

## Pilots and use cases

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## Scenarios & Pilots

- 3 Cross-border Pilots:
  - Czech Republic/Slovakia for everyday life issues connected to Environmental aspects
  - ☐ Hungary/Slovakia for Nature Conservation
  - ☐ Italy/Slovenia for Environmental Risk (Geohazard)

- 1 Scenario in two Pilots
  - □ Belgium and Italy for Air Quality



Portugal

 three municipalities (PT) from transboundary catchment - the Tagus River, Scenario on Ecological landuse Planning



# Overview - eENVplus use case definition and user requirements collection

- A number of use cases were defined for each of the Pilot Applications (overall 26 use-cases already defined)
- A Technical Team was established to analyze the provided use cases and extract user and system requirements.
- These requirements (more than 130) are the basis for the specifications of the eENVplus software products.
- A collaborative software environment (bug tracker and project management tool) has supported the requirements collection phase.
- A strong communication effort between all partners has been of great importance.



## Step 1

collectionUse Case descriptions

10 Pilot Applications

# 26 Use Cases where defined

#### EP01 - Pilot in Belgium:

Scenario: Implementation of a SEIS for air quality data

- UC-EP01-01: The reporting service
- UC-EP01-02: Validation and official submission
- •UC-EP01-03: Providing useful open services derived from the same data

#### EP02 - Pilot in Italy

Scenario: Implementation of a SEIS for air quality data

- •UC-EP02-01: National collection of reporting data
- UC-EP02-02: Official submission of National Reporting

#### EP03 - Pilot in Belaium:

Scenario: Providing INSPIRE-compliant access to utility services: the case of sewage networks in Flanders

- UC-EP03-01: Consulting the sewage database for the expansion and maintenance of the sewage system and wastewater treatment infrastructure
- UC-EP03-02: Joint management tool for the sewage database
- •UC-EP03-03: Dissemination of information on sewage system to all stakeholders

#### EP04 - Cross-border Pilot in Czech R. / Slovakia

Scenario: CSspire - Everyday Life Issues Connected to Environmental Aspects

- UC-EP04-01: I want to cut a tree down on land which is under my ownership (outside of the forest)
- UC-EP04-02: I want to use water from underground sources in a quantity greater than 500 qm/day (build a well and draw water)
- •UC-EP04-03: I am seeking a quiet and clean place to build a cottage

#### EP05 - Pilot in France:

Scenario: Natural Areas INSPIRE Compliance Toolbox

- •UC-EP05-01: Determine if the user is in or near a Protected site / a Biogegraphical Region or an Habitat /
- •UC-EP05-02: I've seen a species Is there other around me?

#### EP06 - Pilot in Greece:

Scenario: Forest Fire Management

- •UC-EP06-01: Awareness Phase, data acquisition, pre-processing and preparation
- •UC-EP06-02: Emergency Phase

#### EP07 - Cross-border Pilot in Hungary / Slovakia

Scenario: Window on the Protected Areas - Mobile Conservation Map

UC-EP07-01: Mobile Conservation Map (MCM) application

#### EP08 - Pilot in Iceland:

Scenario: INSPIRE Geoportal

• UC-EP08-01: Discover and Viewing, INSPIRE compliant services for nature conservation purpose

#### EP09 - Cross-border Pilot in Italy / Slovenia

Scenario: Geological Map Harmonization

•UC-EP09-01: Environmental risk (geo-hazard): landslide susceptibility map

•UC-EP10-05: Evaluate the impact of urban growth on air and water quality

- •UC-EP09-02: Environmental risk (geohazard): analysis of flooding phenomena
- UC-EP09-03: Environmental analysis: geological and environmental features of karst area

#### EP10 - Pilot in Portugal

#### Scenario: Urban Landuse Planning

- •UC-EP10-01: Delineation of study areas
- UC-EP10-02: Evaluate urban and rural growth
- •UC-EP10-03: Evaluate and document data accuracy
- •UC-EP10-04: Evaluate spatial planning impact on urban growth
- UC-EP10-06: Integrate statistical data (time series)



