CONFERENCE OF EUROPEAN STATISTICIANS   17 July 2017

Joint UNECE / Eurostat Workshop on Implementing the Common Statistical Production Architecture: 'CSPA for Digital Transformation'

Wiesbaden, Germany, 3-5 July 2017

REPORT OF THE WORKSHOP

1. The Joint UNECE / Eurostat Workshop on Implementing the Common Statistical Production Architecture: 'CSPA for Digital Transformation' was held in Wiesbaden, Germany, from 3 to 5 July 2017. The workshop was attended by representatives of the statistical offices of Albania, Austria, Bulgaria, Cambodia, Canada, Finland, France, Germany, Israel, Italy, Latvia, Lithuania, Malta, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russian Federation, Serbia, Slovenia, South Africa, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, and United Kingdom of Great Britain and Northern Ireland as well as by representatives of the Eurostat, United Nations Interim Administration Mission in Kosovo (UNMIK), Eurasian Economic Commission, and the Organization for Economic Cooperation and Development (OECD).

2. Mr. Rob Mclellan from Statistics Canada, was elected chair of the Workshop. Ms Thérèse Lalor, Chief of the Statistical Management and Modernisation unit of the UNECE Statistical Division, welcomed participants and thanked Destatis for kindly hosting the event. The welcome remarks were delivered by Dieter Sarreither, Director General of Destatis. He stressed the importance of data architecture, standards and CSPA as a way forward in innovating the statistical production.

3. Ms. Marta Nagy-Rothengass, head of Data and Metadata Services and Standardisation, gave the keynote speech. She spoke about how the CSPA activities fit into the digital transformation in the European Statistical System. The availability of new data sources, increasing data economy and data driven applications lead to the need for efficient statistical data eco systems and transformation of organisations.

4. The agenda included plenary and parallel presentations and discussion rounds. A large part of the agenda was dedicated to a hackathon along three streams. The parallel sessions and the hackathon had the following three parallel groups: a) Investors, b) Designers and c) Assemblers. A description of the groups and the outcomes of these activities are documented in the annex:

(i)	Plenary presentations
(ii)	Parallel presentations
(iii)	Challenges and Hackathon
(iv)	Overcoming blockers and barriers to CSPA
(v)	The way forward

5. All background documents and presentations for the workshop are available at https://statswiki.unece.org/x/OwHsBw

6. Key items identified for the way forward included:

- Communicating CSPA to different audiences
- Creating a more active CSPA community
- Improving the tools to support reuse and sharing
- Assisting organisations to understand what decisions need to made
- Improving description of CSPA compliance
- Creating guidance on archetypes and CSPA adapters
- Engage with methodologists regarding the core logic for CSPA services

Annex: Summary of discussions on substantive topics

Plenary Session (i)

7. The national experiences in implementing CSPA were presented in a session chaired by Neville de Mendonca (ONS, United Kingdom). It included the following presentations:

- Statistics Netherlands Application Strategy – Matjaz Jug (Statistics Netherlands)
- ESS Statistical Production Reference Architecture (SPRA) – Jean-Marc Museux (Eurostat)
- Evolution of the .Stat architecture using CSPA – David Barrraclough (OECD)

8. Other plenary presentations and sessions discussed, included the following:
- Service-oriented architecture: The wider focus – Lucas Quensel-von Kalben (Destatis, Germany)
- Modernisation Maturity Model – Thérèse Lalor (UNECE)
- Exploring the CSPA roles – Jakob Engdahl (Statistics Sweden)

9. An interactive session on overcoming blockers and barriers to CSPA was chaired by Lucas Quensel von Kalben (DESTATIS), while a concluding plenary session, chaired by Robert McLellan, was dedicated to determining the way forward.

Parallel Sessions (ii)

10. Based upon the roles involved in implementing CSPA in the statistical production process, three streams were identified. Depending on their role and area of interest, participants joined one of the three streams.

