The task definition process for Istat Large Cases Unit

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Abstract

The international debate on Large Cases Units (LCUs) has increased rapidly in recent years. Worldwide operations of Multinational Enterprises (MNEs) can deeply impact on the production of official statistics and setting up dedicated teams for handling MNEs has emerged as a key topic. However, the notion of such LCUs within a National Statistical Organisation (NSO) appears as a multifaceted concept. According to the experience of the Italian National Institute of Statistics - Istat, the main objective of this paper is to describe the steps followed in the first phase of the LCU project in defining the operational tasks needed to detect complex operations involving top MNEs that may affect both the quality of national statistics and the international comparability.

Keywords: MNEs, official statistics, LCU tasks, consistency, companies restructuring Early Warning System (EWS).

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1. Introduction²

As worldwide operations of Multinational Enterprises (MNEs) can deeply impact on the production of official statistics, the setting up of dedicated teams for handling MNEs has recently emerged as a key topic. According to the Italian National Institute of Statistics - Istat Modernisation Programme (2016), a Large Cases Unit (LCU) team responsible for dealing with the inconsistencies of the top business groups operating in Italy has been established within the Directorate for economic statistics (DCSE)³. The main objective of the LCU is keeping the internal users – business statistics and national accounts experts – informed on the main restructuring events by identifying the effects of complex corporate restructuring at an early stage of the statistical production process.

The international debate on Large Cases Units (LCUs) has increased rapidly and in many different contexts. National experiences focussed on organisational aspects, such as the placement of the LCU within the National Statistical Organisation (NSO), but also analysed methodological topics, e.g. role, responsibilities, tasks and relationships (see among others, Statistics Canada, 2018; Wieser and Vennix, 2014; Connolly, 2011). Aiming at sharing common methods and best practices, some chapters on LCUs or similar activities have been included in international manuals, such as the United Nations Economic Commission for Europe (UNECE), Eurostat and the Organisation for Economic Co-operation and Development (OECD) guide on the Impact of globalisation on National Accounts (UNECE, 2011), the UNECE Guide to measuring global production in 2015 (UNECE, 2015) and the UNECE - Conference of European Statisticians (CES) Guide to sharing economic data (UNECE, 2020). The contribution of LCUs from different countries to GNI (Gross National Income) MNE group pilot exercise (2018-2019) could be regarded as a valuable experience, as this partnership set up within the European Statistical System was designed to verify the reliability of GNI considering globalisation issues.

² Although the article is the result of a joint work, the single paragraphs are authored as follows: Paragraphs 1, 2, 3, 4.2.1 and 5 by Simone Ambroselli; Paragraph 4.1.1 by Chiara Orsini; Paragraph 4.1.2 by Barbara Gentili; Paragraph 4.1.3 by Elisabetta Bilotta; Paragraph 4.2.2 by Fabiana Sartor; Paragraph 4.2.3 by Sonia Amante. Proofreading by Fabiana Sartor.

³ Official name in Italian "Coordinamento delle unità economiche complesse" (Coordination of complex economic units).

In a broader perspective, the main purpose of an LCU team should be improving "the quality, consistency and coherency of data, although there can also be other beneficial impacts such as better use of resources and reducing the statistical reporting burden on MNE groups" (Hussain, *et al.*, 2019: 45). However, the notion of such LCU within a National Statistical Organisation (NSO) is a multifaceted concept especially regarding tasks to be performed. Even though generally, LCUs are not involved in all the actions (Hussain *et al.*, 2019), tasks may vary greatly and they may include management of specific surveys, data collection, contacts with respondents, monitoring activities and National Accounts analyses.

According to Istat experience, the main objective of this paper is to describe the steps followed in the first phase of the LCU project in defining the operational tasks needed to detect complex operations involving top MNEs that may affect both the quality of national statistics and the international comparability. Therefore, this work is presented in the context of official statistics, and specifically focusses on the LCU's (or similar units) organisation.

Complying with the LCU official mandate and acknowledging the findings of several analyses conducted in the starting phase of the project (Ambroselli *et al.*, 2020), the tasks have been defined according to the following two perspectives. Firstly, aiming at identifying the effects of complex corporate restructuring at an early stage of the statistical production process has been labelled as 'monitoring activities'; secondly, helping in dealing with the inconsistencies of the top MNEs in cooperation with the other statistical domains potentially affected, has been tagged as 'MNE analyses'.

Although the paper contributes to the international debate on LCUs, it mainly has practical implications for enhancing our understanding in defining the LCU operational tasks to carry out in our daily activity in order to achieve the set goals.

Nevertheless, the identification of the LCU role and responsibilities within the organisation must be considered as part of an adaptive process able to guarantee the best options in handling top business groups problems in both national and international context. In addition, the tasks should always be tuned considering other initiatives conducted within the NSO to avoid duplications at national level. The paper is organised as follows. Section Two intends to review different experiences concerning the responsibility of the LCU within the NSOs. The process followed by the Istat LCU team to define the tasks is discussed in Section Three while the description of the basic works that will be performed to fulfil the official mandate of the team are presented in Section Four. Discussion and conclusions are presented in Section Five.

