

DORIS_Net **and the network of GMES** **Regional Contact Offices (RCOs)**

Massimo Antoninetti

IREA-CNR

Lombardia GMES Regional Contact Office

SnowCarbo Life+, Finnish GMES User Forum and DORIS_NET
Helsinki, January 9th, 2013

News

Copernicus: new name for European Earth Observation Programme



Copernicus is the new name of the European Commission's Earth Observation Programme, previously known as **GMES** (Global Monitoring for Environment and Security).

The new name was announced the 11th December by Commission Vice-President Antonio Tajani during the Competitiveness Council.

DORIS_Net summary

DORIS_Net: “Downstream Observatory organised by Regions active In Space – Network,, - Coordinated Action SPA.2010.1.1-07, FP7 Space, Feb 2011-Jan 2013

Objective: To create Regional Contact Offices with people expert in GMES that support regional actors (companies, research, end-users, regional authorities, ...) in

- > being aware of the opportunities of GMES
- > being trained and guided in developing new products
- > participating in dissemination events on GMES

RCOs are a voice of regional needs with respect to GMES

RCOs are a network, exchanging practices, information, initiatives



DORIS_Net is the first project fully mobilised on the NEREUS platform, and has been appointed “NEREUS flagship project”

NEREUS

- **NEREUS, Network of European Regions Using Space Technologies, is an initiative by regions from all over Europe, which share as Full Members its governance.**
- **Emphasis is placed on the use of space technologies. The network aims to explore the benefits of space technologies for Regions and their citizens and to spread their applications.**

To perform its mission NEREUS established a platform for:

- **voicing the regional dimension of space policies at a political level**
- **enhancing the growing role of citizens in the development of European space policy and markets**



- **exchanging information and knowledge**
- **networking and building of strong partnerships**
- **mobilising convincing projects and initiatives**

Partner consortium: organizations representing 20 regions + CHT (company with transversal tasks)

RCOs established in:

- CNR IREA, Lombardia, (It) Coordinator
- CEON, Bremen (D)
- CETE, Midi Pyrenees + Aquitania (Fr)
- G-STEP, Univ of Leicester, East Midlands (UK)
- SRCTE, Azores (Pt)
- TERN, Basilicata (It)

RCOs going to be activated in:

- Brittany (Fr) (Pole Mer + GIS-BreTel)
activated on 20th december 2012
- Veneto (It)
- Mazovia (Pl)

Tasks of a Regional Contact Office:

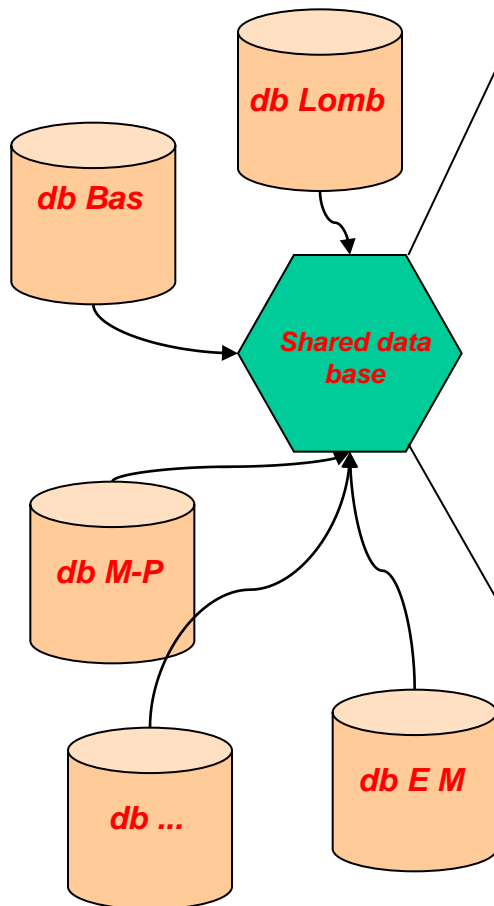
- Building a detailed and updated picture of the regional actors in GMES (**inventory of capacities and needs**)
- Creating events to inform actors on GMES and leverage their awareness
- Participating in the shared activities of the network; in particular
 - > dissemination (production of success stories, fact sheets, presentations, research briefs)
 - > producing market observatories (catalogue of services, review of needs)
- Tutoring new regions in their activities on GMES, recruiting new RCOs

All partners organized events on GMES in their regions



RCOs monitor capacity and needs

Inventories and shared db:
a knowledge base for the network



Shared data base schema

ID_Provider	Organization	Type	Address	...	Main activity	Contact person
Progressive Code	Name of the organization	Possible topic: Company, Research Center, Public Authority, Consultancy, NGO		...	Brief text describing main provider activity	
P1	Text	Code				
P2	Text	Code				
P3	Text	Code	Text		Code	Text
...						

