



# Economic and Social Council

Distr.: General  
28 January 2019

Original: English

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## 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

### Proposed approach for dealing with multi-national enterprise groups: Large Cases Unit

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#### *Summary*

The impact of globalisation through Multi-National Enterprise Groups presents the single largest “measurement” challenge today facing producers of economic statistics. This document presents the rationale, and recommendation, why National Statistical Institutes should establish a large cases type unit to deal with Multi-National Enterprise Groups in economies where such 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.

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## I. Introduction

1. The impact of globalisation through Multi-National Enterprise (MNE) Groups presents the single largest “measurement” challenge facing producers of economic statistics today. This document presents the rationale, and the recommendation, why **National Statistical Institutes (NSIs) should establish a large cases type unit to deal with MNE Groups in economies where such groups are significant.**
2. This type of unit should include adopting an account management approach with the MNE Groups as well as data sharing, data exchange and data reconciliation with other NSIs. This will enable NSIs to collectively address the ever-growing 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.

## II. Background

3. 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 Groups<sup>2</sup>.
4. 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, all MNE Groups represented roughly half of the employment (47%) and the value added (56%) of all enterprises located on French territory<sup>3</sup>. According to a recent study carried out by Dutch Statistical Office (CBS)<sup>4</sup>, MNE Groups are responsible for 21% of total employment and 30% of total value added in the Netherlands. However, they are responsible for about three-quarters of the international trade (excluding re-exports) in goods and services.
5. Collection of reliable and consistent statistical information from the MNE Groups is, therefore, of utmost importance for the NSIs and National Central Banks (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 investments (FDI) and foreign affiliates statistics (FATS), and ultimately, these will feed into the balance of payments (BoP) and national accounts (NA) providing a full, coherent and correct picture of the economy.
6. 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

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<sup>2</sup> Kleinert J. (2001)

<sup>3</sup> Boccara F., Picard T. (2015)

<sup>4</sup> CBS (2017)

major challenges for the NSIs/NCBs in measuring their activities and properly recording their transactions.

7. For such reasons, the establishment of a specialised unit 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 unit is to improve the quality, consistency and coherency 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.

8. 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. 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. Member States, however, decide themselves how to organise the collection of data and production of statistics, in line with the subsidiarity principle. 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.

### **III. Large Cases Unit**

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

10. Establishing an LCU requires, and brings, a cultural and organisational change to the traditional way of organising statistical production. The common question is what an NSI wants to achieve by establishing an LCU. 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. 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 an LCU**

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

12. 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.

13. Often the first contact with the MNE Group requires involvement of senior management from both organisations and then this contact should be maintained thereafter. The work of the LCU will rely on dynamic and close cooperation with statistical domains and the statistical business register as a source of data and tool for consistency improvements.

14. 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 may not be part of the LCU but regular communication, good working relations and data exchange (as appropriate) with them are essential for ensuring consistent and high quality MNE Group data across the various parts of the national accounting framework.

15. 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 Groups<sup>5</sup>.

16. Frequently, the counterpart may be either the national unit of an MNE Group or the headquarters of an MNE Group situated in the compiling country (typically with MNE Groups but possibly also large national enterprises). This needs to be considered when defining the strategy for data collection. 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.

17. Cooperation with LCUs (or other units) in NSIs of other countries is also advisable. In the first place, this should include sharing of best practices in LCU work. In the future, the LCUs may provide the network and contact point for more regular information exchange, data exchange and data reconciliation.

18. 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.

19. 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, ADIMA, BEPS, reconciliation of asymmetries, etc.);
- UNSD is working towards a Global Groups Register; and
- UNECE plans to establish an LCU network to facilitate the work, etc.

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

21. 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

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<sup>5</sup> 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.

furthermore, the user service may be improved through better understanding and analyses of MNE Groups.

22. 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.

## B. Benefits of an LCU

23. The major benefit of an 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 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.

24. 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 IPPs;
- SPEs activity;
- Internet related activity; and
- FDI and related income flows.

25. The above issues are not new but have grown significantly in the past two decades and are problem areas that need to be addressed.

