



Op weg naar INSPIRE

Ontwikkeling tbv INSPIRE binnen Het Kadaster

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kadaster
feitelijk verrassend

Onderwerpen

- Wat is er gedaan ?
- Aanpak
- Resultaten
- Conclusies
- Demo
- Vragen



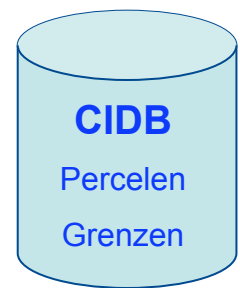
Wat is er gedaan ?

- Ontwikkeling technische aanpak INSPIRE
- Demonstraties met werkende prototypen
- Participatie in consortia
 - EURADIN en ESDIN
- Opzetten Open Source INSPIRE community
 - www.inspire-foss.org
- Input vervolg ontwikkeling binnen PDOK

INSPIRE - De Keten



INSPIRE Prototype - Overzicht



Brondata

Transformatie

Projectie

Schema

Opslag

Database

Web Services

WMS/WFS/CSW

Visualisatie

Webclient

Prototype

**Cadastral
Parcels (CP)**

**Administrative
Units (AU)**

**Addresses
(AD)**

**Geographical
Names (GN)**

**Transport
Networks
(TN)**

**Hydrography
(HY)**

INSPIRE GML + Web Services

INSPIRE Prototype - FOSS Componenten

- **Transformatie**

- Projectie: GDAL/OGR - www.gdal.org
- Schema: XSLT

- **Opslag**

- PostgreSQL/PostGIS

- **Web Services**

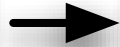
- deegree WFS/WMS - www.deegree.org
- GeoServer WMS - www.geoserver.org
- GeoNetwork CSW

- **Visualisatie**

- OpenLayers/GeoExt

INSPIRE Prototype - De Keten

Kadaster Data
(Oracle)



Extract
Transform
Load (ETL)



INSPIRE Data
(PostGIS)



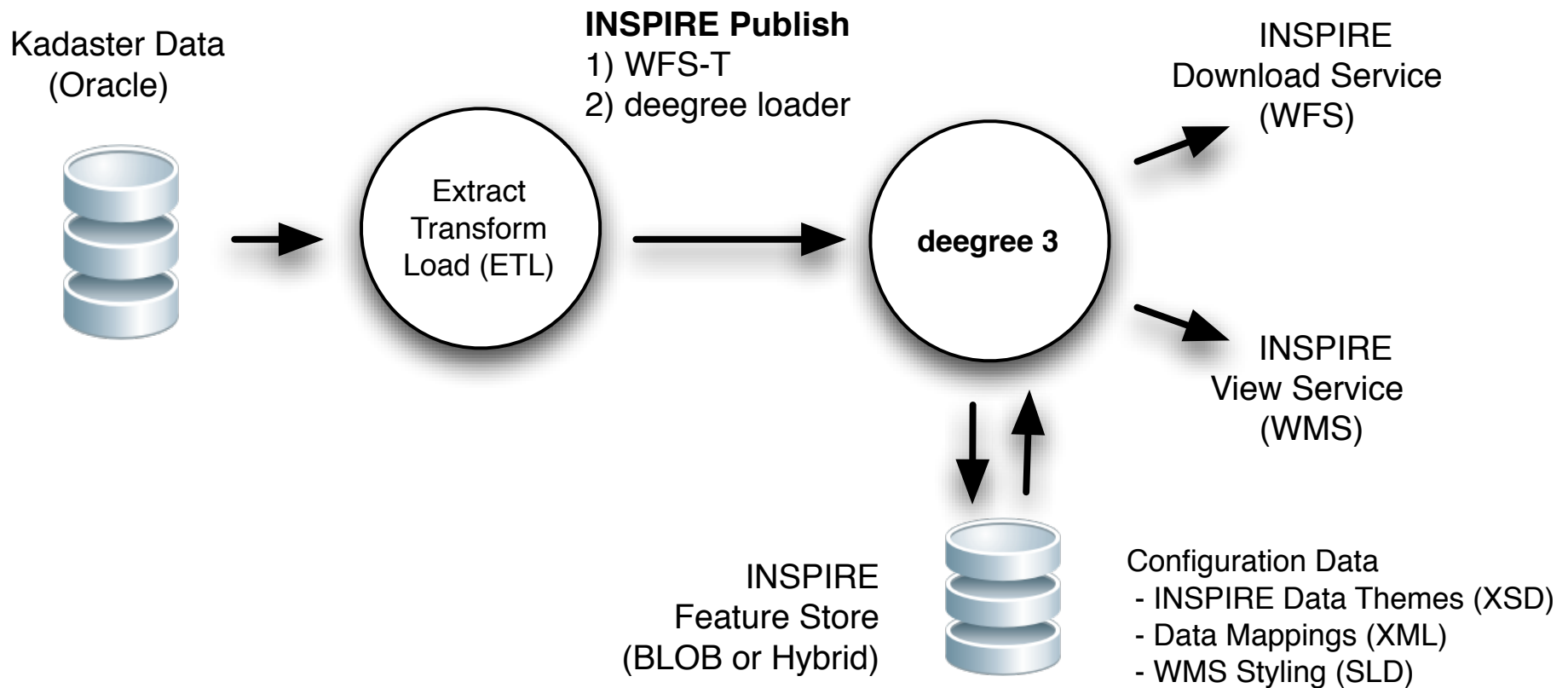
Web
Services:
WFS,
WMS,
[WPS]



