## PEER REVIEW REPORT

ON COMPLIANCE WITH THE CODE OF PRACTICE AND THE COORDINATION ROLE OF THE NATIONAL STATISTICAL INSTITUTE

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### 1. EXECUTIVE SUMMARY

The Central Statistics Office of Ireland (CSO) is the main producer of European statistics in Ireland with circa 90% of European statistics compiled in this institution. The remaining 10% is produced by 14 Other National Authorities producing European statistics (ONAs). This can be seen as a centralised statistical system with respect to the concentration of production of European statistics. The Irish Statistical System (ISS) comprises parts of the public sector involved in the collection, processing, compilation or dissemination of official statistics, whether national or European. Several recommendations in this report are designed to support further enhancement of the coordination between national institutions compiling European statistics. From the perspective of the applicability of the Statistics Act (1993) to the ONAs and the diversity of policies and practices in different statistical authorities, the national producers of European statistics can be considered a heterogeneous system based on soft coordination.

The CSO has a good reputation in Ireland and it is regarded as an independent and highly professional statistical institute. Its strengths are distinct statistical education of staff, centralised dissemination and use of modern IT tools. The CSO contributes greatly to enhancing an informed policy-making culture and developing statistical literacy in Irish society.

Several strengths in implementing the European statistics Code of Practice (CoP) were identified in the course of the peer review: publishing statistics in open data format; disseminating ONAs' data through a common channel; producing clear-cut electronic publications integrated with the public statistical database (StatBank), enabling abandonment of PDF-based electronic releases, establishing a specialised competence and administrative data management centre; and obtaining quarterly earnings data from the information systems of the businesses. A Diploma in Official Statistics for Policy Evaluation, developed jointly by the CSO and the Institute for Public Administration (IPA), is considered an innovative practice.

The Peer Review team identified four broad issues in implementing the CoP: strengthening the CSO's coordination role and the infrastructure for official statistics, advancing process-oriented statistical system with a strong quality management element, enhancing user orientation and improving use of resources. Some but not all of the issues identified in the report are being addressed by the CSO strategic initiative "CSO 2020".

Coordination activities across the producers of European statistics should be strengthened and the related mandate, stipulated in Article 10(2) of the Statistics Act, fully utilised. No consolidated annual statistical work programme is published by the CSO or by the ONAs. To increase the use of administrative data sources by national statistical authorities, the data infrastructure needs to be further systematically developed. The Irish situation differs from many other EU countries in this context since there is no population register and unique identifiers of persons and businesses are not uniformly used in administrative data files. Not all ONAs using administrative data are involved in the design of administrative data to make them more suitable for statistical purposes. With regard to the mandate to collect data, the CSO is legally empowered to collect statistical data on a compulsory basis only under Ministerial order. The Peer Reviewers were informed that the requirement for a Ministerial order has not constrained its ability to specify requirements and collect data. With regard to ensuring professional independence of the CSO, the Statistics Act establishes sound provisions. However, the professional qualifications required for the post of Director General of the CSO (DG) are not stipulated in law, and the appointment is not renewable.

As regards compilation of statistics, the CSO has been moving from a product-based to a process-based organisational structure. Nevertheless, there is a further need for stronger focus on

processes, horizontal methodological work and integrated quality management. There is also room for the further development of electronic data collection from the business sector since paper-based data collection represents a very large share of the CSO's data capture processes. The CSO monitors the response burden on businesses and publishes this information on its website. Additionally, measurement of the response burden of household surveys should also be implemented.

Many practices related to the communication and dissemination of statistical information are well established but different policies are fragmented or partly missing in the CSO and there are no harmonised dissemination policies for producers of European statistics. For instance, regular practices of monitoring user satisfaction and having a common release calendar do not exist. There is also a need for more systematic work and consultation with users. A group of issues relate to potential improvements in specific aspects of the principles of impartiality and accessibility, including equal access to statistical releases; improvements in announcement of release dates; access to research microdata; results of custom-designed analyses; coherence; and metadata.

Finally, in the context of measuring the use of resources, the CSO applies cost-centre accounting but as yet product-based (survey-based) and process-based measurement are not practiced.

The Peer Reviewers found that the CSO is largely compliant with the CoP, but there is still some scope to achieve and enhance compliance. As regards the ONAs, there is more room for improvement in compliance with the CoP.

### RECOMMENDATIONS

Strengthening coordination of statistical activities, statistical infrastructure and professional independence

- 1. The Central Statistics Office of Ireland should decisively strengthen coordination of statistical activities across the producers of European statistics and in the Irish Statistical System. It should assign human resources and a dedicated budget to implement its coordination role. Coordinated statistical programme planning, supervision of the use of classifications, regular monitoring of data submission to Eurostat and uniform dissemination policies and practices should be established. (Coordination.)
- 2. The Central Statistics Office of Ireland should regularly compile and publish the Irish annual statistical work programme covering statistical surveys and other statistical activities of European statistics. The progress reports should also be published accordingly. (European statistics Code of Practice, indicators 1.5 and 11.2.)
- 3. The Irish national authorities should develop and implement a data infrastructure, including unique identifiers (personal and business) and postcodes, supporting the use of administrative data for statistical purposes. (European statistics Code of Practice, indicators 8.1 and 9.4–9.6.)
- 4. The Central Statistics Office of Ireland should continue improving both the frame for the population surveys, and the business register. (European statistics Code of Practice, indicators 7.3 and 8.3.)

- 5. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should have the unconditional legal right to collect information for European statistical purposes. The Other National Authorities producing European statistics should have the right to compel response to statistical surveys of European statistics. The Irish legislative, administrative and statistical authorities should take actions to amend legal provisions accordingly. (European statistics Code of Practice, indicators 2.1 and 2.3.)
- 6. The National Statistics Board, the Central Statistics Office of Ireland and the Other National Authorities producing European statistics should take steps to ensure that all statistical authorities are involved in the design of administrative data, making them more suitable for statistical purposes. (European statistics Code of Practice, indicators 8.1 and 8.7.)
- 7. The Irish legislative authorities should adopt legal provisions for professional qualifications and selection criteria of the Director General of the Central Statistics Office of Ireland and heads of statistical sections of the Other National Authorities producing European statistics. The legal framework should also stipulate renewability of the appointment of the Director General of the Central Statistics Office of Ireland. (European statistics Code of Practice, indicator 1.8.)

### Advancing a process-oriented organisation and strengthening quality management

- 8. The Central Statistics Office of Ireland should move towards a more integrated approach in quality management. The generic guidelines on statistics quality management should be reviewed ensuring their completeness, regular monitoring and updating. (European statistics Code of Practice, indicators 4.1–4.3.)
- 9. The Central Statistics Office of Ireland should substantially strengthen and resource the central methodology unit beyond what was planned for 2015. The methodology unit should promote standardised documentation of statistical methods. (European statistics Code of Practice, indicators 6.4, 7.1 and 7.2.)
- 10. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should improve sampling methods, including coordination of samples, and consistently and publicly report on sample selection and estimation methods. (European statistics Code of Practice, indicators 6.4, 8.3 and 9.2.)
- 11. In the guidelines on statistics quality management or in the related reference documentation, the Central Statistics Office of Ireland should specify the standards on how to handle sampling and non-sampling errors together with procedures aimed at reducing different types of errors. Editing and imputing standards should be improved, advancing macro-editing. (European statistics Code of Practice, indicators 4.2, 8.5 and 12.2.)
- 12. The Central Statistics Office of Ireland should develop a common glossary of terms and definitions, as well as make the classifications publicly available on its website. (European statistics Code of Practice, indicators 7.2 and 10.4.)
- 13. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should provide staff training courses on the quality of statistics. (European statistics Code of Practice, indicators 4.1 and 7.6.)

- 14. The Central Statistics Office of Ireland should increase electronic data collection from businesses in order to reduce costs and make data submission more convenient. Common data collection applications, where applicable, should be used by the Other National Authorities producing European statistics. The Central Statistics Office of Ireland should establish a common portal for business data collection. (European statistics Code of Practice, indicators 9.3 and 10.2.)
- 15. The Other National Authorities producing European statistics should introduce regular measurement of the response burden. The Central Statistics Office of Ireland should complement its performance indicators of the response burden by introducing these indicators for the household surveys. (European statistics Code of Practice, indicators 9.1 and 9.2.)

### Strengthening user orientation

- 16. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should seek out user needs more systematically, institutionalising the relationship and improving communication with users. (European statistics Code of Practice, indicator 11.1.)
- 17. The Central Statistics Office of Ireland should prepare and implement a plan to increase the regularity of user satisfaction surveys and to make sure that the results are used to design corresponding improvement actions. (European statistics Code of Practice, indicators 4.3, 11.3 and 15.1)
- 18. The Central Statistics Office of Ireland should elaborate a comprehensive dissemination policy. It should make public its revisions policy, which should be regularly reviewed. The Other National Authorities producing European statistics should also develop and publish dissemination policies. (European statistics Code of Practice, indicators 8.6 and 15.1.)
- 19. The Central Statistics Office of Ireland should elaborate and implement a media response procedure and formal guidelines to write press releases and conduct press conferences. (European statistics Code of Practice, indicators 1.7 and 6.8.)
- 20. The Central Statistics Office of Ireland should publish a more precise list of users with privileged access to statistical releases and proceed to take action to better monitor the appropriate use of this privilege. Other National Authorities producing European statistics should make the list and the details of privileged access public, taking into account that privileged access has to be limited and controlled. (European statistics Code of Practice, indicator 6.7.)
- 21. The Central Statistics Office of Ireland should develop a more user-friendly advance release calendar, including regular major revisions, providing precise release dates earlier than currently. (European statistics Code of Practice, indicator 6.5.)
- 22. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should publish a list of the custom-designed analyses they have conducted on their websites. (European statistics Code of Practice, indicator 15.3.)
- 23. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should develop remote access to further facilitate the use of microdata for scientific and research purposes. (European statistics Code of Practice, indicators 7.7 and 15.4.)

- 24. The Central Statistics Office of Ireland should develop a more formalised systematic approach to compare and reconcile evidence from different data sources describing the same phenomenon. (European statistics Code of Practice, indicator 14.4.)
- 25. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should directly link standardised metadata with public statistical databases and statistical releases. Metadata should be provided in accordance with the Euro-SDMX Metadata Structure standard. (European statistics Code of Practice, indicator 15.5.)

#### Use of resources

26. The Central Statistics Office of Ireland should improve its cost-accounting systems by introducing a systematic product-based and process-based accounting approach. It should also develop and introduce internal measurement and benchmarking of cost-effectiveness. (European statistics Code of Practice, indicator 10.1.)

### 2. INTRODUCTION

This peer review report is part of a series of assessments, the objective of which is to evaluate the extent to which National Statistical Institutes (NSIs) and the European Statistical System (ESS)<sup>1</sup> comply with the European statistics Code of Practice (CoP).

The CoP, which sets out a common quality framework for the ESS, was first adopted in 2005 by the Statistical Programme Committee and updated in 2011 by its successor, the European Statistical System Committee. The CoP-15 principles and related indicators of good practice — covers the institutional environment, the statistical production process and the output of European statistics. The ESS is committed to fully complying with the CoP and is working towards its full implementation. Periodic assessments review progress towards reaching this goal.

The first global assessment, a round of peer reviews in 2006–2008, explored how the NSIs and Eurostat were progressing in implementing the parts of the CoP relating to the institutional environment and dissemination of statistics (principles 1–6 and 15). This resulted in reports for each NSI and Eurostat, available on the Eurostat website<sup>2</sup>. These reports also include a set of improvement actions covering all the principles of the CoP; these informed the annual monitoring of the implementation of the CoP in the ESS in the period 2009-2013.

