UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE   8 January 2018
CONFERENCE OF EUROPEAN STATISTICIANS

Workshop on the Modernisation of Official Statistics
(Geneva, Switzerland, 27-28 November 2018)

REPORT OF THE WORKSHOP

1.   The Workshop on the Modernisation of Official Statistics was held in Geneva, Switzerland, on 27-28 November 2018. The workshop was attended by representatives from 29 countries and organisations, namely the statistical offices of Albania, Australia, Bosnia and Herzegovina, Canada, Denmark, Estonia, Finland, France, Hungary, Italy, Luxembourg, Mexico, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Korea, Russian Federation, Serbia, Slovenia, Sweden, Switzerland, The former Yugoslav Republic of Macedonia and United Kingdom of Great Britain and Northern Ireland as well as by representatives from the Statistical Office of the European Union (Eurostat), the Organisation for Economic Cooperation and Development (OECD), the DDI Alliance and United Nations Mission in Kosovo (UNMIK)[1].

2.   Taeke Gjaltema, acting Chief of the Statistical Management and Modernisation Unit of the UNECE Statistical Division, and Lidia Bratanova, Director of the UNECE Statistical Division opened the workshop and welcomed the participants.

3.   Stéphane Dufour (Statistics Canada) and Bert Kroese (Statistics Netherlands), Chairs of the Executive Board of the High Level Group for the Modernisation of Official Statistics (HLG-MOS), co-chaired the workshop. Mr Stéphane Dufour gave the keynote presentation on behalf of the Chair of the HLG-MOS, Mr. Anil Arora from Statistics Canada who could not attend.

4.   The workshop consisted of two sessions. The first session focused on reporting the progress on the 2018 work program. The second day was dedicated to setting the priorities for the 2019 work program. All background documents and presentations of the workshop are available at: https://statswiki.unece.org/x/HAFNDQ

Session (i) Reporting on progress during 2018

Data Architecture Project part II

5.   The project leader Carlo Vaccari (Istat) and the lead architect Dick Woensdregt (consultant for UNECE) presented the outcome. The project was a follow-up of the 2017 Data Architecture Project. The continued work on the Common Statistical Data Architecture (CSDA), delivered the following output:

    a. An updated and expanded version of CSDA that was produced in the 2017 project;

    b. A set of guidelines, including a Maturity Model, for implementation of the Architecture.

    c. Use-cases for testing the Architecture.

    d. A leaflet for promotion of the CSDA.

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[1] UNMIK: United Nations Mission in Kosovo which facilitates the participation of Statistics Kosovo.

Strategic Communication Framework Project

6.   Connie Graziadei (UNECE project manager) presented the results of the Strategic Communication Framework Project. Experts from various NSOs developed a project placemat and prepared a Strategic Communication Framework with the following key elements:

a. Branding related to statistical organisations 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. The communication skill sets needed for a professional external communication program
d. Guidelines for creating an external strategic communication strategy.
e. Guidelines to develop a crisis and issue management strategy.
f. Evaluation of the effectiveness of an external communications function.

Reports from Modernisation Groups and Network

Blue Skies Thinking Network (BSTN)

7.   The coordinator leading the BSTN, Barteld Braaksma (Statistics Netherlands) presented the work conducted within the Network. The goal of the BSTN is to identify and evaluate new opportunities, to generate new ideas and to develop concrete proposals. It was concluded that the BSTN had not yet fully realised its role as a 'Think Tank' and suggestions were made how to improve this. The Network produced the following output in 2018:

a. Position paper on Machine Learning for Statistical Organisations for managers and policy makers to inform them about possibilities to use it in the production of official statistics.
b. Project Proposal on Machine Learning for consideration of the HLG-MOS for a project in 2019.

Supporting Standards Group

8.   Márta Nagy-Rothengass (Eurostat), member of the group, presented the activities undertaken by the Supporting Standards group and its Task Teams. The goal of the group is to find ways how to develop, enhance, integrate, promote, support and facilitate implementation of the range of standards needed for statistical modernisation. Activities in 2018 included:

a. Review of the Generic Statistical Business Process Model (GSBPM) and updating GAMSO to remain consistent with it.
b. Review of the Generic Statistical Information Model (GSIM).
c. Survey on the integrated view of Modernisation Standards.
d. Organisation of the ModernStats World workshop jointly with the Sharing Tools Group.

