INSPIRE harmonization experiences by Statistics Netherlands

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EFGS Dublin, November 2nd, 2017

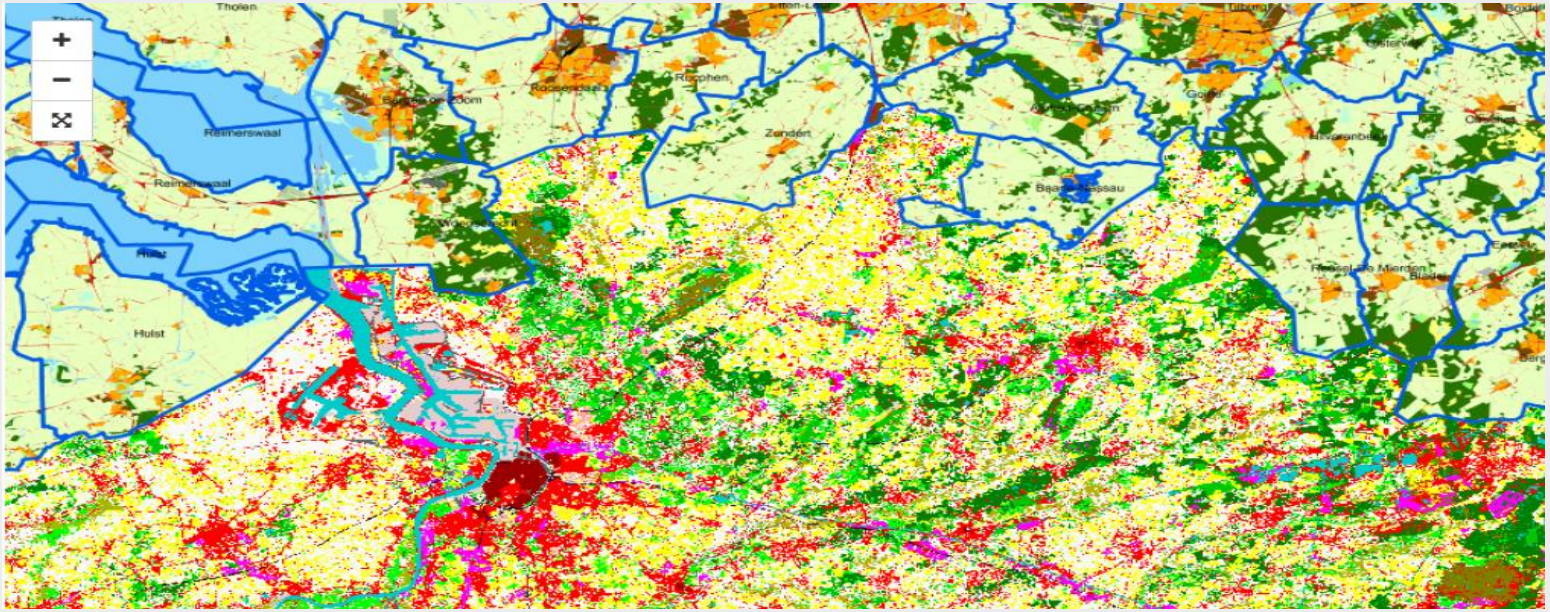
Statistics Netherlands

Why INSPIRE?

- Better data interoperability throughout Europe
  - Findable
  - Available, as open as possible
    - Viewable
    - Downloadable
- More usage of the data
- When harmonized, cross boarder mapping becomes possible

Why INSPIRE?

Netherlands



Belgium

INSPIRE in the Netherlands

- Geonovum coordinates responsibility for INSPIRE themes

- Statistics Netherlands is considered responsible for:
  - Statistical Units, SU
  - Population Distribution, PD
  - Human Health, HH
  - Land Use, LU

