



Economic and Social Council

Distr.: General 08 April 2019

Original: English

Economic Commission for Europe

Conference of European Statisticians

Group of Experts on National Accounts

Eighteenth session Geneva, 10-12 April 2019 Item 4 of the provisional agenda **Seminar on large cases units**

Measuring Activities of Multi-National Enterprise Groups via Large Case Units

Prepared by Eurostat, UNECE and Office for National Statistics of United Kingdom¹

Summary

The impact of globalisation through Multi-National Enterprise Groups presents one of the largest "statistical measurement" challenges facing producers of economic statistics today. This document presents the rationale, and the recommendation, why National Statistical Institutes should establish a team of experts to deal with all statistical aspects of Multi-National Enterprise Groups in economies where such Multi-National Enterprise Groups are significant.

This document also summarises available information, update and share good practices, and steers towards developing an approach in dealing with Multi-National Enterprise Groups. This is an updated version of the document that was presented to the Group of Experts on National Accounts in 2018 and takes into account the comments made during that meeting.

¹ Prepared by Mushtaq Hussain (Eurostat), Rami Peltola (UNECE) and Sanjiv Mahajan (ONS, UK). The authors would like to thank Ales Capek, Isabelle Remond-Tiedrez, Henk Nijmeijer, Paul Konijn (all Eurostat) and Ruth O'Shaughnessy (CSO, Ireland) for their valuable comments.

I. Introduction

1. The impact of globalisation through Multi-National Enterprise (MNE) Groups presents one of the largest "statistical measurement" challenges facing producers of economic statistics today. This document presents the rationale, and the recommendation, why **National Statistical Institutes (NSIs) should establish a team of experts to deal with all statistical aspects of MNE Groups in economies where such MNE Groups are significant.** The establishment of such a team dedicated to data collection, data reconciliation and managing the relationships with MNE Groups goes a long way in addressing these challenges. For the purposes of this paper, we will refer to this team as "Large Case Units" (LCUs).

2. This type of team should include adopting an account management approach with the MNE Groups as well as data sharing, data exchange and data reconciliation with other NSIs and National Central Banks (NCBs). This will enable NSIs to collectively address the evergrowing impacts of globalisation (which encompasses the creation and use of intellectual property products) on the quality of data collected, and hence feeding into main statistical outputs like the National Accounts and Balance of Payments, as well as downstream products such as productivity and environmental analyses.

3. By having an effective, efficient and appropriately resourced LCU, the quality of the domestic economic statistics, and key aggregates, will be improved. Furthermore, with such LCUs operating via an "international network" supported by the international organisations, this would further enhance these benefits as well as improve international comparability and the reduction of trade asymmetries.

II. Background

4. MNE Groups stand at the centre of economic globalisation. They play a dominant role in global production, which is then reflected statistically in their contribution to total external trade, foreign direct investment or international transfer of knowledge and technology. A study carried out in 2001 showed that over 80% of all international trade is related to at least one MNE Group. A third takes place within MNE Groups².

5. MNE Groups play a very important role cutting across most economies in the world. In many European Union (EU) Member States their contribution to production, value added, employment, trade in goods and services, foreign direct investments, etc. is substantial. Indeed, in 2011, in the French economy, MNE Groups represented roughly half of the employment (47%) and the value added (56%) of all enterprises located on French territory³. According to a recent study carried out by Dutch Statistical Office (CBS)⁴, MNE Groups are responsible for 21% of total employment and 30% of total value added in the Netherlands. Moreover, these MNE Groups are responsible for about three-quarters of the international trade (excluding re-exports) in goods and services.

6. Collection of reliable and consistent statistical information from the MNE Groups is, therefore, of utmost importance for the NSIs and NCBs as appropriate. Data received from the MNE Groups should be complete in terms of recording on statistical business registers, and the statistics recorded should be coherent across different statistical domains. These domains include Short-Term Statistics (STS), Structural Business Statistics (SBS), International Trade in Goods Statistics (ITGS), International Trade in Services Statistics (ITSS), Foreign Direct Investment (FDI) and Foreign Affiliates Statistics (FATS), and

² Kleinert J. (2001)

³ Boccara F., Picard T. (2015)

⁴ CBS (2017)

ultimately, these will feed into the Balance of Payments (BoP), National Accounts (NA) including Financial Accounts (FA) by institutional sector, prices and labour market data as well as the Environmental Accounts (EA) providing a full, coherent and correct picture of the economy and the environment.

