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Item 3 (e) of the Provisional Agenda

REPORT ON THE WORK OF THE HIGH-LEVEL GROUP FOR THE MODERNISATION OF OFFICIAL STATISTICS (HLG-MOS)

Prepared by the Secretariat

This paper provides a summary of the outcomes achieved by the High-Level Group for the Modernisation of Official Statistics in 2018, as well as the planned work for 2019.

The Bureau reviewed the outcomes of work in 2018 and provided recommendations on the work under HLG-MOS to be undertaken in 2019.

I. BACKGROUND

1. The High-Level Group for the Modernisation of Official Statistics (HLG-MOS) was created in 2010 to oversee development of frameworks and sharing of information, tools and methods which support the modernisation of statistical organisations.¹ The aim is to improve the efficiency of the statistical production process and the ability to produce outputs that better meet user needs. HLG-MOS oversees work undertaken by a number of modernisation groups, task teams, projects and expert meetings that provide a collaborative platform for experts in statistics to develop strategies and solutions in a flexible and agile way (the current structure of HLG-MOS is presented in Section III.D). The modernisation work under HLG-MOS is open to all who are willing to contribute.

2. HLG-MOS must ensure that it remains adaptive to the changing environment and shifting landscape of challenges and opportunities. Its strategic vision is therefore regularly updated and new priorities are set. The annual work program has to reflect these changing needs while at the same time output created earlier needs to be supported or further developed. To guarantee an optimal outcome, a process of a combined top-down and bottom-up approach is taken.

3. Each year the chair of HLG-MOS sends out an open call for submission of project and activity proposals for the next year. After an initial evaluation, the Executive Board of HLG-MOS provides feedback and decides which proposals will be considered for projects or other types of follow-up. At the annual Workshop on the Modernisation of Official Statistics at the end of November, these proposals are presented and discussed by experts that are working on national and HLG-MOS modernization activities. Through small group discussions, two project

¹ Until 2012, the group was called High Level Group for Strategic Developments in Business Architecture in Statistics (HLG-BAS). Its initial objective was formulated as follows: "oversee and guide discussions on developments in the business architecture of the statistical production process, including methodological and information technology aspects."

proposals are selected for the next year and suggestions are made for follow-up activities and other proposals. Following that, the Executive Board further refines, prioritizes and recommends the proposals for endorsement by HLG-MOS.

4. This paper summarises the outcomes achieved by HLG-MOS in 2018 and outlines work to be undertaken in 2019.

II. ACHIEVEMENTS IN 2018

5. For 2018, HLG-MOS selected the Strategic Communication Framework and phase 2 of the Common Statistical Data Architecture as the two projects. The main outcomes of these projects as well as activities which took place under the auspices of HLG-MOS are summarized below.

A. Projects in 2018

6. The **Common Statistical Data Architecture (CSDA) Project** was a follow-up of the 2017 project. The purpose was to complete the development of a reference framework for data architectures, testing the reference architecture defined in 2017 against other use-cases and to define capabilities. The project brought together experts from Canada, Finland, Italy, Mexico, the Netherlands, Poland, Serbia and the United Kingdom. The second phase of the CSDA project delivered the following output:

- a) An updated and expanded version of CSDA;
- b) A set of guidelines, including a maturity model, for implementation of CSDA;
- c) Use-cases for testing CSDA;
- d) A leaflet for promotion of CSDA.

7. The full results of the project are available from the Data Architecture Wiki (https://statswiki.unece.org/x/4BazBw).

8. The objective of the **Strategic Communication Framework Project** was to increase capacity of NSOs to develop a strategic approach to communication, and to review and renew communication methods and processes. Further objectives were to provide NSOs with tools to increase their visibility, relevance and brand recognition as well as to take a proactive approach to managing issues and reputation.

