditure Survey (EGATUR) reveals that

78% of inbound tourists booked accommodation services digitally, while the Resident Travel Tourism (ETR) Survey found that 45% of trips that booked accommodation in advance were booked digitally.

Less than half of respondents to the stocktaking questionnaire answered question 8b; (asking if they are able to identify if an online intermediation platform was used for digitally ordered travel services). Of those that replied yes: France - only inbound tourists and only for transport and accommodation; Italy - only for all-inclusive trips (for others just accommodation); Spain - the ETR asks but only for accommodation (40%, excluding hotels, were ordered by an online intermediation platform), the EGATUR will introduce these questions into the survey in 2018; and the United States - an estimate for accommodation could be made and possibly for airline reservations.

Digitally delivered transactions

Q9. *Have you made any improvements in the last 1-2 years towards better measuring cross-border transactions in digitally downloadable products?*

- Yes: 7 countries
- No: 24 countries

Q10. *Have you made any attempts to develop such breakdowns in your trade in services statistics (e.g. for different EBOPS categories), potentially in work related to estimating Mode 1 Trade in Services which will be a good approximation of such flows?*

- Yes: 3 countries
- No: 29 countries

Comments:

All countries that stated that improvements in better measuring cross-border digitally downloadable products transactions had been made also stated that the improvements are limited. Both Ireland and Denmark have explored the use of MOSS data to source the purchase of digital products such as Netflix, Apple iTunes Store etc. (Ireland is already making estimates in some cases). Russia makes estimates from data directly obtained from electronic money system operators like PayPal, Spain asks for this data in its international trade in services survey and Iceland is capturing additional variables from credit card data to improve the overall quality of the estimates.

Canada has two new household surveys going into the field in 2018 that while asking households about these products will not ask them to make the distinction between domestic and international purchases (given the difficulty this poses for households). Both Germany and Slovakia have data but can't break it down by individual ecommerce category. France has made progress on Modes of Supply, but not specifically on 'digitally delivered' versus 'not digitally delivered' and the statistical authorities need to focus on the alleviation of reporting burden for enterprises.

Belgium, Hungary and Sweden stated that the development of breakdowns to capture cross-border transactions in digitally downloadable products as part of Mode 1 work would place too much burden on respondents. Canada, Israel, Lithuania, Poland and the United States will start work on measuring Modes of Supply in the near future. Israel is currently testing a new questionnaire to capture Modes of Supply. Canada is expecting to add a Mode 4 question into its international trade in services questionnaire in 2019 and will examine further the services digitally delivered question in the coming months.

The BEA has added questions to the Benchmark Survey of Transactions in Selected Services and Intellectual Property to collect information on the share of transactions provided via Mode 1 for eleven separate services types. The services types chosen were those for which the BEA reasonably expects to be provided over a mix of modes: accounting, auditing and bookkeeping services; advertising services; other computer services; education services; architectural services; engineering services; surveying, cartography, certification, and technical inspection services; legal services; market research services; public opinion and polling services; other management, consulting, and public relations services. For each service type, respondents are asked to check a box corresponding to the range the share of sales provided remotely via email, telephone, etc.: 0%-24%, 25%-49%, 50%-74%, 75%-89%, 90%-99%, and 100%. The survey will be fielded in 2018 to collect data for 2017.

General Questions

Q11. *Have you recently conducted any (other) studies quantifying the impact of digitalisation on international trade, or in related aspects such as the (cross-border) sharing economy? If yes, please briefly describe and provide links to the studies if available.*

- Yes: 0 countries
- No: 19 countries

Q12. *Is there any other information or project within your organisation that you think may be relevant for measuring digital trade that has not been addressed in this survey?*

- Yes: 0 countries
- No: 20 countries

Comments:

Statistics Canada, in 2017, published the results of a study on the sharing economy. The study covered services offered by Canadian individuals and services consumed by Canadian individuals. The BEA has compiled a dataset on transactions in ICT and potentially ICT-enabled services and presented the results at several international statistics meetings (including the 2017 WPTGS meeting). In the Netherlands, transactions of Airbnb were estimated for the 2015 benchmark revision of the national accounts and presented at the 2017 OECD Working Party on National Accounts. In addition in 2016 Statistics Netherlands published research on "Measuring the internet economy in the Netherlands" (and a Eurostat grant will allow the study of exports and turnover of digital intermediaries in the Netherlands).

While Turkstat hasn't recently conducted any studies quantifying the impact of digitalisation on international trade, it is planning to conduct a study with partner institutions in 2018. Greece mentioned that at the EU level countries are investigating how to identify distance sales in international trade in goods statistics using a dedicated Nature of Transaction (NoT) code.

Statistics Finland (Prices and National Accounts Divisions) are studying the possibility to define prices for digital products. As mentioned earlier, the Irish CSO has set up a cross divisional digital economy coherence group aiming to address cross cutting issues around this topic.

Inclusive Globalisation

Q13. *Do you compile information on wages and salaries at the individual firm level, consistent with the corresponding output information used in national accounts?*

- Yes: 16 countries
- No: 16 countries

Q14a. *Can you provide a short description of this work + relevant web links to published studies/articles or data sources, including whether this information was generated through business surveys, household (e.g. labour force) surveys, or other sources?*

- 16 responses

Q14b. *If the data were provided via separate labour specific surveys, what were some of the main challenges you encountered in linking these data sources and developing statistics?*

- 9 responses

Comments:

It was an even split between those countries that compile information on wages and salaries at the individual firm level consistent with national accounts and those that don't. The countries which indicated they do ensure consistency provided in-depth comments on their work.

On a monthly basis Estonia collects wages and salaries at the enterprise level (but published[7] at group level) which are linked with administrative data. The administrative data come from the Estonian Tax and Customs Board and include: payments made to resident natural persons, withheld income tax, unemployment insurance premiums and contributions to mandatory funded pension, calculated social tax and contributions to funded pension calculated on parental benefits; payments made to non-resident natural persons, withheld income tax, unemployment insurance premiums and calculated social tax.

Destatis has participated in two consecutive microdata linking projects[8] (with Eurostat grants) aimed at linking structural business surveys (SBS), international trade in goods, the business register as well as business demography data at the enterprise level. In the future, under the upcoming European Commission Framework Regulation Integrating Business Statistics (FRIBS) regulation the scope of SBS will be broader.

For Lithuania the indicators on wages and salaries are compiled within the SBS survey, where statistical and administrative data sources (State Social Insurance Fund Board) are used. This is much like Slovenia where wages and salaries, at the firm level, are sourced from various different administrative sources. In addition, wages and salaries are linked into the SBS dataset and obtained using administrative sources, mainly annual reports of the companies (the same administrative source used by national accounts).

