

ESGAB ANNUAL 2021

Thirteenth 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 the European Statistical System as a whole



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FOREWORD

As the incoming Chair of the European Statistical Governance Advisory Board (ESGAB), together with a new team ^[1], I am pleased to share with you the *ESGAB Annual Report 2021* – the 13th such report.

2021 was a very unusual year, including in the area of European statistics. It was the second year of the COVID-19 crisis, with all its challenges for the production of timely, relevant, high-quality statistics. 2021 once again showed the agility of Eurostat and of the European Statistical System (ESS), as 2020 already had. Despite the difficult situation, the regular production of official statistics was ensured, and even new – mainly experimental – statistics were developed and published, thus addressing urgent new data needs on the part of users.

The main focus of ESGAB's work in 2021 was the peer review of Eurostat, as part of the third round of peer reviews of the entire ESS. Due to the pandemic and its consequences on social distancing and travel, all the peer review meetings had to take place in a virtual format. However, ESGAB is confident that, despite the unusual format, the necessary information could be gathered and evaluated.

This third round of peer reviews in the ESS has a future-oriented approach towards the European Statistics Code of Practice (ES CoP), focusing predominantly on the preparedness of Eurostat and the system for the challenges of the future, while recognising the progress in the implementation of the ES CoP since the last peer review. ESGAB identified many of these challenges and formulated

recommendations to prepare and strengthen Eurostat for them, thus securing users' confidence in European statistics. In this context, the development of experimental statistics is also addressed in this report.

The institutional environment and governance issues also continue to be important focus areas, especially with regard to independence and impartiality. In these areas, ESGAB is of the opinion that Eurostat has to be a role model for the ESS, as Eurostat is tasked with monitoring and urging the implementation of relevant peerreview recommendations for ESS members. In this regard. Eurostat and the Commission should use best practices to fully meet the requirements of the ES CoP, and should potentially be even more ambitious than that. This is especially important in the current climate – in which the rule of law and the values of the European Union are increasingly threatened in some Member States – to prevent these tendencies from spilling over into statistics.

Finally, ESGAB wants to thank the secretariat, Eurostat and all interview partners in this peer review for their contributions and support.

We hope that our report and its 18 concrete recommendations will contribute to strengthening Eurostat and the entire ESS and making them fit for the future.

> Aurel Schubert European Statistical Governance Advisory Board Chair

¹ Mr Andreas Georgiou was not part of the Eurostat peer review as he only joined ESGAB after the preparation of the *ESGAB Annual Report 2021.*

CONTENTS

Forewo	rd	3
Europea	an Statistical Governance Advisory Board	7
1. Exec	utive summary	8
2. Intro	duction	16
3. A brief description of Eurostat		18
	3.1.1. Mission and vision	19
	3.1.2. General description of the procedure for the appointment of the head of Eurostat	19
	3.1.3. Main characteristics of the statistical work programmes (annual and multiannual)	20
	3.1.4. Dissemination and communication	20
	3.1.5. General description of the quality management system	21
	3.1.6. Main legal acts	21
	3.1.7. Resources	21
4. Prog	ress in the last 5 years	22
5. Compliance with the Code of Practice and future orientation		26
5.1.	Eurostat's strengths in relation to its compliance with the Code of Practice	
5.2.	Issues and recommendations	27
	5.2.1. Being a role model for independence and impartiality	
	5.2.2. Reaching out to users and partners	
	5.2.3. Expanding the statistical production possibilities frontier	
	5.2.4. Being agile and proactive	
Annex -	Agenda of the peer review	38

EUROPEAN STATISTICAL GOVERNANCE ADVISORY BOARD



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);

- 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/

1. EXECUTIVE SUMMARY

Throughout the world, the digitalisation and datafication of societies are presenting statistical producers with new opportunities and challenges. As a result, Eurostat, and the whole of the European Statistical System (ESS) with it, will be going through an important transition in the coming years.

This peer review of Eurostat, the third of its kind, reflects - in addition to an evaluation of Eurostat's adherence to the European Statistics Code of Practice (ES CoP) – the need to rise to the new opportunities and challenges, with a clear focus on adapting to the future. As was the case for its predecessors, the peer review was based on a range of interviews with Eurostat staff and important stakeholders. Due to the COVID-19 pandemic, these interviews had to be done virtually, but the European Statistical Governance Advisory Board (ESGAB) is nonetheless satisfied that the impressions gained from the interviews and from reading relevant documents reflect reality, and that the observations and recommendations contained in this report have a solid basis.

Another reason for putting the emphasis on the future is that Eurostat's recent performance over a range of relevant criteria has been excellent. Its ability to maintain statistical production, and even to enhance the production of experimental statistics during the pandemic, has borne witness to the substantial agility of the ESS as a whole. Furthermore, many of the challenges identified in past peer reviews of Eurostat have been addressed, leaving only a limited set of issues that have more of a compliance character in relation to the ES CoP. One of the themes of this peer review is Eurostat as a role model for independence and **impartiality**, and it covers several compliance recommendations relating to the appointment and dismissal of senior management. While there is no suggestion that practices in these areas have compromised Eurostat's professional independence, it is important to use good times to establish the institutional protections that can be tested during potential bad times. This is even more the case because Eurostat serves as a role model for national statistical institutions and needs to have the

moral authority to challenge national practices that may impinge on professional independence and impartiality, and therefore sap confidence in European statistics.

In the same vein, some current procedures within the European Commission, as reflected in relevant documents, may raise doubts about the independence and quality of statistics. These procedures may therefore need some reconsideration in order to limit any risk of reduced confidence in European statistics. More than ever, with the proliferation of statistical information of varying levels of quality, confidence is a crucial asset for official statistics that must be protected in the best way possible.

A particular aspect of confidence relates to trusting that information provided in confidence will stay confidential. Eurostat and the institutions of the ESS have an excellent record in that area, but must be mindful that their ability to operate relies on preserving that confidence, and therefore on continuing to take action to protect confidentiality.

A second broad theme of the peer review is the need to **reach out to users and partners**. This has always been a priority, but is becoming ever more so in an increasingly digitalised and datadependent society.

Outreach to academia is particularly important at this juncture for various reasons, and should be organised within a comprehensive strategic framework. Eurostat needs to be able to draw on methodological innovations and inspiration from science to exploit new sources of data, created as digital footprints of individuals, households and enterprises, using insights from fields such as data science and artificial intelligence. This should occur in ongoing relationships that will raise the profile and attractiveness of Eurostat both as a partner and as a potential employer, thus helping to close Eurostat's apparent skills gap in new data areas. But Eurostat also has some important potential contributions to bring to this relationship. Access on a secure basis to micro data sets that are comparable across countries could provide strong impetus to research and societal innovation in Europe. In addition, research in some areas could be boosted by easy access to statistics of different vintages.

The relationship with users of statistics is of course crucial to Eurostat, and needs to be invested in at a time when statistical facts and factoids are available in abundance from an increasing number of sources. Eurostat needs to ensure that its statistics remain the prime source of quantitative information on European societies by continuing to develop its communication and dissemination tools and allowing users to customise their access as much as possible to their requirements. In this regard, and building on an improved relationship with academia. efforts should be made to understand, analyse and possibly reduce the revisions of statistics as new data become available – such revisions are an unavoidable by-product of timely publication, but they remain a problem for users.

A third theme of the review is **expanding the statistical production possibilities frontier**. This is very much about making the most out of the new sources of data that are emerging in society. One important precondition for this is gaining access to statistics from new data sources, which are predominantly privately owned. ESGAB emphatically underlines the public interest in this regard, along with the need for the upcoming European Union (EU) Data Act to provide such access to all producers of European statistics.

However, in order to exploit their full potential, the new data sources also need to make comprehensive changes to the way their statistics are produced. ESGAB suggests that a new strategy be developed for approaching the new data. This strategy would cover the priorities with respect to data sources, different modes of access and production, and the implications for skills requirements among staff. Meeting the latter demand is generally seen as a challenge for Eurostat, and one that needs to be addressed in a comprehensive manner by exploiting all the possibilities and freedoms of the generally rigid Commission employment framework and putting a significant amount of effort into training.

