

Peer Review from a national perspective – preparation, procedure, consequences

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Abstract: The new round of Peer Reviews in the European Statistical System (ESS) is a major challenge for National Statistical Institutes (NSIs) as not only they themselves but the whole National Statistical System must prove its compliance with the European Statistics Code of Practice (CoP). Thus, the Peer Review is a real test of the national coordination role of NSIs.

Germany has a federal statistical system. The compilation of most European statistics involves 14 independent statistical offices of the Länder that generally are responsible for data collection and processing while the Federal Statistical Office (Destatis) provides methodology and coordination. Hence, most European statistics are a product of close cooperation between 15 independent statistical offices.

Concerning a Peer Review and especially the initial self-assessment these 15 statistical offices need to present themselves as part of a system where common rules, standards and approaches exist, but also as individual statistical offices where they act self-dependent. Thus, compiling the self-assessment requires a considerable amount of coordination and collaboration between institutions. During the preparation process a vivid exchange of information took place as institutions were discussing and at times reconsidering their institutional environment, their production processes and statistical products.

The paper focuses on the tasks that need to be handled in a decentralised statistical system in order to prepare for the Peer Review in general and for the self-assessment in particular. It also points out how the preparation alone contributes to improving the statistical system.

Keywords: Peer Review; implementation of the code of practice; coordination role of the NSI; self-assessment; decentralised statistical system; identifying statistical challenges of the future

1. The German statistical system

Federal statistics¹ in Germany are basically produced conjointly by the 14 statistical offices of the Länder and the Federal Statistical Office (in the following: Destatis). This working association is referred to as “the system of statistical offices” of the Federation and the Länder and the term regional decentralization describes the underlying principle. Accordingly, the statistical offices of the Länder are generally responsible for conducting statistical surveys prescribed by law. They are administratively and financially independent of the Federation and not subject to directions from Destatis or the federal ministries. This ensues from Germany’s federal structure. Article 84, paragraph 1 of the Basic Law lays down that the Länder are free to establish their own authorities. For that reason, there is no single type of Land statistical office. The organizational setup of the offices is quite different. Apart from that, some of the Länder have set up joint offices so that not every Land has its own statistical authority.²

One focus of the work of Destatis is on research and the development of methods and techniques for federal statistics. New data requirements often emanate from the federal ministries, but increasingly from the European Commission. Destatis is at an early stage involved in the comprehensive preparatory considerations which are required for creating a legal basis for a statistical survey at the national level. The point is to consider the interests of different users in an adequate manner, to define the most appropriate and at the same time most efficient methods and procedures for obtaining the required data, and to restrict the burden on respondents to the minimum. When the relevant legal basis has been created, the surveys mandated by it are prepared by Destatis in technical and methodological terms. Uniform and co-ordinated methods and classifications guarantee uniform federal results that constitute an integral part of a statistical reflection of social, economic and ecological conditions and trends. The relevant technical preparations focus particularly on applying modern data processing technologies to ensure a smooth and rapid flow of data – to the extent possible – without switches between media.

It is usually the statistical offices of the Länder that are responsible for collecting and processing data in due time. Therefore, the core processes of statistics production are

¹ European statistics generally can be regarded as statistics for federal purposes. Thus, provisions that apply for federal statistics also hold good for European statistics.

² At the beginning of 2004, the Land statistical offices of Hamburg and Schleswig-Holstein merged to form the Statistical Office for Hamburg and Schleswig-Holstein (Statistical Office North). The Land Office for Data Processing and Statistics of Brandenburg and the Land Statistical Office of Berlin merged on 1 January 2007 to form the Office for Statistics (AfS) Berlin-Brandenburg.

performed at the statistical offices of the Länder for about two thirds of the federal statistics. However, legislation may also provide for a central survey. That is why Destatis performs all the working steps for about one third of the statistics, i.e. the data are collected and processed centrally, which is the case for instance in foreign trade statistics and cost structure statistics. Destatis alone is in charge of compiling and disseminating federal results. This also includes providing advice to users and performing special evaluations of the data. Regional results, i.e. data for breakdowns below the Land level, are usually compiled and published by the statistical offices of the Länder. The statistical offices also publish information jointly, for instance, in output databases. They coordinate their publication programme with regard to the level of thematic and, above all, regional detail to produce an overall statistical picture which is thematically and regionally consistent.

