

Statistical Commission

Fiftieth session

5 – 8 March 2019

Item 3(b) of the provisional agenda

Items for discussion and decision: Fundamental Principles of Official Statistics

Background document

Available in English only

**Assessment survey of the implementation of the
Fundamental Principles of Official Statistics**

Prepared by the United Nations Statistics Division

Assessment survey of the implementation of the Fundamental Principles of Official Statistics

I. Introduction

Following a request at the thirty-fourth session of the Statistical Commission, the Statistics Division conducted a first global review of the implementation of the Fundamental Principles of Official Statistics in 2003. The results were submitted to the Commission in a report to its thirty-fifth session in 2004, coinciding with the tenth anniversary of the adoption of the Fundamental Principles by the Commission.

At its forty-second session, the UN Statistical Commission “agreed that it was desirable to conduct periodic reviews of the implementation of the Fundamental Principles by Member States and asked the United Nations Statistics Division to undertake such a review and report the results to the Commission before 2014” (Decision 41/111). This request was reaffirmed during the forty-third session in 2012 (Decision 43/111).

The United Nations Statistical Commission, at its 48th session in March 2017, requested the Friends of the Chair Group on the Implementation of the Fundamental Principles of Official Statistics (FOC-FPOS)¹ to work on selected dimensions of the implementation of the Fundamental Principles within the context of the preparation for the twenty-fifth anniversary of their adoption, in 2019. Specifically, the Group was mandated to conduct a global review of the implementation of the Fundamental Principles of Official Statistics² and to prepare a report to be discussed at the Commission’s 50th session in March 2019.

The present assessment of the implementation of the Fundamental Principles of Official Statistics is largely an updated version of earlier questionnaires sent to countries by the UN Statistics Division in 2003 and 2012.³ It has been prepared with the contribution of PARIS21, with the aim to modernize and improve on previous assessments, while maintaining comparability on a set of core items from the 2012 questionnaire to allow for the review of progress. Notable differences include revised and expanded options for each answer based on the FPOS implementation guide and the results of previous questionnaires. The wording of some questions was also revised with a view to improve consistency in

¹ This Friends of Chair Group was mandated by the Statistical Commission at its 48th session in March 2017 (Decision 48/107). The Friends of the Chair Group on the Fundamental Principles of Official Statistics was constituted in February 2018, comprising senior statisticians from 11 countries (Argentina, Australia, Egypt, Italy, Jordan, Malaysia, Mauritius, New Zealand, Poland, Suriname, and the United Kingdom of Great Britain and Northern Ireland) and seven international agencies and organizations as observers. New Zealand is Chair of the Group, with the Statistics Division acting as secretariat.

² See <https://unstats.un.org/unsd/dnss/gp/FP-New-E.pdf>

³ See Report of the Secretary-General on Implementation of the Fundamental Principles of Official Statistics (E/CN.3/2004/21) and (E/CN.3/2013/3) available at <http://unstats.un.org/unsd/dnss/gp/globreview.aspx> and <https://unstats.un.org/unsd/statcom/44th-session/documents/doc13/2013-3-FundamentalPrinciples-E.pdf> respectively. See also the background document with further information on the 2012 questionnaire results which accompanies E/CN.3/2013/3 available at: <https://unstats.un.org/unsd/statcom/doc13/BG-FP.pdf>.

the responses, since the 2012 report highlighted some contradictions across the answers provided by some respondents. The 2018 questionnaire also included new questions related to open data and the application of the Fundamental Principles to non-official and non-traditional sources of data, to better reflect the current situation of national statistical offices and their use of information from an expanded data ecosystem.

There were **73 questions included in the 2018 questionnaire**, compared to 78 in the 2012 version. Many of the questions in the 2012 assessment were yes/no, and the detailed comments that were provided by respondents to those questions were included as options in 2018 questionnaire in order to better pinpoint trends in implementation activities. **Ninety-three countries responded to the 2018 questionnaire**, with a regional breakdown as shown in Figure 1 below.

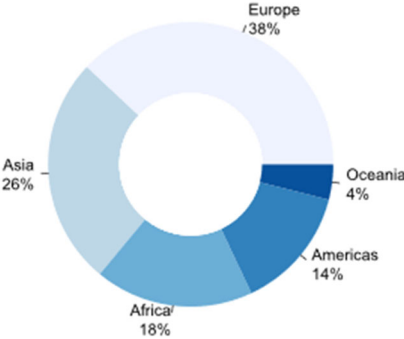


Figure 1. Distribution of responses, by region

Approximately 86 percent of the 93 country responses in the 2018 survey were provided on behalf of the national statistical office (NSO), while about 12 percent were for the national statistical system (NSS). This response rate per NSO and NSS is consistent with the 2012 survey. To fully understand the impact of implementation of the FPOS within the broader NSS, future questionnaires may delve into more specific questions on NSS activities and the FPOS. On average, it took respondents 5 hours to fill out the questionnaire, although this figure varied significantly across regions.

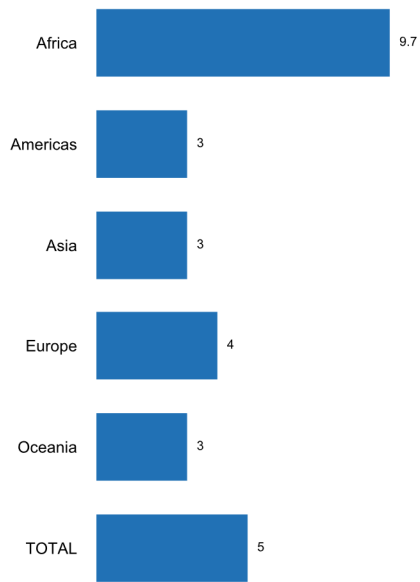


Figure 2. Average time needed (in hours) to fill out the questionnaire

II. FPOS awareness and integration into institutional framework

In line with the results of past questionnaires, heads of NSOs were generally considered to be aware of the existence of the FPOS. However, at present, only 74 percent of the responses indicate that the heads or senior management of other agencies of the National Statistical System are aware of the fundamental principles. Moreover, only 57 percent of countries informed that the line ministry or department to which the NSO reports is aware of the UNFPOS. In most countries, the UNFPOS are mentioned in reports, strategy and policy papers and publications (82 percent) or discussed in meetings and events such as the World Statistics Day (67 percent).

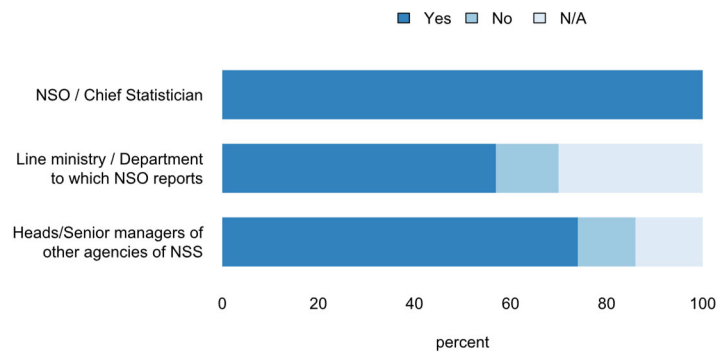


Figure 3. Awareness of existence of UNFPOS

Although the 2012 questionnaire made reference to the extent to which UNFPOS are integrated into the NSS legal framework, the 2018 questionnaire included this more explicitly. This now allows to establish that the UNFPOS are fully integrated in the statistical law or legal framework of over 60 percent of responding countries, whereas about 27 and 6` percent of respondents reported partial and no integration, respectively. At the regional level, more than 80 percent of respondents from African countries indicated full integration of FPOS into the statistical law or legal framework, while more than half of those from the Americas indicated only partial integration.⁴

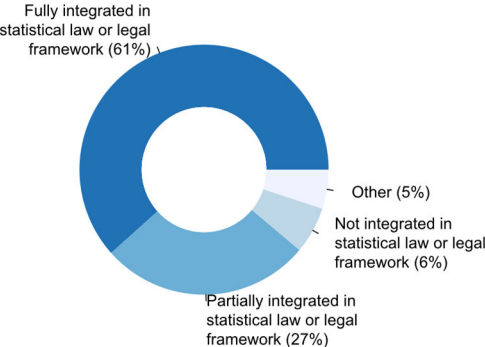


Figure 4. Extent to which UNFPOS are integrated into the NSS institutional framework

III. Results relating to specific principles

Principle 1: Relevance, Impartiality and Equal Access

“Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens’ entitlement to public information.”

Previous surveys on the implementation of the UNFPOS show that the proportion of countries that report the existence of established user councils and organized user groups for specific surveys and/or to ensure user-producer dialogues had increased from 66 percent in 2003 to 72 percent in 2012. The 2018 questionnaire also showed that approximately three out of each five countries relying on user councils or organized user groups as a source of user feedback on their statistical products and services over the last five years (such groups were mentioned by 86 percent European countries).

⁴ In the case of Europe, some respondents also noted that their statistical law or legal framework makes reference to the European Statistics Code of Practice.

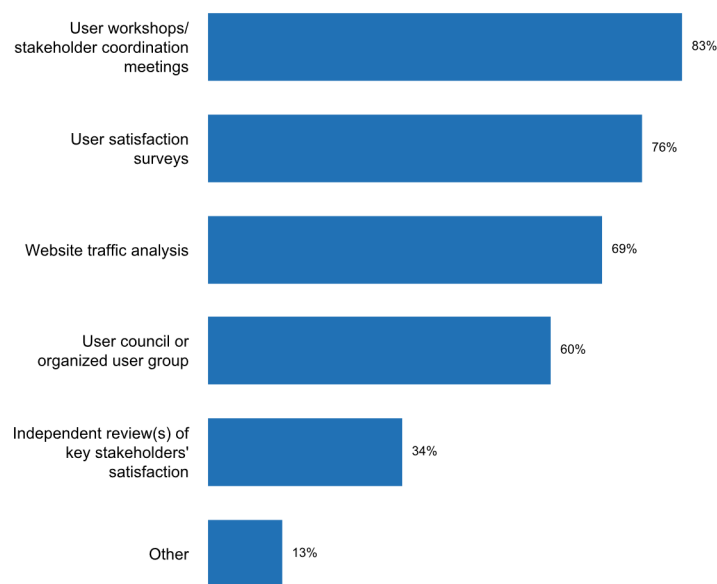


Figure 5. Source of feedback from users on statistical products and services over the last five years

Moreover, 75 percent of those countries that rely on user councils or organized user groups for feedback on their statistical outputs indicated that the mandate of these groups includes the provision of strategic advice on statistical policy and priorities, followed by coordination of statistical activities (66 percent) and provision of technical advice (61 percent). Also, most countries where a user council or user group exists indicated that such group includes government employees (96 percent) and academic and professional associations (93 percent), with representatives of the business sector, policy makers, and civil society organizations being also frequently members of such user groups. In contrast, less than half of the countries where a statistics user group exists indicated the participation of workers' unions, international organizations, and the general public in them.

The 2018 questionnaire also shows that, over the past five years, 83 percent of countries sought feedback from users on statistical products and services through user workshops or stakeholder coordination meetings. In addition, user satisfaction surveys were cited by 3 of every 4 countries as a means of obtaining feedback from users, followed by website traffic analysis (69 percent of countries).

With respect to planning instruments currently being used by NSOs and across the National Statistical System, most countries (88 percent) highlighted annual or multiannual work programmes. In contrast, only three out of every five countries indicated the use of a National Strategy for the Development of Statistics as a planning instrument for their statistical activities.

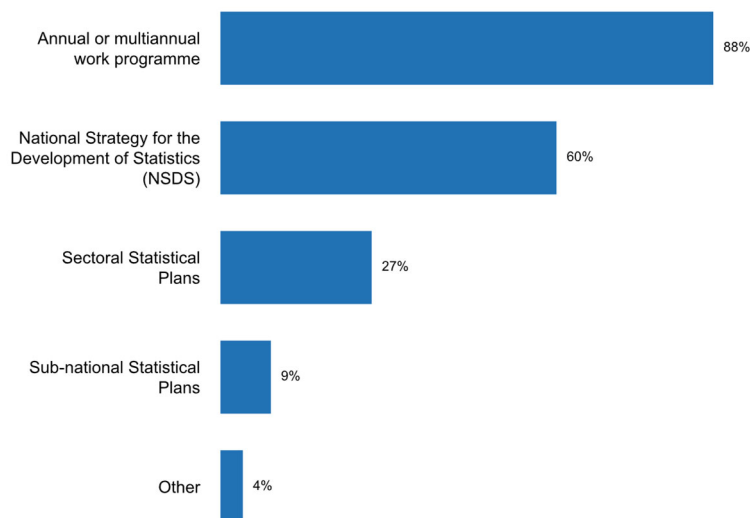


Figure 6. Planning instruments currently being used by the NSS / NSO

In past questionnaires (2012 and 2003), almost 90 percent of countries reported having a systematic dissemination policy. Looking into the measures that are in place for the dissemination of statistics, the 2018 questionnaire shows that almost all of the 93 respondent countries use various traditional dissemination media, such as print publications, online pdf files, etc. A vast majority (90 percent) also have appointed a specialized unit responsible for dissemination or provide user support via email, etc.

An advanced release calendar was frequently mentioned in responses to previous questionnaires as was an element of a dissemination strategy. While this is still relevant for a majority of countries (83 percent), it is clear from the responses that many other measures are frequently used for disseminating statistics.⁵

The accessibility of data for all users and under free circumstances is crucial to any open data initiative. In relation to the state of openness and interoperability of the disseminated data, it is worth noting that the provision of data downloads in proprietary formats is still more frequent (74%) than data downloads in open machine-readable formats (58 percent) or via online Application Programming Interfaces (APIs) (38%).

⁵ In approximately 78 percent of those countries that publish it, the release calendar covers a time span of 4 to 12 months. However, the calendar is adjusted at least once a year in almost half of the countries that have one.

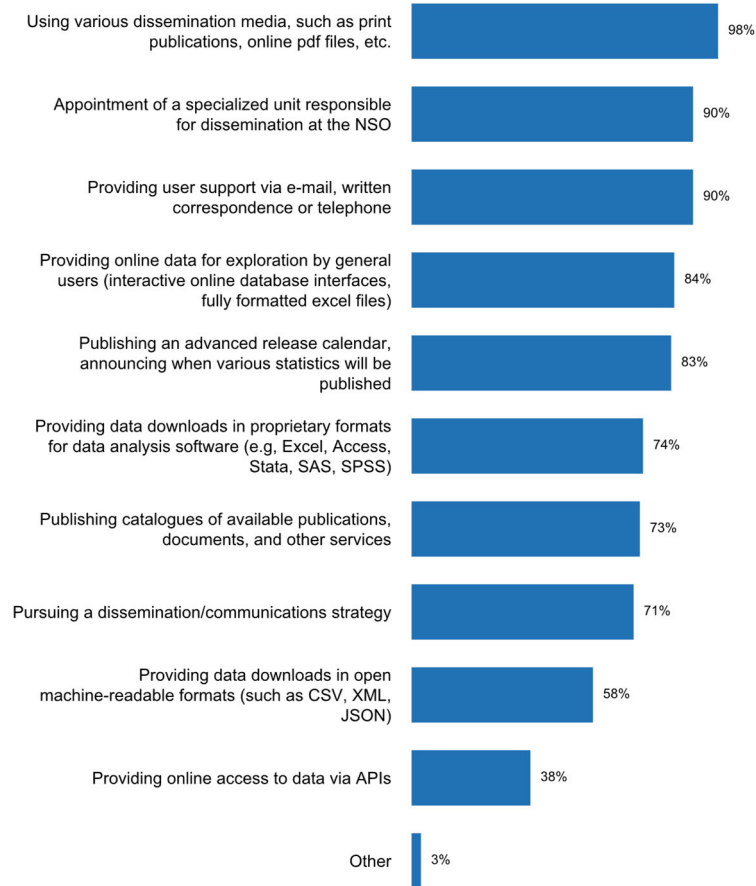


Figure 7. Measures currently in place for disseminating statistics

The pre-release of statistics to certain user groups was not granted to any of the groups listed for 47 percent of the respondent countries. However, 44 percent of respondents noted that government departments or policy-makers are given access to statistics prior to their public release. In 53 percent of such cases, the users who have prior access to the statistics are always publicly identified. Comments provided on this question note that for a number of countries specific policies regarding pre-release are established and found online. In general, those that receive the pre-release access to data do so 24 hours or less time before its publication.⁶

⁶ The 2012 survey yielded contradictory results regarding pre-release, with eighty percent stating statistics were made available to all users at the same time and then two-thirds also confirming that government departments were given access to statistics prior to release.

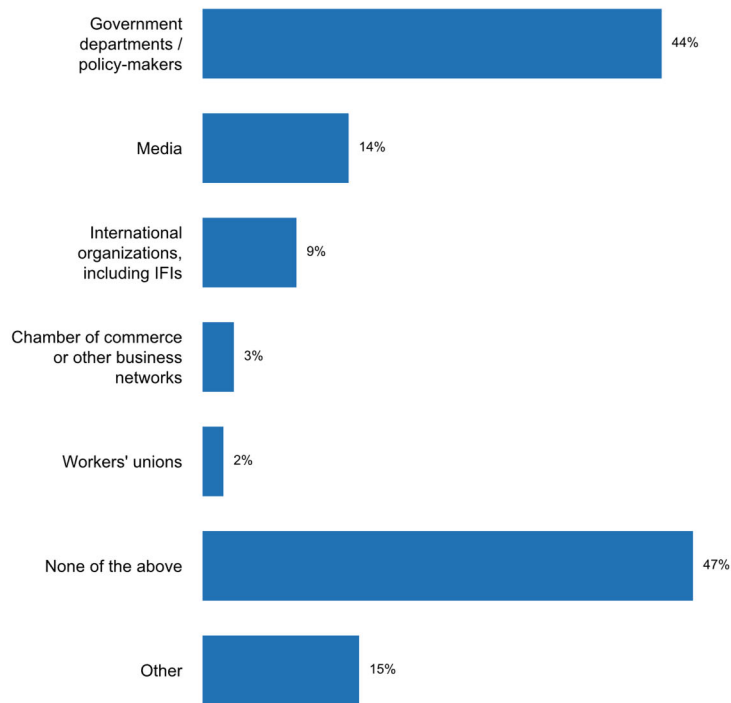


Figure 8. Groups of users given access to statistics prior to their public release in the past five years

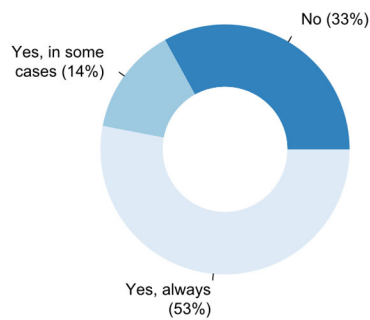


Figure 9. If any user has access to a pre-release, is this publicly identified?

