High-Level Group for the Modernisation of Official Statistics
HLG-MOS

ModernStats World Workshop
26-28 June 2019, Geneva, Switzerland
Official Statistics

NSOs are facing many challenges

- Change how we work

Continuously changing environment

- Become agile and adaptive

We have to be more efficient

- Share and Standardize

Challenges too big to tackle on their own

- Collaborate and Coordinate

Official Statistics needs leadership

- Vision, Mission and Strategy
### HLG-MOS

**Before the HLG-MOS**

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<th>Now</th>
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<td>Many expert groups</td>
<td>Clear vision</td>
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<td>Little coordination</td>
<td>Agreed priorities</td>
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<tr>
<td>No overall strategy</td>
<td>Strategic leadership</td>
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<td>Limited impact</td>
<td>Real progress</td>
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**High-Level Group for the Modernisation of Official Statistics setup in 2010 under the Conference of European Statisticians (CES)**

**Statistical Modernisation Community – Statement of Intent (2015)**

Since 2016 the community is branded as:
Work collaboratively to identify trends, threats, and opportunities & provide common platform to develop solutions in a flexible and agile way.

Actively engage

Be a trusted data authority

Adopt a service oriented approach

Have an agile adaptive culture

Developing innovative solutions

Demonstrating leadership and collaboration

Discussing challenges and opportunities openly

Ensuring that priorities are community driven

Supporting a flexible, result oriented and agile approach
Priority & Emerging Topics

• **Active engagement**
  - Communicating our value
  - Role in the data ecosystem

• **Trusted Data Authority**
  - National Data Strategy
  - Data for better decision making
  - Data protection
  - Data access and ethics

• **Agile and adaptive culture**
  - Setting the vision
  - Culture evolution
Collaboration of the Willing

• Activities are voluntary and demand driven
• Actively steered by group of committed Chief Statisticians

• Four main principles:
  – Openness
  – Flexibility
  – Participation
  – Pragmatism

• Everybody can join and participation at all levels
• But: Strategic Vision and oversight by HLG-MOS the Executive Board
Collaborative Platform

- Two modernisation projects per year
- Four expert groups (with 10-20 Task Teams)
- Several Modernisation Workshops
- Four thematic workshops
- HLG-MOS Wikis
- Catalogues: Sharing Investments Capability, and Statistical Services
- Many Sprint Workshops, face-to-face, virtual meetings
Community Involvement 2018

- Projects: 56 members from 19 countries and 2 International Organisations (IOs)
- Groups: 82 members from 19 countries and 5 IOs
- Steering Committees: 53 members from 19 countries and 4 IOs
- Workshops: 328 participants from 63 countries and 12 IOs

In summary:
- Participants: 500+
- Members: 100+
- Organisations: 75+
ModernStats Pillars

Projects

Create
Projects BSTN (Modernisation Groups)

Support
Share
Maintain
Communicate
Modernisation Groups

Develop
Expand
Interlink
Modernisation Groups (Projects)

Handover (Partner Organisations)
Finished product (NSOs)

Activities

Activities Project
HLG-MOS Annual Projects

Strategic Communication Framework II
Organizational Vision and Strategic Staff Engagement, Stakeholder Engagement management Strategies, Engagement in Government-wide data strategies

Pt I: Communication issue management; maturity model; Skillsets & Branding

Machine Learning for Official Statistics
Pilot studies:
I) Classification & Coding
II) Edit and Imputation
III) Imagery

Quality issues: i) traditional processes and data ii) exploit non-traditional data

Lessons Learned

Current Groups

SHARING

IDEAS

METHODS

MODELS

SERVICES

TOOLS

Supporting Standards

CSPA

GAMS

GSIM

GSPM

Modern Stats

Blue Skies Thinking
Developing Organisational Capability

Organisational aspects of collaboration and modernization how best to bring about the organisational changes necessary to support modernisation in statistical organisations

- Skills and Capability framework
- Forum for sharing
- Setting Vision in NSOs
- Workshops 2019 (11-13 September, Geneva): Culture Evolution

Continues the work of the Modernization Group on Capabilities and Communication
Human resources and more...

Publications

- Compilation of good practices on HRMT in Statistical Offices - English (2013)
- Guidelines for Managers - Russian (2016)

Risk Management

All Risk Management documents could also be accessed from the Risk Management public page

For leadership teams it developed:

- A short paper outlining how organisations can approach the consideration of risk appetite as a framework for decision making.
- A video presentation which seeks to make the case for risk management in statistical organisations.

For risk management practitioners it developed:

- Material which can be used to deliver training modules in the various stages of risk management, in support of the UNECE Guidelines in Risk Management for Statistical Organisations.
  - Module 1: Concept of Risk
  - Module 2: The Risk Management Process
  - Module 3 Risk Appetite
  - Module 4: Identification and Treatment
- An overview of the common risks faced by statistical organisations from across the world, with example mitigating actions, to be used as a basis for risk identification and control.

