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From:	Mr Enrico GIOVANNINI, Chair of the European Statistical Governance Advisory Board (ESGAB)
date of receipt:	18 December 2020
To:	Mr Olaf SCHOLZ, President of the ECOFIN Council
Subject:	ESGAB annual report 2020 - Twelfth annual report by the European Statistical Governance Advisory Board to the European Parliament and the Council of the EU

Delegations will find attached the 2020 annual report by European Statistical Governance Advisory Body (ESGAB) on the implementation of the European Statistics Code of Practice by Eurostat and the European Statistical System as a whole.

E-MAIL



European
Statistical
Governance
Advisory
Board

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Rome, 18 December 2020
ESGAB/2020/57

Mr Olaf Scholz
Federal Minister of Finance
President of the ECOFIN Council
Council of the European Union
Rue de la Loi 175
B-1048 BRUSSELS

Dear Mr Minister,

The European Statistical Governance Advisory Board (ESGAB) provides an independent overview of the European Statistical System (ESS) on the implementation of the European Statistics Code of Practice with an ultimate aim to enhance quality and trustworthiness of European statistics for evidence-based policy making.

ESGAB's twelfth annual report to the European Parliament and Council on the implementation of the European Statistics Code of Practice by Eurostat and the ESS is now finalised. I would like to count on your assistance in ensuring political support where needed for the implementation of the Board's recommendations.

Yours sincerely,

Enrico Giovannini
Chair of ESGAB



ESGAB Secretariat
Eurostat – BECH Building
L-2721 Luxembourg
Telephone: (+352) 4301 32378
E-Mail: estat-esgab@ec.europa.eu
<http://ec.europa.eu/esgab>



ESGAB ANNUAL REPORT 2020

Twelfth annual report by the
**European Statistical
Governance Advisory Board**
to the European Parliament and
the Council of the European Union
on the implementation
of the European statistics
Code of Practice by Eurostat and
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FOREWORD

The publication of the 2020 annual report falls during the most difficult period the European Union has experienced since its establishment. The COVID-19 crisis has caused worldwide upheaval and is provoking the worst-ever economic and social crisis in European countries since World War II. In parallel, the crisis is pushing the European Union to take unprecedented policy and financial actions, including the establishment of the NextGenerationEU initiative, which includes a multiplicity of funds to stimulate the recovery and resilience of EU economies and societies.

The COVID-19 crisis has put the European Statistical System (ESS) under stress not only due to the need for local and national lockdowns, which required significant changes to well-established statistical operations, but also due to the need to provide new data sets and indicators that can monitor the resultant economic, social and environmental phenomena.

On the other hand, the innovative approaches adopted over the year by the ESS may help the whole system speed up the change towards more effective organisation, new forms of cooperation with private and public data holders and new statistical products. Therefore, an important challenge for the ESS will be to consolidate and capitalise on what has been achieved, including new partnerships, access to new data sources, the ability to issue flash estimates, the production of new indicators (such as weekly deaths) and closer relationships with researchers, who will be able to suggest complementary questions to be added to existing or future surveys.

In 2021, the composition of the European Statistical Governance Advisory Board (ESGAB) will change, with the arrival of new members and the departure of several current members, myself included. It has been an honour to serve, first as a member and then as chair of the board, and I would like to take this opportunity to thank the secretariat and all the members of the board for their efforts to ensure the effectiveness and efficiency of ESGAB's work and thus contribute to strengthening the ESS, a fundamental public good for the European Union and its citizens.

Enrico Giovannini
ESGAB Chair

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EUROPEAN STATISTICAL GOVERNANCE ADVISORY BOARD



First row, from left to right:
Enrico Giovannini (Chair),
Kai Carstensen and
Bart De Moor

Second row:
Mireille Elbaum,
Pritt Potisepp,
Frances Ruane,
Algirdas Šemeta



ESGAB was established by the European Parliament and the Council of the European Union in 2008 to provide an independent overview of the ESS with particular regard to the implementation of the European statistics code of practice (CoP). ESGAB's aim is to enhance the professional independence, integrity and accountability (three key elements of the CoP) of the ESS, and the quality of European statistics.

Its tasks include:

- preparing an annual report for the Parliament and the Council on the implementation of the CoP by the Commission (specifically, Eurostat);

- undertaking an assessment of its implementation in the ESS as a whole;
- advising the Commission (Eurostat) on appropriate measures to facilitate the implementation of the CoP, to communicate it to users and data providers, to update it and, if necessary, to answer questions relating to user confidence in European statistics.

Eurostat participates as an observer at the ESGAB meetings and the Commission covers ESGAB's administration and meeting expenses. ESGAB members receive no remuneration. ESGAB therefore has no operating budget.

For further details see:
<https://ec.europa.eu/esgab/>

EXECUTIVE SUMMARY AND RECOMMENDATIONS

This year's European Statistical Governance Advisory Board (ESGAB) annual report analyses the way the European Statistical System (ESS) has responded when faced with one of the greatest challenges of its existence: the COVID-19 crisis.

As described in Chapter 1 of the report, the ESS's response has been extremely positive: notwithstanding the huge operational and methodological issues addressed, the continuity of key indicators has been ensured and new surveys have been launched to gain a better understanding of the behaviours of individuals, communities, companies and public and private institutions in response to the crisis. The report underlines the challenges the ESS will have to face in order to consolidate these actions and to respond to the new questions raised by the crisis. These challenges concern the timeliness and comparability of key economic and social indicators, which may need deeper revisions and further interpretation. They also concern the new data and indicators needed for an adequate assessment of the effects of the crisis in the

gender, intergenerational, social and health dimensions.

Chapter 2 of the report analyses the following four actions undertaken by the European Commission, which will have significant impacts on the future of the ESS.

- **A European data strategy.** This reflects the EU's aspiration to be a global leader in a digital world where data are a key asset. The approach adopted is the development of an EU-wide strategy for data to harness the benefits of the digital world. This involves the creation of data sets, digital connectivity, processing and storage of data, increased computing power and strong cybersecurity.

- **The European Green Deal.** This is the new strategy to make the EU climate neutral and protect the environment. It aims to transform the EU into a fair, inclusive and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases by 2050 and where economic growth is decoupled from resource use. The European Green Deal also aims to protect, conserve and enhance the EU's natural capital and protect the public from environment-related risks and impacts.
- **The new European semester and the preparation of the recovery and resilience plans.** The new focus of the European semester aims to support an economic agenda that will transform the EU into a sustainable economy, helping the EU and its Member States to achieve the United Nations' sustainable development goals (SDGs), to which they are committed. Moreover, the agreed strategy will take into account the crisis resulting from the COVID-19 outbreak and incorporate the national recovery and resilience plans, which need to focus strongly on both reforms and investments supporting the green transition, the digital transition and increased fairness.

- **Resilience as a new compass for EU policies.** The Commission presented its strategy to integrate strategic foresight into EU policymaking, to introduce resilience as a new guiding principle for EU policymaking.

The report describes the most important consequences of all these policy initiatives for the ESS in the years to come, not only in terms of the need to produce additional statistics and indicators, but also in terms of the need to ensure strong coordination of national statistical systems, as several statistics are and will continue to be produced by national statistical institutes (NSIs) along with other national authorities (ONAs, i.e. other entities, apart from the NSIs, designated by Member States as responsible for the production of official statistics).

Finally, Chapter 3 describes how the ESS is approaching its third round of peer reviews on compliance with the European statistics code of practice (CoP), with the objective of strengthening the ESS's alignment with its own common quality principles. The chapter highlights the new features of the peer-review process, which incorporate most of the ESGAB proposals described in the 2019 report, and discusses the actions undertaken by the ESS in response to previous ESGAB recommendations.

ESGAB 2020 RECOMMENDATIONS

2020/1. ESGAB recommends that the ESS consolidate the solutions found during the pandemic period to develop new statistical and data sources in order to ensure the continuity of statistical production and address the new questions raised by the crisis. The ESS should also continue to communicate in a coordinated manner on all measures taken to tackle the challenges arising from the COVID-19 crisis.

2020/2. ESGAB recommends that the ESS deepen and extend the efforts made to ensure the timeliness and comparability of key economic and social indicators, recognising a possible need for deeper revisions and further interpretation at a later stage.

2020/3. ESGAB recommends that the ESS develop additional statistics and indicators to allow for a better assessment of the impact of COVID-19 on economic, social and environmental phenomena, especially concerning economic prospects and the inequalities in the gender, intergenerational, social and health dimensions that have been highlighted by the crisis.

2020/4. ESGAB recommends that the ESS develop a coordinated approach to retain and strengthen trust in official statistics, at the national and EU levels, by implementing a transparent and proactive approach to communication with all types of users, on both methodological and emerging issues. In this regard, a survey on the public's trust in official statistics should be launched, using Eurobarometer, as done in the past.