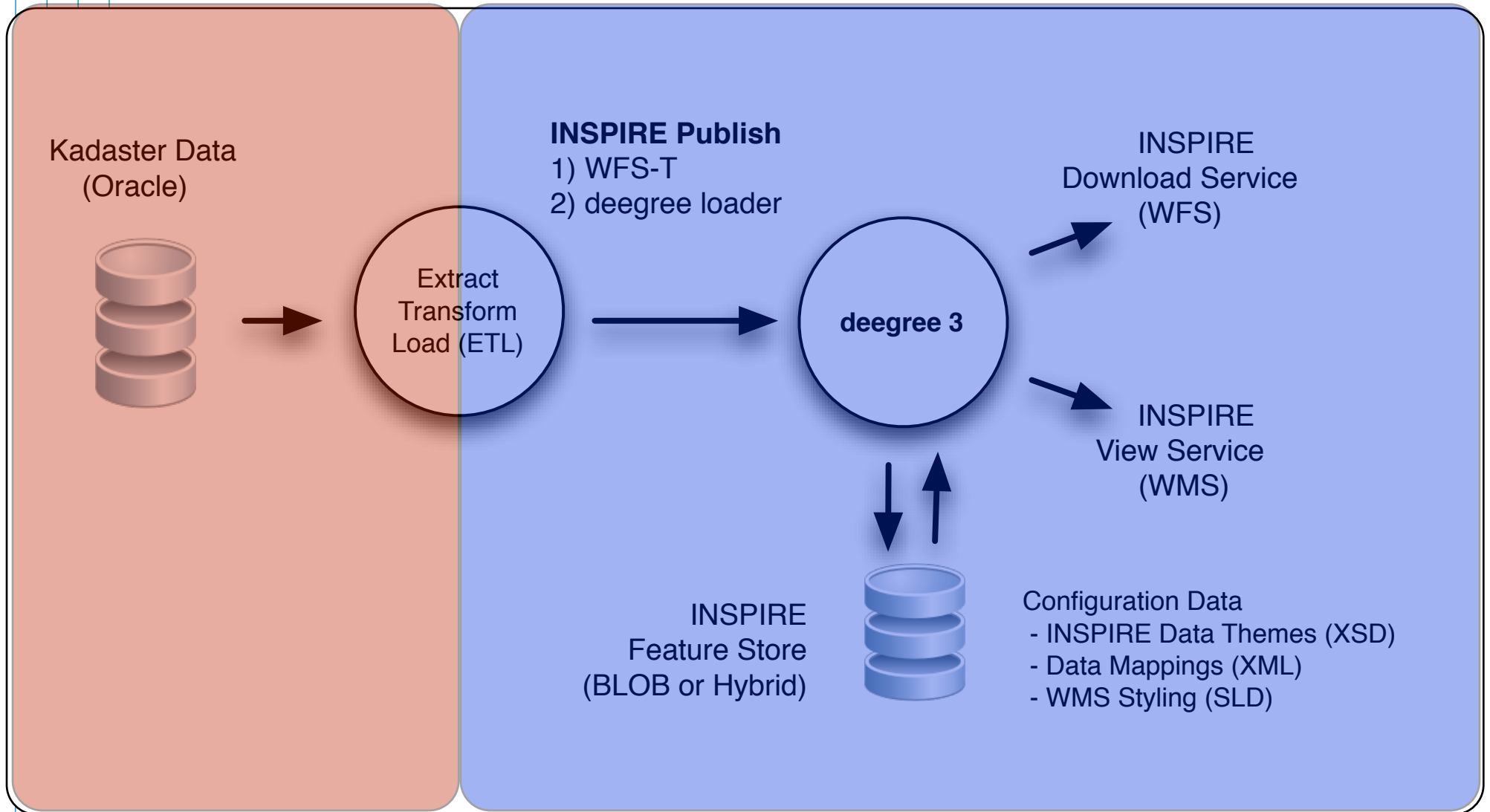
INSPIRE
Download
&
View
Services

Offline Transformation
(Model+Coordinates)