To be successful, the various producers of European statistics should direct their efforts at meeting these new challenges. The further strengthening and extension of cooperation among the central banks and statistical institutes has a great deal of potential, and needs to be a priority. ESGAB therefore underlines the need for Eurostat and the European Central Bank (ECB) to seek ways to maximise coordination and cooperation between their statistical systems (the ESS and the European System of Central Banks (ESCB)), for example in the areas of sharing information on global enterprises or statistical infrastructures.

Most of the above efforts to meet the challenges of the new world of data will require additional resources, both financial and human. The efficiency gains in the production of traditional statistics will not by themselves free up enough resources to cover all of the new requirements. Such resources will be needed both by Eurostat and at the national level. ESGAB calls on EU policymakers at the various levels to meet these needs in the interest of strengthening official statistics as a bulwark against disinformation, reducing the burden of traditional data collection on enterprises, making statistics more promptly available and covering new areas of society with statistics.

The fourth and final main theme of the review is the need for Eurostat to **be agile and proactive**. Crises do occur, and when they do, priorities often change at short notice. For example, the timeliness of information may become more important than accuracy, detail and coherence with other statistics. Eurostat and national producers will have to act correspondingly and will need to be prepared to do so. Preparation also involves taking stock of the possibilities for undertaking collective statistical actions at short notice, financed from European sources.

As mentioned above, the COVID-19 pandemic response has been impressive in terms of both production being maintained under difficult circumstances and the development of new, experimental statistics and dissemination vehicles. Eurostat has played a key role, not least by guiding and advising national producers. It is important to learn the lessons of what has worked well and what has worked less well during the crisis so as to be even better equipped to respond in extraordinary circumstances in the future. This should include a review of the necessary flexibility in terms of the legal framework.

The role of experimental statistics has been particularly significant, and it will be important to consider how Eurostat can mainstream such statistics – which only a subset of countries will be able to produce – both during future crises and during more normal times. A particular point of observation will be how to make such experimental statistics more visible to a wider set of users than has been the case during the pandemic.

To sum up, Eurostat's performance over recent years and during the pandemic has been impressive. Moreover, most of the earlier issues associated with compliance with the ES CoP have been dealt with. Accordingly, the emphasis of this review has mostly been on how best to adapt to the new and emerging data landscape. Eurostat is at a good point of departure in this regard, but a number of initiatives also need to be put in place. In particular, ESGAB is of the opinion that Eurostat can and should be a role model, extend its reach to users and partners, expand the production possibilities frontier and be agile and proactive. To serve these goals, ESGAB presents 18 concrete recommendations. In the spirit of continuous improvement that is integral to the ESS, Eurostat will translate the recommendations formulated in this report into improvement actions for implementation.

RECOMMENDATIONS

I. BEING A ROLE MODEL FOR INDEPENDENCE AND IMPARTIALITY

R1. ESGAB recommends that legislation should specify reasons for the early termination of the contract (dismissal) of the Director-General of Eurostat. These should not include reasons that compromise his/her professional or scientific independence.

R2. ESGAB recommends that the recruitment and dismissal of Eurostat senior management, other than the director-general, should be public and transparent, with a strong emphasis on statistical qualifications.

R3. ESGAB recommends that Eurostat ensure the systematic follow-up of the implementation of the reference quality framework applicable for other statistics, in cooperation with the European Commission directorates-general concerned. This should include exploring the usefulness of setting up a mutual peer-review process in order to monitor and, if needed, strengthen compliance with the reference quality framework. **R4.** ESGAB recommends that Eurostat evaluate critically whether the current practice of pre-releasing statistics to other bodies of the European Commission, while respecting the ES CoP, complies with Eurostat's position as standard bearer of the ESS.

R5. ESGAB recommends that Eurostat further develop its already strong safeguards for confidentiality by reviewing and, to the extent possible, further harmonising practices across statistical areas as regards procedures and tools for anonymisation and/or statistical disclosure control.

II. REACHING OUT TO USERS AND PARTNERS

R6. ESGAB recommends that Eurostat develop a comprehensive strategy of cooperation with academia.

R7. ESGAB recommends that Eurostat further improve its communication and dissemination in light of the 'new world of information overflow', where many providers fight for the limited attention of the users.

R8. ESGAB recommends that Eurostat find ways, where appropriate, of establishing externally accessible vintage databases for relevant statistics in order to facilitate policy-relevant research. **R9.** ESGAB recommends that Eurostat take action to enhance research on microdata by developing appropriate methods and agreeing with Member States on data sets to which access may be feasible, and by developing privacyprotecting techniques for access (such as metadata-driven software) that could also be applied at the Member State level.

R10. ESGAB recommends that Eurostat further develop its analytical frameworks with respect to revisions. Eurostat should publish its revision policy and regular analyses of revisions.

III. EXPANDING THE STATISTICAL PRODUCTION POSSIBILITIES FRONTIER

R11. ESGAB recommends to the colegislators that the upcoming adoption of the EU Data Act should establish a permanent path for access to privately held data for Eurostat and for all producers of European statistics.

R12. ESGAB recommends that Eurostat develop a comprehensive strategy for the use of new digital data sources that have the potential to contribute to the objectives of relevance, accuracy and timeliness, and may help to reduce the burden on respondents and increase cost-effectiveness.

R13. ESGAB recommends that Eurostat and the ECB build on the existing strong cooperation between the ESS and the ESCB to exploit the scope for better coordination and cooperation on data sharing and on dealing with complex statistical cases (such as multinational enterprises), and to evaluate the potential for common statistical infrastructures (such as statistical business registers).

R14. ESGAB recommends that Eurostat identify and map the (future) required skills/competencies of staff. Based on this information, training for existing staff should be adjusted to allow for successful upskilling in the relevant new areas. At the same time, Eurostat should proactively use all the possibilities of the Commission's current recruitment system to attract and retain staff with the necessary future-proof skills. **R15.** ESGAB recommends that EU policymakers back up all the ongoing innovation endeavours with appropriate funding, covering both financial and human resources. It also reiterates its recommendations (recommendations 2020/6 and 2020/7) that the Commission propose significant investment in digital

IV. BEING AGILE AND PROACTIVE

R16. ESGAB recommends that Eurostat and the ESS perform a thorough assessment of the experience during the COVID-19 crisis. This review should cover the challenges, reactions, obstacles and successes, and should draw concrete conclusions. In addition, an action plan should be prepared to ensure resilience in future crisis situations.

R17. ESGAB recommends that Eurostat, jointly with national statistical institutes (NSIs), set up procedures for proactively introducing rapid statistical innovation, which should include experimental statistics in particular. This will help prepare for times of crisis. Proposals should be included on how to ensure the visibility of such statistics, and processes should be devised for their eventual mainstreaming. infrastructure for statistical purposes, to enable innovation and experimentation. The Member States' recovery and resilience plans and other relevant EU funds should support this action on new EU policy initiatives throughout the ESS, covering both development and running costs.

R18. ESGAB recommends that Eurostat use, when necessary, the powers provided for under Article 14(1) (b) and Article 14(2) of Regulation (EC) No 223/2009 on European statistics actively and to the fullest possible extent so as to be able to react quickly to unexpected and urgent statistical demands for policymaking. It should therefore analyse the potential and limits of these legal provisions. If they turn out to be inadequate, the issue should be considered in the context of an amendment to Regulation (EC) No 223/2009.

2. INTRODUCTION

t is recognised that quality is one of the ESS's comparative advantages in a world experiencing a growing need for and ability to produce instant information, heightened at times of crisis such as the COVID-19 pandemic. The ES CoP is the cornerstone of the ESS common quality framework, and the ESS statistical authorities have committed themselves to adhering to it.

In this context, it is crucial for the ESS to be equipped with a review mechanism – peer reviews – supporting, with credible evidence, this self-commitment to adhere to the ES CoP. The objective of this review mechanism is to enhance the integrity, professional independence and accountability of the ESS statistical authorities. The first round of peer reviews was carried out in 2006–2008, followed by a second round in 2013–2015.

