

# Systematic approach to addressing MNEs and the impact on national processes

Fred Demollin

*Program Manager Large Enterprises, Statistics Netherlands*

The interest for Large Case Units in National Statistical Institutes is increasing over the last years. In most of the countries large groups are roughly responsible for half of the value added and a major part of turnover produced in a country. There's a growing awareness that relationships with large enterprise groups need to be maintained very thoughtfully and data, being send by multiple contacts within these groups, needs accurate checking on consistency.

Since decades, Statistics Netherlands has built up experience in setting up close relationships with large enterprise groups. As a result of several projects a Large Case Unit (LCU) was founded in 2010 to specifically maintain contacts with the largest enterprise groups and to check the consistency of data that is send from these groups for a dedicated group of statistics. The profiling of the groups also takes place within the LCU. The results of the LCU are positive for the whole chain of statistics production, from the business register to the national accounts. In this paper the activities that take place within the LCU, the skills of the people that work in the unit and the method that is used to check the statistical data on consistency will be explained..

Although the results of a LCU are difficult to quantify, it is obvious throughout the whole chain that it brings major benefits to solve inconsistencies as early as possible in the production of statistical data. By giving some examples of the effects in the chain of production, an attempt will be made to quantify the overall advantages of a LCU.

Finally the paper will elaborate on the future goals that the unit has developed. These goals are based on the experience of the work over the past eight years.

## 1. Introduction

NSI's in all countries are confronted with inconsistencies in the data they receive in their statistical surveys. These inconsistencies cause problems at various stages in the statistical chain of production. In the single statistics the inconsistencies result in difficulties in comparing information from one period to another. On an aggregated level the inconsistencies result in a lot of extra verification and comparison of different sources to identify as close as possible the real truth behind the data.

Since the nineties of last century Statistics Netherlands is looking for solutions for the inconsistencies in data. With regard to the quality of the statistical results it was considered necessary to reduce the imbalances between the first and final estimates growth rate figures for the Dutch economy. Over the previous twenty years the average adjustment of the growth rate was roughly + 0.5% of GDP. Differences between short term statistics and the annual production statistics were one of the causes behind these adjustments.

As in most countries there is a strong pressure on the Dutch national statistical institute to reduce the response burden it causes on businesses. At the same time Statistics Netherlands was confronted with budget cuts, making it necessary to produce statistics in a more efficient way, i.e. with a reduced number of staff. The creation of the dedicated unit for large enterprise groups was mainly the result of the need for an improvement of the quality of the output of Statistics Netherlands in the field of the economic statistics. Simply because of their size these large enterprise groups have an important contribution to the Dutch economy: the 360 largest non-financial enterprise groups account for about 50% of the total value added. Inconsistencies in the data of these groups will cause major effects throughout the whole production chain of the NSI, eventually resulting in difficulties in the compilation of national accounts.

Monitoring of the inconsistencies in the data showed that the majority of the inconsistencies was due to inconsistent data supplies of large enterprise groups. The fact that large enterprise groups generally report higher figures to the NSI, and a multitude of employees completing the many surveys, caused the inconsistencies.

Before setting up a dedicated organisational unit for the large groups, Statistics Netherlands experimented in several projects in handling inconsistency.

As the single statistics were operating as stove pipes in the past, the national accounts were the first to notice inconsistencies. Therefore the first attempts were made within the national accounts department to solve the problems. However the solutions created in the national accounts were not

sustainable in the sense that the corrections made to the data of the single statistics were too late in the process to be included in the publications of those statistics. On top of that, the inconsistencies in the data would hardly ever be discussed with the groups themselves resulting in similar problems in the next year's survey data.

Analysing the situation, Statistics Netherlands attempted to reduce the inconsistencies by asking all the data at a central administrative level of the groups, assuming that the groups themselves would see and consequently solve the inconsistencies. This experiment on central data collection on 10 large groups failed however due to a variety of reasons. In the first place the majority of the groups explained that the detailed information asked by several statistics was not available at a central level and for regular business management not necessary. Costs to solve this were considered very high. A second problem was caused by the high volatility of large groups. As these groups frequently sell and buy legal units or complete business units, they are confronted with a multitude of administrations and administrative software. These different software systems were often not able to communicate with each other. Central administrations were informed using bypasses as mail or excel sheets with very key variables only. Other data was simply not available. Finally the groups were unpleasantly surprised by the amount of work, caused by the variety of surveys that they have to respond to, that shifted from decentral levels to a central level. From the experiment the conclusion was drawn that central data collection was not possible for a majority of large groups.

