

Workshop on the Modernisation of Official Statistics
(Geneva, Switzerland, 22-23 November 2017)

REPORT OF THE WORKSHOP

1. The Workshop on the Modernisation of Official Statistics was held in Geneva, Switzerland, on 21-22 November 2017. The workshop was attended by representatives from the statistical offices of Canada, Estonia, Finland, France, Hungary, Ireland, Italy, Mexico, Montenegro, Netherlands, New Zealand, Norway, Poland, Republic of Korea, Serbia, Slovenia, Sweden, and United Kingdom of Great Britain and Northern Ireland as well as by representatives from the Statistical Office of the European Union (Eurostat) and the Organisation for Economic Cooperation and Development (OECD).
2. Ms Thérèse Lalor, Chief of the Statistical Management and Modernisation Unit of the UNECE Statistical Division, opened the workshop and welcomed participants.
3. Mr Pádraig Dalton, Chair of the High-Level Group for the Modernisation of Official Statistics (HLG-MOS), gave the keynote presentation. His presentation acknowledged the work to date by the modernisation community on processes and data related topics. Although these topics are still important; there should also be a focus on products and services. Statistical organisations need to turn data into knowledge and information, and provide insight. It is necessary to be innovative with products and services without forgetting the core user base (citizens, researchers).
4. All background documents and presentations for the workshop are available at <http://www1.unece.org/stat/platform/display/hlgbas/Workshops>

Reports from 2017 HLG-MOS Projects

Data Architecture Project

5. Mr Carlo Vaccari presented the outcomes of the Data Architecture Project. 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 first version of the Data Architecture will be released in January 2018.

Data Integration Project

6. Ms Jenine Borowik, presented the activities undertaken within the Data Integration project. The project team further developed the practical guide for data integration in statistical organisations. Input for the guide was supplemented by a survey of statistical organisations, which included a request for use cases. The guidelines will be released in January 2018. It is proposed that a future workshop on data integration could be held to update the guide and use cases.

Reports from Modernisation Groups

'Telling stories with SDG data' Hackathon

7. Mr Manuel Cuéllar-Río introduced the ‘Telling stories with SDG data’ hackathon and demonstrated the winning product from the SDGs Mexico team. During the hackathon, fifteen teams from nine countries had 64.5 hours to create a product that told a story about the younger population using the SDG indicator "Proportion of youth (aged 15-24 years) not in education, employment or training" (Indicator 8.6.1).

Supporting Standards Group

8. Ms Marina Signore and Ms Eva Holm presented the work of this group. The activities in 2017 included reviews of the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM), the inclusion of GSBPM terms in the metadata glossary, and quality indicators for the GSBPM. A workshop on integrating geospatial and statistical standards was also organised during the year.

Sharing Tools Group

9. Mr. Taeke Gjaltema, Mr. Trygve Falch, Ms. Eva Holm and Mr. Pierre Peyronnel reported on this group. The presentation highlighted the development of the variable package for the Logical Information Model, the Common Statistical Production Architecture (CSPA) in practice and work to provide additional detail and options for IT staff developing services. The “CSPA for Digital Transformation” workshop was held in July 2017.

Capabilities and Communication Group

10. Ms Anna Borowska and Mr Ben Whitestone presented the work of this group. Main activities have included risk management training, a training framework for key statistical skills based on GSBPM and assistance to effectively communicate HLG-MOS products (brochures, communication materials for hackathon, blogs). The group also organised the workshop on implementing efficiencies and quality of output during the year.

Blue Skies Thinking Network

11. Mr Bartled Braaksma reported on the work of the network. Under the auspices of the network, a small group of countries have been discussing machine learning techniques for administrative data. The group will prepare a position paper on machine learning for official statistics.

Strategic Reflections

Investment Intentions

12. Mr Taeke Gjaltema presented the results of the 2017 survey on the investment intentions of statistical organisations. This investment intention database is a good resource to review before starting a new project. It will provide information on whether organisations have completed or are currently undertaking similar projects.

Modernisation priorities: a view from Chief Statisticians

13. Mr Pádraig Dalton gave an overview of the modernisation priorities provided by the Chief Statisticians. Five themes were identified:

- Resilience in transformation – A big challenge for statistical organisations is to change the culture, create an appetite for risk around innovation and mobilise staff at all levels. It is important to embed innovation in the culture by empowering middle management and giving staff the assurance that they can take risks.
- Communicating – Traditionally, statistical organisations have not branded what they are and have to offer. Statistical organisations need to be proactive and increase their

visibility. They have a role as provider of evidence for policy makers, and a role to provide evidence for citizens to hold decision makers accountable. There is a need to develop products that transform data and statistics into insightful information.