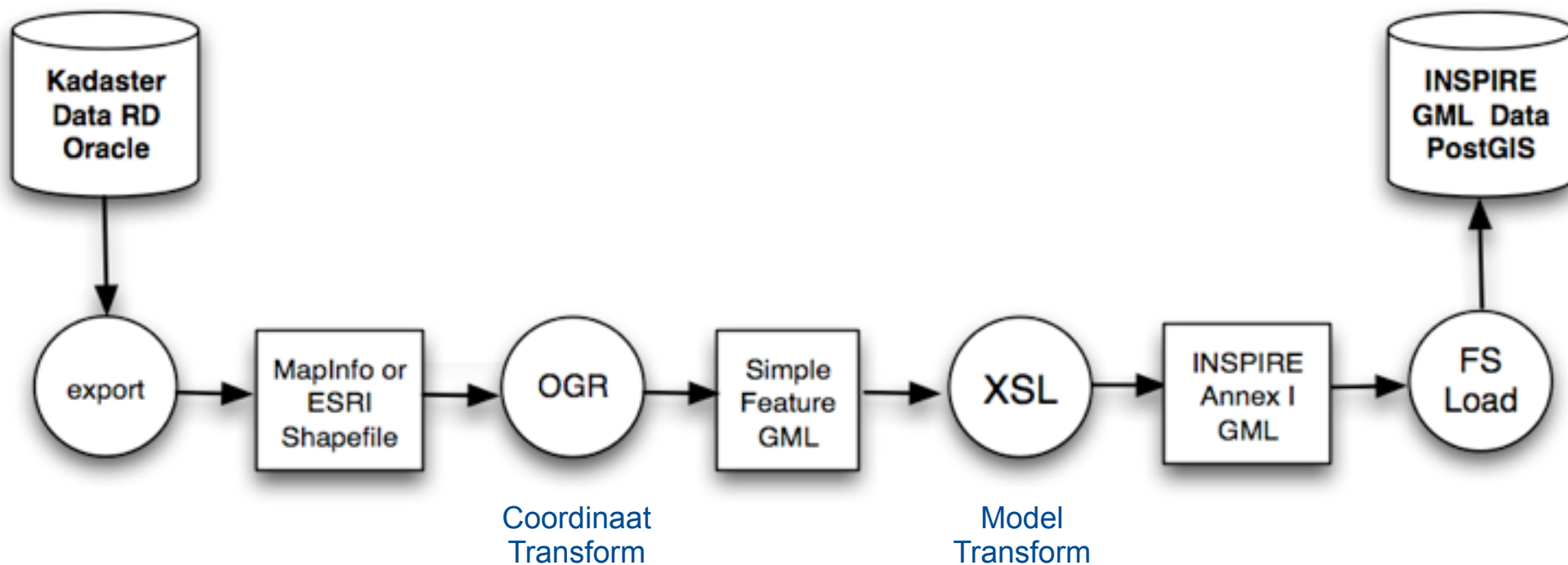
INSPIRE Prototype - Concept



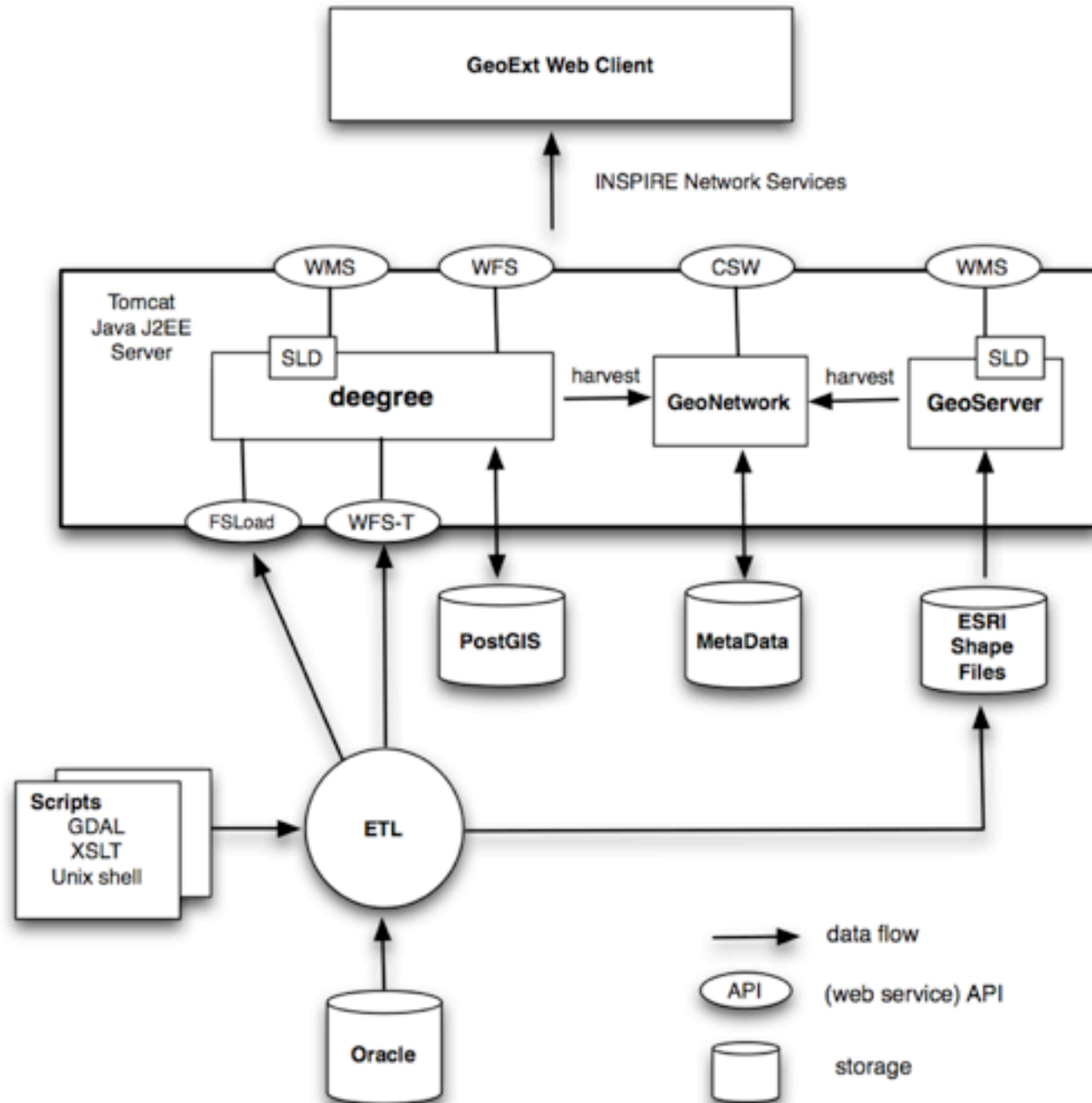
INSPIRE Prototype - Concept - REUSE



INSPIRE Prototype - ETL Keten



INSPIRE Prototype - Totaal Architectuur



INSPIRE Prototype - Testen en Validatie

- XML/GML Schema Validator
- deegree validates GML on import
- ESDIN WP12 Tester
- deelname in ESDIN WP11 interoperability tests