In 2017 the ES CoP was reviewed and extended, and now encompasses 16 principles. This revised version of the ES CoP triggered a third round of peer reviews, being carried out in Eurostat and in the Member States of the EU and of the European Free Trade Association from 2021 to mid 2023. This round of peer reviews aims at improving the quality of and trust in European statistics by assessing the compliance of the ESS with the principles of the revised ES CoP. The peer reviews cover the ESS statistical authorities (Eurostat, NSIs and selected other national authorities (ONAs)) that develop, produce and disseminate European statistics. The peer reviews will be followed by a period of annual monitoring of the implementation of the improvement actions developed by Eurostat and the NSIs to address the recommendations laid down in the peerreview reports.

The third round of peer reviews has the following two objectives.

• To review the compliance/alignment of the ESS with the ES CoP, in order to demonstrate to the ESS and to external stakeholders that the ESS is a system based on the principles of the ES CoP.

• To help Eurostat, NSIs and ONAs further improve and develop by indicating futureoriented recommendations. At the same time, the peer reviews should stimulate statistical and other government authorities to support the implementation of these recommendations.

The peer review of Eurostat was conducted by ESGAB. It had four phases: completion of the self-assessment questionnaire (SAQ) by Eurostat; analysis of the SAQ by ESGAB members; virtual meetings with Eurostat staff and relevant stakeholders; and the preparation of this report, including recommendations by ESGAB. In accordance with the overall methodology applicable to the third round of peer reviews in the ESS, these recommendations are of two types:

- compliance related (ensuring compliance/ alignment with the ES CoP);
- improvement related (less critical/technical, supporting improvements).

A combination of an audit-like and a peer-review approach is used when assessing Eurostat, to benefit from the positive aspects of both approaches. The audit-like approach requires the provision of documents as evidence, the ownership of the recommendations by the ESGAB members and the right for Eurostat to express diverging views on the recommendations and to formulate the corresponding improvement actions. The peerreview approach allows for a peer-learning approach and a focus on improvements needed to adapt to the challenges posed by the surrounding environment.

All of the principles of the ES CoP are reviewed through the SAQ as answered by Eurostat. However, to a significant extent, ESGAB members used their freedom to concentrate on those principles where Eurostat is potentially confronted with issues and future challenges. A similar approach is used to conduct peer reviews of national statistical systems. In this context, however, it is important to underline that certain principles – such as those concerning professional independence and the coordination and cooperation functions of a statistical authority, along with principles including elements of modernisation - are assessed during the peer review for every member of the ESS, and were also kept in focus in relation to Eurostat

It has to be emphasised that the peer-review reports should not be used to compare one member of the ESS to another, even though much effort has been made to harmonise the way peer reviews are conducted within the ESS.

3. A BRIEF DESCRIPTION OF EUROSTAT

urostat is the statistical authority of the EU and a directorate-general of the Commission, headed by a director-general. The directorgeneral is also the chief statistician.

The role and responsibilities of Eurostat within the internal organisation of the Commission, as regards the development, production and dissemination of statistics, are defined in the Commission Decision of 17 September 2012 on Eurostat (2012/504/EU).

As part of the European Commission's services, Eurostat follows the system of governance within the Commission, which is based on a clear division of responsibility between the political, corporate and departmental levels, well-defined chains of accountability and detailed working methods. The College of Commissioners takes overall political responsibility, while operational responsibility is delegated to directors-general and heads of service, who are responsible for managing their departments, allocating available resources within their services and implementing the EU budget under the political supervision of the relevant commissioner, in accordance with the strategic plans and management plans of the respective services.

The Director-General, the Deputy Director-General, the directors and the assistants of Eurostat meet every week (hereafter 'the Directors' Meeting'). The Directors' Meeting advises the director-general; it discusses the overall strategy, priorities and resource allocation of the directorate-general, in particular the statistical programme, crosscutting methodological matters, modernisation, critical projects, internal management issues and relations with partners (NSIs, users, international organisations, etc.), along with other important new initiatives. It also promotes inter-directorate communication.

Eurostat produces European statistics in partnership with NSIs and other national authorities in the EU Member States. This partnership is known as the European Statistical System (ESS), and also includes the statistical authorities of the European Economic Area countries and Switzerland. ESS members collect data and compile statistics for national and EU purposes. The ESS functions as a network in which Eurostat's role is to lead the way in the harmonisation of statistics in close cooperation with the national statistical authorities. The work of the ESS concentrates mainly on EU policy areas; however, with the extension of EU policies, harmonisation has been extended to nearly all statistical fields.

3.1.1. MISSION AND VISION

Eurostat's mission is to provide high-quality statistics and data on Europe.

Eurostat's vision is reflected in the European statistical programme for the years 2021–2027. The general objective is to develop, produce and disseminate high-quality, comparable, timely and reliable European statistics that underpin the design, monitoring and evaluation of all EU policies and help citizens, policymakers and authorities, businesses, academia and the media to make informed decisions and participate actively in the democratic process. More specifically, the objective is to develop, produce, disseminate and communicate high-guality European statistics in line with the quality criteria laid down in Article 12(1) of Regulation (EC) No 223/2009 in a timely, impartial and cost-efficient manner, through a strengthened ESS referred to in Article 4 of that regulation and enhanced partnerships within the ESS and with all relevant external parties. using multiple data sources, advanced data analytics methods, smart systems and digital technologies, and providing a national and, where possible, regional and local breakdown.

As outlined in its *Strategic Plan 2020–2024*, the following priorities will guide Eurostat's work in that period.

- To remain the trusted point of reference for statistics and data on Europe, necessary for better policies, decisions and public debate in the EU. This implies that European statistics are produced and disseminated in line with the principles of professional independence, impartial treatment of all users, objectivity, reliability and statistical confidentiality.
- 2. To better meet users' needs for relevant, timely and high-quality statistics, by seizing the opportunities offered by new digital sources and technologies and becoming more

agile and innovative in addressing emerging needs (new data sources, digitalisation, climate and demographic change, etc.), while committing to quality. This requires prioritising the recruitment and development of new skills, and fostering partnerships.

3. To better communicate and promote European statistics and to facilitate their use by policymakers, citizens, businesses, researchers and the media. In addition, Eurostat commits to continuing to provide wide access to data for scientific purposes, strengthening its capabilities to facilitate micro-data access. It will carry on supporting fact checkers and public authorities in their efforts to correct disinformation, and will develop actions to increase data literacy among users and the public.

3.1.2. GENERAL DESCRIPTION OF THE PROCEDURE FOR THE APPOINTMENT OF THE HEAD OF EUROSTAT

Regulation (EC) No 223/2009 was amended in 2015 by Regulation (EU) 2015/759 with a view, in particular, to strengthening the procedure for the recruitment of the Director-General of Eurostat. Article 6a(2) provides that the Commission shall ensure that this procedure is transparent and based on professional criteria, and that it ensures the principle of equal opportunities, in particular with regard to gender.

Furthermore, Regulation (EU) 2015/759 introduced the obligation for the Director-General of Eurostat to appear immediately after appointment by the Commission, within the framework of the statistical dialogue, before the relevant committee of the European Parliament to discuss matters pertaining to statistical governance, methodology and statistical innovation (Article 6a(4)). In addition, the procedure for the recruitment and appointment of the Director-General of Eurostat follows the rules laid down in the EU Staff Regulations (Title III 'Career of officials', Chapter 1 'Recruitment'). The recruitment shall be directed towards securing for the institution the services of officials of the highest standard of ability, efficiency and integrity (Article 27). Under the EU Staff Regulations, a directorgeneral can be appointed following the external and/or internal publication of the job or by the transfer of a senior official from another post within the Commission. The selection of senior management follows published eligibility criteria and the whole procedure is supervised closely and rigorously by the central human resource services of the Commission. The appointing authority is the College of Commissioners.

3.1.3. MAIN CHARACTERISTICS OF THE STATISTICAL WORK PROGRAMMES (ANNUAL AND MULTIANNUAL)

The multiannual European statistical programme provides the framework for the development, production and dissemination of European statistics, setting out the main fields and objectives of the actions envisaged for a period corresponding to that of the multiannual financial framework. The European statistical programme for 2021–2027 is part of the single market programme.

