



# Sharing Tools Group Achievements 2019

Modernisation Workshop

*27-28 November 2018, Geneva*



# Sharing Tools Group



- Common Statistical Production Architecture (CSPA)
  - “CSPA Implementation support and responsive to the needs of the statistical community” (ToR)
  - Former CSPA implementation Group
- 25-30 members from 16 Statistical Organisations
- Mode of work:
  - Monthly meetings (plenary and sub-groups)
  - Two Sprint sessions
  - Wiki platform, Slack and Google docs
  - ModernStats World Workshop




- New Zealand - Rosemary McGrath **chair**
- Cambodia - Kimhor Meng
- Canada - Robert McLellan, Flavio Rizzolo
- France - Franck Cotton, Romain Tailhurat
- Poland - Anna Długosz
- Slovenia - Tomaž Speh, Blaž Božjak, Simon Pelicon
- Sweden - Eva Holm, Jakob Engdahl, Hakim Sjöström, Henrik Lönnström

## Members 2018

- Italy - Marco Silipo, Carlo Vaccari, Mauro Bruno
- Mexico - Juan Alfonso Mireles, Juan Muñoz
- Netherlands - Matjaz Jug, Ronald Ossendrijver
- Norway - Trygve Falch
- United Kingdom - Neville Demendonca (ONS)
- United States - Lorna Drennen
- Eurostat - Pierre Peyronnel
- OECD - David Barraclough
- UNECE - Taeke Gjaltema

# Sharing Tools 2018

# What we Learned

- We consulted and engaged with (potential) users at 2017 Wiesbaden workshop and 2018 ModernStats World Workshop
- It made us realize that:
  - CSPA ‘compliance’ was perceived as a barrier 
  - The CSPA Document did not invite to commence with implementation or sharing of services 
  - CSPA Catalogue was not easy to find and to access
  - The work on application architecture patterns (adapters and containerization) simplified the understanding of CSPA as a sharing concept 

# So we



- Listened to and reflected on users' concerns
- Repositioned and restated CSPA as first and foremost: a concept to encourage sharing
- Defined Requirements and Features as the key to increasing shareability
- Improved the CSPA Service Catalogue and increased the availability of services and their documentation (Eurostat&ESSnet)



# Next:

- Application Architecture and Shareability: Requirements and Features (Trygve Falch)
- CSPA Service Catalogue (Pierre Peyronnel)

# Goals

- The CSPA was developed to support the sharing and re-use of tools across statistical domains and between statistical organisations.
- It provides a blueprint for a new way of designing, building and implementing the tools needed to produce official statistics.
- We're still trying to figure out how CSPA can guide statistical organisations to build services that can be shared.