2020/5. ESGAB recommends that the European Statistical System Committee (ESSC) be involved, possibly in a leadership role, in the discussions on the creation of a legislative framework for the governance of common European data spaces to avoid duplication and any potential confusion in relation to implementation that could undermine European statistics, and to ensure wide recognition of the value of public data.

2020/6. ESGAB recommends that the Commission propose a significant investment in digital infrastructure for statistical purposes, as well as in digital skills and general data literacy in the EU.

2020/7. ESGAB recommends that Eurostat and the NSIs develop a medium-term statistical action plan to develop the data sets and indicators needed to underpin the European Green Deal and the other policy initiatives agreed by the EU for the next 5 years. The action plan could be supported by a special financing heading in the NextGenerationEU initiative, at both the EU and the national level.

2020/8. ESGAB recommends that, as data relevant for some policy areas are produced by ONAs, the ESSC strengthen the coordination of the whole ESS, to ensure full respect for, and adherence to, the CoP by all data producers.

2020/9. As some data needed to assess the impact of the European Green Deal on economic, social and environmental phenomena may require the extensive use of models, ESGAB recommends that the ESS develop standards on how to develop model-based statistics and indicators and communicate them to users.

2020/10. ESGAB recommends that during the upcoming round of peer reviews the ESS pay special attention to the composition of the peer-review expert teams to ensure both a high level of statistical and managerial skills and full impartiality.

2020/11. ESGAB recommends that during the upcoming round of peer reviews the ESS place a strong emphasis on the compliance by ONAs with the CoP, along with the way in which national legislation and actual practices deal with the coordination and functioning of the national statistical systems, including the role of users.

2020/12. ESGAB recommends that during the upcoming round of peer reviews, when assessing compliance with indicators 1.2 and 1.8 of Principle 1 of the CoP, the ESS pay attention not only to the legal framework for the appointment and dismissal of the heads of NSIs, but also to the actual procedures and practices, and identify any related risks.

2020/13. ESGAB recommends that Eurostat, in cooperation with ESGAB, improve the system for monitoring the appointment and dismissal of the heads of NSIs, including through an early warning mechanism, a detailed specification of the reasons for every appointment or dismissal and a procedure for response by the appropriate body (the Commission, Eurostat, ESGAB, etc.) should doubts arise.

1. THE EUROPEAN STATISTICAL SYSTEM'S RESPONSE TO THE COVID-19 PANDEMIC – OVERALL ASSESSMENT AND WAY FORWARD

The crisis caused by the COVID-19 pandemic has differed from every other crisis in the history of the EU. What started as a health crisis quickly translated into an economic crisis as containment measures were imposed by governments from March 2020 in most EU Member States, directly affecting the European economy and labour markets.

New data demands emerged and the need for timely and well-structured data became apparent. Policymakers had to make timely decisions, which meant short-term, targeted, comparable data needed to be available quickly. In response, the ESS channelled considerable efforts into ensuring the continued production and dissemination of relevant European statistics.

That being said, even more effort is required to fill existing gaps and prepare for future crises.

1.1. MEASURES IMPLEMENTED BY THE EUROPEAN STATISTICAL SYSTEM

The COVID-19 outbreak has posed significant challenges for the ESS. In the face of the pandemic, Eurostat and the NSIs took a large set of initiatives to ensure the continuity of the publication of relevant and high-quality statistics as planned in the national and Eurostat release calendars, notwithstanding the difficulties in collecting and processing data, especially from companies.

For example, the low response rate for business surveys (mainly due to the shutdown of enterprises), along with the impact of lockdown and travel restrictions on household and price surveys, has created difficulties for most NSIs. This lower response rate, combined with the reduced availability of administrative sources, has increased the numbers of e-data imputations and estimations required and resulted in significant adaptations of ongoing production processes, with

a potential impact on the comparability of data over time and across countries.

Further examples are the interruption to face-to-face interviews and the closure of call centres, which have negatively affected the employment/unemployment data derived from the EU Labour Force Survey. Almost all countries have changed their methods of data collection to avoid face-to-face interviews. However, this change and the shift to the sole use of computer-assisted telephone interviewing / computer-assisted web interviewing may have introduced some biases and reduced the number of responses.

It became a challenge to design appropriate imputation methods that could be applied comparably and consistently across the countries, and to provide, at the same time, complementary or context indicators allowing the usual indicators, jeopardised by the pandemic and the lockdown, to be correctly interpreted.

ESGAB acknowledges that the ESS has been agile in reacting to the COVID-19 crisis, with the ESS members quickly implementing measures to respond to the emerging data needs. Many initiatives were launched to better measure the impact of the pandemic, such as flash estimates, dedicated COVID-19 business and household surveys, additional questions in sentiment and consumer surveys, new visualisations and dedicated sections on websites.

In parallel, Eurostat provided practical guidance for official statisticians on the issues triggered by COVID-19, for example on topics such as employment and unemployment, in the form of guidelines and methodological notes published on its website. Eurostat also implemented a coordinated way of responding to the crisis, which was crucial to the ESS providing a timely and adequate response to these unprecedented circumstances.

During the COVID-19 crisis, NSIs have also accelerated their work on experimental statistics. These experiments have included the use of new data sources, both administrative and privately held, along with the production of flash estimates and more frequent data dissemination. Often the products disseminated included statistics produced by other public authorities and trusted private partners.

There were new flash estimates in several domains: earlier flash estimates of gross domestic product and economic indicators by sector, weekly bankruptcies, weekly energy consumption and weekly/daily transport indicators. Another important action taken to monitor and compare the effects of the pandemic was the implementation of weekly and daily reporting of deaths, leading to the publication and analysis of an indicator of excess mortality.

Moreover, the majority of NSIs have contributed to the surveys or actions undertaken by ministries of health, such as serological surveys to estimate the immune population. Pilots to produce experimental statistics based on big data were also launched, for instance to provide insights into the public's movements during the lockdown based on data from mobile network operators, and to patterns of consumption of specific goods based on credit card data.

Simultaneously, Eurostat and the NSIs have launched a number of initiatives for communication with respondents and users, in order to preserve the trust in official statistics. They organised more frequent, virtual exchanges of views and discussed communication issues in the context of a newly created task force on ESS strategic communication, also allowing best practices to be shared and efficiency to be improved.

In June 2020, ESGAB issued an opinion recognising the efforts undertaken by the NSIs and Eurostat during the peak of the health crisis

and the lockdown, and recommending their continuation and development.

An important next step was the release in December 2020 of a dashboard of short-term indicators aiming to provide a holistic overview of the economic and social consequences of the COVID-19 crisis and of the recovery. The dashboard provides timely insights and well-founded answers to economic questions such as the impact of the recovery plans implemented by Member States to combat the economic and social repercussions of the COVID-19 crisis.

In addition to the macroeconomic dimension, this ESS recovery dashboard also includes social indicators (labour market, health, education and skills) and information about sectors hit particularly hard by the pandemic (e.g. tourism, transport and the hospitality industry).

Based on the analysis of national initiatives and user demands, the ESS is already considering ways to improve the timeliness and frequency of various indicators for future versions of the dashboard.

1.2. CONSEQUENCES FOR THE EUROPEAN STATISTICAL SYSTEM

Thanks to these initiatives, the ESS has managed to respond very well to the main problems caused by the COVID-19 pandemic, ensuring the continuity of statistical production processes and answering some new questions through the mobilisation of a variety of data sources. The challenges arising from the pandemic are going to remain and develop for the next several months and probably years, as the economic and social consequences of the crisis may be deep and lasting. Therefore, ESGAB stresses that the ESS will have to continue to adapt to this new and changing environment and to the needs it creates in order to produce relevant, transparent and comparable statistics.

Some initiatives undertaken by NSIs due to the disruption of ongoing production processes may have an adverse impact on the comparability of the resulting data, as methodologies and definitions may not be fully harmonised. This risk is higher when data are collected and produced by ONAs.

Therefore, ESGAB urges Eurostat and the NSIs to continue ensuring the comparability of the main economic and social indicators, recognising that this may eventually involve accepting larger revisions of early estimates. In addition, throughout the economic crisis and recovery the ESS will have to deepen and extend the efforts made to ensure the comparability of those key economic indicators (prices, gross domestic product, etc.) and social indicators (employment and unemployment, risk of poverty, etc.), as their estimates will be subject to a higher degree of uncertainty and to revisions. These actions, motivated by the pandemic and its consequences, complement those previously recommended by ESGAB to enhance the quality of some statistical indicators that could be at risk due to structural phenomena such as migration, globalisation and digitalisation.

These phenomena are continuing during the outbreak period, increasing the need to better understand and handle their impact on the statistical system. In this respect, the recently launched international effort to reform national accounts will be of the greatest importance, including in the area of concepts and definitions.

