What’s New from the High-Level Group?

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I. Introduction

1. The High-Level Group for the Modernisation of Statistical Production and Services (HLG)\(^1\) is increasingly bringing a global strategic overview to the way official statistics are produced. This group of ten heads of national and international statistical organisations now has a clear role as the statistical industry “think-tank” on all issues relating to modernisation. It also oversees the work of MSIS and similar groups.

2. This paper outlines the achievements of the HLG over the past year, including the development of a Generic Statistical Information Model (GSIM). It summarises the two big projects launched by the HLG for 2013, concerning the implementation and integration of standards, and the development of a “plug and play” capability within and between organisations. It also gives an update on changing governance arrangements for modernisation activities.

3. This paper also aims to stimulate a discussion on the role of the MSIS group within the modernisation landscape.

II. HLG Projects

A. GSIM

4. All statistical organisations use information as inputs to and outputs from their processes. However, until now there has been no common standard to describe this information, making it difficult to communicate clearly within and between statistical organisations, limiting the ability to collaborate.

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\(^1\) For more information about the HLG, including its membership, vision, strategy and projects, please see: [http://www1.unece.org/stat/platform/display/hlgbas](http://www1.unece.org/stat/platform/display/hlgbas)
standardise, and share tools and methods. The GSIM\textsuperscript{2} is the first internationally endorsed reference framework for statistical information, and a key element of the HLG strategy for standards-based and collaborative modernisation of official statistics.

4. The GSIM is a reference framework which provides a set of around 150 standardised, consistently described information objects, which are the inputs and outputs in the design and production of statistics. Examples include data and metadata (such as classifications) as well as the rules and parameters needed for production processes to run (for example, data editing rules). As a reference framework, the GSIM can be used to guide the development and use of consistent implementation standards or specifications. In order to meet the future needs of statistical organisations, the GSIM is designed to allow for innovative approaches to statistical production, whilst also supporting current approaches to producing statistics.

5. The GSIM provides the information object framework supporting all statistical production processes, as described in the Generic Statistical Business Process Model (GSBPM)\textsuperscript{3}, giving the information objects agreed names, defining them, specifying their essential properties, and indicating their relationships with other information objects. It does not, however, make assumptions about the standards or technologies used to implement the model.

6. The development of the GSIM was significantly accelerated through 2012, by adopting an “agile” approach. The key features of which were three “sprint” sessions, and intensive collaboration on specific parts of the model in virtual task teams. This approach was successful, resulting in the publication of GSIM version 1.0 on schedule, at the end of the year. A similar approach has now been adopted for other HLG projects, resulting in significantly faster development of standards and guidelines than has traditionally been the case within official statistics.

B. Frameworks and Standards for Statistical Modernisation

7. At the Workshop on Strategic Developments in Business Architecture in Statistics, held in Geneva in November 2012, the High-Level Group for the Modernisation of Statistical production and Services (HLG) and representatives of over 20 expert groups identified two key priorities for work related to statistical modernisation for 2013. One of these priorities is to support the enhancement and implementation of the standards needed for the modernisation of statistical production and services. The two key standards identified were the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM).

8. This project is important for the official statistics community because a lot of effort has gone into the development of standards such as the GSBPM and the GSIM. To realise the full benefits of this investment, it is necessary to ensure continued coordination during the implementation phase, and to ensure that the lessons learned during implementation are shared, and reflected in enhanced versions of the standards and their associated documentation.

9. The project has four main objectives:

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\textsuperscript{2} For more information, please see: \url{http://www1.unece.org/stat/platform/pages/viewpage.action?pageId=59703371}

\textsuperscript{3} \url{www.unece.org/stats/gsbpm}
• To ensure that the international statistical community has access to the standards needed to support the modernisation of statistical production and services
• To increase coherence between these standards
• To provide support mechanisms for the practical implementation of these standards within national and international statistical organisations
• To ensure effective promotion and maintenance of the GSBPM and the GSIM, including the release of new versions as appropriate

10. The project includes liaison with relevant standards bodies in the wider data industry where appropriate, for example the Data Documentation Initiative (DDI) Alliance.

11. The main activities currently underway are mapping the GSIM to SDMX and DDI, and supporting the implementation of GSIM within statistical organisations.

12. Later this year, the focus will switch to reviewing the GSBPM and the GSIM, and identifying areas where revisions or clarifications are needed. The result will be new versions of these models. The policy for the revision process is one of minimal change, with good business cases required for any changes that are adopted. The revisions to these models are therefore expected to be fairly minor, and will be subject to wide consultation.

C. Common Statistical Production Architecture

13. The second key priority project identified by the 2012 Workshop on Strategic Developments in Business Architecture in Statistics is to create a common statistical production architecture for the global official statistical industry. This is often referred to as a “plug and play” architecture, as the aim is to make it easier for each country to combine the components of statistical production based on common standards, regardless of where the components were developed.

14. This project is important for the official statistics community because many organisations have modernisation projects in progress or planned. They are all facing the same issues, so there is a strong risk of duplication of effort. If resources are pooled, not only will this work be done more efficiently, but it will deliver a major step forward in international harmonisation, making future collaboration initiatives easier, thus providing both short-term and long-term benefits. The project aims to integrate as far as possible with existing modernisation initiatives within participating organisations.

15. To deliver the required results will require a combination of theory and practice. The project therefore comprises two important strands. The first strand concerns the development of the necessary architecture frameworks, whilst the second is concerned with practical implementation and pilot applications, which will serve as a proof of concept. The two strands are complementary, helping to validate each other.