2. Preparation for the Peer Review

On 28th September 2011 the European Statistical System Committee adopted the Quality Assurance Framework of the European Statistical System (QAF) that was developed by the Sponsorship on Quality. The QAF is a self-standing document, closely linked to the CoP although not an integral part of it. While the CoP sets the Principles and Indicators as standards by which compliance by statistical authorities will be judged, through Peer Reviews and other forms of assessment, the QAF uses best practices to describe, for each Indicator of Principles 4 and 7 to 15, the activities, methods and tools that facilitate the implementation of the CoP. It is a guiding tool to assist the implementation of the CoP by statistical authorities at national and European levels, becoming therefore an important instrument of the ESS. As a result, the QAF can substantially contribute to the promotion of a common view and understanding of quality management within the ESS.

As early as May 2012 the Conference of Heads of the Statistical Offices of the Federation and the Länder, the supreme body in the German statistical system, decided to review the impact of the QAF on the national statistical system being aware of the QAF being an important reference for any future Peer Review. It assigned this task to the Working Group “Quality of the Statistical Processes and Products” (further referred to as WG Quality), which is composed of the quality managers of all 15 statistical offices. In the first instance, this analysis required a stock-taking of all activities, methods and tools of the QAF (further referred to as activities only) and their implementation in the statistical offices of the Federation and the Länder. On this base an assessment of the compliance with the CoP

followed and activities were identified where further measures are required in order to better comply with the CoP.

For these tasks, the different roles of the statistical offices of the Länder and Destatis in the process of the production of statistics needed to be considered. As described above Destatis provides methodology and coordinates the statistical offices of the Länder who do the actual field work. So the production of most European statistics simultaneously involves 15 different statistical authorities while the general case in Europe is that one national statistical authority is responsible for the whole process of production of a statistic. This work-sharing in Germany is a specialty in Europe that has not been taken care of in the QAF.

So moving from the principles and indicators of the CoP to the activities of the QAF, the situation in German official statistics needed to be differentiated. Looking at the activities on the institutional level it is easy to see that many can be applied to the statistical offices of the Länder as well as Destatis. However, other activities cannot. For example activities of the QAF that are dealing with methodology apply to Destatis only because methodology is its domain and the statistical offices of the Länder generally only adopt it. So some interpretation of the QAF was necessary in order to use it for the German statistical system.

In an environment of work-sharing between offices it has also to be recognized that no single statistical office can completely fulfill the QAF. Instead it has to be acknowledged that one office assumes tasks for other offices and that therefore for many activities all 15 statistical offices should rather be regarded as a single unit. This view is adopted for two types of activities: Firstly, activities where one office provides services for all other offices or where all offices provide services for one office. An example for the former case would be Destatis providing national classifications for the whole statistical system (activity 7.4.1 of the QAF). An example for the latter would be the statistical offices of the Länder carrying out surveys and using feedback from surveys to improve the quality of the business register (activity 7.3.4 of the QAF). Secondly, this view is adopted for activities where common rules and provisions exist so that all offices execute the activity in a similar or even identical way. This view of the 15 statistical offices as a single unit is called “system of official statistics”.

Prior to the stock-taking, for many of the activities of the QAF a common understanding of their meaning had to be brought about, sometimes because the German translation was not adequate and sometimes because the English original was not precise or difficult to understand. Then each activity of the QAF needed to be categorized in order to determine whether it is an activity to be considered for the system of official statistics or whether it is an

activity to be treated by each individual statistical office. In practice, this categorization could not be done separately from the actual stock-taking. In order to categorize activities, one needs at least a general idea how an activity is implemented. In effect, clarification, categorization and stock-taking happened more or less simultaneously for many activities. For the stock-taking only keywords or short phrases were recorded. Both tasks were accomplished in a series of work-shops and extensive online-coordination within the WG Quality.

