Joint Workshop of ESSnet Consistency Work Packages 2 & 3

“On the Way to better Consistency in European Business Statistics”

UNA hotel, Via Giovanni Amendola 57 – 00185 Rome

Report on the 2nd workshop day, 12 June 2013:

“WP2 – Target population, frames, reference period, classifications and their applications”

The second day of the workshop addressed the topics of work package 2 (WP2). Consistency of business and trade-related statistics was discussed with regard to target population, frames, reference period, classifications and their applications. The agenda of the second day of the workshop and the full list of participants (days 1 and 2) are annexed to this report.

Welcome and Overview of WP2

Norbert Rainer (Statistics Austria) in his function as coordinator of WP2 opened the second day of the workshop which was addressed to further aspects of consistency mainly referring to Business Registers (BR). He thanked ISTAT for hosting the meeting and welcomed the 60 participants from 24 countries to the second part of the joint workshop. He gave an overview of the requirements of consistency in Business Statistics and the responsibilities of the three work packages of the ESSnet. After explaining the issues of WP2 and the work that has been done so far, he invited the participants to give a rich feedback from the experiences in their countries which could help to find feasible proposals for improving consistency in business and trade-related statistics. According to the special target of WP2 these proposals should refer to the coverage and maintenance of the BR as a backbone of the system of business statistics, to the methodological aspects of the co-ordination of business frames and to an unambiguous and transparent system of unit classification.

At the present state of the work the focus is on the evaluation of the questionnaires and on first results which could be drawn from these analyses. The presentations of the workshop can be downloaded from the CROS-Portal (http://www.cros-portal.eu/content/joint-workshop-wp23-rome-11-12-june-2013). Norbert Rainer announced that the final results and the draft recommendations will be presented in another workshop of WP2 which will take place beginning of December 2013 in Vienna.

The 2nd day of the workshop was divided into three workshop sessions and a concluding session.
Session 4: Target population, frames and reference period

In this session, which was chaired by Andrew Allen (ONS, United Kingdom), the main results of the inventory related to target populations, frames, reference periods and classifications in the Member States and the EFTA countries were presented. Paul Wetherill (ONS, United Kingdom) explained that WP2 had sent out 600 questionnaires to the different domain experts at national level to detect possible sources of inconsistencies caused by the implementation of the EU regulations. 20 key business statistics domains were identified including Structural Business Statistics (excl. Finance), Short Term Statistics, PRODCOM, Business Demography, Structure of Earnings, Labour Cost, Job Vacancy, FATS, FD1, ICT, R&D, Innovation Statistics and Business Registers. He commented the response rates in the different domains and thanked for the active participation. Looking at the overall response rate of 86% it could be said that the participation in the survey has been very good. The answers from the participating countries lead to a considerable amount of metadata about possible sources of inconsistencies which have to be analysed in detail and which are the basis for the conclusions and proposals of WP2 towards the end of the year.

In the following discussion some countries asked for a feedback from WP2: Since the questionnaires were sent to the domain experts, these countries were interested in a full picture of their responses over all domains. The relatively low response rates from FDI, Outward FATS and Inward FATS were questioned. The reason was seen in the separation of compiling official statistics between NSIs and Central Banks. It has been mentioned that this is a risk for consistency and therefore for the quality of official statistics. Since there are relations between all statistics, especially the representatives of National Accounts present at the workshop expressed a strong preference for a unification of these. The difficulties having occurred with the BoP working group regarding the integration of FDI into the survey should be taken as an evidence for Eurostat to engage in this discussion.

Kieran Walsh (CSO, Ireland) presented a first analysis of the data regarding BR and survey areas.

He summarised the answers of about 31 questions referring to BR about possible restrictions for the integration and maintenance of target populations and frames. The analyses took into account: coverage of NACE Rev.2 activities, under and over coverage in the different domains, thresholds, quality of turnover and employment information and a time stamp of these variables in the BR. The result was that practices in the participating countries are very different and this could be an important source of inconsistency. In the second part of the presentation he summarised the results for the survey areas focussing on target population of data collection methods and frame methodology with special attention for the methodology of updating the Register. An additional topic was the deviation in the reference periods.

To summarise: Although the use of register is wide spread, FDI is problematic; frame methodology and the feedback from surveys to the BR are quite different over different countries. This leads to inconsistency in the data.

