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Items for discussion and decision: Handbook of Statistical Organization

Report of the United Nations Economic Commission for Europe High-level Group for the Modernisation of Official Statistics

Prepared by UNECE

I. Background

- 1. Since 2015, the UNECE has prepared brief reports that serve as background documents for the UN Statistical Commission to inform the global statistical community on the progress of work. This year, this report is also of relevance to document E/CN.3/2018/5 for agenda item 3(b) Handbook of Statistical Organisation.
- 2. The Conference of European Statisticians (CES) created the High-level Group for the Modernisation of Official Statistics (HLG-MOS) in 2010. It comprises the heads of thirteen national and international statistical organizations, and has a mandate to reflect on and guide strategic developments in the ways in which official statistics are produced. The members of the HLG-MOS are Australia, Canada, Ireland, Italy, Mexico, Netherlands, New Zealand, Republic of Korea, Slovenia, United Kingdom, Eurostat, OECD and UNECE.
- 3. The UNECE Executive Committee (EXCOM) met in December 2017. The Committee consists of representatives of UNECE member countries and guides the work of UNECE, including approving the set-up, renewal, discontinuance, terms of reference and work plans of groups under UNECE. At this meeting, EXCOM expressed support for the work of the HLG-MOS and renewed its mandate for the period of 2018 2022.

II. ModernStats Models

- 4. One of the objectives of HLG-MOS is to oversee development of models, and sharing of information, tools and methods, which support the modernisation of statistical organizations. Several frameworks and standards have been developed under HLG-MOS.
- 5. Collectively, these models are called the ModernStats models. These frameworks and models include:
 - a) the Generic Statistical Business Process Model (GSBPM) This model describes the core business processes undertaken by statistical organizations to produce statistical outputs. It can help statistical organisations to find common processes across organisation to reduce inefficiency and redundancy.
 - b) the Generic Statistical Information Model (GSIM) This model describes the core pieces of information needed by statistical organizations to produce statistical outputs. It gives a common language to describe the information that flows in and out of GSBPM processes.
 - c) the Common Statistical Production Architecture (CSPA) CSAP provides an overarching framework for statistical organisations to more easily share and reuse methods, statistical models, implemented methods and implemented services.
 - d) the Generic Activity Model for Statistical Organisations (GAMSO) This model describes the activities that take place within a typical statistical organization. It extends and complements GSBPM by adding overarching processes needed to support statistical production.

- 6. These models and frameworks have supporting materials that assist statistical organisations in using them. This includes resources such as the Quality Indicators for GSBPM¹, and the Modernisation Maturity Models².
- 7. At the 2017 June CES Plenary session, the Conference endorsed these four models and frameworks (GSBPM, GSIM, GAMSO, CSPA). This is an important step as these models are widely used, including outside the UNECE region, and in many cases they constitute a de facto standard.

III. Modernisation topics and outputs

- 8. Since the inception of the HLG-MOS in 2010, the Statistical Modernisation Community³ has produced many valued deliverables. It provides a community network for statistical organisations to discuss issues and find solutions related to modernisation topics.
- 9. The following topics have been (and continue to be) discussed by the statistical modernisation community:
 - e) Organisational topics
 - Guidelines for managers who are responsible for managing change in statistical organisations
 - Risk Management guidelines and training materials
 - Compilation of good practices related to human resources management and training in statistical offices
 - Statistical training framework based on the GSBPM
 - Investment intentions database
 - f) Data topics
 - Common Statistical Data Architecture
 - Data Integration
 - Big Data
 - g) Statistical Process topics
 - Data Collection
 - Statistical Data Editing
 - Statistical Confidentiality
 - Dissemination and Communication
- 10. The organisational topics are becoming increasingly prominent as in a changing environment statistical organisations need to react, keep pace with changes, be strong in their decision making, innovate, and to exceed the changing needs of customers.
- 11. The outputs that have been (and continue to be) produced by the HLG-MOS will be valuable inputs to the revision of the Handbook of Statistical Organisation.