7. As data collection in many countries may be decentralised and not sufficiently coordinated across the statistical domains, large MNE Groups are usually confronted with many different questionnaires where some of the questions ask for the same or similar information. On the other hand, the multifaceted organisational structure of MNE Groups, their complex ownership structures and intricate global production arrangements create major challenges for the NSIs/NCBs in measuring their activities and properly recording their transactions.

8. For such reasons, the establishment of a specialised team within a NSI to focus on the communication and relationship with the largest MNE Groups, as well as data collection, processing and quality assurance of data, is becoming an essential need. The main purpose of such a team is to improve the quality, consistency and coherence of the data but there can also be other beneficial impacts such as better use of resources and reducing the statistical reporting burden on MNE Groups.

9. This is a key first step and addresses the domestic picture of the MNE Group. More importantly, we also need to address the global picture of the MNE Group. Here the international organisations need to step in and help to integrate the data to ensure a coherent global picture of the MNE Group.

10. The present role of Eurostat and other international organisations in this respect is a facilitating one but this could, and should, change as time goes by, for example, through the creation of a world-wide register of MNE Groups and/or even international data collection and data reconciliation. EU Member States provide statistics to Eurostat based on various agreed domain specific statistical regulations. These regulations describe the concepts, definitions and the required output as well as timeliness. EU Member States, however, decide themselves how to organise the collection of data and production of statistics, in line with the subsidiarity principle⁵. This document summarises available information, updates and shares good practices, and steers towards developing an approach in dealing with MNE Groups. The document incorporates the comments made by the Members of the CES Task Force on Exchange and Sharing of Economic Data during its meeting in April 2018.

11. For the purposes of this paper, given the different roles, links and structures of the NSI and the NCB in different countries, to avoid repetition, the reference(s) to the NSI, also apply to the NCB, as appropriate. The NCB will be directly or indirectly involved depending upon the MNE Group case or issue(s), in particular through the provision of various sources such as centralised securities databases, security by security holding statistics and analytical credit registers providing details on external financing of MNE Groups.

III. Large Cases Unit

12. Every country with a "significant" number of MNE Groups should consider establishing a specialised unit responsible for large MNE Groups. Such specialised units are

⁵ In areas in which the EU does not have exclusive competence, the principle of subsidiarity, laid down in the Treaty on European Union, defines the circumstances in which it is preferable for action to be taken by the Union, rather than the Member States. The legal basis is formed under Article 5(3) of the Treaty on European Union and Protocol (No 2) on the application of the principles of subsidiarity and proportionality.

often called Large Cases Units (LCUs) as they deal with large and complex cases trading across borders or just within the national boundary. At the beginning of 2018, the NSIs of Canada, Denmark, Finland, France, Hungary, Ireland, Italy, Netherlands and Sweden had established LCUs, while the United Kingdom (under-going a Pilot Exercise to develop an International Business Unit), Belgium and Norway are considering creating permanent LCUs. Other countries have dedicated programs to perform similar activities (for example, profiling) as LCUs. However, LCUs are still quite rare and mostly concentrated in the EU countries.

13. Establishing a LCU requires, and brings, a cultural and organisational change to the traditional way of organising statistical production. The common question is what the NSI and/or NCB wants to achieve by establishing a LCU. Consequently, the way LCUs are then organised, and located, in practice can differ substantially from country to country depending upon the organisational structure of the NSI and/or NCB, available resources, etc. One of the key roles of the LCU will be to facilitate the cultural change needed by bridging any cultural divide within the organisation and/or across organisations. In this document, different approaches and common characteristics are described. It is also worth noting that, unlike the sequential system described in the Generic Statistical Business Process Model (GSBPM), the LCU brings together various functions from different parts of the GSBPM (UNECE, 2013).

A. Stakeholders of a LCU

14. Three important stakeholders of LCUs, namely the statistical domains in the NSI, MNE Groups and NCBs were mentioned in the background in this paper. In addition to these stakeholders, LCUs will need to liaise and cooperate and communicate with many other stakeholders.

15. At the NSI, one important stakeholder is the senior management of the NSI. They need to understand the important role and impact of the LCU, provide their full support with readiness to engage in meetings with the senior management of the MNE Groups where necessary, and provide adequate resources for the work to be undertaken by the LCU. To establish a separate, autonomous LCU, some organisational restructuring and shifting of resources is likely to be required. Strong senior management and leadership is essential to overcome initial internal resistance for the benefit of the NSI.

16. Often the first contact with the MNE Group will require involvement of senior management from both organisations and then this contact should be maintained thereafter.

17. The work of the LCU will also rely on dynamic and close cooperation with statistical domains and the statistical business register as a source of data and tool for consistency improvements.