The participants of the workshop appreciated the huge amount of information. They recognised that for some questions more detailed analysis is necessary to understand better what the different countries are doing. From a user's perspective the focus should be laid more on cross-cutting issues than on single domains. Ambiguities in the answers by the participating countries were discussed with respect to the interpretation of the results.

There was a warning that classifying enterprises with zero employment or zero turnover as “inactive” may be wrong. It has been recognised that the VAT data are an important source of the BR. Because of the different thresholds in the participating countries and in the different sources of the register for the different areas, the variable “number of enterprises” will never cover all enterprises. Therefore the importance of the information on the correct number of enterprises was questioned. Instead, the focus should be laid on good and reliable data. Regarding the NACE-coding the direct feedback from survey areas could be misleading because of special interests of the individual statistics. It has also
been pointed out that stocktaking of methodologies for updating the BR is on-going in other projects as well. Although the feedback from survey information was recognized as important information, the direct update of the BR through surveys is recommended to be treated very cautiously from a methodological point of view.

The huge amount of information collected by the inventory requires an evaluation strategy. Sweden just started with the evaluation and it was presented what they had done so far. Boris Lorenc and Martin Ribe (SCB, Sweden) presented an evaluation framework of key inconsistency issues from a methodological point of view.

They started their presentation from principle 14 of the European Code of Practice in which consistency is mentioned as one of the quality requirements of European statistics. They sketched the complexity of an overall concept of consistency in a system of economic statistics. Possible conflicts between the different quality components were mentioned for which user inputs in the form of priorities are required. The on-going analysis of consistency takes into account the European and the national level and is divided in the vertical and horizontal perspective. Improving consistency can be looked upon as integration of statistical production processes of statistical domains (subject-matter domains), groups of statistical domains or broad fields like business statistics, economic statistics or national accounts. The evaluation involves different kinds of comparison of the risks of consistency with respect to different aspects like target populations, sampling frames, reference periods etc. The speakers also mentioned that different kinds of consistency could be analysed, such as comparability of published statistics, comparability of calculable statistics and comparability of “theoretically best statistics”. The evaluation approaches for consistency could be done top-down (from a framework view) or bottom-up (from expressed needs for improvement of consistency). It was concluded that the optimal approach would be that the two meet in the middle. The responses to the questionnaires should be used to identify certain risks for inconsistencies. According to the evaluation framework, four types of questions should be distinguished: (1) compliance criteria (questions on features governed by prescriptive rules), (2) harmonisation parameters (questions on features not fully governed by prescriptive rules and potentially affecting comparability or coherence), (3) option indicators (questions on features that affect the possibilities of complying to new or modified rules) and (4) quality indicators (questions on features that affect the efficiency in compliance to existing or new rules). Examples for these types of consistency risks were presented.

It has been recognised that the improvement of consistency requires research and activities in many areas. The proposal was to set priorities, to start in the national system and not to wait for Eurostat solutions and only fulfil regulations. It was proposed to develop an integrated system of economic statistics. Every country should work on an integrated system and can learn from the countries that have already done it or at least are on the way. The implementation of such a system is a long term process. The BR should be central for sampling and a statistical data warehouse should be the central component for data storing. Consistency has to take into account all steps of designing such an integrated system.

**Session 5: Application of classifications**

In this session which was chaired by Norbert Rainer (Statistics Austria) consistency problems resulting from differences in coverage, NACE Rev. 2 breakdowns and size classes in the different domains were discussed. Inga Malasenko (CSB, Latvia) presented the main results from the inventory and Madara Liepina (CSB, Latvia) presented the evaluation of the key inconsistency issues. The majority of respondents are able to provide more extensive NACE Rev. 2 coverage of SBS (Services), Business Demography and Inward FATS (except section K) than currently requested by EU requirements. The coverages of STS (Other Services), Innovations and ICT differ and the ability to provide more than required at the moment is uncertain. Conclusions concerning the coverage of NACE Rev.2 over all domains were that 63 % of the respondents cover more than required by the EU
legislation. Unfortunately, the questionnaire did not divide the question in market and non-market activities. Perhaps this should be taken into account for further analysis. A limitation to market activities in business statistics was preferred by many MS, but also the lack of information caused by this limitation was mentioned.

Regarding the breakdowns the majority of the countries are able to provide data in 2-digit level for SBS and Business Demography (13% of the respondents, however, only at significant costs). Those who are not able to provide these data mentioned confidentiality, sample sizes, lack of resources and burden on enterprises as obstacles. Eurostat announced a new proposal for reducing breakdown details in the future. This was very welcome by many MS, because an increase of details at European level mostly awakes desires for national data.

