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Synthesis Note of the Network of Economic Statisticians: Review of Reports to the 54th Session of the Statistical Commission

Prepared by the United Nations Network of Economic Statisticians

# Synthesis Note of the Network of Economic Statisticians: Review of Reports to the 54<sup>th</sup> Session of the Statistical Commission

# Contents

Introduction	3
Data integration	4
Review	4
Conclusion	6
International statistical standards	7
Review	7
Conclusion	9
The regional commissions and the countries of the Global South	10
Review	10
Conclusion	11

## Introduction

- 1. This note has been prepared at the request of the 53<sup>rd</sup> Session of the Statistical Commission to provide a summary review of the Statistical Commission's reports for its 54<sup>th</sup> Session on shared priorities and related challenges and frame the analysis by the four workstreams of the United Nations Network of Economic Statisticians. It is hoped the review will facilitate dialogue at the Commission, and with relevant international and regional statistical committees and groups, and regional commissions on these priorities and challenges. As such, this note could be instrumental for the Network in the communication with the global and regional statistical system on issues of common interest.
- 2. The Commission made this request to the Network of Economic Statisticians (Network) as its main purpose is to foster cooperation and communication between members of the global statistical system to advance the production of integrated socio-economic, environmental, and geospatial data. More specifically, the Network is tasked with identifying shared priorities and actions for co-investment and overcoming the challenges in achieving better data integration across these statistical domains. This note identifies and explores these shared priorities, allowing the statistical community to reflect on how to address these challenges through cooperation and sharing of best practices.
- 3. The synthesis note will cover various elements such as reported progress, new conceptual developments, emerging data and managerial challenges., as well as ongoing efforts by various groups in advancing some of the identified shared priorities. Better enabling of institutional arrangements and organizations will help to develop coordinated programs, practices, and working methods for the statistical system and improve networking between statistical committees and groups.
- 4. The review is organized around the Network's four workstreams. The workstream for better enabling the institutional arrangements and organization explores the development of coordinated statistical programs, practices, and working methods and the better data and data solutions workstream, can be facilitated through global co-investment and co-production strategies. The better statistical methods and framework workstream seeks ways to continuously update global statistical standards and develop a broader integration framework with multidimensional and sustainable development measures. Finally, better networking, user consultation, and communication will ensure continuous dialogue on the needs of users of the statistical system and promote partnerships with user communities.
- 5. This review of the reports submitted to the 54<sup>th</sup> Session of the Commission covers all reports submitted for discussion<sup>1</sup>. These reports cover a wide range of topics in the economic domain (such as economic statistics, national accounts, business and trade statistics, environmental-economic accounting, and prices), social domain (such as, social statistics, SDG

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<sup>&</sup>lt;sup>1</sup> Reports of the 54<sup>th</sup> Session of the Statistical Commission https://unstats.un.org/UNSDWebsite/statcom/documents/53.

framework, crime and criminal justice statistics, and refugee, internally displaced persons and statelessness statistics), statistical infrastructure domain (such as international classifications, big data, household surveys and geospatial information), and strategic and managerial issues (such as data stewardship, regional commissions, 2030 Agenda for sustainable development, working methods, national quality assurance, fundamental principles, and statistical capacity building).

6. This review has led the Network to identify three shared priorities across the Commission's reports based on the high incidence of these topics being mentioned: (a) data integration, (b) international statistical standards, and (c) the role of regional commissions and countries of the Global South. Two qualifications are in order for this review. Firstly, by its very nature, the review and thus the selection of the shared priorities is influenced by the purpose of the Network's review and its mandate. Secondly, while the reported priorities are presented as separate topics in this synthesis note, they are often jointly presented in the various Commission's reports. For instance, data integration is reported together with the development, update, and maintenance of international statistical standards and manuals, and the supporting role of regional commissions and engagement with the countries of the Global South in advancing these priorities as part of their regional programs on modernization and transformation of the national and regional statistical system. Again, the review is based on the reports submitted to the Statistical Commission, and references are made to the reports to allow for further reading.