Annual work programmes are established by the Commission after utmost account is taken of the comments of the ESS Committee. They are based on the European statistical programme and indicate, in particular: (1) the actions the Commission considers to have priority, taking account of EU policy needs, national and EU financial constraints and the response burden; (2) initiatives regarding reviewing priorities and reducing the burden on both data providers and producers of statistics; and (3) the procedures and any legal instruments envisaged by the Commission to implement the annual work programme.

3.1.4. DISSEMINATION AND COMMUNICATION

Eurostat has established an overall communication and dissemination strategy for 2020–2024, in line with its mission to provide high-quality statistics and data for Europe. The strategy defines the operational framework for ensuring that trustworthy European statistics are widely accessible to users and well understood by anyone looking for reliable data on Europe. It pursues three principal objectives: to inform users, to promote understanding and to raise awareness. A fourth objective is to empower and engage staff.

The Eurostat website is the primary channel for disseminating data, statistical analysis and methodology, including innovative products. Social media is also a key channel for engaging with users, particularly those who would not normally visit the website. In addition, conferences and events, both physical and virtual, provide the opportunity for direct interactions with users.

Regarding products, the Eurostat Database is the tool for disseminating the statistical indicators produced by Eurostat. In addition, euro indicators provide general economic information on the euro area and are communicated through news releases containing timely, high-quality, infra-annual indicators, linked to the principal European economic indicators. They are issued simultaneously with data releases according to a set calendar, planned a year in advance. Other products include 'first release' news items, which are short communications highlighting new data. As the key news value of data sets lies in their timely release, the aim is to publish as soon as data are available for the majority of Member States, and EU/EEA aggregates have been calculated. Other news items are used to announce a wide range of other Eurostat activities and products.

Eurostat provides a broad range of services and provides support to various user groups, including the media, fact checkers, staff from EU institutions and the public. Eurostat also organises webinars, and competitions, such as the European Statistics Competition and hackathons.

3.1.5. GENERAL DESCRIPTION OF THE QUALITY MANAGEMENT SYSTEM

Eurostat's quality management system is based on four levels of quality management. The first three levels are provided for by the ES CoP, with its principles and indicators, and by the ESS Quality Assurance Framework. The fourth level of quality is twofold and concerns domainspecific tools for measuring the quality of the statistical processes and their outputs.

In Eurostat, quality management is driven on an organisational level by the Task Force on Peer Reviews and Quality, supported by the Coordination Group on Quality, which is a crosscutting central body within Eurostat with a consultative function on quality matters. In the broader ESS context, the task force is supported by the Working Group on Quality in Statistics, which often contributes to the design of new quality initiatives.

Eurostat (just like the national statistical authorities responsible for the development, production and dissemination of European statistics) is strongly committed to quality – as expressed in the quality declaration of the ESS, which is also included in the preamble to the ES CoP. In the ESS, quality is assessed and reported based on standardised rules and reporting structures and using a common technical environment: the ESS Metadata Handler.

Eurostat regularly carries out a general user satisfaction survey to obtain better knowledge about users, their needs and their satisfaction with the services provided by Eurostat. Improvement actions are implemented to respond to the suggestions arising from the surveys. In addition, to monitor user engagement and to ensure that European statistics remain relevant, Eurostat measures the number of hits on the website and on social media, along with mentions in the press.

3.1.6. MAIN LEGAL ACTS

Regulation (EC) No 223/2009 on European statistics establishes the legal framework for the development, production and dissemination of European statistics.

Eurostat's website offers a fully comprehensive overview of statistical legislation in force (at https://ec.europa.eu/eurostat/web/europeanstatistical-system/programmes-and-activities/ legislation-in-force).

3.1.7. RESOURCES

Eurostat has around 680 employees, including officials, temporary agents, contract staff and seconded national experts.

The budget allocated to European statistics under the 2021–2027 multiannual financial framework amounts to EUR 552 000 000 (14 % of the total budget of the single market programme).

4.PROGRESS IN THE LAST 5 YEARS

The conclusions and the 16 recommendations of the previous peer review served as a good basis for the continuous improvement of compliance with the ES CoP in Eurostat. As with other statistical authorities of the ESS, Eurostat defined improvement actions, which were monitored and reported in a systematic way. ESGAB has been kept up to date on the status and the results of these actions.

The large majority of the improvement actions born out of the 2014 recommendations have been completed. This implies that the present review can focus its recommendations to a large extent on future-oriented improvementrelated actions, with less weight put on ES CoP compliance.

ESGAB members were assured about Eurostat's very good reputation during the meetings with various ESS stakeholders. This position is particularly important in light of the current environment of enormous growth in the availability of data and information, and forms a good basis for Eurostat to continue to be a trusted point of reference in the future. It is the leading authority within the ESS, and successfully drives development and harmonisation within this complex organisation of diverse national statistical systems. The following areas of progress are to a very significant extent related to the 2014 peer-review recommendations and deserve particular acknowledgement.

 The amendment of Regulation (EC) No 223/2009 in 2015 strengthened the legal environment and the professional independence of statistical authorities and of Eurostat

In order to strengthen the professional independence of national statistical authorities and of Eurostat, Regulation (EC) No 223/2009 was amended. Parliamentary scrutiny of Eurostat via a regular statistical dialogue with the competent committee of the European Parliament was added as a new element within the legal framework of the ESS; procedures for the appointment of the Director-General of Eurostat were strengthened somewhat: and the concept of commitments on confidence in statistics was introduced. As suggested by the peer review in 2014, the ES CoP was slightly revised to put explicit emphasis on the coordinating role of NSIs and Eurostat. However, there is still room for improvement to strengthen Eurostat's professional independence.

• The coordinating role of Eurostat within the Commission

Within the Commission, Eurostat coordinates statistical activities that are not directly related to European statistics (known as 'other statistics'). Such coordination has been continuously strengthened since 2014 to minimise the reporting burden and to ensure coherence and comparability with European statistics. This work is organised through a network of statistical correspondents, which regularly compiles statistical inventories. Memoranda of understanding are in place with those directorates-general of the Commission that are the most intensive users of European statistics and that may also carry out own statistical activities. In addition, Eurostat has established a reference quality framework for these statistics to define quality criteria and provide guidelines, checklists, templates, etc. for other statistics. As a next step, compliance with this quality framework needs to be ensured.

• Framework regulations and compliance with sectoral statistical legislation

The legal architecture based on framework regulations and on delegated and implementing acts makes the system more flexible and agile and will contribute to modernisation, better integration and higher-quality statistics in several domains. Good examples in this context are the framework regulations on integrated European social statistics, European business statistics and integrated farm statistics, which were prepared by the ESS, proposed by the Commission and adopted by the co-legislators between the second and third rounds of peer reviews.

Statistical activities within the ESS as a whole are, to a large extent, defined by EU sectoral statistical regulations. During the peer review, ESGAB was told that there are no significant issues relating to delays in implementing legally stipulated and agreed statistical outputs, methodologies or tools in Member States. Likewise, ESGAB was informed that there is systematic compliance monitoring and annual reporting in place in Eurostat.

• Reaction to the COVID-19 crisis, including the European coordination role

The outbreak of the COVID-19 pandemic called for an unprecedentedly rapid response by the ESS, including Eurostat: on the one hand, production processes had to be safeguarded urgently, in challenging circumstances; on the other hand, quickly emerging crisis-relevant data needs had to be met. The crisis also demonstrated the need to step up common efforts and deepen cooperation within the ESS as a whole, and provided momentum to do so.

The Wiesbaden Memorandum (adopted in November 2020) highlights the importance of, and describes the areas and methods for, coordination within the ESS to react more effectively in future crisis situations. This memorandum, inter alia, mentions the importance of disseminating (through platforms/dashboards) and communicating crisis-specific data, which coincides with observations made by ESGAB during some interviews with stakeholders.

