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Modernizing official statistics



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Statistical agencies worldwide, including Statistics Canada, are modernizing the way they produce high-quality official statistics. The changing demands and expectations of society, the exponential growth of digital information, and the increasing globalization of many aspects of national and international economies are driving the modernization of production and operation activities.

Statistics Canada has responded to this emerging need with the Corporate Business Architecture (CBA) initiative. The international community has responded with the creation of a coordination body within the United Nations Economic Commission for Europe (UNECE) called the [High Level Group for the Modernisation of Official Statistics](#) (HLG-MOS; Network B).

What is the vision of the High Level Group for the Modernisation of Official Statistics?

Both CBA and HLG-MOS highlight the need to develop a culture of change within statistical organizations, encouraging innovation in terms of sources, processes and products. While CBA is internal to StatCan, HLG-MOS is international in scope.

The aim of HLG-MOS is to improve the efficiency of the statistical production process and the ability to produce outputs that better meet user needs. The challenges associated with modernization of this magnitude require that individual statistical organizations work together through increased collaboration, coordination and communication. This is achieved by developing frameworks and sharing information, tools and methods to support the modernization of statistical organizations worldwide.

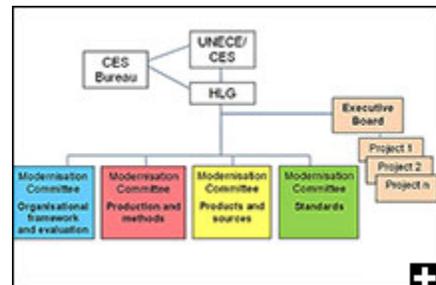


How are they organized?

The HLG-MOS reports annually to the Conference of European Statisticians (CES), which is currently chaired by the Chief Statistician of Canada, **Wayne R. Smith**. It is supported by an executive board. **Peter Morrison**, Assistant Chief Statistician, Social, Health and Labour Statistics Field, is the StatCan member on this board.

The executive board oversees the modernization committees and the major international collaboration projects. Four modernization committees provide expert-level input on topics such as human resource implications, communications, information technology, methodology, data sources, statistical products, standards and quality. StatCan is represented on all four modernization committees.

Other HLG member countries include Australia, Ireland, Norway, Italy, the Netherlands, Poland, New Zealand, the Republic of Korea, and Slovenia, as well as organizations such as Eurostat, the Organisation for Economic Co-operation and Development and the UNECE.



Flowchart displaying HLG-MOS' hierarchy: At the top, UNECE filters down to the CES Bureau. Both UNECE and the CES Bureau filter down to the HLG-MOS. Located below the HLG-MOS are the different modernization committees and the Executive Board.

Mode of operation



The HLG-MOS operates in a truly modern fashion by means of monthly telephone and WebEx meetings, workshops, an annual one- to two-day face-to-face meeting, and 'sprints.' Sprints are high-energy sessions consisting of experts who come together for a week of intense and focused brainstorming and active development with the goal of producing a tangible output at the end of the session. They occur a few times a year in different countries. Statistics Canada hosted a sprint in February 2015.

Results so far

The HLG-MOS has overseen the development of several major global standards to support statistical modernization and of various supporting outputs in the last few years. These include

- **The Generic Statistical Business Process Model (GSBPM):** HLG-MOS is responsible for maintaining and updating the GSBPM, which led to several improvements being included in the release of GSBPM version 5.0 at the end of 2013.
- **The Generic Statistical Information Model (GSIM):** This model is a companion to the GSBPM. While the GSBPM describes the stages of the statistical production process, the GSIM describes the different objects (e.g., data, metadata, editing rules, and classifications) that flow between those stages.
- **The Common Statistical Production Architecture (CSPA):** The CSPA provides a blueprint for designing and developing statistical production components in a way that makes them much easier to share within and between organizations.
- **Big data:** The HLG-MOS has commissioned a number of activities to better understand the importance and impact of big data. A major international collaboration project in 2014 resulted in guidelines on privacy and partnership issues, a big data quality framework, and the documented outcomes of a series of experiments to test big data methods and tools. To support these experiments, the 'sandbox'—a shared computing environment containing big data sets and software tools—has been created in partnership with the Irish Central Statistics Office and the Irish Centre for High-End Computing.
- **Other:** Various papers and online resources, as well as the Virtual Standards Helpdesk support centre.

Conference of European Statistics (CES) is one of the oldest global statistical bodies, founded in 1953. CES provides a platform for coordinating international statistical work in the UNECE region, for addressing emerging issues and for developing methodological guidelines and recommendations to improve national statistics and their international comparability.

The Chief Statistician of Canada, Wayne R. Smith, has chaired the CES since 2013 and, this past June, was re-elected for another two-year term.

The future

In the months ahead, HGL-MOS will contribute a number of important developments, such as

- a set of internationally comparable statistics based on one or more big data sources (to be released by the end of 2015)
- a range of CSPA-compliant components, to be accessible through a central catalogue
- a new Generic Activity Model for Statistical Organizations, which expands the GSBPM by adding the non-data activities that take place in a typical statistical organization
- a set of guidelines on risk and change management in statistical organizations
- quality indicators for GSBPM sub-processes



Statistics Canada hosted an HLG-MOS 'sprint' in February 2015. Photo: T. Lalor.

- the sharing of ideas and experiences on the use of mobile devices for data collection and dissemination
- ideas and tools to communicate the importance of modernization and information about new developments within the official statistics community.

Statistics Canada is committed!

StatCan is very committed to HLG-MOS. The Chief Statistician believes that it can bring great opportunities to the international statistical community.

For more information on the HLG-MOS, please contact Statistics Canada's [Multilateral Relations](#) team.



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