18. It is especially important to ensure data consistency with other producers of official statistics such as the NCB (as a producer of Balance of Payments in many countries) and Customs (as a data collector of foreign trade in goods). These organisations should be involved with the LCU with regular communication, good working relations and data exchange (as appropriate) between them are essential for ensuring consistent and high quality MNE Group data across the various parts of the national accounting framework. Where the statistical system is de-centralised, the LCU may need to be established as a centralised organisation providing the link to all the producers of statistics – here the role of the LCU is even more critical.

19. LCUs may need to establish direct contacts with key administrative data providers, as full access to their data is important for proper consistency analysis. If allowed by the

statistical law, the access to the data of private data holders has similar importance. LCUs may also review the availability of private data sources with relevant data on MNE Groups⁶.

20. Frequently, the counterpart may be either the national unit of a MNE Group or the headquarters of a MNE Group situated in the compiling country (typically with MNE Groups but possibly also large national enterprises). The residency will need to be considered when defining the strategy for data collection, which may be different via an international network of LCUs for the non-resident parts of the MNE Group. Typically, the headquarters have a more complete picture of the operations of the enterprise but may at the same time have more difficulties in reporting country by country data.

21. Cooperation with LCUs (or other units) in NSIs of other countries will need to be developed. In the first place, this should include sharing of best practices in LCU work. In the future, the LCUs should be the contact point for more regular information exchange, data exchange and data reconciliation underpinned by a secure framework for the international network of LCUs.

22. Eurostat has recently launched a grant for establishing LCUs and one of the goals is to set up a dedicated discussion forum of LCU related topics for countries in the ESS. It is important to follow-up how this forum develops and consider possibilities to create a link between this forum and other countries.

23. The international organisations have also many other crucial links to LCU work, for example:

- Eurostat has several initiatives such as the Euro Groups Register (EGR), international profiling, Early Warning System (EWS), etc. (see Section IV for more detail);
- OECD undertakes a range of work in this area (for example, Analytical Database on Individual Multinationals and their Affiliates (ADIMA), Base Erosion and Profit Shifting (BEPS), reconciliation of asymmetries, etc.);
- UNSD is working towards a Global Groups Register; and
- UNECE plans to establish a LCU network to facilitate the work, for example, framework for data sharing.

24. The exchange of information, experience and good practice at international fora is crucial.

25. Users of statistics receive benefits from the work of LCUs and are also important stakeholders. They benefit from the provision of more consistent and coherent statistics, and furthermore, the user service may be improved through better understanding and analyses of MNE Groups.

26. Irrespective of which stakeholder is in question, the language used to communicate with them is extremely important. LCUs need to be ready to take on the role of interpreter between different players in the supply, production and use of official statistics when it comes to data consistency, especially with its dialogue with the MNE Group.

B. Benefits of a LCU

27. The major benefit of a LCU is that a multi-skilled account management team would ensure the collection of timely and accurate data for MNE Groups at the very beginning of

⁶ For example, by means of targeted web search of companies, web scrapping tools, analytics database like OECD ADIMA, and private databases on mergers and acquisitions.

the production process of economic statistics, enabling a prompt reaction to data changes and the resolution of anomalies before they are processed by any of the statistical domains. Data consistency should be ensured by analysing the data received from different surveys and addressing potential issues at the first receipt of data.

28. Depending upon the role and responsibilities of the LCU, the response burden on the MNE Group could be significantly reduced - this forms a major selling point to gain the cooperation of the MNE Group. The LCU could collect the data, maybe using data readily available from the MNE Group and/or bespoke questionnaires designed to suit the MNE Group. The LCU could ensure the data are only collected once rather than collecting some of the data multiple times through different questionnaires.

29. A multi-disciplinary team would have the skills and capability of understanding these complex global MNE Groups, their accounts, and the underlying global issues such as:

- Factoryless goods production;
- Goods sent abroad for processing;
- Merchanting of goods and services;
- Contract manufacturing;
- Toll processing;
- Transfer pricing;
- Stocks and flows of Intellectual Property Products (IPPs);
- Special Purpose Entities (SPEs) activity;
- Internet related activity; and
- FDI and related income flows.

30. The measurement and consistency challenges posed by the above issues are not new but have grown significantly in the past two decades and are main problem areas that need to be addressed. The LCU set-up would be well placed to ensure that these issues are addressed in terms of the MNE Groups.