2. Responsibilities of the LCU

Even though several globalisation phenomena, such as merchanting, global manufacturing, processing abroad or international transactions in intellectual property products, have been analysed at international and European level and guidelines for recording them have been developed (Alajääskö et al., 2018), the need for boosting the efficiency in dealing with the measuring issues of global operations of MNEs is still relevant. Starting from 2016, Eurostat strategy, in addition to all the other projects and initiatives related to international measurement challenges, has been based upon two main actions. The first strategic action was developing a network, the so-called Early Warning System (EWS) (Limpach et al., 2018), in which Member States notify Eurostat of relocation or restructuring events concerning MNEs, while the second strategic action was promoting initiatives and adopt concrete measures to improve the consistent treatment for MNEs which are not relocating or restructuring. Concerning the former activity, it is possible to recognise what Stapel-Weber and Verrinder (2016) have called as an 'ex ante advice function' useful for the NSOs in the preparation of recording changes in MNEs structures. The latter action implies an integrated approach in which both business and macroeconomic statistics are involved: from the business registers to national accounts and Balance of Payment (BoP) passing through all the business statistics potentially involved. In particular, the strategy grounded on the use of the EuroGroup Register (EGR)⁴ as starting point to have a common MNE structure helping in guaranteeing both internal and international coordination. Furthermore, all the initiatives already existing inside the NSOs, such as Profiling⁵ and LCU work programmes, should be conceived to avoid duplication of work and progress faster⁶.

https://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-statistics/eurogroups-register

⁴ EuroGroups Register (EGR) is the statistical business register of multinational enterprise groups having at least one legal unit in the territory of the EU or EFTA countries.

⁵ Eurostat Business Registers Recommendation Manual (BRRM, 2010) as "a method to analyse the legal, operational and accounting structure of an enterprise group at national and world level in order to establish the statistical units within that group and their links, and the most efficient structures for the collection of statistical data".

⁶ Guidelines from BSDG/DMES Joint Task Force on Globalisation concerning the MNE Pilot Exercise, June 2018. The Task Force was established in December 2016 by the Business Statistics Directors Group (BSDG) and Directors of Macro-Economic Statistics (DMES), in recognition of the need for a close cooperation between macroeconomic and business statisticians on globalisation-related issues.

After having defined the population of the groups in the target, according to Hussain *et al.* (2019) an LCU should focus on identifying and resolving the inconsistencies in primary statistical domains. In their contribution, they have identified a set of activities useful to treat inconsistencies at the early stage of the individual statistical processes before the dissemination. UNECE Guide to measuring global production (UNECE, 2015) offers another set of tasks derived from the results of a dedicated survey carried out by the Task Force on Global Production. In the first case, the authors have provided a contribution based on their personal assessment also considering that within the NSO usually there are other projects dealing with MNEs, such as profiling, while the second source have shown empirical results based on a review of national practices.

Combining the two sources, the following macro-groups could resume the potential LCU activities:

a) Contacts with the businesses.

Developing and maintaining regular communication and good working relationships with the selected MNE groups is an essential task for guaranteeing quality products. LCU could develop a new contact manager position, acting as a single contact point for the MNE group and other staff within the NSO. In that way, LCU experts could guarantee the necessary coordination between the NSO and respondents. On the respondent side, a contact manager could help in better understanding NSO statistical needs while, on the internal side, could enable the development of an integrated approach that offers mutual benefits and learning opportunities in dealing with business groups organisational changes. Holding meetings with companies could also be a specific task of the LCU, as a productive way to establish permanent relationships and to improve communication with the groups in the target. A face-to-face interaction could allow a smoother comprehension of the NSO requests and the adoption of a tailor-based approach.

b) Data collection.

In some countries, the LCU has been mainly related to data collection process. Different solutions have been adopted, such as choosing the most suitable method of data collection according to the group, eliminating duplicated questions and cutting the statistical reporting burden by reducing the number of questionnaires. LCU could also be directly involved in data collection in different ways, coordinating the activities for all the existing surveys, conducting specific surveys or developing new tools and methodologies starting from companies' accounts.

c) Monitoring.

Monitoring activities broadly concern the process to identify current and forthcoming issues in data provision and data analysis. This task could be done at different stages of the individual statistical process, from data collection to data analysis. According to what emerged from the international debate through evidence and recommendations, the cornerstone of a successful LCU programme is an efficient strategy for detecting problems before the dissemination and for handling them in an integrated perspective.

d) Data analysis

In several countries, LCU responsibilities involve consistency checks of different statistical and administrative data within and between the statistical domains. In some cases, data analysis also includes imputations and data adjustments. Generally speaking, the purpose should consist in analysing the complete set of data provided by the groups. More in detail, tasks could also include the provision of consistent data for business statistics as well as national accounts and balance of payments, and the exchange and reconciliation of mirror data with other countries.

e) Profiling

Delineation and classification of the statistical units of the main business groups operating in the country is a task that in some cases is associated to the LCU units. Profiling helps in achieving consistency over statistical domains through the complete definition of the business groups structures and the delineation of the enterprises.

f) Other tasks

Under the label of 'other tasks', each country includes very different tasks, such as the development of standards and tools. This activity is particularly useful to improve consistency rules and the knowledge of the team members concerning accounting and fiscal aspects, able to affect the organisation of the business groups and their capacity to provide meaningful statistical data. Based on these findings and according to its official mandate, Istat LCU has investigated on the main aspects to consider in defining the tasks of the team. Alongside external inputs, such as taking in charge EWS activities and following other international initiatives, business groups have been analysed considering their contribution to the National statistics and their degree of complexity (Ambroselli *et al.*, 2020). The team has adopted a new approach using an integrated overview of business groups, writing notes on restructuring events and case reports when needed. Furthermore, no additional data have been requested to the respondents in the classic form of a statistical survey. This procedure perfectly fits with the integrated system of Statistical Registers that has been recognised as one of the crucial elements of the Modernisation Programme.

3. Defining the tasks

Annually, top MNEs in the LCU target have been defined starting from the Italian Business Register⁷ and the Italian Business Register of Enterprises Groups data⁸. The procedure starts at the business group level and two different orders for business groups are generated, by turnover and number of employees. After that, groups belonging to the top 200 ranking for both turnover and number of employees are selected. The third step consists in completing the list to obtain a total number of 130 business groups according to the turnover order only. Finally, other 10 worldwide top MNEs operating in the so-called digital economy, such as e-commerce and sharing economy, are added in the list even if their values are not remarkably high in Italy.