Harmonization

Fitting data into INSPIRE data models

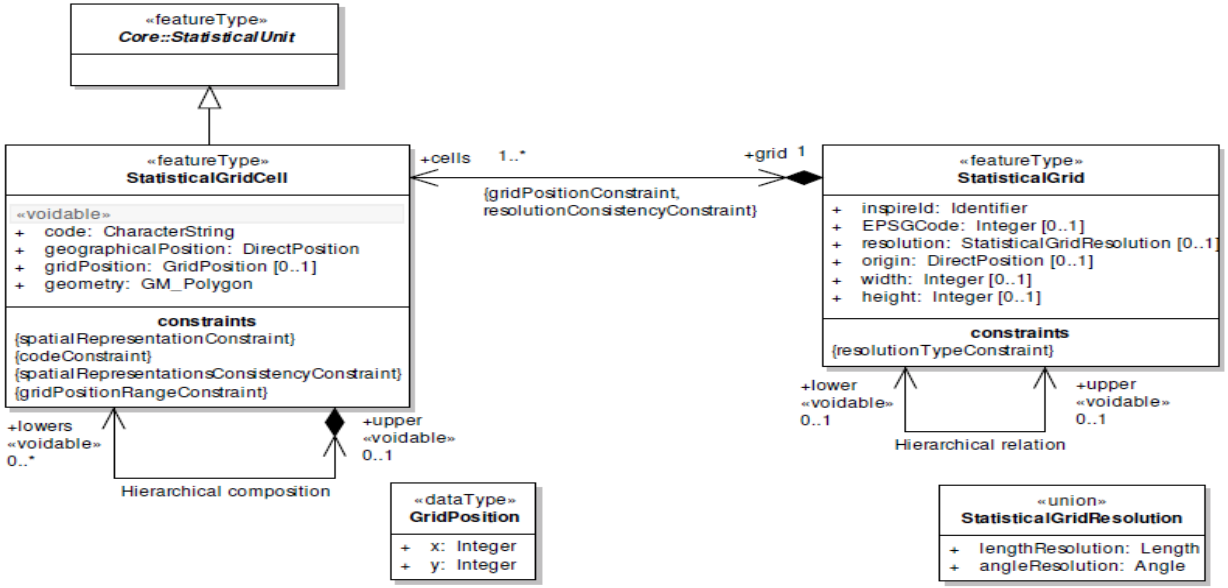
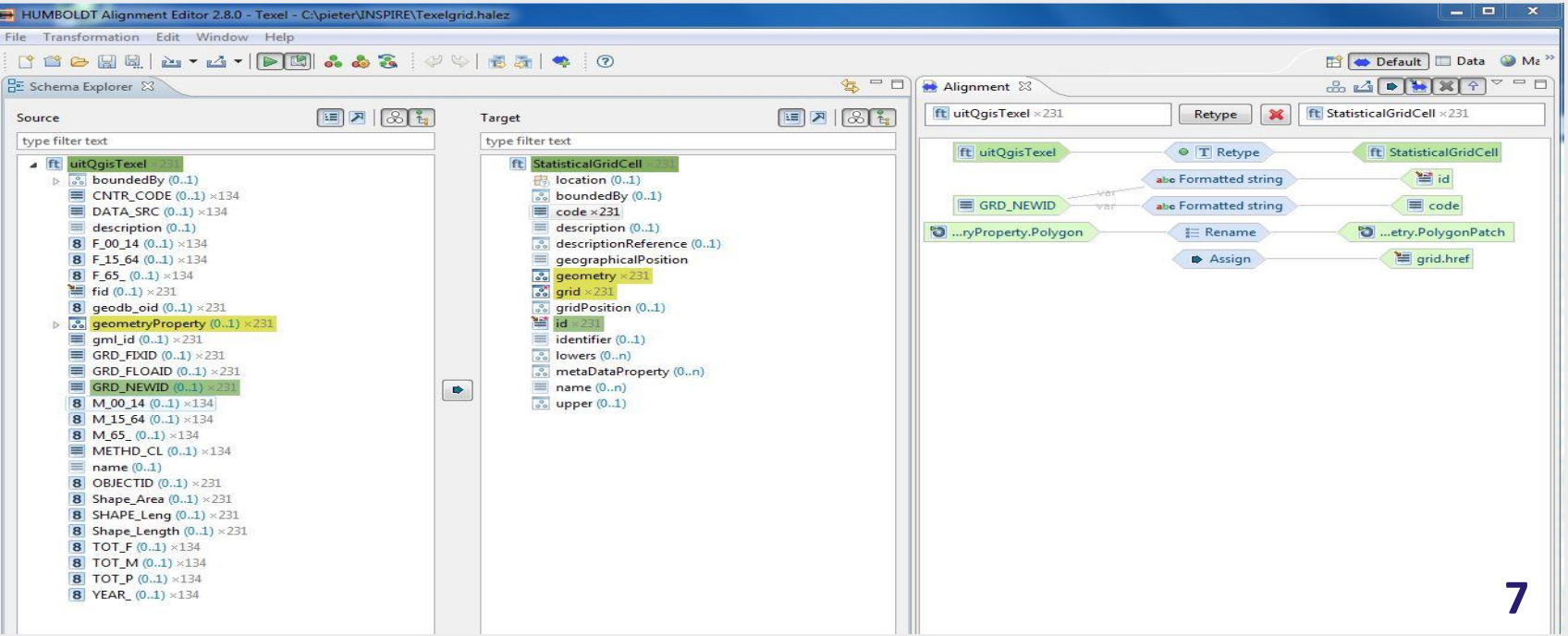


Figure 5 - UML class diagram of the Grid package

Define transformation with HALE



Vector Statistical Units

As Is: 23 years X 20 types of units makes 460 layers

SU-vector model: only one layer is accepted and there is no SU-type field to separate them.

