THE ESSNET VALIDAT INTEGRATION

Towards a common validation infrastructure for the European Statistical System

Work Sessions on Statistical Data Editing,
Den Haag, 24.-26.04.2017
Some motivation…

NSI

Do it again!

Eurostat

Data

Rule(s) ✔

Data

Data

Rules ✗

Data
Is there a better way?

NSI

Great, thanks!

Eurostat

Data

Rules

Data

copy

Rules

copy

Rules

Data

copy

Data
Four Pillars

- Methodology
- Data structures
- IT infrastructure
- Dissemination

Work Packages

Basis: ESSnet ValiDat Foundation
Methodology Handbook

\[ d(x, y) = \|x - y\| \]

\[ d(a, c) \leq d(a, b) + d(b, c) \]

\[ d(m, n) = \begin{cases} 1, & m \neq n \\ 0, & m = n \end{cases} \]
Metrics – what for?

Metrics

Valuation rules → analyse

Validated data + Validation report → improve
Data Validation

Raw Data

Validation Rules

Validation

Validated data

Validation Report
Validation Report

|a|=1
Flag ≠ True
Country=DE
Sum(a,b)>a+b

machine readable

human readable

Information Systems
Data Editing Systems
...

Stakeholders
Management
Domain
IT
...

Style
IT infrastructure (1)

Data → Validation → Validated data → Eurostat

NSI
IT infrastructure (2)

ESS service platform

Eurostat
- Service A
- Service B

NSI 1
- Service C
- Service D

NSI 2
- Service E
- Service B'

NSI 3
- Service A'
- Service E'
Scenarios (1)

ESS service platform

- Rules Registry
- Data Structure Registry

Validation 1
Validation 2

Raw data -> Service Bus
Validated data

NSI
Scenarios (2)

ESS service platform

- Rules Registry
- Data Structure Registry
- Validation 3

Raw data

Service Bus

Validation 1

Validation 2

Validated data

NSI
Scenarios (3)

ESS service platform

- Rules Registry
- Data Structure Registry
- Validation 1
- Validation 2

Service Bus

Raw data

Validated data

NSI
Cost-Benefit analysis

Hard cost vs. “soft” cost

Different Stakeholders – different cost drivers.

Every snowflake is unique. So are NSIs.
Cost-Benefit analysis

Land of Common Validation
More information?

Visit us on CROS!
https://ec.europa.eu/eurostat/cros/content/essnet-validat-integration_en

Write an e-mail!
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Come to the regional conferences!
Questions?

- Den Haag, 11.-12.01.2018
- Vilnius, 01.-02.02.2018
- Belgrade, 22.-23.02.2018
- Lisbon, 13.-14.11.2017