In the case of microdata, there is general consensus that it should only be made available for statistical purposes and in alignment with the existing legal framework, so as to ensure that the confidentiality of the released microdata is protected. Moreover, the procedures for researcher access to microdata, as well as

the uses and users of microdata should be transparent, and publicly available.⁷ In this respect, the 2018 questionnaire also inquired about the conditions under which national statistical offices provide access to aggregates and/or microdata. About 60 percent of respondents indicated that they provide online access to at least some data sets under publicly available terms of use, while dissemination after signing a licensing agreement or for a fee is reported by 29 and 23 percent of the respondents, respectively. Almost 1 in every five countries (18 percent) report the dissemination of some datasets after registration of the users on the website.

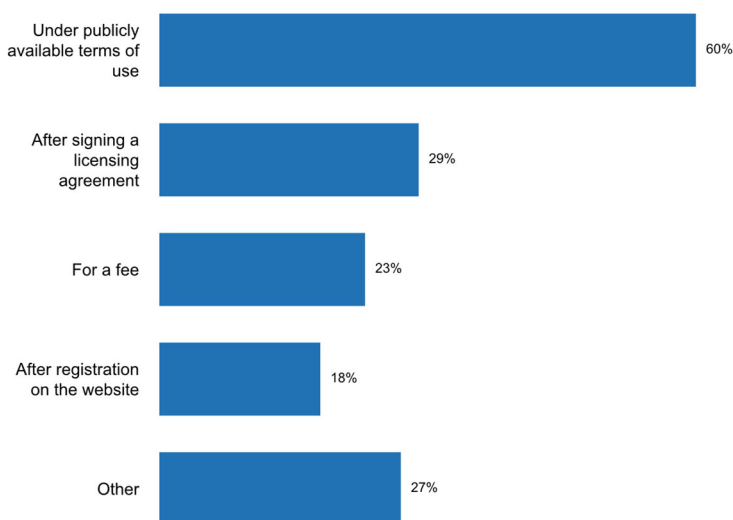


Figure 10. Conditions for online access to aggregates and/or microdata

In 58 percent of the responding countries, anonymized data and aggregates can be re-distributed under condition of attribution of the source, and 41 percent allow such re-distribution for non-commercial purposes. Only 19 percent report allowing the re-distribution of anonymized microdata and aggregates for commercial purposes, and only 15 percent require a fee. Results are very similar with respect to the further distribution of derivative works based on aggregates and/or microdata that are available online (see Figure 11).

In general, some of the main challenges identified by respondents for the implementation of Principle 1 included: (1) ensuring equal access to statistical information; (2) the inclusion or exclusion of microdata and ensuring that aggregates do not identify people or groups; (3) harmonizing legal frameworks with the statistical framework in the short and medium term; as well as (4) harmonizing administrative records for statistical and geographical purposes to increase timeliness of dissemination and reduce costs of data capture, the generation of information and lessen the burden of the system’s informants.

⁷ For further details, see, e.g., the document entitled “Principles and Guidelines for Managing Statistical Confidentiality and Microdata Access”, submitted to the thirty-eighth session of the Statistical Commission in 2007 (<https://unstats.un.org/unsd/statcom/doc07/BG-Microdata-E.pdf>).

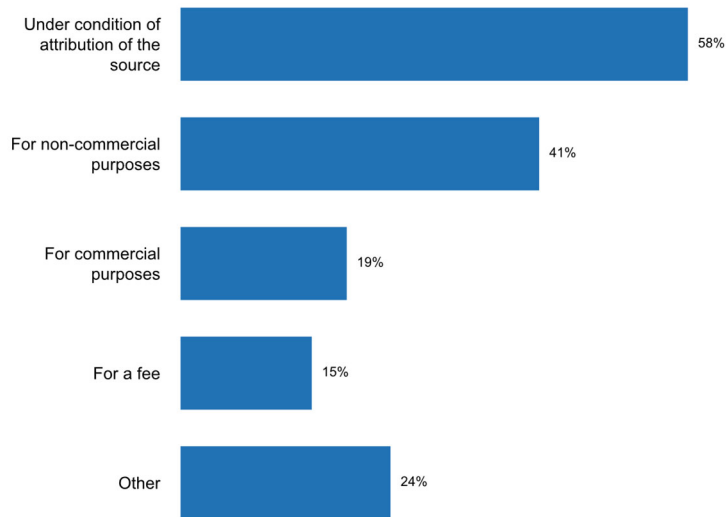


Figure 11. Conditions for re-distribution of anonymized microdata and aggregates

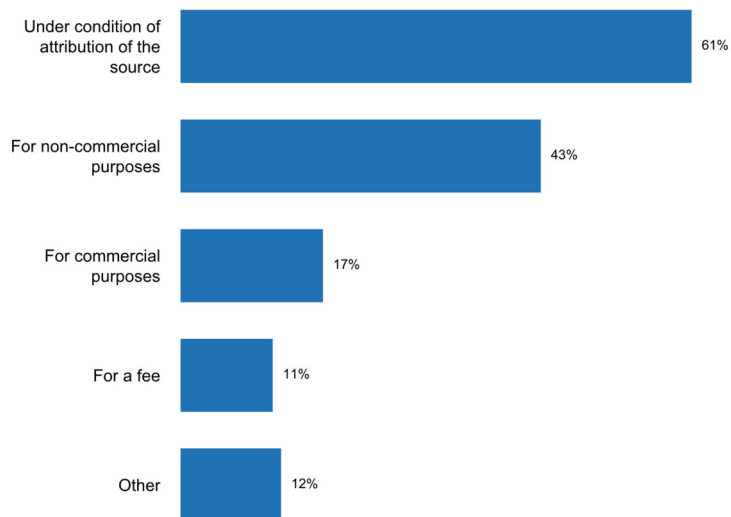


Figure 12. Conditions for distribution of derivative works based on the aggregates and/or microdata that are available online

Principle 2: Professional Standards, Scientific Principles and Professional Ethics

“To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.”

Principle 2 is closely related to the ability of National Statistical Offices to make decisions based on strict professional considerations. A crucial determinant of this independence is the nature of the communication between the Chief Statistician and policy making authorities. The 2018 survey shows that the vast majority (95 percent) of chief statisticians have direct access to policy-making authorities. This access, notably, is most frequently through meetings with ministers and/or deputy ministers, while only 42 percent of the respondents report attending upper/lower house parliamentary hearings.

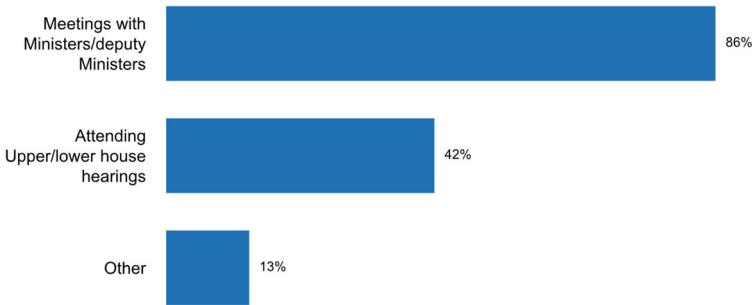


Figure 13. Modalities of communication between chief statistician and policy-making authorities

In 2018, 86 percent of countries responding to the questionnaire reported to have clear rules for the appointment and dismissal of the head of the NSO – a welcome increase from approximately 75 percent in 2012.

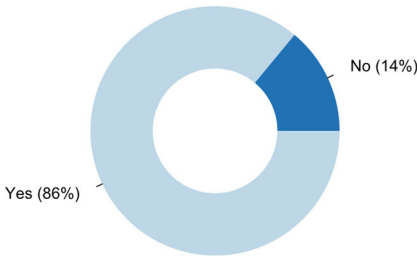


Figure 14. Existence of clear rules for appointment and dismissal of the head of the NSO

More specifically, in almost 7 out of every 10 countries responding to the questionnaire, these rules cover the qualifications and the selection procedure of the Chief Statistician. Other aspects frequently included in such regulations are the length of the appointment period (56 percent) and the reasons for dismissal (49 percent). In fewer cases (24 and 35 percent of respondents, respectively) the rules regulate age and office-term limits of the chief statistician. In the past five years, only a small number of the national statistical offices (less than 7 percent) received inquiries about the chief statistician selection process.

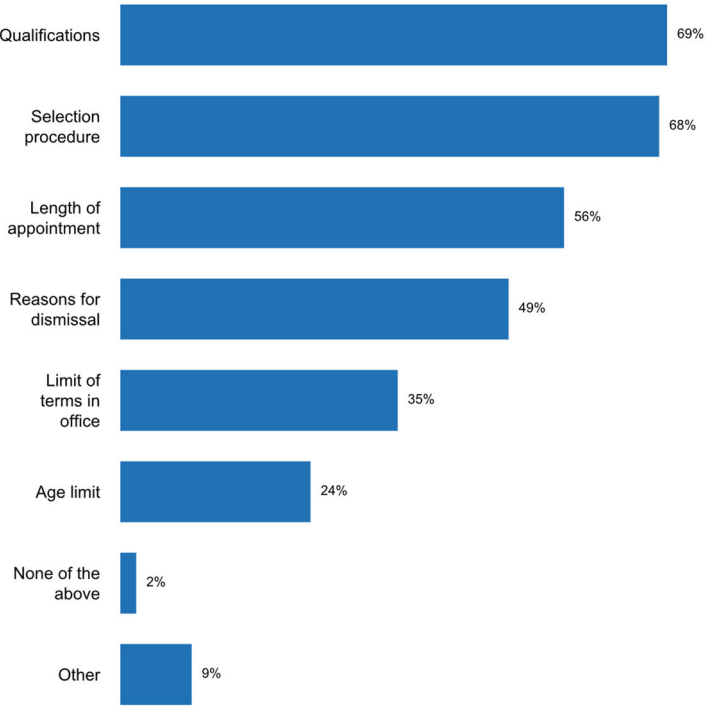


Figure 15. Aspects regulated in rules for appointment and dismissal of the head of NSO

Principle 2 also refers to the methods and procedures for the collection, processing, storage and presentation of statistical data. In this connection, the 2018 survey shows that almost all (96 percent) of countries support their methodologies with the use of internationally recommended standards and methods. Other common practices to obtain external endorsement of the methodologies employed by national statistical systems include peer or expert reviews (68 percent), full disclosure of methodologies applied (63 percent), as well as the publication of revision policies and other procedural manuals (59 percent). Less frequent are the reliance on statistical or methodological councils to make formal decisions on methodology issues (32 percent) and the participation in external monitoring or auditing of the NSS practices (20 percent).

With respect to the coordination of the use of standards and classifications across the NSS, most countries (86 percent) indicate that the NSO compiles, publishes and promotes the consistent use of standards and classifications, and 57 percent report that it monitors compliance with classifications and standards across the NSS. A similar proportion of countries (56 percent) report the existence of legislation establishing

common standards and/or specifying which agency in the NSS is responsible for doing so. In this connection, in almost half of the responding countries the NSO has a role to play in reviewing and approving statistical questionnaires and methodologies employed across the NSS; whereas in 40 percent of the countries there are committees responsible for the coordination of standards in a specific field.

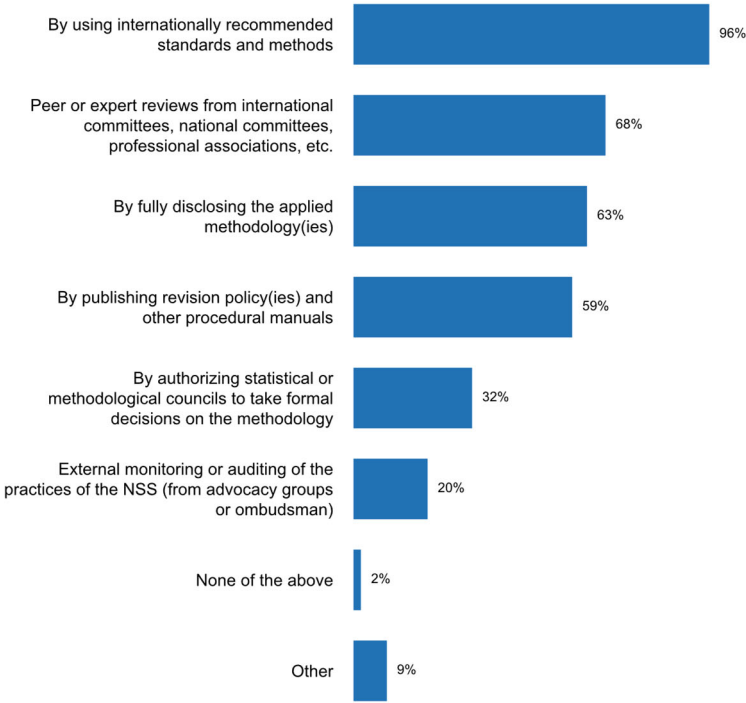


Figure 16. How NSS sought external endorsement of its methodologies and survey designs in the past five years

All countries reported the existence of documents that provide guidelines on professional ethics, with a majority mentioning the statistical law and internal regulations and staff rules as the primary guidance documents. This is an improvement with respect to the 2012 results, when only 80 percent of statistical offices reported having written guidelines for professional ethics. 11 percent also identified other documents that provide guidelines other than existing codifications.

In all but one of the countries that responded to the questionnaire, measures were taken in the past five years to inform and remind staff of national statistical offices about professional ethics. More than three-quarters conduct orientation and training programmes and seminars, and about 67 percent rely on handbooks, booklets, poster, and intranet communication to inform and remind staff of existing codes of conduct. New staff from six out of every ten countries get sworn in and receive relevant laws and guidelines.

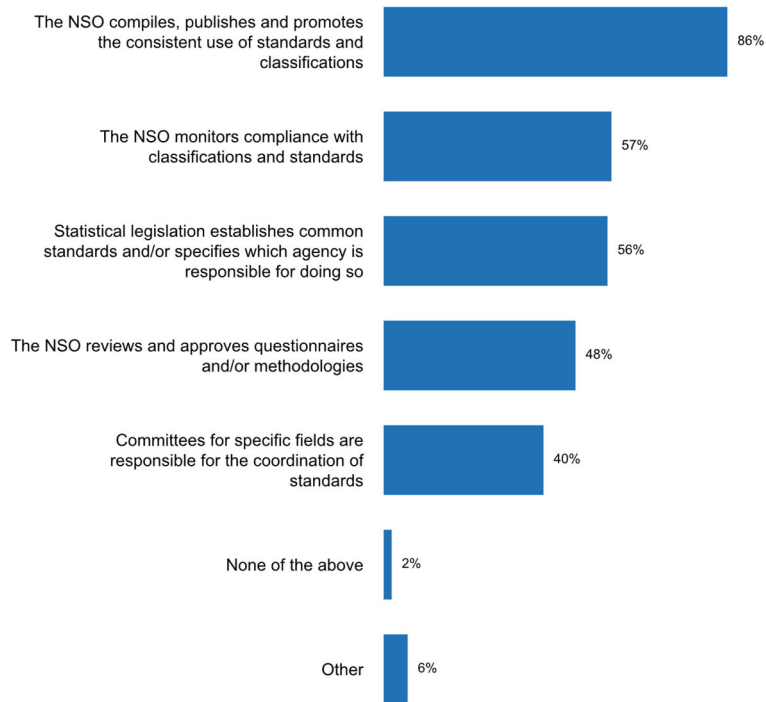


Figure 17. Measures currently being undertaken for coordinating standards and classifications across the NSS

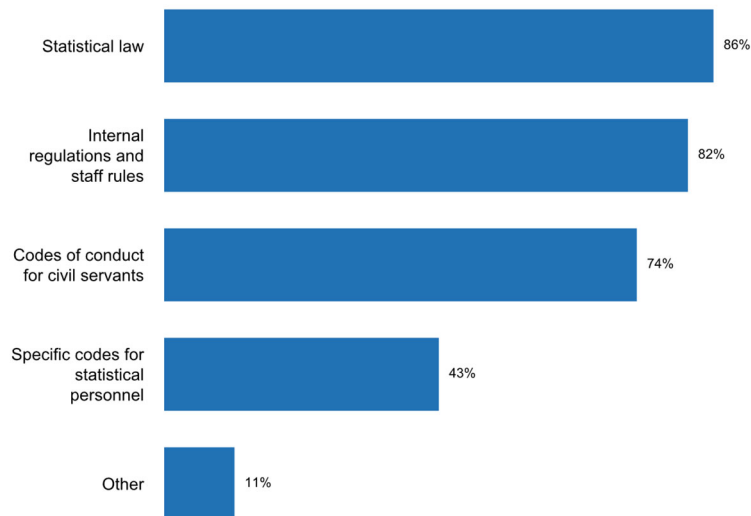


Figure 18. Document(s) providing guidance on professional ethics for staff

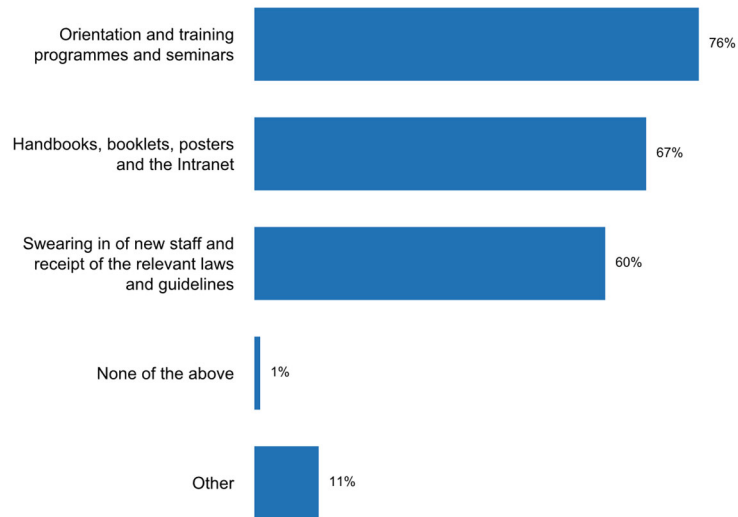


Figure 19. Ways in which staff have been informed and reminded of existing codes of conduct, in the past five years

In the 2018 survey, 91 percent of the responses report that NSO staff have received training concerning open data, data privacy or access to information policies and principles. However, this figure is only 69 percent for staff on other agencies in the NSS. For those that have not received training, the reasons include limited finances, lack of personnel and capacity, and the fact that an open data policy is not yet part of their regular operations.