C. Main objective of a LCU

31. The main objective of a LCU is to provide all relevant statistical domains with consistent data originating from the biggest MNE Groups for compiling their statistics. In practice, inconsistent data are often discovered at different stages of the statistical value chain. Ultimately, many statistical differences and mis-measurement issues can be identified when balancing Supply and Use Tables, often this is too late, where for example, the supply and use of goods and services in an economy do not equal. Similarly, differences or imbalances can be identified when compiling the institutional sector accounts. Analysing the discrepancies, in many cases the source data may be inconsistent data covering MNE Groups, for instance between foreign trade statistics and structural business statistics. A LCU should identify and resolve these inconsistencies at an early stage before dissemination of the primary statistics. This objective, in general, may lead to the following activities⁷:

• Define the population of MNE Groups that should be managed by the LCU.

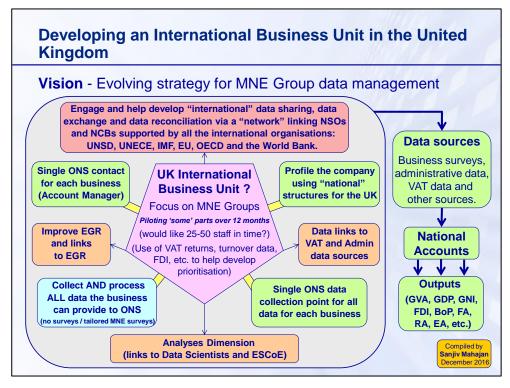
⁷ It should be noted that not all existing LCUs are involved in all the mentioned actions.

- Develop and maintain regular communication and good working relationships with the selected MNE Groups and form a contract manager type role, for example, acting as a single contact point for them and the NSI.
- Coordinate data collection for various statistical domains (e.g. STS, SBS, FDI, outward FATS) by designing common or bespoke questionnaires (monthly, quarterly and annual) and carrying out centralised data collection from the selected MNE Groups. This eliminates duplication of questions and cuts the statistical reporting burden on the MNE Groups by substantially reducing the number of questionnaires sent to them.
- Other data collection strategies can be developed such as collecting all the data that the MNE Group can provide in the form convenient for them such as the management accounts. However, in this scenario, the burden switches to the NSI to process the data as required as well as implementing more effective and efficient strategies such as collecting the data electronically. On the other hand, spending time with the MNE Group mapping their datasets to those required by the NSI and generating bespoke forms to be submitted electronically would benefit both parties.
- Analyse all aspects of the data submitted to the NSI by the selected MNE Groups operating in the country. This includes the delineation and classification of statistical units of the enterprises concerned.
- Exchange and reconciliation of mirror data with partner LCUs, for example trade asymmetries or property income flows.
- Carry out consistency checks of the various statistical and administrative returns, within and between the statistical domains (i.e. to check if data from separate statistical domains are consistent with each other).
- Eventually, provide all relevant statistical domains (business statistics as well as National Accounts and Balance of Payments) with consistent data for compiling their statistics.

32. Depending on the specific tasks of the LCU concerned, the LCU could thereby take over the responsibility for consistency and provide a complete and coherent picture of the MNE Group and its contribution to each statistical domain. In some cases, the unit is not called 'Large Case Unit' as the functions covered are more like a 'Consistency Unit' which better reflects the objective, and going far beyond the traditional profiling related functions. For example, in the UK, a Pilot Exercise is underway to deal with MNE Groups, if successful, then over the longer-term the aim would be to develop an "International Business Unit" as shown in Figure 1.

Figure 1





D. Positioning of a LCU in the organisation of a NSI

33. Those NSIs which already have an established LCU in place usually differ in terms of positioning of the LCU in their organisational structure. For example:

- In Finland, the LCU is situated in the Data Collection Department, as part of the Business Register Unit. As all the data are collected centrally by the Data Collection Department, the LCU is not involved in data collection from the MNE Groups.
- In the Netherlands, the LCU is situated in the Business Statistics Department, between data collection and data analysis. Here again, as all data are collected centrally, the LCU receives the relevant data from the data collection unit and carries out consistency tasks, before providing the data to other statistical domains.
- In Ireland, on the contrary, the LCU is part of the National Accounts Department. However, in this case the LCU itself collects the data, carries out consistency checks and provides all relevant domains with the final data.

34. In the above mentioned three cases, three different approaches have been taken. However, the common feature in all these cases is the fact that the LCU is organisationally close to where the data are collected or is even responsible for data collection itself. It is also important to note that in these three NSIs the data collection, business statistics, National Accounts and Balance of Payments are also organised differently and may have different roles, responsibilities and coverage.

35. Following the principles, and approaches, described in the *Guidelines on Integrated Economic Statistics* (United Nations, 2013) and the GSBPM, it is recommended that the LCU should sit close to, and separate from, the statistical business register and data collection areas, thus near the start of the statistical value chain.

