



# Economic and Social Council

Distr.: General

9 June 2017

English only

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## Economic Commission for Europe

### Conference of European Statisticians

#### Sixty-fifth plenary session

Geneva, 19-21 June 2017

Item 6 of the provisional agenda

#### Work of the High-Level Group for the Modernisation of Official Statistics

## Report of the High-Level Group for the Modernisation of Official Statistics

### Note by the High-Level Group

#### *Summary*

This document provides a summary of the results of the projects overseen by the High-Level Group for Modernisation of Official Statistics during 2016 and plans for 2017. The purpose of the Group is to guide strategic developments in the ways official statistics are produced.

The Conference of European Statisticians is invited to discuss the outcomes of recent projects in the area of statistical modernization, provide guidance on future priorities and to endorse the models and frameworks developed under HLG-MOS.

## I. Introduction

1. The High-level Group for the Modernisation of Official Statistics (HLG-MOS) was created in 2010 by the Bureau of the Conference of European Statisticians (CES). It comprises the heads of eleven 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.

2. Each year HLG-MOS organizes a workshop, inviting representatives of various groups and projects related to modernization of official statistics. These workshops help to ensure coordination of activities. They also review progress and determine the key priorities for the following year. In 2015, the HLG workshop decided that data integration, and implementing “Modernstats” standards were the two highest priorities in 2016. HLG launched international collaboration projects to address these priorities, which ran during the calendar year 2016. This paper summarises the main results of these projects, as well as other activities overseen by HLG-MOS.

## II. Data integration

3. Data integration provides the potential to produce more timely, more disaggregated statistics at higher frequencies than traditional approaches alone. However, official statistics organizations are increasingly facing challenges on how to incorporate new data sources in their statistical production processes.

4. This project brought together experts from twelve countries (Australia, Brazil, Canada, Colombia, Hungary, Italy, Mexico, New Zealand, Netherlands, Poland, Serbia and Slovenia). The project aimed to:

- Gain experience in data integration by pooling resources in joint practical activities.
- Translate experiences into general recommendations for data integration and provide initial guidance for a quality framework.

5. The project was structured into 7 work packages:

- WP0: Data sets for common approaches
- WP1: Integrating survey and administrative sources
- WP2: Integrating new data sources (such as big data) and traditional sources
- WP3: Integrating geospatial and statistical information
- WP4: Micro-macro integration (inactive in 2016)
- WP5: Validating official statistics
- WPA: Synthesizing lessons learnt from new working methods.

6. The project identified and conducted a number of practical experiments in areas of priority interest to participating organizations. The lessons learned from these experiments helped to inform the proposed structure of an on-line guide to data integration. This guide will be further elaborated during 2017.

7. Good progress was made in several areas, including the integration of traditional and new data sources for price statistics, integrating administrative and survey data on employment, and a review of methods and practices for integrating statistical and geospatial data. The full results of the project are available on the project wiki (<http://www1.unece.org/stat/platform/display/DI>).

### III. Implementing “Modernstats” standards

8. This project comprised two distinct activities, described in the following paragraphs.

#### *Linked Open Metadata*

9. France and Italy led this part of the project, with input from Mexico, the Netherlands, United States and Eurostat. The aim was to demonstrate the usefulness of linked metadata for the statistical community and to acquire hands-on experience in that field.

10. This was achieved by constructing two concrete examples of linked metadata information systems: one aimed at improving the way that we disseminate core structural metadata such as statistical classifications, the other at supporting the HLG-MOS vision by grouping the main HLG-MOS models and standards in a coherent and machine-actionable form.

11. Other deliverables describe the lessons learned, best practices, and a sustainability plan for the project outcomes beyond the end of 2016. More information is available on the project wiki at <http://www1.unece.org/stat/platform/display/IMS/Project+Output>

#### *Modernisation Maturity Models and Roadmap*

12. This part of the project was led by Norway and Canada, with input from Estonia, Finland, France, Greece, Ireland, Israel, Italy, Mexico and the United Kingdom. The aim was to provide the means for statistical organizations to evaluate their levels of maturity against a standard framework with the aid of a modernisation maturity model, and to help them determine the priorities for the next steps based on a roadmap.