## Step 2

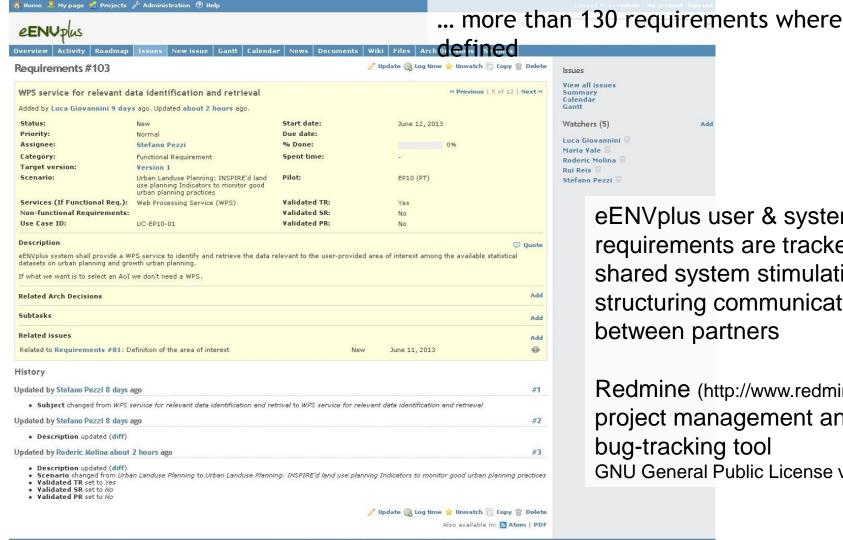
## - Matrix mapping Use Cases to functionalities

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		1	<u> </u>			1	1	1								Service	S										uirements (I			
Pilot Number	Scenario Title	Pilot Responsible	Technical Responsible (Proposal)	Data Themes	Harmonisation Toolkit	Validation Toolkit	<u>e ENVplus</u> Catalogue and connection	Mobile App	TF for Metadata Compilation	TF for Data Discovery	TF for Semantic Explorative Search	Web Map Service (WMS)	Web Feature Service (WFS)	Web Coverage Service (WCS)	Catalogue Service for Web (CSW)	Sensor Observation Service (SOS)	Web Processing Service (MPS)	Orchestration Service	Reporting Service	Crowdsourcing Service	Validation Service	Ingestion Service and Work Flow	Advanced (3D/AR) Visualization Support Service	Other Functional requirements	User Interface	Usability	Performance	i (Issue Categoria) I de la contraction de la co	Security	Legal
EP01	Implementation of a SEIS for air quality data		Olav Peeters (VMM-IRCELIN), Carmelo <u>Attardo</u> (GISIG), EPSIT	III.11.AM, III.7. EF, III.13 AC	EP01-01	EP01-02	EP01-03	3 EP01-03	EP01-03	EP01-03	EP01-03	All EP01-03	All EP01-03			All			EP01-01 EP01-02		All	All	EP01-03	EP01-03 (n)	EP01-02 EP01- 03		EP01-03		EP01-02	EP01-03
EP02	Implementation of a SEIS for air quality data		Giannini Luciana (ISPRA), Carmelo <u>Attardo</u> (GISIG), EPSIT	11. AM	All	All			EP02-01			All	All				All	EP02-01 EP02-02	All		All	All		EP2-02 (2)	see redmin e + require ments					
EP03	Providing INSPIRE-compliant access to utility services: the case of sewage networks in Flanders	s Katleen Miserez (VMM) Kristof <u>Decoene</u> (VMM)	Katleen Miserez (VMM), Roderic Molina (GISIG)	I.8. HY, III.6. US	All (n)	All (n)	All					All	All		All					EP03-03	All	All		see <u>redmine</u> requirements				All	All	
EP04	Connected to Environmental Aspects	s Marek Ziacik (SAZP), Veronika. Koskova (SAZP)	1	I.6 CP, I.8 HY, I.9 PS, II.2 LC, III.5 HH, III.8 PF, III.4 LU (SK), III.6 US (SK), III.17-19 (SK)	All	All	Maybe					All	All		All		All EP04-01 EP04-02 EP04-03				All			All (n)				All		
EP05	Natural Areas INSPIRE Compliance Toolbox	1	Marketa Hanzlova	I.9 PS, III.17 BR, III.18 HB, III.19 SD	All	All		All		All	All	All	All		All					EP05-02			All		All	All			EP05-02	All
EP06	Forest Fire Management		Giacomo Martirano (EPSIT)	II.2: LC, III.7. EF, III.14: MF	EP06-02	х					All		All	All			All	All				EP06-01(n) EP06-02		All						
EP07	Mobile Conservation Map	Attila Andras Takacs (MRD), Bela Markus (GEO), Marek Ziacik, Veronika Koskova, Martin Koska (SAZP)	Stefano Piffer (Graphitech)	I.9. PA , I. 8. HY	EP07-01	EP07-01		EP07-01		EP07-01		EP07-02	EP07-01	EP07-00	EP07-01					EP07-01			EP07-01		EP07-01	EP07-01			EP07-01	EP07-01
EP08	INSPIRE Geoportal - Nature conservation data in Iceland	Eydis Lindal Finnbogadottir (NLSI)	Jens Stutte (PKH), <u>Dimitrios</u> Karachalios (PKH)	I.1.RS, I.4.AU, I.9.PS, I.7.TN	EP08-01	EP08-01	EP08-01	4	EP08-01	EP08-01	EP08-01	EP08-01	EP08-01		EP08-01 (n)									EP08-01 (n)				EP08-01		
EP09		Matevz Novak (GeoZS)	Stefano Pezzi	II.4. GE, II.1. EL (IT), I.7. TN (IT), III.12. NZ, I.8. HY (SI)	All	All	All			All	All	All	All		All	EP09-03	All EP09-01 EP09-02 EP09-03				All	EP09-01 EP09-02	EP09-01 EP09-02	EP09-01 EP09-02	All	All	EP09-01	EP09-01		All
EP10	Urban <u>Landuse</u> Planning: INSPIRE'd land use planning Indicators to monitor good urban planning practices	Rui Reis, Maria Vale (DGT), Raquel <u>Saraiva</u> (DGT)	Rui Reis & Maria Vale (DGT), Roderic Molina (GISIG)	I. 4. AU, II. 3. OI, III. 1. SU, III. 4. LU	All	All			All			All	All				All EP010- (01, 02, 03, 04, 05)					All EP010- (01, 02, 03, 04, 05)		All (n)	All	All				
				Resposibilities (Assignee)	WP3, Giacomo Martizano (EPSIT)	+SINERGIS	T5.7 Jens Stutte + XXX (PKH)	Stefano <u>Piffor</u> (GRAPHITECH)		WP4, Monica De Martino (CNR-IMATI), Carsten Heidmann (disy)		T5.3, Stefano <u>Piffer</u> (GRAPHITECH)	T5.3, Stefano <u>Piffer</u> (GRAPHITECH)	T5.3, Stefano Piffer (GRAPHITECH)	T5.3, Stefano Piffer (GRAPHITECH)	T5.3, Stefano Piffer (GRAPHITECH)	T5.4, Stefano Pezzi (SINERGIS)	T5.4 Carsten Heidmann (disy) Stefano <u>pazzi</u> (SINERCIS)	T5.5 (GISIG, VMM, ISPRA)	T5.6, Stefano Piffer (GRAPHITECH)	T5.3, Giacomo Madirano (EPSIT)	T5.3, Stefano Pezzi (SINERGIS)	WP5 Objs, Stefano Piffer (GRAPHITECH)	Technical Rasponsible	Technical Responsible	Technical Responsible	Technical Responsible	Technical Responsible	Stefano Pezzi (SINERGIS)	Technical Responsible