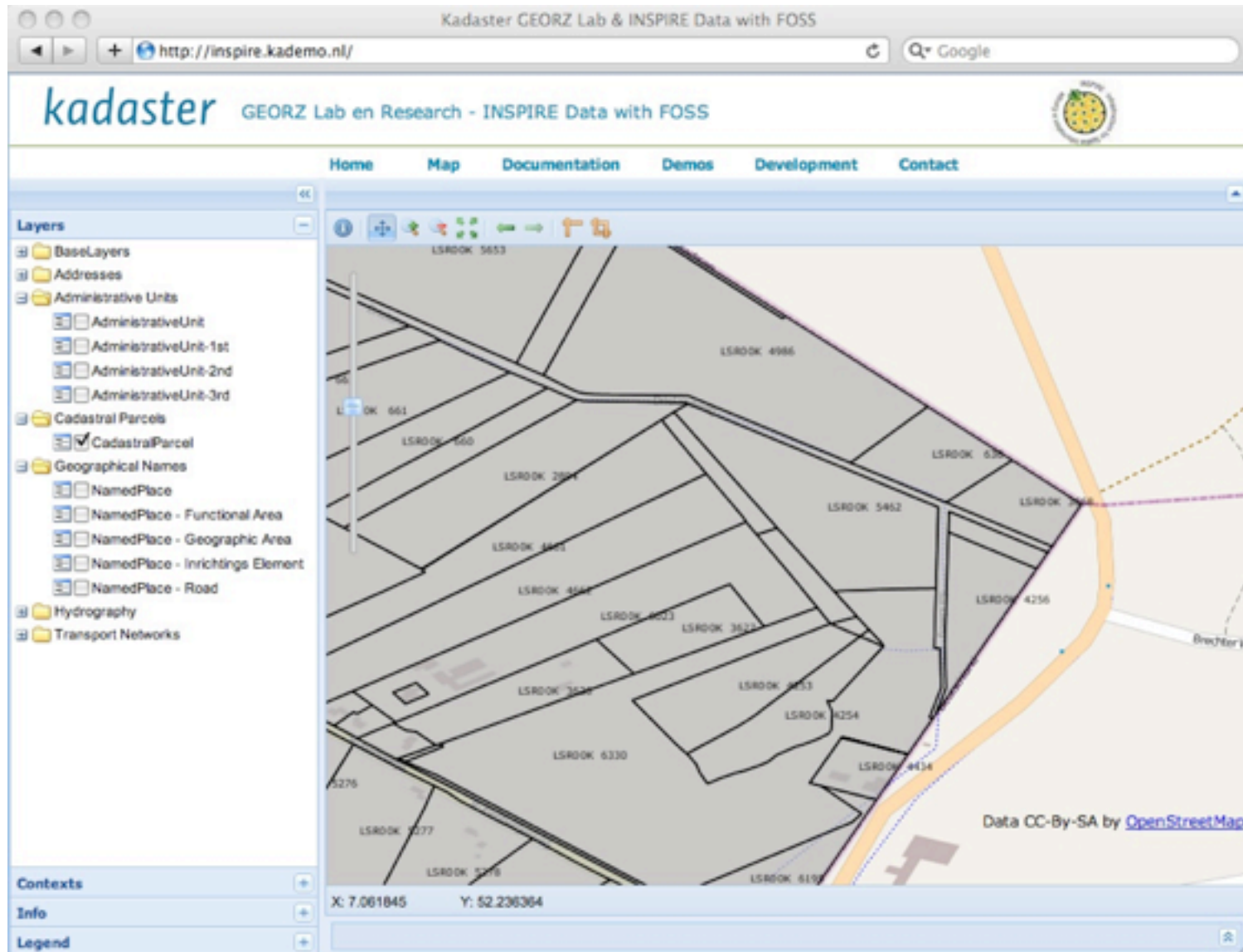
Belangrijkste issues

- axis/ordering (lat/lon vs lon/lat)
- multiple encoding options (e.g. srsName)
- confusion of optional elements