After defining the first list of the 140 groups in the target, the LCU team conducted preliminary studies according to its official purpose, which is keeping the internal users, such as business statistics and national accounts experts, informed on the main restructuring events by identifying the effects of complex corporate restructuring at an early stage of the statistical production process. The contribution of the enterprises in the scope was evaluated for the national Statistical Business Register (nSBR), monthly retail trade index and services turnover index. While aiming at investigating the complexity, the LCU team focussed on multi-business aspect and on the analysis of restructuring signals. Furthermore, interesting hints derived from some international initiatives coordinated by Eurostat or other international organisations to guarantee coordination among countries in dealing with inconsistencies of global MNEs.

Figure 3.1 synthesises the process followed for the definition of the tasks.

⁷ https://www.istat.it/it/archivio/216767

⁸ https://www.istat.it/it/archivio/234313

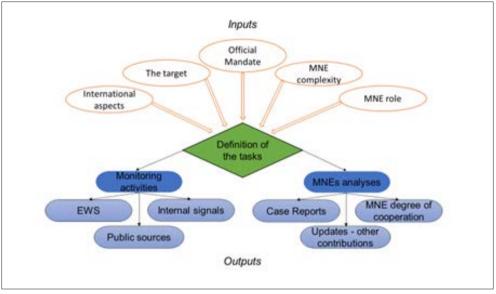


Figure 3.1 - Process for definition of the tasks

Source: Authors' elaboration

Input analyses produced several results that have been combined and evaluated. Tasks have been defined according to two main streams of activities: monitoring activities (Paragraph 4.1) and MNEs analyses (Paragraph 4.2). The former activities mainly aim at identifying the effects of MNEs complex restructuring at the early stages of the statistical production process, while the latter ones help in dealing with the inconsistencies of the top MNEs in cooperation with other statistical domains that are potentially affected.

Monitoring activities are carried out both internally, by sharing signals on major restructuring events and externally through the EWS network. Internal monitoring activities are planned on the information collected through the Istat Business Statistical Portal⁹ and public news gathered from specialised newspapers and magazines. MNEs analysis generally followed signals activated by the monitoring activities. In other cases, cooperation with different Directorates may determine other specific investigations. Furthermore, signals coming from distinct statistical units belonging to the same business group could be an indication of a complex reorganisation that

⁹ In Italian Portale statistico delle imprese. https://imprese.istat.it/

need to be analysed more in detail. In such cases, an in-depth analysis is conducted and disseminated via specific reports. An assessment of the degree of cooperation in surveys through a group perspective may complete these case reports, which are normally updated when further information become available.

4. Day-to-day tasks

This section shows the tasks the LCU has implemented for its ordinary activity. According to the review of the activities generally allocated to the LCU (Paragraph 2), in our experience, day-to-day tasks are mainly referable to monitoring activities (c) with specific contributions for data analysis (d) both for national and international projects.

Working in cooperation with other Directorates, the LCU promoted preliminary projects concerning data collection (b) and contacts with the businesses (a). Speaking about data collection, in 2016 the entire process was entirely assigned to a new Directorate, thus the main contribution to this activity of the LCU is the evaluation of the degree of cooperation of the MNEs. As for the relations with the businesses, the LCU has established contacts also according to specific needs of the National Accounts Directorate. Furthermore, in terms of internal organisation, it is very important to underline that another Istat team is fully dedicated to profiling (e) and (EGR) activities.

4.1 Monitoring activities

International monitoring activities are carried out through the EWS network (Paragraph 4.1.1). Internal monitoring activities are based on the information collected through the Istat Statistical Business Portal, which is the web device focussed on retrieving data and managing contacts with all the enterprises (Paragraph 4.1.2), and on public news gathered from specialised newspapers and magazines (Paragraph 4.1.3).

4.1.1 The EWS flows

To understand the key concept of globalisation, various initiatives are bundled in EU to achieve coherence in methodologies and consistency in treating statistical issues. In line with European Statistical System principles, EWS aims to enhance statistical co-ordination, to promote integrated mechanism in exchanging information and to strengthen expertise in statistical areas. The interlinkages and integrated nature of the LCU are of crucial importance in ensuring that the purpose of the EWS is realised. Involving different expertise in the field of business statistics and National Accounts, the LCU team is able to provide the lens through which to manage MNE restructuring cases in an effective manner. As the LCU works towards wider range of MNE issues, on the one hand Istat correspondents for EWS are committed to triggering EWS Secretariat to anticipate the possible sizeable effects on national and European statistics due to the restructuring of an MNE. On the other hand, EWS Secretariat may trigger Istat correspondents for EWS, requiring them to provide certain information of MNE statistical profiles in order to develop a new approach in achieving statistical consistency while fostering synergies among Member States.

Since 2017 the LCU has been proactively participating in several EWS cases, by developing concise and effective reports concerning the relevant cases, as well as by ensuring responsive, inclusive and participatory decision-making processes in the field of statistics. Therefore, EWS activity is among the most advanced of those currently carried out by the LCU.

The triggering mechanism of the network produces inward and outward flows of information between EWS Secretariat and the LCU, which carries out monitoring activities of MNE statistics related issues while strengthening cooperation with EWS in a coherent and consistent manner. For both inward and outward flows, when MNE event is identified, which may include MNE mergers, acquisitions and restructuring, Istat correspondents for EWS, members of the LCU team, receive data and information from the experts working on the concerned statistical domains. Although generally limited to few variables or very specific situations, a mechanism of involvement of the potentially concerned domains is activated, similar to the way in which case reports are drafted (see Paragraph 4.2.1). In fact, in gathering relevant statistical information related to MNE profile, an internal consultation across various statistical domains is launched, by investigating Structural Business Statistics (SBS), Short-term Business Statistics (STS), Statistical Business Register (SBR), Foreign Affiliates Statistics (FATS), the Statistics of industrial goods and services (Prodcom) and Foreign Trade statistics, as well as National Accounts aggregates.