9. Experts from Australia, Bosnia and Herzegovina, Canada, Croatia, Ireland, Italy, Mexico, the Netherlands, Poland, United Kingdom, United States as well as Eurostat and OECD took part in this project. They developed a project placemat and prepared a Strategic Communication Framework with the following key elements:

- a) Statistical organisations' branding and the process to position, develop, review, confirm and redefine a brand;
- b) Communication Maturity Model designed to help statistical organizations to gauge their current external communications maturity, and to propose areas for improvement;
- c) Communication skill sets needed for professional external communications;
- d) Guidelines for creating an external strategic communication strategy;

- e) Guidelines to develop a strategy for crisis and issue management;
- f) Evaluation of the effectiveness of external communications.

10. The Strategic Communication Framework is submitted to the Bureau for review (ECE/CES/BUR/2019/FEB/22)

B. Other HLG-MOS outputs in 2018

11. In addition to the projects, the four Modernisation Groups set up various task teams that produced several outputs that had been agreed by HLG-MOS. These included:

- a) Revision of GSBPM and GSIM (submitted to the Bureau for review as document ECE/CES/BUR/2019/FEB/10/Add.1);
- b) Position paper on machine learning in official statistics;
- c) Papers on developing organisational resilience, on visions, missions and target operating models, and on risk appetite;
- d) Training materials on risk management;
- e) Renewed public CSPA Service Catalogue and a restated CSPA Sharing Concept with service adapters and features that address CSPA requirements.

12. Steering and organisation committees organized six workshops on innovation and modernisation to share experience, identify areas for collaboration and set agendas for future work. In chronological order these were:

- a) ModernStats World workshop (Geneva, Switzerland, 11-13 April 2018);
- b) Workshop on Statistical Data Dissemination and Communication (Cork, Ireland, <u>25-27 June 2018</u>);
- c) Workshop on Human Resources Management and Training (Oslo, Norway, <u>12-14 September 2018</u>);
- d) Workshop on Statistical Data Editing (<u>Neuchatel, Switzerland, 18-20 September</u> 2018);
- e) Workshop on Statistical Data Collection 'Resourceful Data Acquisition' (<u>Geneva</u>, <u>Switzerland</u>, <u>10-12 October 2018</u>);
- f) Workshop on Modernization of Official Statistics (<u>Geneva</u>, <u>Switzerland</u>, <u>27-28</u> <u>November 2018</u>).

III. WORK PROGRAMME FOR 2019

A. Projects in 2019

13. In January 2019, HLG-MOS approved two project proposals for 2019, outlined below.

14. **Machine Learning (ML)** – the proposal is based on the ML position paper prepared by the Blue Skies Thinking Network in 2018. The following work packages were identified:

- a) WP0: Refining the scope of the ML Project and defining the business case;
- b) **WP1: Pilot studies:** building on existing national projects on ML in specific domains such as image recognition, website analysis and automated coding;

- c) WP2: Quality issues: identifying suitable quality indicators and performance metrics for ML to guarantee quality, reproducibility and transparency, which are core values of official statistics. A full quality framework for ML may be developed later;
- d) **WP3: Lessons learned**: identifying lessons learned and an overview of most promising areas for ML in official statistics.

15. **Strategic Communications Framework Phase 2** - the project will build on the experience and momentum gained in Phase 1. It will focus on developing a strategic approach to internal communications and stakeholder management and analysis in support of two priority topics for 2019 identified by HLG-MOS – "Communicating our value" and "Setting the vision". The project will also explore the experience of national statistical organizations in developing government-wide data strategies in support of a third HLG priority – National Data Strategies. The rpoject will include the following work packages:

- a) WP1: Guidelines to develop organizational vision and strategies for staff engagement. This will increase the ability of statistical organizations to adopt strategic communication as a foundational building block to change management. *The work will be closely coordinated with the Developing Organisational Resilience Group;*
- b) **WP2: Strategies for managing stakeholder engagement.** This work package will provide statistical organizations with the tools to effectively manage stakeholder relationships using analytical tools;
- c) WP3: Engagement of statistical organizations in government-wide data strategies. This work package will gather the experiences and examples of countries who are engaged in a whole-of-government approach. An inventory of existing and upcoming National Data Strategies (NDS) will be established as well as other aspects related to NDS.