ESGAB also stresses the need to preserve the successes achieved and ensure the sustainability of the innovative solutions found, especially regarding the development of new statistics and access to new data sources, contributing to the ESS being better able to adapt to future shocks. An important challenge will be to consolidate and capitalise on what has been achieved, including new partnerships on data cooperation, access to new data sources (for example telecom, transport,

health and barcode data), the ability to issue flash estimates, the production of new indicators (such as weekly deaths) and closer relationships with researchers, for example to add complementary questions to existing or future surveys.

Realising the benefits of these developments makes it desirable for members of the ESS (Eurostat, NSIs and ONAs) to maintain close and regular contact in order to exchange experiences and to facilitate the dissemination of good practices along with specific initiatives. ESGAB welcomes the ESS's endeavour to make the system crisis-proof for the future, notably by launching a high-level reflection on the lessons learnt from the COVID-19 crisis and the measures implemented to overcome the challenges; these reflections could benefit the system in dealing with future crises.

Moreover, as the emphasis is now shifting to mitigating the socioeconomic damage of the crisis, the ESS may have to develop and disseminate additional indicators to help policymakers and users better evaluate the changing impact of COVID-19 on economic, social and environmental phenomena.

NSIs and Eurostat will thus have to meet the new demands for information that have arisen in the context of the outbreak, but may change and develop over the coming years. These needs first concern the demographic (mortality) and the economic fields, such as the need to monitor the situation of particular sectors (such as tourism or transport) over time or to highlight the economic outlook through appropriate existing or new surveys. The ESS will also have to collect all the relevant information needed for a harmonised comparison of the economic measures implemented by national governments in order to support businesses and households and to help the development of strategic activities.

The different types of policy measures designed to tackle the economic consequences of the crisis

(public subsidies, fiscal provisions, loans, etc.) have important statistical implications that must be known, shared and evaluated.

The second phase of the crisis may also increase the demand for social statistics, at both the national and the EU level. These requests will likely relate to the frequency of existing statistics, such as household incomes, working conditions and poverty, which may require the development of early estimates. They also relate to the overall situation regarding public health or to specific sectors such as healthcare or social care.

More broadly, the ESS will have to acquire and disseminate information on the various forms of inequalities highlighted by the crisis, in relation to the gender, generational, social, health and geographical dimensions. A specific focus on intergenerational issues will be necessary, which may demand new collaborations with researchers. Adequacy and timeliness in the measurement of these inequalities through relevant data sets are of major importance for the management of the recovery by policymakers and, more widely, for all economic and social actors in EU societies.

In the face of these challenges, ESGAB underlines the increased importance of harmonised communication with users, respondents and society in general. A coordinated ESS approach, with clear and transparent messages, is key to maintaining trust in official statistics. It may demand the production of additional guidelines for data releases, as well as complementary context indicators and metadata to help with the interpretation of the statistics issued. Such a coordinated approach is also necessary in updating the methodological notes on emerging issues and in ensuring the quality of European statistics.

Therefore, ESGAB underlines that the response to the challenges posed by the crisis requires an unprecedented effort and an innovative approach.

ESGAB 2020 RECOMMENDATIONS

2020/1. ESGAB recommends that the ESS consolidate the solutions found during the pandemic period to develop new statistical and data sources in order to ensure the continuity of statistical production and address the new questions raised by the crisis. The ESS should also continue to communicate in a coordinated manner on all measures taken to tackle the challenges arising from the COVID-19 crisis.

2020/2. ESGAB recommends that the ESS deepen and extend the efforts made to ensure the timeliness and comparability of key economic and social indicators, recognising a possible need for deeper revisions and further interpretation at a later stage.

2020/3. ESGAB recommends that the ESS develop additional statistics and indicators to allow for a better assessment of the impact of COVID-19 on economic, social and environmental phenomena, especially concerning economic prospects and the inequalities in the gender, intergenerational, social and health dimensions that have been highlighted by the crisis.

2020/4. ESGAB recommends that the ESS develop a coordinated approach to retain and strengthen trust in official statistics, at the national and EU levels, by implementing a transparent and proactive approach to communication with all types of users, on both methodological and emerging issues. In this regard, a survey on the public's trust in official statistics should be launched, using Eurobarometer, as done in the past.

2. OPPORTUNITIES TO STRENGTHEN THE EUROPEAN STATISTICAL SYSTEM

Since December 2019, the new European Commission has proposed a wide range of initiatives covering almost all the policy priorities adopted by the European Union following the election of the new European Parliament. Several initiatives will require the development of new sets of statistics and indicators, to both design and evaluate policies at EU, national and local levels.

This chapter focuses on four of these priorities, which have particular relevance to, and implications for, European statistics. In each case, the key elements are summarised and ESGAB provides its perspective and makes recommendations, where appropriate, on how the ESS should respond in order to produce statistics that underpin these policy initiatives.

2.1. A EUROPEAN DATA STRATEGY

On 19 February 2020, the European Commission published its European strategy for data ^[1]. The proposed data strategy reflects the EU's aspiration to be a global leader in a digital world where data are a key asset. The approach adopted is the development of an EU-wide

strategy for data to harness the benefits of the digital world. This involves the creation of data sets, digital connectivity, processing and storage of data, increased computing power and strong cybersecurity.

For this approach to succeed, there will need to be increased data flows within the EU across borders and sectors. At the same time, the rules for access to and use of data must be fair ^[2], practical and supported by trustworthy data governance mechanisms. In effect, it is essential to balance the flow and use of data for economic gain with the objective of preserving the EU's privacy, security, safety and ethical standards ^[3].

The vision foresees win-win situations for EU governments, businesses and citizens if this strategy works. Its adoption throughout the single market is crucial in order for data pools and infrastructures in the EU to be coordinated and operated in a centralised or distributed manner ^[4]. The strategy notes that some Member States have already developed national data strategies to fulfil these objectives but the

[1] https://ec.europa.eu/info/sites/info/files/communication-european-strategy-data-19feb2020_en.pdf

[2] Fairness here relates to the need to ensure that this does not undermine EU competition and consumer protection laws.

[3] These are reflected in the regulations on general data protection and on the free flow of non-personal data, the cybersecurity act and the open data directive.

[4] Distributed data pools make it easier to keep data secure and to control access.

creation of the EU data strategy is essential to the achievement of the EU-wide benefits.

ESGAB considers the content of the approach being proposed under three headings: data issues, the nature of the strategy itself and extra-EU issues.

2.1.1. DATA ISSUES

The strategy identifies several issues that are holding the EU back from realising its potential in the data economy. ESGAB notes that many of these are familiar to the ESSC and have been discussed over the past 20 years, albeit without the context of the innovation-driven digital economy that stands so prominently centre-stage at this time. The issues are as follows.

- **Availability of data.** Currently there are not enough data available for innovative reuse, including for the development of artificial intelligence.
- **Imbalances in market power.** These imbalances can arise from differences in access to data – creating a ‘data advantage’ for some. The strategy recognises the disadvantage currently faced by small and medium-sized enterprises (SMEs) and hence the reduced potential for market contestability and stronger competition.
- **Data interoperability and quality.** The current lack of data interoperability creates barriers to the exploitation of data from different sources, as they cannot be combined within and across sectors.
- **Data governance.** The strategy notes recent calls to reinforce the governance of data use in society and the economy through the creation of ‘common European data spaces’.

— **Data infrastructure and technologies.**

The strategy notes the more limited use of cloud computing in the EU compared with the United States and the risks that EU companies and individuals face due to current legal uncertainties and the need to comply with applicable EU law. These arise from the absence of relevant EU legislation and the current dependence of the EU on cloud resources outside the EU, which results in lower take-up of potential cloud advantages.

- **Empowering individuals to exercise their rights.** The strategy recognises the trade-off that is implicit in enabling the switching of service providers rather than the possible reuse of data. The scale of this trade-off will increase further with the growth in importance of the internet of things.

- **Skills and data literacy.** The strategy notes that big data and analytics are at the top of the list of critical skills shortages, and that the level of general data literacy in the workforce and across the population is relatively low.

- **Cybersecurity.** The strategy notes the need for the highest cybersecurity standards, and that the increased tendency for more data to be decentralised (located closer to users ‘at the edge’) means that there are increased cybersecurity risks and a need for greater skill levels.

2.1.2. THE NATURE OF THE STRATEGY

The strategy states: ‘This European data strategy serves to realise the vision for a genuine single market for data and tackles the problems identified through policy measures and funding, building on what has already been achieved in the last few years.’ ESGAB notes that the strategy provides for the development

of new legislative measures, which will be assessed in full compliance with the better regulation principles, under four pillars.

Pillar 1. A cross-sectoral governance framework for data access and use

In relation to this pillar, the strategy states that an agile approach that favours experimentation (such as regulatory sandboxes), iteration and differentiation is preferred. While ESGAB notes that this appears to be quite different from the approach taken toward statistics in the past, it would be delivered through the following priority actions, which are in line with current practice.