## Data integration

## Review

- 7. Data integration plays a crucial role in advancing innovation and modernization of national statistical systems. In order to integrate data effectively and improve the accuracy and relevance of statistical and geospatial information, a number of key factors need to be considered. Firstly, the data ecosystem is evolving rapidly, and there is a need to deepen existing multi-stakeholder partnerships and develop new ones to meet the changing needs of the data landscape. This is reflected in the realignment of the Cape Town Global Action Plan for Sustainable Development Data<sup>2</sup> with new priorities and the inclusion of innovation and partnerships for better and more inclusive data in the program for the 4th World Data Forum.
- 8. Improving the horizontal integration of data across the three pillars of sustainable development is critical for improving the accuracy and relevance of socio-economic and demographic statistics<sup>3</sup>. This could be achieved through accounting or input/output tables to better understand the interactions between economic, social, and environmental development. Another critical factor is the development of metadata-driven production processes, with the

<sup>&</sup>lt;sup>2</sup> Cape Town Global Action Plan for Sustainable Development Data.

<sup>&</sup>lt;sup>3</sup> Report of the Secretary General on Social Statistics

creation of metadata structures, standards, and technical documentation to guide data integration.

- 9. Furthermore, integrating statistical infrastructure and operations for different data sources, including big data and data science not traditionally used for official statistics, is vital for closing data gaps and improving statistics' frequency, timeliness, and granularity. Statistical estimation techniques, such as small area estimation, are also crucial for this purpose<sup>4</sup>.
- International statistical classifications<sup>5</sup> play a crucial role in guiding the transformation of 10. statistical infrastructure and standardizing the quality of integrated statistical production processes. In this context, in the proposed adjustment in the Commission's multi-year programme of work<sup>6</sup> with the updated Classification of Statistical Activities (version 2.0), data sources are now centrally classified under "statistical infrastructure and methodology" in recognition of their multidomain applications, where in the past data sources were traditionally classified by the domain under which the compiled statistics are classified (e.g., socialdemographic statistics for household surveys, economic statistics for business surveys). This reclassification is a recognition of the growing importance of the horizontal integration of data sources and their data collection, processing, and dissemination methods in the modern statistical landscape and that data sources, especially newer ones, are no longer domain specific. The adjustment to the statistical activity program results from the ongoing discussions regarding the horizontal integration and centralization of data collection operations in the modernization and transformation of national statistical operations for data sources with multidomain applications.
- 11. There are initiatives<sup>78</sup> to modernize administrative data and registers, integrate geospatial information systems and statistics, centralize data produced by national statistical systems, and develop an integrated data infrastructure to link microdata. This modernization of statistical activities and operations should be accompanied by the reform of the national statistical legal frameworks and the development and update of national strategies for the development of statistics<sup>9</sup>. Also, the work of the regional commissions in data integration initiatives should be noted. For example, ESCAP is promoting data integration work through its data integration community of practice platform which organizes regular sessions on country experience sharing, and is preparing knowledge products on data integration as well.

<sup>&</sup>lt;sup>4</sup> Report of the Secretary General on Social Statistics and Report of the Intersecretariat Working Group on Household Surveys

<sup>&</sup>lt;sup>5</sup> Report of the Committee of Experts on International Statistical Classifications

<sup>&</sup>lt;sup>6</sup> Report of the Bureau of the Statistical Commission on the working methods of the Statistical Commission

<sup>&</sup>lt;sup>7</sup> Report of the Economic Commission for Africa on regional statistical development

<sup>&</sup>lt;sup>8</sup> The Global Partnership for Sustainable Development Data (GPSDD) is recognized in advancing the use of administrative registers for statistical purposes

<sup>&</sup>lt;sup>9</sup> Report of the Economic Commission for Africa on regional statistical development