## C. Main objective of an LCU

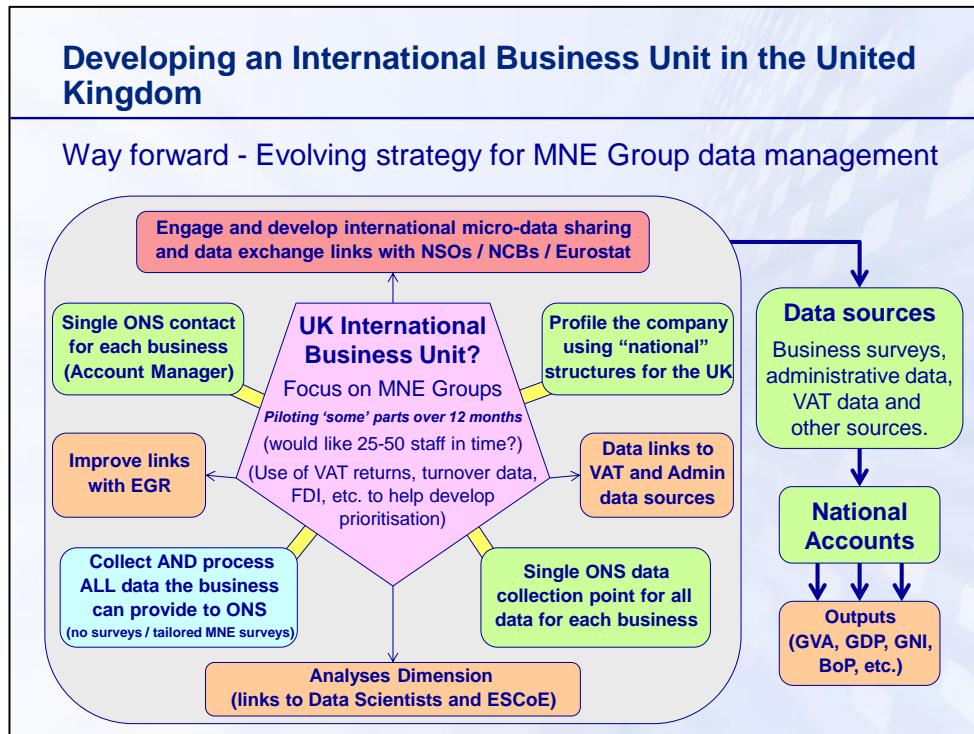
26. The main objective of an LCU is to provide all relevant statistical domains with consistent data originating from the biggest MNE Groups for compiling their statistics. In practice, inconsistent data are often discovered at different stages of the statistical value chain. Ultimately, many statistical differences and mis-measurement issues can be identified when balancing Supply and Use Tables, where for example, the supply and use of goods and services in an economy do not equal. 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. An LCU can identify and resolve these inconsistencies at an early stage before dissemination of the primary statistics. This objective, in general, may lead to the following actions<sup>6</sup>:

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<sup>6</sup> It should be noted that not all existing LCUs are involved in all the mentioned actions.

- Define the population of MNE Groups that should be managed by the LCU.
  - 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.
  - 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.
27. Depending on the specific task 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. For example, in the UK, a Pilot Exercise is underway to deal with MNE Groups with the longer-term aim of developing an "International Business Unit" as shown in Figure 1.

Figure 1

**Pilot exercise – Developing an International Business Unit in the United Kingdom****D. Position of an LCU in the organisation of an NSI**

28. 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.

29. 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 in these three NSIs that the data collection, business statistics, national accounts and balance of payments are also organised differently and may have different roles, responsibilities and coverage.

30. 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 process. The LCU would then naturally feed reconciled, coherent and consistent data through to the statistical survey domains, and beyond, avoiding unnecessary process and feedback loops. 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**

31. 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 part-time 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.

32. 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.