Statistics Norway has access to data on wages and salaries at the level of individuals which can be linked to firms in registers and surveys via the enterprise identification

[7] http://andmebaas.stat.ee/Index.aspx?DataSetCode=PA011

[8] http://ec.europa.eu/eurostat/statistics-wxplained/index.php/Microdata_linking_in_business_statistics_-_introduction

number. The Nordic statistics offices are planning a project in 2018 on linking trade and employment microdata. Argentina also uses the individual identification number (CUIL) to link to the enterprise identification number (CUIT) in the register for the Integrated Pension System.

The BEA collects employment data on both the level of employment and employee compensation in its Activities of Multinational Enterprise (AMNE) surveys of both national and foreign-owned multinational enterprises. The BEA is also engaged in projects that link the AMNE data with establishment level data collected by the United States Census Bureau and the Bureau of Labour Statistics to produce estimates of employment by type of ownership, establishment level industry, region, and occupation.

In the Netherland, the primary data source for compensation of employees are monthly micro-datasets available via the Social Statistical Database (from 2006 onwards companies were legally obliged to report to the tax authorities on a monthly basis every individual payment to every employee). Information is available on the economic activity, hours worked, total amount of wages and number of days for which wages were paid. The administrative records are not in full conformity with the definitions of the ESA2010 and therefore need further processing. Note that weighing the microdata to correspond to the industry level national accounts totals distorts the microdata at a firm level (weighted firm level data will not match bookkeeping data).

Two major challenges with using separate labour specific surveys were identified by countries. These were the actual survey data and the level of resource required. Germany, Mexico and Turkey all outlined issues attempting to link different surveys, for example establishment versus enterprise, different sample sizes in surveys, and different sampling methods. The Netherlands and the United States both mentioned the labour intensity of undertaking such linking. The United States also mentioned possible legal constraints that restrict the ability to link.

Q14c. *Did you explicitly include information on the trading status of the firm in this analysis, e.g. exporter/non-exporter enterprise, trading/non-trading enterprise?*

- Yes: 7 countries
- No: 10 countries

Q14d. *Did you explicitly include information on foreign ownership of the enterprise in this analysis (either as a binary variable or in more detail e.g. shares of turnover, partner countries, and destinations)?*

- Yes: 9 countries
- No: 7 countries

Comments:

Only seven countries in their linking analysis explicitly include information on trading status while only nine explicitly include information on foreign ownership.

France stated that included in their administrative tax data was information on export turnover at individual firm level and from the SBS they have the share of turnover by NACE code. In addition, in the French business register there is an indicator of foreign ownership of the enterprise.

Mexico captures information on trading status through its Manufacturing Industry Survey and it is feasible to distinguish foreign ownership based on the origin of capital and this captured in the Mexican Economic Census. Singapore captures status (and foreign

ownership) using administrative data and Turkey captures status and foreign ownership through the SBS survey.

For the United States a current data linking project on global value chains includes examining labour force data by trading status (no results have been published from this work to date). The Census Bureau currently produces the Business Dynamics Statistics (e.g. job creation, job destruction) by firm age and firm size and is currently developing prototype statistics that include goods importing/exporting firms. In addition to this work the BEA and Census Bureau have published detailed tables every five years that report employment for both foreign-owned establishments and all national establishments.

In Estonia, as the sample is taken by economic activity, the method of post-stratification can be used for calculating data by kind of owner of enterprise. In Germany it's possible to differentiate the group status of the enterprise as either independent or dependent. For dependent enterprises, those which are controlled by foreign enterprises could be identified. On the other hand it isn't possible to identify those domestic enterprises which do own/control affiliates abroad. These data are only available to the Bundesbank not Destatis as microdata exchange between these institutions is currently illegal.

Israel captures information about shares of turnover and foreign ownership in their MNE survey. In Korea, the Ministry of Trade, Industry and Energy provides a list of enterprises with foreign ownership that can be used in the linking.

Q15. *How easy or difficult would it be for you to engage in such a linking exercise (source on jobs/wages with enterprise survey and trade/foreign ownership distinctions) in the future? What would be the main challenges?*

- 28 responses

Comments:

Argentina, Denmark, Estonia, Finland, Singapore and Slovenia all thought that such an exercise is possible and shouldn't pose too many challenges. The most common point made by these countries was the use of a single identifier in undertaking such an exercise. For example, in France linkages between different enterprise surveys is facilitated by the existence of a unique enterprise identifier ('Siren').

Denmark and Norway mentioned that the Nordic countries have been working on this issue in conjunction with the OECD and the next phase is to link social statistics (e.g. wages, age, gender, etc.) with enterprise characteristics. Ireland is currently undertaking a data matching project which is attempting to create interlinked persons, businesses/institutions and property registers using administrative data sources, they see this linking exercise as possible given the data sources (surveys and administrative data) available.

Latvia and Spain thought that such an exercise would not be easy, Latvia because of the resource requirements and Spain because of the number of different sources that would require linking. Germany hasn't undertaken such an exercise, but considers that there would be issues with different definitions, statistical units, data frequency and the scope of labour and business surveys.

Canada has undertaken this type of work, but given the different data sources (namely surveys and administrative data) the results for wages and salaries obtained so far are too inconsistent to be useful.

Switzerland is currently investigating this issue in terms of resources and the legal framework (but cannot, as yet, assess the difficulty of the exercise). In Switzerland the statistical work is decentralised and the exchange of confidential data (especially microdata) between entities is barred, the main challenge would be to overcome these microdata exchange barriers.

Q16. *What other studies have been conducted by your organisation that are relevant in the context of 'inclusive globalisation' (e.g. related to for example off-shore outsourcing and jobs, the development of business functions)?*

- 23 responses

Comments:

Belgium, Germany, Finland, Lithuania, Norway and Slovenia are taking part in the Eurostat coordinated International Sourcing Survey (for the reference year 2016/2017). The survey collects data on persons employed by business functions and furthermore offers information on offshoring of business functions as well as related employment effects. The Eurostat survey is expected to become mandatory as part of the yet to be adopted FRIBS regulation.

Statistics Denmark has performed three outsourcing surveys[9], where enterprises are asked if they have outsourced any business functions.

Banque de France published the 2017 working paper (51) "Losers and winners of Globalisation: offshoring of manufacturing benefits to skilled workers and affects negatively unskilled workers" and CEPII (www.cepii.fr), a think-tank based in Paris, has a number of research papers and has organised conferences on this topic.

In Ireland a project was completed that provided information on the impact of Foreign Direct Investment on the Irish economy. This publication[10] looked at various aspects of Foreign Direct Investment in Ireland such as location of investor, return on investment, associated employment and wages paid in FDI enterprises.