36. The LCU would need to be an autonomous unit at arms-length from its stakeholders to ensure impartiality and independence, for example, the LCU would apply the guidelines consistently, correctly and fairly irrespective of statisticians preferences of their work area such as short-term statistics or structural statistics. The LCU would then naturally feed timely, reconciled, coherent and consistent data through to the statistical survey domains, and beyond, avoiding unnecessary process and feedback loops. The responsiveness and timeliness dimensions are key for short-term surveys and associated statistics. The LCU will still need to involve key downstream actors such as National Accounts and Balance of Payments statisticians as well as link to other areas such as productivity and micro data linking.

E. Size of the LCU and the required skills

- 37. The size of the LCU will logically depend on various factors such as:
 - number of selected MNE Groups;
 - size and complexity of the MNE Groups;
 - number of survey questionnaires sent per year to the MNE Group;
 - amount of time spent on each MNE Group will vary; and
 - staff resources the number of "ring-fenced" staff working either full-time or parttime in the LCU, as they may also work in other domains. It is recommended that the LCU staff are "ring-fenced" and work only for the LCU and not partly working for other statistical survey domains. This will help to remove any conflict of interest and ensure an efficient process feeding into the survey areas and beyond. This will be dependent upon the resources and budget available to the NSI.
- 38. The following skills and experiences are desirable in a LCU:
 - Good communication skills to develop and maintain a good working relationship with the MNE Groups. Communication inside the NSI (and with the NCB as appropriate) is also important - the LCU should listen to users and discuss (conceptual) issues as well as be able to convince the statistical domains that the data provided are correct, consistent and coherent and need no further adjustments.
 - Experience and knowledge about the business models, business practices and the functioning of MNE Groups to understand the content and validity of the statistical returns.
 - Experience in the different types of profiling techniques, preferably manual "intensive" profiling.
 - Expertise in accountancy, to be able to understand business accounts and translate the information to statistical concepts in line with the SNA and BPM. Bridging the gap is key as well as being able to communicate in a language that businesses will understand.
 - Experience and knowledge of the statistical system and the relations between different domains.
 - Proficiency in statistical techniques and data engineering dealing with a large amount of information.
 - Identification, investigative and data problem resolution skills such as reconciling data from different domains as well as company accounts and other sources.
 - Administrative skills.

- Supporting IT solutions are also needed.
- A mix of internal competencies from different areas (registers, business surveys, NA, BoP, etc.) is considered a strong asset to be integrated with external knowledge (finance, international accounting standards, business strategy) by training and consultancy.

39. In most of the above cases, it is rare that "all" of the skills mentioned are available in one person. Thus, the focus is on building a team whereby all the skills and competencies required are brought together and complement each other. The number of staff, part-time and/or full-time, solely deployed in the LCU will vary in each NSI depending upon the issues mentioned above.

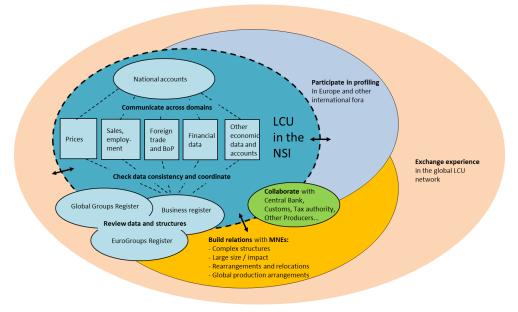
F. Working procedure

40. The working procedure of currently existing LCUs usually includes:

- Regular contacts with the MNE Groups and official formal meetings, complemented by ad-hoc and informal contacts.
- Good preparation for MNE Group meetings by reviewing the company structure, company data and notes and actions of previous meetings.
- Service-minded attitude to all statistical domains whom the LCU will provide with consistent and coherent data for compiling their statistics.
- Intra-institutional and international cooperation, including the contacts with LCUs in other countries, should be part of the LCU strategy from the beginning.

41. Figure 2 illustrates the role that a LCU may play in the statistical production process. As already mentioned before, providing consistent primary data to National Accounts, Balance of Payments and other upstream domains by building relations with MNE Groups and ensuring close cooperation with other relevant authorities inside and outside the country make the role of LCU crucial in the statistical production process.