B. Modernisation Groups and network

16. After in-depth discussion by experts at the Modernisation Workshop 2018 and further prioritization by the Executive Board, HLG-MOS approved the 2019 work programme for the modernisation groups and network. New priorities may emerge during the year. In these cases, the proposed work will be presented to the Executive Board and potential realignment considered based on capacity. The following paragraphs outline the work that is planned to be undertaken by the modernisation groups and network.

1. Developing Organisational Resilience Group

17. The Modernisation Group on Developing Organisational Resilience (DOR) focuses on the organisational changes necessary to support modernization in statistical organizations. Currently, this group is chaired by Poland. The group will set up task teams to consider the following substantive topics during their monthly web conferences:

a) **Skills and capability framework for NSOs** – The group will work on showing connection between technical and complementary skills necessary in NSOs, to increase awareness about it at all levels. The group will specifically address the skillsets requirements for the Strategic Communication Framework;

- b) Forum for promoting and sharing earlier work The group will continue to increase awareness and make available earlier output and similar work done at NSOs, and evaluate where past and current work is relevant for other initiatives under the HLG-MOS, or CES;
- c) Setting vision in NSOs The group will share its work on vision and mission statements and target operating models, and collaborate with the Strategic Communications Framework Phase 2 project.

18. The DOR Group will organise a Workshop on Culture Evolution, in September 2019 in Geneva, Switzerland. Experiences in achieving business agility will be one of the topics.

2. Supporting Standards

19. The Supporting Standards Group provides support for the implementation of the "ModernStats" models (GAMSO, GSBPM and GSIM) through a range of activities which include development, promotion and maintenance of the models. Currently, this group is chaired by Italy. It will undertake the following work:

- a) Linking GSBPM and GSIM The activity will map the information objects of GSIM to the processes and sub-processes in GSBPM as input or output of individual process steps;
- b) **Core ontology for official statistics** The activity will create a common semantic model and vocabulary for official statistics;
- c) Alignment of overarching processes in GSBPM with GAMSO The activity will clarify the cross-cutting (overarching in 5.0) processes in GSBPM and how they relate to Corporate Support activities in GAMSO;
- d) **Metadata glossary** The activity will create a central, unified and definitive source for the terms and definitions in the ModernStats Models that can identify and address ambiguities between homographs and synonyms. *The team will be self-supporting and receive only minimum secretariat support from UNECE.*

3. Sharing Tools

20. The Sharing Tools Group provides implementation support for CSPA and works on further defining and promoting the shareability concept. Currently, this group is chaired by New Zealand and meets monthly. Extra meetings to progress elements of these topics will be set up on an ad hoc basis. In addition to the monthly meeting, separate task teams will progress work on the following topics:

- a) **Digitising of CSPA document** The aim is to create an on-line version of the CSPA documentation that makes the content easily accessible for different users and with different knowledge of CSPA;
- b) Adding services to the CSPA Catalogue The group will focus on adding services to the catalogue and provide support to submitters and users of services. *Surveys and outcomes of substantive workshops will be considered;*
- c) **Communicating the restated CSPA Concept** To increase awareness and to lower the threshold for submitting services to the CSPA Catalogue.

3. Blue Skies Thinking Network

21. The Blue Skies Thinking Network is the idea factory of the ModernStats community. A core group will be set up to do the initial scan of proposals brought to the Network, evaluate them and select the ones that will be proposed to the Executive Board for their consideration. The core group will consist of approximately 5 persons from various NSOs with in-depth and broad knowledge related to innovation, representing variety of fields of expertise. The core group will draw from a flexible pool of resources to assist in the evaluation of proposals.

22. HLG-MOS members will bring the Network to the attention of their innovation groups and actively stimulate generation of ideas for proposals to be submitted to the Network. The core group will also actively engage with the statistical community to identify potential topics. One initial task will be to evaluate project proposals that were not selected by the HLG-MOS Executive Board, and assess whether they merit further consideration.

C. Workshops and work sessions

23. The four Modernization Groups will organise several workshops to support their work and to share experiences and progress with a wider audience.