Turkstat has started a new exercise that will calculate "total exports" for all enterprises in the Business Register. This is possible as Turkstat has access to the Ministry of Finance's and Social Security Institution's administrative data.

Researchers from BEA and Bureau of Labour Statistics collaborated on "FDI and the task content of domestic employment for U.S. multinationals[11]" which shows that foreign direct investment is generally positively correlated with domestic labour demand, with the exception of automated/routine tasks.

Organisation of the Statistical Information System

Q17. *What, if any, have been the main organisational innovations in your organisation in recent years in relation to better measuring complex phenomena such as globalisation or digitisation? Please check all that apply, and provide a brief description for each checked*

[9] www.dst.dk/pubpdf/13110/helpub

[10] http://www.cso.ie/en/releasesandpublications/ep/p-fdi/fdi2015/

[11] https://www.bea.gov/papers/pdf/wp2015_paper_with_tables.pdf

organisational innovation (aims of the innovation, exact form/shape, challenges encountered, results obtained).

- We have a separate **Large Case Unit**
- We have adopted a **network/matrix** organisational approach to measuring large complex cases
- We have changed our data collection and/or processing systems for key globalisation-related variables towards a more **integrated approach**
- We have intensified and/or revised **collaboration** with other statistical organisations within our country (NSO, Central Bank, others)
- We have created a unit or centre of expertise dedicated to **Big Data**
- We have implemented **other** organisational innovations

Responses:

- Large case unit: 13 countries
- Network/matrix: 4 countries
- Integrated approach: 7 countries
- Collaboration: 17 countries
- Big Data: 11 countries
- Other: 10 countries

Comments:

Question 17 generated a large number of responses, a lot of it in-depth. In general, collaboration was stated as the most common way of dealing with measuring complex phenomena such as globalisation and digitisation. Thirteen countries have established Large Cases Units (LCUs), while eleven countries have established expertise in Big Data and seven countries have changed compilation systems to become more integrated.

Argentina: Recently a memorandum of understanding (MOU) was signed between the Central Bank and National Statistics Office to share data at the level of individual firm.

Denmark: Statistics Denmark is currently establishing a LCU. The aim is to cover the 50 largest reporting companies. The unit will undertake profiling complex enterprise units as well as maintaining a key account function and single point of entry/contact for the companies.

Validation across domains is undertaken via data being integrated with respect to the key globalisation variables, most notably the turnover of the largest companies is decomposed into domestic turnover and turnover from international activities. This consistency check has so far proven to be the best indicator of wrongful reported data.

Close cooperation between Statistics Denmark and Danmarks Nationalbank (the central bank) is established and for example a pilot study investigating the current account and financial account transactions of the MNEs has just been completed. As part of the monthly production balance of payments cycle the two organisations compare data reported at the individual firm level.

A formal network of people is currently being established in Statistics Denmark to investigate big data.

Estonia: In Estonia there is positive and deepening cooperation between Eesti Pank (the central bank) and Statistics Estonia in such domains as balance of payments, foreign trade statistics, government statistics, financial accounts and national accounts, including common data exchange calendar, common revision policy, joint seminars, data sharing, case studies etc. Eesti Pank has created a Big Data position in the balance of payments unit which as a first project has developed a new methodology in compiling travel statistics using mobile positioning/roaming big data.

Finland: Statistics Finland has a LCU containing four employees working with around 20 enterprise groups. Statistics Finland is also establishing a network for early warning of exceptional transactions. Statistics Finland and the Customs Authority have collaborated to form an expert group for coherent recording of exports and imports of ships and airplanes. The national statistics office also has a 'cross-statistics' project with the aim to make recommendations on identifying global producers and coordinating compilation and publishing of globalisation statistics in Finland (i.e. those economic statistics that have a link to globalisation), the project ends in March 2018.

France: The Banque de France, in the balance of payments area has a LCU of 21 employees covering more than 600 companies that is dedicated to large cases reporting. The LCU works with French Customs and the national statistics office (INSEE) to better harmonise the statistical treatment of large enterprise groups. Banque de France has created a centre, "Le Lab Banque de France", of expertise for digitalisation, big data and open innovation, in the context of digital transformation. As a start, balance of payments has explored the use of social network data for travel services using Le Lab Banque de France. INSEE is also creating centre for innovation, "SSP-lab", for the whole official statistical system with a focus on Big Data.

In the Banque de France, a number of separate balance of payments units have merged. The synergies expected from this merger are aimed at capturing "below-the-threshold" foreign direct investment (for instance, involving start-ups), accelerate the release of first estimates and addressing the challenge of estimating greenfield foreign direct investment.

Germany: In Germany, Destatis and the Bundesbank, will establish a working group to discuss and coordinate, inter alia, globalisation issues. Big Data is part of the responsibilities of the Destatis section "Cooperation with Scientific Community, Microsimulation, New Digital Data".

All reports of key players in various external statistics (excluding international trade) are compiled by one unit in the central office of the Bundesbank (800 enterprises) while all others are compiled in the Bank's service centre (nearly 35,000 enterprises monthly).

Greece: The Bank of Greece has an ongoing project to integrate data collection and compilation methods as well as databases in Bank of Greece for foreign direct investment, balance of payments, financial accounts etc.

Hungary: The Hungarian Central Statistical Office created a LCU in December 2017 currently consisting of 3 economists and 2 accountants (the planned number of employees being 7) and closely cooperates with the national accounts, international trade and international services units within HCSO. The LCU plans to improve the usability of the VAT database in cooperation with other departments in particular to improve data quality. Additionally, in 2018 the LCU will take part in the coordination of a grant from Eurostat on Integrated Global Accounts and Global Production (12 enterprise groups will be analysed). The two tasks together, VAT data and integrated global statistics, will lay the foundation for the ongoing operation of the LCU.

Ireland: In the Central Statistics Office of Ireland, the LCU has 6.5 employees and covers 60 enterprises. The Large Cases Unit collects all CSO statistics from these 60 companies. It is the CSO contact point for the following surveys: balance of payments, short-term-statistics, capital assets inquiry, and production statistics and is thus a highly integrated approach for the large companies.

All economic outputs (trade in goods and services, balance of payments and national accounts) are collected and produced in one CSO directorate. National Accounts and Balance of Payments sections have established cross departmental teams who are working on projects relating to the measurement of globalisation in the Irish Economy. For example, the *Depreciation Project* is a joint project between balance of payments and national accounts tasked with improving the consistency of depreciation measurement between the two statistical outputs.