Consistency in the size classes seems to be very challenging especially regarding small and micro enterprises. Only 24% of the respondents nationally already produce a more detailed size class than required by EU legislation. All the others mentioned no user demand, confidentiality problems, lack of resources or small sample sizes as obstacles. A small majority of 57% of the respondents used “Number of persons employed” and the rest “Number of employees” for the size classes. Differences also exist regarding the period used for the size class breakdown. 66% of the respondents use the average during the reference period; others use the end of the period or other point in time. This heterogeneous situation for generating size classes should be avoided in a consistent system of business statistics.

Session 6: On the way to better consistency

In the last session, which was chaired by Jens Olin (SCB, Sweden) possible directions of recommendations were presented and discussed. Daliute Kavaliauskiene (CSB, Lithuania) presented advantages versus disadvantages of the use of frozen frames and their effects on the comparability between SBS and STS. Afterwards, Norbert Rainer (Statistics Austria) presented preliminary conclusions regarding the classification of units, the classification aggregates and breakdowns and the role of the BR as a backbone of a system of business statistics.

Regarding the classification of units, he referred to the classification rules for a statistical unit stated in the NACE-classification rules (main activity, top-down-approach) and pointed out, that consistency within a statistical system also requires that the method is applied in a comparable manner over all the domains and member countries. Since value added is not always available as a best classification criterion, he proposed a hierarchy of proxies to be used instead. The second best solution would be an output variable like turnover and a third best solution would be an input variable like persons employed. Participants of the workshop agreed that the worst method is the self-assessment of the unit itself. It has also been agreed that the classification methodology has to be transparent and to be applied uniquely over all domains. Also practical implementation rules for the institutional sectors of the ESA should be developed in cooperation with National Accounts and the Central Banks.

Regarding the classification aggregates and breakdowns, the consistency goal is a comparable definition of “total economy” and comparable breakdown level between the (main) domains. SBS is looked upon as the core of the system of business statistics and the coverage in Business Demography, FATS/FDI, SES, LCS and so on should be harmonised with SBS. The breakdown is proposed to be at NACE Rev. 2 division level or the aggregation level used in National Accounts which is an aggregated version of the division level.

Concerning the role of the BR as a backbone of the system of business statistics it has been agreed that there is a necessity for a single BR in each MS being of high quality and covering all statistical units, all economic activities and all relevant variables. Regarding quality the coverage (thresholds) and timeliness are important issues. It has also been agreed that the BR should be used as a central frame for all business statistics domains in a coordinated way. Therefore, concepts, requirements and
practical implementation rules of a frame methodology in a system of business statistics have to be developed including a methodology of survey feedback to the register.

**Resume and concluding remarks**

In his concluding remarks, **Hans-Eduard Hauser (Eurostat)** appreciated the great work that WP2 and WP3 have done so far in identifying a lot of inconsistencies in the present system of business statistics. The inventories created by both WP's are valuable information for Eurostat in the development of FRIBS. The data files shed light on problems and dependencies of the implementation of EU statistical legislation in the Member States and Eurostat will take this information into account. He said that it does not seem to be possible to solve all inconsistencies without becoming normative. It became apparent that the reduction of inconsistencies is not always at the disposal of statisticians. Statisticians do not have enough power to make administrative sources to refer to the same period etc. That limits the use of administrative data. Furthermore some inconsistencies were caused by lack of resources so that budget constraints also clearly set limits to solving the inconsistencies.

He thanked ISTAT for hosting the Workshop and the members of WP2 and WP3 for the huge amount of work and the interesting information which has been presented.

**17:30**  **End of workshop**
Annex 1: Agenda of the second day of the workshop

“WP2 – Target population, frames, reference period, classifications and their applications”

12 June 2013

The 2nd work package of the ESSnet on consistency made an inventory of inconsistencies in all Member States and EFTA countries regarding target population, frames, reference period, classifications and their applications. This inventory included the following business statistics domains: Structural business statistics (SBS), Short-term statistics (STS), Statistics by products (PRODCOM), Business demography statistics, Foreign direct investment (FDI) statistics, Foreign affiliates statistics (FATS), Information society statistics, Community innovation survey (CIS), Statistics on research and development (R & D), Structure of earnings survey (SES), Labour cost survey (LCS), Job vacancy statistics and Business Registers (BR). At this workshop the main results will be presented and discussed with experts from the Member States and EFTA countries as well as first proposals for minimizing the detected inconsistencies. Each of the main topics of the WP2 will be treated in a separate session.

