Modernising Statistics

The Newsletter of the High-Level Group for the Modernisation of Statistical Production and Services

Issue 2 – June 2013

About the High-Level Group

Why was the HLG established?

The High-Level Group for the Modernisation of Statistical Production and Services (HLG) was set up by the CES Bureau in 2010 to oversee and coordinate international work relating to the modernisation of official statistics. It was originally known as the High-Level Group for Strategic Developments in Business Architecture in Statistics (HLG-BAS), but the name was changed to better reflect the role of the group.

The terms of reference for the HLG were renewed at the end of 2012, and can be found at: http://www1.unece.org/stat/platform/display/hlgbas

Who are the HLG members?

The HLG currently comprises the heads of nine national and international statistical organisations:

- Gosse van der Veen (Netherlands) - Chairman
- Brian Pink (Australia)
- Wayne Smith (Canada)
- Eduardo Sojo Garza-Aldape (Mexico)
- Park, Hyungsoo (Republic of Korea)
- Katherine Wallman (United States)
- Walter Radermacher (Eurostat)
- Martine Durand (OECD)
- Lidia Bratanova (UNECE)

The UNECE provides the secretariat to the HLG.

How can I contribute to the work of the HLG?

Resources are needed to implement the strategy of the HLG, through a series of priority projects, agreed with the international statistical community. All contributions are voluntary, and usually take the form of providing experts for specific project activities. Please contact the UNECE Secretariat to discuss this further, at Support.stat@unece.org.

Contents

Useful Links

The HLG Wiki

Easy access to all important documents and references, including the HLG Vision and Strategy:

http://www1.unece.org/stat/platform/display/hlgbas

Join us on Linked in

A LinkedIn group "Business Architecture in Statistics" has been created for people interested in modernising official statistics. The aim of this group is to share knowledge and promote activities, such as those undertaken by the HLG and related expert groups.

This group has already attracted over 700 members from around the world. Join the discussions at:
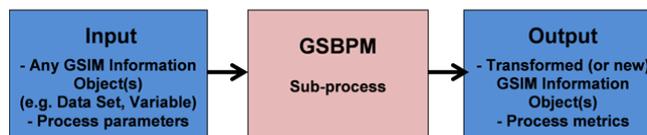
http://www.linkedin.com/groups?home=&gid=4173055
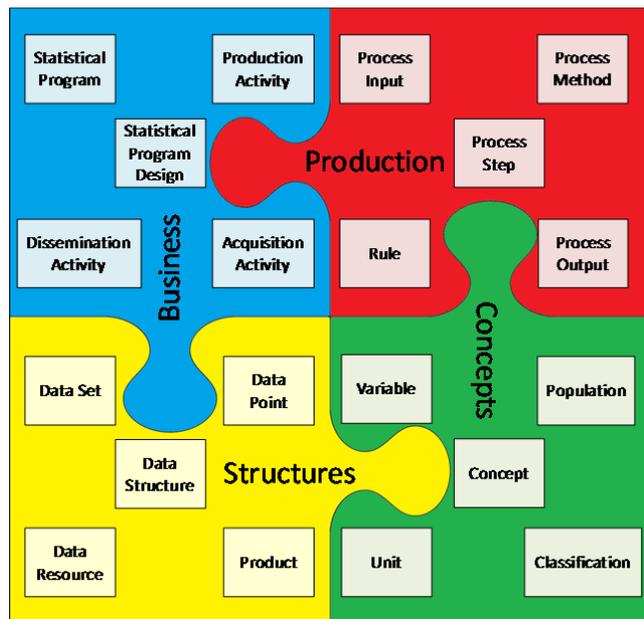
HLG Activities – Outputs So Far

Generic Statistical Information Model (GSIM)

Many readers will be familiar with the Generic Statistical Business Process Model (GSBPM), developed by the Conference of European Statisticians Steering Group on Statistical Metadata, and published in 2009. To complement this model, an equivalent Generic Statistical Information Model (GSIM) was identified by the HLG as an essential requirement for modernising statistical production.

