

A photograph of a paved road with a yellow center line and white side lines, stretching into the distance. The road is flanked by dry, yellowish-brown grass. The sky is bright blue with scattered white clouds.

IMPLEMENTING INSPIRE WITH FOSS4G

A Success Story

AGENDA

- INSPIRE - Intro & Challenge
- INSPIRE - Implementation with FOSS4G
- Success Stories
- Getting Involved

Just van den Broecke

Just Objects

www.justobjects.nl

just@justobjects.nl

Dutch Kadaster - GEORZ Lab



www.kadaster.nl
Ebrahim Hemmatnia
Ko van Raamsdonk

INSPIRE - TECH VIEWPOINT

- European SDI spec
 - Services
 - (Meta)data



INSPIRE - WHAT



INSPIRE - DATA THEMES

Annex I	Annex II	Annex III
<ul style="list-style-type: none">• Coordinate reference systems• Geographical grid systems• Geographical names• Administrative units• Addresses• Cadastral parcels• Transport networks• Hydrography• Protected sites	<ul style="list-style-type: none">• Elevation• Land cover• Orthoimagery• Geology	<ul style="list-style-type: none">• Statistical units• Buildings• Soil• Land use• Human health and safety• Utility and governmental services• Environmental monitoring facilities• Production and industrial facilities• Agricultural and aquaculture facilities• DemographyEtc.

INSPIRE - CHALLENGES

Advanced ISO/OGC Standards

WFS 2.0 WMS 1.3.0

Complex Application Schemas: GML 3.2.1

Transforming local source data

```
+ <xs:element name="AddressAreaName" substitutionGroup="app:AddressComponent" ></xs:element>
```

```
- <xs:element name="ThoroughfareName" substitutionGroup="app:AddressComponent" >
```

```
- <xs:complexType>
```

```
- <xs:complexContent>
```

```
- <xs:extension base="app:AddressComponentType" >
```

```
- <xs:sequence>
```

```
  <xs:element name="name" maxOccurs="1" minOccurs="1" type="ad:GeographicNamePropertyType"/>
```

```
  <xs:element name="transportLink" maxOccurs="1" minOccurs="0" type="tn:TransportLink"/>
```

```
- <xs:complexType>
```

```
- <xs:sequence>
```

```
  <xs:element ref="tn:TransportLink" minOccurs="0"/>
```

```
  <xs:sequence>
```

```
    <xs:element ref="gml:AssociationAttributeGroup"/>
```

```
  </xs:sequence>
```

```
</xs:complexType>
```

```
</xs:element>
```

```
</xs:sequence>
```

```
</xs:extension>
```

```
</xs:complexContent>
```

```
</xs:complexType>
```

```
</xs:element>
```

```
- <xs:element name="Address" substitutionGroup="gml:AbstractFeature" >
```

```
- <xs:complexType>
```

```
- <xs:complexContent>
```

```
- <xs:extension base="gml:AbstractFeatureType" >
```

```
- <xs:sequence>
```

```
  <xs:element name="inspireId" type="ad:IdentifierPropertyType"/>
```

```
  <xs:element name="alternativeIdentifier" minOccurs="0" >
```

```
    <xs:complexType>
```

```
    <xs:simpleContent>
```

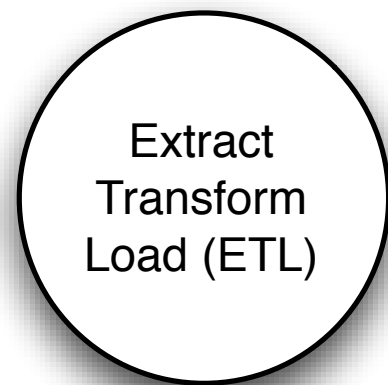
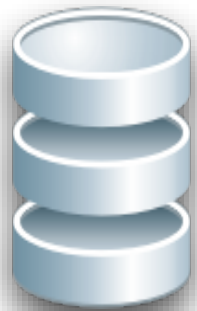
```
    <xs:extension base="xs:string" >
```