## Step 3

## - entering requirements in a tracking system



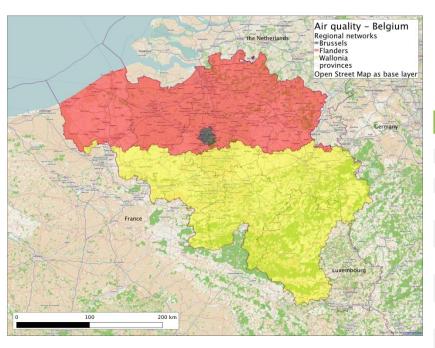
eENVplus user & system requirements are tracked in a shared system stimulating & structuring communication between partners

Redmine (http://www.redmine.org/) project management and bug-tracking tool GNU General Public License v2 (GPL)



### EP01 - Pilot in Belgium: Scenario: Implementation of a SEIS for air quality data

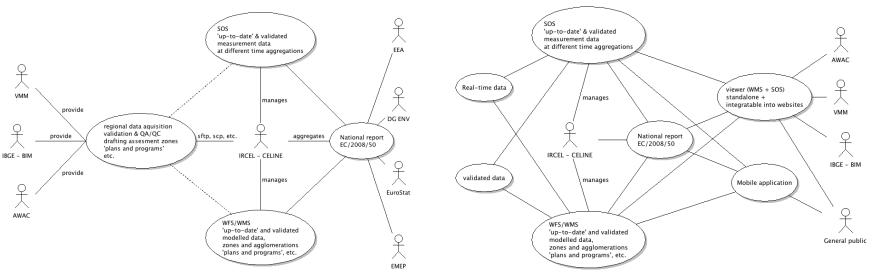
- UC-EP01-01: The reporting service
- •UC-EP01-02: Validation and official submission
- UC-EP01-03: Providing useful open services derived from the same data



Datasets in	Datasets in BE									
INSPIRE DT	Content	Metadata	IPR / Open Data							
III.11.AM	Dataset B – "zones and agglomerations"	ISO 19115	Open data							
III.11.AM	Dataset C – "assessment regime"	ISO 19115	Open data							
III.11.AM	Dataset D – "assessment methods"	ISO 19115	Open data							
III.7. EF	Dataset E1a – "primary validated assessment data – measurements"	ISO 19115	Open data							
III.13 AC	Dataset E1b – "primary validated assessment data – modelled"	ISO 19115	Open data							
III.7. EF	Dataset E2a – "primary up-to-date assessment data – measurements"	ISO 19115	Open data							
III.13 AC	Dataset E2b – "primary up-to-date assessment data – modelled"	ISO 19115	Open data							
III.7. EF	Dataset F1a – "aggregated data - primary validated measurements"	ISO 19115	Open data							
III.13 AC	Dataset F1b – "aggregated data - primary validated modelled"	ISO 19115	Open data							
III.7. EF	Dataset F2 – "aggregated data - primary up-to-date measurements"	ISO 19115	Open data							
III.11.AM	Dataset G – "attainment of environmental objectives"	ISO 19115	Open data							
III.11.AM	Dataset H – "air quality plans"	ISO 19115	Open data							
III.11.AM	Dataset I - "source apportionment"	ISO 19115	Open data							
III.11.AM	Dataset J – "scenario for the attainment year"	ISO 19115	Open data							
III.11.AM	Dataset K – "measures"	ISO 19115	Open data							

