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# Statistical Commission Fifty-fourth session

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## Report of the Working Group on Data Stewardship

## Note by the Secretary-General

In accordance with Economic and Social Council decision 2022/324 and past practices, the Secretary-General has the honour to transmit the report of the Working Group on Data Stewardship (WGDS). The report provides a summary of the recent activities of the WGDS related to its five workstreams and presents a draft consultation questionnaire to be circulated among National Statistical Offices to understand further attitudes on the scope and priorities of data stewardship to assist with developing a working definition.

The Commission will also have before it, one background document containing a more detailed update on the workstreams of the WGDS.

Points for decision by the Commission are contained in paragraph 17.

<sup>\*</sup> E/CN.3/2023/1.

#### I. Introduction

- 1. In 2020, the Statistical Commission, in its decision 51/120, established the work on data stewardship within the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development (HLG-PCCB) and asked them to report back at its next session with a stocktaking exercise and specific recommendations on the way forward. As a result of the HLG-PCCB's work, the Commission through its decision 52/103 created a Working Group on Data Stewardship (WGDS) in 2021 to explore the development of guidance for national statistical offices on approaches to data stewardship.
- 2. The WGDS reported for the first time to the Commission in 2022 which in its decision 53/104, supported the five workstreams begun by the group, covering data governance (workstream 1), equity and inclusion (workstream 2), sharing and collaboration (workstream 3), links with the city data agenda (workstream 4) and development of an overall conceptual framework (workstream 5); recommended consideration of additional aspects, such as data capability, data quality assessment, and increased attention to issues related to the protection of privacy of data; requested outstanding work from the Working Group on Open Data was absorbed by the group; recommended the development of a framework outlining the definition and application of the data stewardship concept, the advantages of assigning the role of data steward to the national statistical office, a glossary of terms related to the data stewardship concept, and maturity models covering different national circumstances; and recommended the group maintained links with similar work being done within different regional bodies.
- 3. The WGDS is composed of representatives from national statistical offices and stakeholders from other data communities, including international and regional organizations and civil society organizations. The current co-chairs are Ms. Beatriz Piedad Urdinola Contreras, Director General of the Departamento Administrativo Nacional de Estadística (DANE-Colombia) and Mr. Dominik Rozkrut, President of Statistics Poland. The Statistics Division of the UN Department of Economic and Social Affairs provides the secretariat for the WGDS. The working group met four times during 2022 through a series of virtual meetings, while the five individual work streams usually met more often. For further information, the group's Terms of Reference, its membership and its past public events and official documents can be found on the website: https://unstats.un.org/unsd/statcom/groups/Data Stewardship/.

## **II.** Updates from the workstreams

## A. Data Governance workstream

4. This workstream is co-lead by Statistics Poland and World Privacy Forum (WPF) to provide guidance to National Statistical Offices (NSOs) regarding data governance and legal frameworks to assist them in transforming and potentially expanding their role as data stewards. The workstream is collecting data from working group members on existing and forthcoming data governance-related documents, at different levels. In 2022, the European Commission finished the work on Data Governance Act<sup>1</sup>, which aims to foster the availability of data for use by increasing trust in data intermediaries and by strengthening data-sharing mechanisms across the European Union. Moreover, the group is working towards creating a glossary of data governance-related terms, as well as an inventory of national legislation describing issues linked with data privacy, data protection and data governance, with the aim of facilitating mutual understanding between cross-existing data governance models and government institutions with data governance responsibilities. The workstream is also collecting key data governance use cases from NSOs and analysing them to ascertain and catalogue good practices. This workstream is focused on ensuring clearer communication amongst NSOs and establishing a web-based library to make it easier to navigate the complex world of data governance-related terms and concepts.