The scope of this second round of peer reviews is broader: the assessment of CoP compliance covers all principles; the CoP compliance of selected other national producers of European statistics (as well as the NSI) in each country is assessed; and the way in which statistical authorities coordinate the production and dissemination of European statistics within their statistical systems is explored.

It should be underlined that there is a fundamental difference between the reports in the previous round of peer reviews conducted in 2006-2008 and the reports from this round. In the 2006-2008 round compliance with principles 1 to 6 and 15 of the CoP was assessed by means of a four-level scale (fully met; largely met; partly met and not met) and improvement actions were agreed on all 15 principles. After five years of continuous development most of the improvement actions have been implemented and significant progress towards full compliance with the CoP has been made. Therefore, rather than stating the state of play for all principles of the CoP, the reports from the 2013-2015 round mainly focus on issues where full compliance with the CoP has not been found or further improvements are recommended by the Peer Review team.

In order to gain an independent view, the peer review exercise has been externalised and an auditlike approach, where all the answers to the self-assessment questionnaires have to be supported by evidence, has been applied. As in 2006-2008, all EU Member States, the EFTA/EEA countries and Eurostat are subject to a peer review.

Each peer review in the Member States and EFTA/EEA countries is conducted by three reviewers and has four phases: completion of self-assessment questionnaires by a country; their assessment by Peer Reviewers; a peer review visit; and the preparation of reports on the outcomes. The peer

<sup>&</sup>lt;sup>1</sup> The ESS is the partnership between the Union statistical authority, which is the Commission (Eurostat), the national statistical institutes (NSIs) and other national authorities responsible in each Member State for the development, production and dissemination of European statistics. This Partnership also includes the EFTA /EEA countries.

<sup>&</sup>lt;sup>2</sup> http://ec.europa.eu/eurostat/web/quality/first-round-of-peer-reviews

review of Eurostat has been conducted by the European Statistical Governance Advisory Board (ESGAB).

To test and complete the methodology, it was piloted in two countries, Iceland and Slovakia, over the summer of 2013.

The peer review of Ireland was conducted by Priit Potisepp (chair), Jaime García Villar and Rimantas Juozas Vaicenavičius, who conducted a peer review visit to Dublin on 23 – 27 March 2015. The programme of the visit is in Annex A and the list of participants in Annex B.

This report focuses on compliance with the CoP and the coordination of European statistics across the producers of European statistics in Ireland. The report highlights some of the strengths of the producers of European statistics in these contexts and contains recommendations for improvement. Improvement actions developed by Central Statistics Office of Ireland (CSO) on the basis of this report will be published within the four-week period starting when the final report is sent to the NSI.

### 3. BRIEF DESCRIPTION OF THE NATIONAL STATISTICAL SYSTEM

### General structure and coordination of the production of European statistics

Though the production of European statistics in Ireland is centralised as measured by the share of the CSO in statistical production (90%), it is heterogeneous in terms of planning, setting quality guidelines, using common tools, monitoring dissemination of statistics and transmitting data to Eurostat. The remaining 10% of European statistics are compiled by 14 Other National Authorities producing European statistics (ONAs). Three of the 14 ONAs — the Department of Health, the Department of Education and Skills (DES) and the Department of Social Protection — have seconded statisticians from the CSO. European statistics are produced predominantly by conducting surveys or by extracting data from administrative records by the CSO or the ONAs, and the latter is gradually increasing.

The CSO has, according to the law, a formal coordination role in relation to European statistics. It has the authority to coordinate official statistics compiled by public authorities, to assure adherence to statistical standards and the use of appropriate classifications. It has also the legal authority to assess the statistical potential of administrative data and the obligation to ensure that this potential is realised. A formal network involving producers of European statistics, the Formal Statistician Liaison Group (FSLG), has been set up to communicate and discuss issues of common concern. Memoranda of understanding between the CSO and the holders of administrative data are important tools for the delivery of administrative data to the CSO.

### The CSO and the National Statistics Board (NSB)

The CSO is an independent statutory body in the Irish Civil Service under the aegis of the Department of the Taoiseach (Prime Minister). The Director General (DG) is appointed by the President of Ireland following nomination by the Taoiseach.

The CSO has offices in three locations: one in Cork and two in Dublin. The business and household surveys and the main administrative functions are carried out in Cork. Macroeconomic, environmental and trade statistics are compiled in Dublin's Rathmines office while Census of Population data are processed in Dublin's Swords office. Total staff in January 2015 numbered 697 employees on the CSO's payroll (including 92 survey interviewers); about two-thirds of the total workforce is located in Cork. The activities of the CSO are currently organised into four directorates: Macro-Economic Statistics; Social and Demographic Statistics; Business Statistics and Methodology; and Corporate Affairs, which includes the human resources, Information Technology (IT), finance and transformation and performance divisions.

The gross budgetary allocation of the CSO in 2015 amounts to €52.8 million and there have been downward pressures on funding and staff since 2007.

The National Statistics Board (NSB) is established by the Statistics Act. It comprises seven members plus the DG in ex officio capacity. Its members are appointed by, and the NSB reports to, the Taoiseach. The NSB guides the CSO by establishing priorities for the compilation and development of official statistics, assessing the resources which should be made available, and arbitrating where necessary between the CSO and other public authorities regarding extraction of statistics from administrative data or coordination of statistical activities. The NSB has gradually come to take an entire system view of the development of the Irish Statistical System (ISS) after focusing on statistical priorities and resources of the CSO in its early years. This has contributed to greater use of administrative data for statistical purposes, wider awareness of statistics for policy purposes and the establishment of statistical sections in a growing number of public bodies. The

NSB determines in its "Strategy for Statistics 2009—2014" critical data gaps and system-wide priority actions in its mid-term strategic programme.

### Main legal acts and the Irish Statistical System Code of Practice (ISSCoP)

The legal basis for official statistics is the Statistics Act (1993). It sets out the institutional structure of the CSO, defines the sole responsibility of the DG for deciding the statistical methodology and standards and the content and timing of statistical releases, stipulates the collection of information, the use of administrative records for statistical purposes, and the protection of confidential information. The Statistics Act applies almost exclusively to the work of the CSO. According to the opinion of the NSB, formal arrangements governing statistical work in many government departments and agencies are missing.

Additionally, the Civil Registration Act, the Garda Síochána (Police) Act, the Sustainable Energy Act and the Central Bank and Financial Services Authority of Ireland Act facilitate the production of vital statistics, crime statistics, energy statistics, and balance of payments (BoP), national accounts and financial statistics, respectively.

In November 2013, to help align statistical practices implemented in the ONAs with European norms, the national quality framework of Irish national statistics — the Irish Statistical System Code of Practice (ISSCoP) — was launched and published on a dedicated website. It can be understood as a subset of the CoP, consisting of five principles: professional independence, timeliness and punctuality, accessibility and clarity, commitment to quality and confidentiality.

According to the government's Public Service Reform Plan (2011), the CSO is assigned the development and implementation of the ISSCoP and the development of standards for the public sector, with regard to gathering and use of data for statistical purposes.

### The statistical work programme and publications

The CSO has long-term strategies, but does not have consolidated statistical work programmes either at national or at CSO level. The CSO has approved its strategic document "CSO 2020: Providing information for Ireland" (hereafter called CSO 2020) and prepares a Statement of Strategy setting out its medium-term goals for every three years. The CSO's statistical work plans are documented at a more detailed level in the internal Divisional Action Plans and Local Business Plans. The NSB's "Strategy for Statistics 2009—2014" focuses on the whole ISS. It addresses the existing strategic problems in the ISS and defines medium- to long-term actions as follows: maintaining the quality and integrity of the ISS and strengthening its institutional commitment; developing infrastructure for data integration and building up data organisation capacity in all producers of official statistics, underlining the need for using standard classifications; and applying unique personal, business and geo-spatial identifiers in administrative databases.

The CSO conducts the Census of Population every five years. This is more frequently than many European countries. The CSO is in charge of compiling the BoP data, including monthly BoP data; and annual financial accounts of institutional sectors (FAoIS).

The CSO disseminates its statistical releases on its website <a href="www.cso.ie">www.cso.ie</a> and also maintains the <a href="www.cso.ie">www.cso.ie</a> and also the producers of official statistics. The majority of the CSO's short-term releases and also the flagship publications (e.g. the "Statistical Yearbook" and "Measuring Ireland's Progress") are available for free in electronic format, providing convenient links to the more detailed tables in the public statistical database (StatBank).

# 4. COMPLIANCE WITH THE CODE OF PRACTICE AND THE COORDINATION ROLE WITHIN THE NATIONAL STATISTICAL SYSTEM

## 4.1 STRENGTHS OF THE NATIONAL STATISTICAL INSTITUTE IN RELATION TO ITS COMPLIANCE WITH THE CODE OF PRACTICE AND TO ITS COORDINATION ROLE

The CSO's strengths are distinct statistical education of staff, centralised dissemination and use of modern IT tools. The Peer Reviewers were impressed with the culture of professionalism and commitment to official statistics. The CSO contributes greatly to enhancing an informed policy-making culture and public administration capacity and developing statistical literacy in Irish society. The CSO's reputation and the unquestioned professional independence of the institution were underlined by various stakeholders during the peer review visit.

In April 2010, the CSO commenced a partnership on linked open data with the Insight Centre for Data Analytics at the National University of Ireland, Galway (NUIG). Following a successful pilot project linking Census of Population 2006 results and schools data, the CSO and the Digital Enterprise Research Institute (INSIGHT) worked together to publish the Census of Population 2011 results as linked open data (<a href="http://data.cso.ie/">http://data.cso.ie/</a>). The census data are machine-readable and can be queried through a query language for linked data (SPARQL) and the Application Programming Interface (API) provided by the CSO. The provision of statistical tables as linked open data was extended in 2014 to cover almost all tables in the StatBank. The beta version of the StatBank API has been published at <a href="http://www.cso.ie/webserviceclient/">http://www.cso.ie/webserviceclient/</a>. In October 2013, the CSO launched the first "Apps4Gaps" competition to encourage the use of this new data format. The launch took place during Maths Week and the competition was related to the use of Census of Population open data. The latest Apps4Gaps competition — <a href="https://www.apps4gaps.ie">www.apps4gaps.ie</a> — encourages the use of the StatBank API to create mobile, social and Web apps. Extending open data initiatives can be considered a strength in disseminating statistical data, which forms the basis for further innovations (CoP, indicator 15.2).

Since there are 14 ONAs in Ireland, a common portal (<a href="http://www.statcentral.ie/">http://www.statcentral.ie/</a>) to official statistics is hosted by the CSO. This portal provides links to websites where standard recurring official statistics can be found. Additionally, the CSO has enabled 10 other producers of statistics, including 4 ONAs, to publish their statistical tables in its StatBank. As a result, one central data source with self-tabulation functionality is at the users' disposal. These user-friendly solutions can also be seen as a strength in relation to disseminating statistical data in a National Statistical System (NSS) consisting of numerous producers (CoP, indicator 15.1 and Coordination).

The CSO demonstrates a high-level of integration of its electronic statistical products. In the StatBank, data are stored both as file-based content and in a relational database structure. It serves as a central source for other electronic releases. Most of the StatBank time series data are available in JavaScript Object Notation (JSON) statistical dissemination format, which allows the developers' computer-to-computer access to StatBank data. As a result, a publication can be designed in an electronic release format, in an integrated manner with the public database, and the publication is subsequently automatically updated following changes in the StatBank. Primary examples in this regard are "Measuring Ireland's Progress", "Women and Men in Ireland" and "Statistical Yearbook of Ireland 2014", all replacing traditional paper products. As another result, making publications electronically available as PDFs is being discontinued (CoP, indicator 15.1).

