

The eENVplus Service Infrastructure

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Workshop - eENVplus - eNvironmental Services for
advanced applications within INSPIRE
Inspire conference - 24 June 2013

Objectives

- To create the eENVplus platform consisting of state-of-the-art, efficient, robust and standard-based services:
 - ☐ INSPIRE OWS (where available)
 - ☐ Ingestion
 - ☐ Service Validation (CSW, WMS)
 - ☐ Data Validation (schema & constraints)
 - ☐ LOD (if any ontology available) & Theasuri
 - ☐ processing
 - ☐ eReporting
 - ☐ Crowdsourcing
 - ☐ 3D visualization

Services (1/5)

■ Basic INSPIRE OWS from national pilots (where available)

Existing services to discover, view and download data

- ☐ CSW
- ☐ WMS
- ☐ Atom/WFS
- ☐ WCS

■ Ingestion services

Ingestion services to automatically load not conformant data and facilitate schema transformation (“bulk&cache”) at database level

Services (2/5)

■ Service Validation services

- Using INSPIRE Geoportal Validator (web service) for:
Existing metadata, CSW and WMS

<http://inspire-geoportal.ec.europa.eu/validator2/>

■ Data Validation services

- Using Geonovum tool for GML data validation for:
XML schema, schematron businessrules, 2d geometry

<http://validatie-dataspecificaties.geostandaarden.nl/genericvalidator/helpResource/download/305?lang=en>

- Using GeoUML validation tool for:
OCL constraints, topological constraints

<http://spatialdbgroup.polimi.it/en/home/>

Services (3/5)

■ LOD services

Using and extending GetLOD implementation (Regione Emilia-Romagna - IT) to publish RDF triples from WFS sourced data and CSW metadata

■ Thesaurus services

Expose EARTH thesaurus that extend and is interlinked to GEMET to explore the use in the context of INSPIRE environmental themes.

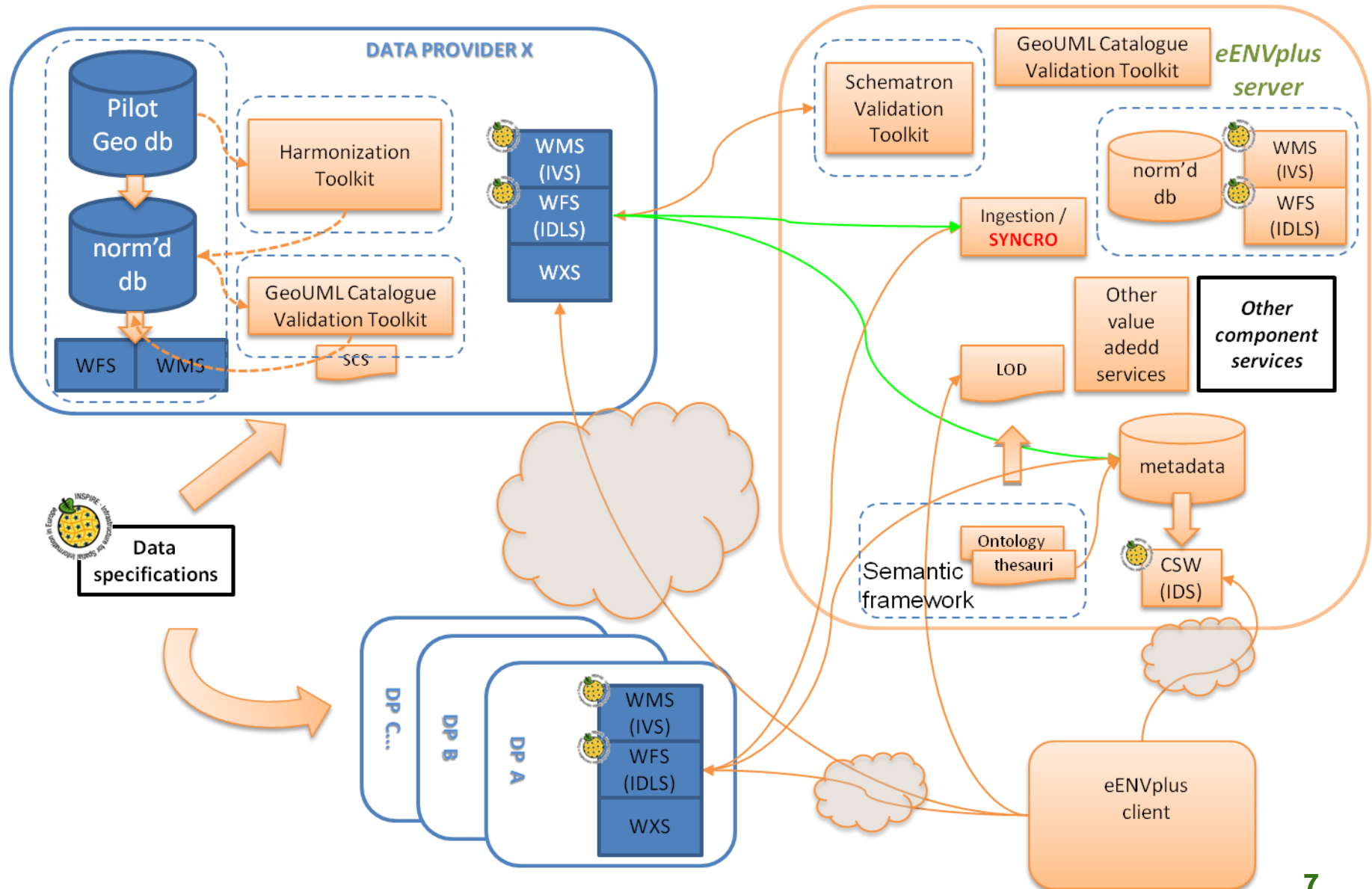
Services (4/5)