Figure 20. Training concerning open data, data privacy or access to information policies and principles

In general, the main challenges identified by respondents for the implementation of Principle 2 included: (1) the need to update/reform the statistical law to guarantee professional and technical independence and code of ethics; (2) lack of training and lack of knowledge in this area by line ministries; areas of data governance; (3) inadequate human and financial resources in this area; and (4) the need to improve transparency and accountability by statistical agencies.

Principle 3: Accountability and Transparency

“To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.”

Ensuring that users have easy access to statistical data along with sufficient information to make proper use of it is critical for the implementation of Principle 3. Eighty-six percent of respondents provide information on the quality of published data through methodological notes, and 82 percent have quality information as part of metadata delivered with the data. This is in line with a growing trend found in the 2012 results of a shift to more routine and standardized formats for reference metadata informing users about the quality of published data.

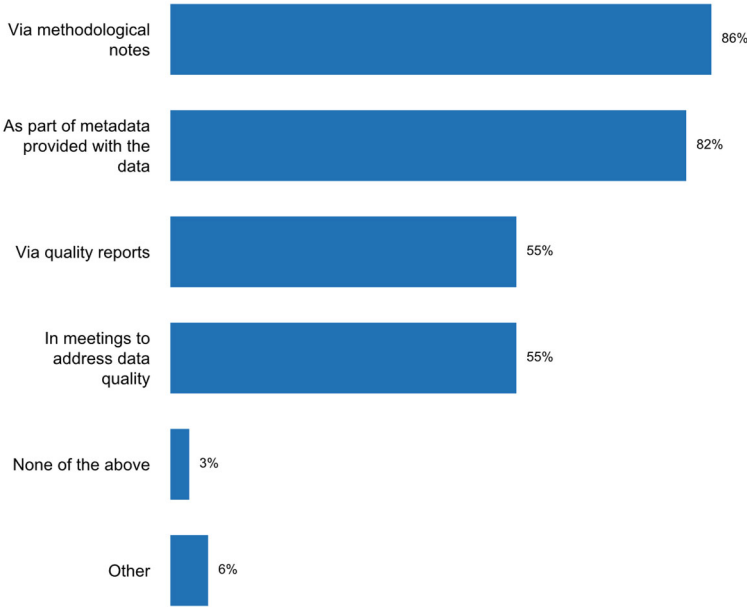


Figure 21. How users are informed of the quality of published data

Published data of all the national statistical offices responding to the 2018 questionnaire are frequently accompanied by explanatory texts. Eighty-three percent of the respondents indicate that metadata is associated with each dataset. Four in every five countries (80 percent) notify their users of major methodological changes, and 61 percent provide errata or other forms of error correction. Moreover, approximately one half of all countries publish the manual and protocols used by the NSS (53 percent) or guides to assist users in the interpretation of data and estimates (47 percent).

Among countries that present metadata with published data, almost 90 percent noted that the datasets released in the last two years included metadata at least half of the time. However, overall, less than half of the total number of respondents indicate that manuals on concepts and definitions (40 percent) or manuals on data collection, editing, processing, analysis and visualization (37 percent) are made available along with published data.

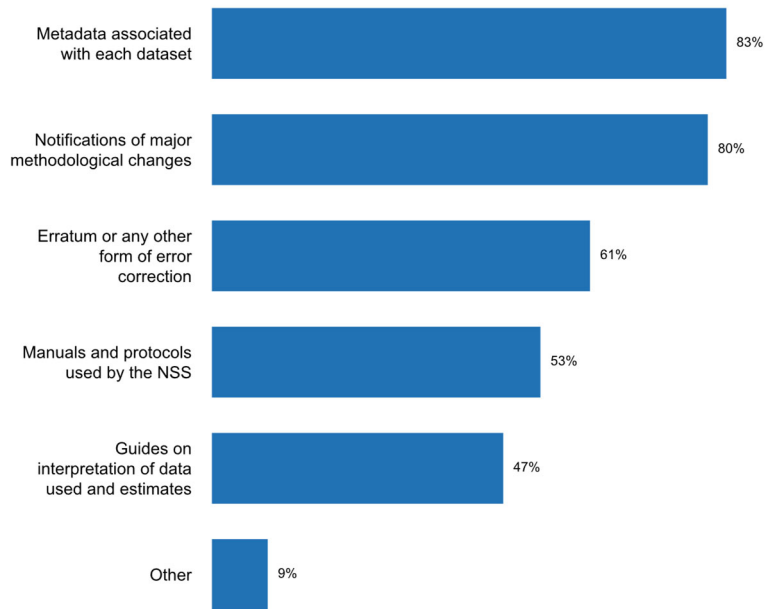


Figure 22. Types of explanatory texts that accompany published data

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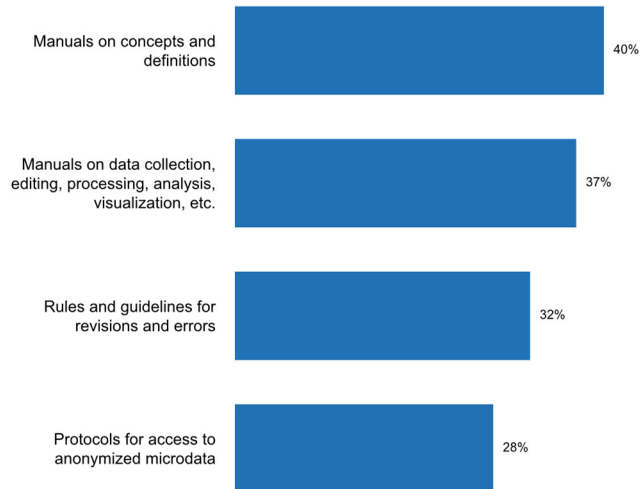


Figure 23. Types of manuals and protocols made available with published data

Almost 97 percent of the countries use at least one data platform to disseminate statistical data. Forty-four percent indicated that they use custom-developed data platforms. Overall, there is a wide variety of platforms being used (see Figure 23), and most countries use a combination of two or more platforms. Almost one third of all countries report the use of ArcGIS,⁸ a platform specialized in the dissemination of geospatially-enabled statistical data. The Eurostat web portal⁹ and OECD.Stat¹⁰ platforms are also widely used, as reported by 27 and 25 percent of all questionnaire respondents, respectively.

⁸ <https://www.arcgis.com/home/index.html>

⁹ <https://ec.europa.eu/eurostat>

¹⁰ <https://siscc.org/>

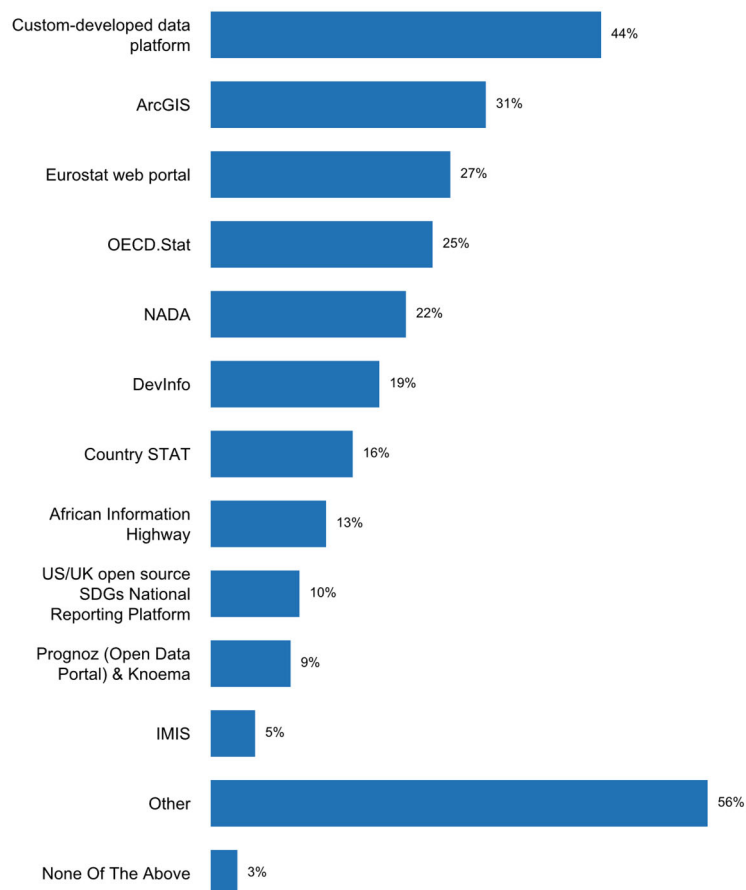


Figure 24. Data platform(s) currently used by NSS/NSO to disseminate statistical data

Many questionnaire respondents, particularly from developing countries, also report the use of the NADA platform,¹¹ a microdata cataloguing tool which uses the Data Documentation Initiative (DDI) metadata standard. It is worth noting that almost one in every five country reports the use of DevInfo¹², although this tool is being phased out as technical support is no longer provided. On the other hand, CountryStat,¹³ supported by FAO, and the African Information Highway platform,¹⁴ supported by the African Development Bank, are used by a relatively large proportion of countries, especially in Africa. Other platforms commonly mentioned by respondents as being used for data dissemination include PX-Web¹⁵ and Redatam.¹⁶

¹¹ <http://www.ihsn.org/nada>

¹² <http://devinfo.org/>

¹³ <http://www.fao.org/economic/ess/countrystat/en/>

¹⁴ <http://dataportal.opendataforafrica.org/>

¹⁵ https://www.scb.se/sv_/PC-Axis/Programs/PX-Web/

¹⁶ <https://www.cepal.org/en/topics/redatam>

In general, the main challenges identified by respondents for the implementation of Principle 3 included: (1) lack of resources to produce recommended quality reports and metadata; and (2) lack of metadata from other agencies in the NSS.

Principle 4: Prevention of Misuse

“The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.”

There are many ways official statistics can be misinterpreted, and national statistical offices need to understand how and why this can happen, so as to be able to take corrective proactive action and maintain their credibility. In many cases users generally do not have the level of subject matter and data expertise that is necessary for accurate interpretations of statistical data. Thus, even when aiming to make the best use of the information available, statistical data is often prone to be misinterpreted or misused by omitting important variables, making unwarranted inferences or failing to take into account the full context necessary to interpret the data.

Over three-quarters of country respondents to the 2018 questionnaire indicate that the NSO and/or the NSS have reacted to the erroneous interpretation and misuse of statistics during the past five years, primarily through sending letters to the editors of newspapers or advertorials (60 percent), publishing articles through webpages or social media (57 percent) or holding press conferences or issuing press releases (52 percent). Other means employed by NSOs and NSSs to comment on erroneous interpretation and misuse of statistics include television appearances and email communication.

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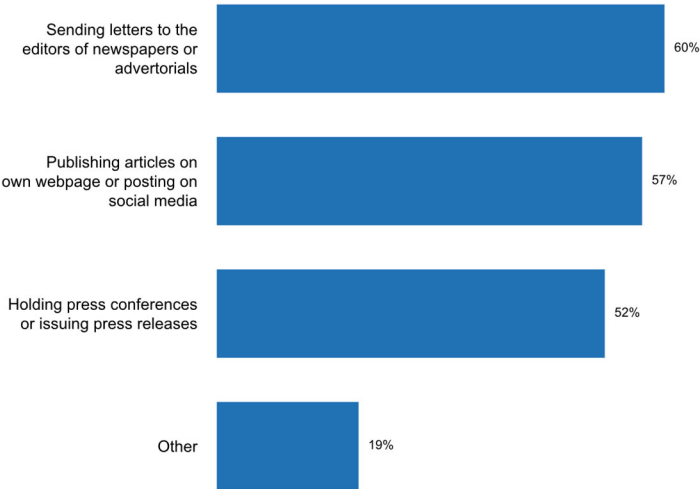


Figure 25. How NSO/NSS reacted to erroneous interpretations and misuse of statistics during the past five years

Moreover, almost half of the countries responding to the 2018 questionnaire indicate that the NSO and/or NSS has commented on erroneous interpretation and misuse of statistics at least once every year over the last five years, and 1 in every 3 respondents has done so twice or more per year.

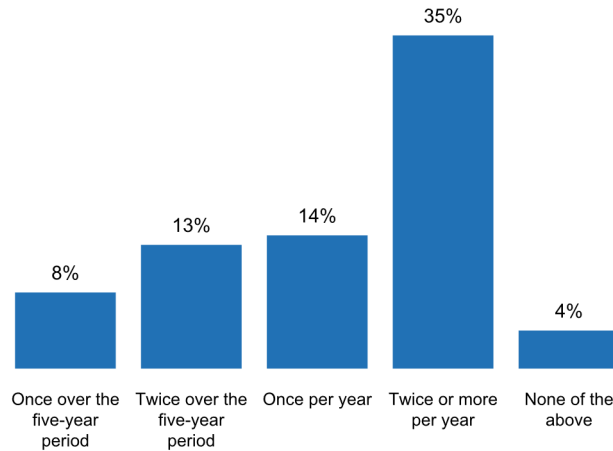


Figure 26. Number of times the NSO/NSS commented on erroneous interpretation and misuse of statistics in the past five years

The most commonly identified type of misuse over the past two years was the misreporting of findings (62 percent). Other issues frequently reported include over-generalizations, selective reporting of findings, and suggestions of false causality.

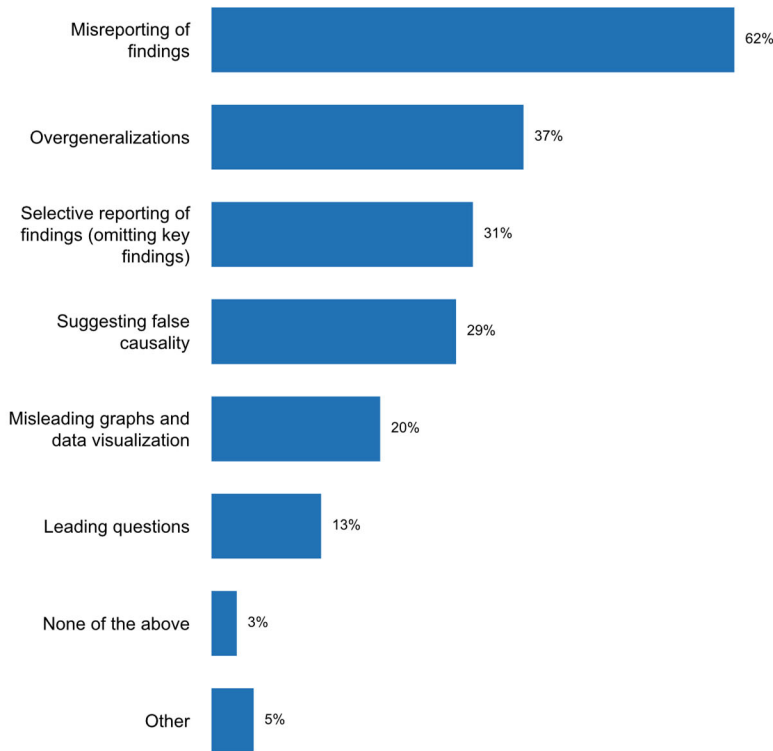


Figure 27. Types of misuse identified in the past two years

Similar to the results in 2012, problems of misinterpretation often are attributed to users' lack of methodological knowledge, statistical literacy and awareness. These issues were also identified as the most challenging for countries when implementing this Principle.

In this context, countries are engaging in a wide array of activities to educate data users, in line with results found also in the 2003 and 2012 surveys. In addition to the activities noted in the answer choices, countries also pointed out other activities such as: quizzes for users, hackathons, self-learning videos and statistical Olympics for high school students. Generally, seminars, participation in external events, and/or appearance in mass media activities were held twice or more per year by the majority of respondents.