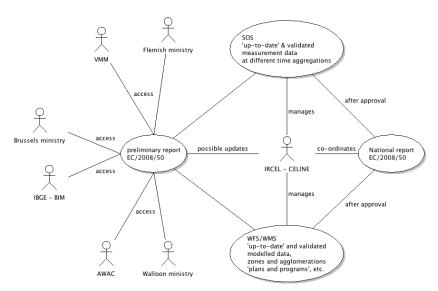


## EP01 - Pilot in Belgium: Implementation of SEIS for air quality data



UC-EP01-01 - The reporting service

UC-EP01-02 - Validation and official submission



UC-EP01-03 - Providing useful open services derived from the same data



Scenario

Pilot

## EP01 - Pilot in Belgium: Implementation of SEIS for air quality data

Assignee

Subject

## Example of requirements:

		beenano	000 0000 10	Abbiginee	Subject
109	EP01 (BE)	Implementation of a SEIS for air quality data	UC-EP01-01, UC-EP01-02, UC- EP01-03	Stefano Pezzi	Ingestion Service for air quality data
91	EP01 (BE)	Implementation of SEIS for air quality data (BE)	UC-EP01-03		Integrate View Service with INSPIRE (DRAFT)
90	EP01 (BE)	Implementation of SEIS for air quality data (BE)	UC-EP01-03		Integrate Download Service with INSPIRE (DRAFT)
60	EP01 (BE)	Reporting Service	UC-EP01-01 UC-EP01-02 UC- EP01-03	Stefano Piffer	SOS support for browser-based mapping client
58	EP01 (BE)	Implementation of a SEIS for air quality data	UC-EP01-03	Stefano Piffer	Advanced Visualization in Web Client
54	EP01 (BE)	Reporting Service	UC-EP01-03	Stefano Piffer	Mobile app for Air quality dataset
36	EP01 (BE)	Reporting Service	UC-EP01-01 UC-EP01-02 UC- EP01-03	Stefano Piffer	WFS support for web-based mapping client
35	EP01 (BE)	Reporting Service	UC-EP01-01 UC-EP01-02 UC- EP01-03	Stefano Piffer	WMS support for web-based mapping client
17	EP01 (BE)	Implementation of SEIS for air quality data	UC-EP01-03		Semantic Explorative Search
16	EP01 (BE)	Implementation of SEIS for air quality data	UC-EP01-03		Service Discovery
15	EP01 (BE)	Implementation of SEIS for air quality data	UC-EP01-01 UC-EP01-02		Metadata Compilation for time-aggregated datasets

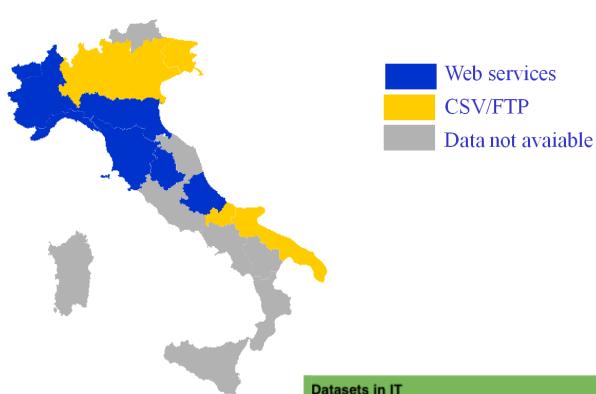
Use Case ID



### EP02 - Pilot in Italy:

Scenario: Implementation of a SEIS for air quality data

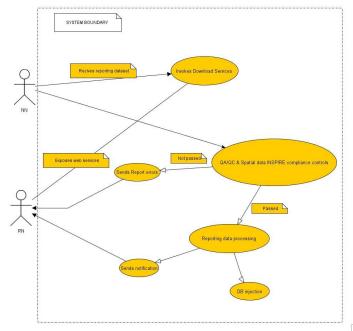
- UC-EP02-01: National collection of reporting data
- UC-EP02-02: Official submission of National Reporting



