

UNECE work on data stewardship

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1. CES discussions of data stewardship:

- 2019: [Emerging role of NSOs as offices for statistics and data](#)
- 2020: [Data stewardship - next steps for National Statistical Offices in the changing world](#)
 - Paper by Estonia et al. ['Implementation of the new role of national statistical offices at the time of expanded possibilities'](#)

2. Experiences from countries:

- [Albania, Australia, Canada, Denmark, Estonia \(1, 2\), Finland, France, Ireland, Lithuania, Netherlands, New Zealand, Romania, Russia, Serbia, Switzerland, United Kingdom, Eurostat](#)

Impact of COVID-19 on the role of NSOs



- ❖ Covid-19 made the data governance problems more evident
 - Diversity and fragmentation of data sources
 - Different definitions and lack of comparability
 - Inflexible and slow official statistics - timeliness, granularity; survey collection
 - Access and use of admin and other new data sources, legal basis
 - Ineffective data exchange, re-use and opening
- ❖ Opportunity for rapid change and taking on a new role
 - Access to new data sources, including privately owned
 - Increased visibility and reputation of official statistics
 - Changes in work environment and culture, attracting qualified staff
 - Use of new methods; producing new data, almost real-time data

CES Task Force on data stewardship



- ❖ CES Task Force set up in February 2021 (until 2023), aim:
 - Define data stewardship and the related terms (data governance, curation, etc.);
 - Develop a set of possible responsibilities for a data steward, including a minimum core set and maturity model
 - Develop a toolkit of good practices and tools for a data steward;
 - Clarify what NSOs can and can not do in line with FPOS

At a later stage this could lead to guidance on the role of NSOs in the new data ecosystem
- ❖ Coordinate with the UN global working group on data stewardship
 - Number of overlapping members
 - Secretariats in close contact

Implementation of the new role of NSOs

Form the paper by Estonia et al.



1. National data ecosystems, comprising statistical, administrative, geospatial and other new sources, including big data
2. Strategic questions;
 - What will be the role of NSOs and official statistics in society?
 - What traditional functions NSOs have to maintain? How may the new role change values and traditions?
 - How NSOs will respond to competition from other organisations? What strategic partnerships are needed?
 - How to maintain high trust in delivering quick insights to changes in society?
3. Where NSOs should exercise leadership; what and how NSOs should act

Considerations/actions to be taken (1)



1. Governance of public data

- Establish a legal system enabling use of data (with governments)
- Get involved in developing national data strategies
- Governments to appoint a Chief Data Officer, or a Data Governance Board
- Define a minimum set of core responsibilities for a data steward
- Promote data literacy and numeracy; share experience with data governance

2. National data ecosystems and data services

- Move towards a common data architecture (based on statistical experience)
- Review infrastructure to ensure protection of data and confidentiality, while facilitating data integration
- Encourage government bodies to improve their data quality

Considerations/actions to be taken (2)



- NSOs could be certification bodies for quality of data held by other parts of NSS
- Participate in open data initiatives, support with statistical experience
- Strategic communication to engage policy makers, professional communities and statistical staff; pay special attentions to citizens' needs and concerns

3. Next generation of statistics and analysis

- Work with customers to deliver needed data as close to real time as possible
- Develop analytical capabilities, data science and data engineering
- Consider what roles to adopt concerning metadata – support building up metadata systems and their interoperability
- Implement data science methodology and tools, cooperate with AI community
- Support government in promoting a data culture, including data ethics

Examples of data stewardship (1).



Switzerland: simplification for companies and citizens through once-only principle

- Data ownership and storage is decentralised
- Interoperability of data is key
- Center of expertise for data science in SFSO supporting the whole administration
- Data governance, including a role model and processes of standardisation and harmonisation
- Swiss Data Steward in SFSO; local data stewards in other government agencies (including in SFSO for statistics)
- Metadata catalogue and interoperability platform developed

Examples of data stewardship (2).



Ireland

1. Co-ordinate official statistics compiled by public authorities
2. Access administrative data, ensure their statistical potential is realised
3. Support development of public service data strategies and national data infrastructure
4. Identify and describe data requirements of users
5. Manage content of metadata (data catalogue), metadata quality assurance
6. Data services (data collection and dissemination platforms, access to microdata)
7. Policy relevant research projects
8. New services via partnerships
9. Secondment of professional statisticians to other government departments
10. Defining and supporting implementation of standards, data quality assurance
11. Data governance and protecting confidentiality
12. Support for policy analysis

Examples of data stewardship (3).



Lithuania

- Amended Law on Official Statistics (2020):
 - NSO manager of the State Data Governance System
 - produces official statistics and can collect data and produce information other than official statistics
- Creating a State Data Governance System
 - multifunctional data management platform enabling quick and efficient access to data sources
- New data management model to produce official and experimental statistics
- Future plan: centralised production of public sector open data

Thank you!

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