

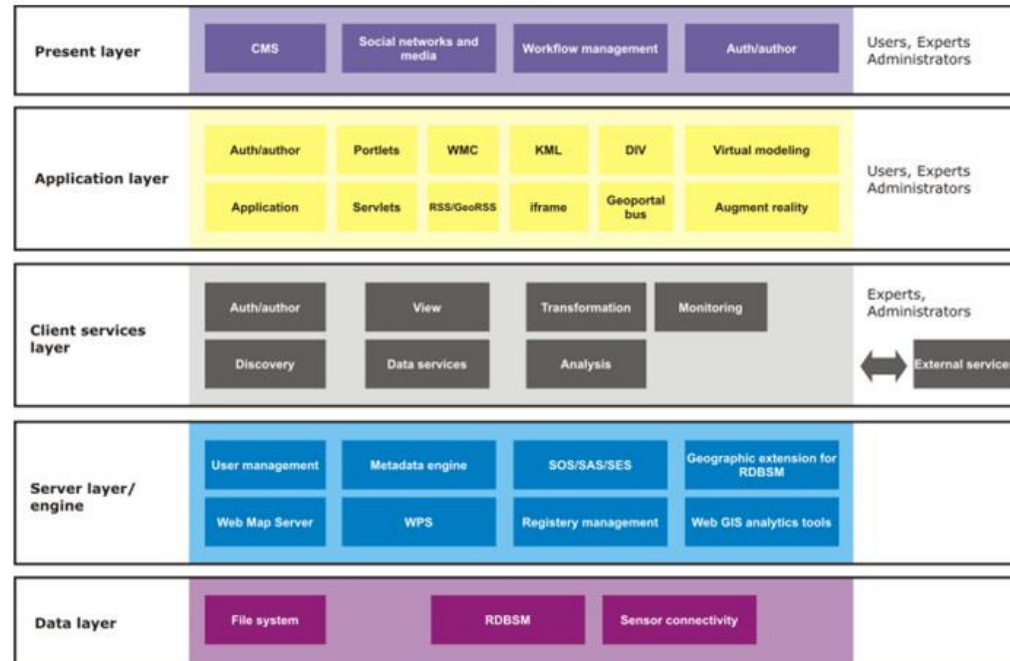
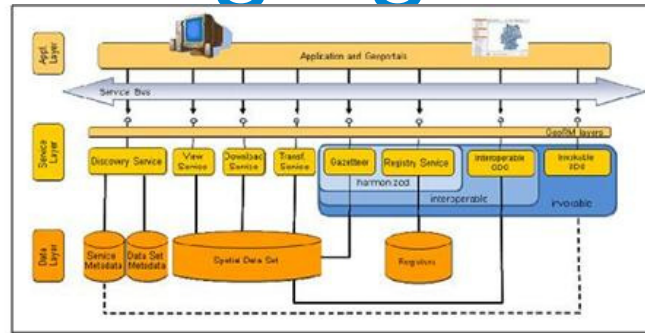
# Linked Open Data for Environment Protection in Smart Regions The SmartOpenData Project Approach