- 12. A holistic approach<sup>10</sup> to the national integrated data environment is necessary, including reducing barriers to data-sharing, optimizing available resources, and increasing trust in data and statistics produced by the national statistical system. The role of national statistical offices as data stewards is also critical, leveraging existing statistical infrastructure and taking advantage of new data sources and ecosystems.
- 13. International data-sharing and collaboration is another key aspect of data integration, as well as the modernization<sup>11</sup> of administrative data and registers, the integration of geospatial information systems, and the centralization of data produced by national statistical systems. These transformations should be accompanied by the development of an integrated data infrastructure and their inclusion in the update of national strategies for developing statistics. Similarly, international guidelines could be developed for the "leave no one behind" approach to support countries to develop the appropriate statistical infrastructure.
- 14. For the monitoring of the progress of data integration, there is a search for success criteria<sup>12</sup> for data integration and related data stewardships. The proposed criteria could include monitoring and reporting on increased resources for data production and dissemination, increased centralization and use of metadata driven statistical production processes, increased use of national data quality assurance framework, increased data-sharing and reuse, increased trust in data and statistics, low incidence of data privacy breaches, active engagement between data producers and users, increased citizen engagement in surveys and censuses, more data-driven policymaking, increased data literacy, and increased use of statistics.
- 15. Data integration also covers the much demanded integration of statistical and geospatial data facilitated by the Global Statistical Geospatial Framework (GSGF)<sup>13</sup>. This data integration will offer a more complete and detailed picture of the social, economic and environmental conditions of a given area, such as the location and social conditions of special disadvantaged population groups. Moreover, geospatial disaggregations by special population groups have proven to be in high demand for decision-making on budget allocations to areas of interventions during the COVID pandemic as well as distributions of social services.

### Conclusion

16. In conclusion, data integration for sustainable development data, indicators, and accounts is a shared priority across many regional and international statistical and geospatial groups and programs to advance innovation and modernization of national statistical systems, and a range of factors need to be considered to ensure its success. This includes deepening multistakeholder partnerships, developing metadata-driven production processes, improving horizontal data integration, enhancing collaboration between statistical and geospatial

<sup>&</sup>lt;sup>10</sup> Report of the Expert Group on the Integration of Statistical and Geospatial Information

<sup>&</sup>lt;sup>11</sup> Report of the Economic Commission for Africa on regional statistical development

<sup>&</sup>lt;sup>12</sup> Report of the Working Group on data stewardship

<sup>&</sup>lt;sup>13</sup> Report of the Expert Group on Integrated Statistical and Geospatial Information

information groups, and modernizing administrative data and registers. In addition, technical and technological barriers have to be overcome, which required specialized knowledge. Also, ensuring the quality and comparability of geospatial and statistical data can be a challenge, especially when data is collected from multiple sources. Data privacy and security have to be considered with the use of geospatial information, because it can make it easier to identify individuals, households, and businesses. Another challenge is the limited capacity and resources. Many countries may have limited capacity and resources, and may require technical assistance and support from international organizations and other stakeholders.

- 17. The Network's review of the Statistical Commission reports has determined that data integration is an essential aspect of the changing data landscape for official statistics to meet the emerged user demand for multidomain and disaggregated information. It requires a collaborative effort from multiple stakeholders and statistical programs to take a collective and holistic programmatic view.
- 18. The Network's review shows that data integration is recognized by statistical groups and committees as a central statistical priority across the statistical domains and can be a major driver for cross-domain cooperation and co-investment. The Network proposes that the 54<sup>th</sup> Session of the Statistical Commission reflects on working methods for coordination and networking to advance and intensify multidomain cooperation on data integration in 2023 and beyond to maximize progress in this crucial statistical activity for the modernization and transformation of statistical systems in low, medium, and high-income countries.

## International statistical standards

### Review

- 19. International statistical standards and manuals approved and endorsed by the Statistical Commission as the apex entity of the global statistical system are essential normative documents for the alignment and international comparability of statistics and statistical activities of the global statistical system. Moreover, they play a critical role in guiding the production and dissemination of data, statistics, and accounts that inform and support policymaking on socioeconomic and environmental development, including reporting on sustainable and inclusive wellbeing.
- 20. In light of the rapidly changing policy and user demands, the pace of the development and update of international statistical standards and manuals may need to increase and move from a discrete to a continuous update process. These international statistical standards and manuals cover domain-specific conceptual frameworks like the System of National Accounts and the System of Environmental-Economic accounting. They also cover operational manuals for statistical infrastructure and elements of the statistical production process, such as metadata and data sources, and guidelines on strategic and managerial issues.