The production of statistics can be described in terms of a set of processes, and the information objects that flow between them (for example, information requests, variables, classifications and data sets).

The following diagram shows a few of the more important information objects, grouped into four main categories. In total, the GSIM identifies over 150 information objects, but many of these are only of interest to technical specialists.

The GSIM was released on schedule in December 2012. The accompanying documentation follows a layered approach, which aims to deliver the appropriate amount of technical detail to different types of reader, and can be found at: http://www1.unece.org/stat/platform/x/SwCPAw

Big Data

One of the conclusions from a High-level Seminar on Modernization 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."
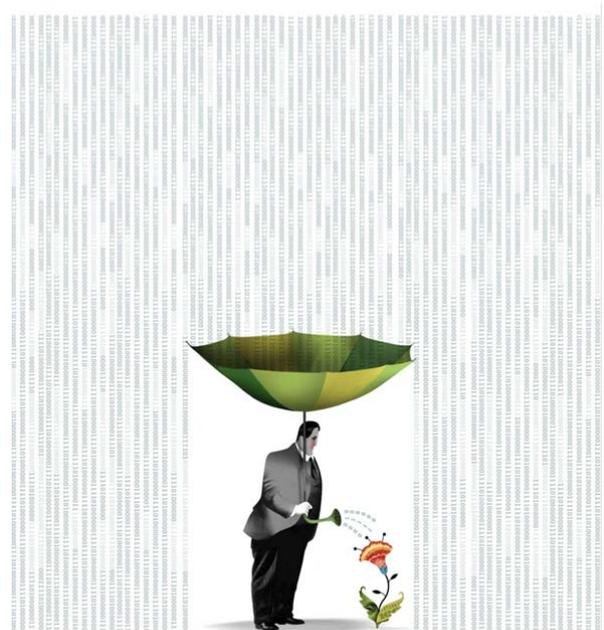
As a follow up activity, it was proposed that the High-Level Group for the Modernization of Statistical Production and Services should provide:

"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. It is available in English, French and Russian at: http://www1.unece.org/stat/platform/x/toeZB

Further work is in progress to define potential areas for practical international collaboration on Big Data.
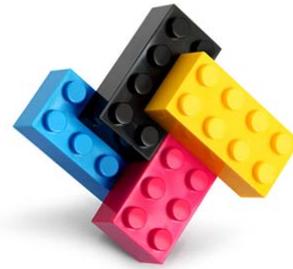
HLG Activities – Current Projects

This project focuses on implementing, reviewing and better integrating the key standards, models and frameworks needed for the modernisation of statistical production and services. It has 4 main objectives:

- 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.

The project comprises 8 substantive areas of work:

- Supporting the implementation of GSIM-creating a community of GSIM adopters to exchange experiences and ideas
- Enhancing the GSIM- gathering feedback to improve GSIM and supporting documentation
- Updating the GSBPM- gathering feedback to improve GSBPM and supporting documentation
- GSIM / DDI / SDMX mapping – determining the coherence between the standards, to identify gaps and areas for improvement
- Training, advocacy and communication
- Linking to geo-spatial standards - assessing the role of geo-spatial standards in the modernisation of official statistics
- Set up a virtual standards helpdesk
- Mapping GSBPM to the Fundamental Principles of Official Statistics

Fostering Interoperability in Official Statistics: Common Statistical Production Architecture

This project, also known as "plug and play", has two main strands, developing an "industry architecture" for official statistics, and testing it in practice by building a "proof of concept" application.

The project objectives are increased:

- Interoperability in official statistics through the sharing of processes and components
- Ability to find real/genuine collaboration opportunities
- Ability to make international decisions and investments
- Sharing of architectural/design, knowledge and practices

... and, of course, reduced costs for all organisations.

The importance of having a common "industry architecture" for official statistics is explained on the next page. A first draft of the high-level architecture principles can be found at: http://www1.unece.org/stat/platform/display/msis/CSPA+v0.1

How to get involved?