With regards to outward cases, once collected all relevant statistical data and indicators combined with public information about the Company such as Corporate website and newspapers, Istat correspondents trigger EWS Secretariat by informing that the restructuring case may affect other Member States and European statistics, accordingly. Istat correspondents provide the network with the MNE case overview containing the following information:

- detailed description of the restructuring case;
- statistical domains involved (*e.g.* STS, SBS, Business Registers, National Account aggregates);
- principal economic activity (NACE);
- estimated effects on the statistics;
- other countries which might be affected;
- timing of the restructuring;
- methodological assessment and proposal for statistical treatment;
- plans for communication to users.

The EWS secretariat establishes an *ad hoc* task force to collect information and to discuss the case involving the other Member States concerned. Integrating Member States opinions, EWS secretariat drafts Eurostat an interim report containing the information provided by the Member States and options to treat the MNE related statistics at the National and at the European levels. The mechanism of reaching consistency in statistical treatment of MNE case may require high-level institutional commitment, and effective and well-functioning inter-institutional coordination process, including, for instance, the involvement of the European Central Bank and National Central Banks. In close cooperation with the concerned correspondents, Eurostat produces a methodological note containing a summary of the case and an agreed methodological treatment to ensure a coordinated timing in the publication of first results and revisions. All the above-mentioned exchanging documents and information, including the methodological note and Member States opinions, are stored in a secure platform with an access only for correspondents differentiated by Case Group. Furthermore, as the agreed statistical treatment and consistent revisions may be applied to other cases, the repository of treated cases are available as anonymised explanatory notes containing the case description and the agreed methodological treatment for statistical unbalances available for all EWS members¹⁰.

¹⁰ EWS Methodological summary notes https://ec.europa.eu/eurostat/web/economic-globalisation/early-warning-system

Even if EWS is based on the voluntary cooperation among National Authorities dealing with statistics, enhancing expertise on global statistics is crucial in developing effective procedures and in accelerating integrated approaches that leverage synergies across different dimensions of globalisation related issues. The network established by EWS provides a developing mechanism to support Member States to deal with statistical inconsistency due to globalisation events in a coherent manner.

4.1.2 Signals from Istat Statistical Business Portal requests

Istat Statistical Business Portal (from hereon will be referred to as the Portal) is "a single entry-point for Web-based data collection from enterprises, which is at the same time an attempt to streamline the organisation and management of business surveys as a whole" (Fazio et al., 2013: 1). As a communication channel, the Portal guarantees the possibility to interact with respondents. In fact, it is "a tool for optimizing the bi-directional communication between Istat on one side and the companies involved in the statistical surveys on the other side" (Papa et al., 2018: 4). One of its key features consists in an integrated system that allows nSBR experts to manage the requests from enterprises in terms of changes (status and variables). The company can fulfil easily and quickly its obligations as well as monitoring the status of statistical requirements in real time; it can consult its situation in the nSBR and, if necessary, communicate changes receiving a response in real time. According to Consalvi et al. (2019), the tool has profoundly changed the methods of updating the nSBR from statistical sources and nowadays most of the updates of the register are collected through the Portal. Based on the management model adopted, an official application is activated for each request and a business register expert analyse and solve the case.

Concerning the LCU, monitoring activities aim at evaluating the signals from a business group point of view besides the enterprise level. In some cases, in fact, organisational changes in a business group consist in structural changes of several companies belonging to the same group.

From an operational point of view, all the requests sent via the Portal by the enterprises belonging to the business groups in the target are analysed. The full integration with the Business Register system allows the LCU team to automatically process data as identification codes, type of requests, variables affected and dates. Through this procedure, a provisional database containing signals on potential complex restructuring events involving the groups in the target is built up.

Starting from the target as defined in Section 3, for the period 2014-2019, 122 business groups (87 per cent of the reference population) and a total of 712 companies (22 per cent of the whole reference population in terms of legal units) communicate via the Portal showing a good propensity to use the tool. Enterprises belonging to the target groups are substantially stable (for example, about 84 per cent of the units are present in the years 2017 and 2018) but the incoming and outgoing movements in terms of single enterprises from a Business Register perspective can be considered as well significant.

Number of	requests
	58
	219
	273
	237
	187
	300
	1,274

Table 4.1 - LCU target enterprises, requests per year. Years 2014-2019

Source: Authors' elaboration based on Istat Statistical Business Portal requests

Table 4.2 - LCU target enterprises	s, requests per variables. Ye	ars 2014-2019
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TYPE OF REQUESTS	Absolute value	Percentage value
 Mergers/split-offs	350	24.5
Status	95	6.7
Nace code (economic activity)	203	14.2
Name	288	20.2
Legal form	86	6.0
Insolvency proceedings	43	3.0
Address (administrative office)	363	25.4
Total	1,428	100.0

Source: Authors' elaboration based on Istat Statistical Business Portal requests

As shown in Table 4.1, 1,274 communications were received, 72 per cent of those cases were posted by the respondents. The rest of 28 per cent came from internal users, especially from short-term surveys. The requests were associated to 1,428 variables related to statistical classifications, demographic characteristics and structural changes (Table 4.2).

For LCU purposes, interesting signals concern structural changes, such as mergers, split-offs, requests for Nace code changes and communications about status and insolvency proceedings. In total, these requests amount to almost half (48 per cent) of the total. As previously mentioned, the main innovative aspect of our approach is related to the possibility to evaluate the requests according to a broader perspective (business group) in order to detect complex restructuring cases at an early stage of the statistical processes. For the most relevant cases, case reports are drafted and shared within business statistics and national accounts directorates (Paragraph 4.2.1).