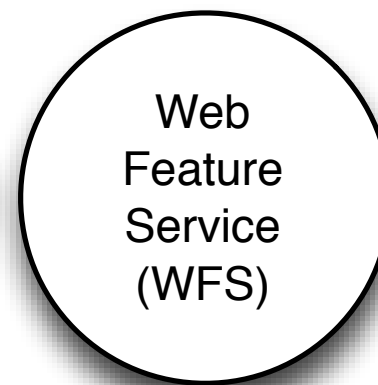
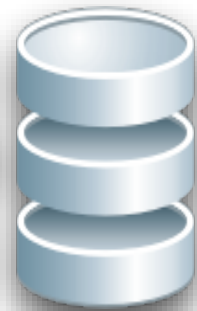

IMPLEMENTATION

APPROACH - DUTCH KADASTER

National Data
(Oracle)



INSPIRE Data
(PostGIS)

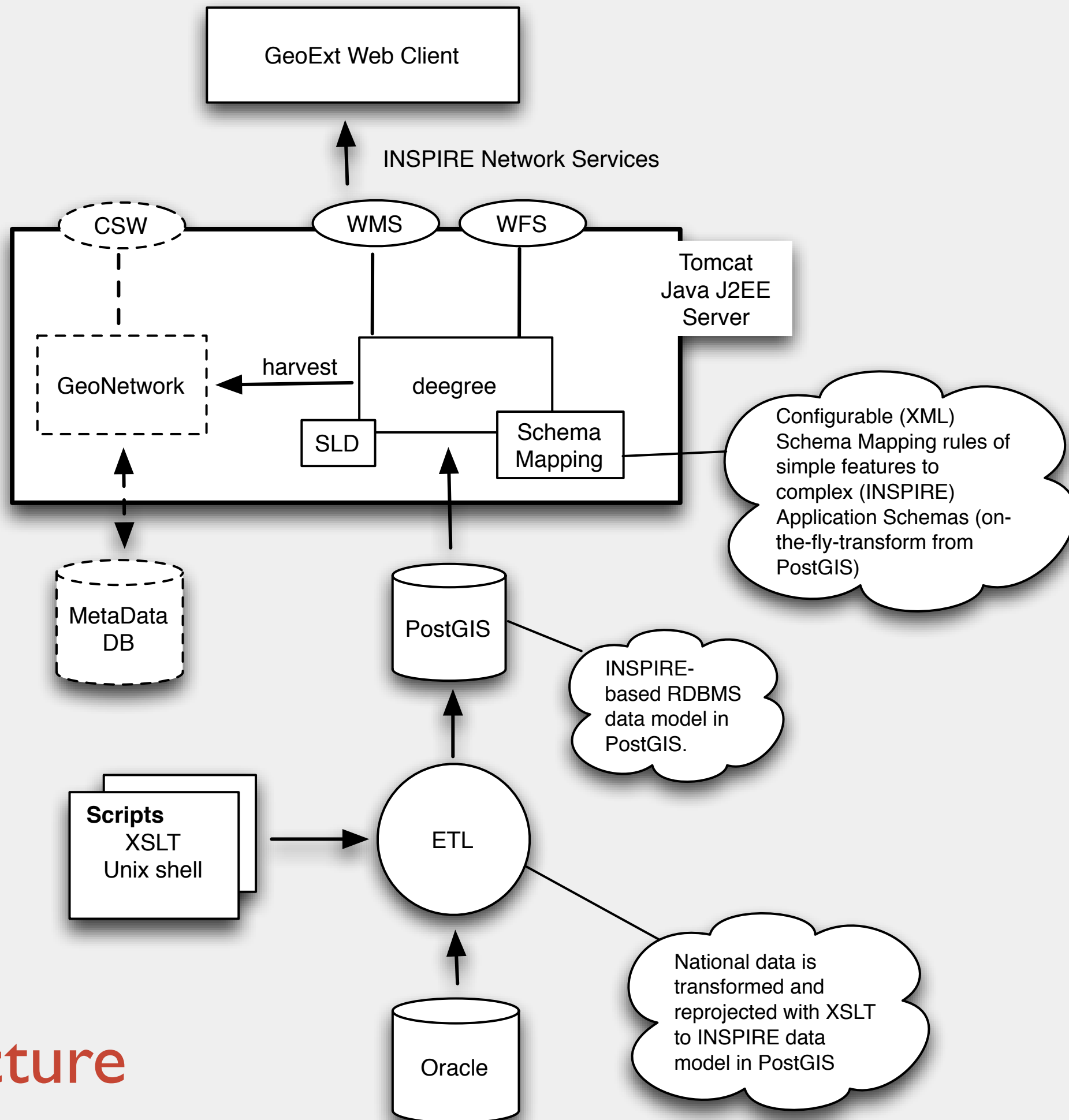