16. The project has three main objectives:

• To create a standardised architecture for statistical production solutions, including processes, information and systems, coherent with the GSBPM and the GSIM, and to allow specifications and ultimately applications to be re-used easily within and between statistical organisations.
• To enable and advance the sharing of production processes or components, thus reducing costs.
• To provide the basis for a central inventory or repository with life cycle management of sharable production processes and components.
17. Activities so far have focused mainly on the architecture strand, starting with gathering requirements and expectations, preparing for a “sprint” session in Ottawa, Canada, 8-12 April 2013. The outcomes of this sprint session will be discussed in the panel session during MSIS 2013.

D. Big Data

18. One of the conclusions from a High-level Seminar on Modernisation of Statistical Production and Services (St. Petersburg, Russian Federation, 3-5 October 2012) was:

"Big data is an increasing challenge. The official statistical community needs to better understand the issues, and develop new methods, tools and ideas to make effective use of Big data sources. This includes closer integration with geographical data and standards."

19. As a follow up activity, it was proposed that the HLG should provide "a document explaining the issues surrounding the use of Big data in the official statistics community". A paper that aims to address this requirement was produced by a group of leading international experts under the supervision of the HLG, and was released in March 2013 under the title “What does Big data mean for official statistics?”.

20. One of the recommendations of this paper is that the HLG should take a coordinating role, helping to ensure the efficient sharing of information between the many national and international initiatives related to the use of Big data for official statistics. The HLG is currently considering how best to do this.

III. Governance

21. The Conference of European Statisticians (CES), an annual meeting of chief statisticians from around the world, has identified the modernisation of official statistics as a key priority, and given its strong support to the work of the HLG. As the role and influence of the HLG grows, and the expectations on it increase, it is becoming more and more important to set in place an appropriate governance structure for the different HLG initiatives, and the related activities under the CES.

22. In addition, to overseeing key modernisation projects, the HLG oversees and steers the work of relevant CES expert groups, and coordinates, giving leadership where needed, to other relevant international expert groups. The current expert groups tend to have relatively narrow focusses, particularly in terms of the profile of participants. However, the GSIM Development Project has shown the value of a cross-domain approach to modernisation issues, bringing together information technology specialists, information architects, methodologists and subject-matter specialists.

23. Agreement has been reached in principle between the HLG and the Bureau of the CES to move to a new governance structure based on four modernisation committees. These modernisation committees will generate ideas for projects, identify good practices, and highlight issues and developments in their respective fields of competence. All relevant existing formal and informal groups and initiatives overseen by the HLG and/or serviced by the UNECE Secretariat will be consolidated into these modernisation committees.

- Organizational Framework and Evaluation – This committee will consider human resource, training, legal, licensing and similar issues. It will also be responsible for evaluating the success of HLG activities. It will oversee the organisation of relevant expert group meetings, including on Human Resources, Management and Training.
- Production and methods – This committee will consider the technical and methodological and architectural aspects of modernising statistical production. It will oversee the organisation of relevant expert group meetings, including on the Management of Statistical Information Systems,

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4 http://www.unece.org/stats/documents/2012.10.hls.html
5 http://www1.unece.org/stat/platform/pages/viewpage.action?pageId=77170614
and Statistical Data Editing. It will absorb the work of the Sharing Advisory Board, and have a clear role in promoting inter-operability of tools and methods.

- **Products and Sources** – This committee will consider how to use and integrate a growing range of data sources, and provide new types of outputs and services for users of official statistics. It will have a more outward facing role, looking beyond the official statistics community for new data sources and new opportunities to add value by enhancing statistical outputs. It will oversee HLG initiatives in these areas, and the organisation of relevant expert group meetings, including on the topics of data collection and confidentiality.

- **Standards** – This committee will consider how to develop, enhance, integrate and support the range of standards needed for statistical modernisation. It will have operational responsibility for the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM). To encourage coherent development and greater inter-operability of key standards, membership will include representatives of other relevant standards groups, particularly the Data Documentation Initiative (DDI) Alliance and the Statistical Data and Metadata eXchange (SDMX) Sponsors. The group will oversee the organisation of relevant expert group meetings, including on the topic of statistical metadata (METIS). It will absorb the current informal work on metadata flows within the statistical business process, and the SDMX/DDI Dialogue group, facilitated by the UNECE.

24. The modernisation committees will include a mixture of domain experts and senior managers from national and international statistical organisations. Where appropriate, they will also include representatives of other organisations and initiatives that support the vision and strategy of the HLG. They will oversee the organisation of expert group meetings and any temporary task teams that are needed for initiatives supporting the work of the HLG.

25. An “Executive Board” is also being established to coordinate the activities of the modernisation committees and oversee the HLG projects. The detailed terms of reference for these new groups will be developed during 2013, and the groups are expected to be fully functional by the end of the year.

**IV. What Does This Mean For You?**

**A. Projects**

26. All of the projects listed above are open to participation from any national or international statistical organisation, or any other body that shares similar goals. Participation can be at many different levels, from active involvement in sprint sessions or virtual task teams, to being a copy recipient for any documents distributed or consultations launched. Any person or organisation wishing to get involved should contact the UNECE Secretariat at support.stat@unece.org.

**B. Governance**

27. Whilst MSIS meetings are likely to continue in a similar format for the next few years, the emphasis at individual meetings is likely to be driven by the priorities of the modernisation agenda at the time. In the longer term, the full range of technical and methodological meetings held under the work programme of the UNECE and the Conference of European Statisticians, is likely to be re-structured and re-focused to meet the changing needs of the international statistical community in the most efficient way. This could include closing or merging some groups, and creating new ones as necessary. Any changes will be driven by the requirements expressed by national and international statistical organisations through the Conference of European Statisticians.