All HLG projects are open to any interested organisation. Most work is done through virtual task teams using wikis and web conferencing. If there is a specific issue to address a "sprint" session may be held. These are like very intensive workshops for small groups of experts.

The level of involvement is therefore very flexible, and can be determined according to interest and availability of resources. If your organisation would like to be involved, please contact the UNECE Secretariat at support.stat@unece.org
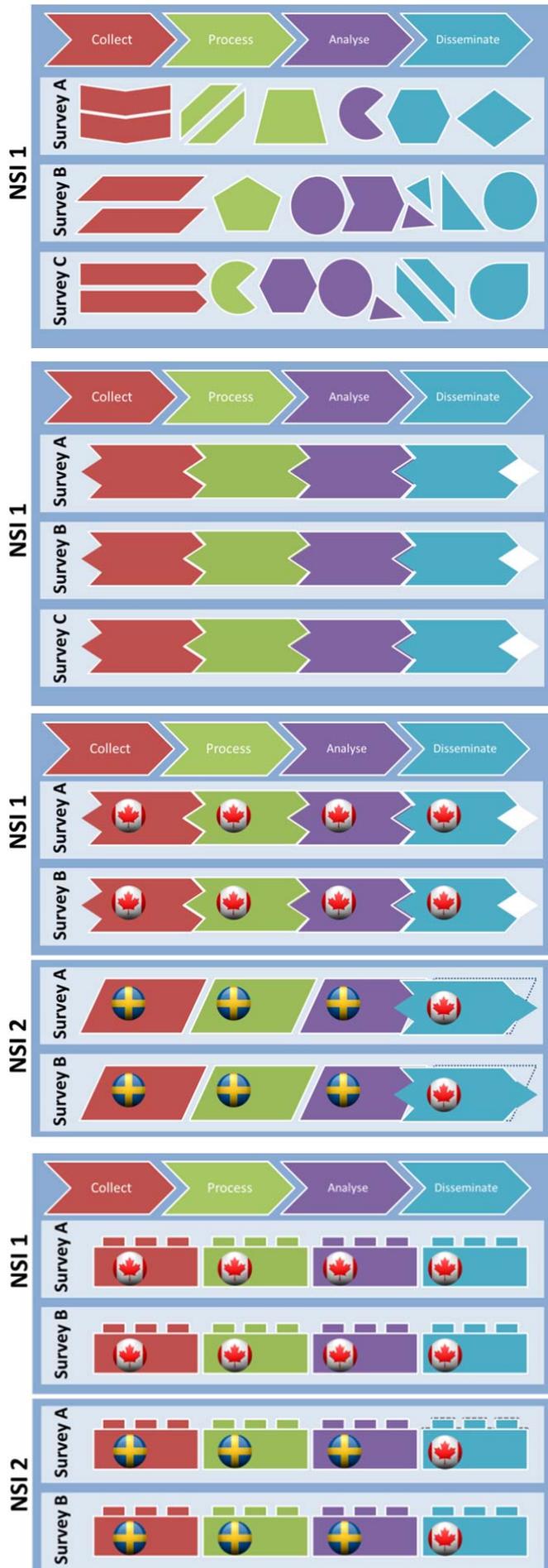
Why Do We Need an "Industry Architecture" for Official Statistics?

Historically, statistical organisations have developed specialised processes and systems for each output or survey. Often, these are not interchangeable, and they need resource-intensive ad-hoc solutions to integrate them.

Some statistical organisations are modernising using an "enterprise architecture" approach, emphasising the importance for solutions that work across the whole organisation. This can help to remove subject-matter "silos" and can improve collaboration across an organisation.

But if each statistical organisation does this in isolation, it will still be difficult to share processes and components efficiently between organisations. In the theoretical example in the diagram opposite, the dissemination component from Canada will not easily fit with the standards in Sweden because the interfaces are different. It will require additional work if Sweden wants to use this component.

If statistical organisations work together to define a common "industry architecture" for official statistics, this will make it easier to standardise, and to combine the components of statistical production, regardless of where they are developed.