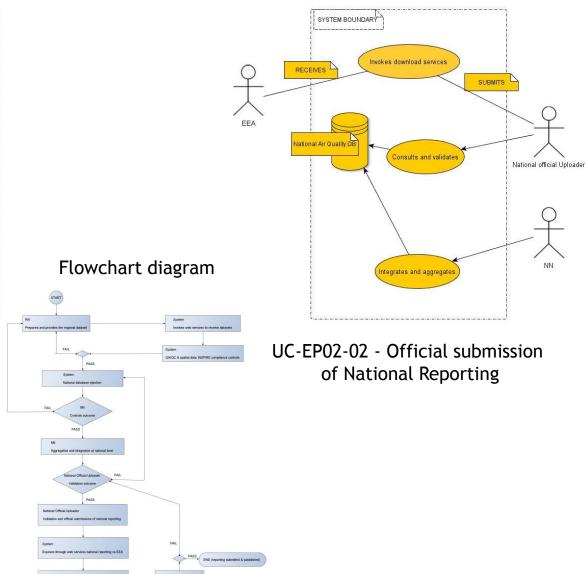
Datasets in IT							
INSPIRE DT	Content	Metadata	IPR / Open Data				
11. AM	Air Quality Zone and Agglomerations Information	ISO19115/INSPIRE	Free under specific agreement (IPR mention), data available for eENVPlus use				



## EP02 - Pilot in Italy: Implementation of SEIS for air quality data



UC-EP02-01 - National collection of reporting data





### EP03 - Pilot in Belgium:

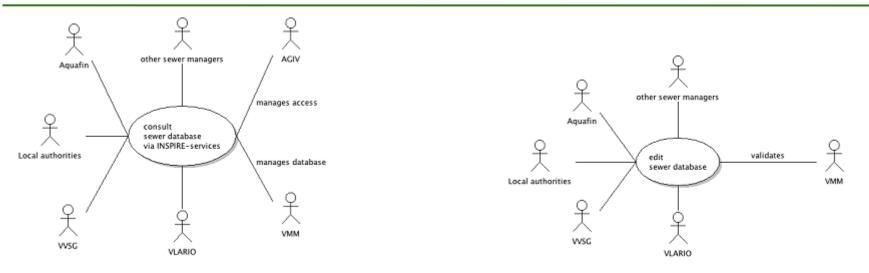
Scenario: Providing INSPIRE-compliant access to utility services: the case of sewage networks in Flanders

- UC-EP03-01: Consulting the sewage database for the expansion and maintenance of the sewage system and wastewater treatment infrastructure
- UC-EP03-02: Joint management tool for the sewage database
- •UC-EP03-03: Dissemination of information on sewage system to all stakeholders

Datasets in BE						
INSPIRE DT	Content	Metadata	IPR / Open Data			
III.6. US	Sewage database	No	Open Data			
I.8. HY	Dataset Hydrography (WMS)	ISO 19115	Open Data			

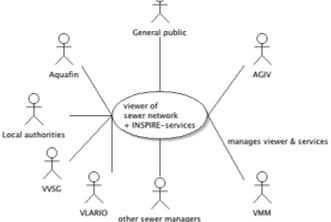


## EP03 - Pilot in Belgium: Providing INSPIRE-compliant access to utility services



UC-EP03-01 - Consulting the sewage database for the expansion and maintenance of the sewage system and wastewater treatment infrastructure

UC-EP03-02 - Joint management tool for the sewage database



UC-EP03-03 - Dissemination of information on sewage system to all stakeholders



### EP04 - Cross-border Pilot in Czech R. / Slovakia Scenario: CSspire - Everyday Life Issues Connected to Environmental Aspects

- UC-EP04-01: I want to cut a tree down on land which is under my ownership (outside of the forest)
- UC-EP04-02: I want to use water from underground sources in a quantity greater than 500 qm/day (build a well and draw water)
- •UC-EP04-03: I am seeking a quiet and clean place to build a cottage



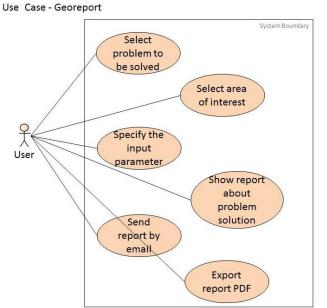
Datasets in CZ							
INSPIRE DT	Content	Metadata	IPR / Open Data				
I.6 CP	Cadastral parcels	ISO 19115	Open data				
I.9 PS	Protected areas	ISO 19115	Open (WMS), Free under the specific agreement, data available for eENVplus use				
I.9 PS	Important landscape elements	ISO 19115	idem				
II.2 LC	CORINE	ISO 19115	Free for research and education, data available for eENVplus use				
III.8 PF	ePRTR	ISO 19115	Open data				
Datasets in	sk						