- The creation of an enabling legislative framework for the governance of common European data spaces to facilitate the use of data for innovative business purposes. This will require strengthening governance mechanisms (to cover standardisation and harmonised description and overview of data sets, data objects and identifiers to foster data interoperability across and within sectors) at the EU and national levels.
- Making more high-quality public-sector data available, through the creation (under the open data directive) of high-value-added data sets for reuse, which are especially relevant for SMEs.
- An assessment of the need for legislative actions to provide incentives for data sharing across sectors.

Pillar 2. Enablers: investments in data and strengthening the EU's capabilities and infrastructures for hosting, processing and using data; interoperability

ESGAB notes that the strategy recognises the need for significant investment under the multiannual financial framework to build the

infrastructure necessary for the EU to succeed in the digital economy.

Pillar 3. Competences: empowering individuals; investing in skills and in SMEs

The key points of focus here are the benefits to individuals of creating and rolling out 'personal data spaces' that are compatible with the general data protection regulation, and the investment in skills and general data literacy. ESGAB notes that the latter is specifically relevant to the ESSC as it envisages the significant growth required in the digital talent pool, which Eurostat and the NSIs currently draw on. Also relevant is the need to raise general data and digital skills across the EU, and to build the capacity of SMEs to be able to use data as an asset in promoting their growth.

Pillar 4. Common European data spaces in strategic sectors and domains of public interest

This pillar notes that cross-sectoral data legislation will need to be complemented by sectoral legislation for data access and use and mechanisms for ensuring interoperability.

2.1.3. EXTRA-EU ISSUES

The final section of the strategy sets out the EU's approach in a context where many activities and markets are global. This approach supports the transfer and sharing of data with trusted countries, in a manner consistent with EU values and strategic interests. ESGAB notes that Eurostat and the ESSC will need to take a central role in establishing the data strategy as it addresses statistical and policy needs, while also supporting it as the EU seeks to establish a global position in the digital economy.

2.2. THE EUROPEAN GREEN DEAL

The European Green Deal ^[5] is the European Commission's new strategy to make the EU climate neutral and protect the environment. It aims to transform the EU into a fair, inclusive and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases by 2050 and where economic growth is decoupled from resource use. The European Green Deal also aims to protect, conserve and enhance the EU's natural capital, and protect the public from environment-related risks and impacts.

The Commission communication of 11 December 2019 ^[4] presented the European Green Deal and a roadmap of key actions and measures such as the integration of the SDGs into the European semester. As it touches on a broad range of areas, it will put pressure on the resources and priorities of the ESS. Therefore, the ESS needs to anticipate emerging needs, as the policy context takes shape very quickly and statisticians may have little time to react, in particular for new statistical products. The ESS has decided to structure the work related to the European Green Deal according to the following strands.

- **Enhanced communication and dissemination of existing statistical products.** Many existing data sets (in the areas of macroeconomic, sectoral, social and business statistics) already provide essential information. Innovative use of these existing data sets can help monitor, by means of official statistics, the implementation of the European Green Deal targets.

- **Extending and updating the legal basis for official statistics relevant for the European Green Deal.** In order to increase the relevance, quality and timeliness of statistics, the legal basis needs to be improved. In several statistical areas (agriculture statistics, environmental accounts and energy statistics), discussions have already started in directors' groups and working groups. The anticipated improvements could contribute to meeting data demands in relation to the European Green Deal.
- **Development of official statistics without a change in the legal basis.** This includes both enhanced quality of existing statistics and new statistical products based on existing data, voluntary data collections, etc. Based on consultations at the EU level, the ESS has identified gaps in several domains such as sustainable finance, environmental footprints, waste and transport. There are also ongoing initiatives that will provide additional information needed in the context of the European Green Deal, such as the geoinformation systems, the next Land Use and Coverage Area Survey and the update of the system of national accounts.
- **Development of experimental statistics.** Experimental statistics provide an opportunity to develop products in specific areas before they become official statistics. For example, statistics on natural capital and biodiversity are developed as part of the Commission project on integrated natural capital accounting. In addition, the enhanced integration of big data into the regular production of official statistics is a recurring topic. In the context of the European Green Deal, this includes questions such as the use of smart energy meters for statistics on electricity consumption.

[5] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

[4] https://ec.europa.eu/info/publications/communication-european-green-deal_en

- **Release of new scoreboards of indicators.** Scoreboards are collections of indicators relevant for specific (political) purposes such as the SDGs, the circular economy and the macroeconomic imbalance procedure. Eurostat already plays a strong role here and plans to extend it with respect to the European Green Deal, for which an overarching monitoring framework could be established.

ESGAB reiterates its opinion that the successful implementation and evaluation of policy measures must be based on objective and impartial information, of which official statistics are a key source. It therefore welcomes the ESS's proactive involvement in the development of official statistics to measure environmental change and monitor the European Green Deal. In fact, ESGAB views the European Green Deal as an opportunity to showcase the usefulness of official statistics for policy purposes, which should not be missed.

At the same time, ESGAB is concerned that the European Green Deal is so overarching and the expected increase in data demand so high that it may lead to an excessive burden on the limited resources of the ESS. Therefore, the Commission should articulate its demands with clarity and prioritise its goals properly so that the ESS is able to deliver the statistics needed without jeopardising quality and relevance.

ESGAB observes that, while the European Green Deal impacts official statistics at many levels, it is also an opportunity to reflect, within the EU, on the future role of official statistics in general, and of Eurostat in particular. This concerns both centralisation and coordination within the ESS with a particular focus on ONAs and data providers outside the ESS. Adherence to the CoP and preservation of the highest quality standards are essential for trustworthy

statistics that can withstand fake news and partiality.

Finally, ESGAB notes that certain statistics related to the European Green Deal, such as green investment, green public budgets and environmental footprints, may be based on models and concepts that are not as widely accepted as others. Both policymakers and the ESS should be aware that the publication of such statistics may, in the worst case, lead the public to view the ESS as a Commission partisan, which would endanger its public standing.

2.3. THE NEW EUROPEAN SEMESTER AND THE PREPARATION OF THE RECOVERY AND RESILIENCE PLANS

The European semester's new focus is laid down in the communication issued on 17 December 2019 on the annual sustainable growth strategy for 2020 ⁽⁷⁾, where the Commission presents an economic agenda that 'must transform the Union into a sustainable economy, helping the EU and its Member States to achieve the United Nations Sustainable Development Goals, which they committed to'.

ESGAB notes that environmental sustainability, productivity gains, fairness and macroeconomic stability will be the four dimensions of economic policy in the years to come, and that these four key dimensions will be crucial in implementing the SDGs. From a statistical point of view, the refocusing of the European semester in the context of the annual sustainable growth strategy is especially important because it

⁽⁷⁾ <https://ec.europa.eu/transparency/regdoc/rep/1/2019/EN/COM-2019-650-F1-EN-MAIN-PART-1.PDF>

includes the production of country reports that integrate economic, social and environmental dimensions and require comprehensive data inputs from the ESS.

As a first step, the 2020 country reports featured reinforced analysis and monitoring of the SDGs. They included a new section dedicated to environmental sustainability, to complement the analysis of economic and social challenges. In addition to this new section, each country report included a new annex setting out the individual Member States' SDG performance, based on Eurostat's set of EU SDG indicators.

The communication issued on 17 September 2020 on the annual sustainable growth strategy for 2021 ^[8] updates the strategy, taking into account the crisis due to the COVID-19 outbreak and the establishment of the new policy tools agreed by the EU institutions. In particular, it was decided that national recovery and resilience plans will need to focus strongly on both reforms and investments supporting the green transition, the digital transition and fairness.

As far as the green transition is concerned, the plans will address actions to significantly speed up its ambitions for the reduction of greenhouse gas emissions by 2030. In the area of digital transformation, Member States are asked to focus on reforms and investments that improve connectivity, but also to bridge the digital divide, developing digital skills at all levels, building and deploying cutting-edge digital capacities, including artificial intelligence, high-performance computing, cybersecurity, quantum technologies and infrastructure, secure connectivity, microelectronics, electronic components and cloud infrastructure

and services. Finally, the national recovery and resilience plans ask Member States to address structural challenges in the social sphere and implement the European Pillar of Social Rights, undertaking measures to ensure equal opportunities, inclusive education, fair working conditions and adequate social protection.

ESGAB notes that all these developments will have a huge impact on the production of statistical data. As far as the European semester is concerned, the Eurostat database from which the annexes to the country reports are derived covers most, but not all, of the SDGs in an appropriate way or with the requested timeliness. In several cases, data are not produced by Eurostat itself, but are provided by European agencies and other bodies.

Notwithstanding the efforts made over the last few years by the whole of the ESS to speed up the production of indicators related to sustainability, ESGAB underlines that the gaps are still relevant, especially as far as environmental and social dimensions are concerned, where the timeliness of several data and indicators is also unsatisfactory.

