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Coordination of international statistical work in the
United Nations Economic Commission for Europe region:
Outcomes of the recent in-depth reviews carried out by
the Bureau of the Conference of European Statisticians

Outcome of the consultation on the in-depth review of
timeliness, frequency and granularity of official statistics

Prepared by the Secretariat

Summary

This document presents the outcome of a consultation carried out in April and May
2024 on the in-depth review of timeliness, frequency and granularity of official statistics
(ECE/CES/2024/6).

The in-depth review was carried out in February 2024 by the Bureau of the
Conference of European Statisticians (CES), based on a paper (ECE/CES/2024/6) prepared
by a group of experts led by Canada and Portugal. This review followed a seminar on the
same topic held during the seventy-first CES plenary session in June 2023.

The Conference is invited to endorse the outcome of the in-depth review on
timeliness, frequency and granularity of official statistics.
I. Introduction

1. Each year, the Bureau of the Conference of European Statisticians (CES) reviews selected statistical areas in depth. The purpose of the reviews is to improve coordination of statistical activities in the region of the United Nations Economic Commission for Europe (UNECE), identify gaps or duplication of work, and address emerging issues. These reviews focus on strategic issues and highlight concerns of statistical offices of both conceptual and coordinating nature.

2. Following the seminar session on “Timeliness, frequency and granularity of official statistics” held at the seventy-first CES plenary session in June 2023, the Bureau carried out an in-depth review of this topic in February 2024 based on a paper by a group of experts led by Canada and Portugal (document ECE/CES/2024/6).

3. The UNECE Secretariat conducted an electronic consultation in April–May 2024 to inform all CES members about the in-depth review of timeliness, frequency and granularity of official statistics and provide an opportunity to comment on its outcomes.

4. The following 23 countries and organizations replied to the electronic consultation: Austria, Belarus, Costa Rica, Ecuador, Finland, France, Italy, Japan, Kazakhstan, Latvia, Malta, Mexico, Netherlands (Kingdom of the), New Zealand, Norway, Poland, Portugal, Slovenia, Sweden, Türkiye, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and Organisation for Economic Co-operation and Development (OECD).

II. Outcome of the Conference of European Statisticians Bureau discussion in February 2024

5. The Bureau reviewed in depth the topic of timeliness, frequency and granularity of official statistics based on a paper led by Canada and Portugal. Countries and organizations who contributed to the in-depth review include Colombia, Hungary, Italy, Netherlands (Kingdom of the), Norway, Poland, Spain, Switzerland, the United Kingdom, and OECD.

6. A seminar on this topic was held during the seventy-first CES plenary session in June 2023. The paper summarized the key findings from the CES seminar and incorporated further inputs and responses collected through a questionnaire to present a thorough overview of the subject and formulate recommendations for further steps.

7. The following points were made during the discussion:
   
   (a) Many national statistical offices (NSOs) have been striving to produce more timely, frequent and granular data. An important challenge for NSOs in addressing the evolving data needs lies in effectively obtaining and using new data sources.

   (b) The new data sources should be considered as important as traditional sources, considering both their advantages and associated risks. This requires an internal culture change to foster innovation and risk-taking, and leadership with strategic foresight.

   (c) It is crucial for NSOs to ensure the reliability, regularity and sustainability of data to be able to build the new sources into a regular production cycle. The new sources have cost implications and possible limitations on their use, but they may allow for obtaining new data and achieving timeliness, frequency and granularity that were not possible before.

   (d) Collaboration and knowledge sharing within the organization, as well as effective communication and strong partnerships with data providers are needed. NSOs can opt to establish a dedicated unit for innovation which could be more open to experimentation. At the same time, it is important to integrate innovation across the organization. For example, communities of practice can generate a lot of enthusiasm and grass-roots innovation.

   (e) It is essential to maintain a steady and regular supply of granular data not only during emergency situations like earthquakes and pandemics but also during normal times. There is a rising demand for local data by local leaders to inform local decision-making processes.
(f) The use of new data sources often requires investment and may be costly to put in place, even when the data are or seem to be accessible for free. However, there are not many other options to meet the increasing data needs and improve data timeliness, frequency and granularity.

(g) It was suggested to merge the recommendations at international level and at national level into one section in the paper, as they are interconnected and relevant to all statistical organizations.

(h) The issues raised in the paper are relevant to all domains of official statistics. Therefore, the paper should be also brought to attention of the current expert groups working under CES.

8. In conclusion, the CES Bureau supported the recommendations and invited Canada and Portugal to update the paper to take into account the points raised in the discussion. The paper was sent for electronic consultation to all CES members in March–April 2024.

III. General comments received in the electronic consultation

9. Countries commended the clarity and comprehensiveness of the in-depth review. They acknowledged the critical importance for national statistical offices (NSOs) to produce timely, frequent and granular official statistics, along with the key challenges involved. Countries expressed support for the conclusions and recommendations proposed in the paper, which aim to address the evolving needs of data users at both national and international levels (Austria, Belarus, France, Italy, Latvia, Malta, Netherlands (Kingdom of the), New Zealand, Norway, Poland, Portugal, Sweden, the United Kingdom, and the United States). Countries such as Finland, Türkiye, the United States, and others pointed out that the topics discussed in the paper align with their institutional objectives and gave examples of current national practices aiming at producing more timely, frequent, and granular statistics.