Regarding the regular statistical programme, Member States and Eurostat managed to keep production uninterrupted and to respect release calendars, even though several phases of statistical data production (data collection, further processing) were impacted heavily by the pandemic and by lockdowns in response to it. In order to ensure the continued quality and comparability of statistics in the changed environment, Eurostat published more than 30 methodological guidelines to address general and sectoral methodological issues. To improve the visibility of most data and information relevant to the COVID-19 crisis. Eurostat created a dedicated section on its website to provide users with the latest releases, an interactive data visualisation and relevant references to other sources. It also provided a dedicated list of COVID-19related data sets and launched the European statistical recovery dashboard, which currently consists of 27 recovery-relevant indicators on health, social aspects, economics, business and the environment (a number that continues. to increase). Several new crisis-specific indicators were introduced by Eurostat (e.g. weekly deaths and excess mortality, monthly data on commercial flights). In several Member States, innovation went even beyond this. Not surprisingly, the peer-review interviews with stakeholders confirmed that the importance of proactive communication of new statistical information often tends to be underestimated.

• Development and dissemination of experimental statistics (pilot statistics). Further development of modern datadissemination tools and data visualisation, combining statistical data with geospatial references.

Experimental statistics are produced by using new data sources (e.g. mobile networks, satellites) or methods (e.g. data linking). They can be mature to different extents and may diverge from the traditional requirements applicable to official statistics (coverage, comparability). However, experimental statistics are innovative experiments that may lead to the production of new data sets, enhanced timeliness, reduced response burden, etc. Eurostat has developed this area of statistics significantly over the past few years. To do so it has also entered into bilateral partnerships with various data owners from the private sector (e.g. Orange Labs, Proximus Belgium, several collaborative platforms providing travel/ accommodation services).

To publish experimental statistics, Eurostat has created a dedicated section on its website with various areas of experimental statistics produced by Eurostat or directing users to the experimental statistics hub of the ESS. Eurostat's website of experimental statistics is clearly structured, with every subject providing a link to published data and accompanying explanatory information. Further efforts are needed to enhance the visibility of such data sets, as highlighted under recommendation 17.

Eurostat performs a central role in managing the geographical information system within the Commission. It manages a geographical database to provide the Commission with services at three levels: the EU, Member States and regions. It produces statistical maps and provides downloadable geodata where available.

• Project portfolio for the common interest of the ESS (ESS vision 2020)

Encouraging achievements have been recorded in the field of methodological frameworks. Besides sectoral methodological work (standards specified in legislation, handbooks, manuals and guidelines), several important cross-cutting methodological projects under the ESS vision 2020 strategy brought tangible results in close cooperation with NSIs:

- quality guidelines for multi-source statistics (ADMIN);
- innovative use of new data sources (BIGD);
- development of experimental statistics (Digicom);
- consistency of business statistics (ESBRs);
- efficiency, quality and response burden of trade statistics (Simstat);
- improved validation procedures and tools (Validation).

• Further standardisation and harmonisation of quality reports and quality indicators. Development and implementation of standardised metadata structures.

Considerable achievements were also recorded in the field of quality management and the standardisation of metadata. The Single Integrated Metadata Structure integrates and harmonises the Euro-SDMX Metadata Structure and the ESS Standard for Quality Reports Structure. These European standards form a common basis for disseminating metadata and conducting quality reports with a unified structure and content. Progress on the coverage of standardised metadata and quality reports has been monitored and reported to the European Statistical System Committee within the reporting for the ESS vision 2020. Statistics published by Eurostat are provided with metadata using the Euro-SDMX Metadata Structure standard, and summary information on quality is systematically provided. Besides the user-oriented quality reports, producer-oriented versions are becoming more standardised by following the European Statistical System Handbook for Quality and Metadata Reports.

5.COMPLIANCE WITH THE CODE OF PRACTICE AND FUTURE ORIENTATION

5.1. EUROSTAT'S STRENGTHS IN RELATION TO ITS COMPLIANCE WITH THE CODE OF PRACTICE

Since the initial adoption of the ES CoP, compliance with the code has gradually improved throughout the ESS, including Eurostat. In parallel to this improvement, rapid changes in the environment surrounding statistical systems have occurred. ESGAB members followed the overall methodology of the third round of peer reviews in the ESS while maintaining a balance between audit-like and peer-review approaches. It is also important to mention that the members gave somewhat stronger weight to current developments, which will determine further developments in statistical systems over the current decade. This is why ESGAB will not present a mechanical - principle by principle, indicator by indicator - assessment against the ES CoP. However, ESGAB members used the SAQ provided by Eurostat as a systematic and valuable input for evaluation, and would highlight the following strengths in relation to Eurostat's compliance with the code

• The Eurostat public database is a very important source of European, national and regional statistical data, information and metadata, which is available for free. Users are provided with different possibilities to extract and download data in different formats and through different visualisation tools.

• The highly regulated legal environment provides strategic and operational safeguards for Eurostat and all members of the ESS. European statistics should be developed, produced and disseminated by following statistical considerations only and respecting the principle of statistical confidentiality.

At the same time, Eurostat is at the origin of the EU legislative process and prepares statistical legislation in cooperation with the Member States. This position allows the necessary mandate to be established to collect data for statistical purposes, while systematically assessing the burden on respondents. That being said, it should also be stressed that such a highly regulated environment has the disadvantage of making the whole statistical system rather inflexible and limiting its agility. This report refers to related risks in several instances.

• The legal basis provides Eurostat with a unique position from which to coordinate statistical activities and to monitor compliance with legal obligations and quality requirements within the ESS. It is and should continue to be the core of the ESS. Eurostat takes the lead in developing and maintaining

concepts, methodologies, classifications and standardised tools.

- Eurostat prepares manuals, guidelines and methodological notes for all statistical domains to establish and maintain the comparability and coherence of European statistics. There are well-rooted rules and tools in place to coordinate and cooperate within the ESS and beyond.
- Solid statistical programme planning procedures and user consultations are also well established.
- Quality management policies and practices provide the necessary basis to ensure the quality of statistical outputs and processes. They are important preconditions for a sustainable quality culture in statistical authorities and are an important contribution by Eurostat in international statistical forums.
- There is a good track record in ensuring statistical confidentiality.
- A detailed public release calendar covering different periods and statistical products is available for users.

5.2. ISSUES AND RECOMMENDATIONS

5.2.1. BEING A ROLE MODEL FOR INDEPENDENCE AND IMPARTIALITY

Eurostat is the anchor point of the ESS, and it is therefore crucial that Eurostat is, and is seen to be, professionally independent. This is important with regard not only to the direct impact on confidence in the system, but also the indirect effects arising from Eurostat being a role model for the other institutions in the system and its role in enforcing their observance of the ES CoP.

Against this background, ESGAB notes with great satisfaction the significant progress that has been made since the previous round of peer reviews within the legal framework of Eurostat's professional independence, as described in Sections 3, 4 and 5.1. Nonetheless, some residual areas of potential progress remain, notwithstanding the high degree of independence that currently exists in practice. Indeed, independence needs to be not only maintained during 'good times' with a clement political environment but also protected during potentially more challenging times.

There are two issues in particular on which ESGAB has concerns, albeit no specific recommendations. One is related to the extent to which independence is based on documents of a time-limited nature with sometimes ambiguous wording. In particular, the written agreement between the present Commissioner for Economy and Eurostat's Director-General on practical relations on the one hand contains language that is strongly supportive of professional independence, but on the other hand includes stipulations that seem an ill fit with that independence.

The second concern is related to the tension between the general employment framework of the Commission and the needs of a professionally independent body with particular skills requirements (see also Section 5.2.3). It is understandable that a large institution like the Commission would want to unify and standardise employment policy. However, this entails policies in areas such as rotation and country quotas, which could in principle clash with open recruitment based on professional qualifications for specific top management posts. In practice, Eurostat probably has limited leeway in influencing or evading such restrictions. Nonetheless, seeing that there has been little progress on two of ESGAB's recommendations in the previous peer review, ESGAB feels compelled to repeat the same recommendations relating to indicator 1.8 of the ES CoP. On the one hand, it is important for ensuring professional independence that the grounds for dismissal of Eurostat's Director-General are set out in clear terms. On the other hand, recruitment conditions for other members of senior management need to be set out in a way that ensures a transparent process with a large amount of weight given to statistical qualifications.