Provider-service link

ID_Service	G4R Sector	EARSC Sector	Description	Current User	Type of data	...	ID Provider
Progressive Code	G4R taxonomy 2nd level sector	EARSC taxonomy 2nd level sector	EARSC_TAXO user view	specifies the user, when possible	Satellite, ground based, in situ...		link between provider table and service table
S1	Floods monitoring	Emergencies_Natural disaster management	Public Authorities_Emergency Service	Text	Code		P1
S2	Text	Text	Code		P1
S3			Text	Text	Code		P2
...							P3

Service-need link

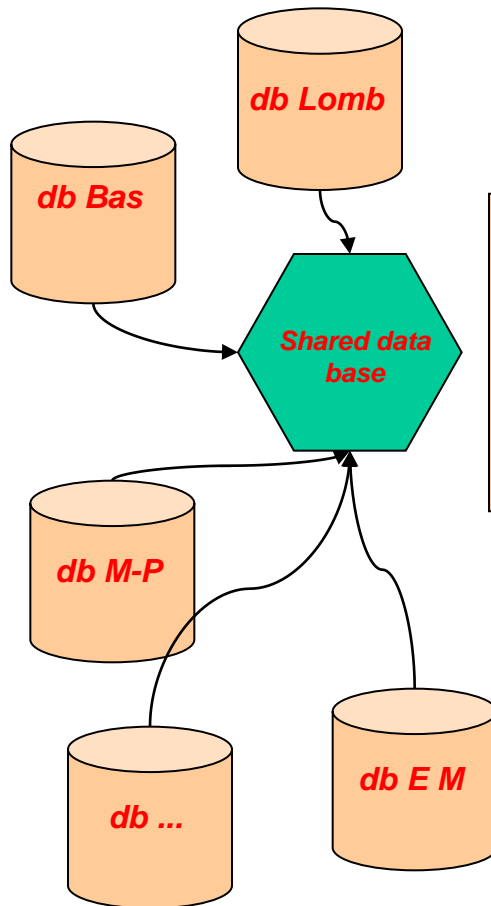
ID_Need	G4R Sector	EARSC Sector	Description 1	...	ID_User expressed this need	ID_Potential /Current service answering this need	Source of this need expression
Progressive Code	G4R taxonomy 2nd level sector	EARSC taxonomy 2nd level sector	EARSC_TAXO user view		This ID creates a link between Needs table and Service table	This ID creates a link between Needs table and Service table	Precise how this need was collected
N1			Text		U1	S1	Text
N2			Text		U2	S2	Text
N3			Text		U3	S3	Text

User-need link

ID_User	Organization	Type	Address	Main activity	Contact person	...
Progressive Code	Name of the organization	Possible topic: Company, Research Center, Public Authority, Consultancy, NGO		Brief text describing main user activity		...
U1	Text					
U2	Text					
U3	Text					
...						

From the knowledge base to dissemination*

In the gmes4regions web portal (www.gmes4regions.eu):