- a) **ModernStats World Workshop** in June 2019 in Geneva, Switzerland, jointly organised by the Supporting Standards and the Sharing Tools Group. The workshop aims to progress work on development and maintenance of the ModernStats models and provide a ModernStats models user platform;
- b) Workshop on Culture Evolution, September 2019, Geneva, Switzerland, organised by the Developing Organizational Resilience Group. Experiences in achieving business agility will be one of the topics.

24. Several other workshops and work sessions will be organized under the auspices of HLG-MOS. The focus is always on innovative developments and modernization. Another key output is the identification of areas for future work and collaboration. The target audience for these workshops includes senior and middle-level managers. They are organized by the UNECE secretariat in collaboration with Organizing Committees consisting of experts. In 2019, the following workshops will take place:

- a) Workshop on Statistical Data Dissemination and Communication, 12-14 June 2019, Gdansk, Poland – the focus of the workshop will be on cutting edge ideas, new trends, experiments, and approaches in the areas of statistical data dissemination and communication.
- b) Work Session on Statistical Data Confidentiality, 29 31 October 2019, the Hague, Netherlands This work session aims to progress work on statistical confidentiality in the context of statistical modernisation and emerging topics arising from new data sources and new roles of statistical offices.
- c) Workshop on Statistical Data Collection, September or October 2019, place and venue to be determined – The objective of this workshop is to identify innovative ways and best practices in statistical data collection, and to provide a platform for practitioners to exchange experiences and foster collaboration in this area.

D. Monitoring progress, coordination and structure

25. HLG-MOS was set up in 2010 by CES, to which it reports. HLG-MOS is a group of committed Chief Statisticians actively steering the modernisation of .statistical organisations Its mission is to work collaboratively to identify trends, threats, and opportunities in modernising statistical organisations.

26. The HLG-MOS Executive Board is tasked with monitoring the work programme. The work of the groups and projects is reported on a monthly basis at the UNECE ModernStats wiki. The Executive Board discusses the modernization updates and evaluates the progress together with the chairs of the Modernization Groups and the project managers in their monthly meetings. If needed, the work program is adjusted. All activities are continuously aligned and coordinated with other international initiatives like the programs under the European Statistical System and the UN Global Working Group on Big Data.

27. The current structure of HLG-MOS is displayed in the diagram below.

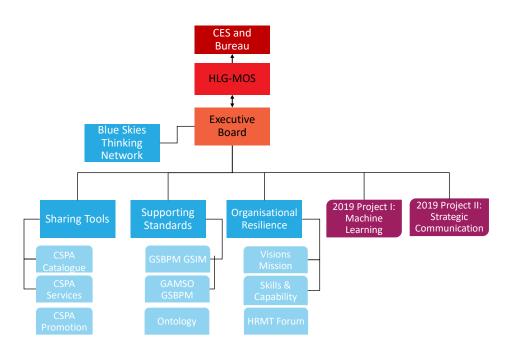


Figure 1: Structure of HLG-MOS (blue: Modernization Groups; light blue: task teams; purple: 2019 ongoing projects, red: oversight)

E. Involvement in modernisation activities

28. As the work on modernising official statistics continues to grow and succeed, more national and international statistical organizations are looking for ways to align with the various HLG-MOS initiatives. In 2018, over 75 national and international statistical organisations were actively participating in the HLG-MOS work program and more than 500 experts participated in at least one of HLG-MOS activities.

29. There are various ways that statistical organizations can participate:

a) Join the Statistical Modernisation Community – It is open to all interested statistical organizations 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: <u>https://statswiki.unece.org/x/ZQYpBw;</u>

- b) 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;
- c) Follow the outcomes of HLG-MOS activities Updates and outputs are regularly posted on the HLG-MOS wiki: <u>http://www1.unece.org/stat/platform/display/hlgbas</u>. Information about new products and initiatives is also shared via the LinkedIn group "Modernising Official Statistics".

IV. PROPOSAL TO THE BUREAU

- **30.** The Bureau is invited to:
 - a) Comment on the achievements in 2018 and make recommendations on the work programme for 2019;
 - b) Comment on the current governance structure of HLG-MOS presented in Section III.D;
 - c) Express views on the focus of work under HLG-MOS