Datasets in	Datasets in SK								
INSPIRE DT	Content	Metadata	IPR / Open Data						
I.9 PS	Protected areas	ISO 19115	IPR data, (Free for research and education), data available for eENVplus use						
I.9 PS	Important landscape elements	ISO 19115	idem						
II.2 LC	CORINE	ISO 19115	Free for research and education, data available for eENVplus use						
III.4 LU	Local plans	ISO 19115	IPR, data available for eENVplus use						
III.6 US	Responsibility of the Office state and public administration	ISO 19115	Open data						
III.8 PF	ePRTR	ISO 19115	IPR, data available for eENVplus use						

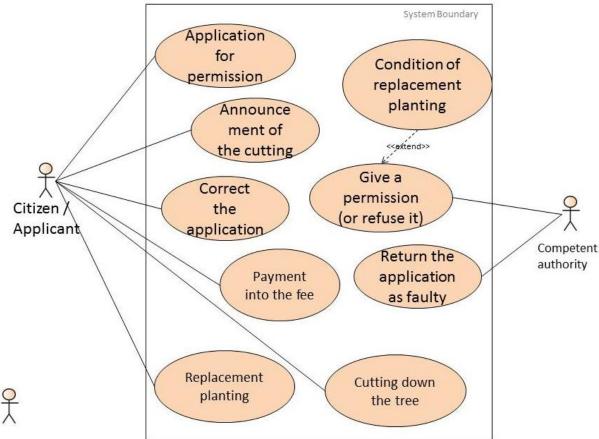


## EP04 - Cross-border Pilot in Czech R. / Slovakia:

CSspire - Everyday Life Issues Connected to ENV Aspects



General diagram - Georeport



UC-EP04-01 - I want to cut a tree down on land which is under my ownership (outside of the forest)

UC-EP04-02 - I want to use water from underground sources in a quantity greater than 500 m3/day (build a well and draw water)

UC-EP04-03 - I am seeking a quiet and clean place to build a cottage



#### EP05 - Pilot in France:

#### Scenario: Natural Areas INSPIRE Compliance Toolbox

- UC-EP05-01: Determine if the user is in or near a Protected site / a Biogegraphical Region or an Habitat / Biotope zone
- •UC-EP05-02: I've seen a species Is there other around me?

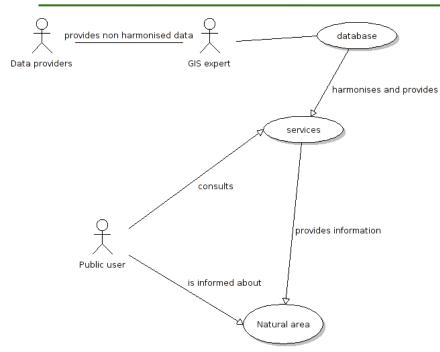


Datasets in FR							
INSPIRE DT	Content	Metadata	IPR / Open Data				
I.9 PS	Parcs Nationaux Terrains des Conservatoires d'Espaces Naturels Réserves Naturelles Nationales	ISO19115 / INSPIRE	IPR protected but free access and use (*).				
III.17 BR	Régions Biogéographiques	idem	idem				
III.18 HB	Inventaire des Zones Naturelles d'Intérêts Ecologiques, Faunistiques et Floristiques Type 1 (ZNIEFF Type 1)	idem	idem				

<sup>(\*)</sup> The text « Muséum national d'Histoire naturelle » must be mentioned whenever the layer is used. The use of the data is allowed for the user's own internal business use, not for any commercial purpose, and not for financial profit or gain. No modification of the data is allowed.

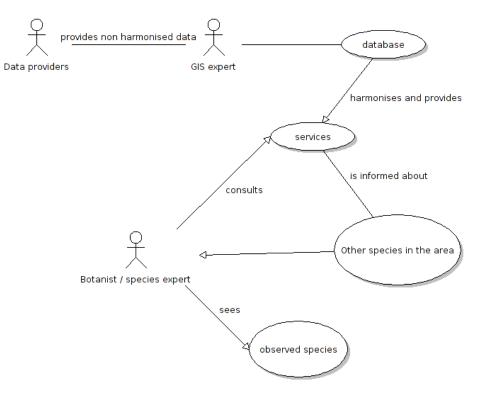


### EP05 - Pilot in France: Natural Areas INSPIRE Compliance Toolbox



UC-EP05-01 - Determine if the user is in or near a Protected site / a Biogegraphical Region or a Habitat / Biotope zone

UC-EP05-02 - I've seen a species - Are there others around me?