- Accessing and using new data sources - Using new data sources is a big challenge but not necessarily a new challenge. We have to know how to add value and tell stories that answer the questions that people want to know.
- Standards - The statistical standards are very important. GSBPM is embedded in many statistical organisations.
- Technology - Technology is critical to business operations and it is important to be aware of the challenges and opportunities it poses.

Priorities for 2018

14. Participants were invited to give short “soapbox” presentations. The following people presented:

- Ms InKyung Choi – Future work topics identified by workshops in 2017
- Mr Emanuele Baldacci – Data Access for Multi-Source Statistics
- Mr Franck Cotton – The Questionnaire Generation Service (QGS)
- Mr Eric Deeben – The UN Global Platform
- Mr Trygve Falch – VTL Engine

15. Ms Heini Salonen presented the HLG-MOS method of work. Representatives from the three Modernisation Groups gave short summaries of the work proposed for 2018. See Annex A for the agreed 2018 work program.

16. Five project proposals were presented:

- Strategic Communication Framework Project – Mr Stéphane Dufour
- Methodology Architecture Project – Mr Vince Galvin
- Data Architecture Phase 2 Project – Mr Carlo Vaccari
- Integrated View of Modernisation Models Project – Ms Marina Signore
- Base Ontology Project – Mr Franck Cotton and Ms Monica Scannapieco

17. Following presentations and discussions on these project proposals, the Workshop recommended that the 2018 projects should be the Strategic Communication Framework and Data Architecture Phase 2 projects. See Annex A for the agreed 2018 work program.

18. In his summary, the Chair thanked participants for their active engagement both during the year, and over the two days of the Workshop. He thanked the participants, presenters and organisers for an excellent workshop.

ANNEX A: **DRAFT** HLG-MOS 2018 Work Program

Introduction

1. Each year the Workshop on the Modernisation of Official Statistics reviews the work undertaken under the auspices of the HLG-MOS during that year. The workshop also considers proposals for work to be progressed in the following year.
2. This document outlines the work program that was created as a result of the discussions at the workshop that was held on 22- 23 November 2017 in Geneva, Switzerland. The intention of the paper is to provide information to the community on the work that will take place so they can participate in the activities that are of most benefit to them.
3. The work of the HLG-MOS is open to all. There is an expectation that people involved in the projects and groups will actively participate in the work.

HLG-MOS Projects

4. On 13 December 2017, the HLG MOS approved the 2018 project proposals. The HLG MOS projects for 2018 are outlined below.
5. Strategic Communications Framework - The project will focus on enabling NSOs to modernise their communications at the strategic level (see Annex 1 for further details). It will include the following work packages:
 - Work Package 1: Guidelines on the Strategic Communications Development Process
 - Work Package 2: Best Practices on Defining a Position in the New Communications Environment
 - Work Package 3: Guidelines on Issue and Reputation Management
6. 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 (see Annex 1 for further details). It will include the following work packages:
 - Work Package 1: Updated version of Common Statistical Data Architecture
 - Work Package 2: Data Architecture Guidelines
7. Work on the projects will begin in January 2018. A project manager will be appointed for each project. The work will be progressed mainly by web conferences and wiki. It is expected that the project members will meet at least once physically for a sprint meeting.

Modernisation Groups

8. On 19 December 2017, the Executive Board met to discuss the work program to be undertaken by the three Modernisation Groups in 2018. The work will be progressed mainly by web conferences and wiki.

9. It is important to note that new priorities may emerge during the year. In these cases, the proposed work will be presented to the Executive Board. The following paragraphs outline the work that is currently expected to be progressed by these groups.

Capabilities and Communication Group

10. The Capabilities and Communication Group focuses on the organisational changes necessary to support modernisation in statistical organisations. Currently, this group is chaired by Poland.

11. The group meets on the second Tuesday of the month. The group will consider the following substantive topics during their monthly meetings:

- Organisational resilience – The group will work on the discovery (‘green’) paper about what organisational resilience means in the context of statistical organisations, and collect case studies on how statistical organisations have developed target operating models.
- Capability development framework in line with GAMS0 – Group will work on identifying skills/capability requirements for the different levels of GAMS0.