Workshops

- Workshop on Culture Evolution (2019)
- Workshop on Human Resources Management and Training: Developing Capabilities for the Future (2016)
- Earlier workshops on HRMT
- Workshop on Implementing Efficiencies and Quality of Output (2017)

Other outputs

- Developing Organisational Resilience:
  - Paper on Visions, Missions and Target Operating Models
  - Green paper: Developing Organisational Resilience in Statistical Organisations

- Statistical Training:
  - Statistical and End User IT Training Framework - based on GSBPM Model (2017)
  - Statistical Training Framework aligned to the GSBPM - paper (2018)

- Organisational barriers to international collaboration (2016):
  - Paper on organisational barriers to international cooperation

- Competencies profiles (2015):
  - Big Data Team
  - Big Data Team Leader

- Earlier outputs:
  - Surveys before HRMT workshop 2010 and HRMT workshop in 2012
  - Exit Interview forms
  - Staff satisfaction survey questionnaires
  - Conceptual approach to HR development - Destatis
  - Results of the staff turnover survey 2010
  - Training system in Statistics Lithuania

https://statswiki.unece.org/x/UgAMDQ
Agenda Culture Evolution WS

- Mission and vision in shifting the organisational culture in NSOs
- Measuring culture
- Drivers of organisational culture
- Implementing culture change
  - Importance of communicating culture change
- Monitoring and evaluation
Supporting Standards

Develop, enhance, integrate, promote, support and facilitate implementation of the range of standards needed for statistical modernization

- Linking GSBPM and GSIM
- Core Ontology for Official Statistics
- Alignment of overarching processes in GSBPM and GAMSO
- Metadata Glossary
Sharing Tools

Activities related to the implementation of the Common Statistical Production Architecture (CSPA)

- Digitising/Editing CSPA document
- **CSPA Service Catalogue**
- Communicating the Restated CSPA Concept
- ➡️ Add Requirements-Features concept
Blue Sky Thinking Network

The ‘ideas factory’ for statistical modernization community. Core Team to Provide an environment scan on selected topics (what, value, state-of-the-art, collaboration opportunities).

• Machine Learning
• HLG Hackathon ‘Telling Stories with SDG data’
Blue Skies Thinking Network

Key Questions
• What is the proposal covering?
• What does it mean for official statistics?
• What has already been done?
• What future work is needed?

Examples of topics considered:
• Secure multi-party computation
• Synthetic data sets
• Data science lab
• Overall technology strategy
• Metadata driven production system
• Integral IT platforms
• Chatbots
• 2018 Project Proposals

Next:
• No business case
• Put on hold
• Proposal for future work (project, activity existing group)

Submit your ideas!
GSDEMs

- **Generic Statistical Data Editing Model**
- Common reference framework for the staff working in statistical data editing
- Designed to be consistent with GSBPM and GSIM
- Revision Task Team (SC Data Editing Workshop)
- Version 2.0 released in June 2019
HLG-MOS Outputs

- Standards and Models
- Guidelines and Best Practices
- Catalogues and Repositories
- Collaboration and Joint Products
- Identifying Challenges and Way Forward

- All Available from the UNECE HLG-MOS wikis
Four thematic workshops

• Workshop on Statistical Data Editing 2020 (18-20 September 2018, Neuchâtel, Switzerland)

• Communication and Dissemination of Statistics 12-14 June 2019, Gdańsk, Poland

• Work Session on Statistical Confidentiality 29-31 October 2019, the Hague, The Netherlands

• Statistical Data Collection Workshop 9-11 October 2019, Geneva

• Workshops on Culture Evolution (11-13 September 2019, Geneva)

• Key Goals: Sharing innovative practices, identifying challenges and topics for future work
HLG-MOS vs CES

• HLG-MOS setup by CES and reports to CES (but large overlap in membership)

• 1) Approval HLG-MOS
  – New model/standard
  – Update
  – Review
  – Revision

• 2) Bureau of the CES
  – Endorsement without consultation
  – Broad CES Consultation

• 3) Endorsement Conference of European Statisticians
ModernStats Achievements:

- **Generic Statistical Business Process Model (GSBPM)**
- **Generic Statistical Information Model (GSIM)**
- **Common Statistical Production Architecture (CSPA)**
- **Generic Activity Model for Statistical Organizations (GAMSO)**
- **Generic Statistical Data Editing Models (GSDEMs)**
Some of the other output

- Common Statistical Data Architecture 1.0 ([CSDA](https://example.com/cdsa))
- Data Integration Guidelines [link](https://example.com/dig)
- Common Metadata Framework [link](https://example.com/cmf)
- Linked Open Metadata [link](https://example.com/loom)
- Strategic Communication Framework ([soon](https://example.com/scf))
- Guidelines on Risk Management [link](https://example.com/gorm)
- Guidelines for Managers [link](https://example.com/gfm)
- Big Data Quality Framework, Classifications, Inventory [link](https://example.com/bdqf)
- Investment Catalogue [link](https://example.com/ic)
- CSPA Catalogue [link](https://example.com/cspa)
HLG-MOS Wikis
Get Involved!
Join the Force!

