
eENVplus - eEnvironmental services for advanced applications within INSPIRE

CIP - Pilot Actions

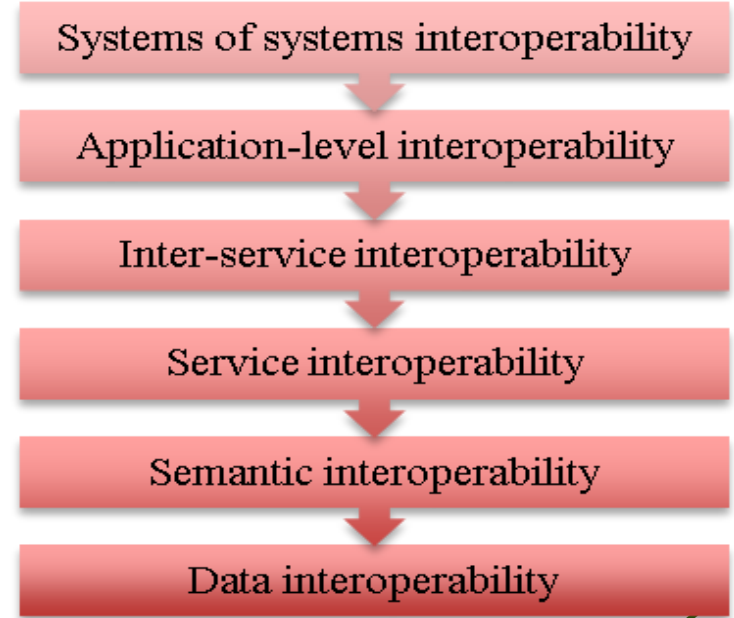
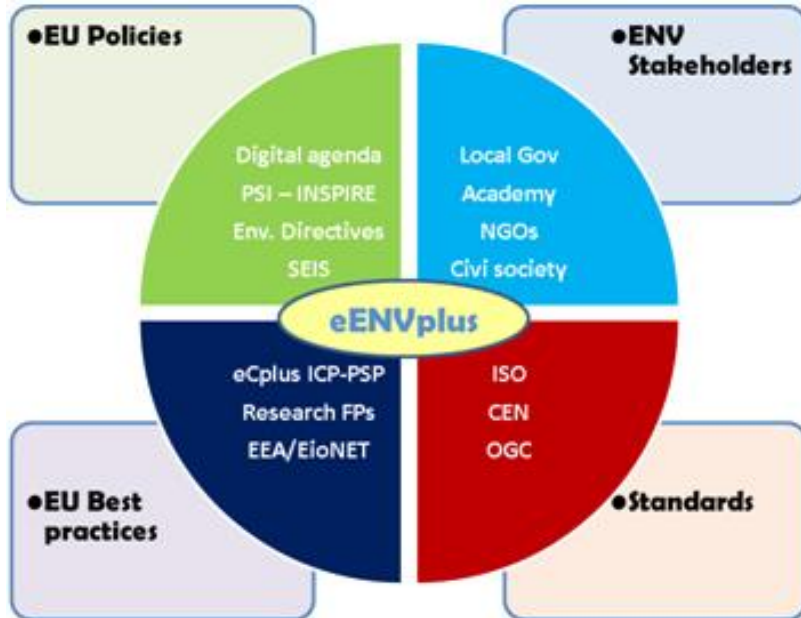
Grant agreement no: 325232

Starting date: 01 January 2013

Giorgio Saio
GISIG

Key objective

- to support INSPIRE and SEIS implementation
- through deployment and integration of value-added eEnvironment services
- available at national level and through past/on-going key EC-funded project
- eENVplus provides Members State and the GI Communities, with tools addressing a multi-level interoperability stack:



Initiatives Policy Environmental Directives



























From Objectives to the

eENVplus



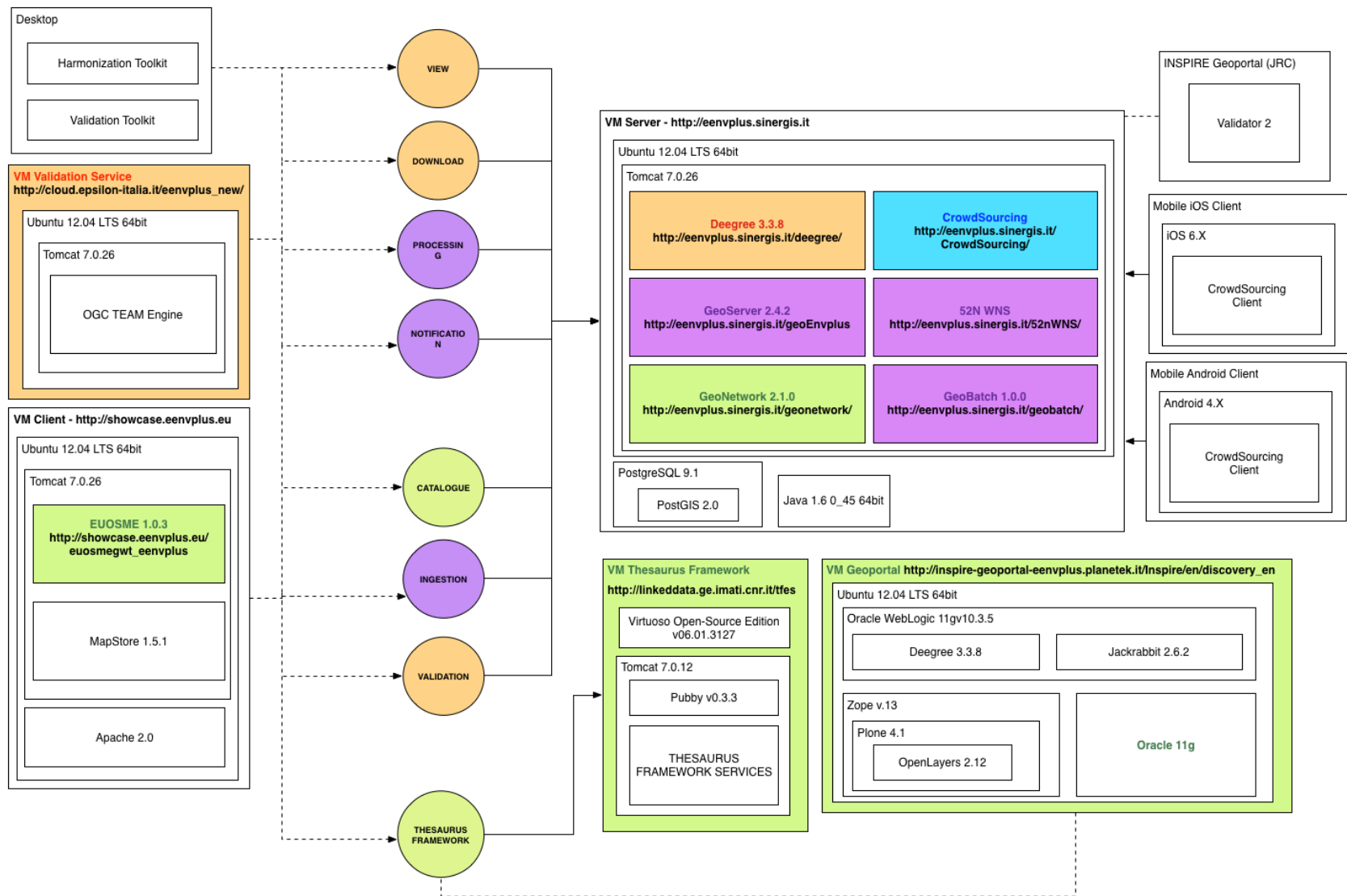
Air
Water
Nature Conservation
ENV Risks
LandUse Planing
Everyday Life











eENVplus interoperable infrastructure provides Member States and Geographic Information Communities with:

- A comprehensive, open and scalable infrastructure able to integrate existing infrastructures according to the INSPIRE requirements, open standards and interoperable innovative services
- A common Environment Thesaurus Framework, supporting the integration of existing thesauri relevant for the environmental sector via Linked Data and providing added-value services for its integration and exploitation in pilot applications
- A comprehensive toolkit with procedures, guidelines and examples for data harmonisation and validation supporting Member States during INSPIRE implementation
- A set of innovative on-line added-value interoperable services aiming to facilitate the development of innovative environmental applications
- A Training Framework to support, with eLearning tools, the development of the necessary capacities and knowledge to implement INSPIRE, to develop a SEIS and to keep this new adapted infrastructure operational