Maximising the statistical potential of administrative records is one means of responding to changing user needs, as stated in the CSO's strategic documents. The Administrative Data Centre

(ADC) was set up as a special unit responsible for developing and coordinating the statistical use of administrative data within the CSO and with administrative authorities. It sets quality and security standards for the statistical use of administrative data and acts as the central portal for administrative data sources. This unit is in charge of administrative data transmission to the CSO, and data management and storage within the CSO. It provides controlled access to the data catalogues, which include associated metadata and quality information.

Since developing and coordinating statistical use of administrative data is a complex activity expanding over a long period of time, and constituting an increasing part of statistical production, establishing a specialised competence and data management centre can be seen as a strength in relation to the CSO's compliance with the CoP and its coordination role (CoP, indicators 8.7–8.9 and 9.4 and Coordination).

The CSO introduced the Earnings, Hours and Employment Costs Survey (EHECS) in 2008, to provide quarterly earnings statistics. It replaced a number of sector-specific surveys on earnings. The CSO cooperated with the payroll software providers to develop modules for the extraction of statistical information in Extensible Markup Language (XML) format, so that respondent companies would have a "push-button" solution for making quarterly survey returns to the CSO. There were many challenges in the roll-out of statistical collection based on payroll software. They included liaison with the software providers, standardisation of the questionnaire requirements and provision of a user-friendly interface across multiple software products. In 2010, the CSO assigned a dedicated XML support team to assist enterprises and maximise uptake of the automated response option.

The increased use of this response method has halved costs for respondents. For the CSO, it has reduced the costs of the EHECS by more than 40% while improving both timeliness and quality. The success of the payroll software project and the efficiency achieved resulted in the EHECS team receiving a Taoiseach's Public Service Excellence Award in 2012. Retrieving data directly from business accounts is practiced in the NSIs, however, it is still limited and every success in this field should be regarded as a strength in reducing the burden on respondents (CoP, indicator 9.3).

### Diploma in Official Statistics for Policy Evaluation

The Diploma in Official Statistics for Policy Evaluation was developed jointly by the CSO and the Institute for Public Administration (IPA). This one-year, part-time programme responds to the need among civil servants for a deeper understanding of how to use official statistics to derive relevant information for evidence-based decision-making. The programme is organised in four main blocks: the framework for official statistics; macro-economic statistics; business statistics; and people, demography and labour force statistics. It is a practical "hands-on" course where emphasis is placed on the visualisation and presentation of statistical evidence in order to derive useful policy information. The Diploma plays a role as a specific training course to support the quality policy because there is a specific module on quality and trust in official statistics. It is also an example of collaboration with the scientific community given that the IPA is an education and research institution focused exclusively on public sector development. Finally, it fits perfectly in the category of a training course for the interpretation of statistics addressed to users, given that participants are mainly civil servants who are, as a rule, intensive users of official statistics.

The innovative character of this initiative can be advanced in the future by extending the coverage of the course to the more sophisticated statistical analysis of information more directly related to policy evaluation. In that sense, this would imply the need for increased collaboration with academia in order to incorporate this empirical analysis perspective into the content of the course.

Following this, the Diploma's profile would be more in line with the potential future role of statisticians as data analysts (CoP, indicators 4.1, 7.7 and 15.1).

### 4.2 ISSUES AND RECOMMENDATIONS

### 4.2.1 STRENGTHENING COORDINATION OF STATISTICAL ACTIVITIES, STATISTICAL INFRASTRUCTURE AND PROFESSIONAL INDEPENDENCE

Though production of European statistics in Ireland is concentrated in the CSO, the official statistics management and coordination dimensions are marked with notable decentralisation, both within the CSO and with regard to the ONAs. This is apparent at the development, production and dissemination stages of official statistics. In this regard, in the preamble of the CoP for the principles on institutional environment, it is stipulated that "institutional and organisational factors have a significant influence on the effectiveness and creditability of a statistical authority developing, producing and disseminating European statistics."

The decentralisation at the level of producers of European statistics is reflected in insufficient mandates of coordinating bodies and institutions, the nonexistence of an annual working programme for all producers of European statistics, an insufficient data infrastructure and constraints in the ONAs' participation in administrative data design. Remarkably, even at the CSO level there is no institutional annual statistical work programme, but rather a suite of Divisional Action Plans. The CSO is empowered to collect data on a compulsory basis only under Ministerial order. While the experience of the CSO is that the requirement for a Ministerial order has not constrained its ability to specify requirements and collect data, it is a limitation in terms of the CoP. The recommendations addressing these gaps are proposed and substantiated hereafter. At the end of this section, it is advocated that adopting legal provisions for qualifications and selection criteria, stipulating renewability of the appointment of the DG and the heads of statistical sections of the ONAs, would further enhance compliance with the principle of professional independence.

### 4.2.1.1 STRENGTHENING COORDINATION OF STATISTICAL ACTIVITIES

Although the production of European statistics in Ireland may be seen as a concentrated statistical system with around 90% of European statistics produced in the CSO, from a legal point of view, the provisions of the Statistics Act apply primarily to the CSO. Besides, there are no strong formal coordination activities in place across the producers of European statistics or the ISS. Moreover, the central coordinating institution, the CSO itself, applies different practices across subject matter areas. This fact by itself makes coordination of policies, procedures and activities beyond the CSO more complicated and makes well-functioning coordination tools (e.g. committees, memoranda of understanding, guidelines) inevitably necessary.

ONAs are not directly subject to the Statistics Act, but according to Section 10(2) the CSO has the authority to coordinate official statistics compiled by these institutions to ensure adherence to statistical standards and the use of appropriate classifications. Additionally, Section 11(1) of the Statistics Act stipulates the CSO's right to "make arrangements with other public authorities for the collection, compilation, extraction or dissemination for statistical purposes", which means, in practice, compiling joint surveys and sharing statistical tasks, subject to the principles in the Act. And finally, Section 31 of the Statistics Act empowers the DG to request any public authority to cooperate with the CSO in assessing the statistical potential of administrative data.

Consequently, the CSO's coordination role is sufficiently stipulated in Irish statistical legislation. As mentioned already, the Statistics Act is completely centred on the CSO establishing its status,

institutional structure, the principle of independence, the right to collect information and the use of administrative records, the protection of confidential information and its coordination role. Since underlying principles and procedures of official statistics are not imposed on the ONAs by the Statistics Act, coordination tools have to be advanced.

The NSB plays an important role in establishing strategic priority actions for the ISS. It encourages the CSO to support the production of official statistics in the ONAs and to play an active role in the use of administrative data. Data integration, including the need for consistent use of business and personal identifiers across public bodies, the need for a postcode system as well as improving standard classifications and coding systems are important priorities.

The ISSCoP underpins awareness of and commitment to the fundamental principles of official statistics, relying on cooperation between national statistical authorities. As stated in the CSO 2020 Projects Status Update, the CSO will, over the next three years, work with producers of official statistics to review compilation and dissemination practices of official statistics and, as needed, to develop plans to bring practices into line with the ISSCoP.

The Liaison Groups are one tool being used for coordinating statistical activities within the ISS. These groups are consultative, established on a formal basis (with defined Terms of Reference, designated membership and published minutes), usually chaired by the CSO, but with a very diverse composition (users, data providers and/or managers in statistical sections of public authorities) and different roles (coordination, consultation). According to the information available on the CSO website, there are currently nine domain-based Liaison Groups: Enterprises, All-Island Tourism Statistics, Transport Statistics, Agricultural Statistics, CSO-Revenue, Government Finance Statistics, System of Health Accounts Project, Census Homeless Methodology and CSO-Suicide Mortality Statistics. In addition, there is a Formal Statistician Liaison Group (FSLG) to deal with issues common to producers of European statistics.

The FSLG is a network of managers of CSO and ONA statistical sections, i.e. an information and discussion forum at large. The group is chaired by an Assistant DG and comprises a number of persons (including statisticians seconded from the CSO to the ONAs) involved in the compilation and dissemination of official statistics in the ONAs. The primary functions and roles of the FSLG include, among other things, coordinating adherence to common principles and standards guiding the compilation and dissemination of official statistics and facilitating a coordinated approach to meeting EU and international standards.

According to the CSO self-assessment questionnaire (SAQ), there is no single entity responsible for coordinating and planning the production of official statistics across the producers of European statistics. The Peer Reviewers were also repeatedly told that the CSO has not used legal power to coordinate statistical activities to the extent that it should have.

The Peer Reviewers found the following:

- There is no dedicated budget or sufficient human resources assigned for ensuring effective coordination.
- There is no unit responsible for ISS-wide programme planning.
- There are no memoranda of understanding/agreements/protocols regulating coordination of statistical production activities with the ONAs.
- There are no harmonised national dissemination policies and practices.
- There is no monitoring of the submission of European statistics to Eurostat.
- There is no complete, coordinated, ISS-wide coordination of the use of classifications.

In order to improve overall coordination across producers of European statistics and the ISS and to further enhance compliance with the CoP, the Peer Reviewers recommend that:

 The Central Statistics Office of Ireland should decisively strengthen coordination of statistical activities across the producers of European statistics and in the Irish Statistical System. It should assign human resources and a dedicated budget to implement its coordination role. Coordinated statistical programme planning, supervision of the use of classifications, regular monitoring of data submission to Eurostat and uniform dissemination policies and practices should be established. (Coordination.)

### 4.2.1.2 STATISTICAL WORK PROGRAMME

According to indicator 1.5 of the CoP, statistical work programmes should be published and periodic reports should describe the progress made. NSIs should regularly compile and publish statistical work programmes containing a list of statistical surveys and other activities (e.g. development projects). The statistical work programme contains a list of statistical data and indicators or other deliverables related to a particular statistical activity. Moreover, in an NSS consisting of many institutions producing statistics, a consolidated work programme providing the overall picture of national statistical activities would form a core for presenting statistical work in a transparent way, and underpin priority setting and accountability. In addition, statistical surveys listed in an electronic statistical work programme document can be linked to uniformly structured metadata providing a transparent set of information on respective data.

The NSB prepares a strategy covering a five-year period in which it reviews the current statistical priorities for the ISS and outlines high-level targets and priorities for the future. The NSB's document on strategic priorities for official statistics in Ireland 2015–2020 was elaborated during the first half of 2015.

The CSO has prepared the CSO 2020, which defines its vision, its strategic goals and its actions. The CSO also compiles a three-yearly Statement of Strategy, which is driven by its long-term strategy. The CSO reports regularly on the implementation of strategic activities in an annual progress report.

Statistical work plans are presented at a more detailed level in the Divisional Action Plans and Local Business Plans but these documents are available only on the CSO intranet. The vast majority of the statistical work is driven by the Multiannual European Statistical Programme and the European Statistics Annual Work Programme. Users are informed about new initiatives related to European statistics via Liaison Groups. A list covering the CSO's statistical releases and publications is published on the CSO website.

Similarly, both the Department of Education and Skills (DES) and the Sustainable Energy Authority of Ireland (SEAI), interviewed in the course of the peer review visit, do not publish statistical work programmes.

In conclusion, there are neither institutional statistical work programmes nor a common national version available and published in Ireland.