2.4. RESILIENCE AS A NEW COMPASS FOR EU POLICIES

With the publication of the report entitled 'Strategic foresight – Charting the course towards a more resilient Europe' ^[9], the Commission presented its strategy to integrate strategic foresight into EU policymaking. It identifies initial lessons from the COVID-19 crisis, introduces resilience as a new guiding principle for EU policymaking and discusses the

[8] <https://ec.europa.eu/transparency/regdoc/rep/1/2020/EN/COM-2020-575-F1-EN-MAIN-PART-1.PDF>

[9] COM(2020) 493 final of 9 September 2020, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52020DC0493>

role of strategic foresight in strengthening the resilience of the EU and its Member States. The report analyses resilience in four interrelated dimensions – social and economic, geopolitical, green and digital – and explains its importance for achieving strategic long-term objectives and better implementing the United Nations' SDGs.

ESGAB welcomes the fact that the Commission's report underlines that proper monitoring tools are required. A few prototype dashboards are presented in the report, as a starting point for an effort that will draw upon

existing sectoral indicators and monitoring tools, such as the social scoreboard and the reports monitoring EU progress towards the SDGs. As this new activity will require additional work from the ESS, it is fundamentally important to ensure that Eurostat and the NSIs are involved from the beginning, including in order to make the measurement of vulnerability and resilience coherent with the efforts already underway to monitor sustainable development and quality of life.

ESGAB 2020 RECOMMENDATIONS

2020/5. ESGAB recommends that the ESSC be involved, possibly in a leadership role, in the discussions on the creation of a legislative framework for the governance of common European data spaces to avoid duplication and any potential confusion in relation to implementation that could undermine European statistics, and to ensure wide recognition of the value of public data.

2020/6. ESGAB recommends that the Commission propose a significant investment in digital infrastructure for statistical purposes, as well as in digital skills and general data literacy in the EU.

2020/7. ESGAB recommends that Eurostat and the NSIs develop a medium-term statistical action plan to develop the data sets and indicators needed to underpin the European Green Deal and the other policy initiatives agreed by the EU for the next 5 years. The action plan could be supported by a special financing heading in the NextGenerationEU initiative, at both the EU and the national level.

2020/8. ESGAB recommends that, as data relevant for some policy areas are produced by ONAs, the ESSC strengthen the coordination of the whole ESS, to ensure full respect for, and adherence to, the CoP by all data producers.

2020/9. As some data needed to assess the impact of the European Green Deal on economic, social and environmental phenomena may require the extensive use of models, ESGAB recommends that the EES develop standards on how to develop model-based statistics and indicators and communicate them to users.

3. CHALLENGES IN IMPLEMENTING THE CODE OF PRACTICE BY THE EUROPEAN STATISTICAL SYSTEM

The ESS is approaching its third round of peer reviews on compliance with the European statistics CoP, the major quality framework of the ESS since 2005. The first and second rounds of peer reviews were conducted from 2006 to 2008 and 2013 to 2015, respectively. Through these exercises, the members of the ESS have strengthened their alignment with the common quality principles of the ESS, which cover the institutional framework of the statistical system, quality aspects of the statistical production process and statistical output. After each round, the ESS has systematically identified the opportunities for improvement of the exercise and adjusted the methodology accordingly. In 2017, the European statistics CoP underwent slight amendments.

The overall approach of having three rounds of peer reviews includes some changes but the core process has remained almost unchanged – at the initial stage, compliance with the CoP is assessed. For this, every NSI fills in the standardised self-assessment questionnaire. Then a visit to the country in question is conducted and a report is compiled by peer-review teams. The report contains assessments and recommendations on the basis of which the countries formulate their actions for improvement.

As a result of the 2013–2015 round of peer reviews, 707 recommendations were proposed; the national statistical systems then defined 910 improvement actions. It can be said that the level of granularity of the recommendations and the respective improvement actions varied to a great extent, which is why the number of actions implemented does not necessarily tell the full story.

In other words, a number of recommendations have been easier to implement than others. Nevertheless, the high number of improvement actions implemented demonstrates the value of the peer-review exercise. NSIs have declared that the peer-review exercise and the resulting recommendations, in addition to ensuring a higher level of compliance with the CoP, have provided an important impetus for modernisation activities, enhanced the visibility of official statistics and improved the trust of users through increased transparency. Some NSIs reported improved communication across the organisation through discussions on how to implement the recommendations. The recommendations also provided a stimulus for further measures to increase the quality of the organisation and of the statistics, and gave rise to wider-reaching actions not originally planned.

3.1. TOWARDS THE NEW PEER-REVIEW EXERCISE

The third round of peer reviews will be conducted from 2021 to mid 2023. It will cover the national statistical systems of the EU, the European Free Trade Association and Eurostat. ESGAB will carry out the peer review of Eurostat as it did during the second round. The methodological framework and all necessary guidelines have already been prepared by Eurostat in cooperation with the NSIs. However, it must be noted that the uncertainty arising from the increasing number of COVID-19 infections may require the ESS to revise the initial schedule adopted for the next round of peer reviews.

The third round will involve some changes from the previous rounds. Firstly, the CoP has been revised and now includes 16 principles instead of 15. Very importantly and to some extent differently from the previous round, the peer reviewers have to identify the key issues of focus prior to visiting the country. However, the principles of professional independence and coordination and those including aspects of modernisation of statistical production processes, quality frameworks and statistical output will be assessed for every national statistical system. During the first two rounds, all 15 principles were reviewed, with each receiving almost equal attention. A more balanced, audit-like and peer-review approach will be used in the third round, compared with the audit-like approach adopted during the previous round. All in all, the new approach is expected to create a focus on broader issues and a less mechanical, principle-by-principle evaluation.

The peer-review process will also assess the advances in alignment with the principles of the CoP to a greater extent than the second round. Moreover, the self-assessment questionnaire in this round includes sections that facilitate the

mapping of strategic challenges and very recent developments in the statistical production and output driven by the COVID-19 crisis. The recent external pressure has accelerated positive changes in many organisations, including statistical ones, and it is very important to systematically gather and exchange information on the experiences and tools employed.

The composition of the peer-review teams is also different. In the first round, peers from other NSIs conducted the visits to countries, while independent experts played a key role in the second. In the third round, these two methods are combined – a senior manager from an NSI will be the chair of the peer-review team, while the independent experts will be members. Differently from the second round, an expert from Eurostat will be a full member of the peer-review expert team. In this way, senior management experience and expertise in statistics, as well as knowledge about the functioning of national statistical systems and about the latest strategic developments in statistics, will be combined.

Similarly to the previous round, other national producers of European statistics (ONAs) will be interviewed as well as the NSIs. ESGAB welcomes the greater emphasis on the compliance of ONAs, since the previous rounds have demonstrated that the implementation of common principles is more complicated in decentralised statistical systems.

As the CoP peer reviews aim to strengthen the credibility of the ESS, inter alia, in the eyes of external actors, special emphasis will be placed on the communication strategy.

3.2. MAINTAINING THE INDEPENDENCE OF THE ESS

3.2.1. PROCEDURES FOR APPOINTMENT AND DISMISSAL OF THE HEADS OF NSIS

The trustworthiness and credibility of European statistics build on the professional integrity that the statistical institutes display to the public. The practices regarding the appointment and dismissal of the heads of NSIs are one of the most visible aspects of the principle of professional independence as outlined in the CoP. Thus, even the mere perception that an institute lacked professional independence would be damaging to the statistical system as a whole.

ESGAB has been observing since its establishment that the procedures and practices regarding the appointment and dismissal of the heads of NSIs in some Member States do not appear to be in line with the CoP's first principle, 'Professional independence', and in particular with indicators 1.2 and 1.8, as follows.

1.2. The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have sufficiently high hierarchical standing ... They are of the highest professional calibre.

1.8. The procedures for the recruitment and appointment of the heads of the National Statistical Institutes and Eurostat and, where appropriate, the statistical heads of other statistical authorities, are transparent and based on professional criteria only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

In the past, there have been cases where heads of NSIs and of ONAs with the best professional qualifications and experience have been dismissed while officials without sufficient expertise in statistics have been appointed as top managers in some statistical institutes.

Such practices could be due to deficiencies in the legal framework. However, even when the legal framework perfectly corresponds with the principles of the CoP, aspects such as its inefficient enforcement and ambiguous implementation of rules and procedures could cast doubt on the credibility of a specific appointment or dismissal. Consequently, ESGAB urges the next peer-review teams to pay particular attention not only to the legal framework for appointment and dismissal of the heads of NSIs but also to the actual procedures and practices being used, and to identify any related risks.

Due to the importance of the appointment and dismissal procedures of the heads of NSIs to the overall credibility of the ESS, ESGAB considers that Eurostat should play a more proactive role in monitoring how indicators 1.2 and 1.8 of Principle 1 of the CoP are being implemented.