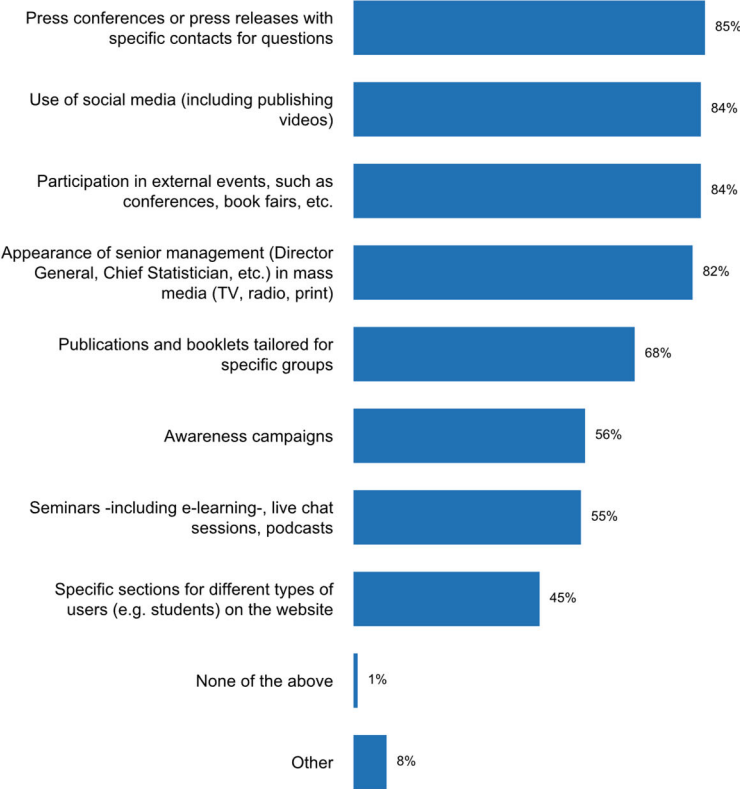


Figure 28. Activities carried out by the NSO/NSS to educate data users in the past five years, including the media

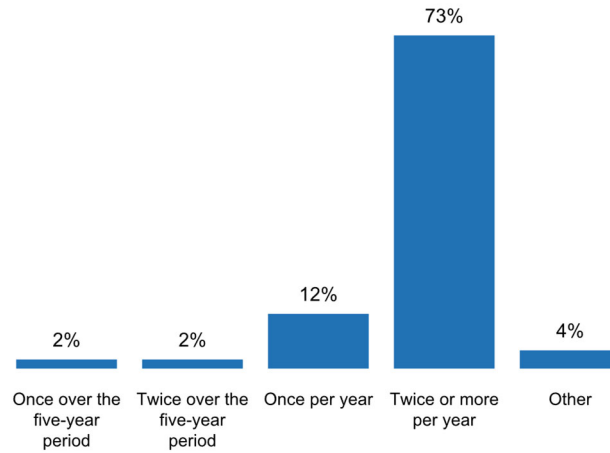


Figure 29. Number of times "seminars, participation in external events, and/or appearances in mass media" took place to educate users in the past five years

In general, the main challenge identified by respondents for the implementation of Principle 4 focused on the need to improve statistical literacy and awareness, an issue that has been recently discussed in many international statistical fora and has become a priority for many national statistical offices.

Principle 5: Sources for Official Statistics

“Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents”

To produce high-quality and timely statistical information that is relevant to policy and decision makers across different sectors of society, and in order to minimize the burden imposed on individual data providers, national statistical systems must keep abreast of methodological and technological advances that allow to make best use of all available sources of data at their disposal.

Not surprisingly, census data is cited in the 2018 survey one of the most common sources of data (94 percent) used by NSOs. However, administrative and non-traditional sources of data are increasingly employed by NSOs and NSS for the compilation of official statistics. In particular, practically every national statistical office uses sample surveys (99 percent) and/or administrative records (98 percent) as data sources for the compilation of official statistics. This is in line with the results of the 2012 and 2003 surveys on the implementation of the UNFPOS, which found that in virtually all countries, national statistical offices have to some degree access to administrative data. Non-traditional sources of data are also being more widely used as well; for example, 38 percent of respondents indicated that they currently use web scrapped data, while 31 and 29 percent use privately-owned datasets and satellite imagery for the compilation of official statistics, respectively. In contrast, only 6 percent of respondents to the questionnaire report the use of citizen-generated data from civil society organizations.

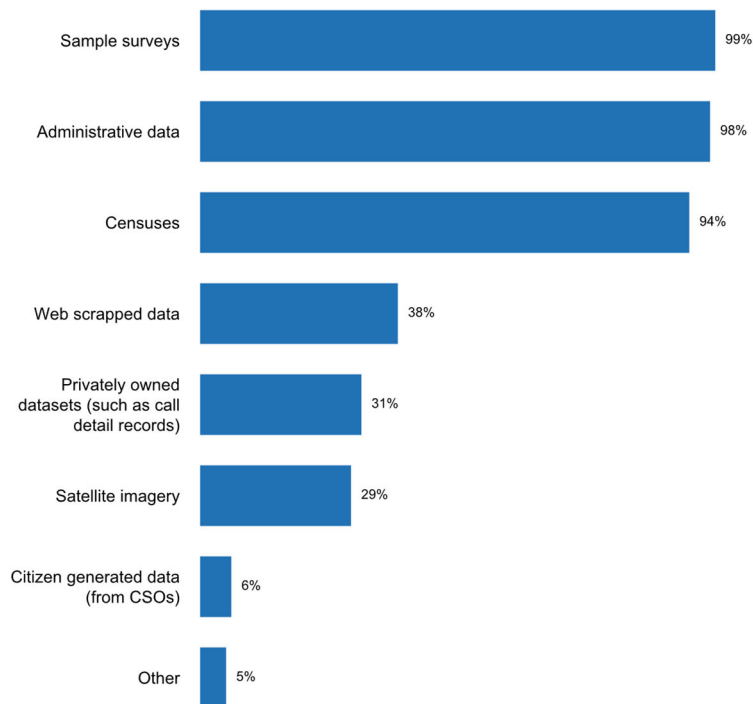


Figure 30. Sources of data currently used by the NSO

In recent years, there has been renewed interest in the use of administrative sources of data to improve timeliness, manage costs and reduce burden on data providers. In this connection, it is worth noting that the use of administrative records as a direct source of data (without linking or drawing of inferences) is reported by 9 in every 10 countries. However, around 8 in every 10 countries also use administrative data for correcting input errors, imputing values, and calibrating sample weights in census and sample survey data, and as a means for estimation by combining multiple records to derive variables. The use of administrative data as a means to develop sampling frames and to add information to what is collected in survey or census interviews is somewhat less frequent (70 percent). Almost one half of respondents also indicate that administrative data is used as a means to assess non-response rates in surveys, which is an important quality indicator.

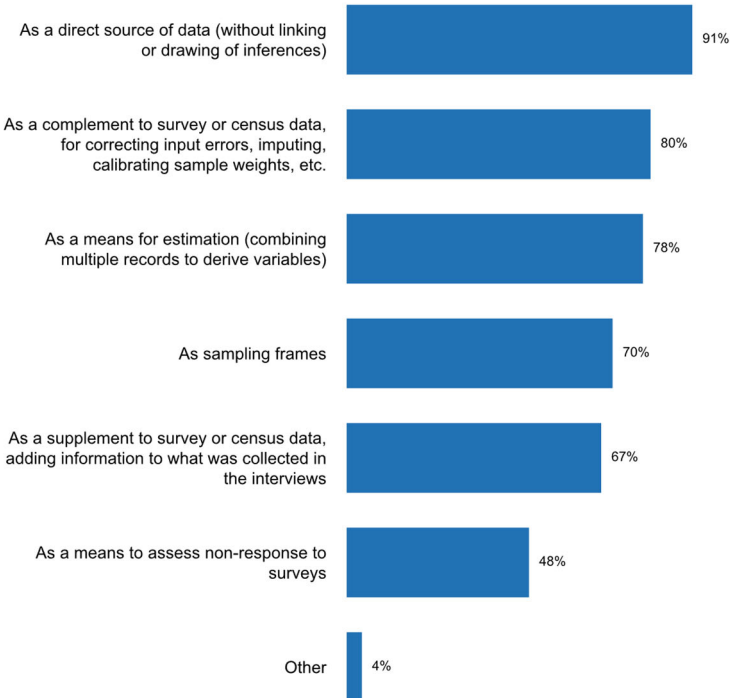


Figure 31. How administrative records are currently used

The majority of countries take action for adapting data from administrative records to statistical purposes. For instance, 85 percent cooperate with the custodians at the stage of design or modernization of information systems; 80 percent provide advice to the custodians for amending the composition and classification of administrative datasets; and 72 percent give feedback to the data source when errors are detected. However, less than half of countries provide training to custodians of administrative sources, hinting towards an opportunity for stronger cooperation and engagement.

Out of 93 countries that responded to the questionnaire, 55 percent indicated that they use web scrapped data, satellite imagery or privately-owned datasets as a source of data. Of those, over two-thirds (69 percent) have specific rules of access and confidentiality measures to treat the datasets and over half (53

percent) stated that the data provider does not contribute to methodological decisions regarding the use of the data. On the other hand, only 37 percent stated that “consumers/citizens are informed that their data is being used for compiling official statistics”.

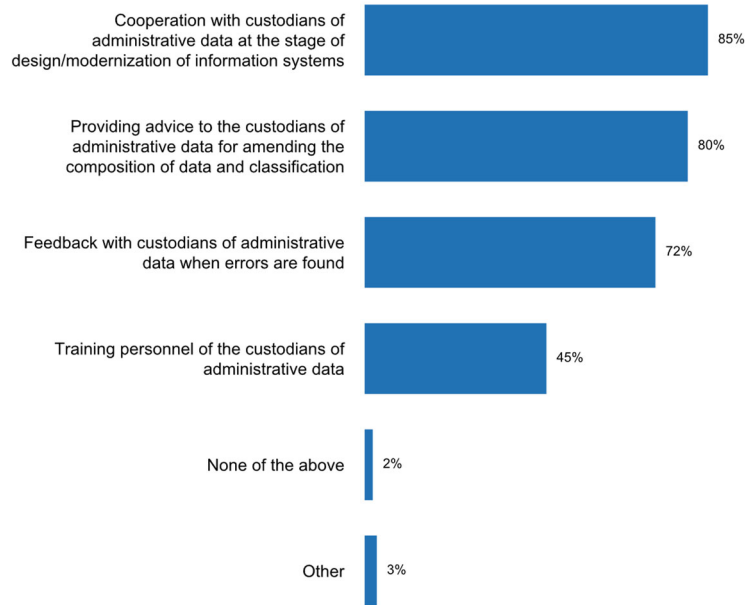


Figure 32. Actions taken for adapting administrative records for statistical purposes

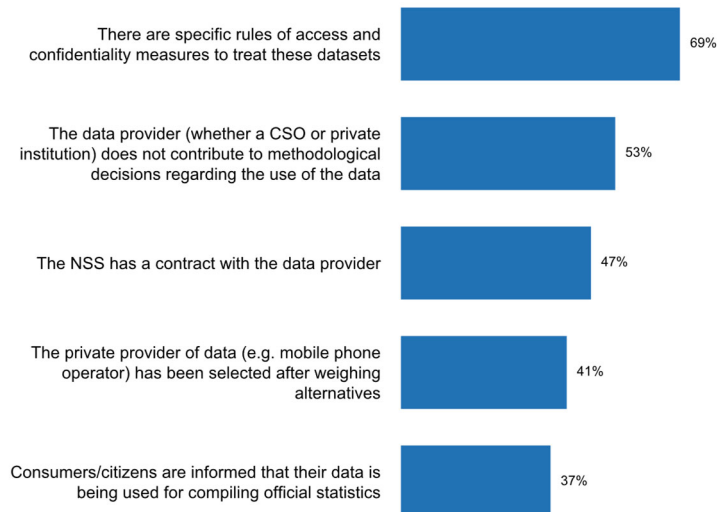


Figure 33. How the NSS accesses and uses big data and citizen-generated data (percentage calculated over a total of 51 responses indicating the use of web scrapped data, satellite imagery or privately-owned datasets)

According to Principle 5, the choice of data sources should be based on considerations of quality, timeliness, costs and the burden on respondents. With respect to the timeliness of *data sources*, it is worth noting that two-thirds of respondents meet with data providers to agree on deadlines.

In addition, most National Statistical Offices monitor the timeliness of publications against the release calendar (89 percent) and use new technologies for reducing processing times (78 percent). Other measures to ensure the timely release of statistical results include the use of standardized dissemination protocols and the release of preliminary data to users. In terms of resources dedicated to this end, 57 percent of respondents indicate that they use staff overtime or hire temporary staff to ensure timely publication of statistical outputs.

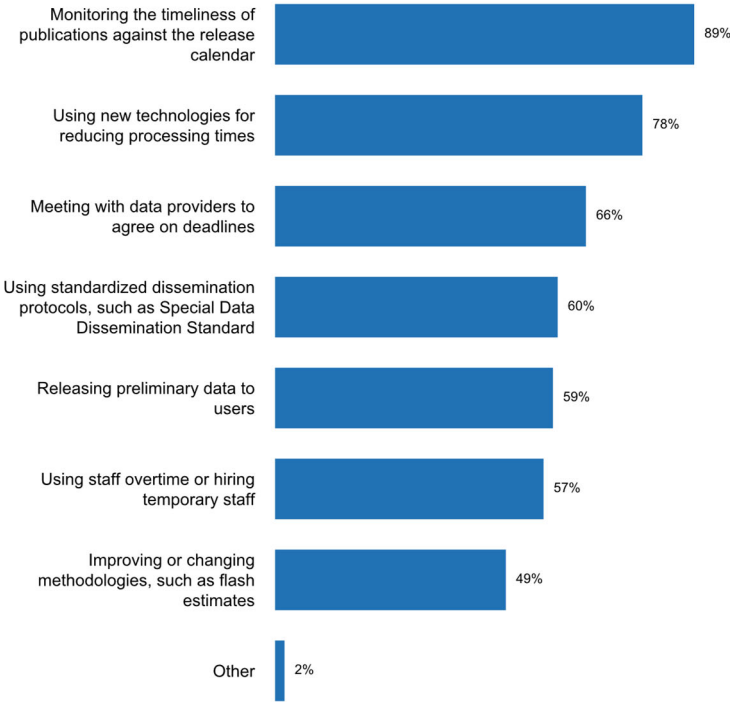


Figure 34. Measures taken to ensure timely release of survey results and/or statistical publications or bulletins

As regards to the use of quality management frameworks by National Statistical Offices, 46 percent of respondents indicate that they apply the Data Quality Assessment Framework (DQAF); 43 percent use the European Statistical System Quality Assurance Framework; 38 percent use the General Data Dissemination System, and 23 percent use Total Quality Management. The use of the ISO 9001 and ISO 27001 standards was also cited by a number of survey respondents.

In terms strategies for reducing response burden, almost 4 in every 5 statistical offices often report efforts to simplify survey questionnaires, often pre-filling them with data available from existing records, so as to minimize the time that respondents need to spend filling out the questionnaires. The use of administrative records and other data sources (such as big data) has been identified by 70 percent of the respondents as a means of reducing response burden.

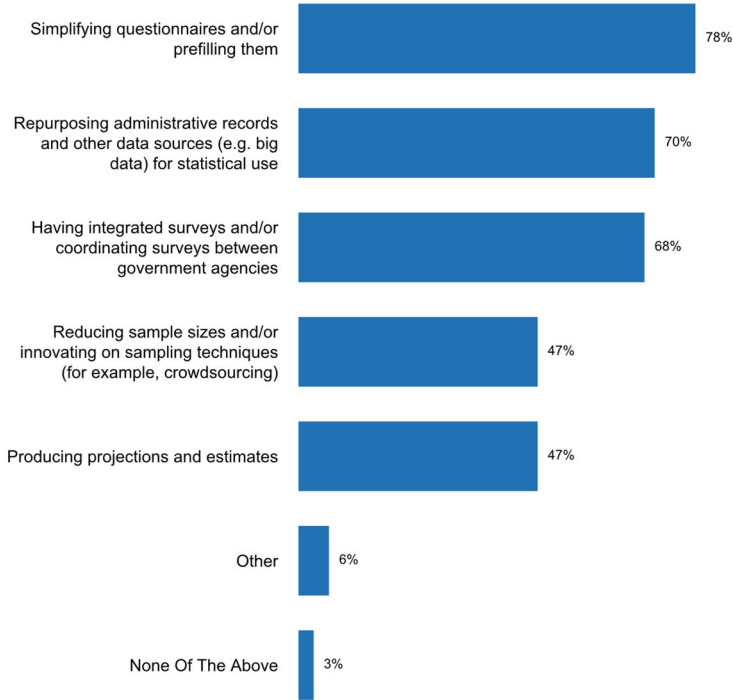


Figure 35. Measures being applied to reduce respondents' burden

Only about one-fourth (24 out of 93) of the countries provided additional comments on challenges to the implementation of Principle 5. Issues with administrative data was a relatively popular theme – their quality and/or the lack of legislative access to them. Some countries also underscored issues with quality of administrative data, including lack of resources for assessing data quality. Access to big data and privately-owned data were also mentioned as common challenges in the implementation of Principle 5.

Principle 6: Confidentiality

“Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.”

Understanding the privacy rights of all stakeholders and complying with the fundamental principle of confidentiality is in the best interest of every statistical organization. Providing clear and consistent rules for dealing with data privacy issues has a positive effect on stakeholders’ trust and their willingness to share their information, thus enabling the use of data for legitimate purposes. For national statistical offices, moreover, the relationship between data providers and data users depends crucially on the trust placed by all stakeholders in their ability to handle data properly and ethically.

There is a global trend towards strengthening legislative and policy frameworks for the protection of individual’s information privacy, driven in large part by the increased realization of new privacy risks created by the explosion of digital technologies and data analytic capabilities in all areas of life. In this context, it is not surprising that all 93 respondents to the 2018 survey indicated the existence of a confidentiality provision in the laws that regulate the NSO/NSS, with 71 percent noting that the confidentiality provision applies to the NSS in general and not just the NSO.

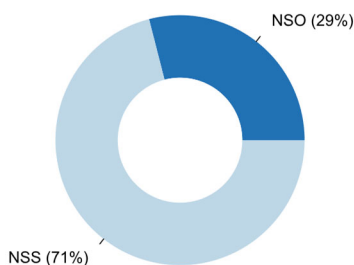


Figure 36. Scope of legal provisions on confidentiality

In most cases, such provisions cover the duty of staff in National Statistical Offices to protect confidentiality, and the training of staff on how to protect individual data. They also cover technical aspects of confidentiality protection, including processes for granting access to microdata, storing and destroying individual records, and checks that need to be conducted before releasing microdata data.

But it is not enough to comply with existing rules and regulations, as the data environment is in rapid, continuous evolution. Every statistical organization needs to translate the strategic intent of the principle of confidentiality into concrete operational policies, standards and procedures, and oversight and issue management mechanisms. Management of data privacy and confidentiality also requires monitoring systems for identification of new data privacy issues, mechanisms for assigning action items and escalating issues to higher levels of authority, procedures for capturing stakeholder viewpoints and evaluating resolution alternatives, and determining, documenting and communicating issue resolutions.