Sharing Tools Group

9.   Juan Muñoz (INEGI), Trygve Falch (Statistics Norway) and Pierre Peyronnel (Eurostat), presented the work of the Sharing Tools group. The group is mainly responsible for supporting and further developing the Common Statistical Production Architecture (CSPA). The group had consulted and engaged with users of CSPA and learned about barriers to its implementation. The main output for 2018 included:

     a. Improving and making public accessible the CSPA Service Catalogue.
     b. Introduction Service Adapters and CSPA Features that implement requirements for making services more shareable.
     c. Restating CSPA as first and foremost a concept to encourage sharing rather than a focus on rules and compliance.
     d. Organisation of the ModernStats World workshop jointly with the Supporting Standards Group.

Developing Organisational Resilience Group

10.   The work of the Developing Organisational Resilience group was presented by its chair, Anna Borowska (Statistics Poland). The group is the continuation of the Capabilities and Communication group and focuses on HRMT aspects of statistical modernisation. The main focus of their act:

     a. Green Paper on Organisational Resilience for NSOs that the importance of it to encourage transformation and innovation for example in the face of external challenges.
     b. Paper on Strategies, Visions and Target Operating Models (TOM) which presents examples and highlights commonality and how NSOs translate visions into reality.
     c. Risk Management training materials, a paper on Risk Appetite, as well as a knowledge base were developed.
     d. Organisation of the Workshop on Human Resource Management and Training 'Building Resilience in Statistical Organisations'.

11.   Salome Studer of the UNECE Secretariat presented the results of the survey on the investment intentions of statistical organisations. The results are published in the 2018 investment catalogue. It now contains 630 projects from 38 countries and is good resource to review before starting a new project. It was discussed that the investment catalogue was not being used to its full potential. The chairs suggested that the Executive Board should mandate a sub-group to look into the potential of developing a joint strategic investment framework to increase the sharing culture.

12.   The outcome of the thematic workshops that were organised in 2018 under the auspices of the HLG-MOS were presented. The focus of these workshops is on innovative developments in their respective areas and a main output is identifying topics for future work. The outcome following workshops were presented:

     a. Statistical Data Collection Workshop 'Resourceful Data Acquisition': the outcome was presented by Barteld Braaksma (Statistics Netherlands), member of the Steering Committee.

b. Workshop on Statistical Data Editing, presented by Daniel Kilchmann (Swiss Federal Statistical Office), chair of the Steering Committee.

c. Workshop on Statistical Data Dissemination and Communication was presented by Salome Studer (UNECE), secretariat of the workshop.

Session (ii) Priorities for 2018

13. The second day of the workshop was dedicated to presenting project and activity proposals. The Chairs thanked submitters and showed appreciation for the many proposals that were submitted. The UNECE Secretariat and the Chairs of the Workshop remained the participants about the prioritization and procedures for selecting projects and activities. Groups and individual countries submitted fourteen activity proposals. Details can be found in Annex 1.

14. In total, a record-high nine project proposals were submitted. The HLG-MOS Executive Board had selected four of these for consideration as projects, based on the criteria such as the alignment with the HLG-MOS vision and priorities, how they fit in existing work or further advance it and whether the proposed output would be useful to cover the needs of sufficient NSOs. The four proposals for consideration as projects were:

a. Machine Learning

b. National Data Strategy

c. Strategic Communication Framework Phase 2

d. Statistical Framework for Metadata Monitor and Driven Approach

15. The other five proposals were to be considered for other types of follow-up, either as part of the 2019 program of activities or later as refined proposals. The submitters were given the opportunity to present their proposals and to clarify questions raised. Unfortunately, no representative of Statistics Armenia could attend the workshop to present their use of administrative registers for statistical purposes project proposal. The other four proposals that were presented were:

a. Methodological Inventory by Zoltan Vereczkei (Statistics Hungary)

b. Decision Making Support by Sinisa Cimbaljevic and Branko Josipovic (Statistical office of the Republic of Serbia)

c. Gathering Experience from NSOs in Achieving Business Agility by Jakob Engdahl (Statistics Sweden)

d. Reference Architecture Framework (RAF) for IT Solutions by Anna Długosz (Statistics Poland)