> **R1.** ESGAB recommends that legislation should specify reasons for the early termination of the contract (dismissal) of the Director-General of Eurostat. These should not include reasons that compromise his/her professional or scientific independence.

R2. ESGAB recommends that the recruitment and dismissal of Eurostat senior management, other than the director-general, should be public and transparent, with a strong emphasis on statistical qualifications.

During the peer review, ESGAB heard evidence to the effect that Eurostat's counsel and advice on statistical issues was much in demand by other directorates-general involved in statistical production within the Commission. However, such statistical production and its dissemination remain outside the scope of European statistics. Also, notwithstanding the best intentions of the producers in the directorates-general and Eurostat's efforts, there is a lack of clarity about the standards actually implemented in relation to such statistics. Were such statistics to be faulted in the public debate, it would likely be difficult to avoid reputational damage also to European statistics, even though in principle they are not related. Therefore, although in principle they are outside the remit of ESGAB, these considerations suggest that such statistics may in practice be within its scope. Against this background, ESGAB feels that although the application of the ES CoP may not be a first step, there is reason to ensure that such statistics respect clear quality guidelines.

> **R3.** ESGAB recommends that Eurostat ensure the systematic follow-up of the implementation of the reference quality framework applicable for other statistics, in cooperation with the European Commission directoratesgeneral concerned. This should include exploring the usefulness of setting up a mutual peer-review process in order to monitor and, if needed, strengthen compliance with the reference quality framework.

The ES CoP (indicator 6.7) stipulates the general principle of equal access to statistical releases for all users at the same time so as to preserve the – actual as well as perceived – impartiality of statistical production. It does, however, allow for limited, well-justified and publicised deviations from the general principle. ESGAB heard evidence to the effect that, over time, there had been a slow but steady decline in the number of NSIs having recourse to this possible derogation. Still, Eurostat provides pre-release access to a limited number of statistics to the Commissioner's cabinet and the Directorate-General for Economic and Financial Affairs.

One argument for applying this derogation clause in the case of Eurostat could be that the pre-release access granted by Eurostat does not distort the political playing field in the same way that national pre-release access benefits the executive to the detriment of the opposition. This argument should not be exaggerated, however, as the EU's governance system includes other parties such as the Parliament and the Council who, in theory, are placed at a (relative) disadvantage. More importantly, by providing pre-release access, Eurostat forfeits its position as a role model for national institutions and makes it more difficult for the service to challenge potentially more abusive practices at national level.

> **R4.** ESGAB recommends that Eurostat evaluate critically whether the current practice of pre-releasing statistics to other bodies of the European Commission, while respecting the ES CoP, complies with Eurostat's position as standard bearer of the ESS.

Eurostat has put a great deal of effort into developing its practices on statistical confidentiality. This is important because respect for confidentially is part of the societal contract that allows statistical institutions access to data on citizens and enterprises in the first place. The importance of confidentiality is underlined by principle 5 of the ES CoP. Confidentiality can be jeopardised through a number of different channels, including breaches of digital security; malfeasance of staff; mishaps relating to or misuse of research access to microdata; and overly disaggregated presentation of statistics. In the latter case, and particularly as regards enterprises and smaller countries, there are important trade-offs between disseminating statistics that provide an adequate description of societal phenomena and preserving confidentiality.

ESGAB received evidence to the effect that, although practices had improved, approaches to disclosure control still diverged without full justification within Eurostat depending on the kinds of statistics concerned. **R5.** ESGAB recommends that Eurostat further develop its already strong safeguards for confidentiality by reviewing and, to the extent possible, further harmonising practices across statistical areas as regards procedures and tools for anonymisation and/or statistical disclosure control.

5.2.2. REACHING OUT TO USERS AND PARTNERS

Outreach and dissemination to users and partners have always been and will continue to be priorities for Eurostat, as evidenced by Eurostat's 2021-2024 communication and dissemination strategy. This strategy comprises 10 general principles of behavioural guidance and four strategic objectives (informing users of products and services; promoting the understanding of data; raising awareness of the value and trustworthiness of European statistics; and empowering and engaging staff). All these issues are elaborated in more detail in this strategy document. However, ESGAB feels that several additional aspects can be brought to the forefront, as European and global societies are increasingly digital and data driven.

Outreach to and increased interaction with academia is particularly important. Eurostat needs to be able to draw on methodological innovations and inspiration from science so as to exploit new sources of data created as the digital footprints of individuals, households and enterprises, using insights, methods and algorithms from fields such as (big) data science, machine learning and artificial intelligence. The collaborative formats should not be limited to a couple of occasional interactions with some universities; instead, thought should be given to a structured, open and more systematic approach, including adequate funding for medium- to long-term projects.

Such structured interactions with academia and research institutes would deliver new and important benefits: they would raise the profile and attractiveness of Eurostat as a leader in trustworthy data collection and processing and as a reliable cooperation partner for academia. It would also help to portray Eurostat as a potential and interesting employer ('employer branding'), thus helping to close Eurostat's perceived skills gap in new data areas. Indeed, a strategy for cooperation with academia could be developed to serve two goals in particular: continuous exchange of ideas, methods and models in joint research/development projects and ongoing interactions; and improved attractiveness of and access to highly educated human resources.

In the long term, Eurostat could be a leader with respect to innovation, and an inspiration for NSIs, which are also confronted with the same challenges on potential new data sources, new data processing methodologies and recruiting adequately trained staff.

R6. ESGAB recommends that Eurostat develop a comprehensive strategy of cooperation with academia.

The relationship with users of statistics is of course crucial to Eurostat, at a time when statistical facts and factoids are available in abundance from an increasing number of sources, including fake news, and there is an increasing disbelief and distrust in official statistics. Eurostat needs to ensure that its statistics remain the prime source of quantitative information on European societies by continuing to develop its communication and dissemination tools and allowing users to customise their access as much as possible to their requirements. The routes for disseminating information are developing fast, and Eurostat risks having strong competitors among the plethora of data providers. Quality should be the principal attribute differentiating Eurostat data from others, but while necessary it is not sufficient: in addition, user-oriented communication, as initiated by the 2021–2024 communication and dissemination strategy, should be further improved. Is the website the most suitable way for communicating and disseminating? Is it intuitive enough? Are different categories of users adequately served? What about the diversity and consistency of communication channels? Eurostat should ensure that it remains attractive for all groups of users in order to be the first place to look up European statistics and data. Everybody should be able to retrieve statistical information in a convenient and individually adaptable way.

> **R7.** ESGAB recommends that Eurostat further improve its communication and dissemination in light of the 'new world of information overflow', where many providers fight for the limited attention of the users.

The increasing availability of microdata confronts Eurostat with new possibilities, but also new challenges. Access on a secure basis to micro data sets that are comparable across countries could provide strong impetus to research and societal innovation in Europe with European data. In fact, country-level regulations may be different, for instance in the way privacy protection is dealt with, thus complicating access to micro data sets at the national level. let alone across countries. In this sense. Eurostat, as a provider and an intermediator, could act as a data-providing, data-accessenabling authority. For this to be feasible, however, state-of-the-art privacy-protecting techniques would have to be deployed, or in some cases improved on. Separately, but also importantly, research in several policy areas

could be boosted by easy access to statistics of different vintages. Relevant *ex post* analyses of policies require access to the data that were actually available to the policymakers at the time of the decision. Such analyses can only be performed if such vintage databases exist and are accessible. This is currently not the case for Eurostat data.

> **R8.** ESGAB recommends that Eurostat find ways, where appropriate, of establishing externally accessible vintage databases for relevant statistics in order to facilitate policy-relevant research.

R9. ESGAB recommends that Eurostat take action to enhance research on microdata by developing appropriate methods and agreeing with Member States on data sets to which access may be feasible, and by developing privacyprotecting techniques for access (such as metadata-driven software) that could also be applied at the Member State level.

The revision of key statistics (e.g. gross domestic product, industrial production, retail sales) was a recurrent theme in the peerreview process. Informed users understand that, to some extent, revisions are inevitable, as some information may still be missing at the time of the first release, especially for flash gross domestic product estimates. But not all users are well informed, which is why revisions may lead to distrust in official statistics. This is particularly true when revisions appear extensive or are left unexplained.