In order to achieve compliance with the CoP, the Peer Reviewers recommend that:

2. The Central Statistics Office of Ireland should regularly compile and publish the Irish annual statistical work programme covering statistical surveys and other statistical activities of European statistics. The progress reports should also be published accordingly. (European statistics Code of Practice, indicators 1.5 and 11.2.)

### 4.2.1.3 DATA INFRASTRUCTURE

In recent years the CSO has been increasingly investing in the use of administrative data, yet the institution is still in the early days of exploiting the full administrative data potential for European statistics purposes. First of all, it relates to indicator 9.4 of the CoP, which specifies that administrative sources are used whenever possible to avoid duplicating requests for information. To this aim, the CSO's Statement of Strategy 2012–2014, in its Goal 2 of developing the ISS, explicitly requires to "support an integrated approach to administrative data across the public service, including promotion of consistent approaches to identifiers, classifications and geo-spatial /postcode data in service planning and delivery". The same topic is highlighted in the CSO's Statement of Strategy 2015–2017. Implementing the institutional strategy, the CSO has also been given a central role on a number of key action points relating to developing the National Data Infrastructure (NDI), under the Public Service Reform Plan. Under this Plan, the use of common identifiers (personal and business) across administrative departments is being promoted, and a system of postcodes is being introduced.

As mentioned in Section 4.1, to support smooth implementation of the NDI, the Administrative Data Centre (ADC) has been set up in the CSO.

The NSB has fostered the NDI, most forcefully in its two documents published together in December 2011: "The Irish Statistical System: The Way Forward" and "Joined Up Government needs Joined Up Data". With regard to the NDI initiative, it is important to note that indicator 9.5 of the CoP states that data sharing within statistical authorities should be generalised in order to avoid multiplication of surveys, while indicator 9.6 states that statistical authorities promote measures that enable the linking of data sources in order to reduce the reporting burden. The NDI involves public bodies agreeing and implementing the ISSCoP, which sets the standards for the gathering, use and dissemination of statistical data. The aim is that all Irish administrative data will make systematic use of identifiers for each individual, business and building; therefore, key linking variables for statistical purposes in the Irish context will be the Personal Public Service Number (PPSN), the business identifier and a postcode. The Peer Review team was told that there is a wide consensus in the Irish official statistics community that unique identifiers for individuals can be built by extending systematically the use of the PPSN, which is currently used in a restricted way as an individual identifier in providing public services. Promoting the NDI, including widening the usage of the PPSN across public sector data holdings, can contribute significantly to improving the data sources available for statistics and, in the long term, provide additional information to support the further development of new registers and sampling frames for statistics.

There is no population or household register in Ireland, hence, a frame of dwelling addresses serves as the sampling frame for population surveys. Indicator 7.3 of the CoP requires that the frames for population surveys are regularly evaluated and adjusted if necessary in order to ensure high quality. The national frame for household surveys is fundamentally updated every five years following the Census of Population. In between censuses it is updated with administrative data on new dwellings or other changes. This has important implications for population sampling, its quality, and even for the distribution of the reporting burden, because after a dwelling is selected, all the members of that household are attributed to the sample. The ONAs are fundamentally

constrained in using this frame, as they do not have access to it because of legal limitations, unless there is a joint survey conducted with the CSO. In the case of an ONA conducting a survey on its own without the CSO, it has to use the database of addresses as a substitution frame.

The use of unique personal identifiers is very limited due to the national legal framework, which does not allow national personal identification numbers. Existing PPSNs cannot serve as a sampling frame without further development, improving uniqueness and coverage. To improve the sampling frame, the CSO participates in most of the key interdepartmental groups, including the group dealing with postcodes and the Chief Information Officers Council. The CSO has also set up an internal postcodes group to examine how this development can be better used across statistical domains.

In 2013, the CSO completed a project to review the usage of its central business register as a sampling frame for business surveys. The main recommendation of the report is aimed at standardising the use of the business register. As a result of this review, follow-up actions include a review of sampling methodologies and the possibility of standardisation. According to internal documentation, this action was likely to progress in the second half of 2014, yet it had not been accomplished by the end of the first quarter of 2015. This action supports implementation of indicator 7.3 of the CoP, which says that the business register has to be regularly evaluated and adjusted if necessary in order to ensure high quality of statistics.

In order to further enhance compliance with the CoP, the Peer Reviewers recommend that:

- 3. The Irish national authorities should develop and implement a data infrastructure, including unique identifiers (personal and business) and postcodes, supporting the use of administrative data for statistical purposes. (European statistics Code of Practice, indicators 8.1 and 9.4–9.6.)
- 4. The Central Statistics Office of Ireland should continue improving both the frame for the population surveys, and the business register. (European statistics Code of Practice, indicators 7.3 and 8.3.)

### 4.2.1.4 MANDATE FOR DATA COLLECTION

In general, Sections 10, 23 and 24 of the Statistics Act define the legal mandate of the CSO to collect information for European statistical purposes. These provisions set out the functions of the CSO, including data collection and assessing statistical potential of administrative data, and the DG's authority to prepare forms and questionnaires for data collection and to specify the date or period within the forms, questionnaires and other records or the required information to be returned to the CSO. It should be stated that the aforementioned clauses do not apply to the ONAs, which carry out statistical surveys according to specific laws (e.g. Sustainable Energy Act 2002 and Education Act 2000).

According to Section 24 of the Statistics Act, the DG (and thereby the statistical subject matter units of the CSO) is empowered to collect statistical information on a voluntary basis. Only the Taoiseach, according to Section 25 of the Statistics Act, may prescribe by Ministerial Order a requirement for persons and businesses to provide information for statistical purposes. Moreover, it is the Taoiseach's authority under Section 25 to determine the general nature of the information required, data transmission frequency and the persons and businesses required to provide data. Only after enacting an order by the Taoiseach, is the DG entitled to launch mandatory data collection.

Household surveys in Ireland are voluntary, with the exception of the Census of Population, but business surveys are mandatory in most instances. As an example, surveys of short-term economic indicators (e.g. monthly industrial output, retail trade, trade of goods and services, quarterly construction) are mandatory. It should be also mentioned that response rates of business statistics surveys vary to a considerable extent.

The Peer Reviewers were informed that there has never been any interference in statistical concepts and data collection through the CSO's legally limited mandate to collect information for European statistical purposes. In practice, the CSO prepares the outline of the Ministerial Order and the Taoiseach's office approves the order describing the general nature of a questionnaire.

The CSO has a legal right of access to the records of public authorities under Section 30(1) of the Statistics Act. According to Section 30(2) of the Statistics Act, this right of access to records for statistical purposes does not extend to the Courts, the Garda Síochána, the prison administration or the Ombudsman (a body responsible for examining complaints against and investigating actions of public bodies). Medical records can be made available to the CSO with the agreement of the Minister of Health.

The Peer Reviewers were informed that the DES was confronted with difficulties when requesting education data from a private organisation as, because of the legal environment, this department (an ONA), cannot compel response to statistical surveys by private organisations. The legal environment for other ONAs is comparable at large.

Although representatives of the CSO underlined the absence of practical problems in collecting data, it is the opinion of the Peer Review team that the existing legal provisions might limit the CSO's right to collect information for statistical purposes.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

5. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should have the unconditional legal right to collect information for European statistical purposes. The Other National Authorities producing European statistics should have the right to compel response to statistical surveys of European statistics. The Irish legislative, administrative and statistical authorities should take actions to amend legal provisions accordingly. (European statistics Code of Practice, indicators 2.1 and 2.3.)

### 4.2.1.5 CONSTRAINTS OF ONAS IN ADMINISTRATIVE DATA DESIGN

According to Section 31(2) of the Statistics Act, public bodies must consult the CSO when administrative forms or files are created, but said public bodies are not required by the Statistics Act to consult with the ONAs concerned. The Statistics Act does not apply to ONAs as statistical authorities. Nevertheless, statistical authorities have to be involved in the design of administrative data in order to make it more suitable for statistical purposes according to indicator 8.7 of the CoP. This provision is very closely related to the requirement of indicator 8.1, which states that when European statistics are based on administrative data, the definitions and concepts used for administrative purposes should be a good approximation of those required for statistical purposes. The ability of the ONAs to participate in administrative data design varies across institutions.

The SEAI, which is an ONA according to statistical responsibilities, has dedicated the Energy Policy Statistical Support Unit (EPSSU) to statistical tasks since 2002. The EPSSU may request administrative data in a format that will make them more useful for statistical purposes. For example, when requesting transport data from the vehicle registration unit, some additional fields

are required on an annual basis. Nonetheless, some administrative data are available to the EPSSU in a pre-defined format only; hence, internal processes are used to reformat the data. On the other hand, the EPSSU's mandate appears to be broadly sufficient with regard to indicators 8.1 and 8.7, since the unit has the remit to collect, process and publish energy statistics to support policy analysis and development in line with national needs and international obligations.

Although the statistics section of the DES has not been directly involved in the design of all existing administrative data collection systems in the past, the level of statistical section involvement has improved. The statistics section is now either directly involved in the design of primary and post-primary education data or consulted in re-design or introduction of changes to the data collection systems of many of the other data providers.

All in all, the ONAs have restricted influence on the design and collection process of administrative data, although there has been evident progress, especially due to the implementation of the ISSCoP. The ongoing rollout of the ISSCoP is broadly expected to strengthen awareness of the requirements to involve statistical authorities in administrative data design or redesign. Indicator 3.5 of Principle 3 (Accessibility and clarity) in the ISSCoP specifies that "data systems are designed or are capable of being adapted to allow for the extraction of raw data for analytical purposes". Section 31(2) of the Statistics Act sets out the legislative framework for cooperation between the CSO and public authorities on these issues.

In order to achieve compliance with the CoP, the Peer Reviewers recommend that:

6. The National Statistics Board, the Central Statistics Office of Ireland and the Other National Authorities producing European statistics should take steps to ensure that all statistical authorities are involved in the design of administrative data, making them more suitable for statistical purposes. (European statistics Code of Practice, indicators 8.1 and 8.7.)

### 4.2.1.6 APPOINTMENT AND DISMISSAL OF THE DIRECTOR GENERAL

According to Section 12(1) of the Statistics Act, the DG is appointed by the President, on the nomination of the Taoiseach. Since DGs have the level of the Secretary General, an open competition is conducted by the Top Level Appointments Committee (TLAC). This body is responsible for the selection process for all posts at Secretary General and Assistant Secretary General levels in the Irish Civil Service. The requirements for the post of DG are defined in the information booklet and application documents (2012) issued by the TLAC. They detail the professional skills and qualifications required from the candidates. The Peer Reviewers were informed about the comprehensive competition procedure. A good knowledge and understanding of statistical methodology (or the ability to acquire it quickly) as well as the ability to communicate statistical concepts and results in a confident and professional manner are expected. A good understanding of the social, political and economic environments and their impact on the demand for statistical information is asked for. The ability to network and cooperate with users at national level and professional peers at the international level is required.

It is important to emphasise that the aforesaid requirements are not stipulated in the law and not uniformly used when appointing heads of statistical sections in the ONAs. In practice, the heads of statistical sections in the ONAs have often a CSO background. The Peer Reviewers were told that the outgoing DG has an important role in defining the professional qualifications and skills in the public competition documentation.

According to the government decision of 3 January 1984 setting up the TLAC, the term of the office of Secretaries of Departments should be for a period of no more than seven years. In general, the

appointment is not renewable. In specific cases, a Secretary General, i.e. also the DG, may apply for an extension of their term of office by 3 or 4 years.