There has been increased collaboration between the CSO and the Irish Central Bank for balance of payments financial statistics covering two specific projects:

- Insurance Statistics: A project has started, which will examine the data collected under the Solvency II requirements and the data collected for balance of payments purposes to assess the possibility of combining some, or all, of these data collections to reduce the response burden for insurance enterprises; and
- Banking Sector Statistics: The CBI collects the quarterly and annual financial accounts and transmits them to the CSO for compilation of balance of payments and international investment position statistics. Challenges encountered include some differences in definitions and methodologies used by the institutes, along with the need for more granular data by the CSO. As a result of increased discussions between the CSO and the CBI, an increased understanding and alignment of definitions, methodologies and an agreement to provide more granular data was achieved.

The CSO has a Big Data unit that has expertise in increased use of this data for official statistics purposes, and for example recently conduct a project on *Tourism Statistics using Mobile Phone Data*. Currently there is only one statistician dedicated to working on Big Data projects.

Israel: The Israeli Central Bureau of Statistics has two surveys concerning globalisation: 1. A globalisation survey, which provides information about the outward affiliates of Israeli groups; and 2. An exports of services survey that includes several questions used to identify factory-less goods producers. The ICBS is also conducting tests to try to identify factory-less goods producers based on data from the business register.

The ICBS is working on the creation of a National Statistical System (NSS) to enhance collaboration with all government ministries and other public institutions that produce official statistics.

Italy: A new organisational model of the statistical production process based on the Business Architecture approach was adopted by Istat in 2016 giving rise to a LCU. The LCU team includes experts from different domains (namely business statistics, trade statistics and business register) in order to ensure both an appropriate mix of skills and an extensive network. In particular, the LCU is actively engaged in the following tasks: profiling activities; exploring new administrative sources; developing more efficient use of existing information; and identifying the information gap that needs to be filled through a direct contact with the relevant enterprises (information visits).

Since the second half of 2017 a new project has been included in the strategic planning of the Istat National Accounts Directorate in order to deal with all the different aspects of globalisation and with their interactions in the various national accounts domains. To carry it out, a working team has been created with experts from different units of the National Account Directorate: supply of goods and services, flows with ROW (import/export), sector accounts, labour input and compensation of employees. The team is actively engaged in assessing the correct and consistent registration of the transactions activated by MNEs, combining the information provided by the business register, business statistics survey, and by balance of payments (compiled by the Bank of Italy). Since this is a recent project, the LCU experts and the national accounts team are also carrying out intensive training in order to increase close and efficient collaboration between the business statisticians and the national accountants.

The target population for the LCU is the top 140 enterprise groups, in terms of turnover and employment, (of which 14% domestic and 86% MNE) acting in Italy plus a specific focus on some of the most famous web giants. All the MNEs of the target population are monitored both as groups and single enterprises according to a strategy based on signals of control links changes, demographic events and considerable variations in terms of economic variables in time and/or among different domains. The new integrated approach aims at ensuring a coherent treatment of the MNEs main changes both for the business statistics and the national accounts.

Currently, the main challenges jointly managed by national accounts experts and LCU covered complex MNEs reorganisations and specific aspects such as the concept of residency for foreign units and the activities abroad of the "Italian" MNEs (e.g. contract manufacturing, ownership). In the medium/long term, the activities of the experts are aimed at ensuring the sustainability of the statistical and analytical tools as well as of the information system necessary to support the analysis and measure of the behaviour of MNEs.

The Bank of Italy and Istat have been collaborating for several years with the aim of improving the coherence between balance of payments and national accounts data. The interinstitutional working group is now facing the new measurement challenges posed by globalisation and related problems of correct analysis and the common identification of resident units and of their transactions.

Korea: Bank of Korea has a Big Data Research Section with 5 employees.

Latvia: The Central Bureau of Statistics of Latvia has intensified collaboration with the national central bank regarding GDP and GNI related issues.

Lithuania: Collaboration between Statistics Lithuania and Bank of Lithuania was significantly intensified in the international trade in services statistics area. As a result, a Services Trade by Enterprise Characteristics pilot project was carried out (coordinated and financially supported by Eurostat) and, starting in 2017, the Bank of Lithuania and Statistics Lithuania have been producing quarterly joint news releases on international trade in services statistics.

Mexico: The national statistics office in Mexico (INEGI) specifically follows up large establishments in the Mexican Economic Censuses in order to identify their relationship with other establishments and enterprises (exploring their relationships with other economic units abroad) as well as transactions via internet, etc. As a starting point, INEGI is working on a strategy looking into the statistical business register to consolidate enterprise groups.

INEGI collaborations with Banco de México on the national accounts trade in value added (NA-TiVA) project.

Netherlands: Statistics Netherlands has had a LCU since 2010 that analyses the data of the largest 300-350 enterprise groups. All statistics are put together and values are checked for plausibility and correctness. Data collection for balance of payments (responsibility of the national central bank) and for ROW accounts (responsibility of Statistics Netherlands) has been combined. In September 2016 Statistics Netherlands started a Centre for Big Data Statistics, there are currently approximately 12 employees working on developing statistics in the field of amongst others healthcare, employment, internet economy and education.

New Zealand: Statistics New Zealand has a LCU focusing on New Zealand's largest firms.

Norway: Statistics Norway's LCU has 3 FTEs with a main responsibility of identifying units for profiling and co-ordinating the subsequent work. Statistics Norway participates in the BigInsight[12] consortium.

Singapore: The Department of Statistics Singapore (SingStat) has a LCU that manages large and complex cases. Team members working on the business register, account managers in surveys and compilers of different statistical domains work together on the profiling, data collection and data reconciliation for the large and complex units across statistical domains.

A small team in SingStat was set up to explore the use of big data in business statistics. The team has been exploring potential data sources, evaluating data mining tools and conducting research and studies on using big data for economic activity classification, prediction of business trends and sentiments analysis.

Slovenia: The Statistical Office of the Republic of Slovenia (SURS) has a special internal group of experts comparing data from surveys and all other available data sources to ensure a consistent statistical activity code for enterprises is used across the organisation. Previously each legal unit was addressed separately, but with the change the entire enterprise group is taken into account in order to determine the correct activity of individual legal units.

Spain: The Banco de España has an intense collaboration with the following organisations:

a) The Ministry of Economic Affairs and Competitiveness who are responsible for foreign direct investment statistics. In order to improve the quality of the data there is a data exchange programme.

b) The national statistics office (INE) who are responsible for international trade in services and required by the Banco de España for balance of payments statistics.

c) INE's National Accounts Department, in order to ensure full consistency between the balance of payments/national accounts rest of the world account.

INE has just approved the planning for a LCU and at the same time will undertake study visits to other member states in relation to the treatment of globalisation in economic

[12] http://biginsight.no/biginsight/drupal/

statistics. In this regard, a year ago INE created an internal group integrating various units to coordinate all topics related to globalisation.

Sweden: Statistics Sweden has a LCU with 15 employees covering around 50 large cases.

