Federal Agency for
Cartography and Geodesy

INSPIRE implementation: Example of DLM250

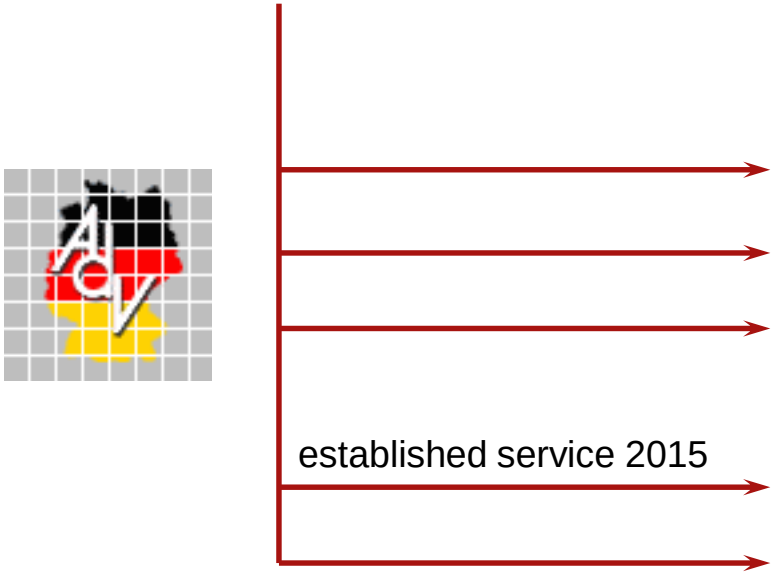
Federal Agency for Cartography and Geodesy (BKG)

Agenda

- Source data
- Transformation process
- Service
- Result

Source data

- German AAA DLM250
  - Digital Landscape Model
  - Scale: 1:250 000
  - Schema: AAA Model



INSPIRE Themes Annex I
Addresses
Cadastral parcels
Geographical grid systems
Hydrography
Transport networks
Administrative units
Coordinate reference systems
Geographical names
Protected sites

Transformation process

AFIS ALKIS ATKIS

EuroGeographics

ELF EUROPEAN LOCATION FRAMEWORK

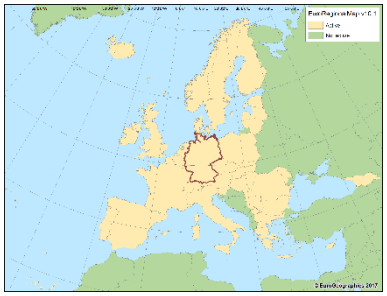
INSPIRE Infrastructure for Spatial Information in Europe