According to Section 12(4) of the Statistics Act, the DG shall hold office on such terms and conditions as may be determined by the Taoiseach after consultation with the Minister of Finance. Additionally, the public competition documents (2012) provide that the appointment of the DG is subject to termination at any time by either side in accordance with the Minimum Notice and Terms of Employment Acts 1973 to 2005. The Peer Reviewers were assured that the DG holds a fixed-term contract for a period of seven years or until they reach the age of 60. There is also protection in law against unfair or arbitrary dismissal.

In order to achieve and strengthen compliance with the CoP, the Peer Reviewers recommend that:

7. The Irish legislative authorities should adopt legal provisions for professional qualifications and selection criteria of the Director General of the Central Statistics Office of Ireland and heads of statistical sections of the Other National Authorities producing European statistics. The legal framework should also stipulate renewability of the appointment of the Director General of the Central Statistics Office of Ireland. (European statistics Code of Practice, indicator 1.8.)

## 4.2.2 ADVANCING A PROCESS-ORIENTED ORGANISATION AND STRENGTHENING QUALITY MANAGEMENT

Although CSO staff has a well-established commitment to the quality of statistics, there are still many stages of the statistical process across statistical domains which are done independently with little support from the central methodology or quality unit. Due to a gradual move to a more process-oriented approach, the CSO currently has a mixed quality management structure, which includes the features of both systems. According to indicator 4.1 of the CoP, an organisational structure and tools have to be in place to deal with quality management. Supporting this aim, during 2015 the integrated methodology function has expanded from 2 to 4 staff members while currently just one CSO expert is dealing with integrated quality management. Moreover, most of the quality management functions of this expert relate to general (not statistical) quality management according to the Lean Six Sigma methodology. In recent years the CSO has been moving away from the traditional statistical domain-based organisation structure to a more integrated quality management. The Administrative Data Centre (ADC) works as a good example of how statistical processes can be integrated across the statistical domains.

The CSO and the ONAs have to improve the integrated methodology and quality documentation; further develop sampling, editing and imputation methods; create a glossary of terms and definitions; and make classification information public. Supporting the implementation of quality management, the CSO has to strengthen quality training programmes.

### 4.2.2.1 Integrated quality management

The CSO's commitment to quality is laid out in the document "Quality in Statistics" (2006), which makes up volume 1 of the CSO's standards and guidelines. This document, defining CSO policy by providing guidelines for various steps of statistical procedures, is available publicly on the CSO website. Within the CSO, quality control and checks at all the stages of the statistical production process are determined by the specific statistical domains themselves. Quality in Statistics in Section 4.13, dedicated to documentation and metadata, states that "documentation refers to the collection of material that provides a description of the activity." Moreover, it says "it should include the concepts, definitions, metadata, methodology, and an outline of the production

processes used". Nothing else is said about required quality documentation in this key CSO document.

The Peer Review team was assured that the CSO intends to use the Generic Statistical Business Process Model (GSBPM) across the institution. There is strong evidence of its use in IT system design and data management in particular. However, there is no documentation supporting its consistent organisation-wide implementation.

While the CSO does not have generic quality guidelines in place, Project 1 of the CSO 2020 foresees the development of a comprehensive Quality Management Framework (QMF). In line with indicator 4.2 of the CoP, procedures should be in place to plan and monitor the quality of the statistical production process. In implementing the QMF, an updated version of the Office Standards and Guidelines with regard to Quality in Statistics has to be produced. As part of the implementation of the CSO 2020, the QMF documentation project is currently examining documentation on quality and will recommend procedures to ensure that the quality documentation is up to date. The ONAs, having a lower standard of integrated quality management than the CSO, have to catch up with the CSO's progress in quality management.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

8. The Central Statistics Office of Ireland should move towards a more integrated approach in quality management. The generic guidelines on statistics quality management should be reviewed ensuring their completeness, regular monitoring and updating. (European statistics Code of Practice, indicators 4.1–4.3.)

### 4.2.2.2 STRENGTHENING HORIZONTAL METHODOLOGICAL WORK

In the CSO, there is no approved written procedure in place defining regular updating or reviewing methodological documentation; therefore, to a large degree the nature of conducted updates or reviews depends on the business area. Even though there is the central standard document Quality in Statistics, divergences from European methodological recommendations are not uniformly explained, nor required to be explained in the aforementioned document.

The incomplete core quality documentation, which currently is too narrow by coverage and has not been updated for the last nine years, is largely an implication of the under-resourcing of the central methodology unit. Though this unit will be staffed with two additional people in 2015, at this stage updates of central quality documentation are not foreseen in the short term. Moreover, there are no signs that the statistics quality documentation of the CSO is used by the ONAs, which would set out guidelines for all statistical domains and processes. The ONAs do not have their own approved standard quality documentation. In the ONAs, even the documentation defining statistical procedures in specific statistical domains is not always up to date.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

9. The Central Statistics Office of Ireland should substantially strengthen and resource the central methodology unit beyond what was planned for 2015. The methodology unit should promote standardised documentation of statistical methods. (European statistics Code of Practice, indicators 6.4, 7.1 and 7.2.)

Statistical procedures are defined and applied in a largely heterogeneous way in the CSO. Formal in-house methodological support from the central methodological unit providing common guidelines, methods for sampling and estimation is extremely limited or non-existent, due to the staffing decisions explained earlier. In addition, the practice of reporting publicly on sample selection and estimation methods varies across statistical domains in the CSO. By contrast,

indicator 6.4 of the CoP requires that information on the methods and procedures used is publicly available. As a consequence of sampling decentralisation, there is no consistent and coherent formal coordination of samples across statistical surveys in the CSO. This has genuine implications for the spread of the reporting burden, keeping in mind that indicator 9.2 of the CoP specifies that the reporting burden is spread as widely as possible over survey populations.

Though the Quality in Statistics document requires in its guideline 4.8.4 that five types of errors — coverage, non-response, measurement, processing and sampling — "should be evaluated", by and large this requirement is not fully respected. In addition, the Quality in Statistics document does not touch on the issue of making these estimates public for the users. CoP indicator 12.2 demands that sampling errors and non-sampling errors be measured and systematically documented according to European standards. In the CSO, some statistical matter units quantify and publish precision estimates but most areas do not. Hence, main sources of error are not formally measured and reported on an ongoing basis. In most cases, quality issues are dealt with in the subject matter units between the statisticians and the head of the unit. However, this is not a standardised process. Sampling errors are compiled for key variables in household surveys for the benefit of this area. A range of non-sampling errors are quantified, although this is done on a more ad-hoc basis across the different surveys. There are no internal procedures and guidelines to reduce errors beyond those indicated in part 4.7 on data editing in the Quality in Statistics document, which relates to micro-editing of entries.

There is considerable room for improvement and standardisation of editing and imputation, both in the CSO and in the ONAs. In the CSO, there has been an over-emphasis on micro-editing, and resources would be better deployed by moving partly towards macro-editing. In the ONAs, imputing and editing are predominantly manual.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

- 10. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should improve sampling methods, including coordination of samples, and consistently and publicly report on sample selection and estimation methods. (European statistics Code of Practice, indicators 6.4, 8.3 and 9.2.)
- 11. In the guidelines on statistics quality management or in the related reference documentation, the Central Statistics Office of Ireland should specify the standards on how to handle sampling and non-sampling errors together with procedures aimed at reducing different types of errors. Editing and imputing standards should be improved, advancing macro-editing. (European statistics Code of Practice, indicators 4.2, 8.5 and 12.2.)

The CSO does not have a glossary of terms and definitions, and classifications used are not publicly available on the CSO website. Even though indicator 7.2 of the CoP requires that procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the statistical authority, the CSO does not have a glossary of statistical terms and definitions, which is instrumental both for development (redesign) within specific statistical domains and for users of statistics. A single glossary would serve all the producers (CSO, ONAs) well.

Statistical classifications were available on the CSO's intranet during the peer review visit, but this information was not publicly available on the CSO website without any clear reason. The Classifications and Related Standards (CARS) system is the CSO's internal system for storing and accessing classifications. The CARS database is the central repository for all classifications, concordances and coding indexes.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

12. The Central Statistics Office of Ireland should develop a common glossary of terms and definitions, as well as make the classifications publicly available on its website. (European statistics Code of Practice, indicators 7.2 and 10.4.)

### 4.2.2.3 QUALITY TRAINING

Although the CSO staff takes part in a large number of internal and external training courses, there is a compelling need for specific in-house training courses supporting quality management policy. Targeted training on specific statistical techniques, for example on dealing with non-response and design and testing of questionnaires, has been delivered by international experts. There was extensive training in project management through 2013 and early 2014.

Moreover, there is a specialised Training and Development unit with a dedicated training manager. The unit provides e-learning, structured statistical training at three levels, as well as personal development training. Priced courses for advancement in professional career and related exam fees are refunded. The Peer Review team was informed that statisticians are also encouraged to investigate new techniques, attend relevant European Statistical Training Programme and other external courses, and pass on their knowledge. Interviewed statisticians from the ONAs complained that they were not invited to attend statistical training or quality training organised by the CSO. However, seconded statisticians attend CSO training courses. All in all, there are no joint training courses foreseen for both the CSO and the ONAs. Undoubtedly, as the NSB has advocated that "joined up government needs joined up data", the joined up data need joined up training.

In order to strengthen compliance with the CoP, the Peer Reviewers recommend that:

13. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should provide staff training courses on the quality of statistics. (European statistics Code of Practice, indicators 4.1 and 7.6.)

### 4.2.2.4 FACILITATING DATA COLLECTION FROM BUSINESSES

The CSO increasingly uses electronic means for data collection from businesses and households. Prices data for the Consumer Price Index (CPI) are currently collected by using palm-held electronic devices and the CSO is investigating re-developing both CPI and Passenger Card Inquiry (Tourism passenger statistics) data collection using new technology. Electronic forms (e-forms), based on PDF or Hypertext Markup Language (HTML), are currently being used for short-term and structural business statistics surveys. Respondents can readily access their relevant e-form at the CSO website <a href="https://eforms.cso.ie/">https://eforms.cso.ie/</a>; not all electronic questionnaires, however, are available there. Some surveys are now based on e-forms only and usage rates of the electronic data collection means are steadily increasing over time. The CSO is currently implementing additional e-forms for short-term business statistics and structural business statistics. An internal unit responsible for collecting data for large enterprises (The National Accounts Integration and Large Cases Unit) in the CSO is the most advanced in electronic data collection – all large enterprises submit data electronically.

Nonetheless, the Peer Reviewers were informed that not all business surveys are covered by eforms. In some instances Excel-based questionnaires are used, and there is still extensive paper-based data collection in place. Share of paper returns (58%) still exceeds the proportion of electronic returns in the group of surveys with both electronic and paper-based data collection

modes. The CSO is developing a mobile device based data collection for Tourism passenger statistics, which will bring the overall electronic response rate to over 70% of total data collection.

The Peer Reviewers have been assured that the current situation is not in accordance with the CSO's future vision. A Respondent Portal Working Group was established in 2013 to develop high-level options for further examination of electronic data collection. The exercise includes examining how to transform the current e-forms collection into a full "respondent data portal" so as to customise the e-data collection experience for respondents. For example, the respondent can see the full list of the questionnaires to be submitted and the outstanding survey returns. The respondent data portal project started in 2014 by gathering requirements applicable to common solutions. The modernisation of data collection is being discussed in the Enterprise Statistics Liaison Group, involving representative bodies of businesses.