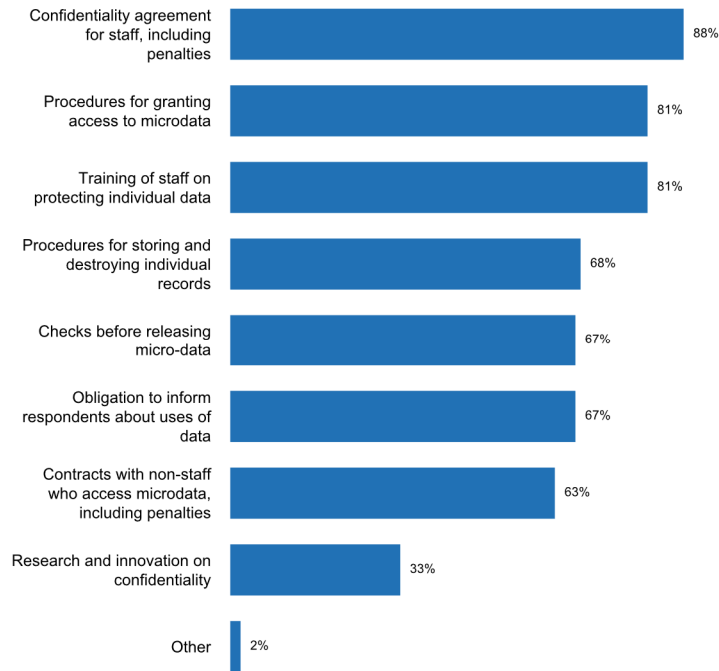


Figure 37. Aspects considered in the confidentiality policy of the NSO

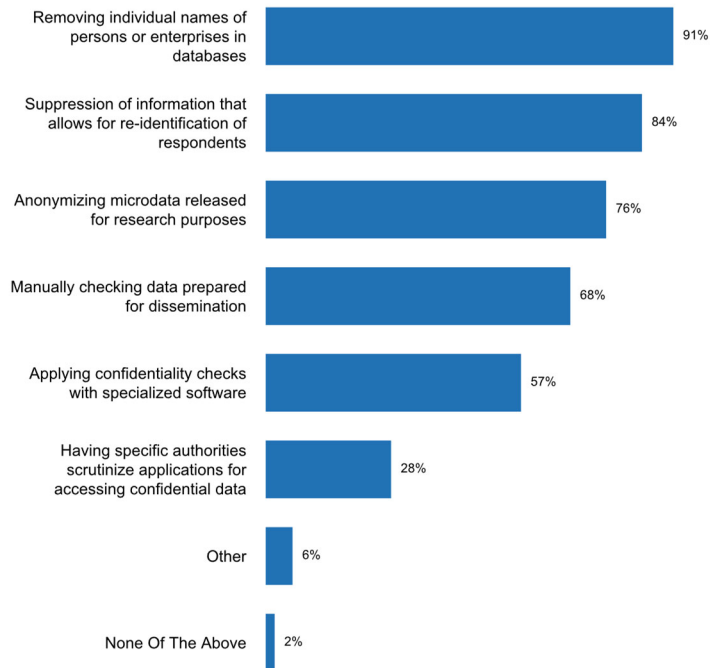


Figure 38. Practices being implemented to anonymize statistical data

Asked about the most common practices implemented to anonymize statistical data, the majority of countries mentioned the removal of individual names of persons and enterprises in statistical databases (91 percent), as well as the suppression of information that allows for re-identification of respondents. Every 3 out of 4 countries reported conducting microdata anonymization prior to release for research purposes, and every 2 out of 3 countries conduct manual checks of data being prepared for dissemination. However, only 57% of countries report the use of specialized software in order to apply confidentiality checks, and only 28 percent of the respondents engage specific authorities to scrutinize applications for accessing confidential data.

Less than two thirds of the respondents identified any circumstances under which individual data can be disclosed to third parties. Among those that did, the most frequent was when the concerned individuals or enterprises have expressed their consent. Only 1 in 5 respondents of the questionnaires indicated that individual data could be disclosed when exchanging data with other statistical offices or agencies in the country. A request by a court of law or emergency situations (e.g., a public health crises) were cited as possible circumstances allowing for disclosure of individual data by only 16 percent and 6 percent of the respondents, respectively.

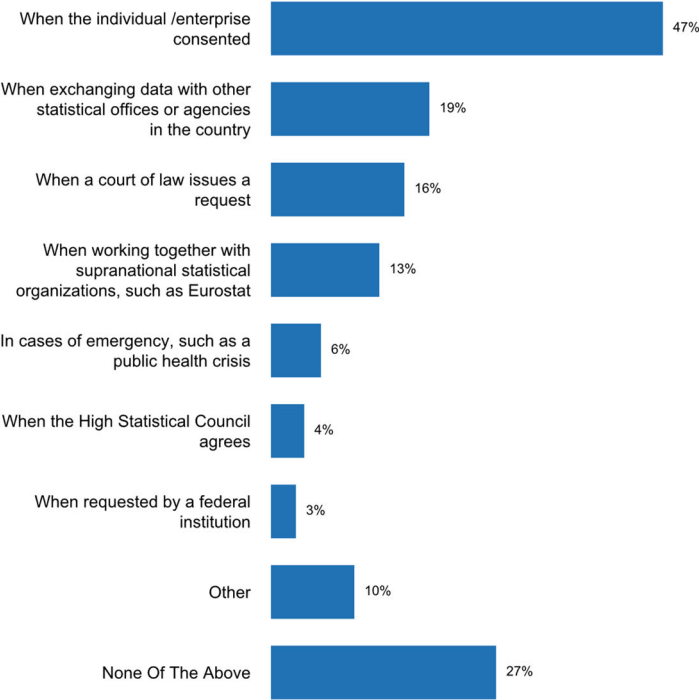


Figure 39. Circumstances under which identifiable individual data can be disclosed to third parties

In general, the main challenges identified by respondents for the implementation of Principle 6 included: (1) Need for more guidance and recommendations on how to handle microdata and open data

accessibility, (2) Consideration of the risks relating to equitable access when data is released by multiple sources; (3) Situations when local populations are too small, which results in a high probability of response fatigue by survey respondents and increased probability of re-identification of statistical data; and (4) Contradictions between other laws and the Statistics law.

Principle 7: Legislation

“The laws, regulations and measures under which the statistical systems operate are to be made public.”

The statistical legal framework of a country defines the scope and responsibilities of the National Statistical System, as well as the principles and procedures to be applied in developing, producing and disseminating official statistics. It also lays down the responsibility to provide data for statistical purposes by citizens, businesses and other institutions of a country, as well as their rights with respect of privacy and confidentiality. Moreover, statistical legislation is crucial and underpins the ability of National Statistical Offices’ to maintain access to administrative records and other data sources for statistical purposes.

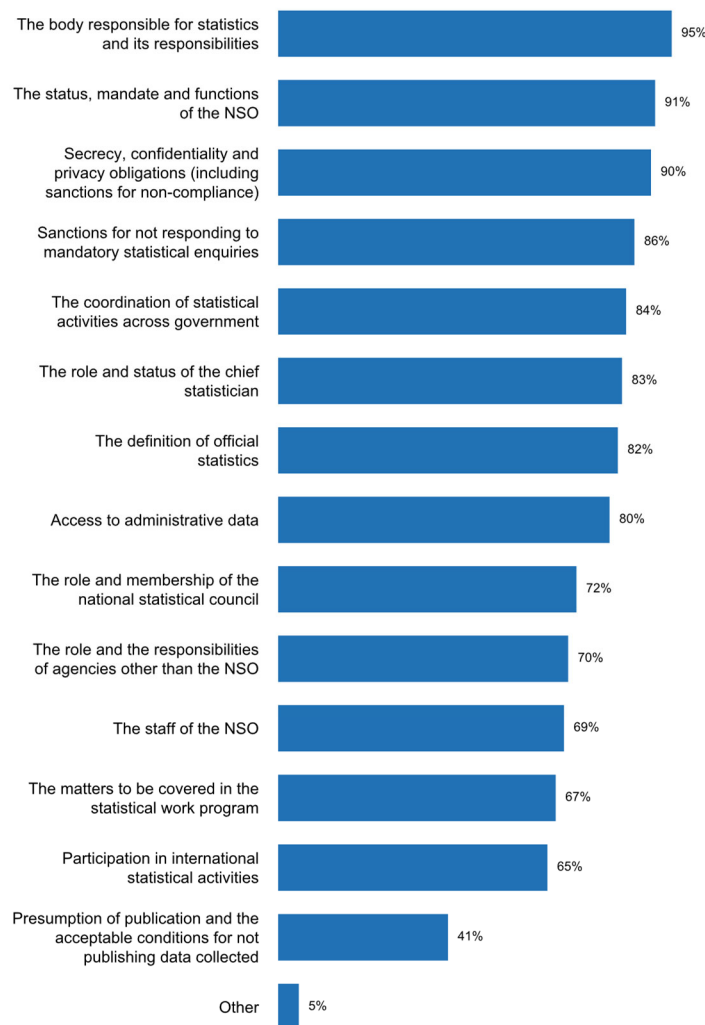


Figure 40. Aspects covered by statistical regulations (e.g. Statistical law, presidential decrees)

According to the results of the 2018 survey on the implementation of the UNFPOS, a general statistics law exists in all but for three of the responding countries. In 95 percent of all the responding countries, there are regulations that cover the body responsible for statistics. Regulations in 91 percent of the countries provide rules on the status, mandate and functions of the national statistical office. Approximately 9 in every 10 countries report that statistical regulations cover secrecy, confidentiality and privacy obligations.

In terms of the coverage of the statistical regulations beyond the NSO, only 52 percent of respondents indicated that the law covers the role and responsibilities of statistical services in line ministries, and only 44 percent mentioned the statistical services in the Central Bank. Also, about 2 in every 5 respondents mentioned that statistical laws cover the role and responsibilities of the custodians of administrative data, and a similar proportion of countries mentioned the statistical offices at the sub-national level. However, cases where statistical laws cover roles and responsibilities of statistical research and training centers, private institutions, chambers of commerce or other business networks, or trade unions, are the exception rather than the common practice.

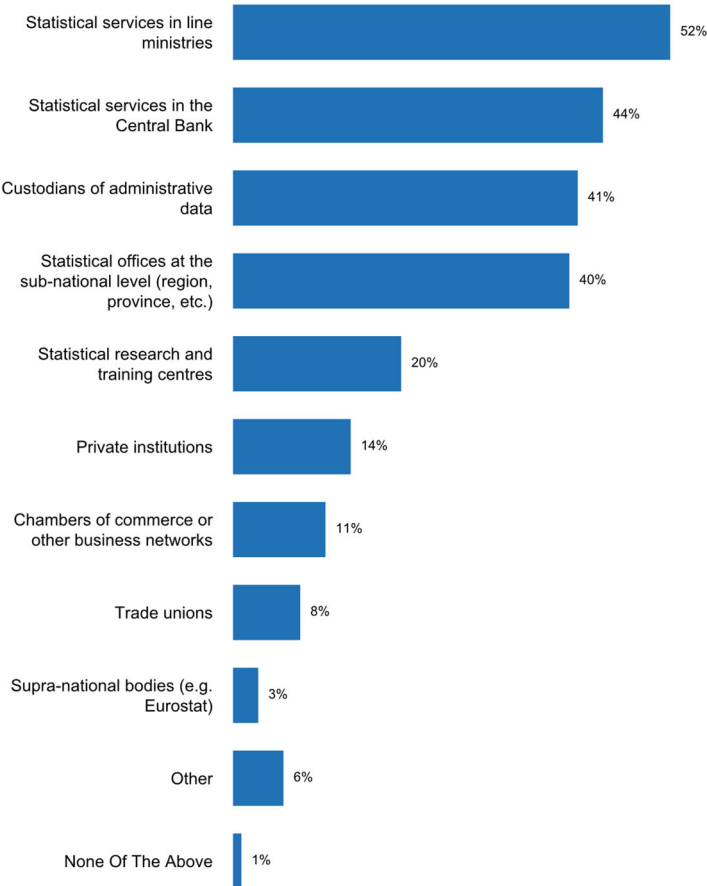


Figure 41. Agencies other than NSO whose role and responsibilities are covered by the statistical law

In most cases, the 2018 survey shows that the head of the national statistical office reports to the Ministry of planning or development (24 percent of the respondents); the Prime Minister, chancellor or President (22 percent); the Ministry of Finance or Comptroller general (13 percent); and Ministry of Economic Affairs, Industry or Trade (12 percent). It is worth noting that only about 5 percent of respondents indicate that the head of the national statistical office reports to the parliament or congress of the country.

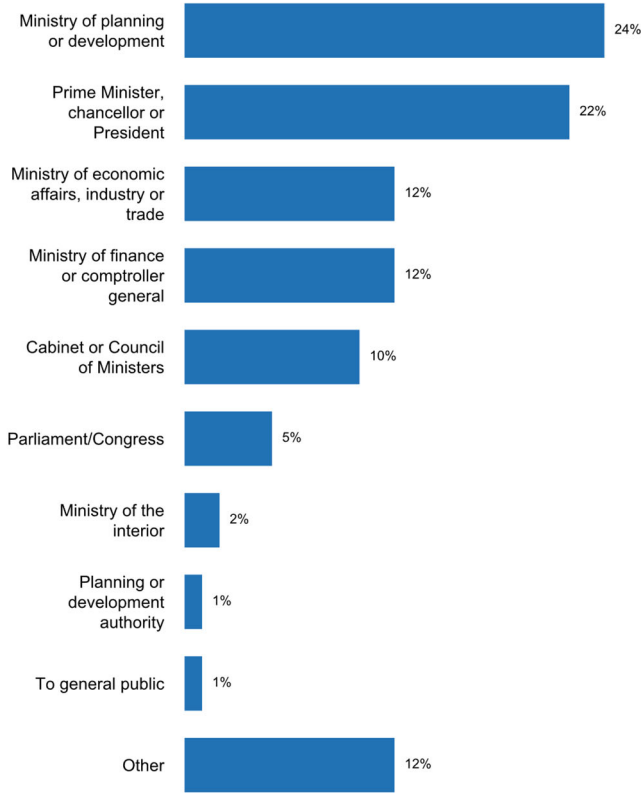


Figure 42. Person or office within the government to which the head of the NSO reports

According to the results of the survey, Freedom of Information or Access to Information laws exist in 82 percent of the countries. However, the national statistical system is not covered in only 73 percent of countries. In addition, 78 percent of the respondents confirmed that regulations describing the functioning of the national statistical office are published on their website.

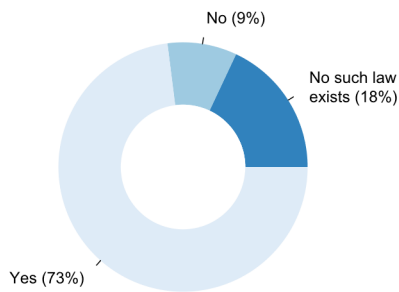


Figure 43. Existence of a Freedom of Information or Access to Information law covering the NSS

In general, the main challenges identified by respondents for the implementation of Principle 7 included: (1) the fact that often the statistical legal framework does not cover all relevant members of the National Statistical System, (2) the need to raise awareness of existing statistical laws across all members of society, and (3) the need to update existing statistical laws in order to respond to new challenges and to be inclusive of all relevant members of the National Statistical System.

In addition, one responded noted that even when the legal framework of the NSS is published, the relevant regulations and administrative guidelines issued by the government may not be published or communicated to the offices concerned.

In those cases where a revision of the national statistical legal framework is underway, various countries mentioned that such revisions are often focused on strengthening the coordination role of the NSO and formalizing the establishment of a national statistical strategy or programme. In this endeavor, various respondents highlighted the use of the generic law on official statistics template initially developed by the UN Economic Commission for Europe¹⁷.

¹⁷ http://www.unecce.org/fileadmin/DAM/stats/publications/2016/ECECESSTAT20163_E.pdf

Principle 8: National Coordination

“Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system ”

Ninety-one out of the 93 national statistical offices reported that at least one other agency in their country produces official statistics on behalf of the government. The two other agencies most frequently identified as producers of official statistics were the statistical services of the Central Bank (90 percent) and the statistical services in line ministries (86 percent). Statistical offices at the sub-national level also have responsibilities in the production of official statistics on behalf of the government in about half of the countries that responded to the questionnaire (47 percent). In addition, public research institutes and statistical research and training centers are producers of official statistics in 24 and 20 percent of the respondents, respectively. Finally, it is worth noting that one of the two respondents that did not identify another agency that produces official statistics in addition to the national statistical office, their statistical law does allow for other institutions to produce official statistics upon request.

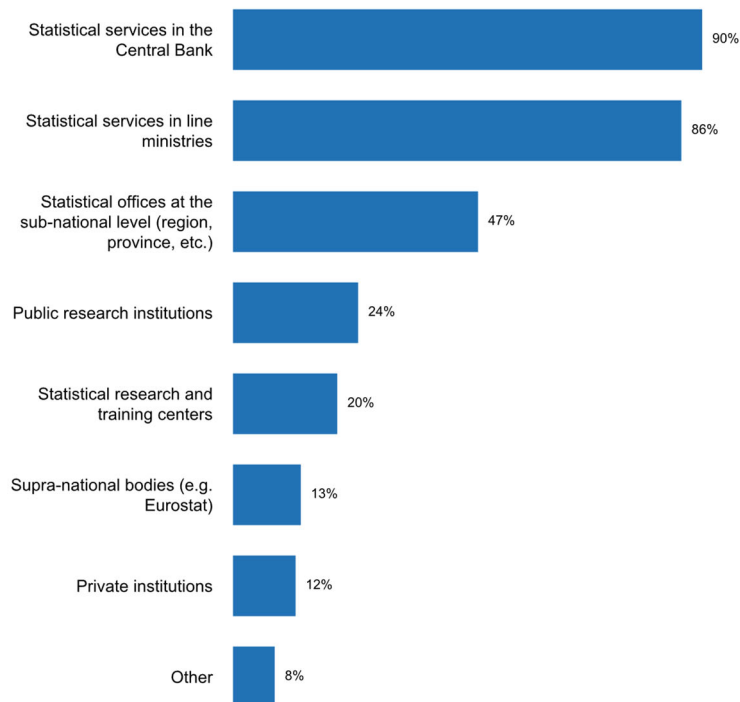


Figure 44. Agencies other than the NSO which produce official statistics on behalf of the government

With respect to the coordination of the production of statistics among members of the National Statistical System, almost 9 in every 10 countries indicated that this is done by meeting in statistical committees, councils, etc. In particular, more than 90 percent of the respondents indicated that producers of official statistics have met at least once during the last five years with 75 percent meeting twice or more per year and 12 percent meeting annually.