DLM250

FME + manual work

Well established process

ERM/EBM



German part of European Topographic dataset 1:250 000

FME

new

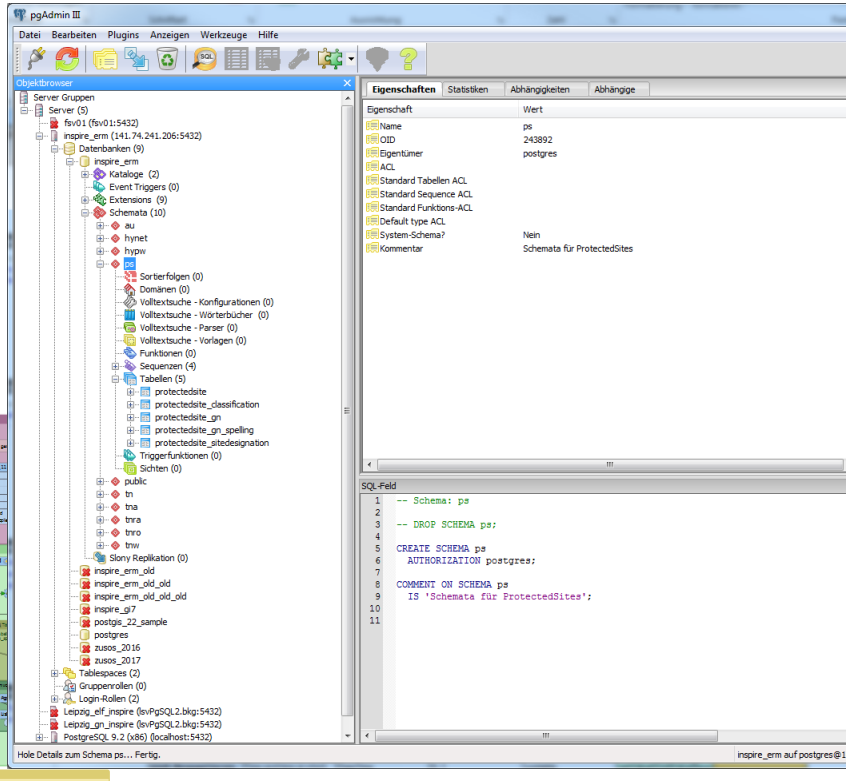
INSPIRE and ELF

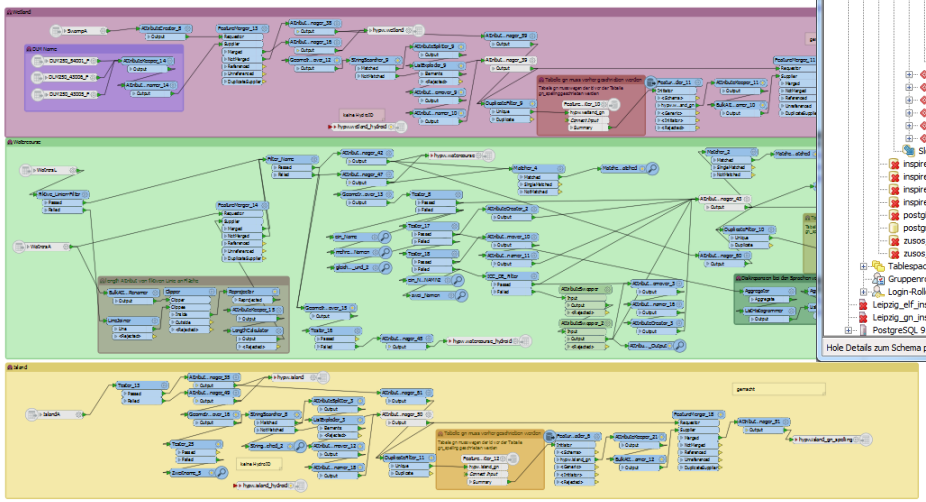
Transformation process

- Preliminary work to derive INSPIRE from ERM
  - ELF project http://www.elfproject.eu/
    - Objective:
      - European Location Framework (ELF) to provide up-to-date, authoritative, interoperable, harmonized cross-border, reference geo-information for use by the European public and private sectors
      - Practical implementation of INSPIRE compliant geo-information
    - Technical work performed
      - UML schema
      - SQL queries out of GoPublisher from Snowflake
      - Mapping Tables (generated from INSPIRE schema)

Transformation process

- Implementation with FME
  - Source: ERM v10.1+ EBM v11
  - Destination: PostGIS database with INSPIRE and ELF schema
  - Themes: TN, HY, AU, PS, GN





Service

- BKG-INSPIRE Services based on deegree
- What is deegree?
  - Open source software for spatial data infrastructures and the geospatial web
  - Implements geospatial webservice specifications of the OGC and the INSPIRE Network Services
- Why deegree?
  - Implements WFS standards (INSPIRE download services)
  - Designed for rich data models
  - Flexible mapping of GML application schemas to database models
  - Fits in BKG infrastructure