It is the opinion of the Peer Review team that considering the technological opportunities in this expensive part of the statistical production process, there is considerable efficiency potential in modernising data collection in the CSO, as well as in the ONAs.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

14. The Central Statistics Office of Ireland should increase electronic data collection from businesses in order to reduce costs and make data submission more convenient. Common data collection applications, where applicable, should be used by the Other National Authorities producing European statistics. The Central Statistics Office of Ireland should establish a common portal for business data collection. (European statistics Code of Practice, indicators 9.3 and 10.2.)

#### 4.2.2.5 Monitoring the response burden

Minimising the burden placed on business respondents has been and is a corporate priority of the CSO. The response burden of business and agricultural surveys is measured by asking respondents to provide data on the time it takes them to complete forms. Based on this information, the Response Burden Barometer is released on the CSO website. By using an index (2005=100) or absolute figures, the change in the number of forms issued and returned and the time used to complete them can be easily monitored. Time use in 2010, 2011 and 2012 and 2013 can be compared with time use in 2005 and the Response Burden Barometer index time series covers 2005–2013. Additionally, data on the change of the response burden on businesses is accompanied by a textual explanation of the main findings. The response burden has been reduced by 32% from its peak in 2008, as a result of the increased use of administrative data, reduction of sample sizes, reduction in the length of questionnaires, collection of earnings data from payroll software, and greater data linkage.

There is no measurement of the response burden in the ONAs. Although they only conduct a limited number of surveys in Ireland, according to the CoP they should also introduce respective performance indicators.

The Peer Reviewers were informed that the length of an interview is also measured in the CSO's household surveys, but this information is not published.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

15. The Other National Authorities producing European statistics should introduce regular measurement of the response burden. The Central Statistics Office of Ireland should complement its performance indicators of the response burden by introducing these indicators for the household surveys. (European statistics Code of Practice, indicators 9.1 and 9.2.)

### 4.2.3 STRENGTHENING USER ORIENTATION

Section 11(2) of the Statistics Act puts demands on how the relationship between the CSO and the users has to be organised with the stipulation that "the Office shall maintain close and regular contact with the principal users and suppliers of statistics." Additionally, dissemination as one of the four functions assigned to the CSO by Section 10(1) of the Statistics Act is completely associated with the relationship with users. In fact, the user orientation of CSO activities is not just a legal consideration but is part of the CSO's vision, set out in the first paragraph of the CSO 2020 describing how the Office will provide a continuous improvement in services to its customers. This vision refers in a straightforward way into the second CSO 2020 project (Customers and outputs), which aims at building an understanding of customers' information needs and developing relationships to jointly identify future data needs and channels of delivery.

Despite this explicit commitment to user satisfaction, there is room to improve the processes in place to consult users and to develop a more explicit, basic and comprehensive dissemination policy, which can also contemplate the use of new media to communicate with users, as considered in the CSO 2020.

In that sense, recommendations 16 and 17 are devoted to strengthen user orientation not only in the CSO but also in the ONAs. They emphasise the necessity of more systematic work and consultation with users and an adequate and regular monitoring of their satisfaction. Recommendations 18 to 25, also applicable for the ONAs, are devoted to establishing the principles and basic features of a dissemination policy, paying special attention to potential improvements in specific aspects related to the principles of impartiality and accessibility (equal access, improvements in announcement of release dates; accessibility to research microdata; results of custom-designed analyses; coherence; and metadata).

### 4.2.3.1 Systematic work with the users

Apart from the reference to the close and regular contact with principal users mentioned earlier, the Statistics Act establishes in Section 19(1) that the NSB guides the strategic direction of the CSO, which includes establishing priorities in the production of official statistics. This function has an implicit impact on the composition of the NSB (Section 18(1) of the Statistics Act), where five of the seven members (plus the DG) are persons with proven ability and experience in relevant fields, three of whom are nominated by organisations the Taoiseach considers to be representative of users of official statistics and providers of information. Consequently, the NSB is a forum where users are met at the strategic level but with three limitations in terms of the full implementation of CoP indicator 11.1: insufficient coverage of specific expertise in all the fields relevant to official statistics; not being fully a users' body; and having according to the Section 19(1) of the Statistics Act only competences in the CSO strategy, but not in that of the ISS. However, it is not, and was not designed to be, a full users' body with coverage across all fields relevant to official statistics.

One mechanism used by the CSO to reach a wider range of users is that of Liaison Groups mentioned in Section 4.2.1.1.

Although bodies for consulting on user needs exist, in terms of the full implementation of CoP indicator 11.1 communication with users should be improved by the CSO, as well as by the ONAs. More robust consultation procedures with users are needed.

In order to further enhance compliance with the CoP, the Peer Reviewers recommend that:

16. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should seek out user needs more systematically, institutionalising the relationship and improving communication with users. (European statistics Code of Practice, indicator 11.1.)

### 4.2.3.2 Monitoring user satisfaction

In the introduction of the CSO 2020, the DG mentions that the CSO's customers will be the ultimate arbiters of the success of the strategy and gives some examples of the type of questions to be asked for assessing their opinion. This is clearly in line with the need to measure the success of the projects associated with this strategy, in particular those referring to customers and outputs.

However, the CSO states in the SAQ that the main area of weakness with regard to their organisation's approach to relevance is the lack of office-wide metrics in relation to use and users of statistics. This last quantitative aspect is associated with what is established in CoP indicator 11.3 about monitoring user satisfaction in a regular and systematic way, with indicator 4.3, about monitoring quality, and with indicator 15.1 (method 15.1.2 of the ESS Quality Assurance Framework (QAF) referring to user consultation about appropriate forms of dissemination).

The last survey of CSO users was conducted by the NSB in 2006 and the previous one in 2002. It is clear that this is not satisfactory and that there is a need for a systematic approach to making the results comparable over time and, if possible, with the indicators of other NSIs. The analysis of the results of the user satisfaction surveys should be used to design the corresponding improvement actions.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

17. The Central Statistics Office of Ireland should prepare and implement a plan to increase the regularity of user satisfaction surveys and to make sure that the results are used to design corresponding improvement actions. (European statistics Code of Practice, indicators 4.3, 11.3 and 15.1.)

### 4.2.3.3 COMPREHENSIVE DISSEMINATION POLICY

The QAF establishes the existence of a dissemination policy as the first method at institutional level associated with indicator 15.1 of the CoP. This policy should define dissemination practices (general guidelines) in order to facilitate adequate interpretation and meaningful comparisons of statistics. It also has to establish the principles on which it is based and the policy has to be public.

The dissemination policy should make reference to the issues associated with the release and accessibility of official statistics: equal access for all users (indicator 6.7), privileged access (indicator 6.7), timing of the statistical releases (indicator 6.5), non-disclosure of data because of quality reasons (indicator 6.2), impartial presentation of the releases (indicator 6.8), access to microdata (15.4), accessibility to further information when it is not restricted (15.3), accessibility to metadata documentation (indicators 15.1 and 15.5) or reactions to misuses, criticisms or misinterpretations of statistics (indicator 1.7), among others. In some NSIs, the corrections of errors and the handling of revisions are also included in the dissemination policy although some NSIs prepare a specific revisions policy.

The CSO has a link on its website to several short texts included under the common heading "Publication and dissemination policy", but without a clear structure as a policy document. These pieces of information are announcement and publication of statistical releases, special analyses, press releases and conferences, the StatBank and delivery of statistics. There is also a text about pre-release practice for certain CSO statistics and some references to CSO databases. Additionally, the Peer Reviewers were informed that the CSO has a revisions policy, which is available on the CSO intranet, and that the methodological review of revision procedures is not permanent or regular.

On the other hand, the Peer Reviewers were informed that the ONAs are not completely transparent about the European statistics they produce. In particular, they do not have a release calendar and a revisions policy. In general they do not provide information on methods and other metadata in the public database. As already mentioned, improving coordination in the ISS should help to extend and share good dissemination practices among ONAs to better comply with the CoP. In fact, in Recommendation 9 of the Strategy for Statistics 2009–2014, the NSB recommended that "to ensure transparency, all producers of national statistics, particularly when meeting EU requirements, should be required to: prepare advance calendars of publications; document their procedures and processes; and make them publicly available". These are the basic elements of a dissemination policy.

In order to further enhance compliance with the CoP by the CSO and to achieve compliance by the ONAs, the **Peer Reviewers recommend that:** 

18. The Central Statistics Office of Ireland should elaborate a comprehensive dissemination policy. It should make public its revisions policy, which should be regularly reviewed. The Other National Authorities producing European statistics should also develop and publish dissemination policies. (European statistics Code of Practice, indicators 8.6 and 15.1.)

Finally, since the dissemination policy only provides some general guidelines on the issues therein, there is a need for more specific guidelines in some cases. The Peer Reviewers were informed that there is no specific written policy to intervene on statistical issues whenever there is a misuse, misinterpretation or criticism of statistics. The DG or the relevant director in the CSO deals with this on a case-by-case basis. Similarly, although there is an internal document ("Write Well, Write Clearly"), which provides guidance on communication principles, there is no formal set of guidelines for press releases and press conferences.

In order to further enhance compliance with the CoP, the Peer Reviewers recommend that:

19. The Central Statistics Office of Ireland should elaborate and implement a media response procedure and formal guidelines to write press releases and conduct press conferences. (European statistics Code of Practice, indicators 1.7 and 6.8.)

### 4.2.3.4 PRIVILEGED ACCESS

Equal access to statistical releases is the core of CoP Principle 6, since it establishes explicitly that statistical authorities disseminate European statistics in an objective, professional and transparent manner in which all users are treated equitably. However, indicator 6.7, although emphasising equal access, allows for privileged access, subject to three key conditions: it should be limited, controlled and publicised.

The "Pre-Release Practice for Certain CSO Statistics" document, published on the CSO website, establishes that the CSO gives short advance notice of the results of 15 statistical releases to a limited number of government departments and agencies. In particular, statistics for national

accounts are provided one day in advance of the official release time, a restricted briefing is provided two hours in advance for social and demographic statistics and some short-term indicators are provided under embargo one hour in advance to the corresponding departments.

The list of privileged access is also published in the above-mentioned document. However, as the document refers to provision of access to an institution (i.e. government department or agency) rather than to a clearly-identified individual, it does not demonstrate that the condition of this access being limited is met. The CSO assured the reviewers that access is to identified individuals only. The Peer Reviewers were also shown an example of an e-mail with an encrypted pre-release copy in an Excel file requiring a password. There is no explicit monitoring of the use of this privileged access, or any other specific means of control. In the course of the peer review, justification of privileged access practice was raised by some media representatives.

On the other hand, the privileged access granted by the ONAs is not always clear and transparent. The Peer Reviewers were informed that, in some cases, pre-release access is granted to some specific users.

In order to achieve compliance with the CoP, the Peer Reviewers recommend that:

20. The Central Statistics Office of Ireland should publish a more precise list of users with privileged access to statistical releases and proceed to take action to better monitor the appropriate use of this privilege. Other National Authorities producing European statistics should make the list and the details of privileged access public, taking into account that privileged access has to be limited and controlled. (European statistics Code of Practice, indicator 6.7.)

#### 4.2.3.5 COMPREHENSIVE AND USER-FRIENDLY RELEASE CALENDAR

The policy followed by the CSO with respect to the announcement of statistical releases has two key elements: a weekly announcement and a four-month advance calendar. Each Thursday the CSO publishes "Statistics Due for Release" on its website, which lists the releases and publications due for release in the following week, with specific indication of the concrete date. Similarly, a four-month advance calendar is available at the end of each month with an indicative "not later than" publication date.