Also, most of the respondents (76 and 78 percent, respectively) indicated that they engage in sharing of information and databases or that they sign memorandums of understanding between agencies for the coordination of production of official statistics. The development of joint training programmes is also a relatively frequent mechanism of coordination (63 percent), while little more than half of respondents mentioned the preparation of an annual or multi-annual consolidated program of statistical activities in the country as well as the monitoring of work duplication between agencies. It is also encouraging to note that 45 percent of the countries report joint data collection initiatives. However, in terms of resource integration, only 24 percent of countries report the exchange of staff between agencies, and only 18 percent report the sharing of budgetary resources between statistical agencies.

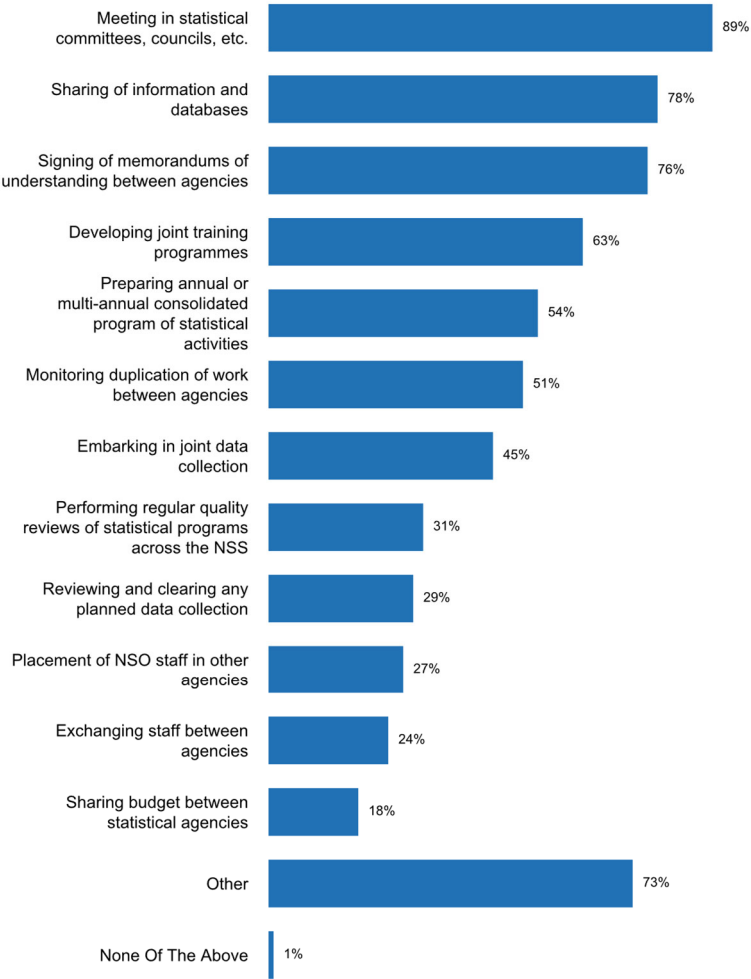


Figure 45. Activities currently being implemented for coordinating the NSS

Based on the results, in countries where national statistical systems have different data producers, only 35 percent reported having a central data portal where the official statistical data are published. For the 62

percent that reported not having a central hub, many stated lack of resources and coordination amongst agencies as the main reasons/challenges. It may also be worth noting that although a central data portal doesn't exist, some respondents mentioned providing direct links to the dissemination platforms of the other agencies.

Coordination of data dissemination practices among members of the National Statistical System is also crucial to achieve consistency the data that is available to users, as well as efficiency in the development and maintenance of dissemination channels. However, only few countries report specific coordination efforts in this regard. For instance, less than one third of the countries report the existence of a unified release calendar across the National Statistical System, and only one in every five respondents indicated the adoption of standardized metadata structures for data dissemination. Similarly, only about one third of respondents indicated the existence of a central data portal where different members of the NSS publish official statistical data for their country.

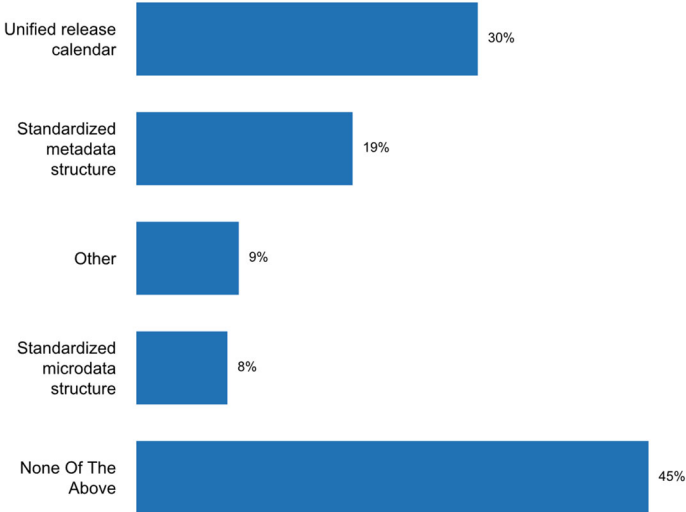


Figure 46. Means employed for coordination of data dissemination across the NSS

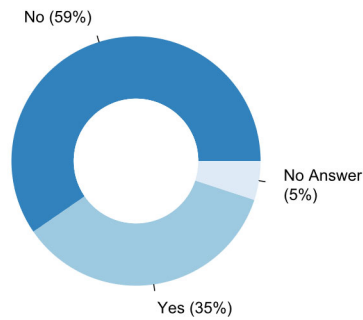


Figure 47. Existence of a central data portal where different members of the NSS publish official statistical data

In general, some of main challenges identified by respondents in the implementation of Principle 8 include: (1) the need to raising awareness among line ministries on the importance of implementing international standards on data compilation and adoption of a common data quality framework; (2) difficulties in mobilizing the resources necessary to support coordination activities through meetings and dedicated staff; (3) the complexity of the statistical system, particularly when there is no national strategy for the development of statistics and when the role and responsibilities of the many agencies involved are not clearly determined by law; (5) difficulties involving senior management from multiple government entities to make joint decisions on issues related to statistical work; and (6) lack of direct means to enforce the implementation of common standards, methods and practices across statistical units of line ministries of sub-national governments. Also, at least one respondent underlined that coordination challenges are compounded when international organizations contact individual members of the National Statistical System without the knowledge of the National Statistical Office.

Principle 9: Use of International Standards

“The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.”

Statistical standards and classifications are often updated to reflect structural changes in the social, economic, and environmental systems measured by official statistics, as well as to incorporate the latest advances in statistical methodology and respond to the growing needs of data users. Whereas National Statistical Offices deal with a vast body of detailed statistical standards and classifications in their day-to-day operations, the 2018 Survey on the implementation of the Fundamental Principles of Official Statistics examined the status of implementation of a key set of international standards.

The System of National Accounts (SNA) is at the core of official economic statistics, providing the conceptual and methodological framework for understanding the economic structure of a country and monitor its economic activity and interlinkages with the global economy. In order keep up to date with economic reality and user needs, the System of National Accounts has been regularly updated, and with its latest two versions being the 2008 SNA and the 1993 SNA. In this connection, 71 percent of the countries indicated that they currently use latest version (either the 2008 SNA, or the European version based on it, the ESA 2010). However, 20 percent of the responding countries indicated that they still apply the 1993 SNA.

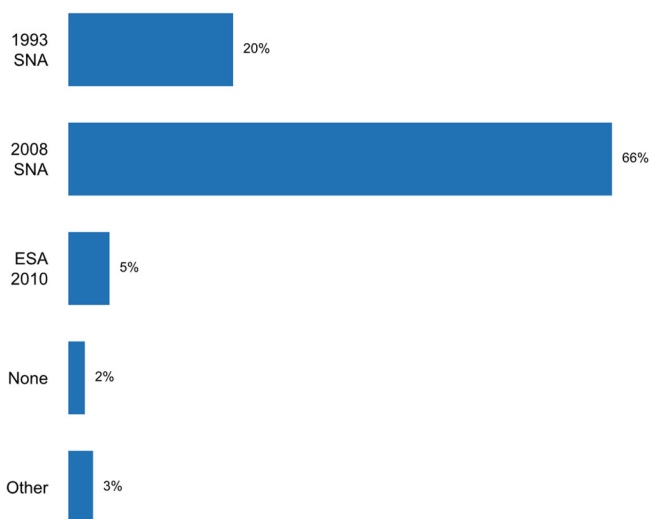


Figure 48. SNA version currently in use

Population and housing censuses are one of the primary sources of data needed for formulating, implementing and monitoring policies and programmes aimed at inclusive socioeconomic development and environmental sustainability. Moreover, they are key source of information for supplying disaggregated data needed for assessing the situation of people by income, sex, age, race, ethnicity, migratory status, disability and geographic location, or other characteristics. Since 1958, the United Nations has issued a series of principles and recommendations for population and housing censuses, which have evolved over time in response to the latest practices and national needs. The last two global

Principles and Recommendations for Population and Housing Censuses were published in 2008 (Revision 2) and in 2017 (Revision 3) in preparation for the 2010 and the 2020 World Population and Housing Census Programmes, respectively. In this regard, the 2018 Survey on the implementation of the UNFPOS showed that only 3 percent of the countries are not implementing the Principles and Recommendations for Population and Housing Censuses in their latest census programme. Seventy-two are implementing it fully, while 25 percent are implementing them partially.

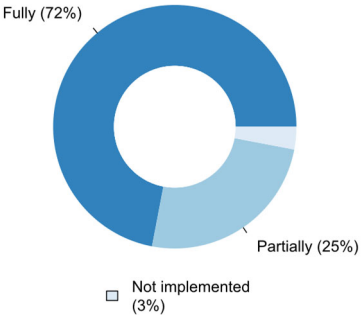


Figure 49. Implementation of Principles and Recommendations for Population and Housing Censuses in latest census programme (Rev. 3 for census undertaken after 2015 or Rev. 2 for census undertaken before 2015)

Official statistics on time-use are an important tool for exploring a wide range of policy concerns, including assessing quality of life or general well-being, analysing division of labour between women and men, improving estimates of all forms of work (paid and unpaid) and estimating household production and its contribution to GDP. The International Classification of Activities for Time-Use Statistics 2016 (ICATUS 2016), endorsed by the UN Statistical Commission in March 2017, provides a set of activity categories that can be utilized in producing meaningful statistics in relation to the broad range of objectives of national time-use studies as well as cross-national and cross-temporal comparative studies on time use. The 2018 Survey on the implementation of UNFPOS shows that 35 percent of the countries do not yet use ICATUS 2016 in collecting and analysing time-use data. Nineteen percent of the national statistical offices use it to guide the collection of time-use data, while 18 percent use it for the dissemination of time-use statistics, regardless of the type of instruments used for data collection, and 14 percent use it as the basis for national classifications of activities for time-use statistics.

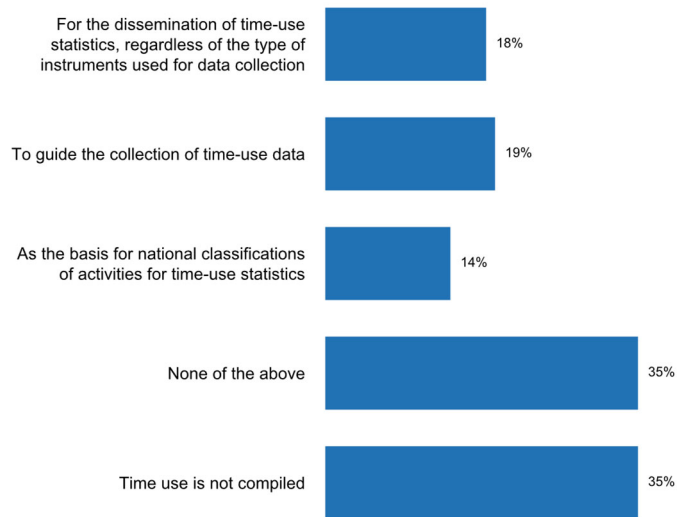


Figure 50. Use of the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016)

The System of Environmental-Economic Accounting (SEEA) is a framework of internationally agreed standard concepts, definitions, classifications, accounting rules and methodologies for producing internationally comparable statistics and accounts that provide a comprehensive view of the interrelationships between the economy and the environment. With respect to the implementation of SEEA by national statistical systems, the results of the 2018 Survey on the implementation of the UNFPOS show that almost one half of respondents (46 percent) have compiled and published at least one Environmental-Economic Account (EEA). Eight percent have compiled but not yet published at least one EEA, and 15 percent have not compiled but have a started or planned a programme. On the other hand, 31 percent of the countries indicated that they do not have a programme on EEA in place at the moment.

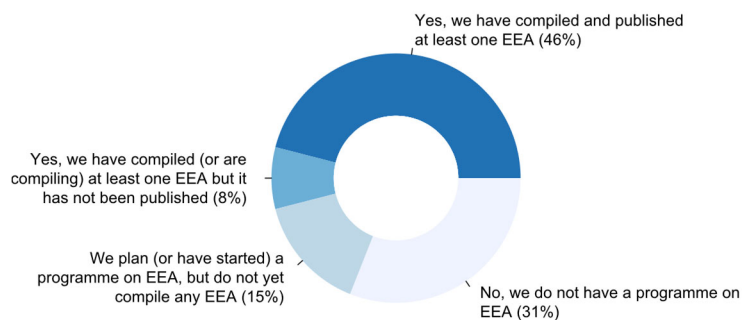


Figure 51. Existence of a programme on Environmental Economic Accounts

The official statistics community has increasingly adopted the Statistical Data and Metadata Exchange (SDMX) standard to support the exchange and dissemination of statistical data and metadata among international organisations and their member countries. Several versions of the technical specifications have been released since 2004, with the latest consolidated version (SDMX 2.1) published in 2013.

According to the 2018 Survey on the implementation of the UNFPOS, 71 percent of the respondents stated that they use SDMX, although almost one-half of these respondents do it only partially (i.e., only in some statistical domains or data sets). Still, 27 percent of countries do not report the use of SDMX in their exchange of statistical data and metadata, while 2 percent did not know if SDMX was currently being used in their country. At the regional, SDMX is being used at least partially by 94 percent of European countries and 77 percent of countries in the Americas; in contrast, more than one-half of respondents in Asia (54 percent) and 2 in every five countries in Africa report that they are not using SDMX at the moment. Some countries indicated the use of SDMX in the dissemination of IMF data indicators in the context of the enhanced General Data Dissemination System (E-GDDS).¹⁸

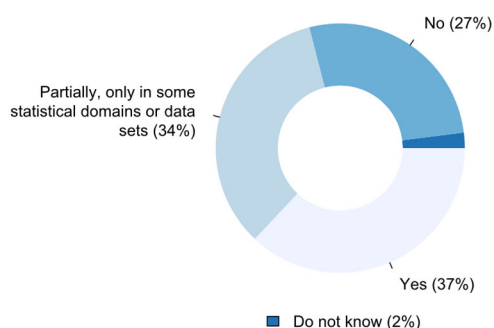


Figure 52. SDMX currently being used

Some of the main challenges identified by respondents in the implementation of Principle 9 include: (1) the need to strengthen NSO capacity to comply with the international standards, (2) lack of resources and technical knowledge, which may cause delays implementing the latest versions of international statistical classifications and standards; (2) the need to develop and implement an inventory of international standards that is applicable to all NSS entities.

One country also underlined the importance of participating in the expert groups where international statistical standards are being developed and maintained, in order to generate more knowledge that can be applied in the modernization process of the National Statistical System.

¹⁸ See <https://dsbb.imf.org/>

Principle 10: International Cooperation

“Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.”

International cooperation is key to improve the capacity of all countries to produce and publish internationally comparable and high-quality official statistics, and in particular to strengthen the ability of national statistical systems in developing countries to respond to the increasing demands from users of official statistics at all levels. In this context, the United Nations General Assembly, in its resolution 69/313 of 27 July 2015 endorsing the Addis Ababa Action Agenda of the Third International Conference on Financing for Development,¹⁹ indicated the determination of Member States to enhance capacity-building support to developing countries and to provide international cooperation, including through technical and financial support, to further strengthen the capacity of national statistical authorities and bureaux, with a view to increasing their ability to deliver high-quality, timely, reliable and disaggregated data.

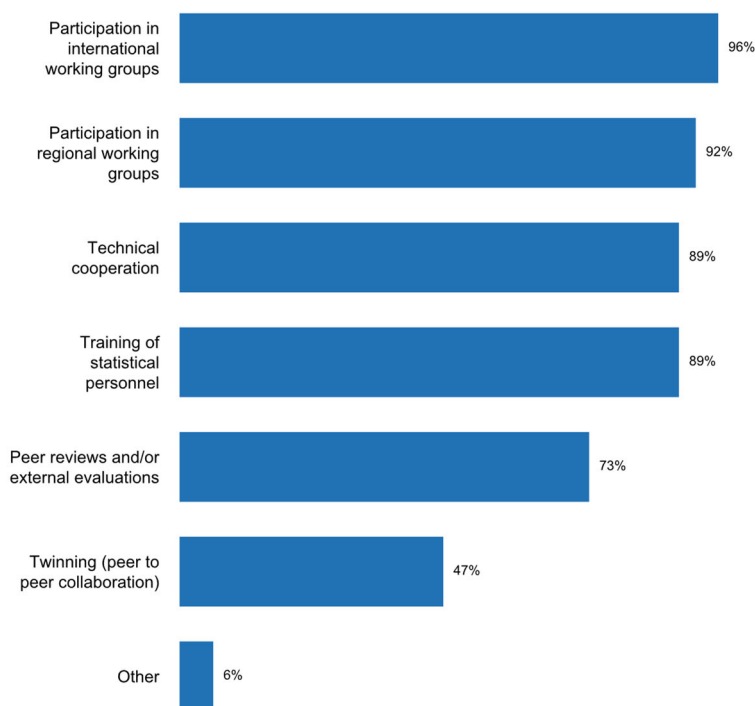


Figure 53. Types of international cooperation activities the NSS engages in

All respondents to the 2018 Questionnaire on the implementation of the UNFPOS reported being engaged in international cooperation activities. Approximately 96 percent participate in international working groups, and 92 percent are in working groups at the regional level. Most national statistical offices also

¹⁹ http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/313

engage in technical cooperation activities (89 percent) and in training of statistical personnel through international cooperation (also 89 percent). Seventy-three percent participate in peer reviews and/or external evaluations, and 47 percent report the use of ‘twinning’ (peer to peer collaboration) arrangements with international partners.