10. Concerning the use of new data sources to produce timely, frequent, and granular data, it was suggested that Mobile Network Operator (MNO) data, currently being explored in two projects within the European Statistical System (ESS), could be included in addition to the sources already discussed in the paper (such as Earth Observation (EO) data, web-scraped data, and financial transaction data) (Austria and Italy). Austria highlighted that the new challenges brought by MNO data, such as the need for new cooperation agreements and quality checks on processes like data pre-processing (e.g., aggregation of data) by data holders (MNOs) which NSOs cannot oversee, should be further explored. Austria also pointed out that the term “new data sources”, or “alternative data”, might carry negative connotations in German, where “alternative media” often refers to untrustworthy information sources. Norway highlighted their experience in facing resistance from companies and initiating dialogue with the Norwegian Data Protection Authority (DPA) while attempting to access privately held data, such as transactions from banks and grocery stores. This case, which was presented at the sixty-fourth International Statistical Institute World Statistics Congress, could serve as a potential case study for countries. Details of the case can be accessed here: https://www.isi-next.org/abstracts/submission/1314/view/. Regarding the effectiveness of administrative registers in improving timeliness, despite the numerous positive experiences highlighted in the review, Norway observed delays during the pandemic in reports from administrative registers, such as the tax register for businesses (companies got extended deadlines for reporting due to the difficult situation), which led to delays in the data dissemination.

11. The United States highlighted the risk associated with using privately held data, noting the difficulty in ensuring its continuous supply – a problem that official government statistics typically do not encounter. Drawing from the Spanish example discussed in paragraph 16 of the review on producing the Industrial Turnover Index, the United States emphasized that timeliness can be improved not only by incorporating new data sources but also by implementing techniques that enable the earlier utilization of traditional business survey data. They provided an example of how the Bureau of Economic Analysis (BEA) is researching to determine when during the validation/editing process their survey data on
Multinational Enterprises’ financial and operating data reach a quality sufficient for inclusion in published statistics. Various statistical techniques, including machine learning, are being explored. Ecuador and Norway emphasized the importance of safeguarding data confidentiality when integrating new data sources for timely, frequent and granular statistics. Ecuador detailed their national measures and technologies implemented to ensure the integrity and confidentiality of personal data collected during the Census.

12. France noted that while requests for greater precision and frequency in statistics are generally legitimate, they sometimes warrant questioning. For example, the usefulness of producing monthly statistics for long-term phenomena, as well as the relevance of processes implemented during the pandemic in the post-Covid era. Therefore, it is crucial to strike a balance between “quick” statistics and reference statistics, all while upholding quality standards, which aligns with the fit-for-use paradigm discussed in the review.

13. Austria and Italy agreed with the discussion and recommendations from the review, stressing the importance of leveraging and investing in new technologies, such as artificial intelligence and cloud computing, to obtain more timely, frequent and granular data. Austria pointed out that, in addition to technical challenges, cloud computing also faces legal challenges due to confidentiality protection rules.

14. Italy, Mexico, Netherlands (Kingdom of the), and Norway stressed the importance of ensuring the quality and transparent communication when utilizing new data sources, statistical methods, and technologies to achieve more timely, frequent and granular statistics, thereby maintaining public trust in NSOs. The United Kingdom suggested that existing national quality assurance frameworks should be adapted to facilitate the production of timely, frequent and granular statistics.

15. The recommendation on “leadership for innovative culture and risk-taking” was underscored by Netherlands (Kingdom of the), Norway, and the United Kingdom. In particular, Netherlands (Kingdom of the) highlighted the importance of employee-oriented leadership in building a strong and robust innovation culture. Leadership focused on employees, which entails building a “learning organization”, fostering a “growth mindset”, shifting the “error culture”, and prioritizing individuals over processes, demands new skills from both leaders and staff. Norway noted that the discussion regarding internal culture change and leadership may intersect with the ongoing work on quality culture in the Subgroup on Quality Culture of the Expert Group on National Quality Assurance Frameworks (EG-NQAF) at the United Nations and their connection could be explored.

16. Austria, Norway and the United States provided general comments to the review. Austria appreciated the country examples and progress in producing timely, frequent and granular statistics provided in the review, and pointed out that countries’ experiences vary (what is considered as innovation in some countries has been a longstanding practice in others) and suggested that it would be beneficial to provide links of the country examples. The United States pointed out that the review is unclear on whether the granularity of official statistics includes subnational data and suggested that this should be explicitly stated, potentially with examples from various countries for illustration. Referring to the recommendation on “continuous emphasis on timeliness and granularity”, the United States suggested that the review could offer more specific timeframe guidance for NSOs to aim for in terms of timeliness.

17. OECD provided further details on the wide range of novel techniques they employed, together with the United Nations Statistics Division (UNSD), to combine and validate the information from public sources to construct the Multinational Enterprise Information Platform (MEIP) highlighted in the review. OECD noted that while the paper presents the recommendations separately for national and international statistical organizations, they are interconnected and relevant to all statistical organizations, and could therefore be merged.

18. The comments will be taken into account in further work in this area.