Therefore, Eurostat should establish an analytical framework for revisions based on state-of-the-art analytical methods in order to detect revision patterns and identify the potential sources, structural biases and

drivers of these revisions. Applied regularly to key statistics, this framework may help to achieve three objectives. First, to the extent that revisions turn out to be predictable, Eurostat should use this knowledge to improve first estimates and thus reduce revision sizes. Second, patterns or drivers of the revisions that are more structural may indicate how Eurostat and NSIs can improve the datacollection process, possibly by integrating new data sources. Third, a good understanding of the revision process of key statistics should be used to improve communication with users, both ex ante to quantify data uncertainty and ex post to explain which factors contributed to a specific revision

> **R10.** ESGAB recommends that Eurostat further develop its analytical frameworks with respect to revisions. Eurostat should publish its revision policy and regular analyses of revisions.

5.2.3. EXPANDING THE STATISTICAL PRODUCTION POSSIBILITIES FRONTIER

During the pandemic, many NSIs have gained access on an ad hoc basis to various private digital data sets and, consequently, have been able to provide information in close to real time about economic and societal developments that are relevant for dealing with the pandemic, such as mobility patterns. Against this background, ESGAB attaches great importance to the establishment by the EU Data Act of permanent paths for access to such data sets by statistical institutes as providers of European statistics, as outlined in the 'Opinion of the European Statistical Governance Advisory Board (ESGAB) concerning the forthcoming Data Act proposal'.

Access can take many forms, from the outright transfer of data or algorithms to remote access regimes restricted to selected properties only, and the choice of form should reflect the costs to enterprises and statistical institutes; the commercial value of data; and the need for statistical institutes to integrate new data with other data sets in order to provide richer statistics. Institutional arrangements need to be established that, on the one hand, favour the common good of high-quality statistics and, on the other hand, protect enterprises against the perceived risks of high costs and the leakage of proprietary data to competitors.

The new data sets will also prove extremely important for socially valuable research such as the scientific evaluation of policy measures. Therefore, the producers of European statistics should set up appropriate modes of access to these data for external researchers. These modes of access not only need to protect the identity of individuals, households and enterprises, as is the case for traditional data sets, they also need to take properly into account the commercial value of data in the digital economy and the data security concerns of the private data owners.

Giving producers of European statistics access to new sources of data does not come free for the concerned enterprises. Both set-up costs and ongoing costs are involved. At a societal level, however, these costs are low compared with the gains from better statistics and from alleviating other statistical reporting burdens affecting the business sector, for which, by public policy decision, no compensation is paid. This needs to be kept in mind when considering appropriate financing structures for data access.

Producers of European statistics will also face set-up costs. The new data may be extremely granular and so require appropriate aggregation; they may need in some form to be accessed and transferred electronically to NSIs and Eurostat; and they may come in different formats and frequencies than traditional data. Therefore, their integration into the existing data processing routines will be challenging, and may require IT and data science expertise and infrastructure that are currently not available to the necessary extent.

Therefore, ESGAB recommends that Eurostat proactively develop a comprehensive strategy for the use of new digital data sources. This strategy should prepare – in cooperation with international statistical stakeholders – appropriate statistical standards for new data sources, and it should strive to balance the aforementioned costs, both for enterprises and for producers of European statistics, against the benefits of relevance, accuracy and timeliness. It should also address the potential to reduce response burdens on households and enterprises in more traditional survey and reporting channels.

> **R11.** ESGAB recommends to the colegislators that the upcoming adoption of the EU Data Act should establish a permanent path for access to privately held data for Eurostat and for all producers of European statistics.

R12. ESGAB recommends that Eurostat develop a comprehensive strategy for the use of new digital data sources that have the potential to contribute to the objectives of relevance, accuracy and timeliness, and may help to reduce the burden on respondents and increase costeffectiveness.

The ECB is one of the key users of Eurostat data (price and other economic statistics, social statistics, labour statistics, etc.) and a partner in the compilation of European economic statistics. It leads the other pillar of official European statistics, the ESCB. The peer review revealed that cooperation between the ECB and Eurostat is excellent. However, there are pressing new needs that have to be addressed.

One important issue is the adequate and consistent statistical treatment of large, globally active, multinational enterprises, which is of great relevance for sound macroeconomic and financial statistics, at both the national and the European levels. The sharing of information between the ESS and the ESCB, including confidential information, should therefore be extended wherever it supports the production of better statistics regarding multinational enterprises. The centralised collection of such data might even be contemplated in order to keep pace with the rapidly evolving cross-border activities of these institutions. The backbones to many statistics are state-of-the art business registers. Therefore, both European statistical systems have developed such registers to serve their respective statistical needs. Based on these well-established registers, more intensive cooperation between the two systems seems promising, and a common approach should be evaluated in order to reap benefits for the efficiency and the quality of European statistics, while respecting the relevant confidentiality rules in full

> **R13.** ESGAB recommends that Eurostat and the ECB build on the existing strong cooperation between the ESS and the ESCB to exploit the scope for better coordination and cooperation on data sharing and on dealing with complex statistical cases (such as multinational enterprises), and to evaluate the potential for common statistical infrastructures (such as statistical business registers).

Highly skilled and motivated staff are crucial for coping with the challenges of modernisation and digitalisation. Core competencies include statistics, but also various types of IT and data sciences, all of which are in high demand on the labour market. Therefore, Eurostat needs to identify proactively the specific competencies needed in the future, adapt its human resources strategy accordingly and communicate it effectively to staff and management. This strategy should not exclusively rely on outsourcing capacities, because expertise is needed internally to react quickly to new developments and, as a minimum, to design and manage the outsourcing contracts.

Therefore, Eurostat should establish, and live up to, an environment of continuous learning to keep pace with technical progress. Regular internal and external training for existing staff should help to achieve successful upskilling in relevant areas. This can have the positive side effect of making employees feel appreciated and well prepared for the future.

However, the upskilling of existing staff will not suffice to weather the challenges of the future. It will be necessary to hire staff with new, futureproof skills. With respect to hiring, the current Commission recruitment system appears to be too inflexible and not well designed for the specialised talent needed. However, one cannot expect changes in the near future. Therefore, Eurostat should at least use all the possibilities the current rules offer to attract high-potential employees. Cooperation with academia (see recommendation 6) could be a promising avenue to get in touch with highly educated graduates.

Attracting and retaining highly skilled staff requires that Eurostat further improve its popularity as an employer, which is a continuous process. ESGAB appreciates that Eurostat is already active in this respect, for example by organising events like the European Big Data Hackathon. Again, close cooperation with academia would also be promising in this respect, along with a more flexible traineeship system to get in contact with students and graduates. **R14.** ESGAB recommends that Eurostat identify and map the (future) required skills/competencies of staff. Based on this information, training for existing staff should be adjusted to allow for successful upskilling in the relevant new areas. At the same time, Eurostat should proactively use all the possibilities of the Commission's current recruitment system to attract and retain staff with the necessary future-proof skills.

High-quality statistics that are comparable across Member States will be key to the successful evaluation of EU policies in general and the recovery and resilience plans in particular. The latter are the centrepiece of NextGenerationEU, which aims to make societies greener and to foster their digital transition. However, measuring the outcomes will be challenging given current capacities. Therefore, ESGAB urges EU policymakers to let the ESS participate in the roughly EUR 800 billion of new investment by appropriating a (small) portion of the funds to pay for the statistical action plan needed for reliable, policy-relevant new data and statistics.

ESGAB proposes that Eurostat and the NSIs set up a statistical action plan that specifies the most pressing needs, many of which have been discussed in the previous recommendations, such as investment in digital infrastructure and appropriate staffing. The recovery and resilience plans of the Member States, along with other relevant EU initiatives, should then provide sufficient funding.

For the future, ESGAB asks EU policymakers to make policy-evaluation measures a standard part of any policy proposal. Typically this will include collecting appropriate data and statistical processing, for which the ESS (under the leadership of Eurostat) is the natural, impartial candidate. ESGAB believes that objective policy evaluations will not only improve policy as such but also help to build trust and confidence in EU societies. It goes without saying that this should also be properly funded.