Pilots / Scenarios / Use Cases [WP7]

- In 10 pilots, 3 cross-border
- Pilots (10): the actual implementation of the scenarios in a geographical area
- Scenarios (9): the different use cases considered by eENVplus, which the applications correspond to
- Use Case (26): a methodology used in system analysis to identify, clarify, and organize system and user requirements

- Offering examples on how the eENVplus outcomes can be utilized in a variety of different situations (ENV aspects) and users' needs
- Providing streamline of the tools available to the project into the main flow of INSPIRE compliance
- Proposing interoperability among applications (existing or planned)

- Implementation of a SEIS for air quality data, pilots in **Belgium and Italy**
- Providing INSPIRE-compliant access to utility services: the case of sewage networks in Flanders, pilot in **Belgium**
- CSspire - Everyday life issues connected to Environmental aspects in **Czech Republic and Slovakia**, cross-border pilot
- Natural Areas INSPIRE Compliance Toolbox, pilot in **France**
- Forest Fire Management, pilot in **Greece**
- Window on the Protected Areas - Mobile Conservation Map in **Slovakia and Hungary**, cross-border pilot
- INSPIRE Geoportal - Nature conservation data in **Iceland**, pilot in **Iceland**
- Geological Map Harmonization **in Italy and Slovenia**, cross-border pilot
- Urban Landuse Planning: in **Portugal**



■ National Agencies:

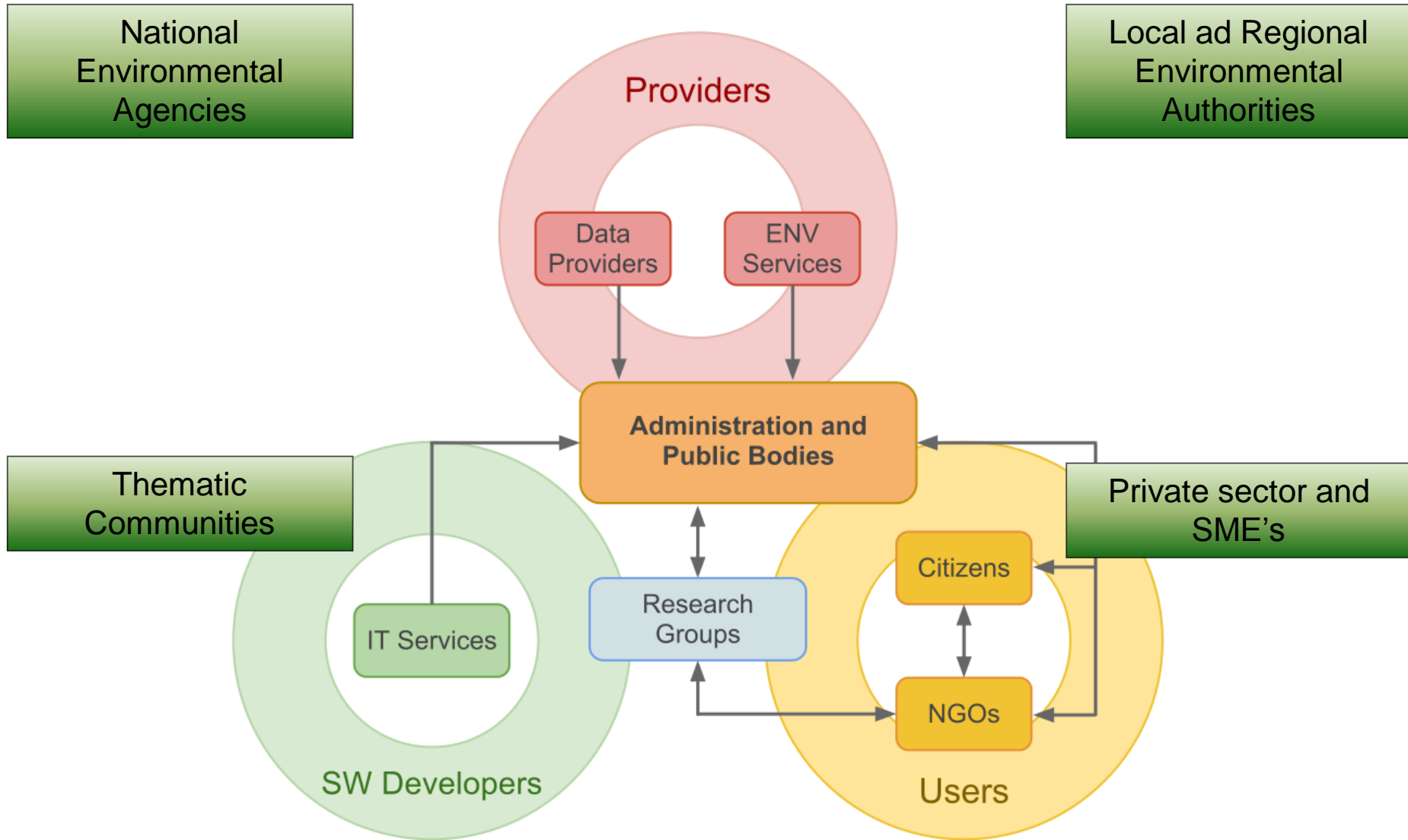
- Environmental Agencies: VMM (BE), ISPRA (IT), CENIA (CZ), SAZP (SK), MRD (HU) with support of GEO (HU); moreover, EPSILON in close cooperation with GR EA
- Mapping Agencies: DGT (PT), **NLSI (IC)**
- Thematic Agencies: Geological (GeoZS, SLO), Nature (ATEN, FR)