According to the survey, 65 percent of all the respondents receive support from donors to strengthen their statistical capacity. This underlines the importance of coordination of statistical capacity building activities among donors, with a view to avoid duplication of efforts and promote the most efficient use of technical and financial resources.

However, only a little over half (53 percent) among those countries receiving donor support for statistics stated that there is a donor coordination mechanism in place or a basket fund for statistics. As a consequence, in many cases there is a high risk of individual donors funding specific programs without taking into account other statistical capacity building activities in a country. Moreover, this lack of coordination may often lead to NSOs having to compete with other members of the National Statistical System to obtain resources to support their annual activities. In cases where all external donor funding (including other activities other than statistics) is coordinated by another government entity, such as the Ministry of Finance or Economic Development, this may mean additional challenges to mobilize support for specific statistical activities.

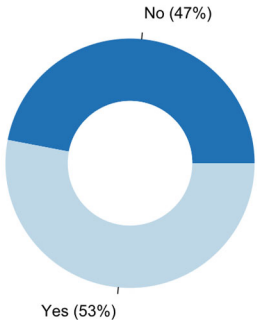


Figure 54. Existence of donor coordination mechanisms or basket funds for statistics (among countries receiving support from donors)

In general, some other challenges identified by countries regarding the implementation of Principle 10, include: (1) Situations where donors want to achieve what they think it is best for the countries, not necessarily taking into account national priorities; (2) the need to make sure that when donors contribute to statistical activities undertaken by line ministries, they abide by the UNFPOS; (3) challenges mobilizing financial contributions to regional technical assistance centers which can provide technical missions upon request; and (4) need to improve the communication of international cooperation at the level of other entities of the NSS to know what is taking place with other institutions.

IV. Open Data

In its preamble, the UNFPOS recognize the critical role of high-quality official statistical information in analysis and informed policy decision-making in support of sustainable development, peace and security, as well as for mutual knowledge and trade among the States and peoples of an increasingly connected world, demanding openness and transparency. In this context, an increasing number of countries recognize the value of open access to, and subsequent use of, official statistics.

Members of national statistical systems are increasingly expected to report regularly to the public on the progress and impact of open data initiatives, and to promote the open release of official statistics. Accordingly, in the 2018 survey on the implementation of the UNFPOS, 60 percent of all respondents from National Statistical Offices and/or National Statistical Systems report that they participate in or contribute to organizations or partnerships whose purpose is to promote open data.

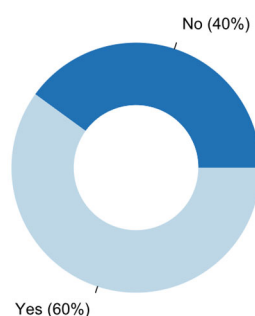


Figure 55. Proportion of NSOs that participate in or contributes to organizations or partnerships whose purpose is to promote open data

V. Main conclusions

Although the 2018 survey continues to show high level of awareness regarding the FPOS within National Statistical Offices, there is still a need to improve the understanding and appreciation of the principles among other members of National Statistical Systems, and in particular among those line ministries or governmental departments to which the NSO reports. Some countries also emphasized the lack of knowledge about Principle 2 on professional standards, scientific principles and professional ethics for those working on the production of statistics among line ministries, and noted the need to strengthen the integration of the FPOS in the legal framework.

The survey also shed light on the activities carried out by NSOs to engage with users, which focus mostly on obtaining feedback through surveys, workshops, and web traffic analysis. However, there is more work to be done with respect to keeping users informed about the quality of statistical data published by National Statistical Offices. Also, the survey identified a clear need to strengthen data literacy among users, for instance, through the publication of guides that help users interpret statistical data and more proactive efforts to avoid the erroneous interpretation and misuse of statistics. The survey indicates that

sample surveys, administrative data, and censuses are the most common sources of data for the production of official statistics and that the use of innovative sources of data, such as big data and citizen-generated data, is still very limited.

There is widespread awareness of the importance of protecting the confidentiality of personally identifiable information, and most countries implement anonymization techniques to reduce the risk of statistical disclosure. However, in many cases these efforts are still limited in scope.

In most countries, there is a statistical legal framework in place establishing the mandate for the compilation of official statistics and the functions of the National Statistical Office, as well as the duty to protect confidentiality and to respond to statistical enquiries. There is, however, more work to be done to enable statistical offices to access administrative sources data, and to clarify the role and responsibilities of actors other than the NSO within the National Statistical System.

Coordination of both data production and data dissemination among members of the national statistical system, and between national and international statistical agencies, is still assessed to be insufficient by most respondents. Although in most countries there are statistical committees or councils that regularly meet in order to improve coordination, the sharing of resources and the implementation of joint data collection activities are not very common. Also, coordination of data dissemination, for instance, through common data portals, is lacking in most countries.

The level of implementation of international statistical standards is very heterogeneous across countries and regions. For instance, while most countries worldwide have already implemented the 2008 System of National Accounts (2008 SNA), a majority of countries in Africa are still using the 1993 SNA. Relatively new standards, such as the International Classification of Activities for Time Use Statistics 2016, or more technically involved standards, such as SMDX, are even less widespread, and countries have cited lack of technical knowledge and resources as the main factors causing delays in implementing them.

Finally, the 2018 survey shows that most countries value international cooperation and dedicate substantial time and efforts to participate in international and regional working groups, as well as in technical cooperation and training activities. However, the survey results also underscore the need to strengthen coordination mechanisms among donors that provide support for statistical activities, and to make sure that such support is in alignment with FPOS, particularly when it involves line ministries in the recipient country.

With respect to open data and interoperability, it is worth reiterating that a large majority of countries still provides data downloads in proprietary formats for data analysis software, while the dissemination in open, machine-readable formats or through online APIs is not as common. Also, while only few countries provide access to data for a fee (implying that most data is disseminated free of charge), the conditions for access and re-distribution of statistical data by users vary significantly across countries.

VI. Annex with survey results by region (in percent)

				Africa	Americas	Asia	Europe	Oceania	TOTAL
Q00.1	Answering on behalf of		National Statistical Office (NSO)	88	77	92	86	75	86
			National Statistical System (NSS)	6	15	8	14	25	12
			Both NSO & NSS		8				1
			Senior Statistician	6					1
				Africa	Americas	Asia	Europe	Oceania	TOTAL
Q00.2	Awareness of existence UNFPOS	<i>NSO / Chief Statistician</i>	Yes	100	100	100	100	100	100
		<i>Heads/Senior managers of other agencies of NSS</i>	Yes	76	54	79	77	75	74
			N/A	12	15	13	17		14
			No	12	31	8	6	25	12
		<i>Line ministry / Department to which NSO reports</i>	Yes	71	46	75	43	50	57
			N/A	18	31	25	37	50	30
			No	12	23		20		13
				Africa	Americas	Asia	Europe	Oceania	TOTAL
Q00.3	Extent to which UNFPOS are integrated into the NSS institutional framework		Fully integrated in statistical law or legal framework	82	31	63	63	50	61
			Partially integrated in statistical law or legal framework	18	54	33	14	50	27
			Not integrated in statistical law or legal framework		8		14		6
			Other		8	4	9		5

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q00.4	How UNFPOS are communicated to raise awareness at the national level	UNFPOS are mentioned in reports, strategy and policy papers, publications	88	85	75	80	100	82
		UNFPOS are discussed in meetings and events, such as the World Statistics Day	71	92	79	46	75	67
		None of the above				6		2
		Other	6	8		9		5
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.1	Source of feedback from users on statistical products and services (e.g. needs, satisfaction) sought in the past five years	User workshops/ stakeholder coordination meetings	76	77	88	83	100	83
		User satisfaction surveys	53	69	71	94	75	76
		Website traffic analysis	41	77	54	89	75	69
		User council or organized user group	35	38	54	86	50	60
		Independent review(s) of key stakeholders' satisfaction	35	31	38	31	50	34
		Other	12	31	8	11		13
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.1a*	Mandate of user council or organized user group	Strategic advice on statistical policy and priorities	67	80	92	70	50	75
		Coordination of statistical activities	100	80	85	50	50	66
		Technical advice, in general or on specific statistical programmes and topics	67	60	77	50	100	61
		Other	17	20	0	10	0	9

* Percentage calculated over total number of respondents that have a user council or organized user group

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.1b*	Stakeholders represented in user council or organized user group in the past five years	Government employees (administrative staff, technical staff)	100	100	100	93	100	96
		Academia and professional associations (e.g. statistical society)	100	80	85	97	100	93
		Chamber of commerce or other business networks	100	60	62	90	50	80
		Policy-makers (ministers, politicians)	100	80	85	63	100	75
		Civil society organizations (e.g., NGOs)	83	60	62	63	100	66
		Mass media	83	40	46	50	0	50
		Workers' unions	67	20	15	60	0	45
		International organizations, including financial institutions	83	60	54	23	50	41
		General public	50	40	54	27	50	38
Other	33	20	8	27	0	21		
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.2	Planning instruments currently being used by the NSS/NSO	Annual or multiannual work programme	76	77	88	97	100	88
		National Strategy for the Development of Statistics (NSDS)	76	46	63	57	50	60
		Sectoral Statistical Plans	29	23	29	29		27
		Sub-national Statistical Plans	6	8	8	11		9
		Other	6	15			25	4

* Percentage calculated over total number of respondents that have a user council or organized user group

				Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.2a*	Time span of current NSDS	Starting year	2011	0	0	7	0	50	4
			2013	17	0	0	20	0	11
			2014	8	0	0	5	0	4
			2015	17	17	14	10	0	13
			2016	25	17	21	15	0	19
			2017	25	33	21	10	0	19
			2018	8	33	29	30	50	26
			2019	0	0	7	10	0	6
			Ending year	2018	0	0	7	0	0
	2019	17		0	0	10	0	7	
	2020	42		33	29	50	0	39	
	2021	8		0	21	5	50	11	
	2022	25		50	21	30	0	28	
	2023	0		0	14	5	0	6	
	2025	8		0	7	0	0	4	
2027	0	0	0	0	50	2			
2040	0	17	0	0	0	2			

* Percentage calculated over total number of respondents that have an NSDS currently in place

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.4	Measures currently in place for disseminating statistics	Using various dissemination media, such as print publications, online pdf files, etc.	94	100	100	100	75	98
		Appointment of a specialized unit responsible for dissemination at the NSO	88	92	92	94	50	90
		Providing user support via e-mail, written correspondence or telephone	71	92	88	100	100	90
		Providing online data for exploration by general users (interactive online database interfaces, fully formatted excel files)	59	92	88	91	75	84
		Publishing an advanced release calendar, announcing when various statistics will be published	59	92	75	100	50	83
		Providing data downloads in proprietary formats for data analysis software (e.g, Excel, Access, Stata, SAS, SPSS)	47	69	75	86	100	74
		Publishing catalogues of available publications, documents, and other services	71	69	71	77	75	73
		Pursuing a dissemination/communications strategy	76	69	58	80	50	71
		Providing data downloads in open machine-readable formats (such as CSV, XML, JSON)	24	54	46	83	75	58
		Providing online access to data via APIs	24	38	21	57	25	38
		Other		15		3		3

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.4b*	Time span of the calendar	1-3 months	0	0	17	0	0	4
		4-12 months	90	83	67	76	100	78
		13-24 months	10	8	6	15	0	11
		More than 2 years	0	0	11	6	0	5
		Other	0	8	0	3	0	3
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.4c*	Frequency of adjustments to the release dates specified in the calendar	1	40	58	44	50	0	47
		2	10	25	22	26	50	24
		3	50	17	28	21	50	26
		4	0	0	6	3	0	3
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.6	Groups of users given access to statistics prior to their public release in the past five years	Government departments/policy-makers	41	69	42	34	75	44
		Media	6		21	17	25	14
		International organizations, including IFIs	18		8	6	25	9
		Chamber of commerce or other business networks	6		8			3
		Workers' unions	6		4			2
		None of the above	53	15	50	57	25	47
		Other	18	38	4	14		15
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.6a***	If any user has access to a pre-release, is this publicly identified?	No	50	36	50	7	33	33
		Yes, in some cases	38	0	25	7	0	14
		Yes, always	13	64	25	87	67	53

* Percentage calculated over total number of repondents that have a release calendar

** Percentage calculated over total number of respondents that provide pre-release access to some users

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.7a	Conditions for online access to aggregates and/or microdata	Under publicly available terms of use	35	77	58	66	75	60
		After signing a licensing agreement	6	31	33	34	50	29
		For a fee	12	8	33	23	50	23
		After registration on the website	18	15	21	17	25	18
		Other	41	46	17	23		27
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.7b	Conditions for re-distribution of anonymized microdata data and aggregates	Under condition of attribution of the source	53	54	67	57	50	58
		For non-commercial purposes	59	46	42	31	25	41
		For commercial purposes	24	31	13	20		19
		For a fee	18	8	13	20		15
		Other	24	46	8	26	25	24
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q01.7c	Conditions for distribution of derivative works based on the aggregates and/or microdata that are available online	Under condition of attribution of the source	41	62	71	63	75	61
		For non-commercial purposes	65	46	42	37		43
		For commercial purposes	12	31	8	23		17
		For a fee	18	8	8	11		11
		Other	12	31	8	9		12
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.1a	Modalities of communication between chief statistician and policy-making authorities	Meetings with Ministers/deputy Ministers	76	100	88	83	100	86
		Attending Upper/lower house hearings	35	38	42	46	50	42
		Other	12	15		20	25	13

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.2	Existence of clear rules for appointment and dismissal of the head of NSO	No	24	23	17	6		14
		Yes	76	77	83	94	100	86
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.2a	Aspects regulated in rules for appointment and dismissal of the head of NSO	Qualifications	53	62	75	74	75	69
		Selection procedure	35	62	71	83	75	68
		Length of appointment	41	46	54	63	100	56
		Reasons for dismissal	29	46	33	66	100	49
		Limit of terms in office	41	38	33	31	50	35
		Age limit	18	23	25	26	25	24
		None of the above	6	8				2
Other	6	15		14		9		
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.3	Inquiries (e.g. by the media, the academia, advocacy groups) on procedure for selecting a head of the NSO in the past five years	No	88	92	92	97	100	94
		Yes	12	8	8	3		6

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.4	How NSS sought external endorsement of its methodologies and survey designs in the past five years	By using internationally recommended standards and methods	100	92	100	91	100	96
		Peer or expert reviews from international committees, national committees, professional associations, etc.	59	54	58	86	50	68
		By fully disclosing the applied methodology(ies)	47	77	63	63	100	63
		By publishing revision policy(ies) and other procedural manuals	35	62	50	77	50	59
		By authorizing statistical or methodological councils to take formal decisions on the methodology	18		46	40	50	32
		External monitoring or auditing of the practices of the NSS (from advocacy groups or ombudsman)	18	15	25	20	25	20
		None of the above		8		3		2
		Other		23	4	11		9

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.5	Measures currently being undertaken for coordinating standards and classifications across the NSS	The NSO compiles, publishes and promotes the consistent use of standards and classifications	76	85	92	86	100	86
		The NSO monitors compliance with classifications and standards	47	54	71	57	25	57
		Statistical legislation establishes common standards and/or specifies which agency is responsible for doing so	65	38	63	54	50	56
		The NSO reviews and approves questionnaires and/or methodologies	53	38	63	40	50	48
		Committees for specific fields are responsible for the coordination of standards	41	31	50	31	75	40
		None of the above	6	8				2
		Other		15	4	9		6
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.6	Document(s) providing guidance on professional ethics for staff	Statistical law	100	85	83	83	75	86
		Internal regulations and staff rules	76	92	92	74	75	82
		Codes of conduct for civil servants	59	77	71	80	100	74
		Specific codes for statistical personnel	41	54	25	51	50	43
		Other	6	15	13	11		11

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.7	Ways in which staff have been informed and reminded of existing codes of conduct, in the past five years	Orientation and training programmes and seminars	82	85	71	71	100	76
		Handbooks, booklets, posters and the Intranet	71	77	71	60	50	67
		Swearing in of new staff and receipt of the relevant laws and guidelines	41	62	58	69	75	60
		None of the above	6					1
		Other	12	31	4	9		11
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q02.9_Q2.10	Training concerning open data, data privacy or access to information policies and principles	NSO	82	85	88	100	100	91
		Other agencies in the NSS	59	69	67	77	50	69
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.1	Dissemination channels through which the NSS/NSO makes its data available to the public?	NSO Website	100	100	96	97	100	98
		Printed material	94	77	88	86	100	87
		Data portal	76	31	67	63	75	62
		Other official NSS website(s)	59	62	63	57	25	58
		CD/DVD	35	31	67	37	50	44
		Other	18	38	29	26		26
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.2	How users are informed of the quality of published data	Via methodological notes	76	92	83	89	100	86
		As part of metadata provided with the data	71	77	88	86	75	82
		Via quality reports	24	38	33	89	75	55
		In meetings to address data quality	65	46	63	43	100	55
		None of the above	6	8	4			3
		Other		15	4	6	25	6