Reconsidering the situation, Statistics Netherlands decided to introduce the consistency work as early as possible in the chain of production; immediately after data collection and before analysis of the results by the individual statistics. As the inconsistencies were clustered within the largest enterprise groups, it was decided to define a population of approximately 300 enterprise groups and to handle these groups in a dedicated department. Data of nine separate statistics and two fiscal sources were monitored on consistency issues. This was the first time that the stove pipe principle was abandoned and an integral view on the data was introduced.

The large case unit had to introduce a new working approach in the settled way of working of the whole NSI. Contacts with large groups for instance had to be clustered and rerouted to personal of the LCU. The authority to adjust survey data from large groups also had to be concentrated in the LCU, excluding changes afterwards in the further process. Eventually it took some years before the whole chain of production within the NSI was used to working with a LCU.

As the national accounts were working on the revision of 2015 data, the effect on the LCU was proven. The data for large enterprise groups that were part of the LCU hardly needed to be revised. The total amount of revised data in the 2015 revision sunk considerably compared to previous revisions.

Also the accuracy of the economic growth indicator has increased over the last years. The work of the LCU has certainly contributed to this improvement.

## **2. Methodology**

### *2.1 Personnel*

The present LCU at Statistics Netherlands consists of 30 full time equivalents divided into 5 different roles. The central role within the LCU is the group coordinator. There are 6 group coordinators active within the LCU. These persons monitor a panel of approximately 60 enterprise groups assigned to them. They are the central contact persons for the groups, and generally are the best informed persons about the data the large groups supply to the NSI. The group coordinators hold academic degrees and most of them are also post academic educated in accounting or controlling. The coordinators orchestrate the whole process from the business register until consistent data towards the rest of the NSI. They are in regular contact with the groups and if necessary they pay visits to them, sometimes on their own initiative and more and more on demand of the group. In these visits the statistical structure is being discussed with the group representatives and also problems in data supplies in previous statistical periods.

For the profiling the coordinators are being supported by 3 profilers. The profilers hold bachelor degrees in accounting or economics. They cooperate in close contact with the coordinators and manage the business register content for the large groups. Changes reported by administrative sources or available in newspapers and on the internet are being verified. The profilers overlook the statistical consequences of the changes and discuss possible changes in the statistical structure of the group. The intention of this is to guarantee the possibility and the awareness of the group to report in the way as proposed and expected by the NSI. When the statistical structure is agreed by the group, confirmation letters with reporting details are send to the group.

The third role within the LCU is the role of data analysts. There are 12 analysts monitoring the complete data of 9 statistics. These analysts perform a first check as soon as the data is supplied to

the NSI. In the beginning the analysts also had immediate contact with the groups on ambiguous data. In the last years questions on ambiguous data are being clustered within the LCU to reduce the administrative burden for groups and also to prevent redundant questions as information might become clear when overlooking other statistical results from the same group. The analysts also hold bachelor degrees or have a maturity build up within the NSI itself by working for several departments within the office.

The last two roles are project leaders and IT staff. These two roles often interfere with each other and the difference between the roles is reducing in time. The staff fulfilling these roles holds academic degrees and has major experience within the office. They take care of the process management and the department IT. As Statistics Netherlands decided to hold the regular IT of the stove pipes in place and organise the IT of the LCU in a bypass of the regular process, the IT environment of the department has grown quite extensive. The IT staff within the LCU is absolutely necessary to guarantee an undisturbed production sequence.

The LCU staff might seem a large investment in the NSI. However most of the work was done already within the NSI before introduction of the LCU. The people that did this work were at the set up of the LCU reallocated to the new unit. The role of group coordinator was formally the only new role in the organisation. In fact these persons might be indicated as an extra investment in consistency.

On the other hand the type of work they perform was done before as well but then very fragmented all over the organisation with a low grade of efficiency.

