Validation Implementation

Item 2.5 of the agenda
IT Working Group meeting 2016

Eurostat:
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“Implementation of validation solutions is a time consuming process due to the lack of using standards”

The work is influenced by:

- IT driven strategies for validation that can not be implemented easily and sustainable on ESS level
- Business needs are only partially taken into account,
- Case-by-case implementations support stove pipe solutions
- Lack of structured testing, which includes representatives from the whole user community.
- No service approach for validation solutions
- Current solutions consume to many resources (maintenance, frequent release updates, local installations, training, guidelines which are customized)
Introduction of a service approach in a validation architecture:
- Structured Validation
- Content Validation
...

ESS Vision Implementation
- SERV
- ESSnet SERV
- ESDEN

ESS VIP Validation
- Recommendations
- Updated tools

Global developments and standards
- CSPA recommendations
- SDMX

Use existing solutions as a service:
- EDIT
- SDMX converter

Generic Use case
- NAPS-S project
EVUG Validation discussions feedback

(A) EDIT general: recommendation of the SISAI (IT WG) to further analyse the local EDIT server alternative. Eurostat will do this but align it with the ongoing developments of generic validation services.

(B) EDIT alternatives: Situation in Member States
- No cohesion in Member States, no preferred scenario to early to decide, might be a mixed need
- Common Validation language is needed to express validation rules
- Positioning of validation services in the business process needs to be well described

(C) Action for Eurostat to support EVUG detailed reporting on EDIT:
Set up an EUsurvey (for EVUG) concerning this subject allowing EVUG participants to discuss with colleagues inside the Target: July/August 2016. Results to be reported and discussed in EVUG 2016.
ESS.VIP Validation – IT enablement

Medium-term goals:
- Ensure transparency of validation procedures
- Enable sharing and re-use of validation services

Scenarios:
1. Common rules
2. Common services
3. Common processes

What IT solutions do we need to enable this?

ITERATIVE APPROACH:
- Build new services
- Reshape old ones
... until the IT landscape supports the new business architecture
Validation Services

![Diagram showing validation services and their components]

- Validation rule Graphical User Interface (GUI)
- Data Structure Registry (e.g. SDMX registry)
- Validation Rule Registry
- Structural Validation Service
- Content Validation Services
- Validation syntax
Scenario 1 – Common Rules

- ESTAT is developing Validation Rule GUI Prototype:
  - Store VTL rules and rulesets
  - Graphical User Interface
  - Service Interface

- Further IT developments could be performed by Member States (or ESSnets)
Scenario 2 – STRUVAL

- Validates the structure of SDMX compliant data
- Based on CSPA
- Used in NAPS-S
- Web-service
- UI is being developed
Scenario 2 – CONTVAL

- Validation Levels 2+
- Will be used in NAPS-S
- Will be developed according to CSPA
- ESTAT started the service definition
- First version will be based on EDIT
Scenario 2 – Changes to EDIT

• Building service-oriented interface (e.g. for CONTVAL)

• Allowing secure data transmission to the validation system (EDIT) – being developed

• Plans for later: Assessment of adapting EDIT to VTL
Scenario 3 – Common Processes

Steps towards integrated data submission and validation:

- Validation feedback via EDAMIS Back-channel
- Using Comments field
- Planned – allowing validation before transmission in EDAMIS

Comments: Your transmitted file ASYLUM_A05_Q_DK_2016_0001_V0001.csv has been validated by Eurostat with outcome: ERRORS FOUND. Your file will not be disseminated. Please consult the validation report available in EDAMIS and re-transmit the revised data after correcting the errors. If necessary please contact Eurostat.

Feedback file name: ASYLUM_A05_Q_feedback_298863.CSV

Data Transmission Info:
Dataset: ASYLUM_A05_Q
Datafile name: ASYLUM_A05_Q_DK_2016_0001.csv
In summary:

The view on validation is changing towards a more holistic approach taking as a basis a generic validation architecture that allows to implement validation services step by step when using international standards for defining the services.

This includes the usage of existing solutions for validating data and in the same time allows to introduce new generic solutions supporting validation like the VTL language.