13. The model was developed and tested in several countries, as well as at an international workshop. The roadmap contains various tools to help determine priorities and manage change. The project outputs are available at:

<http://www1.unece.org/stat/platform/display/RMIMS>.

### IV. Other HLG-MOS activities

14. In addition to the projects outlined above, the HLG-MOS oversees the work of various expert groups and task teams. The key outputs of these groups in 2016 included:

- A new version of the Generic Activity Model for Statistical Organisations (GAMSO)
- The results of a survey on investment intentions in statistical organizations. This allows senior managers to see which countries are planning similar investments in developing specific statistical capabilities. The aim is to facilitate contacts and the sharing of ideas and experiences between statistical organizations with similar needs
- New guidelines on risk management practices in statistical organizations
- Studies on topics such as organizational barriers to international collaboration, methodology architecture and “next generation data management”
- A new handbook for managers who are responsible for managing change in statistical organizations (English and Russian versions).

15. For more information on these outputs, please see:

<http://www1.unece.org/stat/platform/x/KwOzBw>

## V. Projects for 2017

16. The two major international collaboration projects identified as key priorities for 2017 are:

- Data integration – Further development of the on-line guide, in parallel with various practical experiments
- Data architecture – Developing data management tools to reflect the increasingly varied types of data used for official statistics, facilitating greater integration of sources and products

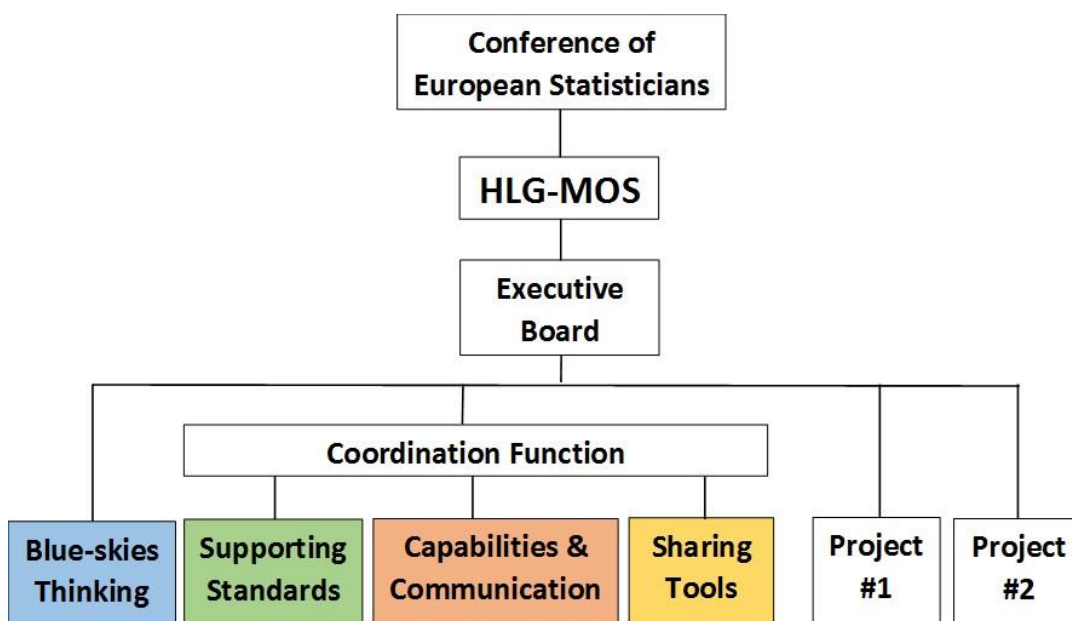
17. More information on these projects is available at:

<http://www1.unece.org/stat/platform/display/hlgbas/2017+Project+Outlines>

## VI. A new governance structure

18. HLG-MOS adopted a new strategic framework in June 2016<sup>1</sup>. The aim was to bring a clearer focus on key priority areas. To support this, a new and simplified structure of the expert groups supporting HLG-MOS activities was developed. In February 2017, the CES Bureau endorsed the revised terms of reference and the new governance structure for HLG-MOS and its activities. The new structure was put in place from 1 January 2017. This is shown in Figure 1 below.