INSPIRE
GML

Offline Transformation

On-the-fly Transformation

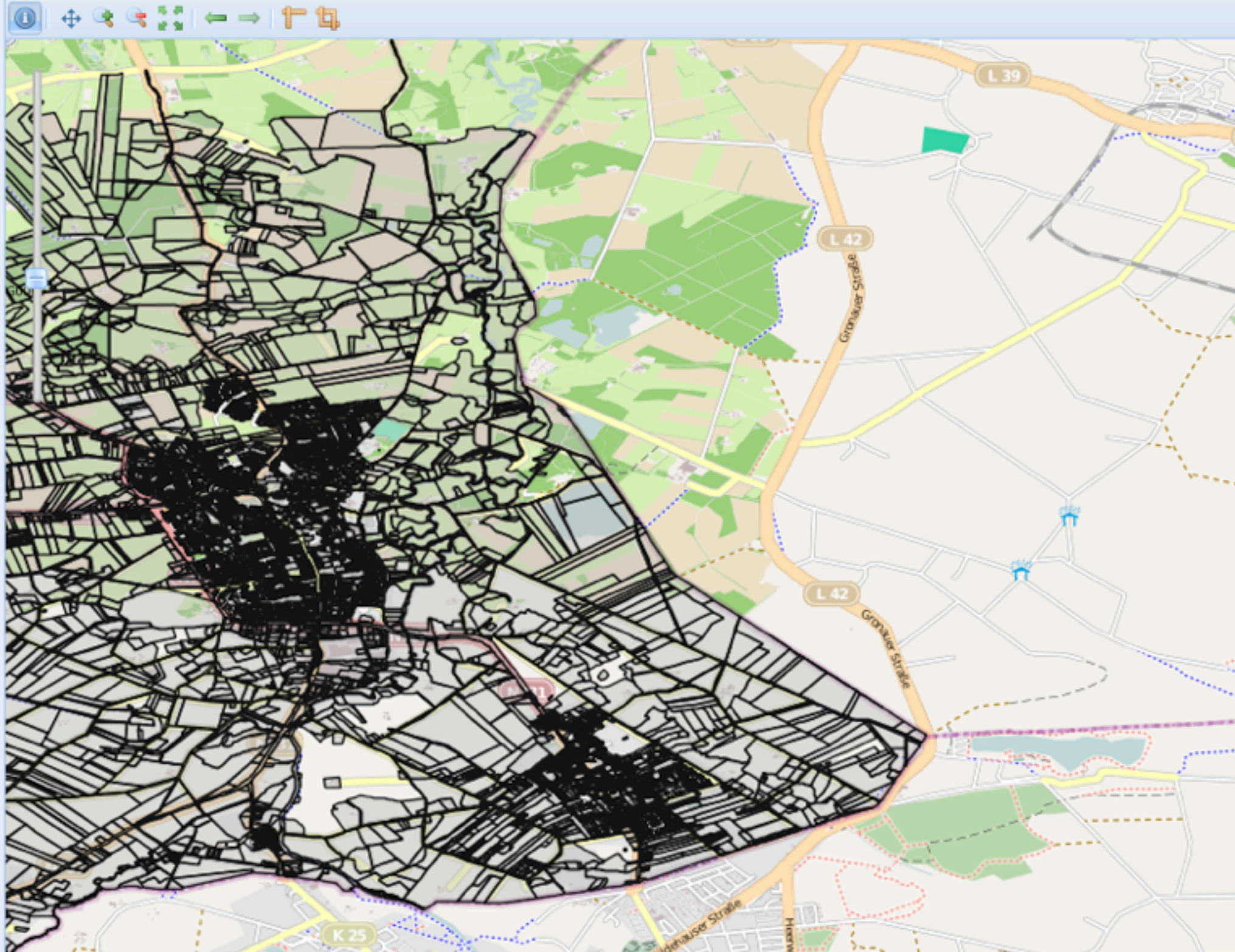
Architecture





Layers

- Base Layer
 - Blanc
 - Topo Raster
 - OpenStreetMap
- Overlays
 - INSPIRE Addresses