<sup>&</sup>lt;sup>1</sup> REGULATION (EU) 2022/868 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2022

## B. Equity and inclusion workstream

- 5. This workstream is co-lead by the Departamento Administrativo Nacional de Estadística (DANE-Colombia) and the Global Partnership for Sustainable Development Data (GPSDD) to provide guidance to NSOs to ensure an equitable and inclusive approach to data use is adopted with the aim of leaving no one behind as set out by the 2030 Agenda for sustainable development. During 2022, the workstream focused on deepening the understanding of the principles and practices that National Statistical Offices (NSOs) have adopted to promote more equitable and inclusive data as part of their role as a data steward. The workstream started to explore the different policies and strategies adopted by NSO's across the globe to ensure inclusive and equitable data use and the inclusion of different communities throughout the data value chain.
- 6. The main deliverable of the workstream will be a briefing document that compiles case studies highlighting the main ways that NSOs foster equity and inclusion through their data stewardship role. To fulfil this objective, the workstream co-leads elaborated a concept note which examined the relation between data stewardship and equity and inclusion to inspire members of the WGDS to share their experiences. Building on the elaboration and review of a case study featuring Colombia and Canada's experiences promoting equity and inclusion, the group will agree on general findings, advice and guidance to share with the wider working group.

## C. Sharing and collaboration workstream

- 7. This workstream is co-lead by the Departamento Administrativo Nacional de Estadística (DANE-Colombia) and the Instituto Nacional de Estadística y Censos (INDEC-Argentina) with the aim of developing a better understanding of issues related to access, sharing and collaboration within the data ecosystem. Since National Statistical Offices (NSOs) exist with different starting points in the data ecosystem, the group looked at different scenarios where access to data sources, mainly focused on the public and private records, was an issue and how issues around sharing were addressed. In this sense, the workstream sought to compile the different experiences and lessons learnt by NSO's across the globe on this subject, keeping in mind that each case is different since every NSO acts within their own legal framework.
- 8. Moreover, throughout the year, it was highlighted how the lack of a strong legal mandate has not limited the willingness of NSOs to diversify their strategies to harness new data sources for official statistics. This includes establishing cooperation mechanisms through the adoption of a stewardship approach to gain some early wins. For this reason, the workstream wants to create a "living document" that is constantly shared with NSOs, and feedback is given to improve its usefulness. This includes the compilation of cases, challenges, and experiences in the field of data sharing and collaboration.

## D. Data Stewardship and the City Data Agenda workstream

- 9. This workstream led by the Sustainable Development Solutions Network (SDSN) TReNDS links the working group and those engaged in the Smart cities initiative with the aim of fostering knowledge exchange, finding areas of mutual interest and suggesting remedies in these areas to improve and connect data stewardship at the national and cities level. Data can be a powerful tool for helping city governments improve the efficiency of their operations, save money, provide better services, and enhance citizen engagement. Yet, to fully leverage the value of data to achieve these objectives requires city governments to improve their data stewardship and data analytics capabilities. As such, the experiences of National Statistical Offices (NSOs) are important for advancing data stewardship and supporting whole of government data strategies within cities.
- 10. Throughout 2022, this workstream has engaged in several activities. The well-attended webinar in March 2022 entitled "enabling a data-driven culture between the national and city level", provided an inclusive platform to delve into the recommendations this workstream provided to the Commission during its previous session. Key takeaways from the webinar were as follows: first and foremost, we need more dialogue between the data communities at the national and cities level; second, there are laws and regulations that support data stewardship at the city level but more needs to be done to ensure that there are common standards across municipalities

consistent with national ecosystem data governance; and third, there is work at both the cities and NSO levels to enhance citizen engagement in government activities.

- 11. As a follow-up to the webinar, the workstream has concentrated its efforts in two areas. The first area explores the potential for the Sustainable Development Goals (SDGs) to act as a use case for data innovations within cities. Consistent with the OECD's findings that at least 105 of the 169 SDG targets will not be reached without proper engagement and coordination with local and regional governments, more cities are bench marking their efforts to achieve environmental sustainability and social equity through the SDGs. With cities and subnational entities having conducted more than 50 Voluntary Local Reviews in 2021 / 2022, the workstream is considering city use cases that could showcase innovations in data production, dissemination, and use under the SDG framework.
- 12. Second, City Chief Data Officers (CCDOs) have long recognized academic institutions as an important resource and collaborations between university-based data labs and city data units are common, combining local knowledge with specialized technical skills to co-develop solutions. City data partnerships with private sector entities are also on the upswing. As such, the workstream is identifying and reviewing case studies that could inform how these partnerships are established and what makes them effective. These lessons could inform NSOs strategies aimed at developing sustainable and productive collaborations with academia and the private sector to improve their access to non-traditional forms of data and incorporate new analytics into their service offerings.