4.1.3 Signals from specialised newspapers and public sources

Evaluating the signals from specialised newspapers and magazines constitutes the second leg of the internal monitoring activities. News is analysed and organised by year in a dedicated repository. At the end of the year t, the records are further scrutinised, and three different groups are identified:

- a) events confirmed, codified and shared during the year t;
- b) events postponed to next year t+1;
- c) news not confirmed and not shared.

In terms of coverage, the activity concerns both the business groups in the LCU target and all the events that could involve Italian and foreign multinational companies in order to support the FATS statistics and the Statistical Business Register on Enterprise Groups processes.

Concerning the sources, the activity was mainly carried out by analysing the news reported by the specialised newspaper '*Il Sole 24 Ore*'. For the reference year 2019, the information sources treated were expanded: in addition to '*Il Sole 24 Ore*', the LCU used the 'Merger & Acquisition' report prepared by KPMG and the Newsletter distributed by the company Fineurop Soditic, specializing in mergers and acquisitions. This operation allowed an increase in the number and type of events reported.

The core objective is to identify the events that may involve the most significant enterprises or business Groups active in Italy and the impact for the statistics (acquisition projects, mergers, opening of new sites, liquidation, expansion projects abroad).

Before sharing the files, the confirmed events are checked and coded. This last phase must be as accurate as possible since the names of the companies involved must be traced back to the identification codes otherwise the information could not be used.

The undefined events are divided between those that have not materialised and those still being defined or completed. The events postponed are recorded separately so that they can follow their evolution over the following year.

For both groups of events confirmed and postponed, two distinct dissemination files are shared within Istat. Excel format to share the cases with a reduced number of variables has been chosen in order to obtain files that are easily and quickly interpretable. Content of both files is described in Table 4.3.

The report for the year 2019 created through analysing data on daily basis, summarises information on cases concerning companies and MNEs mainly involved in mergers/split-offs and sales or acquisitions of subsidiaries. While considering that the number of cases analysed is strictly dependent on the underlying economic reality and highly variable from year to year, for 2019 the number of events analysed compared to previous years has been more than double, also because new information sources have been fully exploited.

Starting from a total of 449 events analysed, those defined during 2019 have been 376 (Table 4.4) while in 3 cases their conclusion took place in 2020. In 37 cases the events have been postponed to the following year, while 7 cases needed further investigations. The latter situations have concerned very complex restructuring operations of large Italian groups. Finally, we found that in 26 cases the reports concerned only announced events that did not materialise.

Results in terms of type of monitored events for the year 2019 are shown in Table 4.5. Acquisitions of subsidiaries (or entire business groups) account for three quarters of the total, while the rest concern MNEs reorganisations both

internal and related to other parties (mergers, split-offs, sale and cessation of activities).

Dissemination file 1 - confirmed events	Dissemination file 2 - postponed events
Progressive identification code	Progressive identification code
Identification code main statistical unit	Identification code main statistical unit
Name statistical unit	Name statistical unit
Type of event	Type of event
Extended description of the event	Extended description of the event
Other Units' codes	
Other Statistical units' names	
UCI* name or GGH** name	
UCI or GGH country	
Group name involved in the event	
Survey on foreign-controlled companies resident in Italy (Inward FATS)/or foreign affiliates abroad controlled by Italy (outward FATS)	Survey on foreign-controlled companies resident in Italy (Inward FATS)/or foreign affiliates abroad controlled by Ital (outward FATS)
Indication of the different domains interested in the survey	
Territorial impact (IT/FRGN)	
Date (certain) of the event or reference year	
	Expected date of the event
Other notes	Other notes

Table 4.3 - Content of the dissemination files

*UCI: Ultimate Controlling Institutional Unit.

**GGH: Global Group Head.

Table 4.4 - Monitoring results. Year 2019

EVENTS	Number
Events carried out during the year	376
Events of large groups not yet defined during the year	7
Events postponed to the following year	37
Events closed in the following year	3
Events not occurred	26
Total events analysed	449

Source: Authors' elaboration

ТҮРЕ	Percentage value
Acquisitions	75.3
MNE internal events	10.7
Sale / cessation of activitieS	7.4
Mergers/split-offs	6.6
Total events carried out during the year	100.0

Table 4.5 - Type of the	events carried or	ut during the year	Year 2019
	oronico ournou o	at aaring the year	

Source: Authors' elaboration

The analysis of 2019 data reveals that approximately 24 per cent of the events concerned acquisitions of Italian companies by foreign multinationals. In Italy took place 43 per cent of the operations (acquisitions, mergers, opening new offices), while 19 per cent of the operations were managed abroad by Italian multinationals; finally, approximately 14 per cent of the operations were carried out between foreign groups.

4.2 MNEs analyses

Case reports (Paragraph 4.2.1) and the evaluation of the degree of cooperation to the surveys from a business group perspective (Paragraph 4.2.2) represent the main outputs labelled as 'MNEs analyses'. Other *ad hoc* analyses are presented at the end of the Paragraph 4.2.3.

4.2.1 Case reports

Case reports represent the main tool the LCU team uses for sharing information concerning groups in the target, such as restructuring, changes of ownerships and impact on statistical units. The purpose of the task is carrying out concrete actions for the development of a coherent set of information useful to improve a consistent treatment of complex MNEs within different business statistics. Without prejudice to the autonomy of each production process, the aim of LCU reports is to facilitate a shared solution and the application over time of the same solutions for similar cases. Cooperation in MNE data treatment is a key task for the success of the LCU.