ESGAB will propose to Eurostat that they work together to improve the existing monitoring system to include an early warning mechanism, a detailed specification of the reasons for every appointment or dismissal and a procedure for response by the relevant body (the Commission, Eurostat, ESGAB, etc.), should doubts arise.

3.2.2. COOPERATION WITH THE EUROPEAN STATISTICAL ADVISORY COMMITTEE

In 2019, ESGAB explored the issue of governance of the statistical system at Member-State level and organised a seminar to discuss the variety

of methods used by Member States to ensure compliance with the CoP. This meeting showed that, while some countries have ESGAB-like bodies, others may have different practices, such as the following.

- Countries often have consultative boards or councils, comprising outside individuals / third-party experts whose role includes some of these governance functions or that provide assistance to the heads of NSIs in these governance duties.
- Where such consultative bodies exist, they are particularly helpful if they involve suppliers as well as users of statistical products in their work, such as the media and the research community. In such cases, functions such as those of the European Statistical Advisory Council (ESAC) and ESGAB-like functions may be exercised jointly.

In its 2019 annual report, ESGAB also stressed the importance of the involvement of users in the implementation of the CoP, especially regarding Principle 11, 'Relevance', in the context of the fast-changing evolution of economic, social and environmental phenomena. The 2019 ESGAB report benefited from the information on national user councils (NUCs) collected through a survey launched by ESAC.

This information was very useful, but it did not allow for a comprehensive understanding of the precise ways and mechanisms by which ESAC-like bodies intervene effectively in the governance of the national statistical system. In order to get a better understanding of the current situation and to be able to analyse the precise roles performed by NUCs at a national level, ESGAB would like to cooperate with ESAC (and Eurostat) to gather the more detailed information required.

3.3. IMPLEMENTATION OF IMPROVEMENT ACTIONS ARISING FROM PREVIOUS ESGAB RECOMMENDATIONS

In its 2019 annual report ^[10], ESGAB issued 14 recommendations covering challenges faced by the ESS in implementing the CoP. As is done each year, in 2019 ESGAB also monitored Eurostat's and the ESS's progress in implementing the improvement actions taken in response to its previous recommendations. This section presents the state of affairs in that respect, as well as ESGAB's view on the need for further progress.

Eurostat has informed ESGAB that it has taken several initiatives to raise Member States' awareness of the recommendations issued. ESGAB recognises Eurostat's efforts to assist Member States in this endeavour and reiterates that some of its recommendations are addressed to NSIs and some to national governments, which may require different implementation strategies. Therefore, ESGAB will maintain its practice of having dialogues with heads of NSIs to gather more information on how to implement its recommendations and on whether the NSIs need more support in that regard.

3.3.1. GOVERNANCE

Improving the governance of the European Statistical System

ESGAB Recommendation 2019/1 stipulated that the mission of all bodies in charge of overseeing the functioning of national statistical systems should be made explicit in national legislation.

^[10] https://ec.europa.eu/eurostat/documents/34693/10434952/ESGAB_Annual_Report_2019.pdf/63f00f6c-7770-7edc-d176-85ea10cca950

Their roles would thus be strengthened and their actions facilitated because they would be recognised as key interlocutors within the NSI-government relationship.

Considering the relevance of this recommendation for the forthcoming round of ESS peer reviews, the peer-review experts will be informed of the importance of such bodies and the advice to include a reference to them in national legislation. ESGAB welcomes this idea. In addition, it may consider the opportunity, as the body responsible for overseeing the functioning of the ESS in terms of governance, of contacting Member States to highlight the importance of assigning ESGAB-like functions to existing or new national bodies through national legislation.

ESGAB Recommendation 2019/2 stressed the importance of an appropriate governance structure to prevent problems and fully implement the CoP and advised that the governance issues should feature prominently in the next round of peer reviews, notably in the context of the communication strategy accompanying the peer-review procedure.

Bearing in mind this recommendation, the peer-review experts will be reminded to pay special attention to governance structures during the peer-review visits. The guidelines provided to those experts will also include a governance-related topic. As regards communication on governance, communication officers in NSIs will be asked to pay special attention to governance structures in their communication activities and to target political decision-makers in their communication campaign on the topic of governance structures. ESGAB considers these plans relevant for implementing its recommendation.

In Recommendation 2019/3, ESGAB stipulated that the third round of peer reviews to be launched in 2020 should produce systematic

evidence on how the governance within each Member State achieves effective implementation and compliance with the CoP.

In view of this recommendation, the peer reviews will be carried out in a combination of audit-like and peer-review-like approaches guaranteeing that evidence will be provided and duly documented by NSIs. The Eurostat peer-review guidelines will provide clear instructions to the peer-review experts.

ESGAB Recommendation 2017/11 strongly reiterated that more Member States should adopt and publish commitments on confidence in statistics to address some of the improvement actions required to ensure compliance with the CoP, in particular those that are still open because further progress depends on authorities outside the NSI. ESGAB Recommendation 2018/9 also urged the European Commission and the ESS to agree on a minimum set of issues to be covered by these commitments and to promote the delivery of stand-alone ones.

Eurostat monitors the commitments by Member States as required by Regulation (EC) No 223/2009 ^[1]. ESGAB regrets that so far only nine Member States have adopted stand-alone commitments on confidence in statistics, and that no progress has been reported on a minimum set of issues to be covered by these commitments.

ESGAB invites Eurostat to be more proactive in promoting stand-alone commitments. Eurostat should also initiate discussions with ESS members on a minimum set of issues to be covered by the commitments.

[1] <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009R0223>

3.3.2. COMMITMENT TO QUALITY

Prominence of and reference to the code of practice

In accordance with the CoP and as reinforced by ESGAB Recommendation 2017/7, the heads of NSIs should ensure that ONAs release impartial statistical publications that can be clearly differentiated from political statements. Eurostat monitors this implementation through the regular ESS peer reviews.

As stipulated by ESGAB Recommendation 2017/9, since a revised CoP is expected to take into account the emergence of new data sources, amended Regulation [EC] No 223/2009 and the outcome of the second peer-review exercise, the implementation of the revised CoP should be assessed in a third peer-review exercise.

ESGAB notes that these ideas have been incorporated in the methodology of the third round of peer reviews, taking place from 2021 to 2022, and would like to be kept informed about their implementation by Member States.

Data from private sector organisations

ESGAB Recommendation 2017/4 advised that where data are provided by private sector organisations to Eurostat, NSIs or ONAs, it is up to these bodies to ensure that the data are robust and that access can be sustained over time, and to check the quality of the methods used. To this end, for other statistics produced by the directorates-general of the European Commission, Eurostat has developed a reference quality framework.

While ESGAB welcomes the development of this important reference quality framework, it believes that it does not fully address the issue raised by Recommendation 2017/4. Therefore, it urges Eurostat and the NSIs to develop a

reference quality framework for statistics provided by private sector organisations as well.

ESGAB Recommendation 2018/6 stipulated that Eurostat and the NSIs should engage with the private sector by establishing partnerships to enhance cooperation and collaboration, and reduce the burden on respondents by making use of new data sources.

In order to implement this recommendation, Eurostat proposed the integration of several actions in the multiannual action plan (MAP) implementing the provisions on European statistics included in the proposal for the 2021–2027 single market programme. Those actions comprise: (1) developing business models for selected economic domains; (2) establishing arrangements with large private data holders to ensure stable access to data; (3) amending cross-cutting or sectoral EU legislation to enable legal access to private data sources; and (4) creating data sets that combine private data sources available at EU level with national data sources.

ESGAB would like to be informed as to how the actions integrated in the MAP contributed to accessing the data from private sector organisations.

Increasing data quality

ESGAB Recommendation 2018/7 advised Eurostat and the NSIs to develop minimum standards on data quality to be followed by entities operating in the European Union such as companies and institutions not belonging to the ESS but that produce statistical data and indicators.

In the context of the next 7-year multiannual financial framework, the ESS included clear quality indicators, along with CoP-based methodology for using both new data sources and privately held data, in the MAP.

ESGAB takes note of the planned actions and will closely monitor their implementation in the future.

3.3.3. RELEVANCE

Creating strategies for relations with users

ESGAB Recommendation 2019/4 advised that due to the importance of an effective dialogue with users in implementing Principle 11 of the CoP ('Relevance'), the ESS should discuss how to strengthen such a dialogue at both the EU and the national level.

Several initiatives to enhance the dialogue with users are ongoing, notably in the context of the new priority-setting mechanism endorsed by the ESSC (which builds strongly on user needs) and of the project for digital communication, user analytics and innovative products. In addition, to support the dialogue at the national level as well, Eurostat will promote the regular exchange of best practices through the Dissemination Working Group, the network of press officers and the network of support centres.

ESGAB Recommendation 2019/5 urged Eurostat to prepare, in cooperation with ESAC, an overview of NUCs and promote the establishment of these bodies in countries where they do not currently exist or the extension of their scope, as necessary.

ESGAB takes note of the fact that ESAC is analysing the available information on countries' NUCs to assess the need to promote the establishment of these bodies where they do not currently exist.