Workshops on Modernising Statistical Production and Services

Each year, in the autumn, the HLG holds a workshop with representatives of over 20 different expert groups whose activities are somehow related to implementing the HLG vision. The workshops aim to ensure that the expert groups align their work towards realising the vision. The workshops review progress over the previous year, and set the strategic priorities for international collaboration activities related to modernisation for the coming year. They are a unique forum for top managers and expert groups to exchange ideas, in an informal atmosphere.

Summary of the 2012 Workshop

The Workshop was held in Geneva on 7-8 November 2012. It was attended by representatives of the HLG, the Bureau of the Conference of European Statisticians, and twenty-two expert groups. The agenda consisted of the following topics:

(i) Presentation of the project to accelerate the development of the Generic Statistical Information Model (GSIM)

(ii) Moving towards standards-based modernisation

(iii) Priorities for future work

(iv) Summary and way forward

The workshop participants agreed on the following conclusions and actions:

- Two key priority projects should be undertaken during 2013, one on the implementation management and support of existing standards, and the other on developing a common statistical production architecture.
- Human resource management, and legal / licensing issues, were seen as important supporting activities, and essential enablers to ensure the successful completion of the chosen projects.

In his summary, the Chair noted that the work of the HLG is becoming more and more serious. To be successful we must have an impact and relate to our stakeholders' needs. We have to balance the need for practical results with the need to have sound underlying models and architectural frameworks. This way we can prove to chief statisticians that this work has real substance and value, and encourage them to be more than just spectators.

Plans for the 2013 Workshop

The next workshop is planned for 25-27 November 2013, also in Geneva. Invitations have been sent to relevant expert groups, who can nominate up to two representatives.

The programme of the workshop will include the following topics:

(i) Overview of the HLG projects and initiatives during 2013 - This session will review progress on the key priorities agreed at the 2012 workshop. The two projects will be presented for discussion and feedback. Participants will be invited to assess the extent to which these projects are meeting expectations, and delivering useful outputs.

(ii) Introducing the new governance structure: the Executive Board and modernisation committees - Each modernisation committee will be asked to give a presentation setting out the main current developments and challenges in their areas of expertise. Participants will be invited to identify common themes, which could form the basis for international collaboration projects.

(iii) Identifying key priorities for the implementation of the strategy during 2014 - Following an initial presentation, discussions in small groups and in plenary will identify the key priorities on which the HLG should focus its activities during 2014, and agree the topic for one or more international collaboration project(s).