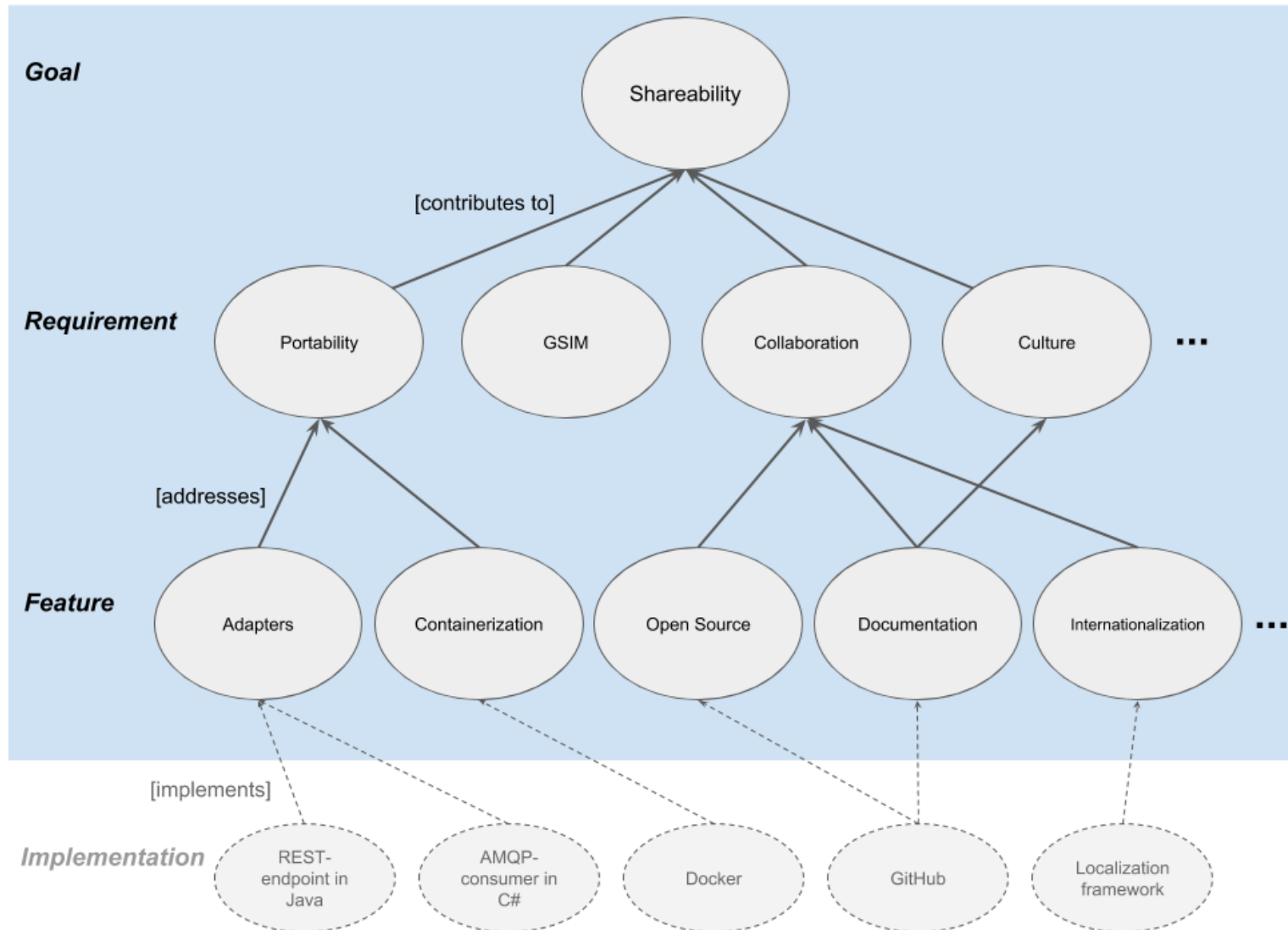




# Application architecture

- Describes the behavior of applications and services used in a business
- Application architecture helps you with how the different applications, components and services works together
- CSPA relies on existing application architecture patterns, and best practices
- We have curated and contextualized different patterns and best practises

# From goal to implementation





CONTEXT IS KING

# Requirements and Context

- The statistical services do not need to serve any kind of process, but they should serve **GSBPM** processes.
- This means that services do not have to process any kind of data, they should just be able to process **GSIM-structured** data.
- This means that services do not have to support any type of organization, but a **statistical organization**
- Make use of existing **technology investments** as much as possible
- Build on the shoulders of giants and use our internal experts to work on the problems that are **specific to statistics**



# CSPA Features

- Services can have one or more features that implement one or more requirements
- Features are the things you need to add to your service to make it more shareable
- Features are more than technical components
- Examples can be Adapters, Documentation, using GSIM, containerization etc.

# Example

## CSPA and java-vtl

**java-vtl** (<https://github.com/statisticsnorway/java-vtl>) is an Open Source Java implementation of the [Validation Transformation Language](#), based on the VTL specification. The implementation follows the JSR-223 Java Scripting API and exposes a simple connector interface one can implement in order to integrate with any data stores. VTL is a standard language for defining validation and transformation rules (set of operators, their syntax and semantics) for any kind of statistical data. The core functionality of java-vtl is to provide a interpreter that can interact with data.