■ Processing

Using and extending WPS services implemented in BRISEIDE project (GeoServer, R2WPS) according to pilots' requirements:

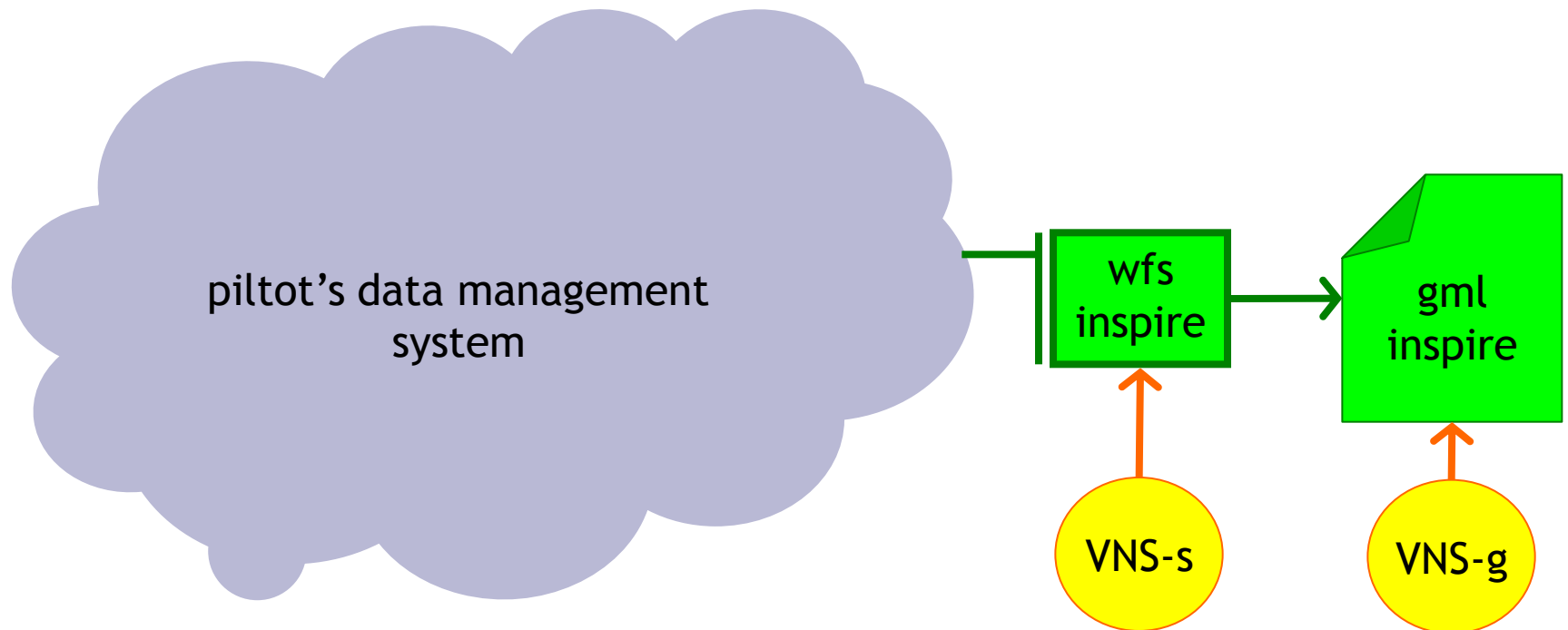
- ☐ Topological
- ☐ Statistical
- ☐ Raster algebra
- ☐ ...

to build added value services ie: cross border landslide risk maps, cross border flood hazard maps...