 - INSPIRE Parcels



Contexts

Info

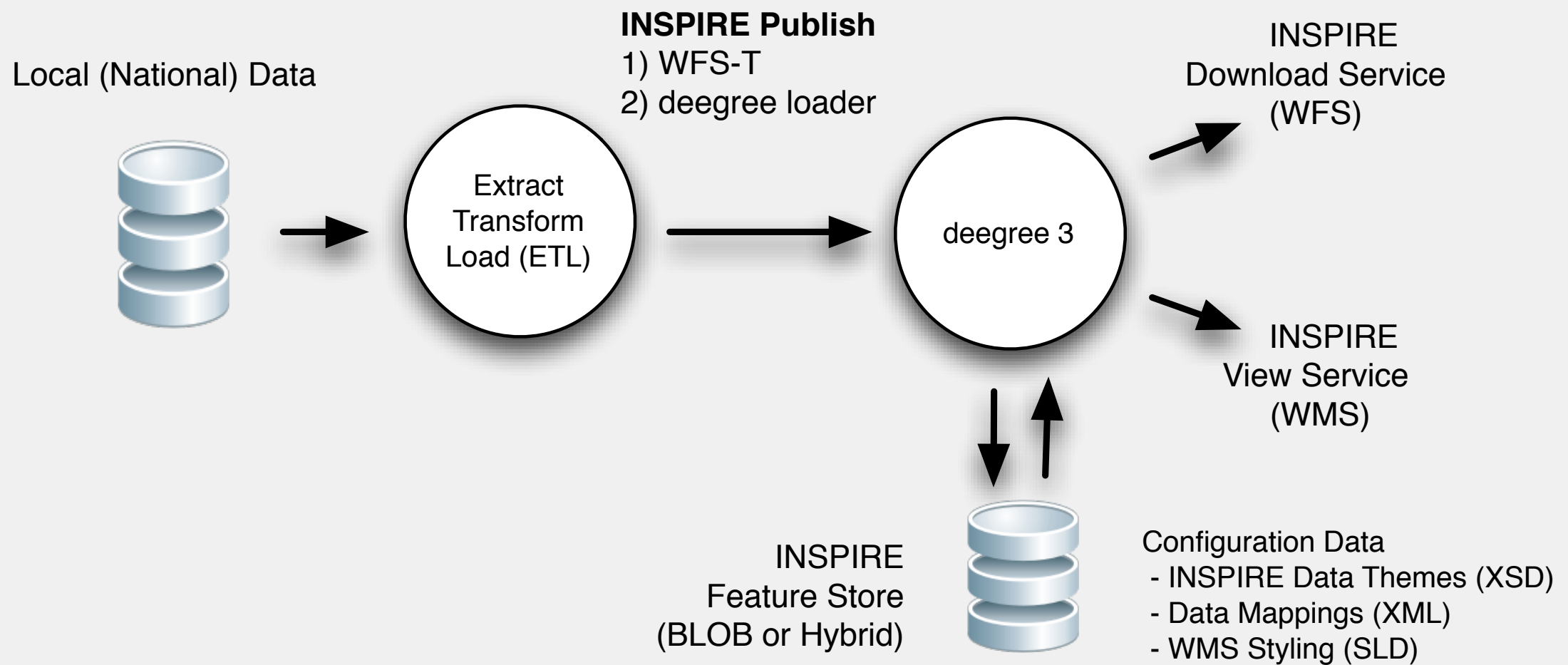
Legend

X: 7.016129 Y: 52.224010

OSGeo - Bolsena - 2010



WORK IN PROGRESS



FOSS4G WITH INSPIRE - 3 SUCCESSES



AND SOME FAILURES...