In fact, this "not later than" manner of making publicly available the advance release calendar is incorporated as indicator 2 of Principle 2 of the ISSCoP which deals with timeliness and punctuality. Strictly speaking, the approach followed by the CSO complies with indicator 6.5 of the CoP to the extent that precise statistical release dates and times are pre-announced, in this case a week in advance. However, in the meetings with the main users of European statistics during the peer review visit, the Peer Reviewers became aware of the users' need for and interest in an earlier advance release calendar, including also regular major revisions, with the precise dates in line with common practice in some other NSIs, namely by the end of the previous year.

Additionally, the advance release calendar should be improved by making it possible to process the information which is included in terms of the users' interest (by theme, by date, by type of indicator, etc.).

In order to strengthen compliance with the CoP, the Peer Reviewers recommend that:

21. The Central Statistics Office of Ireland should develop a more user-friendly advance release calendar, including regular major revisions, providing precise release dates earlier than currently. (European statistics Code of Practice, indicator 6.5.)

### 4.2.3.6 CUSTOM-DESIGNED ANALYSIS

As already mentioned, one of the points included in the Publication and Dissemination Policy link currently accessible on the CSO website makes reference to special analyses. This type of custom-designed request appears as a consequence of specific requirements not met by the regular releases and reports. In this sense, the CSO provides, on a fee basis, specific analyses to individual users tailored to their particular needs.

Apart from being a mechanism to satisfy user needs, this type of practice is also a manner of identifying new demands of information whenever they are frequent and repetitive. If this is the case, the CSO incorporates these analyses and the corresponding tables into the standard releases.

However, as mentioned in indicator 15.3 of the CoP, the public should be informed about these custom-designed analyses where possible in order to guarantee equal access to the statistical information established in Principle 6 of the CoP. Related to this, the Peer Reviewers were informed in the answers to the SAQ that Section 5.6.1 of the Standard Reports on Methods and Quality describes the extent to which custom-designed analysis is available for each statistical output. But this is not sufficient, not only because the contents in this section are very general and do not include the specific analyses carried out, but also because these reports are not regularly updated and, consequently, there is no mechanism to publicise these special analyses. The simplest way of complying with the publicity requirement of the CoP indicator 15.3 is to make available on the website a list of custom-designed analyses conducted by the corresponding statistical authority.

In order to achieve compliance with the CoP, the Peer Reviewers recommend that:

22. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should publish a list of the custom-designed analyses they have conducted on their websites. (European statistics Code of Practice, indicator 15.3.)

### 4.2.3.7 ACCESS TO MICRODATA

The fourth vision included in the CSO 2020 refers to researchers' efficient access to microdata. The provision of this type of access is envisaged by the CSO as one of the important services provided to those involved in policy evaluation and research. In the CSO 2020, four points are explicitly mentioned in the vision related to microdata access: the introduction of a system for secure remote access for researchers; the revision and updating of the corresponding policy, in the context of the Statistics Act; the evaluation of resource utilisation for remote access (cost); and the establishment of a process to determine the value derived from this type of access (benefit).

According to the information supplied by the CSO, a review of the existing environment for access to microdata has been completed and four project groups have started to work on enhancing centralised management, IT infrastructure, policies and awareness, under the support of five key principles: safe data, safe people, safe setting, safe projects and safe outputs.

This vision is fully supported by the scientific community according to the meeting with the Peer Reviewers during the visit. Researchers recognised the tremendous improvement in accessibility to microdata in recent years, but they also pointed to the necessity of improving this service in order to increase efficiency. Additionally, they pointed out that there are significant differences between the CSO and the ONAs in relation to this issue, access to microdata being more difficult in the latter.

Additionally, in Recommendation 10 of the Strategy for Statistics 2009–2014 the NSB "recommends that the CSO and other data producers in the ISS continue to facilitate requests for access to microdata files for legitimate research purposes, including the development of a remote access option, subject to all the security arrangements being in place to ensure full compliance with the data protection provisions of the Statistics Act".

The Peer Reviewers also see the improvements in this field as an indirect mechanism to increase collaboration between the official statistics authorities and the scientific community, which can be useful not only in the development of methodological issues but also in facilitating the CSO's move, mentioned during the peer review visit, to a more active role in data analysis. A potential joint venture where researchers provide their expertise in empirical analyses and official statisticians provide their knowledge of the data can contribute to a better statistical service for users and the society.

In order to strengthen compliance with the CoP, the Peer Reviewers recommend that:

23. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should develop remote access to further facilitate the use of microdata for scientific and research purposes. (European statistics Code of Practice, indicators 7.7 and 15.4.)

### 4.2.3.8 Systematic monitoring of coherence and comparability

The transition from a product-based towards a more integrated model of production of official statistics, among other things, has increased the need for reconciling different measures of the same phenomena from different sources. In that sense, the special feature of the Irish economy with the dominance of large multinational enterprises has driven the CSO to undertake active work in ensuring consistency and plausibility between national accounts and some other relevant areas. The National Accounts Integration and Large Cases Unit was therefore set up and is in charge of this.

Nevertheless, the multiplicity of sources for some key variables, like the labour market variables, makes it necessary to increase the statistical work on coherence and comparability in order to avoid misinterpretations or misuses of official statistics, which may end up in less credible statistical authorities.

In the answers to the SAQ, the CSO mentions as a weakness in relation to Principle 14 of the CoP that the detailed work on coherence and comparability takes place on an informal basis, domain by domain, with no systematic approach to the whole organisation.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

24. The Central Statistics Office of Ireland should develop a more formalised systematic approach to compare and reconcile evidence from different data sources describing the same phenomenon. (European statistics Code of Practice, indicator 14.4.)

#### 4.2.3.9 STANDARDISED METADATA

The first of the projects to implement priority actions derived from the CSO 2020 has to do with the development of a comprehensive Quality Management Framework (QMF). The scope of the project includes, among other aspects, the definition of metadata standards and its consistent implementation.

According to the information supplied by the CSO, a system of metadata storage and management is being tested within the institution and the corresponding evaluation of its suitability will be carried out afterwards. Additionally, the Peer Reviewers were informed that all statistical results are disseminated with the corresponding metadata, although they are not always linked to the output directly. Moreover, comprehensive metadata are provided as a part of the methodological documents on the CSO website, which are not structured in accordance with the Euro-SDMX Metadata Structure (ESMS) standard. In any case, the CSO mentions as a weakness related to Principle 15 of the CoP that there is a need for improvement and implementation of international standards in the provision of metadata.

In order to enhance compliance with the CoP, the Peer Reviewers recommend that:

25. The Central Statistics Office of Ireland and the Other National Authorities producing European statistics should directly link standardised metadata with public statistical databases and statistical releases. Metadata should be provided in accordance with the Euro-SDMX Metadata Structure standard. (European statistics Code of Practice, indicator 15.5.)

### 4.2.4 USE OF RESOURCES

Given that in the CSO financial accounting is based on cost-centre accounting, new elements such as product-based (survey-based) and process-based cost calculation should be advanced. According to indicator 10.1 of the CoP, internal and independent external measures have to monitor the statistical authority's use of resources. The CSO's cost-reporting structure is based on staff allocation to statistical sections or cost centres, which align closely with outputs for statistical areas except where the statistical production has moved considerably toward a process-based organisation. In the CSO, ex-ante estimates of full costs of large projects are undertaken for EU projects, externally funded projects or projects of significant change. Staff cost templates are used in the calculation of advance estimates of staff costs for large projects.

The CSO is in the early days of product-based and process-based cost accounting. A well-established classification and coding system of CSO activities for this purpose and an organisation-wide well-functioning time reporting system do not exist.

Currently in the CSO there is a lack of appropriate benchmarking for cost-effectiveness and only a restricted set of indicators measuring corporate performance and quality. However, there is clear and growing institutional consensus for broader use of better developed internal metrics.

In order to strengthen compliance with the CoP, the Peer Reviewers recommend that:

26. The Central Statistics Office of Ireland should improve its cost-accounting systems by introducing a systematic product-based and process-based accounting approach. It should also develop and introduce internal measurement and benchmarking of cost-effectiveness. (European statistics Code of Practice, indicator 10.1.)

## 4.3 NATIONAL STATISTICAL INSTITUTE VIEWS WHERE THEY DIVERGE FROM PEER REVIEWERS' ASSESSMENT

The Central Statistics Office (CSO) of Ireland thanks the Peer Review Team for their professionalism, constructive engagement and the care they have taken throughout the review process. The CSO welcomes the report and recommendations, which align closely with CSO's own plans for continuous statistical improvement and with the CSO 2020 programme.

The CSO has a diverging view in relation to one point:

### Role of the National Statistics Board (NSB)

The CSO accepts recommendation 16, which is about working more systematically with users, but does not agree with the associated commentary on "three limitations" in the NSB mandate. The NSB is a strategic board and was not designed to be an across-the-board users' forum and the report acknowledges this. Therefore the limitations cited regarding NSB user engagement do not apply. Furthermore, the reference to the NSB "having only competences in the CSO strategy" is factually incorrect. Official statistics are defined very broadly in Section 1 of the Statistics Act and the remit of the NSB as set out in Sections 19(1)(a) and (19(1)(b)) of the Act includes all official statistics.

### **ANNEX A: PROGRAMME OF THE VISIT**

### **A**GENDA

Peer review visit to Ireland (23 March 2015 – 27 March 2015)

Time	Programme	Organisation	Participants
9.00 – 10.15	Peer Reviewers' discussion to finalise the preparation of the visit, in particular to share views on the information received (self-assessment questionnaires and other documents)		
10.15 - 10.45	Preparatory meeting with the CSO coordination team	CSO	Joe Treacy, Ann Hickey, Eily Fitzpatrick, Michael Quinlan, Niamh Kavanagh
10.45 - 11.00	Coffee break.		
11.00 - 11.30	Welcome and introduction of the programme, organisational matters	CSO	Pádraig Dalton, Jennifer Banim, Joe Treacy, Lucy Fallon-Byrne, Richie McMahon, Ann Hickey, Eily Fitzpatrick, Michael Quinlan, Claire Hanley
11.30 - 12.30	General information session with a description of how the national statistical system is organised (bodies, distribution of responsibilities, relations between authorities)	CSO	Pádraig Dalton, Jennifer Banim, Joe Treacy, Lucy Fallon-Byrne, Richie McMahon, Ann Hickey, Eily Fitzpatrick, Michael Quinlan, Claire Hanley
12.30 - 13.15	Lunch.		
13.15 - 14.15	Coordination role of the CSO	CSO CSO	Richie McMahon, Pádraig Dalton, John Dunne, Michael Quinlan, John Hayes, Eily Fitzpatrick, Reamonn McKeever
14.15 - 15.15	Meeting with National Statistics Board (NSB)	CSO	Pádraig Dalton, Donal Kelly  NSB members: Patricia O'Hara, Rowena Dwyer, John Callinan, John McCarthy, Gerard O'Neill, Dr. Helen Johnson, Ann Hickey, Michael Quinlan, John Sheridan
15.15 - 15.30	Coffee break	CS0	
15.30 - 17.30	The statistical law, related legislation and statistical work programme. (CoP Principles 1, 2, 5 and 6)	CSO CSO	Joe Treacy, Pádraig Dalton, Jennifer Banim, John Dunne, John O'Reilly, Eily Fitzpatrick, Michael Quinlan, Michael Brennan
17.30	Stock-taking meeting (incl. outstanding clarifications or additional issues) and reviewing of remaining schedule		
9.00 - 10.45	Programming, planning and resources. (CoP Principles 3, 9 and 10)	CSO	Lucy Fallon-Byrne, Joe Treacy, John O'Leary, John Dunne, Elaine Lucey, Keith McSweeney, Gerard Mullamphy, Eily Fitzpatrick, Ann Hickey, Norita Murphy
10.45 - 11.00	Coffee break		
11.00 - 12.00	Commitment to quality (organisational structure, tools, monitoring). (CoP Principle 4)	CSO CSO	Richie McMahon, Jennifer Banim, Ken Moore, Keith McSweeney, Michael Quinlan, Michael Connolly, Eily Fitzpatrick, Michele Butler
12.00 - 12.45	Lunch.		
12.45 - 14.15	Methodology, data collection, data processing and administrative data (CoP	CS0	Jennifer Banim, John Dunne, Tara Davis, Keith McSweeney, Fiona O'Callaghan, Richie