- 21. Many reports<sup>14</sup> for the 54<sup>th</sup> Session of the Statistical Commission document the ongoing good practices on the development, update, and maintenance of these standards and manuals, report on the progress made, and seek the Commission's endorsement for their work programs on normative documents.
- 22. Past and present developments and updates of standards and manuals have been mainly undertaken in isolation. However, with the increased focus on making interrelationships between statistical domains explicit and ensuring horizontal integration of concepts, definitions, and classifications to measure sustainable development, many reports of the statistical groups and committees to the Statistical Commission report on their efforts of mobilizing domain-specific expertise through collaboration with other statistical expert groups and committees. Similarly, the manuals on statistical infrastructure and strategic and managerial issues emphasize integration, interoperability, centralization, and collaboration of statistical operations and partnerships to make the statistical systems more efficient, cost-effective, relevant, robust, usercentric, and agile. Statistical expert groups and committees responsible for the latter two domains would also benefit from sharing their expertise and progress, as mentioned in their reports. An example is the reporting<sup>15</sup> on incorporating the lessons learned from the United Nations Legal Identity Agenda and the population registers based on the civil registration and vital statistics and population and housing census program for launching an initiative on national business registration and use of national and global unique identifiers for business registration. Dialogue between the experts on business statistics and population and housing censuses already resulted in considerations of developing an integrated data infrastructure to link microdata on people and businesses by reviewing country practices in aligning concepts and methods used in population and housing censuses with population registers, address/dwelling/building registers and other administrative data.
- 23. The Network suggests that there is merit in documenting past and present practices in developing and updating international statistical standards and manuals initially building on the practices reported in the Commission reports. These practices should also include the role of pilot countries in the testing of new methodology like for the development of the SEEA ecosystem accounting manual and the excellent collaboration between the national accounts and balance of payments communities in updating the 2008 SNA and BPM6 respectively. This scope of the inventory could include timelines, criteria, and drivers for developing and updating international statistical standards and manuals. It could take into account the similarities and differences between the timelines, criteria, and priorities for domain-specific international statistical standards and cross-cutting thematic issues and manuals for statistical infrastructure and strategic and managerial issues. Proposed and applied criteria for updates reported to the 54th Session include limited change, no additional country burden, focus on implementation, and not undermining existing investments. Drivers for the update of the conceptual frameworks are meeting changing user demand for more issues related to a more comprehensive measurement of wellbeing and sustainable development, gender and special population groups issues,

<sup>&</sup>lt;sup>14</sup> See https://unstats.un.org/UNSDWebsite/statcom/documents/54.

<sup>&</sup>lt;sup>15</sup> Report of the Committee of Experts on Business and Trade Statistics

environmental conditions and services, the global and digital economy and thematic applications related to climate change, biodiversity, and circular economy. The drivers for the development and update of manuals for statistical infrastructure and operations<sup>16</sup> include enhancing interoperability and integration, improving sampling efficiency and coverage, building capacity for computer-driven data collection devices, systematizing the collection, storage, and use of paradata and metadata, incorporating machine learning and artificial intelligence for data quality control and analysis, and improving data access, discoverability, and dissemination.

- 24. A comprehensive review could also generate an overview of the various user-driven drivers for domain-specific international standards like the System of National Accounts, the System of Environmental-Economic Accounting, and a future System of Social and Demographic Statistics in meeting the changing policy demand by informing emerging thematic issues related to the economy, environment, and society. The drivers for the manuals for statistical infrastructure and strategic and managerial issues may be more of an operational nature and relate to the changing conceptual frameworks and the need to modernize and transform the statistical production process and the management and governance of national statistical offices and the statistical system.
- 25. The review could establish that the development and update of standards is increasingly accompanied by experimentation and testing, particularly in low and medium-income countries, as an integral and dedicated part of early and agile national capacity-building programs. Continuously updating international statistical standards is also crucial to keep them relevant and robust. This could be achieved by better sharing of outcomes of national user consultations, applying semantic web technology to link international and national metadata repositories, and introducing an extensive outreach and communication with national experts to inform and consult them on newly proposed methodological refinements and changes.