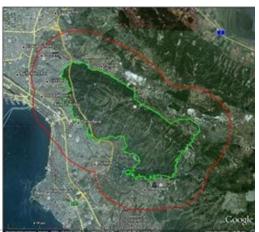


#### EP06 - Pilot in Greece: Scenario: Forest Fire Management

• UC-EP06-01: Awareness Phase, data acquisition, pre-processing and preparation

• UC-EP06-02: Emergency Phase





Datasets in EL						
INSPIRE DT	Content	Metadata	IPR / Open Data			
II.2: LC	Fuel types classification, using the INSPIRE LC Data Specification (COVERAGE: -National)	ISO 19115	IPR, data available for eENVplus			
III.7. EF	Weather conditions and their measurements; precipitation, temperature, evapotranspiration, wind speed and direction (COVERAGE: Regional)	No	IPR, data available for eENVplus			
III.14: MF	idem	idem	idem			

Note: Additionally, the following datasets are included as well: Spatial-temporal processed data:

- Fire Linear Intensity, BYR (Kw/m) / WCS
- · Cloud Coverage, CLO (%) / WCS
- Dead Fuel Moisture, DFM (%) / WCS
- Air Relative Humidity, HRE (%) / WCS
- Probability of Ignition, PIG (%) / WCS
- Rain precipitation in the last hr, PPH (mm) / WCS
- Accumulated Precipitation, PPD (mm) / WCS
- Temperature, TEM (Celsius) / WCS
- Wind Speed, WSP (m/sec, integer) / WCS
- Wind Direction, WDI (Degrees Clockwise) / WCS

#### Spatial-static processed data:

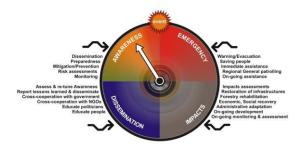
- Aspect, ASP (Degrees) / WCS
- Slope, SLO (Degrees) / WCS
- · Fuel Models, FMO (List of models) / WCS

#### Background map

- CORINE Land Use / WCS
- OSM Road Network / WFS

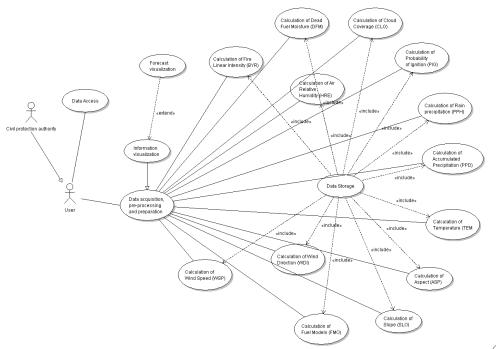
#### Infrastructures

- Infrastructures related to forest fires / WFS
- Building blocks / WCS



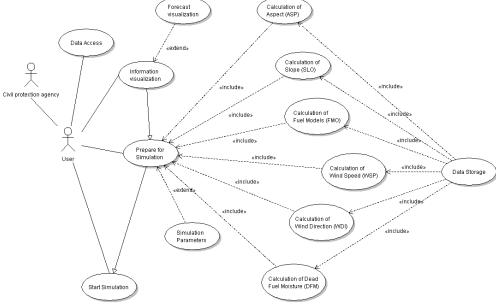


## EP06 - Pilot in Greece: Forest Fire Management



UC-EP06-02 - Emergency Phase

UC-EP06-01 - Awareness Phase, data acquisitior pre-processing and preparation





### EP07 - Cross-border Pilot in Hungary / Slovakia Scenario: Window on the Protected Areas - Mobile Conservation Map

•UC-EP07-01: Mobile Conservation Map (MCM) application

Datasets in SK (Area covered: Slovak Republic)								
INSPIRE DT	Content	Metadata	IPR / Open Data					
I.9. PA	Protected areas, important landscape elements	ISO 19115	IPR data (Free for research and education), data available for eENVplus use					
I. 8. HY	Surface and ground water	ISO 19115	idem					
Datasets in HU (Area covered: Hungary)								
	··· (/ ou oo / o. ou gu. )/							
INSPIRE DT	Content	Metadata	IPR / Open Data					
		Metadata ISO 19115	IPR / Open Data Open data for eENVplus use					



### EP08 - Pilot in Iceland: Scenario: INSPIRE Geoportal

• UC-EP08-01: Discover and Viewing, INSPIRE compliant services for nature conservation purpose

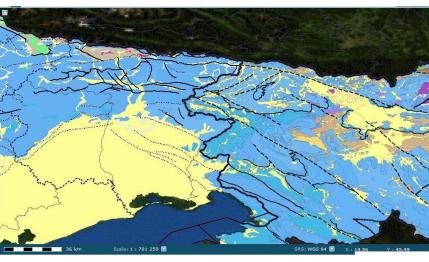
Datasets in IS (Area covered (103.000 km3): Whole Iceland)							
INSPIRE DT	Content	Metadata	IPR / Open Data				
I. 1. RS	Information of the Icelandic coordinate reference system (vertical and horizontal)	ISO 19115	Open data				
I. 4. AU	Municipality boundaries (second level)	ISO 19115	Open data				
I. 9. PS	Nature protected sites in Iceland (such as National Parks and reserved areas)	ISO 19115	Open data				
I. 7.TN	Road database of Iceland (from the NLSI)	ISO 19115	Open data				

Note: And Topographic map IS 50V (WMTS)