16. Additionally, seven participants took the opportunity to give a 'Soapbox' presentation, either in support of their proposals or to share ideas on innovative products and methods.

a. Janusz Dygaszewicz: Repositories

b. Anna Długosz: Metadata Approach

c. Trygve Falch: Linked Data Store

d. Bert Kroese: Statistical Siri

e. Stéphane Dufour: the Innovation Radar

f. Franck Cotton: LOS ESSnet

g. Yulla Choi: NARAStat & Nara-PC

17.   A small group discussion round was held to discuss the merits of all activity and project proposals. Each group selected two project proposals for 2019 and suggested alternative solutions for the other project proposals. After further plenary discussions, the Workshop recommended that the 2019 projects should be:

a. Machine Learning
b. Strategic Communication Framework Phase 2

18.   A summary of the discussion and the results of the second round of small group discussion that focused on the scope and work packages for the selected projects, can be found in Annex 1. All background documents and presentations for the workshop are available at https://statswiki.unece.org/x/HAFNDQ

19.   The chairs and the UNECE secretariat briefly explained the next steps. The Executive Board would meet to discuss and draft the work program for 2019. This would be endorsed by the HLG-MOS in early 2019. They very much thanked the participants for their active engagement during the year and over the two days of the workshop.

Annex 1: Summary of discussion and proposed follow-up on projects and activity proposals.

Selection of Projects

Four proposals were selected to be considered for 2019 projects. These were:

1. Machine Learning
2. National Data Strategy
3. Strategic Communication Framework Phase 2
4. Metadata Monitor and Driven Approach

The comments and ensuing first round of group discussion can be summarized to conclude that:

1) Machine Learning: In general the value of the having the topic as a project was seen. It got the widest support for being selected as a project (by 3 and in other got most votes but proposal needed more work). This project was therefore unanimously selected.

2) National Data Strategy: There was general support for this proposal but an intervention from the director of the UNECE Statistical Division and the Chief Statistician (CS) of Poland precluded the second proposal to a major extend as it was communicated that the Bureau of the Conference of European Statisticians (CES) planned to organize a seminar on the same topic. Furthermore, a discussion of the Chief Statisticians at a Eurostat event concluded that a high-level discussion at CS level was needed. This project would therefore not be feasible this year but could commence after the CES seminar as it needs further strategic direction.

3) Strategic Communication Framework Phase 2: The proposal got similar support as proposal 2 and the importance of stakeholder involvement was stressed. The clear links with the HLG-MOS priority topics and the strong output delivered in phase 1 were arguments to continue and no alternative platforms/activities exist for this topic.

4) Metadata Monitor and Driven Approach: The proposal got least support as a project, but importance and need for follow-up was widely stressed. The alternative proposed most was that the Supporting Standards Group should follow-up on this. It has also links with business agility and the work of the Developing Organisational Resilience (DOR) group.

These two projects were therefore proposed for 2019:

A) Machine Learning
B) Strategic Communication Framework Phase 2

Refining content of selected projects

The second round of group discussions focused on the content of the projects (comments with respect to this provided in earlier discussions are included here):

A) Machine Learning: The scope was seen as too wide. The proposed Work Packages 2 (Inventory of existing ML projects), 5 (Communication and dissemination) and 6 (overall project management) should be removed. It was proposed to have a sprint in January to refine the scope of the Machine Learning Project proposal and/or to define clearly the business case as the first activity (WP 0).

   WP1 ML Pilots: Pilot studies should be built on existing national projects on ML. A good area to start would be data editing and imputation.

   WP3 Design of a quality framework: It is too early for developing a full quality framework but quality issues should be addressed

WP4 Development of a 'ML for dummies' handbook: Most were in favour of dropping this as enough handbooks exist and rather change it to providing lessons learned and an overview of most promising areas for ML as that would be useful.