During this process firstly an enlarged version of the QAF became available from the European “Task Force to Develop the Methodology of the Peer Reviews”. This version of the QAF also included activities, methods and tools to support the implementation of principles 5 and 6 of the CoP which were lacking in the original version. Shortly after that the task force made the first draft versions of the Self-Assessment Questionnaire (SAQ) available. This draft is based on the expanded QAF, transformed the activities into statements (questions) as a reference for self-assessment and added statements for the principles 1 to 3. The WG Quality decided to expand the analysis from principles 4 and 7 to 15, which are covered by the QAF, to all 15 principles as covered by the draft SAQ. This seemed imperative since the analysis ought to prepare for the Peer Review as well as to explore the implementation of the QAF.

Based on the stock-taking the degree of implementation of the activities was evaluated, using a four-level scale (1 = fully implemented, 2 = largely implemented, 3 = partly implemented, 4 = not implemented). Starting from this evaluation on activity-level, the compliance with the indicators of the CoP was assessed. For this, the values for all activities of an indicator were summed up and divided by the number of activities of that indicator, thus generating a mean value between 1 and 4 for the indicator. For the principles of the CoP the same approach was applied, completing the assessment of the implementation of the QAF as well as the CoP.

With the weaknesses now easily cognizable, areas for improvement became discernible. Many of the activities of the QAF that were only partly or even not implemented turned out to be parts of a few larger topics. In September 2013 the Conference of Heads of the Statistical Offices of the Federation and the Länder approved a set of 14 measures to improve the implementation of the CoP.

3. Procedure for the self-assessment

In the middle of December 2013 the official SAQ was received, indicating the start of the new round of Peer Reviews 2014/2015. It will assess the national statistical systems in their

entirety. Apart from the relevant National Statistical Institute, i.e. Destatis, Other National Authorities (ONAs) will also be covered by the Peer Review. In Germany there are currently 31 such institutions among them the statistical offices of the Länder. As outlined above the latter are an integral part of the German statistical system and make a major contribution to compiling European statistics. Thus, including the statistical offices of the Länder in the Peer Review is a prerequisite for an adequate presentation of the German statistical system.

In accordance with the methodological requirements made by Eurostat regarding the Peer Review, the number of ONAs to be assessed has been limited to three. Against this background, the Conference of Heads of the Statistical Offices of the Federation and the Länder decided that the entirety of the 14 statistical offices of the Länder would be treated as one ONA for the Peer Review and would complete one common self-assessment questionnaire. This appeared necessary as their functions are the same and as there is close co-ordination within the system of federal statistics.

The statistical offices of the Federation and the Länder compile most of the European statistics in close cooperation applying a system of work-sharing. They form a statistical system with many joint bodies and coordinated procedures and regulations for statistics production. Therefore many, albeit not all, questions of the SAQ should be answered in the same way for the statistical offices of the Federation and the Länder.

In order to ensure this the WG Quality coordinated and harmonized the answers to the questions of the SAQ. In order to reduce the workload on the quality managers a system of work-sharing was established for this task: Each of the 14 quality managers of the statistical offices of the Länder was assigned one or two principles of the CoP for which he/she took on responsibility to edit the answers in cooperation with Destatis but in place of and representatively for the other 13 quality managers. This quality manager was labelled “expert” for the respective principle. Thus, each quality manager only had to take care of one (or two) principle(s) of the CoP and the related questions/answers which significantly reduced the workload. Based on the results of the stock-taking exercise those questions of the SAQ were determined, where common answers for the “system of official statistics”, i.e. the statistical offices of the Federation and the Länder, were required and those, where individual answers for Destatis and the statistical offices of the Länder were possible. In case of the former, Destatis provided a first draft for each answer based on the output from the stock-taking exercise, and circulated it electronically to the quality managers of the statistical offices of the

Länder for revision. These harmonized answers were used both in the SAQ of Destatis and in the SAQ of the statistical offices of the Länder.

For questions where individual answers for Destatis and the statistical offices of the Länder were required, Destatis gave an answer for itself while the “expert” quality manager used the output from the stock-taking exercise to compile a common answer for the statistical offices of the Länder. Where the statistical offices of the Länder apply different procedures, these are shown by categories indicating to which category the individual offices belong. So for these questions, the SAQ of Destatis may contain an answer that differs from that in the questionnaire of the statistical offices of the Länder.

On April 30 2014 the completed SAQs for Destatis and the statistical offices of the Länder were sent to Eurostat.