### EP09 - Cross-border Pilot in Italy / Slovenia Scenario: Geological Map Harmonization

- •UC-EP09-01: Environmental risk (geo-hazard): landslide susceptibility map
- •UC-EP09-02: Environmental risk (geohazard): analysis of flooding phenomena
- •UC-EP09-03: Environmental analysis: geological and environmental features of karst area

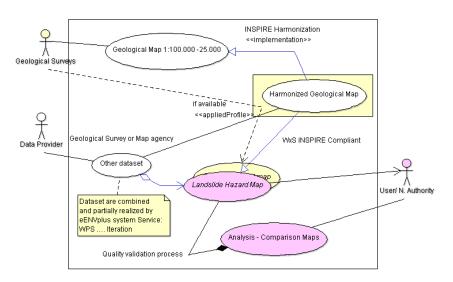


Datasets in IT	T .			
INSPIRE DT	Content	N	Metadata	IPR / Open Data
II.4. GE:	Geology 1M	1:	SO 19115	Open Data
II.4. GE:	Geolithology 100K	1	SO 19115	No commercial use
II.4. GE:	Geology 25K		SO 19115	No commercial use
II.4. GE:	IFFI Landslide	1	SO 19115	No commercial use
II.4. GE:	Sinkholes	]:	SO 19115	No commercial use
II.4. GE:	ITHACA	1	SO 19115	No commercial use
II.1. EL:	DEM		SO 19115	No commercial use
I.7. TN:	Road and Railway network	1	SO 19115	No commercial use
III.12. NZ	Landslide susceptibility map	1	No	No commercial use
III.12. NZ	EEE Catalogue	١	No	No commercial use
Datasets in S	1			

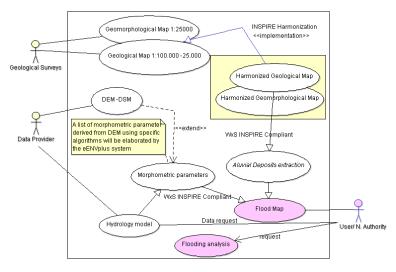
Datasets in S	l		
INSPIRE DT	Content	Metadata	IPR / Open Data
II.4. GE:	Geological and structural map	ISO 19115	Open Data
II.4. GE:	Basic geological map 1:100 000 sheet Beljak and Pontebba	ISO 19115	Copyright
II.4. GE:	Basic geological map 1:100 000 sheet Tolmin and Videm	ISO 19115	Copyright
II.4. GE:	Basic geological map 1:100 000 sheet Gorica	ISO 19115	Copyright
II.4. GE:	Basic geological map 1:100 000 sheet Trst	ISO 19115	Copyright
II.4. GE:	Geological map of Slovenia 1:250K	No	Copyright
II.4. GE:	Structural-tectonic map of Slovenia 1:250K	ISO 19115	Copyright
III.12. NZ:	Landslide susceptibility map of Slovenia 1:250K	ISO 19115	Copyright
III.12. NZ:	Debris-flow map of Slovenia 1:250K	No	Copyright
I.8. HY:	Hydrogeological map of Slovenia 1:250K	ISO 19115	Copyright



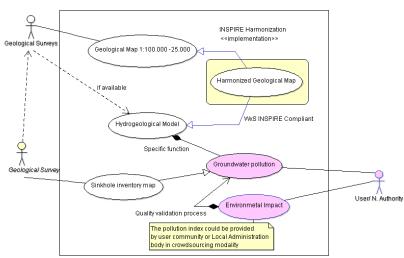
## EP09 - Cross-border Pilot in Italy/Slovenia: Geological map harmonisation



UC-EP09-01 - Environmental risk (geo-hazard): landslide susceptibility map



UC-EP09-02 - Environmental risk (geohazard): analysis of flooding phenomena



UC-EP09-03 - Environmental analysis: geological and environmental features of karst area



### EP10 - Pilot in Portugal Scenario: Urban Landuse Planning

- •UC-EP10-01: Delineation of study areas
- UC-EP10-02: Evaluate urban and rural growth
- •UC-EP10-03: Evaluate and document data accuracy
- UC-EP10-04: Evaluate spatial planning impact on urban growth
- UC-EP10-05: Evaluate the impact of urban growth on air and water quality
- UC-EP10-06: Integrate statistical data (time series)



Datasets in PT (Area covered: Tomar, Abrantes and Loures)				
INSPIRE DT	Content	Metadata	IPR / Open Data	
I. 4. AU	Administrative units of the country: CAOP dataset	ISO 19115	Open data	
II. 3. OI	Ortho imagery	ISO 19115	IPR, data available for eENVplus use	
III. 1. SU	Official statistics related to housing and demography	ISO 19115	idem	
III. 4. LU	COS90	ISO 19115	Open data	
III. 4. LU	COS2007	ISO 19115	IPR, data available for eENVplus use	



## Thank you!

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