Figure 2 Role of LCUs in statistical production



42. It should be noted that to work as effectively as possible, it is important to have the right selection of MNE Groups to be managed by the LCU. The size of the MNE Group is an important but not the sole criterion. Other important selection criteria are complex ownership structures, opaque organisational structures, number of countries across which it operates, transmission of inconsistent data, re-arrangements and relocations of MNE Groups, involvement in global production arrangements, ownership of intellectual property products, etc. The LCUs will also need to monitor the resident subsidiaries of MNE Groups with the controlling institution outside the resident territory.

43. It might be useful to have a suite of criteria, and priorities, to help define (and possibly to regularly review) the units treated by the LCU.

44. Furthermore, it is very important that the selected MNE Group is willing to cooperate which should underpin the working of the LCU - this may not always be the case. Here one of the prime functions of the LCU and senior management will be to pursue initiatives to foster collaboration with the MNE Group.

IV. International aspects

45. Sections III and IV are essential steps in setting up a foundation that the LCU can ensure the domestic data for the MNE Group is consistent and coherent. However, the real problem is that the LCU will not have the complete picture, a global perspective is needed to ensure there are no parts missing or being double-counted. Here the international organisations need to play the role of developing processes and frameworks for facilitating access to information and for reconciliation.

46. To fully understand MNE Groups and to better compile data on their global business activities, it is important to understand their structure and their international ownership chain. MNE Groups organise their production chains across national boundaries with affiliates in numerous countries as well as different links with different companies in different countries. Therefore, a proper treatment of MNE Groups would require cooperation between concerned NSIs in the form of exchange of relevant information, sharing of statistical data related to the activities of those MNE Groups and reconciliation of the data to ensure the whole picture was correct. Without a full picture of the activities of the MNE Group, it is a challenge to produce meaningful and correct measurements of global production and trade, and to understand the influence of MNE Groups on macro-economic and business statistics.

47. Therefore, data sharing, data exchange and data reconciliation between national LCUs is essential if they are to accomplish their tasks in an efficient and effective way. An international network of LCUs seems to be the right answer to facilitate the necessary exchange of relevant information. LCUs may have a special role in facilitating international work towards better understanding of MNE Groups. LCUs could provide the contact point between NSIs for MNE Group profiling and data exchange. The active involvement of LCUs in international work and follow up of results achieved in recent international initiatives would support national work on MNE Groups.

48. However, exchange of confidential data will face different obstacles of a legal, administrative, statistical, technical and cultural nature. Several on-going international initiatives are attempting to make progress in addressing issues across countries such as:

- the G-20 Data Gap Initiative;
- several European Commission driven initiatives (for instance, the EGR, EU Profiling, FDI Network, GNI MNE Group Pilot Exercise and the Early Warning System (EWS));

- the Nordic LCU Network; and
- the UNECE Task Force on Exchange and Sharing of Economic Data.

49. In March 2017, a **G-20 Data Gap Initiative** (DGI) Workshop on data sharing concluded that national authorities should review non-legal restrictions to data exchange, build trust by striking a balance between making more data available while maintaining confidentiality, and start with the sharing of data at the national level to contribute to further data sharing internationally. The G-20 DGI Workshop highlighted the need for further standardization and use of common frameworks in statistical production and data exchange (for example, Statistical Database Metadata Exchange (SDMX)) and noted the necessity to consider ways to adopt common identifiers. Also noted was the need to establish an international network to advance work, and suggested that the DGI Contact Group Members⁸ serve as a first contact point for questions on data sharing and accessibility. It would be useful for LCUs to liaise with the national contact point in the G-20 countries highlighting issues and progress from the statistical viewpoint.

50. The European Statistical System, for instance, has set up the **EGR**, a unique international business register of MNE Groups that have more than one enterprise in the territory of the EU. The EGR contains information that identifies each enterprise in terms of ownership, activity, persons employed as well as structure and turnover. Together with national business registers, the EGR helps to provide a more informed view of the impact of MNE Groups on the economy. This can immensely facilitate the work of LCUs as the EGR should lead to better survey frame populations and improve the quality of information on MNE Groups. Although the EGR can be improved regarding quality and timeliness, it is a key tool to facilitate further developments.

51. Another important tool in obtaining consistency in the observation and description of large and complex MNE Groups is "**EU Profiling**". This approach should precede the work of LCUs in reconciling any MNE Group data. The work of profiling is a method to analyse the legal, operational and accounting structure of an enterprise group at national and EU level, to establish the statistical units within that group, their links, and the most efficient structures for the collection of statistical data. The initial step of profiling is the delineation of statistical units in large and complex MNE Groups. It is therefore directly linked to the EGR, which offers the starting point in terms of acquiring a first view of the legal units and cluster of control of a MNE Group. However, a more up-to-date, live and dynamic EGR is necessary. For the MNE Groups, "intensive" profiling including company visits will also be necessary, especially for the more complex cases.