## E. Overall Conceptual Framework on Data Stewardship workstream

- 13. This workstream is co-lead by Statistics Poland and Open Data Watch (ODW) to establish a common understanding of what the concept of data stewardship covers, recognizing that there are different interpretations of what constitutes data stewardship and differences in the terminology used across different data communities. The goal is to give guidance on the role of NSO as data steward. This workstream strives to reconcile regional definitions of data stewardship to develop a global conceptual framework and define a framework for describing data stewardship based on a common terminology. This will ensure coherence across the other four workstreams in the working group as well as across the different regional data stewardship activities.
- 14. To build on the stocktaking exercise of existing definitions of data stewardship, workstream members began developing a list of terms related to data and statistics. This potential glossary was expansive and comprehensive to accommodate stakeholders with varying levels of data expertise. The goal of this glossary was also to create a common language and understanding of key concepts related to data stewardship to support the overall goal of this workstream. In parallel to these efforts, the workstream capitalized on the diversity of its membership to connect with relevant groups within the regional United Nations economic commissions in Europe and Latin America and the Caribbean. Through these efforts, the workstream received updates on the data stewardship paper developed by the United Nations Economic Commission of Europe (UNECE) and provided written comments on the draft paper. Similarly, the workstream also reviewed a survey developed by the United Nations Economic Commission for Latin America and Caribbean (UNECLAC) that consolidated inputs from NSOs in the region on their understanding of data stewardship. Based on these engagements, it was decided that to avoid duplication of efforts, this workstream would work with UNECE to formulate a commonly agreed upon glossary of terms.
- 15. Considering the work already underway at the regional level, members of the workstream agreed to learn from the regional efforts, consolidate their findings and inputs, and gather inputs from across all regions to develop a framework on data stewardship. To this end, the workstream members developed a potential framework and definition in a brief document with an accompanying questionnaire to be deployed globally with support from the secretariat of the working group, see Annex I for the draft questionnaire. This framework defines data stewardship as a cross-cutting activity that connects data governance to data management and maintains trust and accountability in data. The draft questionnaire was developed in consultation with other workstream leads and all members of the working group.

- 16. The workstream saw the data steward as a "change leader" in charge of articulating specific goals and actions that increases trust in and use of data and statistics, and thus maximizes the positive impact of data and statistics. The accompanying questionnaire solicits feedback on this proposed definition to ensure it is inclusive of different global perspectives and experiences. After finalizing these documents, the workstream will conduct a pilot exercise of the questionnaire before deploying it more broadly. Once the results are analyzed, the workstream will share a revised global framework for data stewardship and a checklist of activities that may be conducted by a data steward, in addition to a glossary of terms. This may require additional consultations with key stakeholders and the development of a compendium of case studies of how data stewardship is operationalized within varying data and government systems.
- III. Action to be taken by the Statistical Commission
- 17. The Statistical Commission is invited to:
- (a) Take note of this report presenting the work of the WGDS;
- (b) Approve the reports on the progress of the five works streams defined under the working group;
- (c) Approve the draft consultation questionnaire to be circulated among National Statistical Offices to understand further attitudes on the scope and priorities of data stewardship as presented in Annex I;
- (d) Approve the proposed workplan of the WGDS for 2023 as presented in Annex II.

#### Annex I

The Working Group on Data Stewardship (WGDS) was established at the fifty-second session of the Statistical Commission, to develop a common understanding of what the concept of data stewardship covers, considering there are different interpretations of what constitutes data stewardship across different data communities and different uses of the terminology. This short questionnaire is intended to collect your organisation's perspective on the definition and parameters of data stewardship in official statistics.

Your feedback will help inform the development of a global definition of data stewardship and will ensure that any frameworks proposed by the WGDS will be inclusive, actionable, and context sensitive.