(iv) Summary and way forward

More information

For more information about these workshops, including papers, presentations and detailed reports, please see:
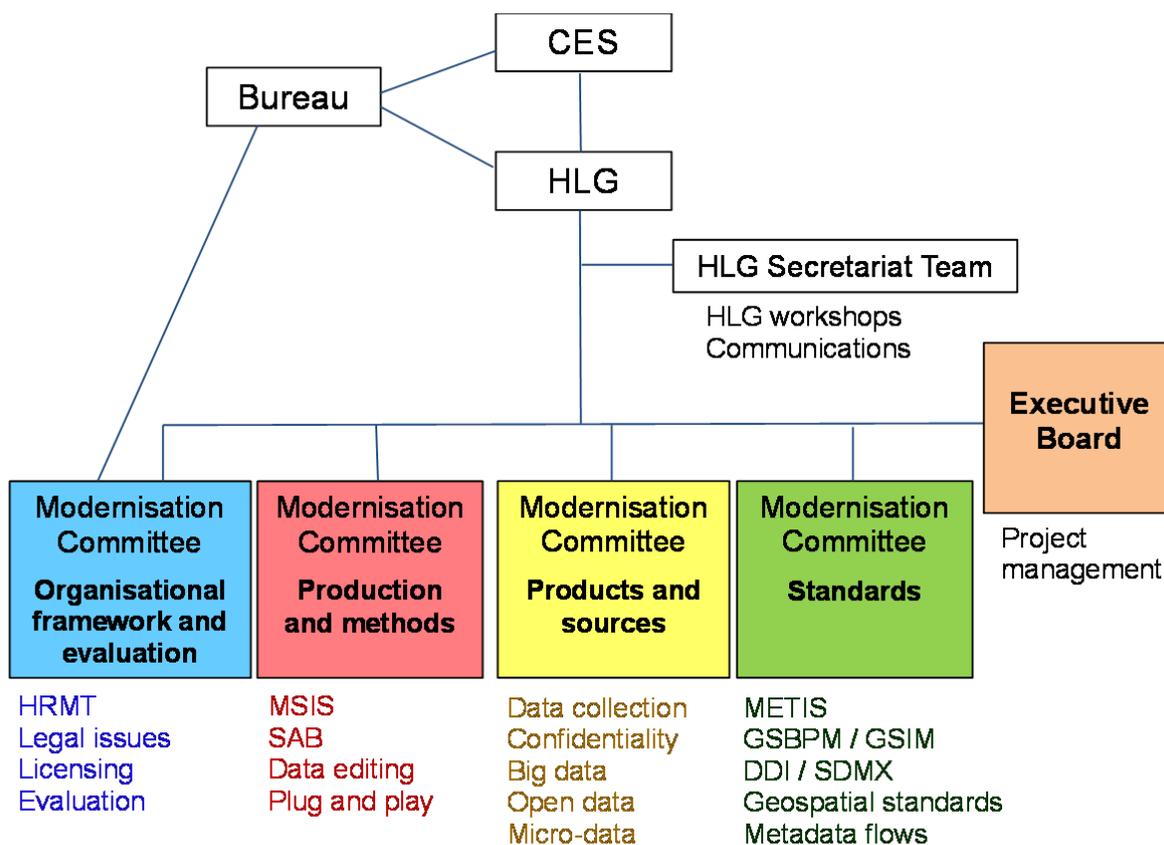http://www1.unece.org/stat/platform/x/-IDFAw

Towards a More Efficient Governance Structure

As the work of the HLG increases in intensity and visibility, a clear and forward-looking governance structure for organisational aspects is becoming increasingly necessary. The HLG has proposed a structure (illustrated below) that aims to absorb existing initiatives and expert groups overseen by the HLG, and reallocate tasks in a way that encourages a more multi-disciplinary approach than has previously been the case, whilst also ensuring better alignment with the HLG Vision.

The Executive Board will be responsible for the strategic management of on-going HLG projects.

The modernisation committees will generate ideas for projects, identify good practices, and highlight issues and developments in their respective fields of competence. They will include domain experts and senior managers from national and international statistical organisations. They may also include representatives of other organisations that support the HLG vision.

The proposal has been agreed in principle by the CES Bureau at its February 2013 meeting. Detailed terms of reference for the new groups are currently being prepared

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                              CES
            Bureau
                              HLG
                                       HLG Secretariat Team
                                       HLG workshops
                                       Communications
                                                            Executive
                                                            Board

    Modernisation   Modernisation   Modernisation   Modernisation
    Committee       Committee       Committee       Committee       Project
                                                                    management
    Organisational  Production      Products and    Standards
    framework and   and methods     sources
    evaluation

    HRMT            MSIS            Data collection  METIS
    Legal issues    SAB             Confidentiality  GSBPM / GSIM
    Licensing       Data editing    Big data         DDI / SDMX
    Evaluation      Plug and play   Open data        Geospatial standards
                                    Micro-data       Metadata flows
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Key to Abbreviations and Acronyms

CES – Conference of European Statisticians
DDI – Data Documentation Initiative
GSBPM – Generic Statistical Business Process Model
GSIM – Generic Statistical Information Model
HLG – High Level Group for the Modernisation of Statistical Production and Services
HRMT – Expert group on Human Resources Management and Training
METIS – Expert group on Statistical Metadata
MSIS – Expert group on Management of Statistical Information Systems
SAB – Sharing Advisory Board
SDMX – Statistical Data and Metadata Exchange