A case report is provided when MNEs reorganisations seem to be able to create 'breaks' in the statistical outputs. The urgency of the case is closely linked to the needs of the involved domains. Currently, the variables under control are related to classification (Nace code), turnover and employment, as well as a general assessment of the structure of the groups in terms of statistical units. Checks are carried out by considering statistical data and Financial Statements (Annual Reports and Consolidated Accounts). By the report, an internal consultation of the concerned statistical domains is opened. Firstly, the assessment is made considering the effects produced (or that will be produced) in the short term and therefore able to have an impact on STS and SBR domains. At the same time, the other primary statistics (SBS, FATS, PRODCOM, Foreign Trade statistics) are involved to facilitate the most homogeneous treatment of the events in a wider perspective. For the same reason, a dedicated National Accounts team for the treatment of the globalisation process is also involved for assessing the need to investigate specific aspects not captured by primary statistics but necessary for the compilation of national accounts.

Operationally, the reports derive from signals collected via monitoring activities (Paragraph 4.1) or follow some specific needs emerged inside the NSO. Reporting is an iterative process that engages people in charge for the different statistical domains potentially involved. Comments and suggestions are collected via a dedicated email box or, preferably, writing using a track changes function inside a common protected area.

Table 4.6 - Case reports: checklists

		Checklist 1		
Statistical Units	Impact		To do	
Groups	Yes	No	Yes - go to Checklist 2	
Enterprises	Yes	No	Yes - go to Checklist 3	
Local Units	Yes	No	Yes - go to Checklist 4	
Checklist	t 2 – Groups		_	
Variables	Imp	act	_	
Existing control links	Yes	No	_	
New control links	Yes	No		
UCI (GGH)	Yes	No		
Complex reorganisation	Yes	No		
	Chec	klist 3 – Enter	rprises	
Variables			Imp	act
Variables Enterprise events (mergers; take	overs/break-ups; sp	lit offs)	Imp Yes	act No
	overs/break-ups; sp	lit offs)	•	
Enterprise events (mergers; take	overs/break-ups; sp	lit offs)	Yes	No
Enterprise events (mergers; take Nace	overs/break-ups; sp	ilit offs)	Yes Yes	No No
Enterprise events (mergers; take Nace Employment	overs/break-ups; sp	lit offs)	Yes Yes Yes	No No No

Variables	Imp	act
Headquarters	Yes	No
Local units (mainly factories)	Yes	No
Others	Yes	No

Source: Authors' elaboration

Reports contains the following parts:

- description of the event and data available;
- type of signal: internal/external;
- source of signal: monitoring activities; specific needs inside Business Statistics; input from other Directorates; international projects;

- evaluation of the impact for the statistical production in terms of statistical units (business groups, enterprises, legal units and, partially, local units) and variables (mainly, employment, turnover, economic activity classification and location);
- outcome of the preliminary analysis: the potential impact and the proposals/decisions for the involved domains;
- list of the involved statistical units (names and Register codes);
- contributors and contact persons for the case;
- version.

Even though the task is composed of a continuum of operations and some phases can be contextual or iterative, the following macro-steps have been defined to follow in drafting the reports, not necessarily in a rigid sequence. Classifying the signals and collecting further information and data concerning the case constitute the first macro-step of the activity and allow a quick evaluation of the complexity of the case. The actual handling of the case starts immediately after the first assessment and represents the core stage of the entire process: the urgency of the case is assessed, the inconsistencies are identified and described and the impact on the main users is predicted at a sufficiently detailed level of information. Basically, the evaluation should enable to answer the checklists of statistical units and variables showed in Table 4.6.

In this phase, the need for contacting the business could emerge and members of the LCU provide the necessary steps to organise the contact properly. At the end of this phase, information on the expected effects and operational proposals and/or decisions are added in the report.

The subsequent step consists in sharing the first draft of the report in order to obtain the involvement in the analysis of the thematic experts. In that way decisions to be taken could be refined and approved.

In the final step of the process, the final version (rev. 1) of the report is shared with all the statistical domains even if not immediately affected. It is important to consider that in our perspective the responsiveness in analysing the signals concerning complex cases is of primary interest even if new versions of the report could be made in case of relevant updates.

4.2.2 Business groups: degree of cooperation and statistical burden

A high response rate guaranteed by the top MNEs is a key aspect to obtain accurate statistical outputs. Either as a complement of case reports or as an independent analysis, one of the tasks of the LCU team concerns studying how business groups in the target cooperate in surveys, supplying tables for resuming and comparing data. For this purpose, a group perspective has been adopted for all analysis on cooperation.

While providing significant timely data and high-quality statistics, NSOs should always consider the need to minimise the reporting burden. Principle 9 of the "European Statistics Code of Practice For the National Statistical Authorities and Eurostat (EU statistical authority)" by Eurostat (2011 and revised edition 2017) states as "the reporting burden should be proportionate to the needs of the users and should not be excessive for respondents. The statistical authority monitors the response burden and sets targets for its reduction over time". Business groups generally express concerns over the statistical burden they have to bear while official statistical producers have to face increasing demands for information and a remarkable effort to be compliant with EU Regulations. Nowadays blending these opposing needs offers a compelling challenge to NSOs.

According to Istat internal organisational, each survey manager and the Data Collection Directorate are in charge of the burden evaluation, especially regarding the contents of the questionnaires. Furthermore, for each survey a dedicated team of experts check if the submitted questionnaires are filled in properly. Collaboration between the Data Collection Directorate and the LCU team allows measuring the actual cooperation of large business groups in official statistics, serving two main purposes. First, this analysis helps to assess the availability and the quality of the data (collected or estimated) used for consistency checks; secondly, it allows to evaluate the feasibility of requesting further cooperation (direct contacts,) especially for globalisation related issues. Furthermore, updates and new versions of the reports (see Paragraph 4.2.3) allow coverage assessment of data collection after restructuring.