Time	Programme	Organisation	Participants
	Principles 2, 7 and 8)		McMahon, Marie Creedon, Michael Quinlan, Ann Hickey, Peter Culhane
14.15 - 14.30	Coffee break.		
14.30 - 17.00	Quality of Statistical Outputs (CoP Principles 11–15)	CSO	Richie McMahon, Jennifer Banim, Ken Moore, Keith McSweeney, Michael Connolly, Gillian Roche, Eoin Mc Cuirc, Fiona O'Callaghan, Michael Quinlan, Eily Fitzpatrick, Gerard Keogh
17.00	Stock-taking meeting (incl. outstanding clarifications or additional issues) and reviewing of remaining schedule		
09.00 - 11.00	Dissemination and confidentiality (CoP Principles 5, 6 and 15)	CS0	Joe Treacy, John O'Connor, Helen Cahill, Chris Sibley, Michael Connolly, Eoin McCuirc, Ann Hickey, Eily Fitzpatrick, Niamh Kavanagh, Michael Brennan
11.00 - 11.15	Coffee break		
11.15 - 12.30	Cooperation/level of integration of the ESS	CSO CSO	Pádraig Dalton, Ciaran Dooly, Jennifer Banim, Joe Treacy, Lucy Fallon Byrne, Richie McMahon, Michael Quinlan, Eily Fitzpatrick, Claire Hanley
12.30 - 13.15	Lunch.		
13.15 - 14.45	Meeting with main users – ministries and other public/private institutions (including the Central Bank as a user)	CSO	Shane Enright, Cillian Doyle, Terry Corcoran, Joanne Mulholland, Jonathan Healy, Nicola Tickner, Keith Walsh, Mary Cussen, Martin O'Brien, Prof. Frances Ruane, Tom Healy, Joe Treacy, Michael Quinlan, Michael Butler
14.45 - 15.00	Coffee break.		
15.00 - 16.00	Meeting with main users – media	CSO	Sean Whelan, Arthur Beesley, Brendan Keenan, Austin Hughes, Dan O'Brien, Lucy Fallon Byrne, Joe Treacy, Helen Cahill, Aéidin Sheppard, Eily Fitzpatrick, Ann Hickey, Margaret Kinsella
16.00 - 17.00	Meeting with main data providers	CSO CSO	Geraldine Anderson, Mark O'Mahony, Catherine Lascurettes, Joe Treacy, Ann Hickey, Eily Fitzpatrick, John Sheridan
17.00	Stock-taking meeting (incl. outstanding clarifications or additional issues) and reviewing of remaining schedule		
9.00 - 11.00	Meeting with other national authorities: Department of Education and Skills (DES)	CSO	Nicola Tickner, Diarmuid Reidy, Richie McMahon, Ann Hickey, Derek Stynes
11.00 - 11.15	Coffee break.		
11.15 - 13.15	Meeting with other national authorities: Sustainable Energy Authority of Ireland (SEAI)	CSO	Martin Howley, Mary Holland , Richie McMahon, Eily Fitzpatrick, Margaret Kinsella
13.15 - 14.00	Lunch.		
14.00 - 15.00	Meeting with junior staff	CSO	Barra Casey, Brian Cahill, Claire Burke, Dermot Corcoran, James Hegarty, John Flanagan, Morgan O'Donnell, Ruth O'Shaughnessy, Saidhbhin Hardiman
15.00 - 15.15	Coffee break		

Time	Programme	Organisation	Participants
15.15 - 16.30	Meeting with main users – scientific community.	CSO	Stefanie Haller, Prof. Jean-Christophe Desplat, Eoghan McCarthy, Dominic Byrne, Eilish Kelly, Dr.David Duffy, Joe Treacy, Ann Hickey, Eily Fitzpatrick, Derek Stynes
16.30	Stock-taking meeting (incl. outstanding clarifications or additional issues)		
9.00 - 10.30	Peer Review team discussion	CS0	
10.30 - 10.45	Coffee break.		
10.45 - 11.45	Clarifications, remaining or additional issues and focus areas	CS0	Joe Treacy, Richie McMahon, Lucy Fallon Byrne, Jennifer Banim, Pádraig Dalton, Ann Hickey, Eily Fitzpatrick, Michael Quinlan
11.45 - 12.30	Lunch.		
12.30 - 14.00	Meeting with senior management: conclusions and recommendations	CS0	Pádraig Dalton, Jennifer Banim, Joe Treacy, Lucy Fallon-Byrne, Richie McMahon, Ann Hickey, Eily Fitzpatrick, Michael Quinlan
14.00	Preparation of the report: task sharing	CS0	

### **ANNEX B: LIST OF PARTICIPANTS**

	Peer Review Team
1	Priit Potisepp, Chair
2	Jaime García Villar, Peer Reviewer
3	Rimantas Juozas Vaicenavičius, Peer Reviewer
	Eurostat observer
4	Jean-Pierre Poncelet, Head of unit, Risk and Quality Management, Government Finance Statistics, Eurostat
	CSO management
5	Pádraig Dalton, Director General
6	Aeidin Sheppard, Assistant Principal, Dissemination
7	Brian Ring, Senior Statistician, Labour Market
8	Chris Sibley, Senior Statistician, Head of Balance of Payments
9	Ciaran Dooly, Assistant Principal, International Relations
10	Donal Kelly, Senior Statistician, Secretary to National Statistics Board
11	Elaine Lucey, Senior Statistician, Head of IT Corporate Systems
12	Eoin McCuirc, Assistant Principal, Dissemination
13	Fiona O'Callaghan, Statistician, Methodology
14	Gerard Mullamphy, Assistant Principal, Finance
15	Helen Cahill, Statistician, Dissemination
16	Jennifer Banim, Assistant Director General, Economic and Environment Statistics
17	Joe Treacy, Director, Business Statistics and Methodology
18	John Dunne, Senior Statistician, Head of Administrative Data Centre
19	John Hayes, Statistician, Administrative Data Centre
20	John O'Connor, Principal Officer, Head of IT Service Delivery
21	John O'Leary, Principal Officer, Corporate Services
22	John O'Reilly, Assistant Principal, IT Corporate Systems and Confidentiality, Data Security Committee (CDSC)
23	Keith McSweeney, Senior Statistician, Head of Structural Business Statistics

24	Ken Moore, Senior Statistician, Quality Manager
25	Lucy Fallon-Byrne, Assistant Director General, Corporate Affairs
26	Michael Connolly, Senior Statistician, Head of National Accounts Integration
27	Michael Quinlan, Statistician, Head of Internal Audit
28	Richie McMahon, Assistant Director General, Social & Demographic Statistics
29	Tara Davis, Senior Statistician, Household Development Transformation
30	Marie Creedon, Assistant Principal, HR Workforce Planning, learning & development
	National coordinator team
31	Ann Hickey, CSO Peer Review Coordinator
32	Eily Fitzpatrick, CSO Peer Review Coordination Team
33	Niamh Kavanagh, CSO Peer Review Coordination Team
	Other CSO staff members
34	Barra Casey, Statistician, Consumer Price Index
35	Brian Cahill, Statistician, Earnings Analysis
36	Claire Burke, Statistician, Household Budget
37	Dermot Corcoran, Statistician, Geography
38	James Hegarty, Statistician, Demography
39	John Flanagan, Statistician, Balance of Payments and Financial Sector
40	Morgan O'Donnell, Statistician, Methodology
41	Ruth O'Shaughnessy, Statistician, Government Accounts
42	Saidhbhin Hardiman, Statistician, Balance of Payments
43	Gerard Keogh, Notetaker
44	Reamonn McKeever, Notetaker
45	Norita Murphy, Notetaker
46	Michele Butler, Notetaker
47	John Sheridan, Notetaker
48	Margaret Kinsella, Notetaker
49	Michael Brennan, Notetaker
50	Claire Hanley, Notetaker

51	Derek Stynes, Notetaker
52	Peter Culhane, Notetaker
	Representatives of the ONAs
53	Martin Howley, Programme Manager, Energy Policy Statistical Support Unit,
	Sustainable Energy Authority of Ireland
54	Mary Holland, Data Management Executive, Energy Policy Statistical Support Unit,
	Sustainable Energy Authority of Ireland
55	Nicola Tickner, Statistician, Department of Education and Skills (Also attended Main Users session)
56	Diarmuid Reidy, Senior Statistician, Department of Education and Skills
	Representatives of main users
57	Shane Enright, Senior Economist, Department of Finance
58	Cillian Doyle, Assistant Principal, Economic Policy, Department of An Taoiseach
59	Terry Corcoran, Principal Officer, Department of Social Protection
60	Joanne Mulholland, Department of Social Protection
61	Jonathan Healy, Senior Economist, Department of Jobs, Enterprise and Innovation
62	Keith Walsh, Principal Officer, Revenue Commissioners
63	Mary Cussen, Central Bank of Ireland
64	Martin O'Brien, Central Bank of Ireland
65	Professor Frances Ruane, Director, The Economic and Social Research Institute
66	Tom Healy, Director, Nevin Economic Research Institute (NERI)
	Representatives of media
67	Sean Whelan, Economics Correspondent, RTE
68	Arthur Beesley, Economics Editor, Irish Times
69	Brendan Keenan, Former Group Business Editor - Independent Newspapers
70	Austin Hughes, Chief Economist, KBC Bank
71	Dan O'Brien, Chief Economist -Institute of International and European Affairs (IIEA) and Media Commentator
	Representatives of main data providers/respondents
72	Geraldine Anderson, Head of Research, Irish Business and Employers Confederation IBEC

73	Mark O'Mahony, Director of Policy and Communications, Chambers of Commerce Ireland
74	Catherine Lascurettes, Executive Secretary, IFA Dairy Committee, Irish Farmers Association IFA
	Representatives of the scientific community
75	Stefanie Haller, Lecturer/School of Economics, University College Dublin
76	Professor Jean Christophe-Desplat, Director, Irish Centre for High-End Computing
77	Eoghan McCarthy, Data Management and Visualisation Coordinator, All-Island Research Observatory (AIRO)/National University of Ireland Maynooth (NUIM)
78	Dominic Byrne, Head of IT, Fingal County Council
79	Elish Kelly, Researcher, Economic and Social Research Institute (ESRI)
80	David Duffy, Senior Researcher, Economic and Social Research Institute (ESRI)
	National Statistics Board
81	Patricia O'Hara, Chairperson of the National Statistics Board, Adjunct Professor, National Institute for Regional Spatial Analysis
82	Rowena Dwyer, Chief Economist, Irish Farmers Association (IFA)
83	John Callinan, Assistant Secretary, Department of An Taoiseach
84	John McCarthy, Assistant Secretary, Department of Finance
85	Gerard O'Neill, Chairman, Amarach Research
86	Helen Johnston, Senior Policy Analyst, National Economic and Social Council