B) Strategic Communication Framework Phase 2:

WP1 Developing stakeholder engagement management strategies: Stakeholder engagement was seen as a very relevant topic

WP2 Guidelines to develop strategic staff engagement strategies: It should be checked that there is no duplication of the work of the DOR group (on soft skills, agility) and the outcome should also address how to promote use of sharing tools.

WP3 Statistical organizations engagement in Government-wide data strategies: The scope could be broadened. An inventory of existing and upcoming NDS would be useful, and would be beneficial for the CES seminar. Other aspects related to the NDP project proposal could be included here (e.g. trust, reputation, quality and our value proposition). The outcome of the CES seminar on NDS can further steer the content of this WP for the second half of 2019.

Follow-up on other Project Proposals

The other five of the nine submitted project proposals were considered for finding alternative solutions.

5. Methodology Inventory: it was suggested that either the Supporting Standards or the Sharing Tools group would pick this up. An inventory could be developed but communicating it is essential.

6. Decision Making Support: Several aspects of this proposal were or could be activities of the Developing Organisational Resilience group. Parts could also be included in the NDS proposal for 2020.

7. Gathering Experience in Achieving Business Agility: the planned 2019 workshop on Culture Change should include the topics proposed here and most aspects can be covered by the DOR group.

8. Reference Architecture Framework: it was seen as very relevant. Guidance on how to actual implement the standards is needed as it is very difficult. The Supporting Standards group would be the place to take it up (but is already overburdened). It was also proposed that solutions are too country specific and first national and bilateral models have to be developed before taking it up to the global level.

9. Use of Administrative Registers for Statistical Purposes: It was generally felt that it was outside the scope of ModernStats work and too large to be tackled by an HLG-MOS project.

Activity Proposals Modernisation Groups
Activity proposals were presented (mostly from the groups themselves). Several significant activities were proposed for the groups as follow-ups of the project proposals that were not selected as a project.

Developing Organisational Resilience:

1. Setting the vision in NSOs.
   -Has to be linked to National Data Strategy and activities under CES.

2. Skills and Capability Framework for NSOs.

3. Workshop on Culture Evolution.
   -Project proposal Gathering Experience in Achieving Business Agility: The workshop could cover or be extended in order to cover aspects of the proposal.

Follow up from project proposals:

4. Metadata Monitor and Driven Approach: address the business agility aspects needed to implement a metadata driven and integrated models approach.
5. Decision Making Support: Some aspects have already been addressed (e.g. risk management guidelines) the other WPs would fit well in the work of the DOR group.

Supporting Standards:

1. Connecting GSBPM&GSIM.
   - This was seen as ambitious, but important, so time boxing will be needed.
2. Alignment of overarching processes in GSBPM with GAMSO.
   - together with 1): It was also suggested that we need to consider making all models consistent or even create one integrated model (in connection with Target Operating Models).
3. Core Ontology for Official Statistics.
4. Communicating ModernStats Models.
5. Metadata Glossary.
6. ModernStats World Workshop (jointly with Sharing Tools group).

   By Sweden:
7. Create Virtual forum (WebEx/sprints) to help colleagues understand and implement the models.

   Follow up from Project proposals:
8. Follow-up on the 2017-2018 Common Statistical Data Architecture (CSDA) workshop should be done by this group.
9. Metadata Monitor and Driven Approach: Several aspects on how to implement and make the models work together should be addressed by the group.
10. Reference Architecture Framework: Aspects of this proposal that are deemed relevant for multiple countries can be addressed here or jointly with the Sharing Tools group given expertise present in that group.

Sharing Tools:

1. Digitising of Common Statistical Production Architecture (CSPA) document.
2. Adding Services to the CSPA Catalogue.
   - An ambitious target should be set
3. Communicating the Restated CSPA Concept.
4. ModernStats World Workshop (jointly with Supporting Standards Group).
   - CSDA outcome/follow-up should be included in the workshop program.

   Follow up from Project proposals:
5. Methodological Inventory: A (renewed) attempt to include it in this group.
6. Reference Architecture Framework: It was proposed for Supporting Standards to work on aspects of this proposal that are deemed relevant for multiple countries. Given the expertise present this group could join or take the lead.