R15. ESGAB recommends that EU policymakers back up all the ongoing innovation endeavours with appropriate funding, covering both financial and human resources. It also reiterates its recommendations (recommendations 2020/6 and 2020/7) that the Commission propose significant investment in digital infrastructure for statistical purposes, to enable innovation and experimentation. The Member States' recovery and resilience plans and other relevant EU funds should support this action on new EU policy initiatives throughout the ESS, covering both development and running costs.

5.2.4. BEING AGILE AND PROACTIVE

During the COVID-19 crisis, Eurostat and the NSIs put in place a wide range of initiatives to ensure the publication of their usual statistics was not delayed and to swiftly introduce new (experimental) statistics that provided information about the pandemic and its consequences. Both tasks were challenging: timely publication required Eurostat and the NSIs to cope with issues such as low response rates in surveys through additional imputations and estimations: and the introduction of new statistics, often based on new digital data sources, was based on partly or completely new production processes. At the same time, lockdowns and travel restrictions impeded the usual work flow

ESGAB appreciates the Wiesbaden Memorandum on a coordinated ESS response to future crises, which is a big step forward. ESGAB stresses the need to use the momentum provided to proceed further. In particular, to be prepared for the next crisis, Eurostat and the ESS should thoroughly and completely assess the experience gained during the pandemic. Specifically, they should ask which legal, organisational and technical obstacles were responsible for any challenges or shortcomings identified.

> **R16.** ESGAB recommends that Eurostat and the ESS perform a thorough assessment of the experience during the COVID-19 crisis. This review should cover the challenges, reactions, obstacles and successes, and should draw concrete conclusions. In addition, an action plan should be prepared to ensure resilience in future crisis situations.

Both the increased availability of (privately held) digital data and the fast progress in IT and data sciences will boost opportunities for statistical innovation. If official statistics do not enter these new areas, there is a danger that the void will be filled by private operators less concerned with the strict data quality and comparability required by the ES CoP. Therefore, to remain relevant and to provide our societies with impartial and sound information, Eurostat and the ESS need to set up a strategy for statistical innovation that includes procedures for proactively introducing rapid statistical innovation. For example, there needs to be a strategy on how Eurostat computes EU averages if, in crisis times, some NSIs cannot supply certain national statistics or are unable to produce certain new experimental statistics.

In this regard, a comparison with NSIs around the globe and with central banks suggests that establishing a research department as part of Eurostat could be an important step forward. This department should be active in applied statistical research and foster the continuous exchange of ideas with academia, and could thereby quickly become aware of, and stimulate, scientific progress that could be useful for official statistics.

> **R17.** ESGAB recommends that Eurostat, jointly with NSIs, set up procedures for proactively introducing rapid statistical innovation, which should include experimental statistics in particular. This will help prepare for times of crisis. Proposals should be included on how to ensure the visibility of such statistics, and processes should be devised for their eventual mainstreaming.

When new and urgent data demands by policymakers suddenly arise, whether during a crisis or in more normal times, statisticians have to be agile and react guickly. So does Eurostat. However, the current legal framework for the regular production of new European statistics does not support such quick reactions to new data needs. In order to make the system more agile, ESGAB had already recommended in the previous peer reviews that future European statistical legislation adhere to a legislative architecture with framework regulations and delegated and implementing acts, and supported the use of such implementing acts. Subsequently, several framework regulations have been adopted, greatly improving flexibility and reaction times

However, even this legal architecture may not be adequate for very urgent data demands by policymakers in new statistical domains, such as the demands that have been made during the ongoing COVID-19 pandemic. In such cases, Regulation (EC) No 223/2009 already provides in Article 14(1)(b) for the possibility of an individual statistical action by the Commission to meet unexpected statistical needs, and in Article 14(2) for a specific procedure for a temporary direct statistical action. However, the latter is limited to data collection for not more than 3 reference years. In addition, the respective data already need to be available or accessible within the NSIs or other national authorities, or can be obtained directly, using appropriate samples for observation at European level. Ensuring agility and proactivity necessitates that Eurostat uses the powers of Article 14(1)(b) and Article 14(2) to the fullest possible extent. Should experience prove that these powers are not sufficient, a request for an amendment to this part of Regulation (EU) No 223/2009 should be contemplated. In addition, provisions need to be in place to allow NSIs to recover the extra costs of such unexpected activities from central sources

> **R18.** ESGAB recommends that Eurostat use, when necessary, the powers provided for under Article 14(1) (b) and Article 14(2) of Regulation (EC) No 223/2009 on European statistics actively and to the fullest possible extent so as to be able to react quickly to unexpected and urgent statistical demands for policymaking. It should therefore analyse the potential and limits of these legal provisions. If they turn out to be inadequate, the issue should be considered in the context of an amendment to Regulation (EC) No 223/2009.

5.3. EUROSTAT'S VIEWS ON THOSE RECOMMENDATIONS WHERE IT DIVERGES FROM THE PEER REVIEW EXPERTS' ASSESSMENT

'Eurostat's diverging view on recommendations 1 and 2:

The reasons for the termination of the services of the Director-General of Eurostat are laid down in legislation (EU Staff Regulations, Title III 'Career of officials', Chapter 4 'Termination of service'). As recalled in the Commission decision on Eurostat, the Commission is committed to exercising its powers with regard to the transfer and dismissal of the Director-General of Eurostat with due regard to the need to guarantee independence, objectivity and efficiency in the exercise of their responsibilities, and following a transparent procedure based on professional criteria only. The EU Staff Regulations, in combination with the Commission decision on Eurostat, therefore correspond to the ES CoP indicator on having specified within a legal framework the reasons on the basis of which the incumbency can be terminated

Recommendation 1 is thus without object.

Eurostat senior managers, other than the director-general, are also recruited following a procedure that is transparent and based on professional criteria, in accordance with the EU Staff Regulations. Cases of transfer or dismissal are similarly provided for in the EU Staff Regulations.

Recommendation 2 is without object and also goes beyond the ES CoP.'

ANNEX – AGENDA OF THE PEER REVIEW

Tuesday 22 June 2021

9.30–10.00 Welcome and introduction of the peer-review programme

10.00–11.00 General information session with Eurostat, with a description of Eurostat's organisation and its position within the Commission

13.00–14.00 Session with Commission directorates-general

14.00–15.00 Stocktaking meeting

Thursday 24 June 2021

12.30–14.00 Session with the Chair of the Partnership Group

14.00–14.30 Meeting with the Cabinet of Commissioner Gentiloni

14.45–15.30 Stocktaking meeting

Thursday 1 July 2021

9.00–10.30 Session with the media

10.30–11.30 Session with junior staff of Eurostat

11.45–13.00 Session with research institutions / think tanks

13.00–14.00 Session with the European Central Bank

15.30–16.15 Session with international organisations

16.15–17.00 Session with the European Statistical Advisory Committee

17.00–17.30 Stocktaking meeting

Tuesday 6 July 2021

9.00–10.00 Session with Eurostat (principles 1 + 6)

10.00–11.30 Session with Eurostat (principle 1bis)

11.45–13.15 Session with Eurostat (other principles)

14.45–15.30 Session with Eurostat on data sharing and data protection

15.30–14.15 Session with the European Data Protection Supervisor

16.15–17.00 Stocktaking meeting

17.00–17.45 Session with private platforms

Wednesday 7 July 2021

15.30–16.15 Session with international organisations

Thursday 8 July 2021

9.00–10.30 Session with Eurostat on COVID-19 challenges and the future of European statistics

10.45–12.15 Session with Eurostat on new data sources and compilation methods

13.45–15.15 Session with private platforms

15.15–16.00 Session with Eurostat on recruitment

16.00–16.30 Stocktaking meeting

Monday 26 July 2021

14.30–16.30 Preparation for the closing session with Eurostat

Wednesday 28 July 2021

10.00–12.00 Preparation for the closing session with Eurostat

13.30–16.00 Closing session with Eurostat: conclusions and draft recommendations

16.15–17.00 Stocktaking meeting and next steps.

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