How to filter them out as a user?

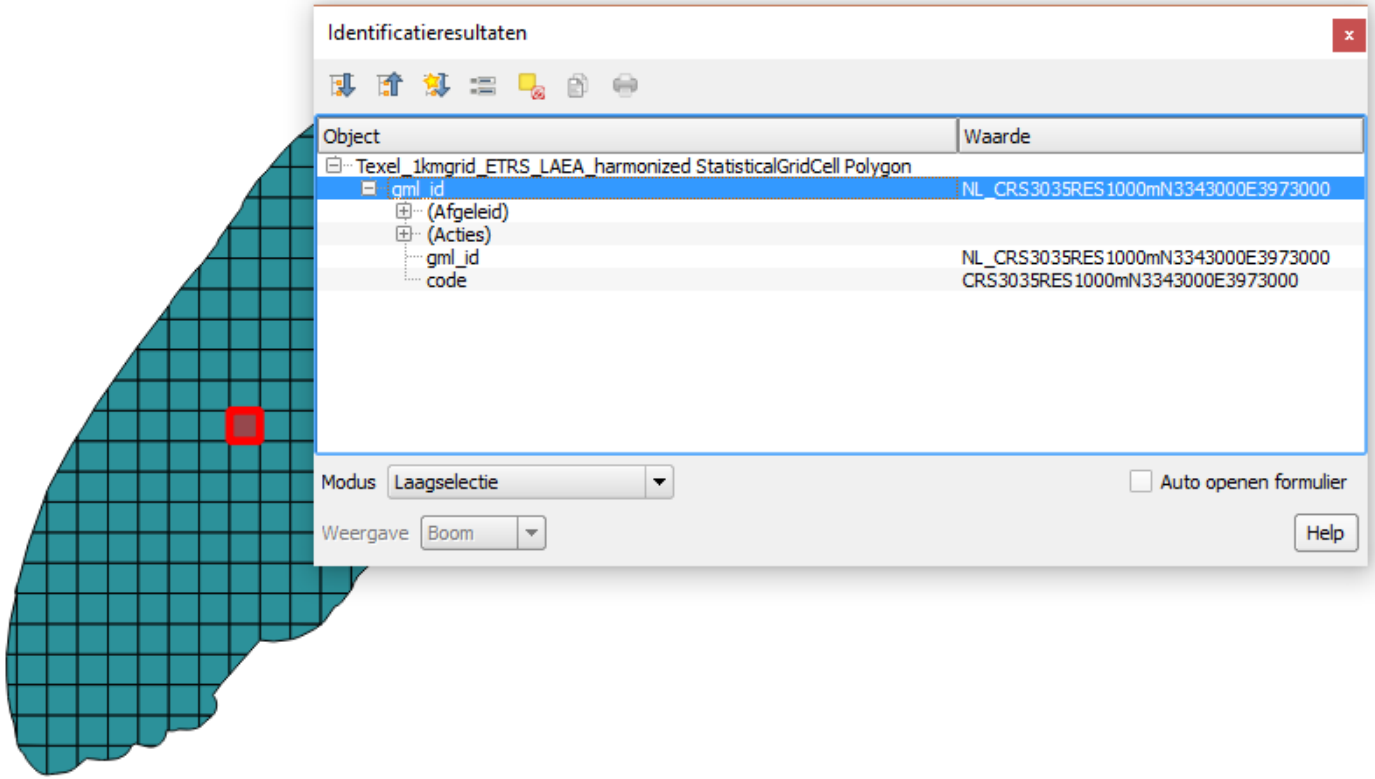
- Misused tessellation attribute in AreaStatisticalUnit
- We might start using stored queries
- Group layers → validation error

Result:
https://geodata.nationaalgeoregister.nl/inspire/su-vector/wfs?

SU GRID

- In Geostat 3 we are testing the SGF on census 2021 grid
- Can’t us As Is grids, because they are in local projections
- So we used 1km2 grids in LAEA shape files: http://www.efgs.info/data/
- Result: Harmonized GMLs for 7 of the participating countries.
- Geoservices (WMS, WFS) are expected by the end of this year.