In view of the increasing risks of third-party dissemination of unvalidated or false information, ESGAB recommended (in

Recommendation 2019/6) that Eurostat and the NSIs design appropriate actions of public communication and outreach to highlight the trustworthiness of official statistics.

To respond to this recommendation, Eurostat:

- has put in place a dedicated support channel for fact checkers and journalists;
- has facilitated direct access to the Eurostat database for fact-checking organisations and has provided training for fact checkers and journalists on the use of these products;
- is updating its communication and dissemination strategy to include explicit actions to support European Commission initiatives to tackle fake news, provide rapid support services for fact checkers and respond appropriately to the misuse of data;
- is developing a specific communication strategy for the forthcoming round of ESS peer reviews, aimed at the general population as well as key target groups.

ESGAB welcomes this comprehensive set of initiatives to counter the dissemination of data from unreliable sources and looks forward to seeing the results.

3.3.4. COHERENCE AND COMPARABILITY

Improving the comparability of key economic and social indicators

ESGAB Recommendation 2018/1 urged Eurostat and NSIs to improve the comparability of key economic and social indicators challenged by the processes of globalisation and digitalisation.

With respect to globalisation, Eurostat has established an early warning system focusing on

events in major multinational enterprises with the potential to impact statistics and introduced important actions for improving the statistical infrastructure. On the issue of digitalisation, Eurostat is cooperating closely with other international organisations to develop a digital economy satellite account and continues its close cooperation with macroeconomic statisticians and business statisticians.

ESGAB wishes to be informed as to how the early warning system improved the comparability of the abovementioned indicators and as to the outcome of the cooperation with other international organisations.

3.3.5. GENERAL

Population and housing census

In Recommendation 2019/7 ESGAB advised Eurostat and the NSIs to pay special attention to the governance of the 2021 population and housing census. In particular, NSIs, with Eurostat support, should strengthen their coordination role in relation to ONAs and local authorities throughout the whole process.

Given the growing use of administrative sources in census operations, ESGAB Recommendation 2019/8 suggested that the ESS ensure the clarity of the definitions used in the 2021 population and housing census and their consistency with those used in the past and with the statistical concepts used worldwide. Particular attention should be given to social topics (e.g. employment and unemployment) and migration flows.

To address these two recommendations, Eurostat, in collaboration with its partners (NSIs, the United Nations Economic Commission for Europe (UNECE) and the International Labour Organization), has been working on a

harmonisation of methodology and technical specifications. The objective of this harmonised approach is to create a common understanding of concepts and exchange of good practice. Furthermore, Eurostat and its partners support the use of administrative data and emphasise the need for ongoing communication and coordination with the owners of the administrative data sources, including relevant ONAs.

Eurostat will continue this work with NSIs to monitor and support the implementation of the 2021 EU census programme and work closely with UNECE and NSIs to update census manuals and methodological guidelines. Eurostat has also updated the definitions and concepts used in 2011 for the census topic 'current activity status' and related employment topics to align them with the latest definitions recommended by the International Labour Organization for labour statistics.

These updates also aimed at maintaining the consistency of concepts and definitions over time and with other areas of statistics, to ensure that concepts remain relevant in the face of social and economic changes.

ESGAB takes note of these developments aiming to increase the quality of the census results and thereby enhance trust in official statistics.

ESGAB Recommendation 2019/9 stated that a comprehensive strategy of communication and dialogue with users in relation to the 2021 population and housing census should be developed at national and EU levels.

The *Conference of European Statisticians Recommendations for the 2020 Censuses of Population and Housing* ^[12] contains guidelines on communication with respondents and users. As part of its ongoing cooperation with UNECE,

^[12] <https://www.unecce.org/publications/2020recomm.html>

Eurostat will support NSIs' reporting on census communication activities and the exchange of experience and good practice.

ESGAB acknowledges that the COVID-19 pandemic has forced changes to communication plans and has created uncertainty about national-level arrangements for the census. Therefore, it welcomes Eurostat's plans to continue its close communication with NSIs at a general or bilateral level, taking into account the developing situation with regard to the pandemic and its impact on the census.

According to ESGAB Recommendation 2019/10, the possibility of developing a continuous population census within the EU should be explored, in light of the growing mobility of people within the EU and the expected trends in international migration.

Eurostat will continue its work with a group of NSIs to develop a new legal base for population statistics beyond 2021. The adoption of administrative sources will allow for the option of collecting annually some data previously only collected every 10 years. It is also intended that the new legal base will offer some flexibility to allow for the gradual increase in the amount of data collected annually, and for a focus on the topics that are most important to data users. Consultation with key data users has shown that data relating to migration and mobility to/from and within the EU must continue to be given priority.

ESGAB takes note of these plans and wishes to be informed of the appropriate legal developments and their impact on data availability.

Peer reviews

ESGAB Recommendation 2019/11 stipulated that, in the final report on the 2013–2015 peer-review exercise at the end of 2020, an in-depth

analysis of the whole exercise and in particular of the implementation of improvement actions, with a categorisation of the different actions, risks identified and successes achieved, must be presented.

ESGAB appreciates the fact that this analysis was presented to the ESSC in May 2020 and shared with the board (see also Section 3.4).

ESGAB Recommendation 2019/12 urged Eurostat, in collaboration with NSIs and potentially with other directorates-general of the Commission, to be proactive in ensuring the progress of the implementation of those peer-review recommendations whose implementation depends on actions to be pursued at a governmental level.

In line with this recommendation, the remaining improvement actions from the second round of peer reviews will be addressed at the forthcoming peer-review visits, based on the report on the implementation of the improvement actions from the second round of peer reviews.

As one of the outcomes of the next round of peer reviews, in line with Recommendation 2019/13, Eurostat should produce a mapping and an assessment of the different risks of non-compliance with each of the principles of the CoP.

ESGAB welcomes the fact that, in line with this recommendation, Eurostat will include a mapping of risks in the final Eurostat report on the peer reviews.

ESGAB Recommendation 2019/14 called for full transparency of the peer-review process, encouraging Member States and Eurostat to promote awareness of the methodology and to communicate with representatives of users at different stages of the process.

To comply with this recommendation, Eurostat will:

- publish the peer-review methodology and corresponding guidelines on the Eurostat website;
- refer the transparency issues on to the communication officers of the NSIs at their dedicated workshop;
- encourage NSIs to promote the information on the peer reviews available on their web pages.

ESGAB Recommendation 2018/5 urged Eurostat and the NSIs to establish a communication strategy for the whole of the peer-review process and ensure the engagement of stakeholders at all steps before, during and after the process.

To respond to this recommendation, the ESS task force on peer reviews has developed a communication strategy covering communication before, during and after the peer review in a given country and, if relevant, at ESS level. This communication strategy was endorsed by the ESSC.

ESGAB welcomes this approach, as a good data communication strategy is a very important element in improving understanding of statistics.

Improving the statistical literacy of EU citizens

ESGAB Recommendation 2018/4 was that Eurostat and the NSIs step up their efforts to improve the statistical literacy of the EU public and to educate professional users (especially the media) in the correct use of statistics.

Activities established to comply with this recommendation continue. Examples include games, e-learning materials and the European

Statistics Competition. In addition, a series of workshops targeted at data journalists were organised.

Identifying new skills needed in the European Statistical System

ESGAB Recommendation 2018/3 stipulated that Eurostat and the NSIs should work with experts in academia and the private sector to identify the emerging new skills needed in the various fields of the ESS, and should make appropriate resources available to retrain current staff members in these key skills.

In line with this recommendation, the following actions were proposed in the MAP implementing the 2021–2027 European statistics programme: (1) exchange of experience within the ESS regarding staff profiles, turnover analysis and staff retention management; (2) providing further learning opportunities for experts; and (3) promoting more intensive staff exchanges between ESS members, including possibly establishing a statistical Erasmus+ programme.

ESGAB takes note of these plans.

3.4. IMPLEMENTATION OF IMPROVEMENT ACTIONS ARISING FROM PEER-REVIEW RECOMMENDATIONS

Introduction

The 2013–2015 round of peer reviews assessed all 15 principles of the CoP as well as the coordinating role of the NSIs within their respective national statistical systems. The main objectives were to improve the efficiency and credibility of the ESS, strengthen its capacity to produce European statistics and reassure stakeholders as to the quality of

European statistics and the trustworthiness of the system.

The independent peer reviewers identified 707 recommendations, which were translated into 910 improvement actions to be implemented by the NSIs. ESGAB welcomes the fact that only 9% of all recommendations issued by the peer-review teams concern non-compliance with the CoP, and the vast majority refer to improving compliance.

The peer reviewers also looked into the level of integration of ONAs within the ESS and assessed a number of those authorities.

Due to its withdrawal from the European Union, no updated monitoring information was received from the United Kingdom for 2019. Consequently, the text of this section focuses on the implementation of the action points in 27 NSIs.