11. The Investor stream had a strategic focus. It discussed issues such as why CSPA should be used, how organisations can find CSPA services that are available to share and how they can become CSPA compliant. The Investors stream included the following presentations:
- When is collaboration better than autonomy? Rosemary McGrath (Statistics New Zealand)
- CSPA Catalogue Pierre Peyronnel (Eurostat)
- A different angle: Validation as a Business Case for CSPA/SERV Volker Weichert (Destatis, Germany)

12. The Designer stream was at the conceptual level and dealt with how services are designed, including the methods used in the services and the information flows. The Designers group consisted of these presentations:
- Methodology Architecture: a problem statement Joni Karanka (ONS, United Kingdom)
- Information Flows in CSPA Eva Holm (Statistics Sweden)
- Reuse - from theory to reality. Tomaž Speh (Statistical Office of the Republic of Slovenia) & Joni Karanka (ONS, United Kingdom)
- Using a Logical Information Model to create services. Robert McLellan (Statistics Canada)

13. The Assemblers stream had the following presentations:
- Design: The three archetypes of integration in the statistical context – Ronald Ossendrijver (Statistics Netherlands) & Jean-Marc Museux (Eurostat)
- Design and Build: Introduction to CSPA Modules – Trygve Falch (Statistics Norway) & Romain Tailhurat (INSEE, France)
- Assemble Demonstrations: Data Collection Platform – Neville de Mendonca (ONS, United Kingdom)
- Assemble Demonstrations: Containerisation - helping with CSPA reuse – Romain Tailhurat (INSEE, France)

Challenges and Hackathon Session (iii)

14. After prioritising the challenges teams were created within each stream to work on the selected challenges. At several instances, the groups met plenary within and between groups to report on progress, to coordinate overlap and to get input from other teams. The results of the Hackathon were presented in a plenary session chaired by Tomaž Speh (Statistical Office of the Republic of Slovenia). The following challenges were discussed and concrete responses were prepared:

Investors:
1. How to communicate with Investors?
2. How to notify the community about opportunities and updates?
3. What services should be provided to the community?
4. What decisions does an Investor need to make?

Designers:
1. How does Enterprise Architecture fit with CSPA?
2. What would a CSPA design cookbook look like?
3. What does it mean to be CSPA compliant?
4. What is the role of standards in CSPA?
5. How to optimise interoperability and flexibility?

Assemblers:
1. What are example archetypes?
2. What are the relevant CSPA adapters and how to use them?
3. How to make use of statistical services outside NSOs?
4. What can be the role of open source?
5. What are the minimum requirements for making services shareable?

Overcoming blockers and barriers to CSPA (iv)

15. Based on the group discussions, representatives formulated key issues that have prevented that more CSPA services have been developed. In an interactive voting procedure, the main reasons were determined:

- Lack of sponsorship is widely perceived as the main reason for why there are so few CSPA services.
- What it means to be CSPA compliant was unclear to a large part of the participants.
- NSOs are not willing or not able to produce more services. Lack of support, especially at the mid-level management is of concern.
- Lack of funds and resources for the development of example services was seen an important reason for having only few services available.
- Another issue was that many people in statistical organisations are not aware of CSPA. One reason for this might be is that the NSOs do not have a clear CSPA focal point who is responsible for promotion within the office.
- Return on investment, the perceived burden, and the lack of an added value were perceived as the main reasons for not making a service CSPA compliant and for not making it available in the catalogue.
- Allocating more funds towards CSPA development and organising boot-camps to develop reusable services was seen as an effective way to increase the availability of services.
- Beside lack of knowledge, integration is still complex for most NSOs and dependencies are often perceived as a blockage to using services developed by others.

The way forward (v)

16. The workshop concluded with a panel session where panellists and other participants determined what the coming year should be delivered by the NSOs in the CSPA community. These were formulated in terms of 'in one year we want to have':

- Finalised the outputs of hackathons and made them accessible
- Some reusable services that are used by multiple NSOs (e.g. a web scraping service)
- Each agency provided and used at least one service
- A living community for each service in the catalogue
- Taken our material and made it accessible (catalogue)
- More reuse of ESSnet services, including beyond ESS community
- Agencies provided a list of candidate services (others can make them reusable)
- Included in the catalogue potential CSPA services (even if not yet compliant) and include a function to enter demand for certain unavailable services
- User ratings, comments and implementation experiences section in the catalogue for each item
- Analysed failures of service reuse, shared lessons learned
- Activated a 'notification' function when updates are available from the catalogue
- Added support for sharing packages
- Started to define what support and maintainability looks like
- 'Solved' the support issue using open source approach
- A methodologist delivered a story with core logic
- Created a methodology library/architecture
- Organized a collaborative boot camp to develop new service
- The 2018 CSPA-World Workshop

16. Presentations and hackathon outputs from the workshop are available at https://statswiki.unece.org/x/OwHsBw