

**First GIS BRETEL WORKSHOP First NEREUS regional workshop**  
**Monitoring of the environment in the framework of the NEREUS working group on**  
**GMES**

**Conclusions**  
**René Garello**

This workshop was a success, thanks to the speakers and participants during the regular sessions as well as for the panel sessions. The level of the presentations was quite high and the exchanges were fruitful. Of course, the success is also due to the organizers (Laurence, Philippe, Eric) and the welcoming team (Martine, Joëlle) and all the supports we had from NEREUS, GMES, DORIS-Net and also the sponsors Brittany Region, OSUR Rennes, Université Rennes 1, Institut Mines Telecom and CLS.

The workshop was a way for the GIS BreTel to show the level of collaboration between members (research labs) within the framework of the VIGISAT project supported by the Brittany region and operated by CLS. The access to 200 scenes per year and the development of joint projects were exemplified.

Several levels were addressed during the presentations: European and Regional infrastructures, academic and industrial R&D, institutional and industrial services, large projects and directives (GEOLAND, MyOcean, DORIS-Net, etc.). One main concern was immediately raised: what of the future of the European satellite missions after the loss of Envisat. The Sentinel series of missions is underway up to 2020, but the regulating body, GMES has to keep going, especially in terms of finances. An argumentation from the Regions as well as from NEREUS is necessary, but not sufficient, of course.

During the talks, the presenters were able to show the use they make from the data coming from VIGISAT on the one hand and in synergy with other sources on the other hand. Of course, the methods are comparable, but the context is very specific in terms of sensors: mainly radar, altimeter, ocean color, SST for the OCEAN and visible, hyperspectral and possibly lidars for LAND. This structure is a very good example of a collaborative approach. The next step will be to develop services based on the research developments. The MCGS (Marine Collaborative Ground Segment) project is a step forward such an achievement. We had another example from the collaboration around the GEOSUD project, presented during the second panel session.

When dealing with the methods the speakers showed that they are really medium dependent, sensor adapted and mainly related to the physics of the observed process. This showed also the high level of difficulty when dealing with satellite data and images for Earth Observation.

The panel sessions were the place for a lot of interaction between the presenters and the audience. They are briefly summarized on the next pages.

Finally, I'd like again to thank all the participants and the supporting organizations and I give you a rendez-vous in two years for the second edition of the workshop.

**First GIS BRETEL WORKSHOP First NEREUS regional workshop**  
**Monitoring of the environment in the framework of the NEREUS working group on**  
**GMES**  
**May 31<sup>st</sup> June 1<sup>st</sup>**  
**St Malo, France**

**Pannel 1 Session Maritime Services**  
**Chair: René Garello, Telecom Bretagne (France)**

Speakers:

Christelle Bosc SAR MEDDTL (France) Quelles applications satellitaires pour répondre aux

Vincent Kerbaol CLS (France) New maritime services

France Energie Marine (France) France Energies Marines, Apports du satellitaire pour les EMR

Panel:

France Energies Marines (France)

Hervé Jeanjean GMES (France)

Christelle Bosc SAR MEDTEL (France)

Jean Yves Le Traon IFREMER (France)

Vincent Kerbaol CLS (France)

René Garello Telecom Bretagne (France)

**Key messages**

1. Satellite data have wide and transverse applications: maritime transportation, pollution monitoring, resource management (energy, , etc.
2. Satellite data provide a very high added value to fic.23 snsपो servic.23es wherthused in conjunction with models.
3. There is a trend nowadays for stabilizing the present state, perpetuate the quality and continuity of services especially in the GMES framework.
4. A large quantity a data acquird in the previous two decades remains to be exploited.

**Summary of the intervention from the panel**

Maritime services using satellite seems to be better structured than the ones dealing with land. For instance, projects such MyOcean, leanSeaNet, Aviso or Previmer are ten cited. This9-4(-)97(i)-4(s)]TJETBT

near the stal ones. The ATGERI - Aménagement du Territoire et Gestion des Risques (<http://c.23artogip.fr/spip.php?rubrique24>) is a good example this regional dynamic.]TJET EMC /P 4MCID 39-BDC BT1 0 0 1 237.17 27.8Tm(s)]TJET EMC /P 4MCID

(providing data to the users, setting and maintenanc.23e of terminals, developing and experimenting new products, etc.). Nevertheless, political actions and strategies remain a key element for the development and the perpetuation of maritime satellite services. The economic model sets by GMES is yet to develop, mainly for what concerns the core services.

The er ds are till w or he « sea-project » developers. The e of ata nd tellite servic.23es in this domain is largely under-exploited. In this respect, an institution like France Energies Marine (FEM) will have to be able to detect some needs and to propose specifications linked to these needs. Thanks to the ability to perform large scale observations with a very high resolution, satellites will be able to answer some of the problems encountered within the Marine Renewable Energy field such as wak.23es at the marine windmill farms, sea-state, piracy, etc. An effort in upstream research must be produce in order to improve the existing servic.23es and to create new on aimed to the maritime world.

**First GIS BRETEL WORKSHOP First NEREUS regional workshop**  
**Monitoring of the environment in the framework of the NEREUS working group on**  
**GMES**  
**May 31<sup>st</sup> June 1<sup>st</sup>**  
**St Malo, France**

**Pannel 2 Session Land applications**  
**Chair: Selma Cherchali, CNES (France)**

Speakers:

Selma Cherchali - CNES (France) Pôle de  
Pascal Kosuth CNRS UMR TETIS - R  
SUstainable Development (Equipex)

pour les surfaces continentales  
- GEOInformation for

Panel:

Selma Cherchali - CNES (France)  
Gilles Pinay - OSUR  
Pascal Kosuth - IRSTEA  
Rozelyne Lacaze GMES land

**Key messages**

1. The thematic Pole continental surfaces is working quite well due to a national multi-institutions strategy with a large diversity of key players.
2. The GEOSUD project example shows that it is a success from a technological point of view, but a failure when dealing with technology transfer. Therefore, the pooling of infrastructure and products (images) resources must be put forward, along with the support of new application developments.

**Summary of the intervention from the panel**

This pole doesn't deal with the maritime aspects. But the acquired data are nevertheless including the coastal zone (about 5km deep). The presentations and the related questions are focused on the thematic pole architecture and more specifically on the role of the Expertise Centers supported by the CNES. Several key points of the GEOSUD platform are discussed as well:

- Image access conditions,
- Eligibility for receiving specific images,
- Lack of expertise concerning the provided software,
- Availability of the SPOT archive images (so far the data acquisition is scheduled for 2010 to 2015, but years 2004/05 and 1997 are under consideration),
- Use of the data by design offices (through subcontracts with a public entity only)
- Cost of licenses (and open licenses?).