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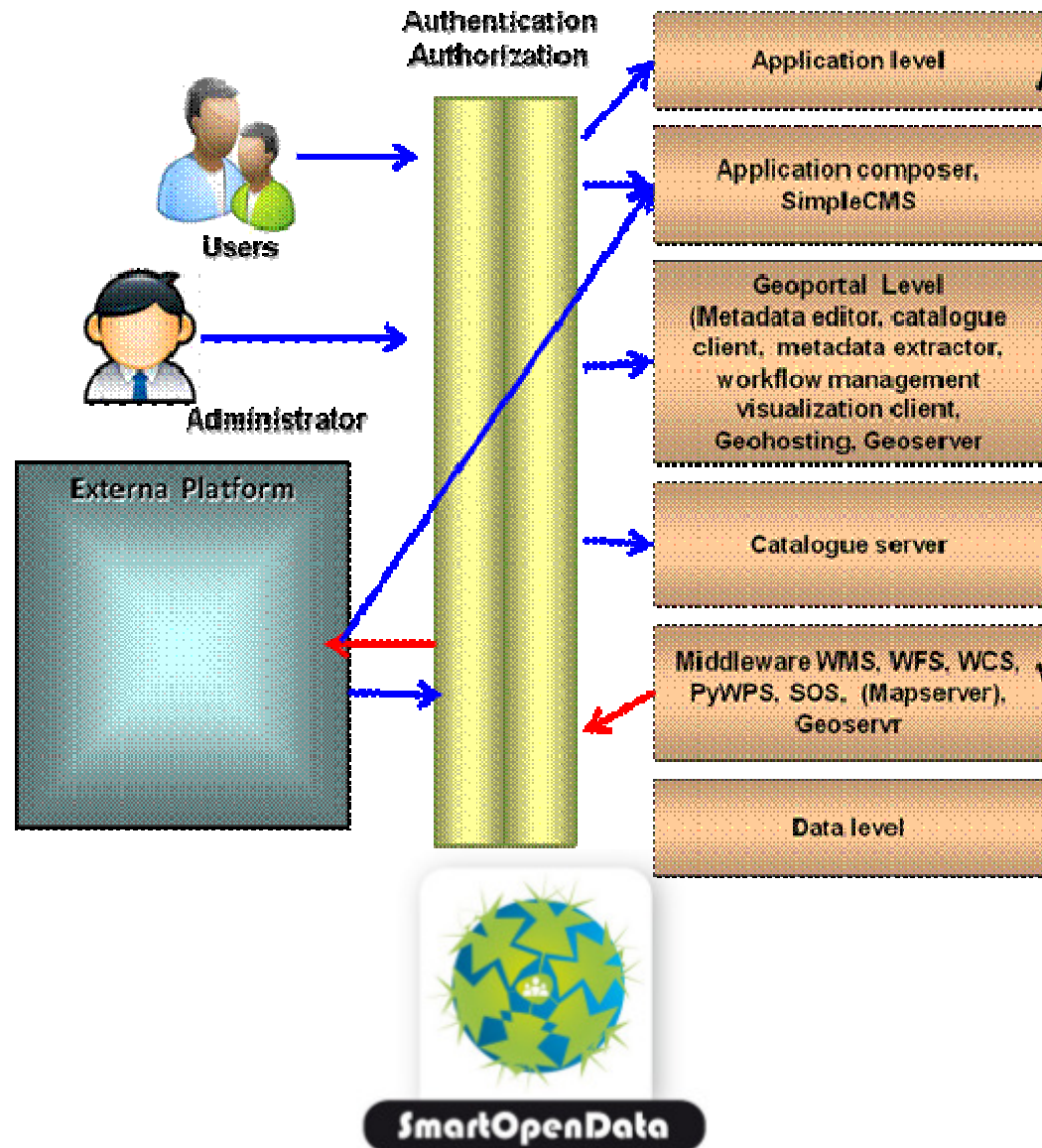


# Habitats Changing Architecture



SmartOpenData

# Habitats Reference Laboratory



# Habitats Linked Open Data

Map - habitats - Windows Internet Explorer

http://www.habitats.cz/view

Soubor Úpravy Zobrazit Oblíbené položky Nástroje nápověda

Oblíbené položky GEOSS-ECP - Breaking N... Windows Německo

Map - habitats

Email: Password: Login Sign up Lost password more ...

Share: f in t |

habitats

Addresses Metadata

Specify an address or locality Search

Home Metadata Map SuperCAT HS-CAT Map Projects Library Blog Follow us HELP

1: 866688

**Eben**

Ski resort Eben is placed in Salzburgin Austria. It is a part of large ski region [Ski amadé](#). More information about Eben: [Wikipedia page](#).

20 km © Copyright | 1490969.8, 6010742.0

Layers

Info

Maps

Public

These maps were created by the geoportal administrator from the provider's data that has been verified.