SU-Grid Harmonized



Population Distribution and Human Health

Problem: No geometry results in useless GML-files

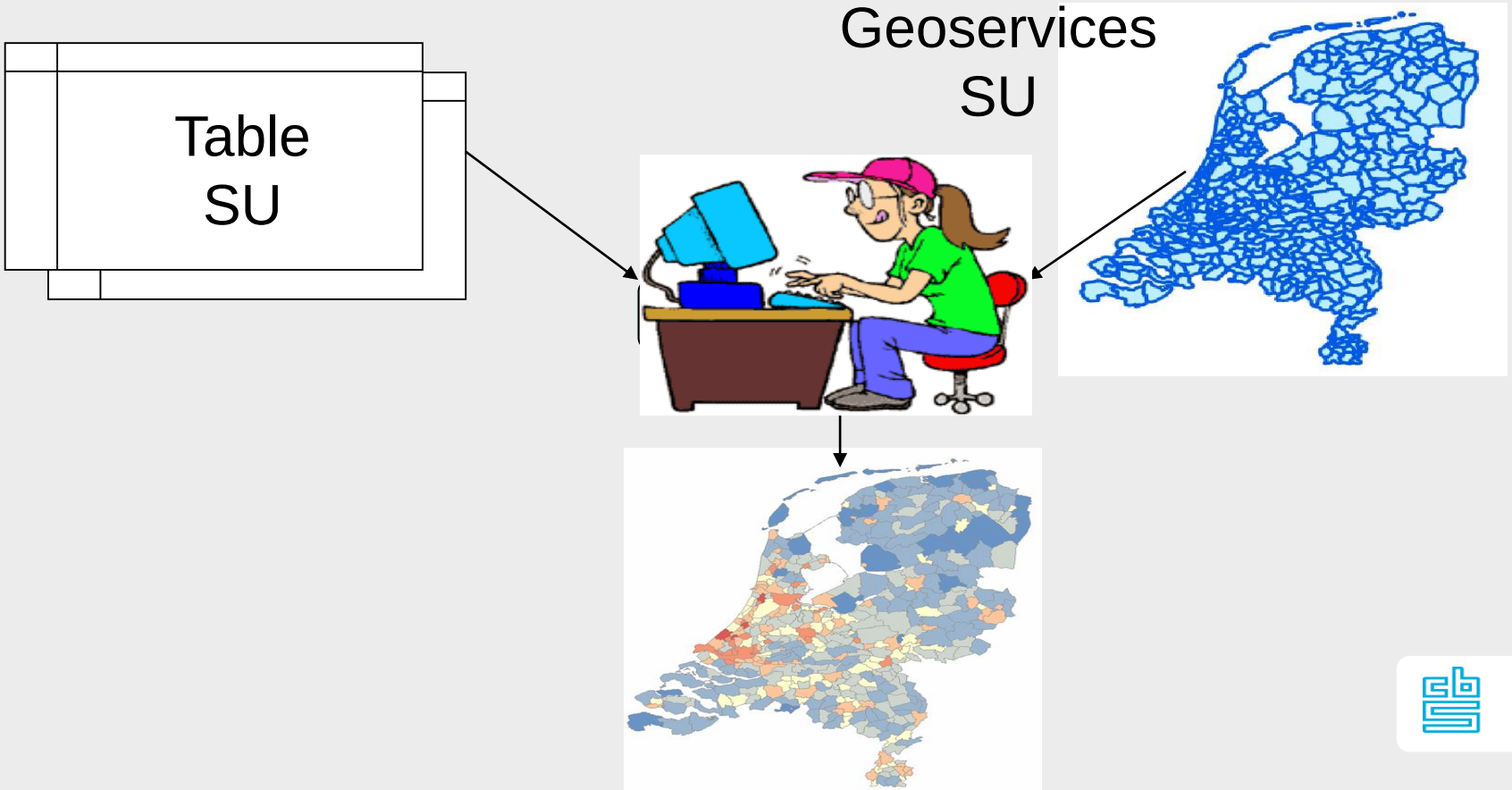
Why not use SDMX files as we already deliver to Eurostat?

– They are already harmonized: semantically and technically
– They are machine readable: http://ec.europa.eu/eurostat/web/sdmx-web-services
– It would save all European Statistical offices a lot of money

Only for new data sets it makes sense to use PD model

- But…. Stick to SDMX for encoding
- Census 2021 grid is a good example

Table Joining Service



Motivation

- No unnecessary copies of data. Data remains at its source.
- Actuality is higher, because table updates can be made visible directly in the online maps
- Too large amount of tables to create maps in advance ➔ so why not create online maps on demand with TJS
- Interoperable with existing INSPIRE services and standards
- Online mapping becomes available for non GIS-specialist when applied in user-friendly applications.

Conclusions

- SU-vector needs a type attribute or group layers should be possible.
- We should continue using existing SDMX services for PD and HH instead of re-harmonizing them
- We need tools like a TJS to join PD and HH with SU to make INSPIRE useful for geo-minded statistical users