**Proposed Questions** 

Name:

Email:

Title:

Affiliation:

Country:

- 1. The NSO in my country is mandated to coordinate the production and integration of official statistics across the National Statistical System (NSS).
  - a. Yes
  - b. Yes, but only over parts of the NSS
  - c. No
  - d. I don't know
- 2. The following functions are often perceived as related to data stewardship. Are there authorities/bodies in your country whose role is to (check all that apply):
  - a. Continuously improve governance policies and management practices for data and statistics across the NSS (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - b. Build and strengthen partnership and collaborations with members of the NSS and stakeholders from civil society<sup>2</sup> (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - c. Support data-related work across government agencies and other NSS entities (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - d. Promote and lead in the implementation within the NSS of technological and statistical standards and best practices across all stages of data production, dissemination, and use (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - e. Oversee security of data systems and data exchange related to the collection, processing and dissemination of official statistics (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - f. Ensure privacy and confidentiality of sensitive and personally identifying information used in the production of official statistics (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - g. Ensure the quality and interoperability of the data and metadata produced and disseminated by members of the NSS (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
  - h. Ensure that data assets and statistics produced across the NSS are readily findable and accessible to different user groups (for example, through the maintenance of publicly available authoritative data catalogues) (If selected, write-in examples of authorities/bodies that fulfil this role in your country)

<sup>&</sup>lt;sup>2</sup> For the purposes of this survey, civil society encompasses nonstate actors relevant to sustainable development based on the definition of Major Groups provided in Agenda 21, i.e., farmers, women, scientific and technological community, children and youth, indigenous people and their communities, workers and trade unions, business and industry, local authorities and non-governmental organizations (see, e.g., https://sustainabledevelopment.un.org/mgos)

- i. Promote and monitor the adoption of good practices for the use and re-use of data (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
- j. Foster user engagement and facilitate user-driven development of data and statistics products and services (If selected, write-in examples of authorities/bodies that fulfil this role in your country)
- k. Other: [write in]
- 3. Do you think a national data steward should oversee all data sources within the National Statistical System (NSS) in a country, including administrative data?
  - a. Yes [Because...(write-in)]
  - b. No [Because...(write-in)]
- 4. How have the following data stewardship responsibilities of the NSO changed in the last two years? Select **one** of the three options provided below:

Area or responsibility	1. Responsibilities have narrowed	2. Responsibilities remain relatively unchanged	3. Responsibilities have expanded	Comments
Data governance policies and management practices	0	0	0	
Partnership and collaborations with members of the NSS and other stakeholders	0	0	0	
Support data-related work across government agencies and other NSS entities	0	0	0	
Implementation of technological and statistical standards and best practices	0	0	0	
Oversee security of data systems and data exchange	0	0	0	
Ensure privacy and confidentiality of sensitive and personally identifying information	0	0	0	
Ensure data quality and interoperability	0	0	0	
Ensure data findability and accessibility	0	0	0	
Promote and monitor the adoption of good practice for use and re-use of data	0	0	0	
Foster user engagement and user-driven development of data products and services	0	0	0	

- 5. How would you define and measure successful implementation of data stewardship? (Select your top five)
  - a. Increased resources allocated to the production, dissemination, and use of data across all sectors of society
  - b. Increased data sharing and re-use between government entities and across the NSS
  - Increased trust in data and statistics produced by the NSS

- d. Low incidence or impact of data privacy breaches and data security incidents within the NSS
- e. Active engagement between data producers and data users
- f. Increased citizen's engagement in surveys and censuses
- g. Increased availability and timeliness of time-series data and statistics
- h. More data-driven and statistics-driven policymaking
- i. Increased data literacy in society
- j. Increased use of statistics by journalists and other communications professionals.
- k. Other (write-in):
- 6. In your normal course of business, what mechanisms do you rely on to share knowledge and experiences with municipal / city government Data Stewards (e.g., Chief Data Officers, City Registrars, Head of Statistics Departments). We emphasis relations with municipal level officials NOT local or regional offices of the National Statistical Office.
  - a. Organizational function / position that is responsible for liaisons with municipal level officials.
  - b. Formalized processes that support recurrent engagement between officials from NSOs and municipal level officials
  - c. Occasional ad-hoc meetings between NSO officials and their municipal level counterparts.
  - d. Rare to no engagement between NSOs and Municipal level officials.
- 7. Please provide any additional thoughts, especially regarding the existence of other entities with data stewardship responsibilities that may create opportunities or challenges for the NSO to serve as a data steward within the broader National Statistical System (NSS).