## 2.2 *Systems*

As mentioned before, Statistics Netherlands has decided to create an information bypass in the chain of production for the LCU. The reason for this was found in the expectation that a complete new system, integrating all individual statistics would be too expensive to develop. Hence the data for the groups in the LCU is filtered from the regular production systems and send to the LCU on a daily basis.

The IT heart of the LCU is formed by a software system that compares the data of the individual statistics automatically on the basis of rules that have been programmed into the software. The software is provided with control limits that were fine-tuned over the years. When the comparison of the statistical data remains within the control limits, the system will accept the data.

However when the comparison results in differences outside of the control limits, the system will provide an alarm and the group coordinator will start a corrective action. The action will differ of course from case to case but may result in taking contact with the group's contacts to ask for clarification, in study of the annual report to verify values of the survey, in research of modification of the structure in relation to the answered surveys. Special attention is given to groups where the contact persons have changed over the last reported statistical period. The experience is that whenever contact persons have changed, the survey data has to be judged extra carefully. The personal interpretation of questions is still an extensive ground for inconsistencies. After clarification of the inconsistencies, a decision will be taken (preferably together with the group's contact person) how to make corrections in the survey data. The corrections will be done in the regular production systems within Statistics Netherlands (not in the bypass). The next day the corrections are visible in the LCU software as every day the original survey data are downloaded towards the LCU.

### *2.3 Method*

The LCU is facilitated with software that does an automatic comparison of the supplied survey data. The software makes use of rules that have been prepared by methodologists when comparing the individual variables from the individual surveys. Some of the rules are solid in a sense that the compared variables, or developments in variables should match completely. Other rules just cause an indication that the data are to be questioned, however it might be correct as it is. The rules that are applied are developed in close corporation with the national accounts department. The intention is to avoid as good as possible inconsistencies in the chain of statistical production and especially in the national accounts. Since the beginning of the LCU in 2010, the rules have been applied in nearly an unchanged constellation. However over the years some ideas have evolved in modifying the ruleset. Eventually, this led to a redesign of the rules that is applied since the consistency work on statistical year 2017. In other words, the rules are quite sustainable but need maintenance once and a while.

### *2.4 Knowledge centre*

As the LCU was founded in 2010, the amount of knowledge within the unit increased rapidly. This was due to the fact that the stovepipe approach was transformed into an integrative view on data. The discussions with the groups about the inconsistencies lead to major insight in the causes of these inconsistencies.

The role of the group coordinators as representatives of the NSI, visiting the groups and being approachable for group's contacts accelerated the process. In a short period of time the LCU also became a knowledge centre for the rest of the NSI. Especially group coordinators are very often consulted by colleagues and invited for participation in all kind of projects where knowledge of the group's behaviour is crucial. The coordinator on their part are very happy to share the difficulties that groups face when they are filling out surveys. The awareness of the available information and the limits to answer correctly to surveys has certainly increased due to the existence of the LCU.

### *2.5 Simultaneous improvements within the NSI*

Apart from the introduction of a LCU, Statistics Netherlands also implemented 'Chain Management' (CM) as a facilitating process for the business statistics. This process is introduced to connect all elements of the production chain from the business register to the national accounts. CM provides all disciplines within the network with the necessary information on changes and irregularities in the chain. CM is coordinated by a chain manager. The chain manager has a facilitating role and leads the regular chain meetings. In these chain meetings the regular production status and foreseen modifications/difficulties of all departments within the chain are discussed. Whenever necessary, CM can initiate additional research to investigate consequences of foreseen situations. The intention is to inform chain partners and to anticipate on consequences of disturbances of the regular processes. CM has proven to improve the cooperation within the chain and also improved the awareness of consequences of decision making of single elements in the network for the rest of the chain of business statistics. The role of the LCU in CM is twofold; the LCU profits from the information spread by CM just as the other departments in the business statistics do. Over the years the LCU has evolved also in an important consultancy body to evaluate consequences of changes in regulations and accountancy principles. The experience and knowledge of the LCU staff is highly appreciated.