NATIONAAL GEOREGISTER.nl

52°09'N 05°23'E

INSPIRE toegangspunt

Deutsch - English - Français

Zoeken

Kaart

Organisaties

Publiceren

Feedback

Informatie

Welkom op het Nationaal Georegister

Welkom op het Nationaal Georegister. Dit is een catalogus van de online geo-informatie in Nederland. Bronhouders registreren hier hun gegevens. Gebruikers ontdekken hier wat er beschikbaar is.

> Snel beginnen!

> Help

> Disclaimer

> Sitemap

GeoRSS.nl

Wat?

Nauwkeurigheid



tolerant

precies

INSPIRE zoekopties

 Alleen INSPIRE metadata

Titel

Annex

Brontype

Service type

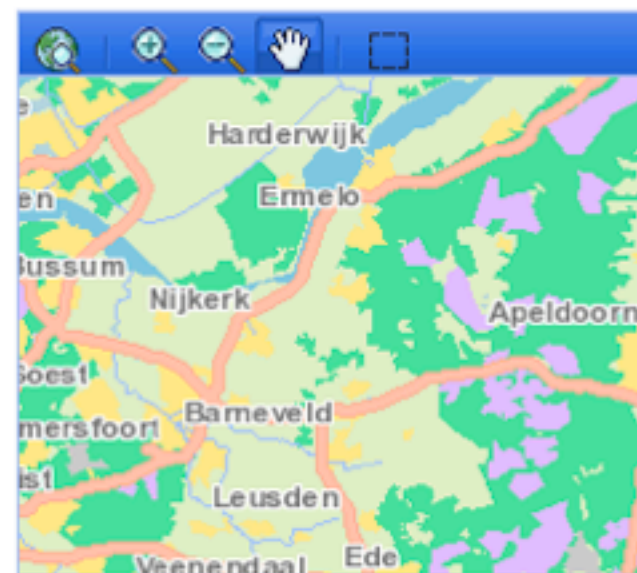
Organisatie

INSPIRE Thema

Annex I

- Geographical names
- Administrative units
- Addresses
- Cadastral parcels
- Transport networks
- Hydrography
- Protected sites

Annex II

Waar?

Uitgebreid Zoeken

Reset

Zoek

Aantal gepubliceerde metadata van datasets in het NGR: 2452

Aantal gepubliceerde metadata van services in het NGR: 6

SUCCESS #1

GEONETWORK NL

SUCCESS #2 ESDIN TESTS

11 participants

- ★ 10 provided a WFS
- ★ 6 of 10 provided compliant WFS
- ★ 4 of 6 used FOSS4G WFS

SUCCESS #3 NL KADASTER

Proprietary Privative



**DATA
TRANSFORMATION
AND SERVICES
FOR INSPIRE**

results

WFS

WMS

ESDIN

.....