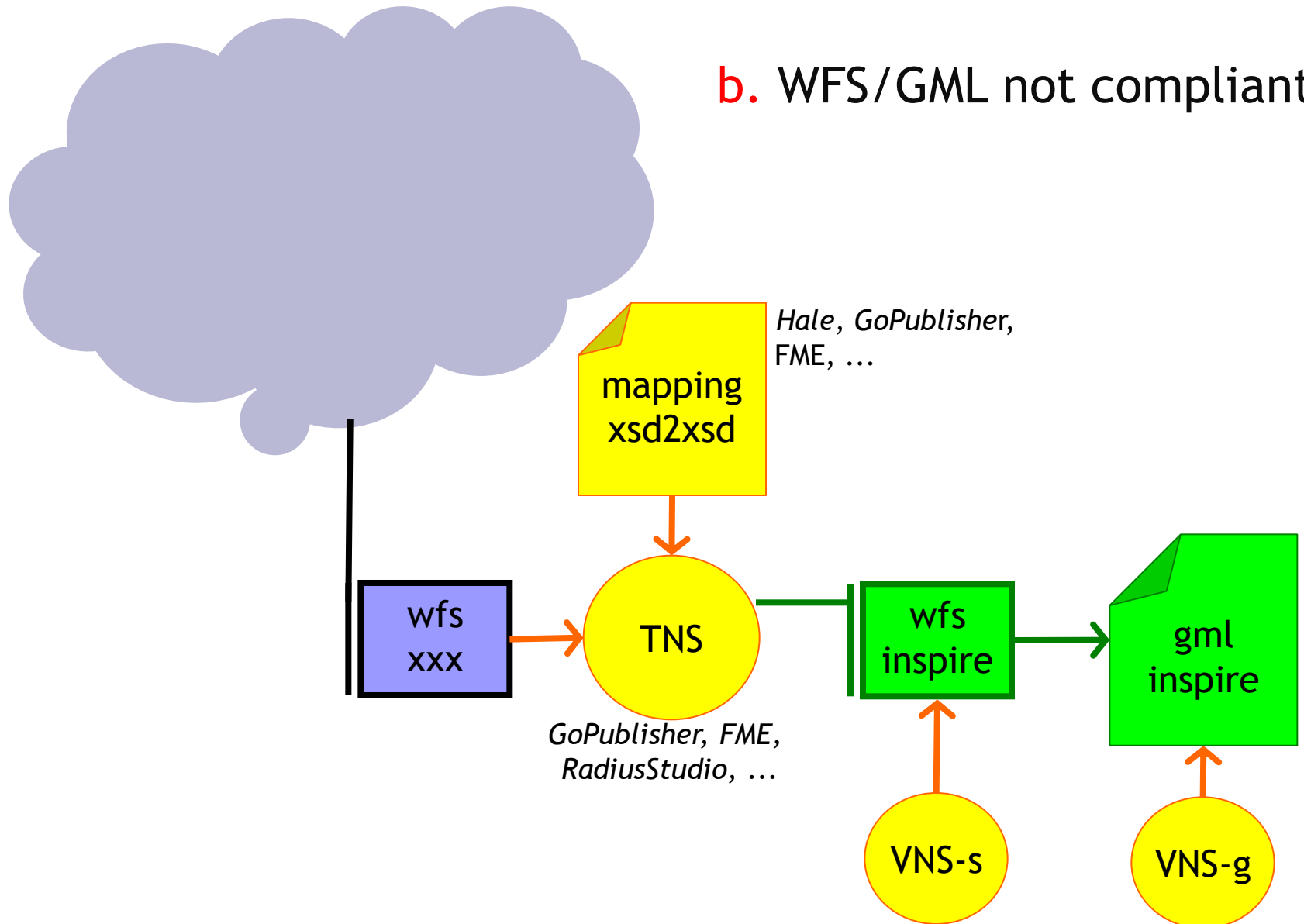


Scenarios

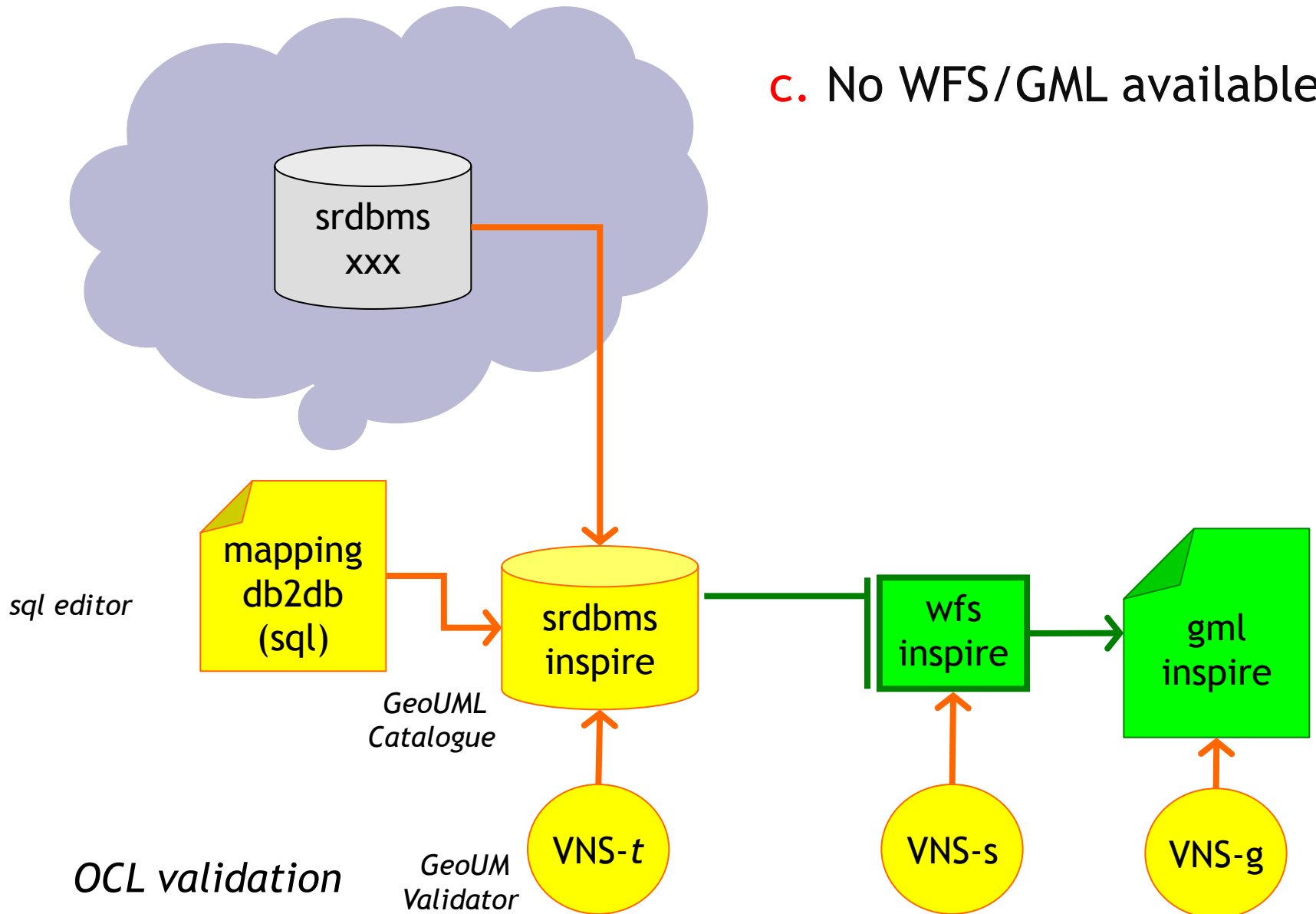
a. WFS/GML already compliant



b. WFS/GML not compliant



c. No WFS/GML available



Gantt



WP5: Services platform						6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
T5.1 Service deployment plan																					
T5.2 Service Technology Platform																					
T5.3 Ingestion, workflow, data access and validation services																					
T5.4 Processing services and service orchestration																					
T5.5 Reporting services																					
T5.6 Crowdsourcing services																					
T5.7 eENVplus catalogue and connection to operational infrastructures																					

Deliverables

■ D 5.1: Service deployment plan [M12]

A report that highlights how the various components of the system will be deployed within the project infrastructure

■ D 5.2 eENVplus Services (Interim Version)[M24]

Includes an interim version of eENVPlus Toolkit (Ingestion and harmonization services, validation services, processing services and service orchestrator, reporting services Services, crowdsourcing services, a metadata catalogue based on OGC and INSPIRE standards, that provides search capabilities and includes access to the catalogue of the INSPIRE Geoportal

■ D 5.3: eENVplus Services (Final) [M30]

Includes the final release of all services.

Thank you

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