ECONOMIC BUSINESS SUR-				Business	s group er	nterprises	;		
VEYS	Ent.1	Ent.2	Ent.3	Ent.4	Ent.5	Ent.6	Ent.7	Ent.8	Tot
OCC1	х		Х			Х	Х		4
RS1	х	х	х	Х	х	х			6
PRODCOM	Х		х	Х		х	х		5
PPI_D	Х					Х			2
CIS	х		Х		х	Х	Х		5
FID_MAN	Х		х						2
ICT	х		х	Х	х	х	Х		6
RCL-SES	Х		Х			Х	Х		4
SCI	Х		Х	Х		Х	Х		5
FATT	Х		х				Х		3
PMI	_			Х					1
IPI	Х		Х	Х			Х		4
IULGI	х		Х	Х		Х	Х		5
INWARD	Х	Х	Х	Х	Х	Х	Х		7
IS	Х		Х	Х	Х	Х	Х		6
PREIMP				Х					1
CENS	х		Х	Х		х	Х		5
Tot	15	2	14	11	5	12	12	0	71

Table 4.7 - Istat business surveys involving enterprises of the examined MNE group, 2017-2019

Source: Authors' elaboration on Istat data

STS in grey

Labour Force Survey (OCC1); Research & Development Survey (RS1); Community Production Survey (PRODCOM); Producer Price Survey – domestic market (PPI_D); Community Innovation Survey (CIS); Business Confidence Survey of Manufacturing Industry (FID_MAN); Information, Communications and Technology Survey (ICT); Structure of Earning and Cost of Labour Survey (RCL-SES); SBS Total Survey on large enterprises (SCI); Industrial New Orders and Turnover Survey (FATT); SBS Sample Survey on small and medium enterprises (PMI); Industrial Production Survey (IPI); Survey on Local Units of Large Enterprises (IULGI); Activities of Foreign Enterprises in Italy (INWARD); Survey on International Sourcing (IS); Import Prices Survey (PREIMP); Businesses and Services Census (CENS).

When monitoring signals and case reports reveal that a group restructuring involves more enterprises and direct contacts, in order to get a clearer picture, the LCU team produces specific reports as showed in the following business case.

The business group considered for this example is an important foreignowned MNE operating in Italy. Although its core business unit focusses on a productive activity, other enterprises of the group operate in several different fields orbiting the main mission. Using the Portal, we could track down the list of surveys in which enterprises belonging to the MNE group were involved. Analysing the response rate for each enterprise of the group to different surveys has helped evaluate the weight of the actual burden on the whole group and to establish the degree of cooperation of the MNE.

The study revealed that the considered business group has 8 enterprises engaged in the Istat surveys (both structural and short-term) in 2017-2019. Table 4.7 shows the results of the investigation. The larger enterprises (1 and 3) were involved in almost all the surveys, while RS1 Survey, ICT Survey, INWARD Survey and IS Survey engaged more than 5 (out of 8) enterprises of the group.

The response rate to the Istat questionnaires has been rather high for six enterprises while in one case only half of the surveys has been filled. However, after the contact, percentages have increased for all the enterprises belonging to the group.

Direct contacts with the business have allowed also discovering that for the same period, the enterprises belonging to the group have received a relevant number of other surveys from National Authorities or other Public Administrations (9 mandatory out of 16).

A first attempt to extend this analysis to other MNEs shows that the majority of the MNEs tend to cooperate actively in surveys, therefore their average response rate is fairly satisfactory. However, MNEs often report having troubles disaggregating data into small geographic areas and by enterprise. The analysis of the statistical burden on MNEs revealed that notwithstanding the effort required to satisfy the demand for information, MNEs tend to cooperate in data collection. Overall, fulfilling these obligations has a cost for both businesses and NSOs, as excessive burden affects the quality of gathered data (redundant information and overlap between business surveys) and the efficiency of data collection process.

4.2.3 Updates and other contributions

Last stream of research concerning 'MNEs analyses' consists of cases updates and other specific contributions made in cooperation with other Directorates mainly for international projects or to establish direct contacts with the businesses.

As seen in Paragraph 4.2.1, when necessary, a case is updated according to new information, data or experts' evaluations (business statistics and national accounts). In these cases, the LCU team generally opts for drafting a new version of the report.

In other cases, as seen in Paragraph 4.1.3, some corporate reorganisations can be very complex and require very long time. The time that passes from the announcement of an event gathered from newspapers to its actual and complete realisation may vary: sometimes events close very soon, while every now and then events can last for months, especially when, for example, the authorisations of the National Competition Authorities involved are necessary. In these cases, the LCU provides some specific contributions that briefly summarised the main aspects of the ongoing operations, the current situation and a time estimation concerning the conclusion of the restructuring. Furthermore, internal identification codes are retrieved in order to connect information to the statistical units. A newsletter is prepared and disseminated to business statistics and national accounts domains. In fact, in this preliminary phase it is important for expert to think over the potential impact that the event, once concluded, could have on the production process which is affected. The newsletter is shared at non-regular intervals when relevant news is available. Given the public nature of the information collected and disseminated, there are no confidentiality issues and email can be used for dissemination.

In our experience, cases disseminated by this tool have covered a wide variety of aspects concerning the main business groups acting in Italy, such as governance, expansion abroad of Italian business groups, organisational changes in terms of legal units and company crises.

Other non-regular contributions have been made in cooperation with National Accounts Directorate in order to help define of specific issues of macroeconomic statistics. Usually, the LCU contribution is made at a preliminary stage, complementing the information from the profiling activity with a general assessment of the business group regarding ongoing events that could substantially impact on primary statistics outputs and, as a consequence, on national accounts aggregates.

Finally, although to a lesser extent, other preliminary analyses have been carried out in order to get a complete overview of the activities of the business group before contacting the businesses. The LCU members contribute to summarise the context, evaluating the cooperation of the single entities belonging to the business group (as seen in the previous section) and looking for the best strategies to establish or maintain the direct cooperation with the respondents.

5. The LCU role: an adaptive process

In order to define the operational tasks needed to detect complex operations concerning the main business groups acting in Italy and able to affect both the quality of national statistics and the international comparability, the LCU team conducted several studies in the first phase of the project.