CSW

FOSS4G



2009

2010

2011

I. INTEGRATION IS KEY



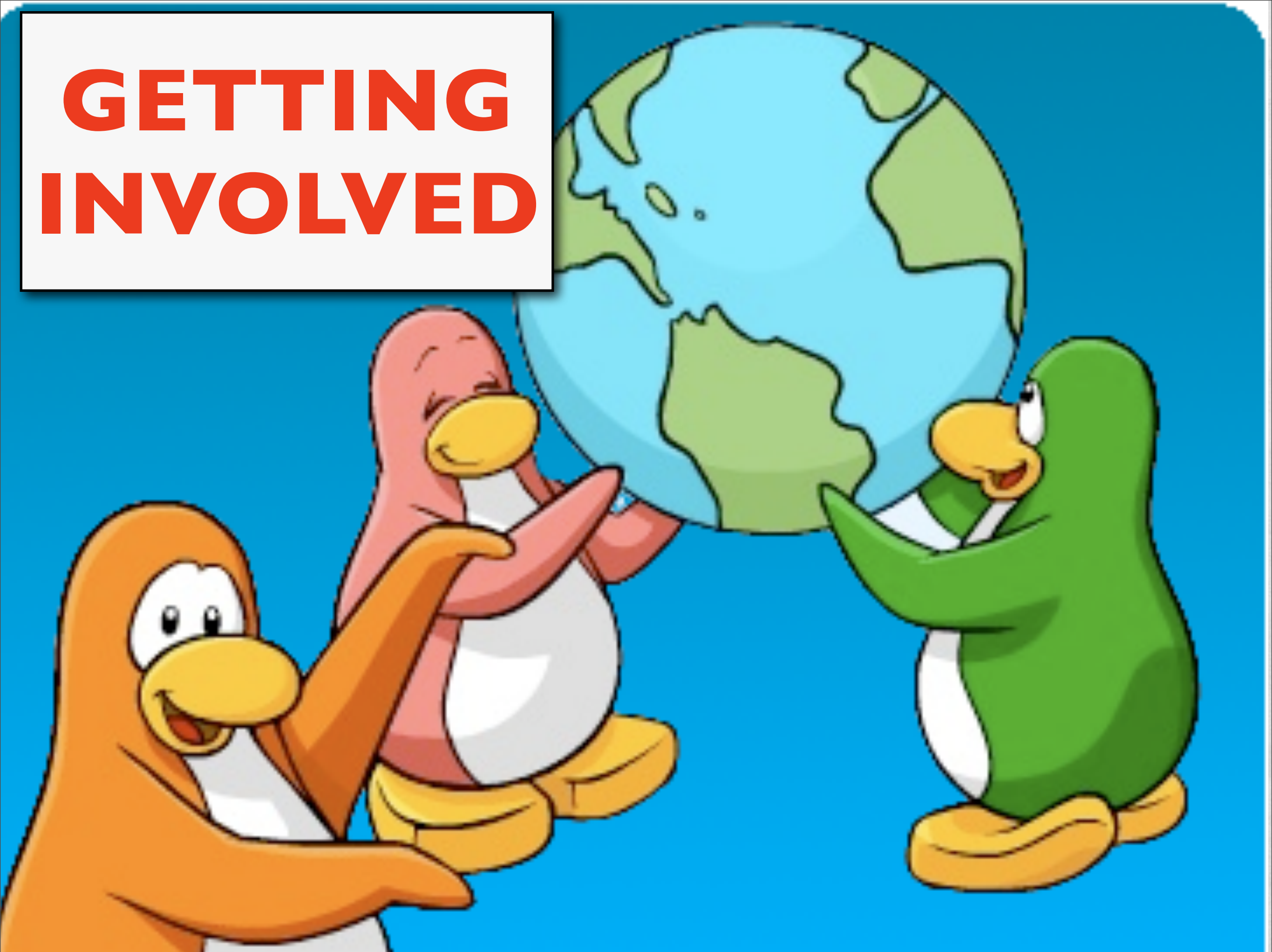


2. SOLVE YOUR OWN PROBLEMS



3. COMMUNITY SUPPORT

GETTING INVOLVED



INSPIRE @ OSGEO

WIKI

http://wiki.osgeo.org/wiki/INSPIRE_data_experiments

MAILING LIST



<http://lists.osgeo.org/mailman/listinfo/inspire-data>

PROJECTS

DOCU DEMOS AND INFO

<http://inspire.kademo.nl>

TRANSFORMATION & SERVICES

<http://code.google.com/p/inspire-foss>

WEB CLIENT

<http://code.google.com/p/geoext-viewer>