52. The **FDI Network** project (as a joint Eurostat and ECB initiative) was launched in June 2009 to reduce asymmetries and increase the internal consistency of the EU and Euro Area Balance of Payments statistics. The FDI Network is a secure tool for FDI compilers to exchange information (micro data) on FDI transactions and (since 2012) positions, while preserving the confidentiality of the data. Although it does not allow for the reconciliation of all transactions and positions, bilateral exchange of micro data between statisticians is considered as a good practice to reduce asymmetries and to identify the reasons behind them.

- 53. Participation in the FDI Network is based on the following principles:
 - It is a voluntary exercise.

⁸ DGI Contact Group Members are senior-level officials identified by the G-20 national authorities to serve as main contacts for the Inter Agency Group (IAG) on the DGI. These officials are first contact points on the annual monitoring reports, attend the global conferences, and coordinate with the policy departments of their respective institutions.

- FDI compilers participating in the Network undertake to follow the rules and provisions laid down in the FDI Network Manual.
- The activities of the FDI Network will be carried out in line with Commission legislation related to statistical activities within the European Statistical System and the European System of Central Banks.

54. The objective of the **GNI MNE Group Pilot Exercise** is to achieve by the end of the current GNI verification cycle in December 2019 a reasonable understanding of the reliability of the recording of globalisation issues in GNI data. This will help to identify the globalisation measures necessary after the end of the 2019 cycle. In addition, the two globalisation recommendations by the European Court of Auditors need to be satisfied⁹. As part of this initiative, the European Statistical System Committee (Director Generals of the EU NSIs) agreed to share microdata for this Pilot Exercise on a trust-based approach based on Regulation 223/2009. A longer-term solution should be developed for the future. Microdata will only be shared between Member States working on the same MNE Group Pilot in relation to the statistical validation process and therefore will not be available to the public or to other international organisations.

55. Eurostat has established the **Early Warning System (EWS)** which aims to identify important MNE Groups and possible restructuring cases, and to agree a common recording, preferably before the changes materialise or need to be incorporated in business statistics, Balance of Payments or National Accounts. The purpose is to ensure consistency of applied methods, statistical treatment and communication of statistics involving MNE Groups across EU Member States. The EWS provides a light procedure for voluntary cooperation between national statistical authorities and Eurostat, and between business statisticians and National Accounts.

56. In September 2017, the Nordic countries decided to establish a **Nordic LCU Network**. In the first phase, the network aims to share practical information on tasks and processes of these units in the countries. Later the network intends to discuss the need and possibilities to share data on MNE Groups for statistical purposes among the statistical authorities of the countries.

57. The **UNECE Task Force on Exchange and Sharing of Economic Data** is also vital in progressing work on identifying the enablers and the obstacles of international data sharing and data exchange as well as developing possible solutions.

V. Conclusions

58. Even though the activities of LCUs vary across countries, with the MNE Groups rapidly changing cross-country production chains, the LCUs can provide an essential mechanism to support statisticians in dealing with the data for MNE Groups across statistical domains. The LCUs can also improve efficiency by promoting the use of common tools, drafting instructions for data collection and enhancing consistent treatment of data for the large and complex enterprises operating nationally and/or internationally. Moreover, when LCUs review the data for MNE Groups, they do so for various statistical domains, whereas without LCUs, this work would be done multiple times in various statistical domains leading to higher costs and lower data consistency.

59. Good communication with MNE Groups can result in receiving timely and accurate information on MNE Group restructuring or relocation in time for the first statistical dissemination by the NSI. The EWS, which has been launched by Eurostat with the

⁹ The two recommendations were: (i) to analyse all potential implications of multinational activities on the estimation of GNI; and (ii) correctly capture R&D assets in terms of valuation and residency.

participation of all EU Member States, relies on the potential of a well-functioning LCU and would benefit from the development of an international LCU network.

60. Examples from countries with existing LCUs show that while the setting up of the LCU requires initial investment and training. in the medium and longer-term efficiency gains and even resource reduction can be achieved, as well as reduction on the response burden for MNE Groups. All countries with an established LCU (or consistency unit, as known sometimes) are benefitting from better knowledge and understanding of major MNE Groups and higher quality data covering their activities.

61. In summary, in an ever-changing globalised world, the investment in a LCU type unit is essential to ensure that the national statistics are of high quality and do not double-count or miss any activity. It is also important to make the step to share data, exchange data and reconcile the data for MNE Groups beyond just the national concept. Global data sharing will enable NSIs (and NCBs) to develop a consistent and complete view of MNE Groups, thereby improving international comparability of economic statistics and reducing trade asymmetries¹⁰.