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<tr>
<th>Time</th>
<th>Session/Activity</th>
<th>Chair(s)</th>
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<tbody>
<tr>
<td>09:00 – 09:15</td>
<td>Welcome and Introduction of the 2nd workshop day</td>
<td>Norbert Rainer</td>
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<td>09:15 – 10:30</td>
<td>Session 4: Target population, frames and reference period</td>
<td>Chair: Andrew Allen</td>
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<td>Main results of the Inventory</td>
<td>Paul Wetherill, Kieran Walsh</td>
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<td>Questions and reactions from the participants</td>
<td>Boris Lorenc</td>
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<td>Evaluation &amp; presentation of key inconsistency issues</td>
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<td>Discussion</td>
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<td>10:30 – 11:00</td>
<td>Coffee break</td>
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<td>11:00 – 12:30</td>
<td>Continuation of Session 4</td>
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<td>12:30 – 14:00</td>
<td>Break</td>
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<td>14:00 – 15:30</td>
<td>Session 5: Application of classifications</td>
<td>Chair: Norbert Rainer</td>
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<td>Main results of the Inventory</td>
<td>Inga Malasenko</td>
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<td>Questions and reactions from the participants</td>
<td>Madara Liepina</td>
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<td>15:30 – 16:00</td>
<td>Coffee break</td>
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<td>16:00 – 17:30</td>
<td>Session 6: On the way to better consistency?</td>
<td>Chair: Jens Olin</td>
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<td>Main sources of inconsistencies, their impact on the quality of statistics and</td>
<td>Daliuute Kavaliauskiene</td>
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<td>attempts of Statistics Lithuania to deal with the problems</td>
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<td>Some preliminary considerations concerning European business statistics</td>
<td>Norbert Rainer</td>
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<td>concepts</td>
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<td>General discussion on the way to better consistency</td>
<td>Hans-Eduard Hauser</td>
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<td>Resume and concluding remarks</td>
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<td>17:30</td>
<td>End of workshop</td>
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Annex 2: List of workshop participants (11 & 12 June 2013)

Norbert Rainer, Austria
Nina Waltner, Austria
Joachim Knockaert, Belgium
Juraj Lojka, Czech Republic
Rudolf Olšovský, Czech Republic
Vibeke Skov Møller, Denmark
Ingeborg Vind, Denmark
Ruth Renter, Estonia
Merike Sinisaar, Estonia
Hans-Eduard Hauser, Eurostat
Petra Sneijers, Eurostat
Jukka Pakola, Finland
Tuula Viitaharju, Finland
Silvie Mabile, France
Pierrette Schuhl, France
Ursula Schipper, Germany
Mirjam Weber, Germany
Joachim Weisbrod, Germany
Björn Witting, Germany
Anna Abatzoglou, Greece
Georgia Grolemi, Greece
Athina Rentifi, Greece
Éva Laczka, Hungary
Pál Pozsonyi, Hungary
Adrienn Szép Szőllősi, Hungary
Brendan Curtin, Ireland
Kieran Walsh, Ireland
Roberto Gismondi, Italy
Silvia Pacini, Italy
Fabiana Rocci, Italy

Madara Liepina, Latvia
Inga Malašenko, Latvia
Sarmite Prole, Latvia
Daliute Kavaliauskiene, Lithuania
Violeta Kunigeliene, Lithuania
Lucia Gargano, Luxembourg
Verduin Henk, Netherlands
Irene Salemink, Netherlands
Thom Werkhoven, Netherlands
Hanna Strzelecka, Poland
Julita Świętochowska, Poland
Marisa De Jesus, Portugal
Andrea Bielakóvá, Slovakia
Jozef Rosik, Slovakia
Barbara Dremelj Ribic, Slovenia
Boro Nikic, Slovenia
Estrella Gonzalez Garcia, Spain
Jonas Färnstrand, Sweden
Nilsson Frederik, Sweden
Sofia Löfgren, Sweden
Boris Lorenc, Sweden
Birgitta Mannfelt, Sweden
Jens Ollin, Sweden
Martin Ribe, Sweden
Fabio Tomasini, Switzerland
Rick Trap, Switzerland
Andrew Allen, United Kingdom
Sanjiv Mahajan, United Kingdom
Paul Wetherill, United Kingdom