Feature	Comments
F1 Documentation	The java-vtl implementation provides an interactive documentation describing how to use VTL. ( <a href="https://statisticsnorway.github.io/java-vtl/reference/">https://statisticsnorway.github.io/java-vtl/reference/</a> )
F3 Open Source	<b>java-vtl</b> is on GitHub using a permissive Apache 2.0 license.
F4 CSPA Adapters	The connector interface provided with java-vtl makes it easy to implement support for more data sources.
F5 Using GSIM	The internal representation of data uses the part of GSIM that specifies Data structures.





# UNECE HLG Modernstats Workshop

## Sharing Tools Group Service Catalogue

Geneva, 27-28 November 2018

Pierre Peyronnel  
European Commission, DG ESTAT  
Unit A3 – IT solutions for statistical production

## Version 3

- Uses [Liferay](#) for content management
- One single system for public and private (editable) sections of the catalogue
  - Publicly viewable
  - Editable after login
  - Partial self-registration

# Features - Overview

- Grid View as home page with list of available service documents
- 4 tab views
  - **Overview**
  - **Definition (with GSIM inputs / outputs)**
  - **Specification (with GSIM LIM objects for inputs / outputs)**
  - **Implementation (with a sub-tab for M/S/L)**

# Features - Overview

- Criteria filtering
- Visualisation of services by GSBPM layer one (validated/submitted/draft)
- Word cloud search

<http://185.48.35.198/> (working on a human readable domain name)

Link accessible via the [UNECE ModernStats wiki](#)

# Tabs - Overview

*Contains basic information about the service*

- **Service Name**
- **Owner Organisation**
- **Contact Person/Team**

*Intended to be linked to a definition*

# Tabs - Defintion

*Contains GSBPM info*

- **Main Phase**
- **Main subprocess**
- **Other related subprocess covered**

*Contains GSIM objects info for inputs and outputs*

*High-level description and function of the service*

# Tabs - Specification

*Contains info about the owner of the Description*

- **Organisation**
- **Contact Person/Team**

*Contains GSIM LIM information for inputs and outputs*

*Also contains architectural, methodological information*

# Tabs - Implementation

*Contains info about the owner of the Implementation*

- Organisation
- Contact Person/Team

*Contains the more technical information from the CSPA template*

- Protocol
- Interface
- Dependencies...

*Extra tab with M/S/L info*

- Licensing
- Type of Support
- Maintenance and Development information



## What now ?

- *Service owners keeping services up-to-date*
- *Add new shared services (or tools)*
- *Contribute to maintaining the CSPA Service Catalogue technical platform (next slide for contact)*

# Thanks

- The group members for their efforts and commitment
- Rosemary for (odd hours) chairing
- Eurostat for support (catalogue)
- ESSnet (services)
- CSPA & ModernStats World Workshop participants for providing constructive feedback
- Statistics Poland and Romain Tailhurat for hosting sprints



## **We Want You For Sharing Tools**

Contact us to join the Sharing Tool Group:  
Rosemary (chair) [rosemary.mcgrath@stats.govt.nz](mailto:rosemary.mcgrath@stats.govt.nz)  
Taeke (UNECE secretariat) [taeke.gjaltema@un.org](mailto:taeke.gjaltema@un.org)



# Links

- CSPA Service Catalogue (<http://catalogue.shared-statistical-services.org/>)
- Common Statistical Production Architecture Wiki
- CSPA Global Artefacts Catalogue
- CSPA Training, Presentations and Videos
  
- ESS Sharing common functionalities in ESS
- ESTAT ESS SERV [ESTAT-ESS-SERV@ec.europa.eu](mailto:ESTAT-ESS-SERV@ec.europa.eu)