■ **Technical partners:** CNR-IMATI, Epsilon, Sinergis, Graphitech, disy, EPSIT, PKH

■ **University:** GEO

■ **Standardization Body:** GIST (Secretary of CEN TC/287 Geographical Information)

■ **European Association:** GISIG (eENVplus Coordinator)



Underlying content, INSPIRE data Themes

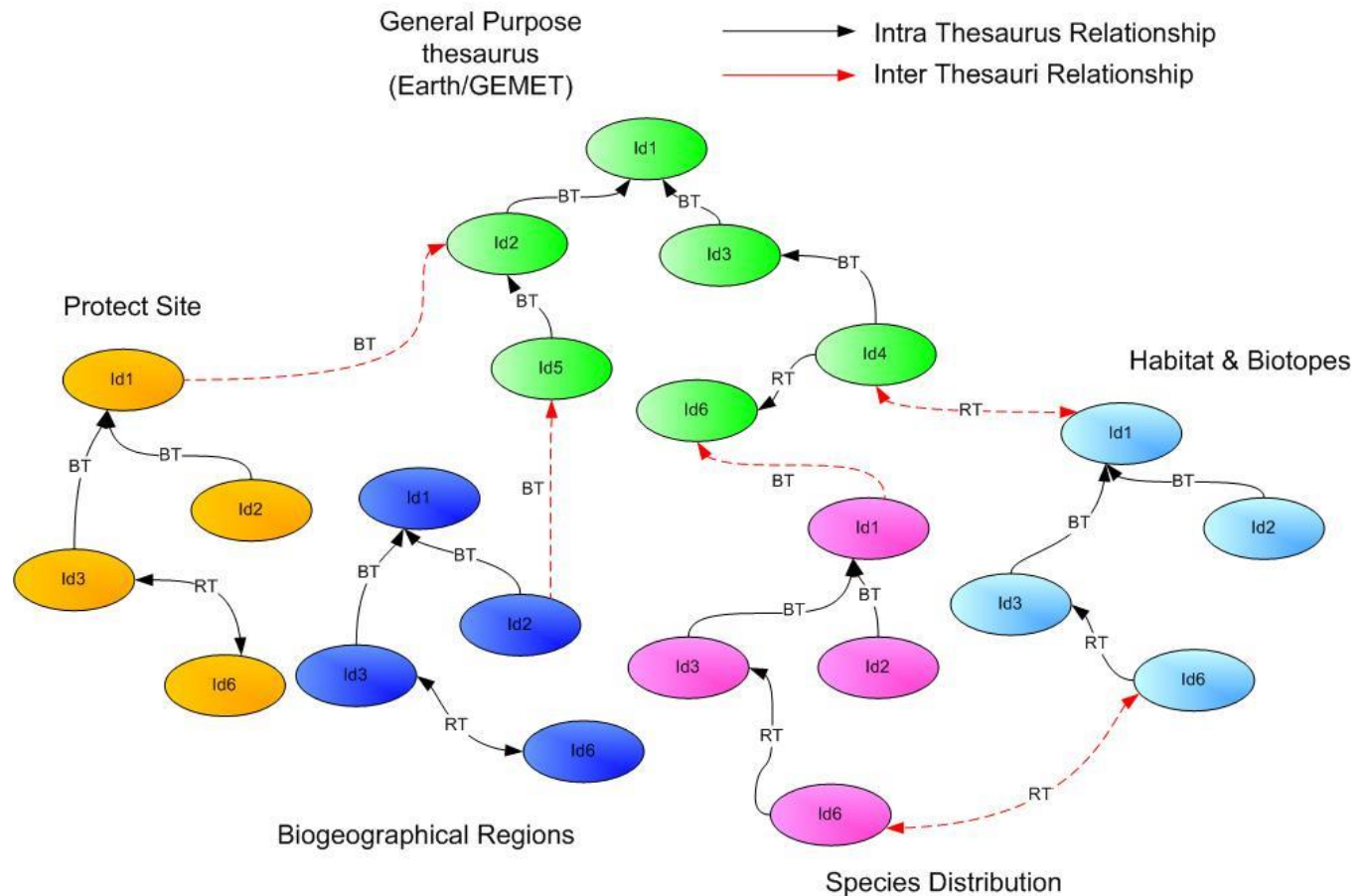
- Various National datasets related to many INSPIRE Annex I-II-III Data Themes, are considered for eENVplus (some are under IPR, many are Open Data)
- After the 1st data analysis, not all of them will be harmonised