Switzerland: In order to increase and facilitate the use of administrative data within the Swiss statistical system, collaboration between the customs and tax administrations have been developed and tightened. Collaboration in the Federal Statistical Office has also been heightened with the Swiss National Bank in the context of foreign affiliates statistics.

United States: The BEA and Census Bureau have established an interagency agreement to combine microdata from the two agencies to develop new and expanded economic statistics related to global value chains. A major goal of this project is to develop extended supply-use tables that disaggregate industry production patterns by important dimensions of firm heterogeneity, such as ownership (domestic multinational, foreign multinational, non-multinational). Key challenges encountered in this work include difficulties in linking records across datasets, particularly in linking merchandise trade records from the customs agency to individual enterprises and establishments.

The BEA recently created a Chief Innovation Officer position in the organisation in regards to big data. The Census Bureau has initiated a Big Data Program, the team is currently engaged in research of alternative data sources to offer greater insight in to the nation's economy through more detailed geographic and industry level estimates, to reduce respondent burden, reduce field collection costs, provide more timely data products, improve efficiency and quality throughout the survey lifecycle, and enhance current survey methodologies.

The BEA has initiated a semi-annual organisation-wide research project inventory through the office of the director. This inventory is useful to form an overall picture of the organisation's research portfolio to gauge areas of strength and identify areas there is a need to increase emphasis in the future to align more closely with the strategic plan and address other emerging issues, including globalisation and the digital economy. The BEA has also initiated an organisation-wide working group on measuring the digital economy to share ideas, scope our joint projects, and ensure consistent treatment across statistics. Finally, the BEA and Census Bureau have organised or participated in collaborative exercises and meetings with partner statistical agencies, such as Statistics Canada, various agencies in the Mexican statistical system, and the United Kingdom's Office for National Statistics.

Data Requests from Policy Makers

Q18. *Please provide an overview of the most important recently received requests from policy makers for data from your office, in relation to international trade and globalisation. Please identify:*

(i) what were the main policy questions/issues that were asked;

(ii) what type of data/information was needed; and

(iii) *what data, if any, was ultimately provided.*

- 22 countries
- 66 responses

Comments:

Twenty two countries listed 66 recently received requests from policy makers for data in relation to international trade and globalisation. What follows is a list of general policy questions that were asked to more than one country relevant to WPTGS.

Brexit: Belgium was asked to undertake Brexit analysis which utilised international trade in goods, services and foreign direct investment statistics. As was Ireland who produced a special report looking at total international trade with the United Kingdom and enterprise characteristics such as number of traders. Statistics Netherlands, while unable to deliver any data given the lack of availability, was asked for insights into the characteristics of services enterprises trading with the United Kingdom as well as bilateral Modes of Supply with the United Kingdom.

International Trade Agreements: Belgium was asked for analysis on the EU-Canada Comprehensive Economic and Trade Agreement (CETA) and the EU-Japan Free Trade Agreement (FTA), in both cases TEC data were supplied. Statistics Canada was asked to investigate the possible impacts of NAFTA negotiations, it did so using detailed international merchandise trade, TEC and TiVA data. Mexico (INEGI) was asked to profile manufacturing exporting industries to the United States in regards to recent trade negotiations and used a range of data, including TiVA, to answer the request. The United States (BEA and Census Bureau) received requests related to countries in which trade agreements are being considered. In these cases detailed bilateral trade and foreign direct investment data are needed and provided.

Modes of Supply: As part of a request on bilateral trade negotiations, Statistics Finland and Statistics Norway (both unsuccessfully) were asked to supply data on Modes of Supply. The Israeli CBS was asked for Modes of Supply data and is currently undertaking a project to see if it is possible to deliver the data.

Bilateral Trade Asymmetries: Statistics Canada, in regard to NAFTA negotiations, was asked why there are bilateral trade statistics asymmetries. After analysing they provided explanations about the definitional and statistical differences. Germany was asked about asymmetries in its balance of payments data and provided detailed statistics (by partner country, balance of payments component and industry).

Cross-border digital trade and ecommerce: Statistics Canada was asked about the impact of ecommerce and digital products on the retail trade sector. They looked at the values of imports through ecommerce and digital products downloaded but could only provide estimates of postal imports. The Bank of Greece was asked for the contribution of Airbnb services in total travel receipts but had to answer that no relative data are available. The Hungarian Central Statistical Office was asked about a digital export strategy which involved using special TEC-type data and the HCSO will introduce new surveys to meet this data need. The Swiss National Bank was asked about online shopping, however after investigating it found there are no data available. The United States BEA was asked how big is the digital economy? How important are digital services such as telemedicine, cloud computing, etc. to the economy? In answering the question the BEA looked for data on trade for specific digital products/services such as telemedicine, cloud computing, cyber security, the gig economy. They could only provide aggregate trade statistics for categories that include these products/services (which are generally not available separately in the statistics).

SMEs: Statistics Finland was asked about the effects of subsidies and other services to SMEs, it investigated the share of small services enterprises in international trade in

services and provided rough estimates (2013-2015). The HSCO was asked about an exports strategy for SMEs, it provided TEC and STEC data. Statistics Lithuania had a policy question on international trade, growth and market penetration of the SME sector. It investigated trade and other business indicators by enterprise characteristics and provided indicators of enterprises sharing characteristics of interest. Turkey had a request on SME policy and needed trade by enterprise class size data to answer the request but currently doesn't have this data.

Merchanting: Both Statistics Denmark and the Swiss National Bank had a policy request on merchanting. The Swiss provided detailed information (within confidentiality limits) that allowed for the evaluation of long term trends. The Danes provided detailed product information on merchanting goods as collected for balance of payments statistics.

International trade in services: Estonia received a request, from the Ministry of Foreign Affairs, for detailed travel statistics on Estonians travelling abroad. The Central Statistics Office in Ireland was asked for international trade in services by sector and partner country. The Israeli CBS was asked about international trade in services, exports, by high-tech industries. It developed an estimate for the request and now publishes this estimate monthly. Statistics Netherlands had a number of policy requests around enterprises involved in international trade in services, in particular their business characteristics, year on year development, and industry characteristics. To undertake this analysis, microdata was needed which has led the office to develop an international trade in services microdata dataset. The Central Bank of Russia was asked for detailed information on international trade in services, by sector, by partner country and if possible by region. Spain had a number of requests for detailed international trade in services data, including the number of exporters, ranking of exporters by value, by sector and partner country and services exports related to ICT and ICT-enabled products.

As well as the multiple requests listed above, some statistical institutes received some other interesting, and very relevant to WPTGS, requests.