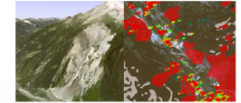


Information on each RCO



Landslide and Natural Risks Monitoring

Keywords: Disaster Management and Prevention, EO data software

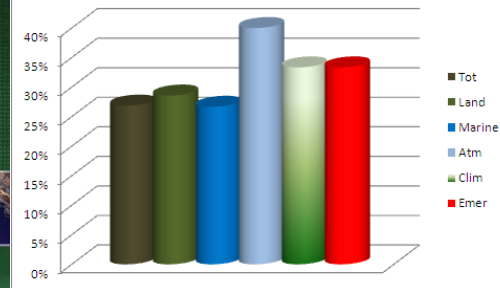


Application field: MORFEO (Morpheus) is a pilot project of the Italian Space Agency experimenting the use of Earth Observation technologies to obtain useful information to the management of landslide risk in the pre-event (after alert) and post-event. In the frame of MORFEO project, IEA-CNR proposes an approach to model landslide susceptibility of a territory, based on a supervised learning technique that mines fuzzy emerging patterns on a set of classified data used as training data (Coptic and SAR EO data, ground-based data). In the approach the training set contains positive and negative examples of homogeneous areas, slope units of a given territory, unstable or stable to the occurrence of landslides. The corridor knowledge base of fuzzy rules exploit the main characteristics of the slope units that are stable and unstable to landslides and are then used for classifying other slope units of the same territory. **Methodology used / workflow:** MORFEO has designed a system to support the civil protection activities on landslide risk through the use of techniques already established and the 'de' project and maps in 3D. **Key Resu** department mapping 4 and mitigate **Innovative Impact:** For the purpose, MORFEO implements five specific functionalities: identification and mapping of landslides, including dynamic 3D visualization; Landslide monitoring; Landslide susceptibility; Forecasting of natural induced landslides; Landslide vulnerability and damage assessment. The system includes three sub-systems: EO products elaboration (Optical and SAR data). Final Users: products generation, Infrastructure for data integration and exchange.

Research briefs

Research Brief of the Virtual Gmes Academy

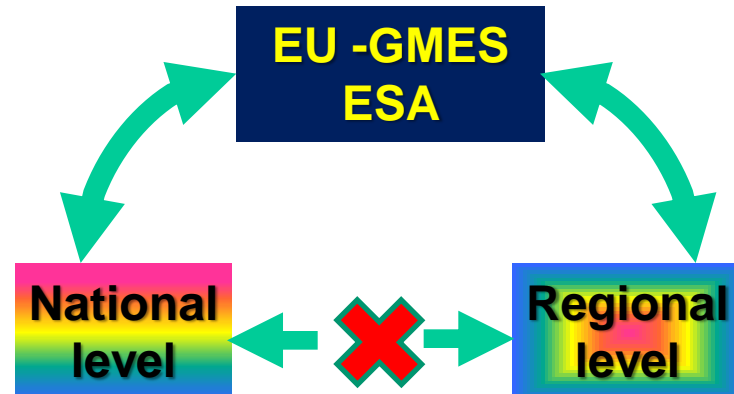
* Dissemination of DORIS_Net is performed through the Gmes4Regions umbrella (powered by GRAAL and DORIS_Net)



Next outcomes of DORIS_Net:

In the next month

- DORIS_Net will present **public deliverables** based on the shared database content, i.e.:
 - > ***“Downstream Service Catalogue”*** (a collection of services in the RCOs)
 - > ***“Report on segmentation of user needs”*** (a report on the needs of regional users)
- The partner Consortium is defining ways and practices to enlarge the network and sustain it beyond DORIS_Net
- Regional events are going to be concluded (Finland, Estonia, Castilla)
- 2 new RCOs will be established



The future of DORIS_Net:

each RCO is developing a sustainability strategy to place the RCO network on an operational basis. The outline Business Plan predicates funding support from

>three possible sources:

- ***In-house Institutional Support,***
- ***Co-funding from EC sources,***
- ***Direct revenue and service charges***

But RCOs maintenance requires specific funding resources from 2013 onwards

***that would not be always available from Institutional resources
RCOs are looking for perspectives***

Conclusions & lessons learned

- *DORIS_Net, soon ending, raised interest in many regions and organizations*
- *It seems to be one of the more lively communities in NEREUS*
- *RCOs are pursuing a promising activity to the benefit of GMES (regional awareness, local market development) and regions (innovation, end users federation, ...) -> they deserve trust and breath!*
- *We learned that acting as a network is not easy nor fast, but it creates precious synergies*
- *... that GMES awareness and potential is higher in regions hosting a RCO*
- *... that RCO job and success is based on person-to-person relationships and deep knowledge of its own territory -> **it takes time to grow! We're still at the beginning!***

Contact: Paola Carrara (coordinator)
carrara.p@irea.cnr.it