#### Annex II

## Work plan (January - December 2023)

## 1. Governance and legal frameworks work stream

- a. Promotion of the role of official statistics in the national and supranational data governance systems, which can effectively contribute to the development of efficient and effective data ecosystems, particularly in the coordination of national information systems.
- b. Encourage the possibility of developing the ethical guidelines for data stewardship, particularly in obtaining data from new data sources (including private and big data) and new models of dissemination vis a vis the data sources (origination); and of incorporating the idea of artificial intelligence and machine learning guidance in the data governance, steward processes, and roles, to foster trust.
- c. Support for the development of the capacity of National Statistical Offices (NSOs) to fulfill the role of data stewards, taking advantage of statistical infrastructure: nomenclatures, standards, classifications, information models, and statistical frameworks; and recent achievements and increased experience in using new data sources and ecosystems.
- d. Promoting the development of cooperation with other relevant stakeholders of national and supranational data ecosystems by creating an observatory on data stewardship, inclusive of best practices in the realm of data governance and examples of data stewardship NSOs' activities.
- e. Ensuring that best practices are used concurrently with the framework of SDGs to nurture progress.

#### Deliverables:

• Summary document articulating the process and recommendations

## 2. Equity and inclusion work stream

- a. Identify specific research questions to shed light on thematic and sectorial dimensions of the equity and inclusion agenda (indigenous communities, gender, intersectional approach), to support different NSOs understanding how they can build their own approach as data stewards while achieving relevance by meeting users' expectations as a cornerstone of statistical quality assurance. These research questions will guide the case studies.
- b. Systematize learning from different national approaches that have been implemented to foster equity and inclusion, strengthen NSOs role as stewards, and foster the empowerment of and collaboration with vulnerable communities through better governance schemes.
- c. Develop guidance on how NSOs can promote equity and inclusion along the data value chain to strengthen their role as stewards, recognizing the realities under which this promotion must be undertaken, and the specific expectations users have regarding the NSOs' role and their own.

#### Deliverables:

• Revised version of the briefing document.

## 3. Sharing and collaboration work stream

- a. Diagnose the different international scenarios where sharing and collaboration is being discussed under the Data Stewardship concept.
- b. Document the good practices and lessons learnt by NSOs and other stakeholders while negotiating and achieving Data Sharing Agreements with public and private actors.
- c. Provide guidance on the kind of instruments that better suit the data sharing and collaboration needs as well as identifying research questions regarding the enabling factors for collaborative environments with multiple stakeholders under the data stewardship concept.

## Deliverables:

- Inventory of resources, with the good practices currently carried out by members on the matter,
- Guide and template(s) for the negotiation of data sharing agreements with members of the data ecosystem, taking into consideration the nature of the stakeholders and the type of data shared.

• Final document which included recommendations, research questions for the work ahead, as well as refined outcomes of the other deliverables (inventory of resources and data sharing agreement templates).

## 4. Data stewardship and the city data agenda

- a. Expanding interviews and case studies
- b. Revising the conceptual framework as needed
- c. Recommendations drawn from Cities experience to support effective data stewardship at the national level

## Deliverables:

• Expanded briefing document with selected case studies, one-on-one consultations, and focus groups. The studies will cover a mix of high-performing and lower-performing countries.

## 5. Overall conceptual framework on data stewardship

- a. Develop a robust and adaptable framework on data stewardship
- b. Issue guidance on the role of NSO as data steward within government and data systems

#### Deliverables:

- Formulate a commonly agreed upon glossary of terms in cooperation with the United Nations Economic Commission of Europe (UNECE) task force on data stewardship
- Questionnaire to have feedback on the proposed definition to ensure it is inclusive of different global perspectives and experiences
- Framework of data stewardship, this may include a checklist to identify the needs and responsibilities that data stewards may fulfil within national statistical systems.

## 6. Meetings

- a. 8<sup>th</sup> meeting: February 2023, UN Statistical Commission, in-person
- b. 9th meeting: May 2023, virtual
- c. 10th meeting: September 2023, virtual
- d. 11th meeting: December 2023, virtual