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.3	Types of explanatory texts that accompany published data	Metadata associated with each dataset	65	77	92	89	75	83
		Notifications of major methodological changes	65	85	71	89	100	80
		Erratum or any other form of error correction	65	62	38	74	75	61
		Manuals and protocols used by the NSS	47	54	46	57	75	53
		Guides on interpretation of data used and estimates	29	62	58	40	75	47
		Other	6	8	13	9		9
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.3b	Information included in explanatory texts that accompany published data	Methodology	59	77	83	89	75	80
		Concepts and definitions	65	77	79	86	75	78
		Classifications and standards	59	77	79	89	75	78
		Data collection procedures	59	77	75	86	75	76
		Quality assessments	35	54	42	71	25	53
		Other	6	23	13	9		11

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.3d	Types of manuals and protocols made available with published data	Manuals on concepts and definitions	41	46	42	34	50	40
		Manuals on data collection, editing, processing, analysis, visualization, etc.	35	46	33	37	25	37
		Rules and guidelines for revisions and errors	18	31	17	49	50	32
		Protocols for access to anonymized microdata	18	38	17	34	50	28
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q03.4	Data platform(s) currently used by NSS/NSO to disseminate statistical data	Custom-developed data platform	47	54	54	31	50	44
		ArcGIS	35	23	42	29		31
		Eurostat web portal			13	63		27
		OECD.Stat	12	15	13	40	50	25
		NADA	47	31	29		25	22
		DevInfo	35	15	25	9	25	19
		Country STAT	35		21	11		16
		African Information Highway	71					13
		US/UK open source SDGs National Reporting Platform	6	15	8	11		10
		Prognoz (Open Data Portal) & Knoema	35		8			9
		IMIS	29					5
		Other	47	46	58	60	75	56
		None Of The Above			13			3

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q04.1	The NSO/NSS has reacted to erroneous interpretation and misuse of statistics during the past five years	No	47		33	9	50	23
		Yes	53	100	67	91	50	77
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q04.2	How NSO/NSS reacted to erroneous interpretations and misuse of statistics during the past five years	Sending letters to the editors of newspapers or advertorials	35	77	58	71	25	60
		Publishing articles on own webpage or posting on social media	41	69	42	74	25	57
		Holding press conferences or issuing press releases	47	69	42	54	50	52
		Other	12	31	13	26		19
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q04.2a	Types of misuse identified in the past two years?	Misreporting of findings	35	92	54	71	50	62
		Overgeneralizations	24	38	33	49		37
		Selective reporting of findings (omitting key findings)	12	38	29	43		31
		Suggesting false causality	6	23	13	57		29
		Misleading graphs and data visualization	12	15	13	34		20
		Leading questions	12	8	13	14	25	13
		None of the above		8	8			3
		Other		31	4			5

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q04.2b	Number of times the NSO/NSS commented on erroneous interpretation and misuse of statistics in the past five years	Once over the five-year period	12	8	8	6		8
		Twice over the five-year period		23	8	17	25	13
		Once per year	12	23	17	11		14
		Twice or more per year	24	31	25	51	25	35
		None of the above		15	4	3		4
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q04.3	Activities carried out by the NSO/NSS to educate data users in the past five years, including the media	Press conferences or press releases with specific contacts for questions	59	92	88	91	100	85
		Use of social media (including publishing videos)	76	92	79	89	75	84
		Participation in external events, such as conferences, book fairs, etc.	94	77	75	86	100	84
		Appearance of senior management (Director General, Chief Statistician, etc.) in mass media (TV, radio, print)	88	92	75	80	75	82
		Publications and booklets tailored for specific groups	65	77	67	69	50	68
		Awareness campaigns	59	62	58	51	50	56
		Seminars -including e-learning-, live chat sessions, podcasts	53	38	42	69	75	55
		Specific sections for different types of users (e.g. students) on the website	29	54	46	49	50	45
		None of the above				3		1
Other		8	13	9		8		

		Africa	Americas	Asia	Europe	Oceania	TOTAL	
Q04.3a	Number of times "seminars, participation in external events, and/or appearance in mass media" took place to educate users in the past five years	Once over the five-year period	6		4		2	
		Twice over the five-year period		8		3	2	
		Once per year	12	23	8	9	25	12
		Twice or more per year	76	54	75	77	75	73
		Other		15		6		4
		Africa	Americas	Asia	Europe	Oceania	TOTAL	
Q05.1	Sources of data currently used by the NSO	Sample surveys	100	100	100	97	100	99
		Administrative data	94	92	100	100	100	98
		Censuses	94	100	92	91	100	94
		Web scrapped data	6	38	13	69	50	38
		Privately owned datasets (such as call detail records)	12	23	17	49	75	31
		Satellite imagery	29	54	21	23	50	29
		Citizen generated data (from CSOs)	6		4	9	25	6
		Other		23		6		5

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.1a	How administrative records are currently used	As a direct source of data (without linking or drawing of inferences)	82	85	92	97	100	91
		As a complement to survey or census data, for correcting input errors, imputing, calibrating sample weights, etc.	71	77	67	94	75	80
		As a means for estimation (combining multiple records to derive variables)	53	69	75	94	100	78
		As sampling frames	59	46	63	89	75	70
		As a supplement to survey or census data, adding information to what was collected in the interviews	47	54	54	89	75	67
		As a means to assess non-response to surveys	29	31	46	66	50	48
		Other		15		3	25	4
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.1b	Actions are being taken for adapting administrative records to statistical purposes	Cooperation with custodians of administrative data at the stage of design/modernization of information systems	76	69	92	89	100	85
		Providing advice to the custodians of administrative data for amending the composition of data and classification	65	77	92	80	75	80
		Feedback with custodians of administrative data when errors are found	76	77	58	74	100	72
		Training personnel of the custodians of administrative data	53	54	63	20	100	45
		None of the above		8	4			2
		Other		8	4	3		3

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.1c*	How the NSS accesses and uses big data or citizen-generated data	There are specific rules of access and confidentiality measures to treat these datasets	60	88	78	58	100	69
		The data provider (whether a CSO or private institution) does not contribute to methodological decisions regarding the use of the data	20	63	33	62	67	53
		The NSS has a contract with the data provider	20	25	56	54	67	47
		The private provider of data (e.g. mobile phone operator) has been selected after weighing alternatives	0	50	56	38	67	41
		Consumers/citizens are informed that their data is being used for compiling official statistics	60	25	44	31	67	37
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.2	Measures taken to ensure timely release of survey results and/or statistical publications/bulletins	Monitoring the timeliness of publications against the release calendar	76	100	83	97	75	89
		Using new technologies for reducing processing times	94	92	75	66	100	78
		Meeting with data providers to agree on deadlines	47	62	75	66	100	66
		Using standardized dissemination protocols, such as Special Data Dissemination Standard	59	62	58	66	25	60
		Releasing preliminary data to users	53	62	58	63	50	59
		Using staff overtime or hiring temporary staff	53	77	75	34	100	57
		Improving or changing methodologies, such as flash estimates	41	31	50	63	25	49
		Other	6			3		2

* Percentage calculated over total responses indicating the use of web scrapped data, satellite imagery or privately-owned datasets.

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.3	Quality management framework(s) currently applied by the NSO	Data Quality Assessment Framework	65	69	63	20	25	46
		European Statistical System Quality Assurance Framework	6	15	29	86		43
		General Data Dissemination System	65	46	50	17		38
		Total Quality Management	6	15	21	37		23
		ISO EN 9001		15	21	14		13
		Other	88	100	96	97	100	96
		None Of The Above	12	8	4		50	6
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.3a	Aspects considered in the quality management framework	Monitoring of production processes, including targets (e.g. number of records failing validation checks)	53	92	71	83	50	74
		Monitoring of outputs (including after they have been published)	35	77	75	74	50	67
		Training programme for staff	47	77	71	71	50	67
		Quality management responsibilities (including assignment of tasks to specific unit(s) or position(s))	41	69	63	80	50	66
		Revisions analysis (e.g. trade-offs between accuracy and timeliness of products)	41	77	54	66	50	59
		External reviews	29	46	25	49	50	39
		Other		15		11	25	8

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q05.4	Measure(s) being applied to reduce respondent burden	Simplifying questionnaires and/or prefilling them	65	77	71	91	75	78
		Repurposing administrative records and other data sources (e.g. big data) for statistical use	24	54	71	97	75	70
		Having integrated surveys and/or coordinating surveys between government agencies	82	62	67	63	75	68
		Reducing sample sizes and/or innovating on sampling techniques (for example, crowdsourcing)	24	23	50	63	75	47
		Producing projections and estimates	41	38	50	51	50	47
		Other		8	4	11		6
		None of the Above		15			25	3
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q06.1a	Confidentiality provision in the laws applies to...	NSO	12	46	29	29	50	29
		NSS	88	54	71	71	50	71
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q06.2	Aspects considered in the confidentiality policy of the NSO	Confidentiality agreement for staff, including penalties	88	100	79	91	75	88
		Procedures for granting access to microdata	59	85	83	89	75	81
		Training of staff on protecting individual data	71	69	88	86	75	81
		Procedures for storing and destroying individual records	35	62	67	86	75	68
		Checks before releasing micro-data	35	62	75	77	75	67
		Obligation to inform respondents about uses of data	65	69	54	74	75	67
		Contracts with non-staff who access microdata, including penalties	35	62	54	83	75	63
		Research and innovation on confidentiality	18	46	21	40	75	33
Other		8			25	2		

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q06.3	Practices being implemented to anonymize statistical data	Removing individual names of persons or enterprises in databases	88	92	92	91	100	91
		Suppression of information that allows for re-identification of respondents	88	92	75	89	50	84
		Anonymizing microdata released for research purposes	59	92	63	91	50	76
		Manually checking data prepared for dissemination	53	62	67	77	75	68
		Applying confidentiality checks with specialized software	35	62	54	69	50	57
		Having specific authorities scrutinize applications for accessing confidential data		15	33	43	25	28
		Other		15		11		6
		None Of The Above			4	3		2
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q06.4	Circumstances under which identifiable individual data can be disclosed to third parties	When the individual /enterprise consented	41	46	25	60	100	47
		When exchanging data with other statistical offices or agencies in the country	12		8	40		19
		When a court of law issues a request	24	8	17	11	50	16
		When working together with supranational statistical organizations, such as Eurostat	12		4	26		13
		In cases of emergency, such as a public health crisis	12		8	3	25	6
		When the High Statistical Council agrees	18	8				4
		When requested by a federal institution	6		4		25	3
		Other		8	4	20		10
None of the Above	29	38	38	17		27		

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.1	Existence of a general statistics law in the country	No		8	8			3
		Yes	100	92	92	100	100	97
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.2	Aspects of the NSS covered by regulations (e.g. Statistical Law, presidential decrees)	The body responsible for statistics and its responsibilities	100	92	92	94	100	95
		The status, mandate and functions of the NSO	88	100	83	94	100	91
		Secrecy, confidentiality and privacy obligations (including sanctions for non-compliance)	94	100	79	91	100	90
		Sanctions for not responding to mandatory statistical enquiries	100	92	63	94	75	86
		The coordination of statistical activities across government	100	85	75	80	100	84
		The role and status of the chief statistician	88	77	75	86	100	83
		The definition of official statistics	94	77	75	83	75	82
		Access to administrative data	82	69	63	94	75	80
		The role and membership of the national statistical council	100	69	54	74	50	72
		The role and the responsibilities of agencies other than the NSO	76	46	75	71	75	70
		The staff of the NSO	82	69	63	66	75	69
		The matters to be covered in the statistical work program	53	69	58	77	75	67
		Participation in international statistical activities	76	54	50	77	25	65
		Presumption of publication and the acceptable conditions for not publishing data collected	47	23	29	49	75	41
Other	6	15	4	3		5		

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.2a	Agencies other than NSO whose role and responsibilities are covered by the law	Statistical services in line ministries	76	31	54	46	50	52
		Statistical services in the Central Bank	65	23	42	49		44
		Custodians of administrative data	41	23	50	40	50	41
		Statistical offices at the sub-national level (region, province, etc.)	47	31	54	31	25	40
		Statistical research and training centres	41	23	29	3	25	20
		Private institutions	35	8	21	3		14
		Chambers of commerce or other business networks	18	8	21	3		11
		Trade unions	18		17			8
		Supra-national bodies (e.g. Eurostat)	6		4	3		3
		Other		8	4	9	25	6
	None Of The Above				3		1	
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.3	How the NSO has encouraged respondents to answer surveys during the past five years	By launching awareness campaigns prior to censuses or large surveys	100	85	92	80	75	87
		By sending pre-announcement letters	71	77	75	94	75	82
		By providing an explanatory text on the front page of the survey	82	69	75	89	75	81
		By requesting informed consent	35	46	29	46	50	40
		By applying fines for not responding	29	8	29	57	50	38
		By declaring the census day national holiday	12	8	13			6
		Other		23	13	17		13

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.4	Person/office within the government to whom the head of the NSO reports	Ministry of planning or development	65	15	29	3	25	24
		Prime Minister, chancellor or President		23	25	31		22
		Ministry of economic affairs, industry or trade		15	13	17		12
		Ministry of finance or comptroller general	24	8	4	14		12
		Cabinet or Council of Ministers	12		13	9	25	10
		Parliament/Congress		8	4	9		5
		Ministry of the interior				6		2
		Planning or development authority			4			1
		To general public			4			1
	Other		31	4	11	50	12	
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q07.5	A Freedom of Information or Access to Information law covers the NSS	No such law exists	18	8	33	11	25	18
		No	6	23	4	6	25	9
		Yes	76	69	63	83	50	73
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q08.1	Agencies other than the NSO which produce official statistics on behalf of the government	Statistical services in the Central Bank	100	92	96	83	75	90
		Statistical services in line ministries	82	92	100	74	100	86
		Statistical offices at the sub-national level (region, province, etc.)	53	31	58	43	50	47
		Public research institutions	35	31	17	20	25	24
		Statistical research and training centers	29	31	33	3	25	20
		Supra-national bodies (e.g. Eurostat)	12	15	4	20		13
		Private institutions	18	31	13	3		12
		Other	6	8		14		8

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q08.2	Activities currently being implemented for coordinating the NSS	Meeting in statistical committees, councils, etc.	88	92	92	91	50	89
		Sharing of information and databases	76	85	92	69	75	78
		Signing of memorandums of understanding between agencies	76	85	79	69	100	76
		Developing joint training programmes	65	54	88	49	75	63
		Preparing annual or multi-annual consolidated program of statistical activities	53	46	50	66		54
		Monitoring duplication of work between agencies	53	38	54	54	25	51
		Embarking in joint data collection	53	38	42	46	50	45
		Performing regular quality reviews of statistical programs across the NSS	24	31	29	34	50	31
		Reviewing and clearing any planned data collection	29	15	38	31		29
		Placement of NSO staff in other agencies	53	31	29	9	50	27
		Exchanging staff between agencies	41	15	29	11	50	24
		Sharing budget between statistical agencies	29	23	17	6	75	18
		Other	71	77	75	71	75	73
		None Of The Above				3		1
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q08.3	Frequency of meetings between producers of official statistics during the past five years	Once over the five-year period	12					2
		Twice over the five-year period		8	4			2
		Once per year	12	8	13	14		12
		Twice or more per year	76	69	79	71	100	75
		Other		15		6		4
		None of the above			4	9		4

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q08.4	How is dissemination coordinated across the NSS	Unified release calendar	41	15	38	29		30
		Standardized metadata structure	18	15	25	20		19
		Other		8	17	6	25	9
		Standardized microdata structure	6	15	4	9		8
		None Of The Above	47	62	25	49	75	45
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q08.5	Existence of a central data portal where different members of the NSS publish official statistical data	No	59	69	46	63	75	59
		Yes	41	31	38	34	25	35
		No Answer	0	0	17	3	0	5
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q09.1	Version of the SNA currently used	1993 SNA	59	23	25			20
		2008 SNA	41	69	63	74	100	66
		ESA 2010				14		5
		None		8		3		2
		Other			4	6		3
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q09.2	Extent to which Principles and Recommendations for Population and Housing Censuses, Rev. 3 (for census undertaken after 2015) or Rev. 2 (for census undertaken before 2015) are being implemented in the latest census programme	Fully	88	69	50	77	100	72
		Partially	12	23	50	17		25
		Not implemented		8		6		3

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q09.3	Use of the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016)	For the dissemination of time-use statistics, regardless of the type of instruments used for data collection	18	15	29	14		18
		To guide the collection of time-use data	29	23	21	14		19
		As the basis for national classifications of activities for time-use statistics	18		21	14		14
		None of the above	29	38	33	37	50	35
		Time use is not compiled	41	38	38	29	50	35
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q09.4	Existence of a programme on EEA*	Yes, we have compiled and published at least one EEA	12	46	38	66	75	46
		Yes, we have compiled (or are compiling) at least one EEA but it has not been published	12		4	11		8
		We plan (or have started) a programme on EEA, but do not yet compile any EEA	35		17	9	25	15
		No, we do not have a programme on EEA	41	54	42	14		31
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q09.5	SDMX currently in use	Do not know	6	8				2
		No	41	15	54	6	25	27
		Partially, only in some statistical domains or data sets	41	46	29	31	25	34
		Yes	12	31	17	63	50	37

			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q10.1	Types of international cooperation activities the NSS engages in	Participation in international working groups	94	85	96	100	100	96
		Participation in regional working groups	94	92	96	89	100	92
		Technical cooperation	88	100	83	89	100	89
		Training of statistical personnel	94	92	83	89	100	89
		Peer reviews and/or external evaluations	76	46	71	83	75	73
		Twinning (peer to peer collaboration)	59	46	42	40	100	47
		Other		8	8	9		6
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q10.3	Existence of donor coordination mechanism or basket fund for statistics (if country receives support from donors)	No	44	75	29	44	100	47
		Yes	56	25	71	56	0	53
			Africa	Americas	Asia	Europe	Oceania	TOTAL
Q10.4	The NSO participates in or contributes to organizations or partnerships whose purpose is to promote open data	No	35	31	50	40	25	40
		Yes	65	69	50	60	75	60