Tasks have been defined according to two different streams. The first set of activities consists in monitoring the MNEs to identify current and forthcoming problems in data provision and data analysis as a consequence of restructuring events. The second set of activities analyses top MNEs to manage data inconsistencies, alerting other potentially affected statistical domains. Even though a logical sequence can be recognised considering monitoring activities as upstream in forming the informative base from which in-depth and other contributions can be extrapolated, relationships could also follow other ways. Therefore, most of the tasks could run parallel with continuous interrelations in order to guarantee the necessary flexibility to the LCU project.

Three different small teams within the LCU follow the three different streams of research belonging to monitoring activities macro-group. For internal monitoring activities (Istat Statistical Business Portal; specialised newspapers and magazines) two different repositories are maintained and mutual exchange of data exist allows comparing the results by internal identification codes and events descriptions and typologies. Both the internal monitoring tasks can feed the international monitoring activities that are carried out through the EWS network. In fact, triggering complex restructuring cases that involve more EU Countries is a task of the LCU team both for inward and outward flows of information between EWS Secretariat and Istat. In the former case, EWS correspondents, members of the LCU team, receive the cases from the EWS Secretariat and then activate an internal mechanism in order to obtain the necessary feedback to define the Italian position concerning the case. In some of these cases, a re-evaluation of the signals gathered from the Portal could be necessary. For outward flows, the EWS correspondents, being aware of a restructuring event able to affect other EU Countries mainly by exploiting the results of internal monitoring activities, trigger the EWS secretariat to activate an EWS case discussion.

Relations between monitoring and MNEs analyses are mainly one-way even if some contributions on MNEs may constitute the starting point for an EWS outward case. Despite the high number of signals collected through the upstream activity, only few cases have the necessary characteristics - in terms of impact or complexity of the restructuring event - for drafting and disseminating a case report or other kind of contributions. As seen in the previous sections, case reports guarantee the development of a coherent set of information useful to improve a consistent treatment of complex MNEs within different business statistics, however the process is time-consuming and requires the involvement of several statistical domains. For these reasons, only very relevant cases have been chosen for reporting and follow-ups. Cases updates and other contributions, as well as the production of outputs concerning the actual cooperation to the survey according to a business group perspective, are more frequent but strictly dependent on external factors, such as the dynamics of the economic context and the needs of other projects. Operationally, the three tasks within the MNEs analyses macro-group are related by two-ways relationships.

Nevertheless, according to our experience, the identification of the LCU role and responsibilities within the organisation must be considered as part of an adaptive process mainly for the following reasons.

Firstly, the tasks should be always tuned considering the other initiatives conducted within the NSO to avoid duplications at national level. In general, crosscutting activities are difficult to accept within an organisation and the LCU is not an exception. The presence of several experts with different skills and engaged in other processes, has proved to be a solution suited to the context but, at the same time, has limitations. In such a situation, strengthening the endorsement by the top managers of the NSO may become essential to survive and guarantee the best options in handling top business groups problems for both a national and an international perspective. However, the ever-increasing interest on the topic of Eurostat and other international organisations has helped us in explaining and adjusting the tasks according to a wider perspective.

Secondly, the adaptation should also consider the labour force allocation balancing different needs, when possible. Currently, resources have been considered as sufficient for the LCU target definition, monitoring activities and for participating in the EWS network. However, with regard to the MNEs analyses, more resources are needed. In fact, concerning the case reports, very good relationships have been established with the thematic experts obtaining a high degree of involvement, but LCU resources are not sufficient to ensure greater production and to follow the consistent implementation of the proposed solution for the cases.

In order to respond adequately to internal and external impulses and to be ready to partly modify its tasks or taking other responsibilities in charge, LCU future plans should also consider training and development of synergies.

Concerning the former, the training of the LCU staff should also be considered as an ongoing process. Promoting the enlargement of the competences for each member of the team could help in enhancing the understanding of the company side not only in terms of structure of legal units but also considering their actual internal organisations for aspects such as degree of internationalisation, regulatory changes that determined internal reorganisations and international accounting standard rules. Increasing the knowledge about MNEs operations in terms of legal aspects, such as Regulations and antitrust rules, International Accounting Standards and group taxation rules, emerged as a key urgent aspect to be developed by the LCU team. Furthermore, as international aspects tend to be very demanding, the LCU team might need to improve its knowledge on international networks operations and its skills to better deal with issues and obstacles (legal, administrative, statistical, technical and cultural) associated with international data sharing.

Concerning the latter, in order to exploit the organisational synergies, the LCU team has planned to collect and effectively keep track of Data Collection and National Accounts Directorates' needs, primarily for improving the effectiveness of direct contacts with the business groups and investigate on globalisation effects caused by activities of MNEs and their coherent and systemic reflection in statistical data. Cooperation with other national authorities, such as the National Central Bank, should also be favoured in order to both enlarge the sources available and include other statistical domains in the analysis. Finally, networking and sharing experiences on LCU work should consider both EU and non-EU countries. In the latter case, international organisations could promote actions to share best practises but also bilateral

studies to examine specific situations. Such practical applications would be more supportive to complete the analyses considering that MNE activities are not limited to the EU.

In conclusion, the article describes the practical implementation in Istat of the LCU tasks in the first years of the project. According to organisational aspects and preliminary studies, during this first phase, the main task of the Italian LCU has been providing information on important restructuring events concerning MNEs to internal users. In order to make the most out LCU work, future activities should mainly boost the identification process to define the restructuring effects on national statistics, assessing the consistency of MNE data from primary statistics and either cooperating with other statistical domains in dealing with globalisation issues or providing backing up for experts' individual decisions. Eventually, arrangements should be made to implement and subsequently improve the use of automatic checking procedures to detect and manage complex issues.

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