Singapore (SingStat) received two such interesting policy questions:

- Do firms engaged in international trade perform better than firms without international trade?
- Do firms engaged in international trade provide better jobs than firms without international trade?

To answer these questions SingStat compared enterprise characteristics of performance, employment and wages between firms with and without international trade and provided aggregated statistics on this analysis.

The BEA was asked about the impact of policies on trade, investment, and employment for specific industries, such as high-technology industries, pharmaceuticals, and the defence industry. In answering the question the BEA provided: trade statistics by end-use commodity or type of service; direct investment statistics by industry; statistics on exports by industry and related adjustments to exports on a customs basis.

The BEA was also asked about the impact of recent tax law changes on trade, investment, and GDP and the implications for profit-shifting and offshoring of intellectual property. The BEA looked for information on how tax law changes will impact MNEs and how changes in corporate taxes and earnings will impact the national and international accounts. To date the BEA has only provided conceptual answers to these questions.

Finally, the BEA was asked how important is foreign trade and/or investment for a particular state in the United States and what is the impact on employment? The BEA used trade, investment, and employment statistics for specific states to answer the question. In providing data the BEA proved direct investment statistics by state and the Census Bureau provided data on trade in goods by state.

Reducing Trade Asymmetries

Q19. *Do you want us to facilitate bilateral meeting(s) with colleagues in the margins of the next WPTGS (note: we will contact you and your preferred counterpart(s) to discuss details)?*

Yes: 6 countries

No: 21 countries

Comments:

A number of countries that said "No" to attending the bilateral trade asymmetry meetings in 2018 however agree with the idea of holding the meetings.

Both Japan and Singapore for example mentioned the issue of data confidentiality and their inability to share such data. Singapore thought that bilateral differences would generally arise due to several factors such as differences in data sources, coverage and methodologies, and while such meetings could help in identifying potential reasons, it is difficult to reconcile the figures without further accessing detailed firm level data which are confidential.

Statistics Netherlands, like a lot of other organisations, also mentioned other ongoing international efforts to reduce asymmetries.

Other Remarks

Q20. *Do you have any other comments or remarks that you would like to make regarding the upcoming WPTGS or suggestions for topics for future meetings?*

Yes: 5 countries

No: 21 countries

Comments:

There were a limited number of responses to this question. Finland would like to see presentations on national good practices, and Sweden stated that since surveys for goods and services use different ways of measuring the transaction, goods use border crossings whilst services use invoices, should the two be joined together in one survey?

Annex A. 2018 WPTGS Stocktaking Questionnaire

Introduction

At the March 2017 WPTGS meeting, the Bureau concluded that several areas of work should be collectively explored for the WPTGS 2018 meeting. This questionnaire is intended to take stock of activities that are already ongoing or planned by WPTGS members, in 4 key areas, in order to support discussions at the next WPTGS meeting:

- **(i) Measuring Digital Trade;**
- **(ii) Inclusive Globalisation;**
- **(iii) Organisation of National Statistical Information Systems; and**
- **(iv) Data Requests Received from Policy Makers.**

In addition, given the continued success of bilateral trade asymmetry meetings, organised alongside the WPTGS meetings, this questionnaire also includes an invitation to countries to participate in 2018 meetings.

Instructions

The questionnaire consists of 20 questions divided into 6 main sections, each of which starts with a small introduction regarding the context and relevance of the questions. For each question, please provide the answer by clicking the relevant check box or by typing in the framed textboxes, which will automatically expand to fit the text you write.

We would very much appreciate it if you could complete this questionnaire and return it to the OECD secretariat at wptgs@oecd.org, **BEFORE 5 February 2018**.

For any questions, please contact Fabienne Fortanier (Fabienne.Fortanier@oecd.org).

MANY THANKS FOR YOUR TIME AND ON-GOING COLLABORATION!

I. MEASURING DIGITAL TRADE

The Internet and digitalisation are fundamentally changing the way people, businesses and governments interact. This has led to a new era of globalisation underpinned by the movement of data across national borders, changing the nature, patterns and actors in international trade in goods and services. While digitally related transactions are not new, the current scale of transactions and the emergence of new (and disruptive) players transforming production processes and industries is unprecedented.

To develop internationally comparable statistics on Digital Trade, the OECD has developed a conceptual measurement framework and conducted a first stocktaking survey, both of which were presented at WPTGS in 2017. IMF conducted the same stocktaking among non-OECD countries, and the combined results, reflecting the replies of more than 70 countries, were discussed at the TFITS Expert Group Meeting on Digital trade (October 2017), the IMF BOPCOM 2017 meeting, and the Eurostat BOP Working Group (November 2017). The conceptual framework was also used in discussions on measuring the Digital Economy involving National Accounts experts.

Feedback from all these meetings concluded that the current conceptual framework, and working definition of digital trade (all cross-border resident-non-resident transactions that are either digitally ordered, online platform enabled, and/or digitally delivered) provided solid foundations on which to build further. Important measurement challenges remain however. This section of the Stocktaking Questionnaire asks more in-depth questions, with the aim of providing inputs to the construction of a Handbook on Measuring Digital Trade and that is currently being developed.

I.1 Digital (online) ordering

I.1.1 Cross-border ecommerce transactions in goods and services

The definition of cross-border ecommerce follows the existing definition of ecommerce (see OECD, 2011), and includes all international trade transactions that classify as "the sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders."

The definition provides further clarification regarding the nature or transactions that should be covered: "The goods or services are ordered by those methods, but the payment and ultimate delivery of the goods or services do not have to be conducted online. An ecommerce transaction can be between enterprises, households, individuals, governments, and other public or private organizations. To be included are orders made over the web, extranet or Electronic data interchange. To be excluded are orders made by phone, fax or manually typed email."

While this definition remains appropriate and robust, some questions have emerged particularly concerning new types of transactions. Although many of the questions, included below, are in theory relatively simple to answer, they have emerged in discussions and as such it would be useful to canvass views to confirm a common understanding.