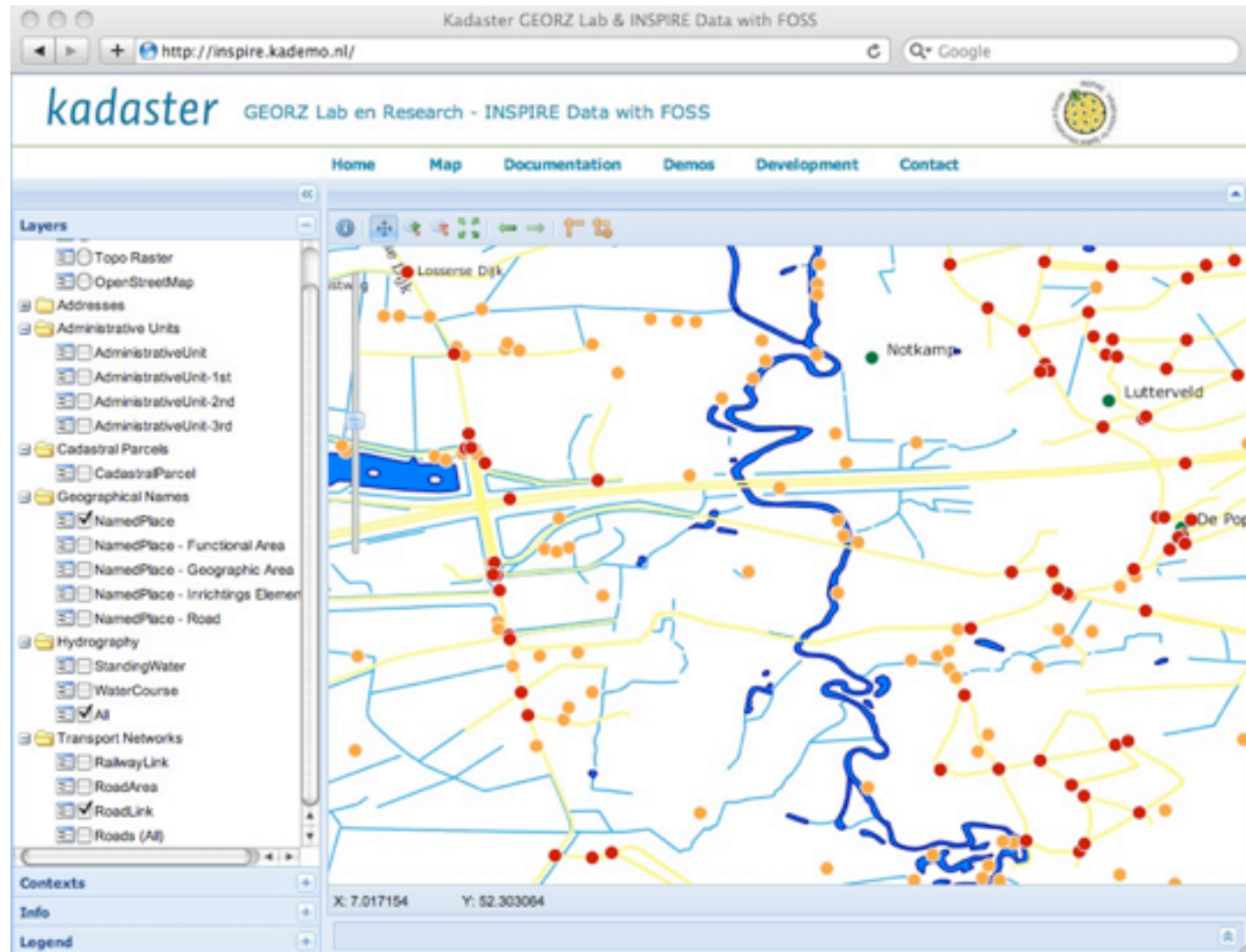
INSPIRE Prototype - Viewer

- Web-gebaseerde viewer
- Javascript framework dmv standaard componenten
 - OpenLayers
 - GeoExt
 - Ext JS
- Open Source
 - zie <http://code.google.com/p/geoext-viewer/>
- Wordt ook gebruikt voor de ESDIN en Kademo viewer

INSPIRE Prototype - Viewer



INSPIRE Prototype - Viewer



INSPIRE Prototype - Viewer

The screenshot displays a web browser window titled "Kadaster GEORZ Lab & INSPIRE Data with FOSS" at the URL "http://inspire.kademo.nl/". The page features the "kadaster" logo and the text "GEORZ Lab en Research - INSPIRE Data with FOSS". A navigation menu includes "Home", "Map", "Documentation", "Demos", "Development", and "Contact".

The main interface is divided into several sections:

- Layers Panel:** A list of layers on the left side, including:
 - BaseLayers
 - Blanc
 - Topo Raster
 - OpenStreetMap
 - Addresses
 - Administrative Units
 - AdministrativeUnit
 - AdministrativeUnit-1st
 - AdministrativeUnit-2nd
 - AdministrativeUnit-3rd (checked)
 - Cadastral Parcels
 - Geographical Names
 - Hydrography
 - Transport Networks
- Map:** A central map area showing administrative units with labels such as "Oosterhout", "Dongen", "Loon op Zand", "Tilburg", "Gilze en Rijen", "Alphen-Chaam", "Goirle", "Bearlo-Randstade", and "Hilvarenbeek". A vertical scale bar is visible on the left side of the map.