4. Consequences from the Peer Review

The awareness of an impending new round of Peer Reviews motivated the heads of the statistical offices to start preparations as early as late 2012 and conduct a stock-taking based on the QAF. The goal was to come to know strengths and weaknesses of the national statistical system, identify measures to tackle the weaknesses and maybe even complete a few improvement actions before the Peer Review initiates. As described above the analysis of the QAF resulted in a list of 14 measures that aim to improve compliance with the CoP. Their scope is manifold; some actions require adaptations of the legal framework and involve other institutions, so their successful completion also depends on other institutions. An example would be a measure aimed at gaining general access to administrative data to complement the existing provisions that allow access on a statistic specific base only. Other actions though quite extensive and laborious to realize are completely within the area of responsibility of the statistical offices but will take some time to complete. An example would be the implementation of an integrated and comprehensive metadata base for both users and staff. A couple of actions are of a more limited nature though and can be realized rather quickly. An example would be the inclusion of training courses for writing press releases. Indeed, this measure has already been implemented and the new training program features a corresponding course.

Generally, the preparation for the Peer Review led to a vivid exchange of information both within and between statistical offices discussing their institutional environment, their

production processes and their statistical products. This raised the awareness for aspects of quality management that were hitherto neglected or not widely known and it strengthened the awareness of interdependences between different dimensions of quality. Thereby it helped promote a culture of quality. The comparison between institutions also revealed a great variety of different practices and will stimulate the adoption of best practices especially in fields where improvements are easy and quick to implement, thus advancing harmonization in the German statistical system. The Statistical Institute Berlin-Brandenburg for example recently published its mission statement on the homepage, several other statistical offices of the Länder intend to adapt Destatis' guideline on how to deal with publication errors. Some offices plan to review their practices of press releases and the handling of pre-release access for special users.

The impending Peer Review also helped Destatis in its negotiations with the Federal Ministry for Economics and Energy over the matter of the first publication of the production index and index of new orders. With effect from 2014 Destatis will carry out the initial publication which was previously done by the Federal Ministry.

Finally, the preparation for the Peer Review was a fine example for an efficient and successful cooperation in the German statistical system. Especially the members of the WG Quality did an excellent job in coordinating the tasks within the individual offices, communicating the results to the partner institutions and elaborating harmonized answers for the SAQ. However, such a complex task cannot be completed successfully without investing a considerable amount of effort. Conducting inquiries in 15 individual statistical offices in order to capture the respective status of implementation of the CoP, carrying out workshops to discuss results within the institutions as well as between institutions, identifying strengths and weaknesses, developing actions to improve compliance with the CoP and finally elaborating answers for the SAQ required an estimated 100 working-months full-time equivalent. This is huge cost for the preparation of the SAQ alone. The total cost for the Peer Review will considerably increase by arranging and hosting the visit of the Peer Review team.

For the self-assessment Eurostat originally set a time frame of 3 months (that included Christmas holidays) and extended this frame due to internal causes to 4 months and until shortly before the end of that period an additional 2 weeks adjournment were granted. Without the extensive preparation of the stock-taking exercise, a proper self-assessment of the German statistical system would not have been possible in that time frame.

Concerning future refinement of the QAF the Peer Review should give ample supply of suggestions from member states. For instance, many statements of the SAQ were difficult to understand and required interpretation. The corresponding activities, methods and tools of the QAF should be rephrased in order to make them more comprehensible and avoid different interpretations. The QAF should also be further expanded to include all principles thus providing support for the implementation of the whole CoP. It should also be considered to extend the QAF beyond the CoP by integrating the coordination which is necessary within a national statistical system in order to guarantee high quality statistics. This topic should be tackled from both perspectives, that of the National Statistical Institute as well as that of Other National Authorities as successful coordination and cooperation requires both sides.

As this paper seeks to demonstrate, the preparations for the Peer Review alone lead to various improvements in the implementation of the CoP even before the actual evaluation carried out by Eurostat. Peer Reviews surely are a necessary and useful technique not only to assess the implementation of the CoP but to enhance it. The huge burden including the time necessary for preparation for the exercise requires more attention though and must be considered whenever discussing future rounds of Peer Reviews.