Q1a Conceptually, cross-border ecommerce transactions should include 'in-app' purchases – i.e. orders that are made via mobile applications (since these apps (or components of these apps) reflect 'systems specifically designed for the placement/receipt of orders').
Agree
Disagree
Do not know / no opinion
Comments:

Q1b Conceptually, cross-border ecommerce transactions should include purchases made via online bidding platforms (since these platforms reflect 'systems specifically designed for the placement/receipt of orders')
Agree
Disagree
Do not know / no opinion
Comments:

Q1c Conceptually, when a sample is ordered online but the subsequent (larger) trade deal involves offline interactions and ordering procedures, ONLY the sample is considered to be a cross-border ecommerce transaction.
Agree
Disagree
Do not know / no opinion
Comments:

Q1d Conceptually, when a trade transaction is concluded via offline ordering processes, but subsequent follow-up orders are made via digital ordering systems (including EDI), ONLY the follow-up orders are considered to be a cross-border ecommerce transaction.
Agree
Disagree
Do not know / no opinion
Comments:

Q1e Conceptually, cross-border ecommerce transactions should NOT include purchases made via WeChat or similar online chat functions (as these do not reflect a system specifically designed for placing orders, but are manually composed messages similar to emails).
Agree
Disagree
Do not know / no opinion
Comments:

Q1f Conceptually, cross-border ecommerce transactions should NOT include offline transactions that are formalised using digital signatures.
Agree
Disagree
Do not know / no opinion
Comments:

Q1g In addition to the questions above, concerning the additional guidance in interpreting the definition of ecommerce in the context of international trade, are there other points of clarification that you believe should be made?
No
Yes, namely:

Q2 Have you recently undertaken any special studies to estimate cross-border e-commerce trade transactions or are you planning to do so in the near future? (Please note this question was also included in last year's survey, but considering rapid developments in this area an update of the work by your organisation would be very useful, even if unchanged from last year's response).
Please provide your answer below:

I.1.2 Digitally ordered cross-border merchandise trade

Customs authorities often specify a minimum value and/or a minimum amount of duties and taxes below which no duties and/or taxes will be collected. The recent and ongoing increase in cross-border digital trade may have led to an increase in the share of below-the-threshold trade, and countries are reviewing their estimation methodologies. Two important new data sources have emerged that may allow for these estimations to be improved: (simplified) electronic customs declarations that enterprises engaged in ecommerce may use to facilitate customs clearance and trace packages across borders; and postal data (with similar information) such as collected internationally by the United Postal Union (UPU).

Q3 Is a system using electronic customs declarations for enterprises engaged in ecommerce as described above already in use at Customs Authorities in your country?
Yes - Please continue with Q4.
No, but it will be implemented in the near future - Please continue with Q4.
No - Please continue with Q5.
Do not know - Please continue with Q5.
Comments:

Q4a Are there specific rules or criteria that enterprises must meet in order to fill out such electronic customs declarations?
No
Yes - Please provide details on the requirements
Comments:
Do not know

Q4b Have you already explored this data source for statistical purposes?
No
Yes - Please provide details on the type of statistics developed, and your approach
Comments:
Do not know

Q5 OECD, UPU, UNCTAD and WTO are currently conducting a pilot study to examine the use of UPU's postal data as a potential data source for cross-border merchandise ecommerce transactions. Would you be interested in participating in a pilot study, in collaboration with the international organisations involved, that would compare UPU data on postal packages and small value transactions (aggregate by trade partner and product) with your below-the-threshold estimations?
Please provide your answer below:

I.2 Digital intermediaries

An important characteristic of digitalization is the advent of digital intermediaries such as Airbnb, Uber, Amazon, eBay or Alibaba, that facilitate (cross-border) digital trade in goods and services. Better understanding their role in international trade is an important

policy objective. This requires first of all statistics on the share of international trade (in goods and in services) that is ordered via platforms. In addition, particularly when transactions are facilitated by a non-resident digital intermediary, a breakdown should be made between the payments for intermediation services (trade in services) and value of the good or service that is provided.

I.2.1 Identifying transactions with non-resident digital intermediaries

Last year's stocktaking questionnaire indicated that imports facilitated by non-resident digital intermediaries were difficult to (separately) identify, but that new data sources, such as credit card data, were being explored.

Q6 Have you made any improvements in the last 1-2 years towards better measuring payments made to non-resident digital intermediaries?	
	Yes - Please describe how you differentiate between the intermediation fee and the underlying good or service that is being purchased? If you do not differentiate between the intermediation fee and the good or service being purchased how do you ensure no double counting with other trade data? Please specify if the approach differs by type of good and service that is intermediated
Comments:	
	No - Do you have any plans/ideas on how this could be developed in your country in the future?
Comments:	

I.2.2 Exports via digital intermediaries

From the view point of suppliers, digital intermediaries provide an opportunity to access foreign markets in a relatively low-cost way, which can help connect SMEs in particular to international markets.

Q7 Can you identify, in, for example, your enterprise surveys, how many enterprises use digital intermediaries (either resident or non-resident) to sell their products to foreign markets, and much trade is involved?	
	Yes - Please describe how , and if you can identify different types of enterprises (e.g. SMEs)
Comments:	
	No - Do you have any plans/ideas on how this could be developed in your country in the future?
Comments:	

I.2.3 Digital intermediaries in travel services

Travel services are among the services where the growing role of online platforms has been among the most visible (e.g. Airbnb, Booking, Expedia). Contrary to most other services transactions, which are measured via enterprise surveys, travel services are often captured by surveying the demand-side (tourism expenditure surveys).

Q8a Are you able to identify, within your tourism expenditure surveys, if the various travel services have been digitally ordered? (i.e. booked online, as opposed to non-digital purchases via e.g. a travel agent or otherwise)?	
	No - Please skip Q8b and go to Q9
	Yes - Please describe how you capture this breakdown (e.g. what type of questions), and provide, if possible, the share of different travel services that are digitally ordered.
Comments:	

Q8b Are you able to identify, within your tourism expenditure surveys, if an online intermediation platform was used for digitally ordered travel services?	
	No
	Yes - Please describe how you capture this breakdown (what type of questions), and provide, if possible, the share of different travel services that are ordered via online platforms.
Comments:	

I.3 Digitally delivered transactions

Digitally delivered transactions are consistent with what is described by the TGServ Task Group as ICT-enabled services, i.e. services products delivered remotely over ICT networks. They involve downloadable products, such as software, e-books, data and database services, which are often also digitally ordered, but also include services that are ordered 'analogously', but delivered online, such as consultancy of BPO services, or certain intra-firm cross-border transactions, including those involving data.

Last year's stocktaking questionnaire indicated that in particular fully digital products (digitally ordered and downloadable) products may not always be well-captured in trade in services statistics. At the same time, new data sources were actively explored to better measure such flows.

Q9 Have you made any improvements in the last 1-2 years towards better measuring cross-border transactions in digitally downloadable products?	
	Yes - Please explain the approach, including sources, you use to measure these
Comments:	
	No - Do you have any plans/ideas on how this could be developed in your country in the future?
Comments:	

Ideally, from a data collection point of view, all international trade in services transactions, should be divided into those that are 'digitally delivered' and those that are 'not digitally delivered'.