12. Extra meetings to progress elements of these topics will be set up on an ad hoc basis.

13. In addition to the monthly meeting, a separate task team will progress work on Risk Management. This task team will focus on developing a course book to complement training, repackaging training into a modular format, exploring opportunities to share and reuse risk management tools, and sharing knowledge and best practices on common and cross-cutting risks.

14. The Capabilities and Communications Group will organise a Workshop on Human Resources, Management and Training on 12-14 September in Oslo, Norway.

Supporting Standards

15. The Supporting Standards Group provides support for the implementation of the “ModernStats” models (GAMS0, GSBPM, GSIM and CSPA) through a range of activities which include development, promotion and maintenance of the models. Currently, this group is chaired by Italy.

16. The group meets monthly on the third Thursday of the month. During the meeting, the group will consider the integrated view of the ModernStats models. The activity aims to increase understanding on how the models can be implemented individually and collectively and what benefits can be expected. The group may have additional meetings to expedite the work progress if necessary.

17. In addition to the plenary meeting, three separate task teams will progress work on the following topics:

- GSBPM Revision Task Team– The team will review the feedback compiled from GSBPM users, analyse relevant issues, evaluate possible solutions to address the issues and draft a revised version of GSBPM. The outputs of the work will include revised GSBPM Document, Communication material and clickable GSBPM.
- GSIM Revision Task Team – The team will review the feedback compiled from GSIM users, analyse relevant issues, evaluate possible solutions to address the issues and draft a revised version of GSIM. The outputs of the work will include revised GSIM Specification, Communication material, clickable GSIM, and new appendix on LIM Variables.

- Common semantic model Task Team – The team will create a common semantic model and vocabulary for official statistics. This can be seen as a more technical approach to creating the integrated view of the ModernStats models. The outputs of the work will include an ontology description, as well as updates to the Metadata Glossary as appropriate.

18. In collaboration with the Sharing Tools Group, Supporting Standards Group will organise the ModernStats World Workshop on 11-13 April, 2018 in Geneva, Switzerland.

Sharing Tools

19. The Sharing Tools Group provides implementation support for CSPA. Currently, this group is chaired by New Zealand.

20. The group meets on the second Wednesday of the month. The group will consider the update of CSPA 1.5 during their monthly meetings. The group will also discuss compliance and communications issues. Extra meetings to progress elements of these topics will be set up on an ad hoc basis.

21. In addition to the monthly meeting, separate task teams will progress work on the following topics:

- Architecture Patterns Task Team – The team will describe an Application Architecture for CSPA services and provide guidance and patterns for creating services that can be re-used (and/or shared) between statistical organisations.
- Methodology Architecture Task Team – The team will create a categorisation of methods and a methods library.

22. In collaboration with the Supporting Standards Group, the Sharing Tools Group will organise the ModernStats World Workshop on 11-13 April in Geneva, Switzerland.

Innovation Stream

23. Currently, a small task team is investigating an application of Artificial Intelligence called Machine Learning. The team is investigating whether the hype surrounding Machine Learning in the context of Official Statistics should be believed or dispelled. The team is currently finalising a position paper on whether machine learning can be used in the process of producing Official Statistics based on their experiences.

Other Physical meetings

24. In 2018, the following additional workshops will occur:

- *Workshop on Statistical Data Dissemination and Communication, 25 – 27 June, Cork, Ireland* – The focus of the workshop will be on cutting edge ideas, new trends, experiments, and approaches in the areas of statistical data dissemination and communication. The following substantive topics will be considered - communications environment, strategic communications, broadening the target audience, and issue management.
- *Workshop on Statistical Data Editing, 18 – 20 September, Neuchatel, Switzerland* - This workshop aims to progress work on statistical editing in the context of Statistical Modernization. In particular, the workshop will:

- Identify the most promising new methods that can be used to manage the statistical quality risks arising from using new data sources (including Big Data).
 - Develop approaches to standardising and implementing statistical editing functionalities.
 - Consider how methodologists can contribute to the wider Modernization work.
- *Workshop on Statistical Data Collection, 10 – 12 October, Geneva, Switzerland* - The objective of this workshop is to identify innovative ways and best practices in statistical data collection, and to provide a platform for practitioners to exchange experiences and foster collaboration in this area.

Annex 1: 2018 Project Proposals



Strategic
Communication Proj



Data Architecture
Phase 2 Project 2018