Basic INSPIRE

- Environment
- Water
- Nature
- Socioeconomic factor
  - Black Sea Land use
  - Climate temperatures
  - Demography
  - Ecoregions for rivers and lakes
  - Five meter elevation contour line

OWS

Hotovo

Internet 100%

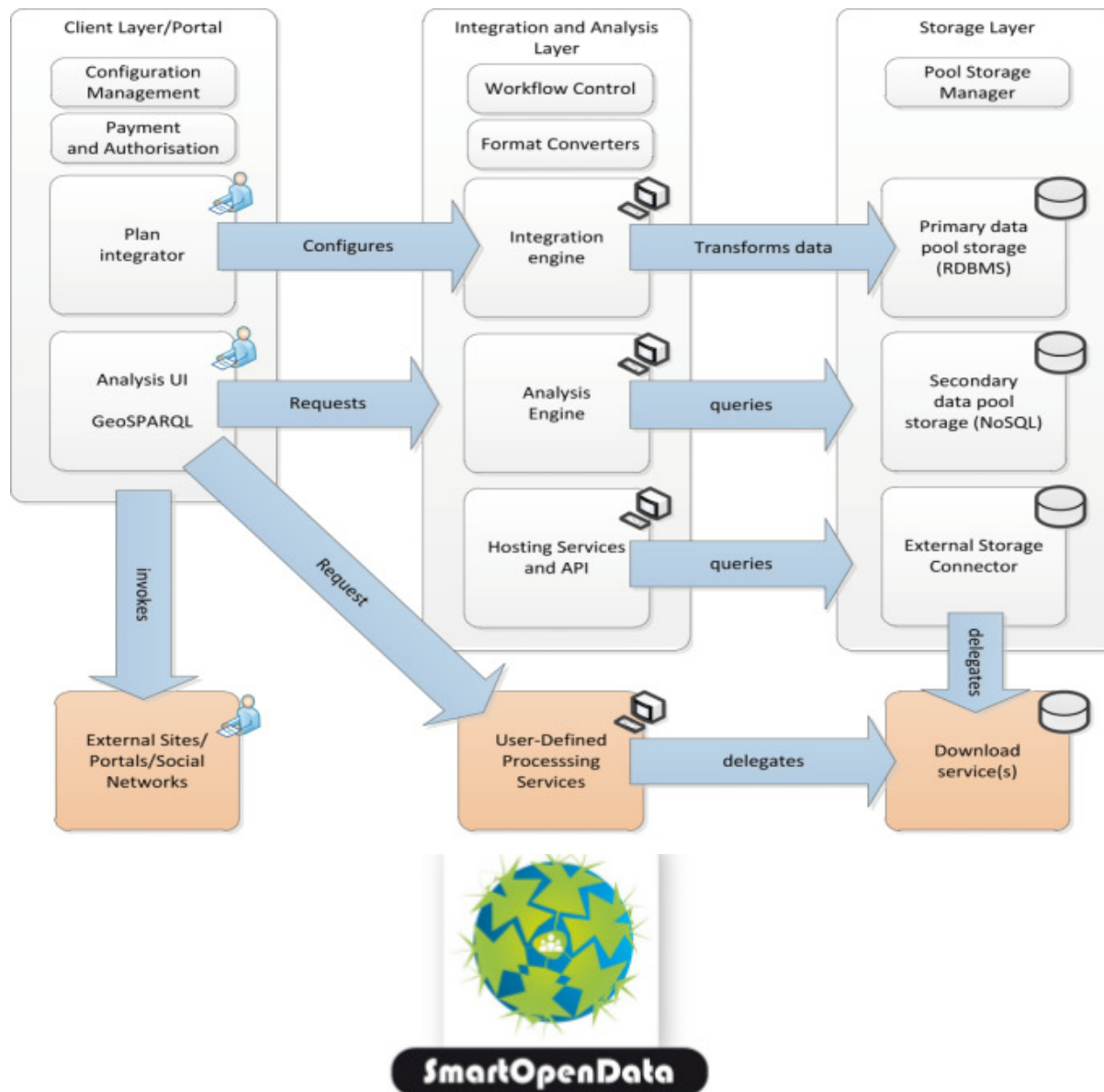
Start

3 P... Think... 3 Fi... 10 M... 7 M... S Skyp... 4 A... 2 I... 5 M... 100% 10:20

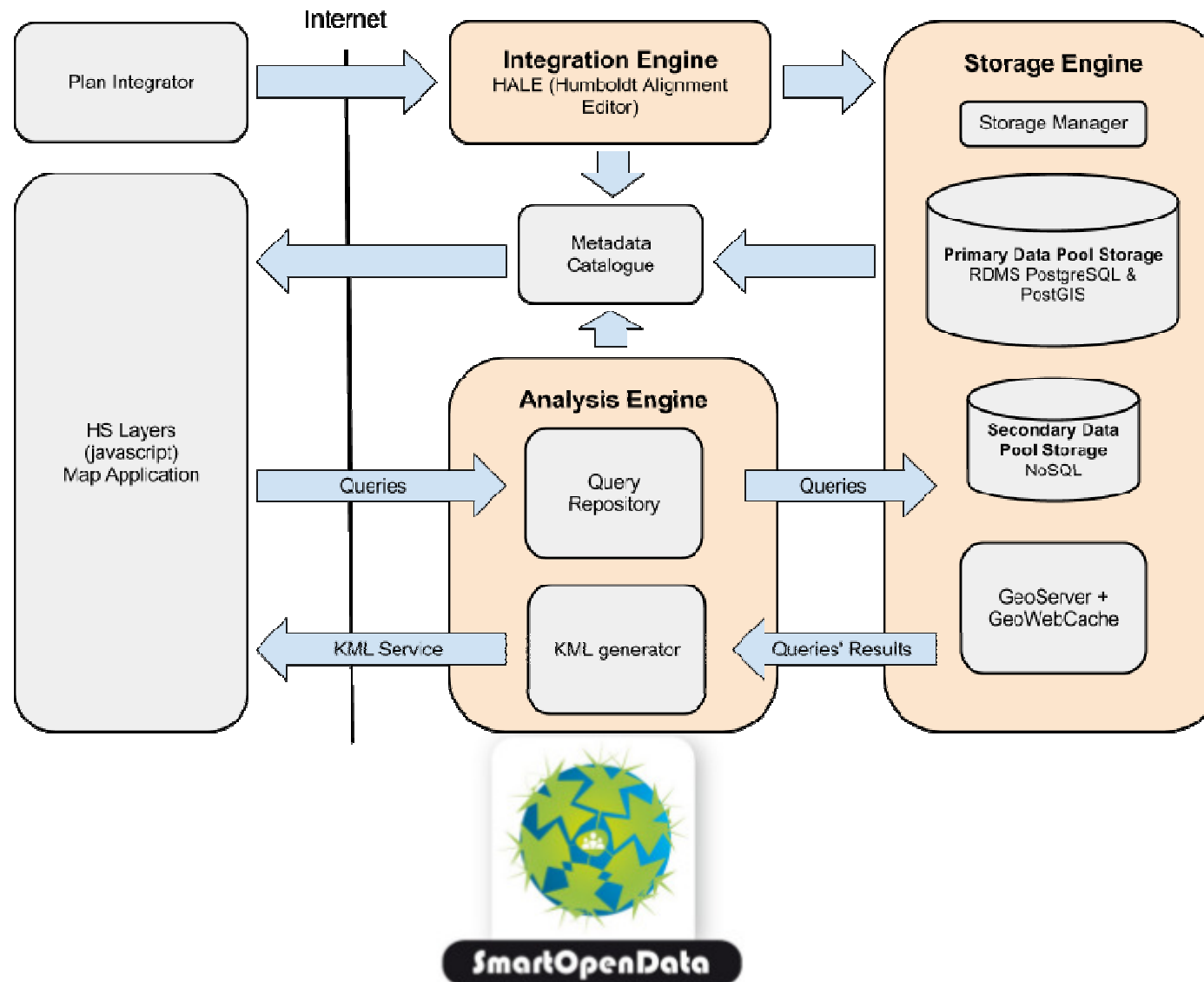


SmartOpenData

# Plan4business approach



# Plan4business approach



# SmartOpenData

- SmartOpenData = Open Linked Data for environment protection in Smart Regions
- Project founded by European Commission (7FP, ENV.2013.6.5-3)
- Kick-off meeting: December 2013 in Madrid, Spain
- Duration: 24 months
- 16 European organizations (Spain, Ireland, Italy, Czech Republic, Slovakia, Norway, Latvia, Portugal, France)

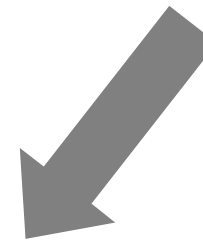


# Aim

Heterogeneous environmental data, including research data or VGI

Environmental data initiatives & projects (INSPIRE, GEOSS, GMES, Habitats...)

