

Christian Ansorge
13th December 2016, Vienna

SDI software and technology EEA and Copernicus actions 2016



INSPIRE - EEA and Copernicus actions 2016

2016

- #1 Feasibility study and benchmarking of INSPIRE Network Services
- #2
INSPIRE GML support in GDAL/OGR & QGIS

Feasibility study and benchmarking of INSPIRE Network Services

Scope:

assess to what extent the most used software tools are able to provide and consume INSPIRE conformant data through view and download services.

Actors:

KU Leuven, Epsilon Italia, WeTransform

Feasibility study and benchmarking of INSPIRE Network Services

View and Download service setup

	Deegree WMS/WFS	Geoserver WMS/WFS	ArcGIS for INSPIRE WMS/WFS
Corine Land Cover, Vector			
Biogeographical Regions, Vector			
CDDA (PS extended)			



INSPIRE - EEA and Copernicus actions 2016

Feasibility study and benchmarking of INSPIRE Network Services

- <http://projects.eionet.europa.eu/eea-inspire-activities/library/2016-study-inspire-services>

Type	Title	Restrictions	Owner	Modification date and time	File size	Edit
	2016 INSPIRE Services BGR Deegree Geoserver	↓	Christian Ansorge	22/09/2016, 11:33	1 MB	
	2016 INSPIRE Services CDDA Deegree	↓	Christian Ansorge	22/09/2016, 11:34	1 MB	
	2016 INSPIRE Services CDDA Geoserver	↓	Christian Ansorge	22/09/2016, 12:10	762 KB	
	2016 INSPIRE Services CDDA dataTransformation	↓	Christian Ansorge	22/09/2016, 12:10	826 KB	