Pilot Applications:		EP01	EP02	EP03	EP04	EP05	EP06	EP07	EP08	EP09	EP10
ANNEX I											
1. RS: Coordinate reference systems									<input checked="" type="checkbox"/>		
4. AU: Administrative units									<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
6. CP: Cadastral parcels				<input checked="" type="checkbox"/>							
8. HY: Hydrography			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
9. PS: Protected sites				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
ANNEX II											
2. LC: Land cover				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
3. Ol: Orthoimagery											<input checked="" type="checkbox"/>
4. GE: Geology										<input checked="" type="checkbox"/>	
ANNEX III											
1. SU: Statistical units											<input checked="" type="checkbox"/>
4. LU: Land use				<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>
5. HH: Human health and safety				<input checked="" type="checkbox"/>							
6. US: Utility and governmental services			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
7. EF: Environmental monitoring facilities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
8. PF: Production and industrial facilities				<input checked="" type="checkbox"/>							
11. AM: Area mng/rest/reg zones & rep. units	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
12. NZ: Natural risk zones											<input checked="" type="checkbox"/>
13. AC: Atmospheric conditions	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
14. MF: Meteorological geographical features							<input checked="" type="checkbox"/>				
17. BR: Bio-geographical regions				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
18. HB: Habitats and biotopes				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
19. SD: Species distribution				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						

The HUMBOLDT Alignment Editor

- The HUMBOLDT Alignment Editor (HALE) is a tool for defining and evaluating conceptual schema mappings.
- HALE is currently being used intensively in the context of the eENVplus “WP3 Harmonisation and Validation” tasks.
- The Data Harmonisation Panel:
 - Supports a community of experts and organisations that have to deal with spatial data harmonisation.
 - Disseminates and exploits the HUMBOLDT Tools.
 - GISIG is one of the Data Harmonisation Panel Founding Members.
- A joint collaborative initiative between the eENVplus project and the Data Harmonisation Panel is under development.