**OPEN  
LINKED  
DATA**



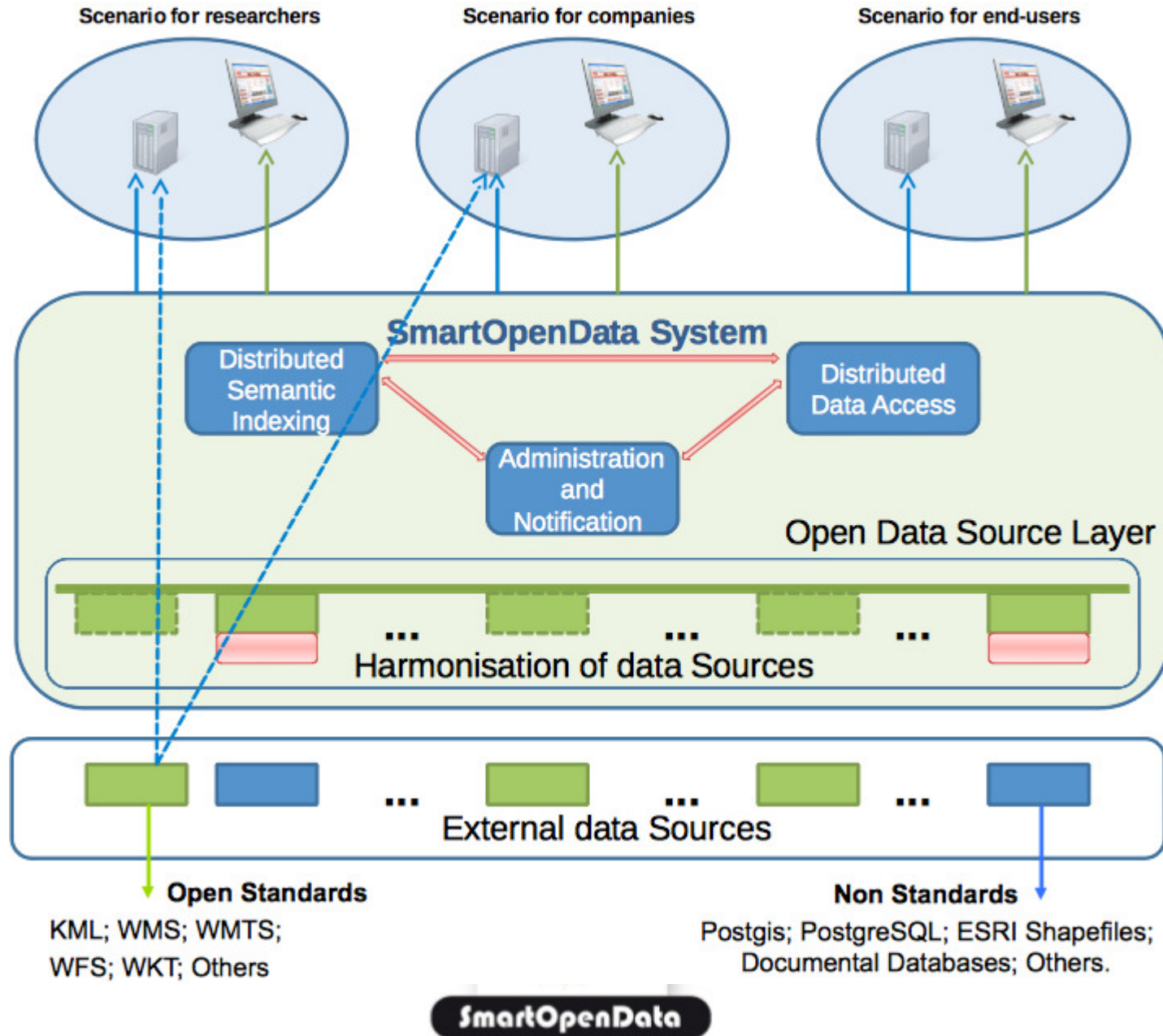
**INTEGRATION**



**SmartOpenData**



# SmartOpenData Architecture



# Integration

- Environmental data and metadata fusion (exploitation, harmonization & integration)
- Application of Open Linked Data principles (data models and structures, shared vocabularies /NeoGeo, GEMET.../, unique links, RDF structures, SPARQL queries...)
- Visualization and publication methods of environmental data based on Open Linked Data