### *2.6 Cooperation with the National Bank*

Over the last years Statistics Netherlands learned that consistency of data goes beyond the limits of the NSI. As the system of National Accounts is closely related with the Balance of Payments, produced by the National Bank, cooperation cannot be limited to business statistics. For that reason Statistics Netherlands and The Dutch Central Bank have tuned their working methods and combined surveys. In 2018 this lead to a major highlight: consistent figures for the Balance of Payments and the Rest of the World account. In a close corporation data is exchanged between the two organisations

including the events that were due to the data. Common understanding of the data and regular meetings on the irregularities in the data are a sound basis for consistency on a national level.

## 2.7 *Globalisation*

Large MNE's are no longer bound to national territory. Production processes are increasingly complex and cross border. Financial ownership and transfer pricing make it difficult to assign the GDP and GNI related elements to the proper country. LCU's bring a great deal of clarification on a national level but action will be limited to the national territory. The Dutch LCU overviews over 50% of Trade in services and some 30% of Trade in goods. To understand the full operations of MNE's it is inevitable to go beyond borders and to create a clear picture of the whole operations of the MNE ideally on a global basis. First attempts are made within Eurostat with the GNI Pilots program. The program showed that international cooperation is necessary and useful to understand and expose flows of goods and to detect the proper countries where added value is created. Creating a sound body for exchange and understanding of international data would create benefits for consistency on a EU level. Organising such a body with a chain management structure, where a central pivotal point would facilitate operations would clarify the discussion on globalisation.

## 3. **Result**

As stated before, the results of a LCU are difficult to quantify. However there are a number of interesting advantages visible after 8 years of consistency work in a LCU in the Netherlands.

In the first place the consistency in the whole chain has increased due to the fact that the consistency work is performed on the original survey data. The complete chain of production profits in this way from the improvements that the consistency work resulted in.

Secondly the national accounts are faced with fairly lower inconsistencies in their integrations of the individual statistics. Finally this resulted in considerably lower figures in their last revision. The knowledge within the NSI about behaviour of large groups has increased. The awareness of the possibilities and difficulties that groups have to answer questions in surveys correctly increased equally.

The increased globalisation of production processes of internationally operating groups made the necessity to gather information on group's behaviour more clear. Discussions about SNA changes as i.e. 'Economic Ownership' made it inevitable to discuss worldwide production in depth with large group's representatives. Having a LCU facilitates such discussions heavily.

#### **4. Discussion and Conclusion**

Setting up a LCU in a NSI brings profitable advantages. The investment does not have to be very large since the extra activities that need to be performed are fairly limited. The change however in a NSI to move away from stove pipe approach towards an integrated monitoring of data from multiple statistics might cause resistance and therefore difficulties in the implementation of a LCU.

Showing the result of consistency work is an adequate way of building trust in consistency work and getting a LCU accepted within the organisation. The ideas of organising a LCU will evolve in time. In the Netherlands the ideas on improving consistency of data are concentrating on disabling 'the human factor' in filling out surveys. First attempts are made to read data from group's accountancy systems directly into surveys. The hope is that data will be delivered in a more consistent state compared to data selected by hand.

Working closely together with the National Bank resulted in a joint survey, to be used for Balance of Payments information and Rest of the world accounts in national accounts. This new survey provides the opportunity to be completed automatically by uploads from the group's accounting systems. This is not only positive for administrative burden but also for consistency of data since the human influence has been deleted in this process. The LCU was heavily involved in the development of the new survey.

Corporation presently stops at the national borders. In order to extend the understanding of international operation of the large MNE's, exchange and understanding of data has to be extended further. A start on a European level with consistency activities would boost the understanding of globalisation. A facilitating role for a chain manager is inevitable.

Statistics Netherlands will continue to look for possibilities in this direction. LCU's however will not be made obsolete by such developments; but it facilitates their consistency work positively.

## References

1. Demollin, F. (2019). “Large Case Units as a tool to cover MNEs in a consistent way in official statistics”
2. Vennix, K (2012). “The treatment of large enterprise groups within Statistics Netherlands”
3. Braaksma, B. (2009). “Redesigning a statistical institute: the Dutch case.” Proceedings of Modernisation of Statistics Production, Stockholm, 2009.
4. Pustjens, H.J.M.V. and Wieser, M. (2011). “A consistency unit at Statistics Netherlands: reducing asymmetries in national accounts and related statistics”. The impact of globalisation on national accounts, UNECE, New York and Geneva 2011, 23-24.