33. 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

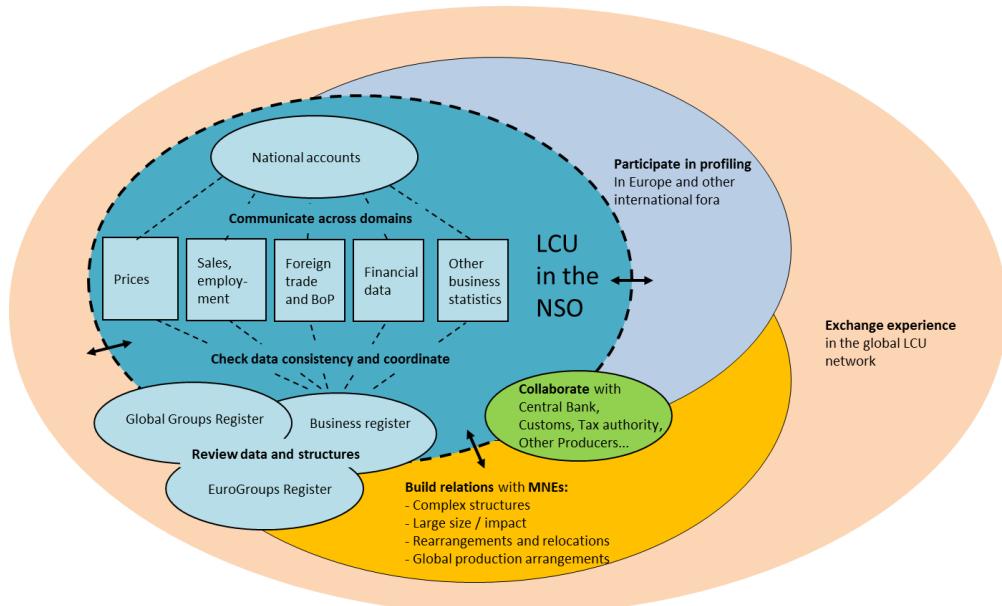
34. The working procedure of currently existing LCUs usually includes:

- 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.

35. Figure 2 illustrates the role an 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



36. 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. It might be useful to have an algorithm to define (and possibly to regularly redefine) the units treated by the LCU.

37. Furthermore, it is very important that the MNE Group is willing to cooperate – this may not always be the case.

## IV. International aspects

38. 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.

39. 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.

40. 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;
- number of Eurostat-driven initiatives (for instance, the EGR, European Union Profiling, GNI MNE Group Pilot Exercise and the Early Warning System (EWS)); and
- the Nordic LCU network.

41. 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, 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 Members<sup>7</sup> serve as a first contact point for questions on data

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<sup>7</sup> DGI Contact Group Members are senior-level officials identified by the G-20 national authorities to serve as main contacts for the 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.

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.

42. 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.

43. 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.

44. 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 satisfied<sup>8</sup>. 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.

45. Eurostat has established the 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.

46. In September 2017, the Nordic countries decided to establish a Nordic network for LCUs. 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.

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<sup>8</sup> 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.

47. 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

48. Even though the activities of LCUs vary across countries, with the MNE Groups rapidly changing cross-country production chains, the LCUs 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.

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

50. 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.

51. In summary, in an ever-changing globalised world the investment in an 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<sup>9</sup>.

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<sup>9</sup> 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\\_Profiling\\_in\\_France\\_Implementation\\_and\\_results\\_France\\_.pdf](http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.20/2015/July/16_Profiling_in_France_Implementation_and_results_France_.pdf)).
- Boccara F., Picard T. (2015): Multinational enterprises and international trade: different country profiles, INSEE Première, No 1558 (<https://www.insee.fr/en/statistiques/1371016>).
- CBS(2017): Internationalsieringsmonitor 2017-IV Waardeketens, CBS ([https://www.cbs.nl/-/media/\\_pdf/2017/50/im201704\\_web.pdf](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](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\\_LargeCorporations\\_FI.pdf](http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.20/2013/Chapter_10_LargeCorporations_FI.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\\_globalization\\_on\\_national\\_accounts\\_FINAL21122011.pdf](http://www.unece.org/fileadmin/DAM/stats/groups/wggna/Guide_on_Impact_of_globalization_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+Process+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\\_Global\\_Production\\_\\_2015\\_.pdf](https://www.unece.org/fileadmin/DAM/stats/publications/2015/Guide_to_Measuring_Global_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](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/businesssurvey/Library/2014%20Wien/Session%202%20-%20Statistical%20Units%20and%20Profiling/Session%202\\_Wieser-Vennix\\_Netherlands\\_Paper%20.pdf](https://circabc.europa.eu/webdav/CircaBC/ESTAT/businesssurvey/Library/2014%20Wien/Session%202%20-%20Statistical%20Units%20and%20Profiling/Session%202_Wieser-Vennix_Netherlands_Paper%20.pdf))

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