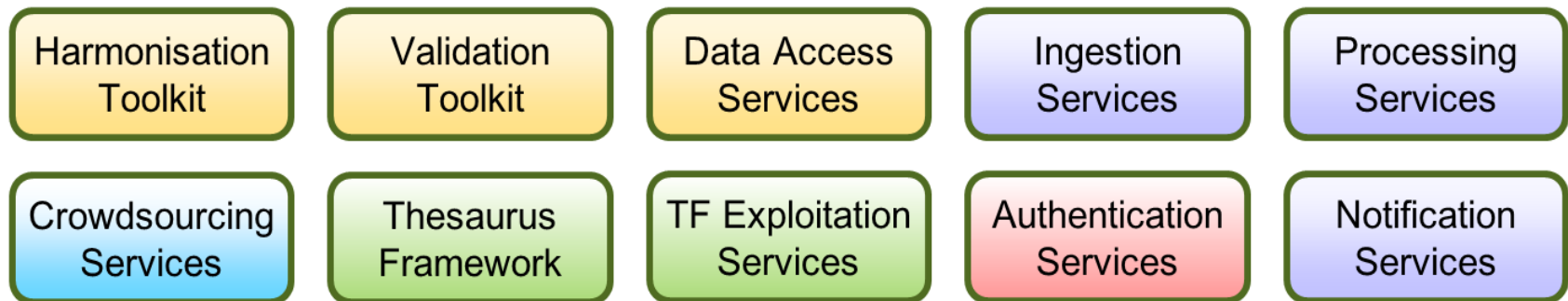




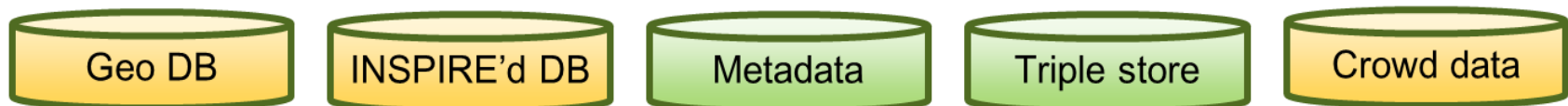
- integration of different available thesauri
- cross walking from a thesaurus to another

- eENVplus infrastructure is composed by a set of components combined into the nodes of the infrastructure

Software components



Data structure components



eENVplus Training Framework

EU GI-related Directives and Initiatives

 Copernicus
The European Earth Observation Programme

 INSPIRE

 SEIS

 WFD

eENVplus

Data Harmonisation

 HUMBOLDT

 NESIS

 GeoSmartCity

 LIFE+IMAGINE

 LINKVIT

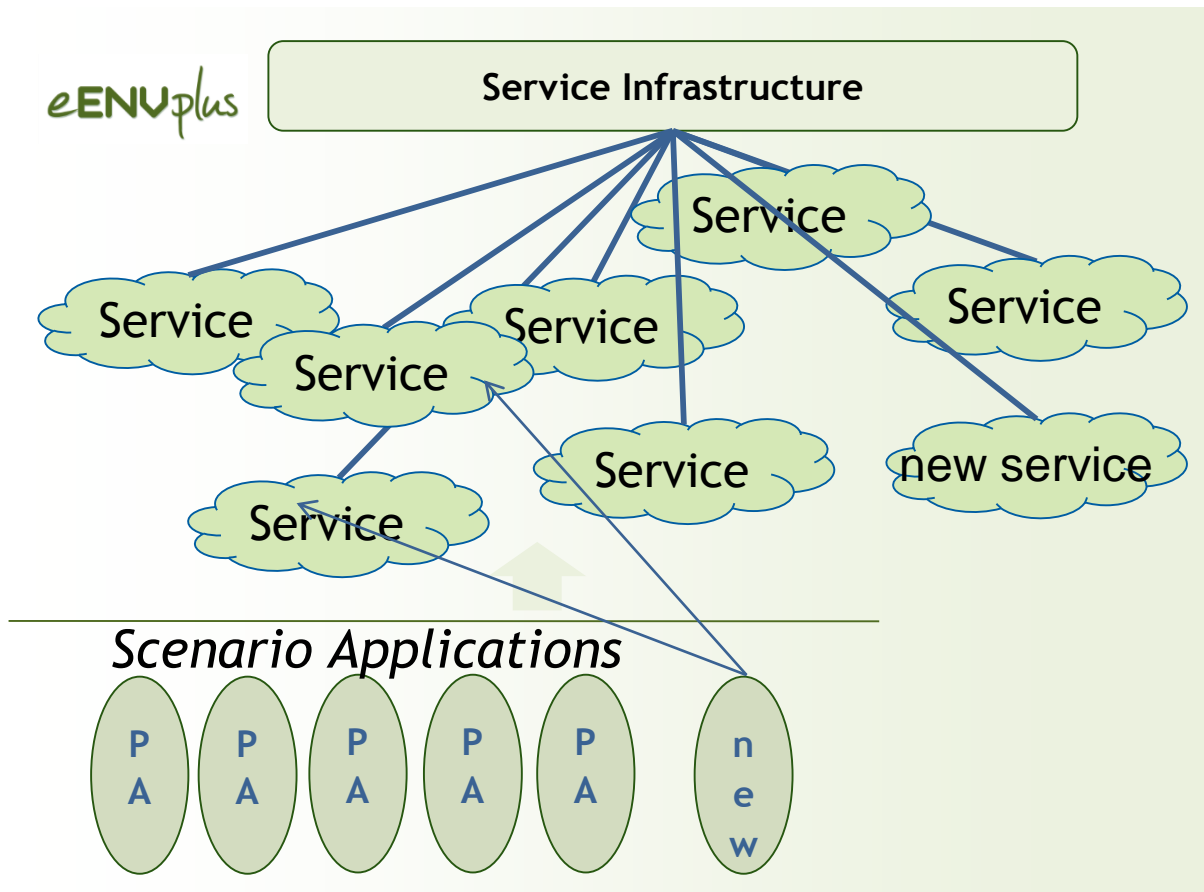
TRAINING (e-learning)