¹ https://statswiki.unece.org/display/GSBPM/Quality+Indicators+Home

² https://statswiki.unece.org/x/KgOzBw

 $^{^3\} https://statswiki.unece.org/display/hlgbas/Statistical+Modernisation+Community$

IV. Achievements in 2017

A. Data Integration project

- 12. Data integration provides the potential to produce more timely and more disaggregated statistics at higher frequencies than traditional approaches alone. However, official statistical organizations are increasingly facing challenges on how to incorporate new data sources in their statistical production processes.
- 13. The project team carried out a number of experiments of integrating data from different sources in 2016. In 2017, they developed a practical guide for data integration in statistical organisations, which was supplemented by a number of use cases that were gathered through a survey of statistical organisations.
- 14. The full results of the project, including the Guide, are available on the project wiki⁴. A Workshop on Data Integration will be held in 2019 to promote the implementation of the Guide, and update its contents and the use cases.

B. Data Architecture project

- 15. Statistical organisations need to find, acquire and integrate data from both traditional and new types of data sources at an ever increasing pace and under ever stricter budget constraints, while taking care of security and data ownership. They would all benefit from having a reference architecture and guidance for the modernisation of their processes and systems.
- 16. The project developed the first version of the Common Statistical Data Architecture (CSDA). The purpose of the CSDA is to support statistical organisations in the design, integration, production and dissemination of official statistics. A number of interesting use cases were identified by the project, including the UN Global Platform. The full results of the project are available on the project wiki⁵.

C. Other HLG-MOS outputs

- 17. In addition to the projects, work is undertaken by virtual task teams and at physical meetings. The outputs from these activities in 2017 included:
 - a) Paper on "Innovative organisations: Strategies to stay relevant" 6
 - b) Quality indicators for the GSBPM (for both survey and administrative data)
 - c) Hackathon on 'Telling stories with SDG data' and its products⁷
 - d) Training framework for key statistical skills based on GSBPM

V. Work programme for 2018

18. Each year a Workshop on the Modernisation of Official Statistics is held in November that reviews the work undertaken under the auspices of the HLG-MOS during that year. The

⁴ http://www1.unece.org/stat/platform/display/DI

⁵ http://www1.unece.org/stat/platform/display/DA

⁶ https://statswiki.unece.org/display/hlgbas/2017+Workshop+on+the+Modernisation+of+Official+Statistics

⁷ https://statswiki.unece.org/display/BST/Products+from+Hackathon

workshop also considers proposals for work to be undertaken in the following year. In December 2017, HLG-MOS approved two new projects for 2018. These are outlined below:

- a) Strategic Communications Framework The project will focus on enabling NSOs to modernise their communications at the strategic level. It will help organisations to look at communications strategies in broader risk management and business continuity contexts. This project aims to change the way of thinking about the role and importance of strategic communications in NSOs.
- b) **Data Architecture Phase 2** The project will focus on providing a more robust version of the Common Statistical Data Architecture that has been validated against use cases, as well as guidance on implementing the architecture.
- 19. In addition, the HLG Modernisation Groups will work on topics such as: organisational resilience; a training framework based on GAMSO; the reviews of CSPA, GSBPM and GSIM; and a common semantic model and vocabulary for official statistics.

VI. Involvement in modernisation activities

- 20. As the work on modernising official statistics continues to grow and succeed, more national and international statistical organizations are looking for ways to align with the various HLG-MOS initiatives.
- 21. There are various ways that statistical organizations can participate:
 - a) Join the Statistical Modernisation Community⁸ It is open to all interested statistical organizations that are willing and able to work together on aspects of statistical modernisation, and that publicly endorse a "Statement of Intent".
 - b) Get involved in projects and groups Membership of the various projects and groups is open to anyone working in official statistics who is prepared to contribute actively to the activities of the project or group.
 - c) Follow the outcomes of HLG-MOS activities Updates and outputs are regularly posted on the HLG-MOS wiki⁹. Information about new products and initiatives is also shared via the LinkedIn group "Modernising Official Statistics".

⁸ http://www1.unece.org/stat/platform/display/smc

⁹ http://www1.unece.org/stat/platform/display/hlgbas