- Contexts Panel:** A panel at the bottom left with expandable sections for "Contexts", "Info", and "Legend".
- Coordinates:** A status bar at the bottom center showing "X: 5.003412" and "Y: 51.404564".

INSPIRE Prototype - Links

- Startpagina en Viewer
 - <http://inspire.kademo.nl>
- Documentatie
 - <http://inspire.kademo.nl/doc>
- Code (services)
 - <http://code.google.com/p/inspire-foss>
- Code (viewer)
 - <http://code.google.com/p/geoext-viewer>

<http://inspire-foss.org>

Bevindingen

INSPIRE implementatie vormt een grote uitdaging !

- Complexiteit INSPIRE richtlijnen (GML!)
 - interpretatie/conformance van/aan de richtlijnen
 - veranderende richtlijnen
 - venijn in details (bijv. GML encodings)
- Software producten zijn nog volop in ontwikkeling
- Conformance garandeert geen interworking

Aanbevelingen

Gebruik Open Source componenten

- Geo FOSS meer afgestemd op standaarden
- Integratie is key
- “Solve your own problems”
- Hulp uit communities

Doe het niet alleen !

- Sluit je aan bij communities
- Q/A op mailing lijsten
- Delen broncode/voorbeelden
- Interoperability tests

<http://inspire-foss.org>