## Conclusion

26. In accordance with its Terms of Reference, the United Nations Statistical Commission continues to prioritize developing and updating international statistical standards and manuals being essential normative documents for the alignment and international comparability of statistics and statistical activities. With the rapidly changing policy and user demands towards integrated statistics and multidimensional presentations, the Commission may consider documenting the collective experience from ongoing and newly launched revisions and updates of international standards and manuals. Additionally, better documenting and sharing of outcomes of national user consultations, the use of new technologies like semantic web technology, and the introduction of extensive outreach and communication with national experts are crucial to move towards continuously updates of international statistical standards to keep them relevant and robust. By doing so, the Commission can guide the production and dissemination of data, statistics, indicators, and accounts that inform and support policymaking

<sup>&</sup>lt;sup>16</sup> Report of the Intersecretariat Working Group on Household Surveys.

on socio-economic and environmental development, including the reporting on sustainable and inclusive wellbeing.

27. The Commission may consider whether documenting the development, update and maintenance practices of international standards and manuals has merit for sharing and communication among the statistical groups and committees.

## The regional commissions and the countries of the Global South

#### Review

- 28. The facilitating role of regional commissions in advancing the regional and national statistical system for official statistics, strengthening the capacity of national statistical systems, and promoting the production and dissemination of high-quality, timely, and relevant statistics and its use for evidence-based policy making is emphasized in many reports of the 54<sup>th</sup> Session of the Statistical Commission. Moreover, the regional commissions are recognized as key partners in the implementation of the international working programs of the statistical expert groups and committees overseen by the Statistical Commission.
- 29. The regional commissions are well-placed to play this facilitating role given their in-depth knowledge of the programs of work of national statistical systems. Each of the regional commissions has an active and striving community led by statistical and geospatial work programs endorsed by their Statistical Committees and implemented by their expert groups and networks organized by the main statistical and geospatial domains and topical areas such as economic statistics, population and social statistics, sustainability and environment, geospatial information, and modernization of official statistics. The recurrent annual meetings of the Committees and expert groups and networks provide the apex regional statistical forums to coordinate the regional stakeholders, including governments, regional and international organizations, academic institutions, and civil society organizations.
- 30. Examples of regional collaboration between global expert groups and committees and regional commissions are diverse. They include sharing updates on technical papers and conducting joint surveys on the impacts of statistical operations, consolidating findings, gathering inputs, and working on commonly agreed glossaries of terms. Additionally, many global groups and committees collaborate with regional commissions to support updating, maintaining, and implementing internationally agreed standards, including their applications to emergent areas such as disaster-related statistics and climate change. Other groups and committees coordinate capacity-building activities globally and regionally, while regional hubs for big data and data science focus on developing data science skills at the regional level. Finally, the Commission's Secretariat seeks to strengthen the implementation and compliance of Fundamental Principles for official statistics with the help of regional commissions.

- 31. Global expert groups and committees have adopted various mechanisms and working methods to ensure close collaboration with the regional commissions and avoid duplication of global and regional efforts. Best practices in collaboration include working together to develop common priorities and a shared global and regional statistical program. A variant on these working methods is that regional commissions are involved in selecting regional memberships of countries and agencies for the coordination and alignment of programmatic priorities. Alternatively, regional members are selected to participate in global statistical expert groups and committees. Other expert groups and committees create with the regional commissions focal points at the country level to create networks such as on geospatial information and data science.
- 32. An opportunity for further strengthening the working methods of collaboration between the global and regional statistical system could be the Cape Town Action Plan for Sustainable Development Data update in the coming two years by the High-Level Group <sup>17</sup>. The updated Plan is expected to incorporate the new national and regional priorities in remedying the challenges for the implementation of the SDG indicators in a changing data environment; and how the global Plan could be meaningful in a national and regional context in facing the obstacles in achieving the Sustainable Development Goals. This overarching Plan could also be considered a guide for the organization and structure of the work programs of the international and regional statistical groups and committees in the short and medium term.

#### Conclusion

33. The Commission may consider the merits of documenting the working methods of statistical groups and committees in incorporating national and regional priorities in their global programmatic priorities and how they coordinate their global work programs with related regional work programs.

<sup>&</sup>lt;sup>17</sup> Report of the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development