Q10 Have you made any attempts to develop such breakdowns in your trade in services statistics (e.g. for different EBOPS categories), potentially in work related to estimating Mode 1 Trade in Services which will be a good approximation of such flows?	
	Yes - Please explain the approach, including sources, you use to measure these
Comments:	
	No - Do you have any plans/ideas on how this could be developed in your country in the future?
Comments:	

I.4 General Questions

Q11 Have you recently conducted any (other) studies quantifying the impact of digitalisation on international trade, or in related aspects such as the (cross-border) sharing economy? If yes, please briefly describe and provide links to the studies if available.
Please provide your answer below:

Q12 Is there any other information or project within your organisation that you think may be relevant for measuring digital trade that has not been addressed in this survey?
Please provide your answer below:

II. INCLUSIVE GLOBALISATION

The 2017 WPTGS meeting concluded that inclusive globalisation is an important new topic for statistical development. It requires in particular an assessment of how variables such as the number and quality of jobs, average wages and wage inequalities, are related to international trade and international investment in different countries, industries and business functions. As a first step towards providing such insights, statistics can be developed that describe how these job and wage related variables vary across different types of companies (for example, trading/non-trading enterprises, foreign affiliates and domestic controlled enterprises, small versus large enterprises), across countries and industries. Such statistics can be compiled by linking business and trade statistics with information on employment and employees (e.g.in business surveys or labour force surveys), preferably at the micro (enterprise) level. This section of the stocktaking questionnaire asks about the extent to which such work has already been carried out by your organisation as part of the development of (new) official statistics, or could be carried out in the future.

Q13 Do you compile information on wages and salaries at the individual firm level, consistent with the corresponding output information used in the national accounts?
Yes - Please continue with Q14.
No - Please continue with Q15.

Q14a Can you provide a short description of this work + relevant web links to published studies/articles or data sources, including on whether this information was generated through business surveys, household (e.g. labour force) surveys, or other sources?
Please provide your answer below:

Q14b If the data were provided via separate labour specific surveys, what were some of the main challenges you encountered in linking these data sources and developing statistics?
Please provide your answer below:

Q14c Did you explicitly include information on the trading status of the firm in this analysis, e.g. exporter/non-exporter enterprise, trading/non-trading enterprise?	
	Yes - Please briefly describe your approach
Comments:	
	No - Is there any particular reason why not (e.g. lack of data, methodological reasons…)?
Comments:	

Q14d Did you explicitly include information on foreign ownership of the enterprise in this analysis? (either as a binary variable or in more detail (shares of turnover, partner countries, destinations)	
	Yes - Please briefly describe your approach
Comments:	
	No - Is there any particular reason why not (e.g. lack of data, different focus of the study, methodological reasons…)?
Comments:	

Q15 How easy or difficult would it be for you to engage in such a linking exercise (source on jobs/wages with enterprise survey and trade/foreign ownership distinctions) in the future? What would be the main challenges?
Please provide your answer below:

Q16 What other studies have been conducted by your organisation, that are relevant in the context of 'inclusive globalisation' (e.g. related to for example off-shore outsourcing and jobs, the development of business functions)?
Please provide your answer below:

III. ORGANISATION OF THE STATISTICAL INFORMATION SYSTEM

The measurement challenges posed by globalisation and by digitisation do not only often require new data sources, but also new methods of working and organising the statistical information system. For example, countries are developing 'large case units' or similar coordinated approaches for measuring large and complex (multinational) enterprises, are creating special units to build expertise on big data as a source for official statistics, and/or are fundamentally integrating the data collection and compilation methods of previously fragmented statistical domains, to reap the benefits of microdata linking and ensure statistical consistency.

Q17 What, if any, have been the main organisational innovations in your organisation in recent years in relation to better measuring complex phenomena such as globalization or digitisation? Please check all that apply, and provide a brief description for each checked organisational innovation (aims of the innovation, exact form/shape, challenges encountered, results obtained)
We have a separate Large Case Unit. [Please describe; including # of employees (FTE), # of large cases covered, challenges encountered and results obtained.]
We have adopted a network/matrix organisational approach to measuring large complex cases. [Please describe; including # of employees (FTE) involved, # of large cases covered, challenges encountered and results obtained.]
We have changed our data collection and/or processing systems for key globalisation-related variables towards a more integrated approach. [Please describe; including the statistical domains concerned, challenges encountered and results obtained.]
We have intensified and/or revised collaboration with other statistical organisations within our country (NSO, Central Bank, others). [Please describe; including the organisations involved, statistical domains concerned, challenges encountered and results obtained.]
We have created a unit or centre of expertise dedicated to Big Data. [Please describe; including # of employees (FTE) involved and types of projects that are undertaken.]
We have implemented other organisational innovations. Please describe:

IV. DATA REQUESTS FROM POLICY MAKERS

It is important for statistical work programs, and as a consequence, the WPTGS agenda, to be aligned with policy interests and needs, to ensure the continued relevance of statistics and to be able to develop the information that is necessary to support evidence-based policy making. The OECD Secretariat aims to facilitate this alignment as much as

possible at the international level, by keeping abreast of discussions in the many policy-oriented bodies of the OECD and elsewhere. However, national priorities may vary. This question aims to provide an inventory of policy questions received by Statistical Offices and Central Banks related to international trade and globalisation more broadly, in order to help ensure that the WPTGS compass continues to point in the right direction.

Q18 Please provide an overview of the most important recently received requests from policy makers for data from your office, in relation to international trade and globalisation. Please identify:
(i) what were the main policy questions/issues that were asked;
(ii) what type of data/information was needed; and
(iii) what data, if any, was ultimately provided.

	Main policy question/issue	Types of data that were needed/sought by policy makers	Statistics that were provided
1			
2			
3			

V. REDUCING TRADE ASYMMETRIES

The previous WPTGS meetings (from 2015 onwards) were accompanied by a series of bilateral trade asymmetry meetings. Feedback from participants has consistently been very positive, and given the importance of solving trade asymmetries for improving TiVA estimates and the construction of new balanced internationally recognised datasets of coherent bilateral trade statistics, we will continue to facilitate such meetings.

For the 2018 WPTGS meeting, we will facilitate these bilateral asymmetry meetings on both 19 and 20 March. The meetings are scheduled for 1.5 hours each. We will help with the planning, make a meeting room (and coffee!) available, but will not be present at the discussions themselves. We invite you to participate!

Q19 Do you want us to facilitate bilateral meeting(s) with colleagues in the margins of the next WPTGS (note: we will contact you and your preferred counterpart(s) to discuss details)?

Yes - Please fill out the name(s) of countries you would be interested to meet, and, if applicable, the exact topic or area you would like to discuss in particular with these countries (merchandise trade, trade in services, particular products or services categories).
No
Other - Please briefly explain below

VI. OTHER REMARKS

Q20 Do you have any other comments or remarks that you would like to make regarding the upcoming WPTGS or suggestions for topics for future meetings?

Yes - Please describe below
Comments:
No