Training within EU Projects

Leonardo Da Vinci
 VESTA-GIS

Leonardo Da Vinci
 eLEANOR

- eENVplus Infrastructure is the base for including new applications and new services also within future projects at a European and National level



- eENVplus will be then the Framework for implementing/use/sharing eEnvironmental services

 GeoSmartCity

 new service

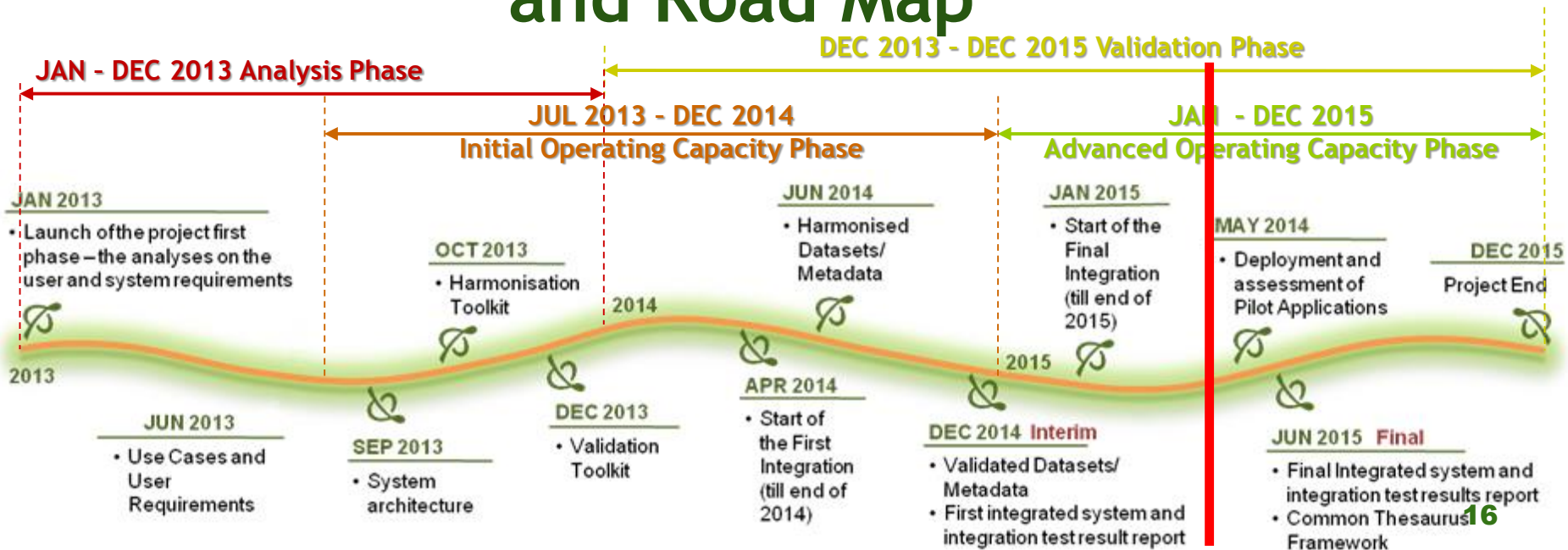
 LIFE+IMAGINE

- That will be part of the long term sustainability plan after the project conclusion

Macro-actions foreseen by eENVplus



and Road Map



Thanks for your
interest in eENVplus !

Giorio Saio

g.saio@gisig.it

GISIG - eENVplus Coordinator