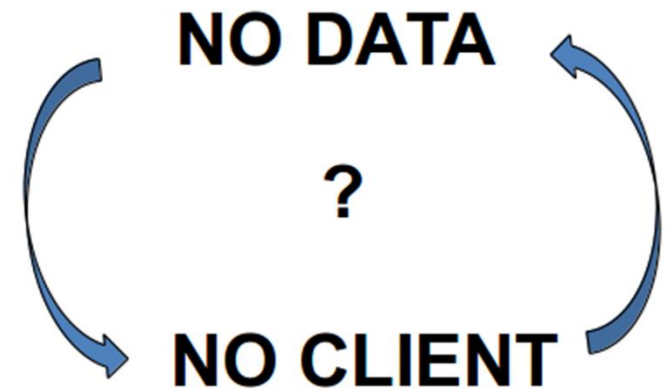


INSPIRE GML support in GDAL/OGR & QGIS

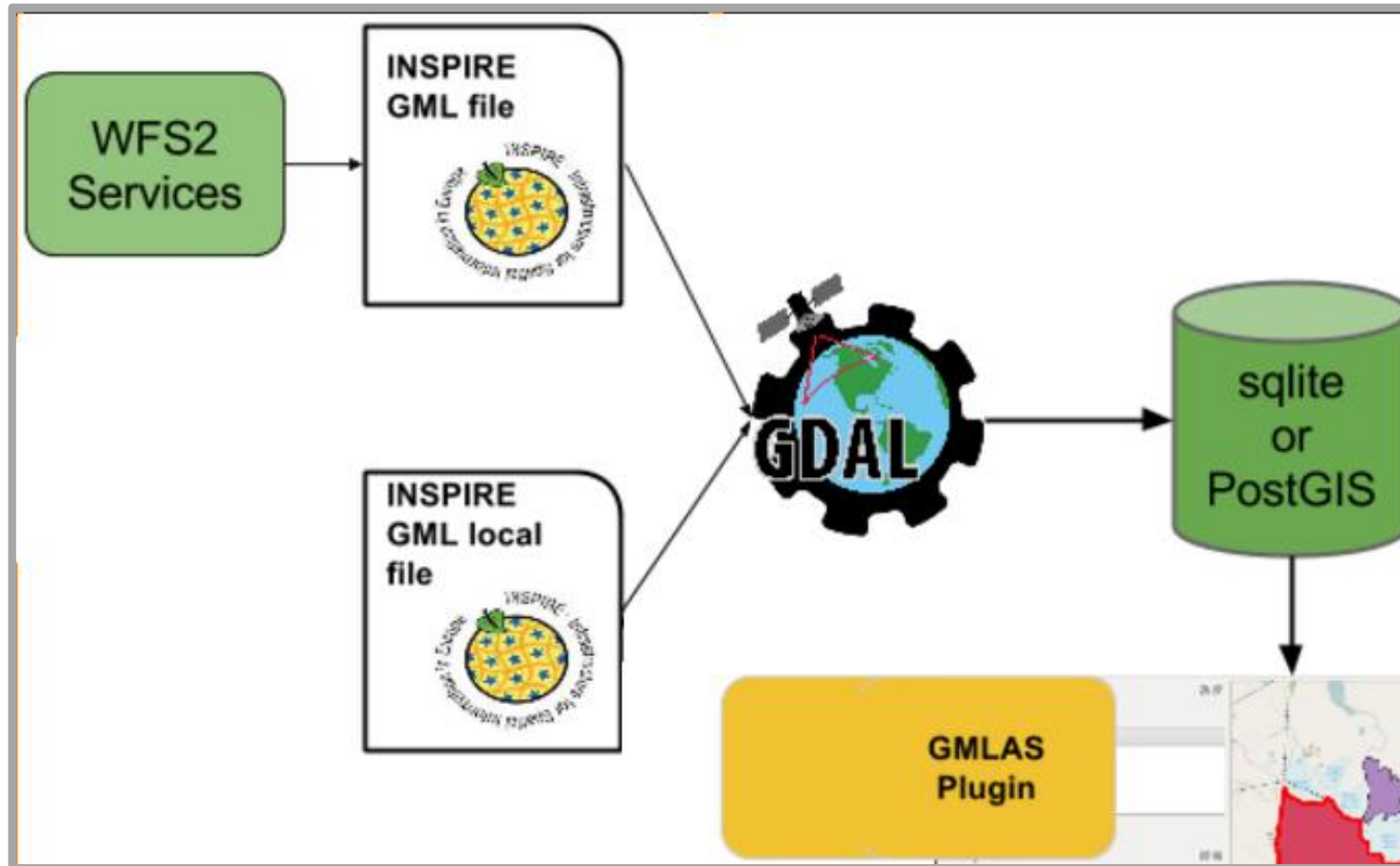
- Support the development of QGIS plugin
- Consum complex feature GML as used for INSPIRE
- Copernicus funded activity

Actors:

Titellus, BRGM



INSPIRE - EEA and Copernicus actions 2016



Complex Feature XML conversion

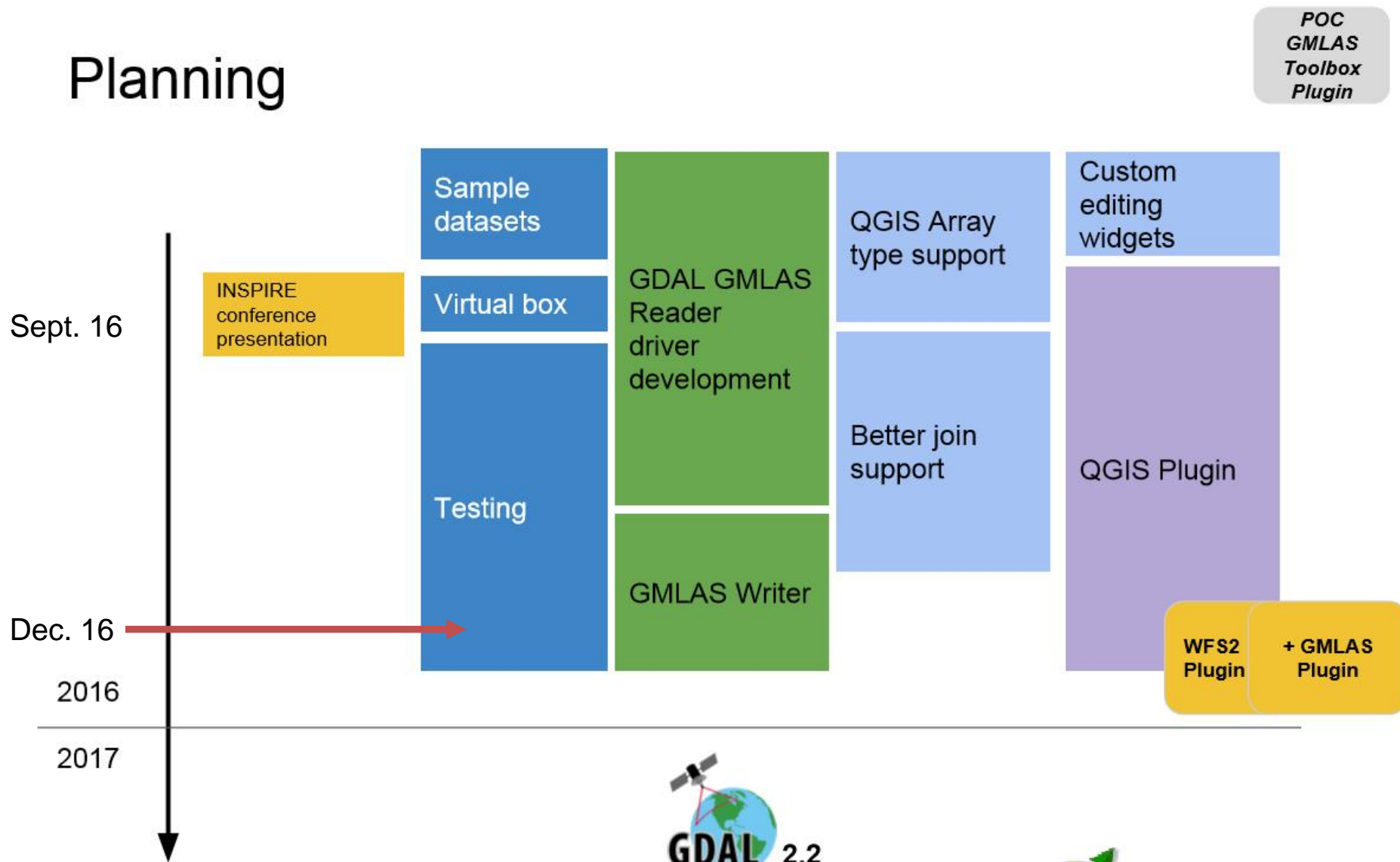
In a relational approach, the main problem is to convert from an XML flow of Complex Features instances to a relational database representation. The approach we followed consists in:

- analyzing the XSD schema(s) declared by the XML instance in order to retrieve the underlying object model and determine the type of each element and attribute as well as links between elements;
- converting links between elements into relations between database tables;
- inserting values in the database corresponding to the values found in the XML instance;
- generating a QGIS project configured to easily manipulate the relational model.