# Key Innovations

- Distributed semantic indexing providing a service for searching and locating data based on semantic information
- Distributed data access
- Administration and notification, which provides administration facilities for managing users, workflows and data to data providers

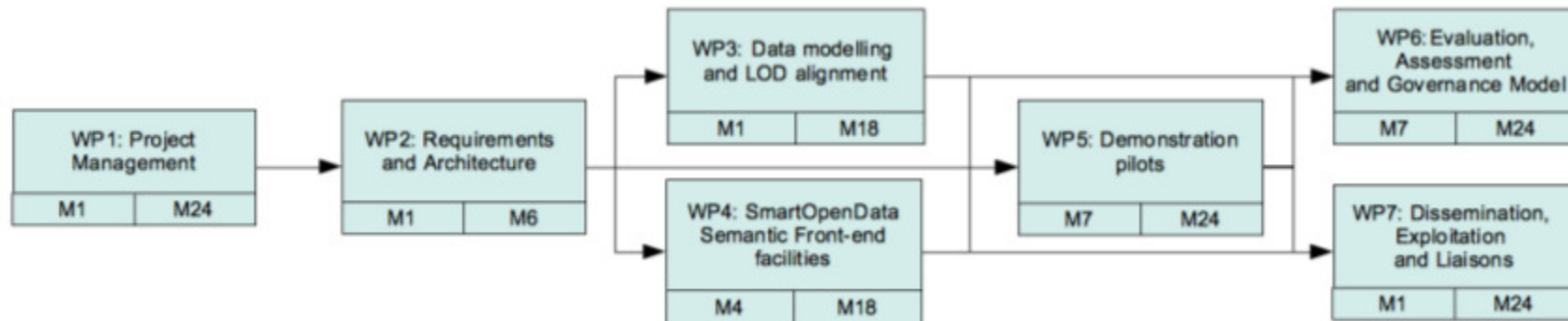


# Pilots

- Agroforestry management pilot (Tragsa, Spain)
- Environmental research, Biodiversity pilot (MAC, Ireland)
- Water monitoring pilot (ARPA, Italy)
- Forest sustainability pilot (FMI, Czech Republic)
- Environmental data reuse pilot (SAZP, Slovakia)



# Work Plan



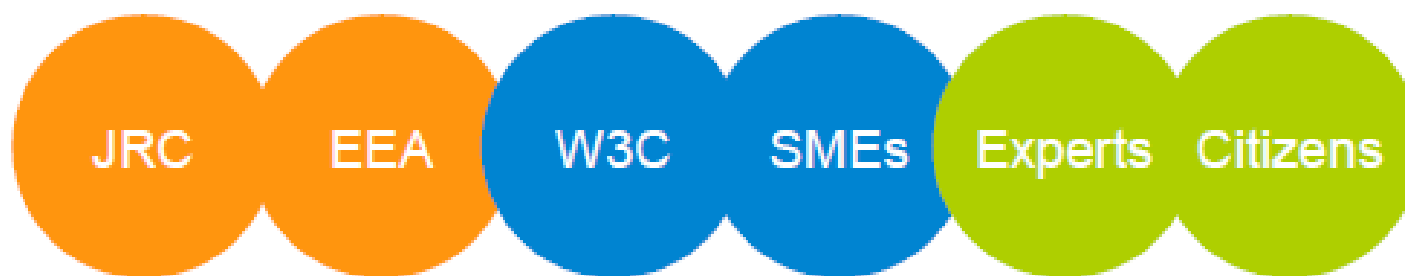
SmartOpenData

# Results

- Sustainable Linked Open Data infrastructure to promote environmental protection data sharing among public bodies in the European Union
- Integration of semantic technologies and approaches
- Definition of business models focused on SMEs and based on innovative services
- Demonstration of the impact of the sharing and exploiting data and information from many varied resources – pilot applications



# SmartOpenData = combination of



## View on environmental data



Thank you  
for your attention