Consult
Contribute
Collaborate
Annex: Links

- **HLG-MOS** [https://statswiki.unece.org/x/xIR8Aw](https://statswiki.unece.org/x/xIR8Aw)
- **Modernisation Groups** [https://statswiki.unece.org/display/hlgbas/Modernisation+Groups](https://statswiki.unece.org/display/hlgbas/Modernisation+Groups)
- **HLG Outputs** [https://statswiki.unece.org/x/7AQpBw](https://statswiki.unece.org/x/7AQpBw)
- **Modernisation Workshops** [https://statswiki.unece.org/x/bAhLBg](https://statswiki.unece.org/x/bAhLBg)
- **Modernisation Updates** [https://statswiki.unece.org/x/QY0HBg](https://statswiki.unece.org/x/QY0HBg)
- **Data Editing** [https://statswiki.unece.org/x/5wCvCg](https://statswiki.unece.org/x/5wCvCg)
Modernisation Workshops

- Annual HLG-MOS Workshop in November (19-21 November 2019, Geneva)
- Annual ModernStats World Workshop (April 2019)
- Developing Organizational Capability:
  - Workshop on Culture Evolution (11-13 September, Geneva, Switzerland)
  - Workshop on Human Resources Management and Training (12-14 September 2018, Oslo, Norway)
  - Workshop on Implementing Efficiencies and Quality of Output (27 - 29 September 2017 Geneva, Switzerland)
  - Workshop on Human Resources Management and Training: Developing Capabilities for the Future (7-9 September 2016, Krakow, Poland)
  - Workshop on Risk Management practices in Statistical Organisations (25-26 April 2016, Geneva, Switzerland)
- CSPA:
  - 2016 CSPA Workshop: Implementing CSPA (3 -5 October 2016, Geneva, Switzerland)
- Other
  - Workshop on Data Integration: Realising the Potential of Statistical and Geospatial Data (21-23 May 2019, Belgrade, Serbia)
  - HLG Seminar on the Process Oriented Approach (19-21 April 2017, Republic of Korea)
  - Workshop on Integrating Geospatial and Statistical Standards (6 - 8 November 2017)
  - HLG-MOS Sprint Session: Strategies to stay relevant 21 November 2017, Geneva, Switzerland
Annex: HLG-MOS members & history

- Australia
- Canada - Chair
- Ireland
- Italy
- Mexico
- Netherlands
- New Zealand
- Republic of Korea
- Slovenia
- United Kingdom
- Eurostat
- OECD
- UNECE

- High-Level Group for the Modernisation of Official Statistics setup in 2010* under the Conference of European Statisticians (CES)
- Since 2016 the community is branded as: modernstats

*originally as HLG for the Modernisation of Statistical Production and Services & HLG Group for strategic Developments in Business Architecture in Statistics (HLG-BAS)
Annex: Statement of Intent Endorsed

- Australian Bureau of Statistics
- Central Bureau of Statistics (Netherlands)
- Central Statistics Office (Ireland)
- Eurostat
- Hungarian Central Statistical Office
- INEGI (Mexico)
- Istat (Italy)
- OECD Statistics Directorate
- Puerto Rico Institute of Statistics
- Statistical Office of the Republic of Serbia
- Statistical Office of the Republic of Slovenia
- Statistics Canada
- Statistics Korea
- Statistics New Zealand
- Statistics Poland
- Statistics Sweden
- Statistical Office of Montenegro
- UNECE Statistical Division
Annex: HLG-MOS Groups

• Developing Organizational Capabilities: 2019 onward
• Developing Organizational Resilience Group: 2018 onward
• Sharing Tools Group: 2017 onward
• Supporting Standards Group: 2017 onward
• Blue Sky Thinking Network: 2017 onward
• Modernisation Committee Products and Sources: 2014-2016
• MC Organisational Frameworks and Evaluation 2014-2016
• MC Production and Methods 2014-2016
• MC Standards 2014-2016
• CSPA Implementation Group 2015
Annex: HLG-MOS Projects

- 2019: Strategic Communication Framework II & Machine Learning
- 2018: Strategic Communication Framework I & Data Architecture Project II
- 2017: Data Integration Project II & Data Architecture Project I
- 2016: Implementing ModernStats Standards & Data Integration Project I
- 2015: Big Data II & Common Statistical Production Architecture II
- 2014: Big Data I & Common Statistical Production Architecture I
- 2013: Frameworks and Standards for Statistical Modernization
- 2012: GSIM