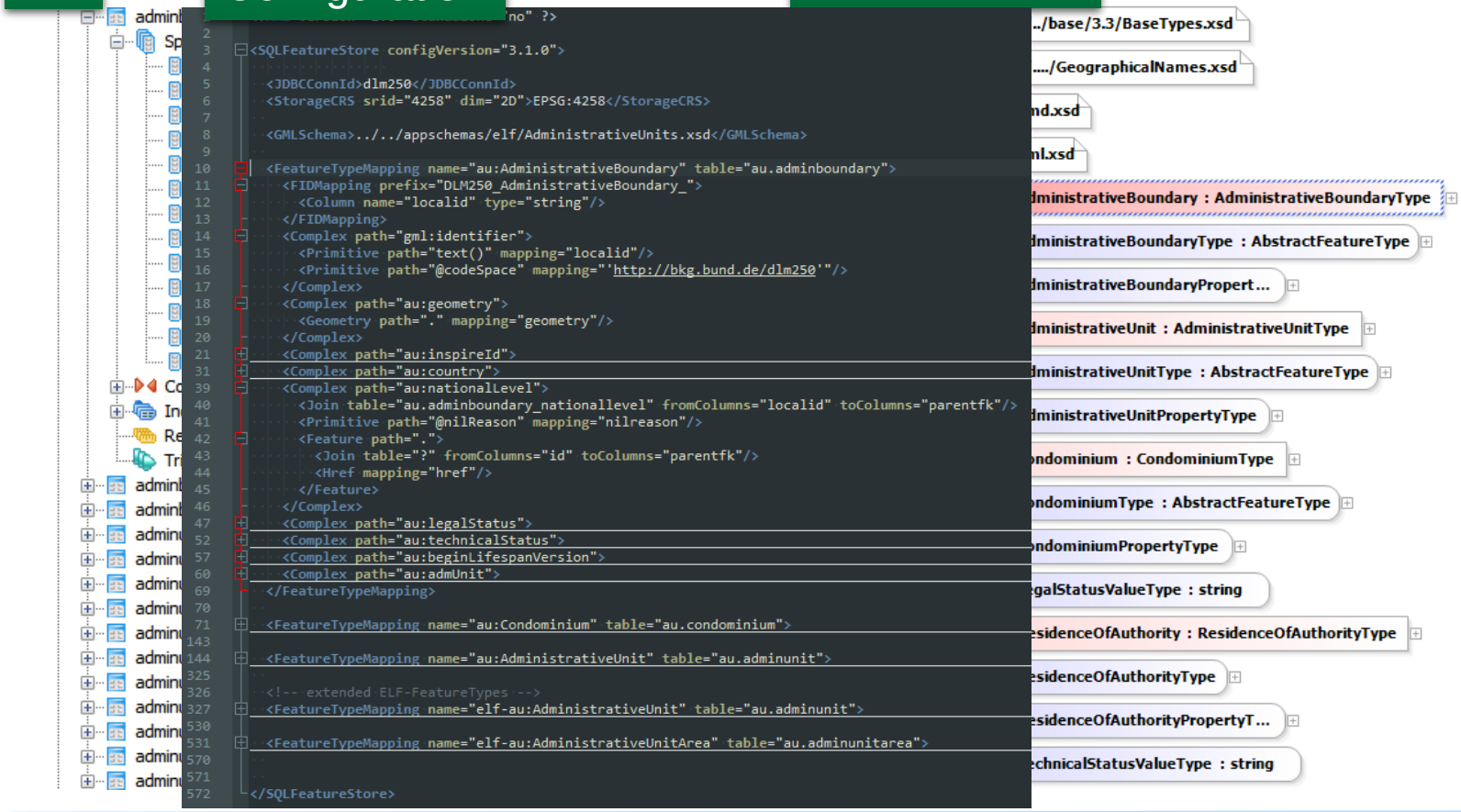
Service

Mapping configuration

DB

Configuration

GML-Schema



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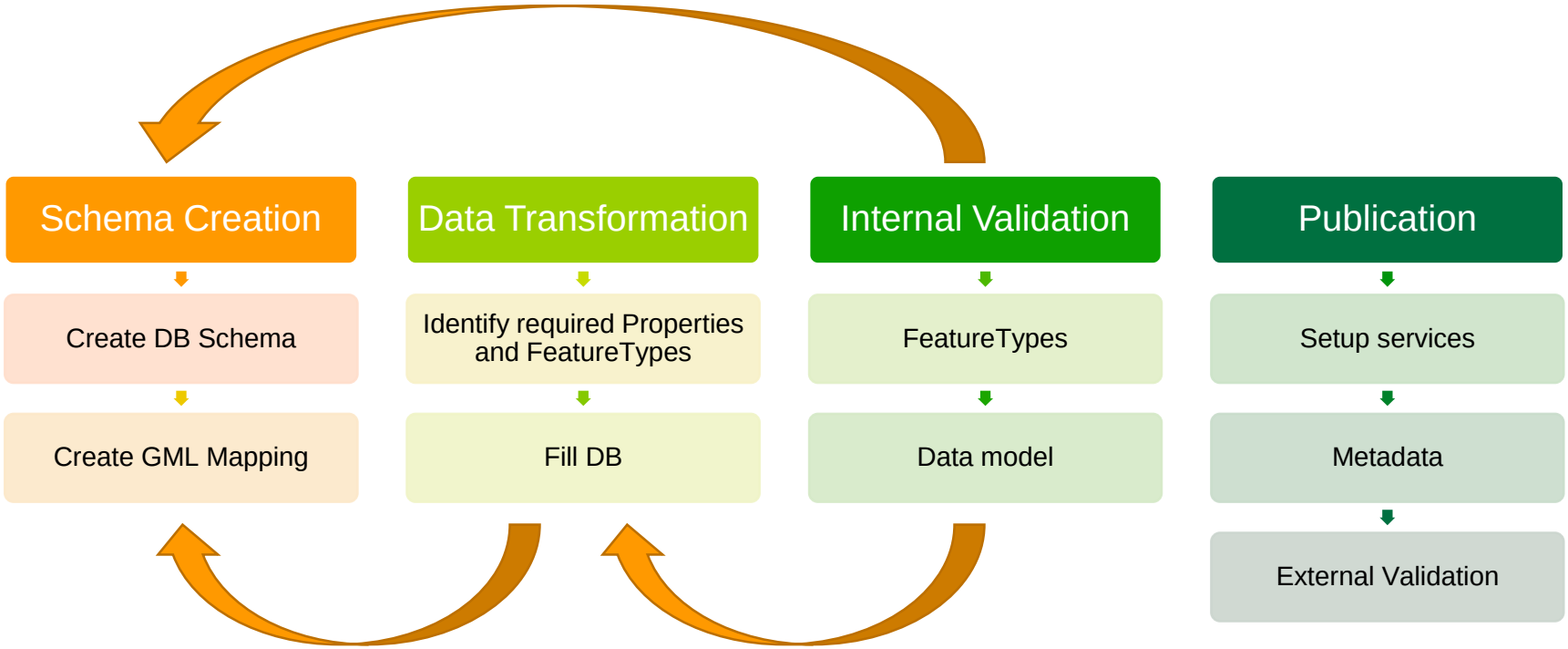
Service

Implementation process



Result

- Data transformation for Annex I in DLM250 complete
- WFS DLM250 online
  http://sg.geodatenzentrum.de/wfs_dlm250_inspire?SERVICE=WFS&REQUEST=GetCapabilities
- Finalized metadata records
- Next steps and open issues
  - External validation
  - Validate and optimize performance
  - Transformation and services for other products and Annex themes

Thank you for your kind attention!

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