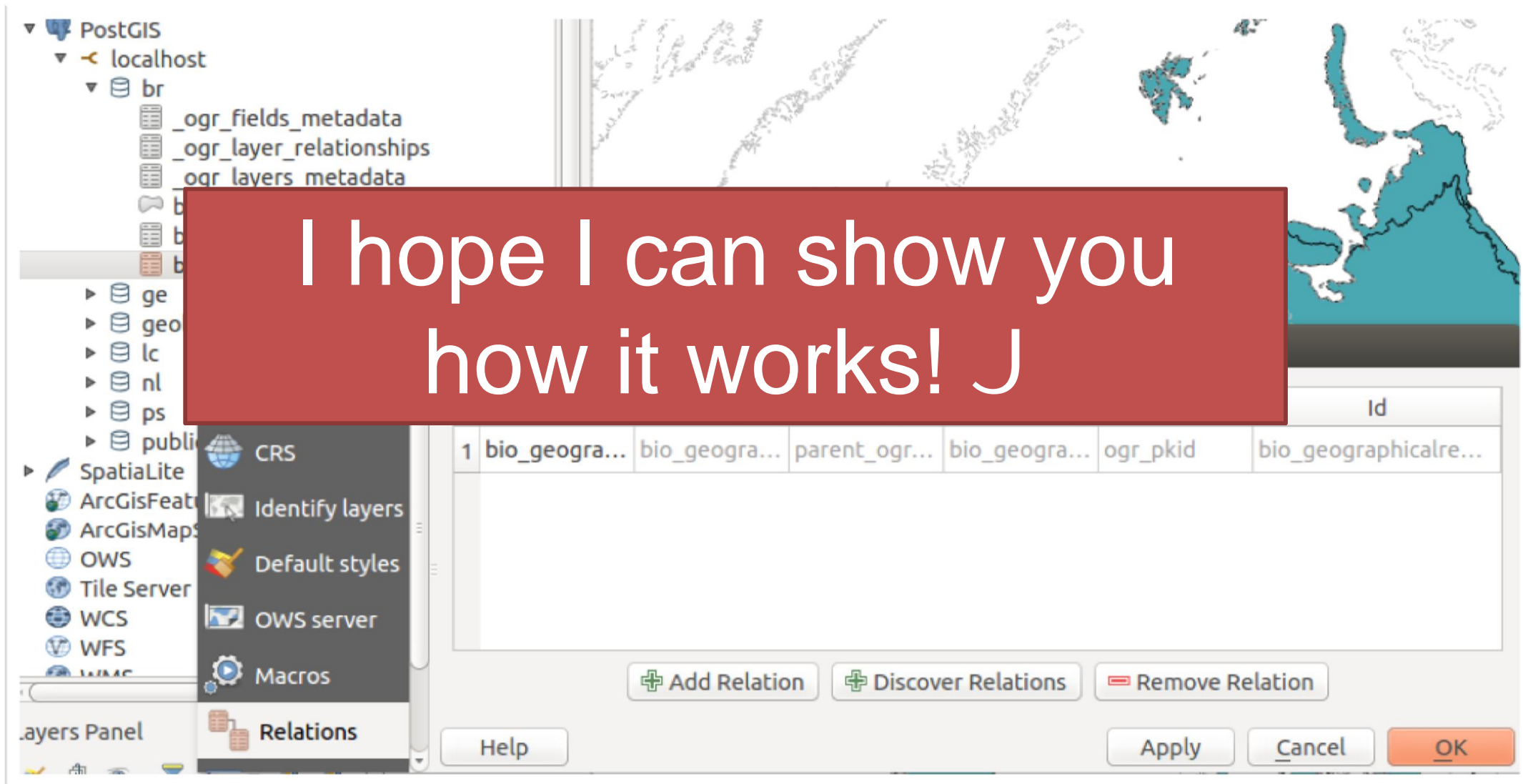
INSPIRE - EEA and Copernicus actions 2016

Planning



INSPIRE - EEA and Copernicus actions 2016

INSPIRE GML support in GDAL/OGR & QGIS



I hope I can show you how it works! J

	Id
1	bio_geogra... bio_geogra... parent_ogr... bio_geogra... ogr_pkid bio_geographicalre...

Buttons: Add Relation, Discover Relations, Remove Relation, Help, Apply, Cancel, OK

INSPIRE GML support in GDAL/OGR & QGIS

- Development of a new driver (GMLAS) in the GDAL library
- Demonstrate GDAL via a QGIS plugin
- Translating complex feature GML into a relational database structure
- Set keys and clean unused tables/structures
- Database structure depends on complexity of the source file
- Direct access to WFS or GML file



INSPIRE GML support in GDAL/OGR & QGIS

Documentation

- https://github.com/INSPIRE-MIF/gml_application_schema_toolbox/blob/master/README.md

VirtualBox image for testing

- <http://files.titellus.net/vbox/>

Instruction videos

- Setting up the virtual box with QGIS3 & GML Application Schema toolbox plugin <https://youtu.be/t9xAE12vLp0>
- QGIS GML Application Schema / INSPIRE Registry xlink resolution depending on language <https://www.youtube.com/watch?v=EeAyyUOykVE>



Thanks

Christian Ansorge

(Paul Hasenohr, Francois Prunayre,
Stefania Morrone)

European Environment Agency