¹⁰ Mahajan S. (2017)

References

Béguin J-M, Hecquet V. (2015): Profiling in France: Implementation and results. Paper presented at the meeting of Group of Experts on National Accounts, UNECE, Geneva (http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.20/2015/July/16_Profili ng_in_France_Implementation_and_results_France_.pdf).

Boccara F., Picard T. (2015): Multinational enterprises and international trade: different country profiles, INSEE Premiére, No 1558 (https://www.insee.fr/en/statistiques/1371016).

CBS (2017): Internationalisieringsmonitor 2017-IV Waardeketens, CBS (https://www.cbs.nl/-/media/_pdf/2017/50/im201704_web.pdf)

Connolly M. (2011): CSO's Large Cases Unit – A strategy for dealing with multinationals and globalisation. International Statistical Institute, Proceedings of 58th World Statistical Congress, Dublin (http://2011.isiproceedings.org/papers/951122.pdf).

Da Pont M. (2014): Improving data quality for large enterprises through profiling and coherence analysis. Paper presented at Eurostat conference on The Account of Society, National Accounts at the Service of Economic and Monetary Policy Making. Eurostat, Luxembourg (http://ec.europa.eu/eurostat/documents/6501972/6553610/INVITEDPAPER-con-cop-Da-Pont.pdf/6ebbf41e-369b-411f-969c-bbcc6cc2a70f).

Kleinert J. (2001): The Role of Multinational Enterprises in Globalization: An Empirical Overview, Working Papers No. 1069, Kiel Institute of World Economics, Kiel (https://www.ifw-kiel.de/ifw_members/publications/the-role-of-multinational-enterprises-in-globalization-an-empirical-overview/kap1069.pdf).

Mahajan S. (2017a): Presentation at the OECD Meeting of the Working Party on National Accounts in Paris, France in November 2017, 'Is the current macroeconomic statistics framework capturing a rapidly changing economy?' (https://community.oecd.org/servlet/JiveServlet/previewBody/124899-102-1-217737/WPNA%20-%20Item%202%20-%20ONS%20UK.pdf).

Mahajan S. (2017b): Presentation at the Eurostat Seminar on Economic Globalisation: Addressing measurement challenges related to MNEs in Eurostat, Luxembourg in April 2017, 'Measurement challenges related to MNEs – Why profiling is necessary?'.

Pakarinen J. (2013): Large and complex enterprises, Work in Finland. Paper presented at the meeting of Group of Experts on National Accounts, UNECE, Geneva (http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.20/2013/Chapter_10_La rgeCorporations_FI.pdf).

United Nations (2013). Guidelines on Integrated Economic Statistics. Studies in Methods, Series F, No. 108. Available online at: http://unstats.un.org/unsd/nationalaccount/docs/IES-Guidelines-e.pdf

UNECE, Eurostat, OECD (2011): The Impact of Globalization on National Accounts (Annex 2.2 A consistency unit at Statistics Netherlands: reducing asymmetries in National Accounts and related statistics, UNECE, Geneva.

(http://www.unece.org/fileadmin/DAM/stats/groups/wggna/Guide_on_Impact_of_globaliza tion_on_national_accounts_FINAL21122011.pdf).

UNECE (2013): Generic Statistical Business Process Model (GSBPM) v5.0. Available online at:

http://www1.unece.org/stat/platform/display/metis/The+Generic+Statistical+Business+Proc ess+Model

UNECE (2015): Guide to Measuring Global Production (Chapter 6, Large and complex enterprise units), UNECE, Geneva.

(https://www.unece.org/fileadmin/DAM/stats/publications/2015/Guide_to_Measuring_Glo bal_Production__2015_.pdf).

Vennix, Kees (2012): The treatment of large enterprise groups within Statistics Netherland. Paper presented at the Fourth International Conference on Establishment Surveys (ICES IV), Montréal. (https://ec.europa.eu/eurostat/cros/system/files/congo_method_sn2012.pdf)

Wieser, Marcel and Kees Vennix (2014): Consistency and profiling of large enterprise groups within Statistics Netherlands. Paper presented at the 24th Meeting of the Wiesbaden Group on Business Registers – International Roundtable on Business Survey Frames, Vienna.

(https://circabc.europa.eu/webdav/CircaBC/ESTAT/businessurvey/Library/2014%20Wien/ Session%202%20-%20Statistical%20Units%20and%20Profiling/Session%202_Wieser-Vennix_Netherlands_Paper%20.pdf)