Report of the United Nations Economic Commission for Europe
High Level Group on the Modernisation of Official Statistics

Prepared by UNECE
I. Introduction

1. The UNECE High-Level Group for the Modernisation of Official Statistics (HLG-MOS) was created in 2010 by the Bureau of the Conference of European Statisticians, the intergovernmental body on statistics of the United Nations Economic Commission for Europe (UNECE). The HLG-MOS 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 organises a workshop, inviting representatives of various groups and projects related to modernisation 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-MOS workshop decided that data integration, and implementing “Modernstats” standards were the two highest priorities in 2016. The HLG-MOS 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 the 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 organisations 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, 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 consisted of 7 work packages:
   - WP0: Data sets for common approaches
   - WP1: Integrating survey and administrative sources
   - WP2: New data sources (such as big data) and traditional sources
   - WP3: Integrating geospatial and statistical information
   - WP4: Micro-macro integration (inactive in 2016)

1 The CES is comprised of the Heads of statistical offices of 56 member countries of the UNECE, OECD member countries and some other countries outside the region for example Brazil, China, Colombia Mongolia and South Africa.

2 Australia, Canada, Ireland, Italy, Netherlands, New Zealand, Republic of Korea, Slovenia, Eurostat, OECD and UNECE
• WP5: Validating official statistics
• WPA: Synthesize lessons learnt from new working methods.

6. The project identified and conducted a number of practical experiments of in areas of priority interest to participating organisations. 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. This part of the project was led by France and Italy, with input from Mexico, 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 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 in 2016

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 organisations. This allows senior managers to see which countries are planning similar investments in developing specific statistical capabilities. The aim is facilitate contacts and the sharing of ideas and experiences between statistical organisations with similar needs
- New guidelines on risk management practices in statistical organisations
- Studies on topics such as organisational barriers to international collaboration, methodology architecture and “next generation data management”
- A new handbook for managers who are responsible for managing change in statistical organisations (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. The HLG-MOS adopted a new strategic framework in June 2016³. 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 put in place from 1 January 2017. This is shown in Figure 1 below.

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³ http://www1.unece.org/stat/platform/display/hlgbas/Strategic+Framework+for+HLG+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 modernisation. The network provides a research and innovation environment where members share ideas and look for partners to explore the potential benefits for statistical organisations.
- Capabilities and communication – This group is responsible for the human resources, training and organisational aspects of modernisation, as well as communicating with the official statistics community about modernisation activities.
- Supporting standards – This group maintains key modernisation 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.

20. As the global impact of the work of the HLG-MOS increases, there is a growing demand for capacity-building and awareness-raising activities related to statistical modernization. The focus of the HLG-MOS is on “cutting-edge” innovation work. Participation in the activities of the HLG-MOS is open to all statistical organizations that are willing and able to contribute, and the outputs are made widely available for others to use. Building capacity related to statistical modernization
could be achieved through strategic partnerships with other global and regional organizations and initiatives, such as the transformative agenda for official statistics.

VII. Involvement in Modernisation Activities

21. There are various ways that national and international statistical organisations can align with the various HLG-MOS initiatives:

- Join the Statistical Modernisation Community – This is a collaborative partnership, launched in early 2016. It currently comprises 15 statistical organisations. It is open to all interested statistical organisations that are willing and able to work together on aspects of statistical modernisation, 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 actively contribute 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”.