ESGAB welcomes the fact that five NSIs completed all their improvement actions in the allotted time frame. The other NSIs are currently working to implement the remaining actions. Some of these actions could not be completed because they are outside the influence of the NSIs (e.g. those regarding changes in legislation).

Progress in the implementation of improvement actions by NSIs

The implementation period for the improvement actions emanating from the second round of peer reviews (which took place from 2013 to 2015) finished on 31 December 2019. As in previous rounds, the NSIs were fully responsible for the implementation of the improvement actions and ensuring the appropriateness, completeness and proper documentation of the actions.

As of 1 January 2019, 229 actions remained open. In 2019, the NSIs completed 64 actions, in addition to the 616 improvement actions accomplished between 2016 and 2018. The number of delayed actions decreased from 86 in December 2018 to 79 in December 2019. The number of actions dependent on authorities outside the scope of the NSIs dropped to 39 at the end of December 2019. A further 18 actions have been closed and no further work is planned. ESGAB takes note of the remaining 118 actions that the NSIs had not completed by 31 December 2019.

As in previous years, the NSIs made progress in all five domains. ESGAB notes that the highest number of completed actions was recorded under the 'quality and methodology' heading.

The remaining open improvement actions can be summarised by domain, as follows.

- **Governance and legal aspects; cooperation.** The highest number of open actions concern coordination issues related to governance and legal aspects, and general aspects of independence including committees/boards.
- **Adequacy of resources and cost-effectiveness.** Cost-effectiveness is the area where the most actions still need to be closed.
- **Quality and methodology.** The areas relating to quality management models and process quality assurance remain those with the highest number of actions still open.
- **Burden reduction and administrative data.** The area of legal provisions on administrative data reports the highest number of pending actions.
- **Impartiality and dissemination.** The actions on dissemination policy and products and

dissemination of microdata show the highest degree of incompleteness.

The NSIs agreed that the peer review and the resulting recommendations provided an important stimulus for modernisation activities. They also felt that implementing the improvement actions had helped raise awareness of the European statistics CoP both within the NSIs and within the national statistical systems as a whole.

Two important positive outcomes of the peer reviews were the enhanced visibility of official statistics and the improved trust of users through increased transparency. In some cases, the implementation of the improvement actions had the unexpected benefit of improving communication across the organisation and better communication with ministries that support and fund statistics.

One of the common concerns reported by the NSIs was the lack of political will regarding the changes to legislation necessary for the implementation of improvement actions. All of the NSIs also felt that the allocation of human and/or financial resources often hampered progress in this respect.

Many NSIs admitted that they had underestimated the workload when setting completion deadlines, which led to delays. Other factors hindering the implementation of some improvement actions included: unclear responsibilities due to changes in the management of NSIs, the high demand placed on IT services that had not been taken into account when setting deadlines for the improvement actions and the fact that many actions were interlinked and delays in one caused subsequent delays in others.

ESGAB acknowledges the work the NSIs have carried out to improve their national statistical systems. Despite the considerable number of actions that remain open, ESGAB recognises the continuous progress and the overall positive impact that the implementation of the improvement actions has had at the national level, as well as on the ESS.

ESGAB acknowledges that the conclusions from this monitoring exercise will be taken into account in the forthcoming round of peer reviews.

ESGAB 2020 RECOMMENDATIONS

2020/10. ESGAB recommends that during the upcoming round of peer reviews the ESS pay special attention to the composition of peer-review expert teams to ensure both a high level of statistical and managerial skills and full impartiality.

2020/11. ESGAB recommends that during the upcoming round of peer reviews the ESS place a strong emphasis on the compliance by ONAs with the CoP, along with the way in which national legislation and actual practices deal with the coordination and functioning of the national statistical systems, including the role of users.

2020/12. ESGAB recommends that during the upcoming round of peer reviews, when assessing compliance with indicators 1.2 and 1.8 of Principle 1 of the CoP, the ESS pay attention not only to the legal framework for the appointment and dismissal of the heads of NSIs, but also to the actual procedures and practices, and identify any related risks.

2020/13. ESGAB recommends that Eurostat, in cooperation with ESGAB, improve the system for monitoring the appointment and dismissal of the heads of NSIs, including through an early warning mechanism, a detailed specification of the reasons for every appointment or dismissal and a procedure for response by the appropriate body (the Commission, Eurostat, ESGAB, etc.) should doubts arise.

ANNEXES

Annex 1. Principles of the European statistics code of practice (as revised in 2017) ⁽¹³⁾

Principle 1

Professional independence

Professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European statistics.

Principle 1bis

Coordination and cooperation

National Statistical Institutes and Eurostat ensure the coordination of all activities for the development, production and dissemination of European statistics at the level of the national statistical system and the European Statistical System, respectively. Statistical authorities actively cooperate within the partnership of the European Statistical System, so as to ensure the development, production and dissemination of European statistics.

Principle 2

Mandate for data collection and access to data

Statistical authorities have a clear legal mandate to collect and access information from multiple data sources for European statistical purposes.

⁽¹³⁾ <https://ec.europa.eu/eurostat/web/products-catalogues/-/KS-02-18-142>

Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

Principle 3

Adequacy of resources

The resources available to statistical authorities are sufficient to meet European statistics requirements.

Principle 4

Commitment to quality

Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and output quality.

Principle 5

Statistical confidentiality and data protection

The privacy of data providers, the confidentiality of the information they provide, its use only for statistical purposes and the security of the data are absolutely guaranteed.

Principle 6**Impartiality and objectivity**

Statistical authorities develop, produce and disseminate European statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Principle 7**Sound methodology**

Sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

Principle 8**Appropriate statistical procedures**

Appropriate statistical procedures, implemented throughout the statistical processes, underpin quality statistics.

Principle 9**Non-excessive burden on respondents**

The response burden is proportionate to the needs of the users and is not excessive for respondents. The statistical authorities monitor the response burden and set targets for its reduction over time.

Principle 10**Cost effectiveness**

Resources are used effectively.

Principle 11**Relevance**

European statistics meet the needs of users.

Principle 12**Accuracy and reliability**

European statistics accurately and reliably portray reality.

Principle 13**Timeliness and punctuality**

European statistics are released in a timely and punctual manner.

Principle 14**Coherence and comparability**

European statistics are consistent internally, over time and comparable between regions and countries; it is possible to combine and make joint use of related data from different data sources.

Principle 15**Accessibility and clarity**

European statistics are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Annex 2. Glossary

European Statistical Governance Advisory Board (ESGAB)

ESGAB is the body that provides an independent overview of the implementation of the CoP. It seeks to enhance the professional independence, integrity and accountability – three key elements of the CoP – of the ESS and the quality of European statistics.

Its tasks include the preparation of an annual report to the European Parliament and the Council on the implementation of the CoP by Eurostat and the ESS as a whole. ESGAB also advises the Commission (specifically, Eurostat) on appropriate measures to facilitate this implementation.

All ESGAB reports are available on the board's homepage (<https://ec.europa.eu/esgab/>).

European Statistical System (ESS)

The ESS ^[14] is a partnership between the European Union's statistical authority, i.e. the Commission (Eurostat), and the NSIs and ONAs responsible in each Member State for the development, production and dissemination of European statistics.

European statistics code of practice (CoP)

The European statistics CoP ^[15] sets the standards for developing, producing and disseminating European statistics. It builds on a common definition of quality in statistics used in the ESS. The CoP is a self-regulatory instrument containing 15 principles which

address the institutional environment in which national and EU statistical authorities operate, and the production and dissemination of European statistics. Its implementation is supported by a set of indicators of good practice for each principle.

The CoP was adopted by the Statistical Programme Committee in 2005; it was revised by the ESSC in 2011 and again in 2017.

Peer reviews

Peer reviews ^[16] are part of the ESS strategy to implement the European statistics CoP. The objective is to enhance the integrity, independence and accountability of ESS statistical authorities.

The first round of peer reviews was carried out from 2006 to 2008, followed by a second round from 2013 to 2015. Both rounds covered all EU Member States and EFTA states. ESGAB carried out a peer review of Eurostat in 2014 using the methodology developed for the NSI peer reviews, with some adaptations to reflect Eurostat's specific role in the ESS.

^[14] <https://ec.europa.eu/eurostat/web/european-statistical-system/overview>

^[15] <https://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice>

^[16] <https://ec.europa.eu/eurostat/web/quality/peer-reviews>

Annex 3. Abbreviations

CoP	European statistics code of practice
ESAC	European Statistical Advisory Council
ESGAB	European Statistical Governance Advisory Board
ESS	European Statistical System
ESSC	European Statistical System Committee
MAP	multiannual action plan
NSI	national statistical institute
NUC	national user council
ONAs	other national authorities
SDGs	sustainable development goals
SMEs	small and medium-sized enterprises
UNECE	United Nations Economic Commission for Europe

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