Figure 1 New governance structure for HLG-MOS activities.



19. The role of the new groups in this structure can be summarised as follows:

- Blue-skies thinking network – This is an exciting new initiative to create the “ideas factory” for statistical modernization. The network provides a research and innovation environment where members share ideas and look for partners to explore the potential benefits for statistical organizations.

<sup>1</sup> <http://www1.unece.org/stat/platform/display/hlgbas/Strategic+Framework+for+HLG+Activities>

- Capabilities and communication – This group is responsible for the human resources, training and organizational aspects of modernization, as well as communicating with the official statistics community about modernization activities.
- Supporting standards – This group maintains key modernization standards such as the Generic Statistical Business Process Model (GSBPM), the Generic Statistical Information Model (GSIM) and others, as well as providing supporting materials to help implementers.
- Sharing tools – This group is responsible for implementing the Common Statistical Production Architecture (CSPA), designing and building statistical software according to common principles, so it can be re-used more easily and cheaply.

## VII. Involvement in Modernization Activities

20. As the work on modernizing official statistics matures, more national and international statistical organizations are looking for ways to align with the various HLG-MOS initiatives. There are various ways that statistical organizations can do this:

- Join the Statistical Modernisation Community – This is a collaborative partnership, launched in early 2016. It currently comprises 15 national and international statistical organizations. It is open to all interested statistical organizations that are willing and able to work together on aspects of statistical modernization, and that publicly endorse a “Statement of Intent”. For more information, please see: <http://www1.unece.org/stat/platform/display/smc>
- 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.
- Follow the outcomes of HLG-MOS activities – Updates and outputs are regularly posted on the HLG-MOS wiki: <http://www1.unece.org/stat/platform/display/hlgbas>. Information about new products and initiatives is also shared via the LinkedIn group “Modernising Official Statistics”.

## VIII. Modernization frameworks and models developed under HLG-MOS

21. The mission of HLG-MOS is to oversee development of frameworks, and sharing of information, tools and methods, which support the modernization of statistical organizations. A number of frameworks and models have been developed and endorsed by HLG-MOS over the last five years.

22. These frameworks and models include the Generic Statistical Business Process Model (GSBPM), the Generic Statistical Information Model (GSIM), the Common Statistical Production Architecture (CSPA), and the Generic Activity Model for Statistical Organisations (GAMSO). These models are being implemented and used by national and international statistical organisations. For example GSBPM is already used by over 50 countries worldwide, and CSPA is facilitating countries to more easily share software tools. As more practical experience is gathered, the models are enhanced to ensure they reflect the real situation in statistical offices.

23. HLG-MOS regularly reports to the CES Bureau on its programme and outputs and annually to the CES plenary session. The frameworks and models have been provided to

the CES plenary session in recent years<sup>2</sup> in the three UNECE official languages - English, French and Russian. GSBPM, GSIM and CSPA were presented to the Conference in 2014 and GAMS0 in 2015. The most current documentation on them, as well as information to support their implementation can be found on the UNECE Virtual Standards Helpdesk (<http://www1.unece.org/stat/platform/display/VSH>).

24. The work of all bodies created under the Conference and its Bureau is regularly reported to the UNECE Executive Committee. A report on the achievements of HLG – MOS, as well as a request to extend its mandate for another 5 years will be presented at the end of 2017. In view of this, the Conference is invited to endorse the frameworks and models as outputs of HLG-MOS.

## **IX. Proposal for the Conference**

25. The Conference of European Statisticians is invited to:

- (a) Discuss the outcomes of recent projects in the area of statistical modernization;
- (b) Provide guidance on future priorities;
- (c) Endorse the following models and frameworks developed under HLG-MOS, including:
  - Generic Statistical Business Process Model (GSBPM),
  - Generic Statistical Information Model (GSIM),
  - Common Statistical Production Architecture (CSPA),
  - Generic Activity Model for Statistical Organisations (GAMS0).

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<sup>2</sup> <https://www.unece.org/index.php?id=38175#/> (GSBPM, GSIM and CSPA) and <https://www.unece.org/index.php?id=38920#/> (GAMS0)