

### NEWS

Executive Council : July 23rd (TBC), Göteborg (Sweden) IASPEI meeting

General Assembly July 24th (TBC), Göteborg (Sweden) IASPEI meeting

VERCE Review Apr. 24-26, Paris

NERA Review May 28-29, Zurich

The three annual activity reports (Real time information services, EMB and Seismic portal) are available here:

<http://www.emsc-csem.org/Documents/?d=doc>

### Quake Catcher Network (QCN) server installed!

The installation of the Quake Catcher Network (<http://qcn.stanford.edu/>) server has been finalised at EMSC, a development carried out in the framework of the REAKT project.

The first experiment will be conducted by Philippe Gueguen (ISTerre) to test the QCN sensors for building health monitoring. We want to thank Jesse Lawrence and Carl Christensen (Stanford Univ.) and Elizabeth Cochran (USGS) for their help!

### NEW OFFICE

End of 2012, the EMSC has moved its offices and IT infrastructure to a new building, next to the French Tsunami Warning Centre. Thanks to the LDG, we took the opportunity to upgrade the IT infrastructure in order to improve its performance, its robustness and its security. The migration of the production services should end on March 2013. This new infrastructure offers new capacities to face future technical challenges.



I would like to welcome you to the launch edition of our electronic-only EMSC Newsletter. We aim to have a more frequent (at least twice a year) and more concise newsletter, saving the cost of printing and mailing 8 000 paper copies. You will also notice that articles are much shorter (typically less than 2 500 characters, blanks included) intending to give you an overview of EMSC developments at a glance.

For the next and subsequent issues, we would welcome short articles such as information on

recent earthquakes, new projects etc. Please note, they should remain short and, if required, link to a longer article on your website.

Finally, I would like to remind you that the next EMSC General Assembly will be held in Gothenburg, Sweden, during the IASPEI meeting, most likely on Wednesday July 24th (we are awaiting confirmation from the organisers).

*Chris Browitt, President*

### Collaboration with the IGN

The Instituto Geografico Nacional (IGN) in Madrid operates a back-up on the Earthquake Notification Service. Their role is to take over the duty when the EMSC is not able to operate the service due to a maintenance intervention or a technical problem.

Our visit in Madrid, end of February 2013, was the occasion to revive our collaboration and coordinate our efforts. We thank Emilio Carreño, Resu Anton and all the IGN team for the nice stay we had in Madrid and for their indefectible involvement all along those last years.



GMR, Rosa Galán, Emilio Carreño, Resu Anton and Roberto Cerdeño



**OUR TEAM**

### The EMSC team

#### Rémy Bossu

*Seismologist and Secretary General*  
Coordination, management and fundraising

#### Charlotte Massol

*Webdesigner and graphic designer*  
EMSC communications

#### Laurent Frobet

*Software Engineer*  
Seismic portal

#### Gilles Maze-Roux

*Seismologist*  
Real time information services

#### Stéphanie Godey

*Seismologist*  
Euro-Med Bulletin, Accelerometric data

#### Frédéric Roussel

*Software Engineer/Webmaster*  
Development and maintenance of EMSC websites

#### Sandrine Lefèbvre

*Analyst Engineer*  
Data analysis

#### Santhi Veloupoulé

*Communications Manager*  
Communications actions and materials

### A prototype rapid earthquake information service on Twitter

Some of you have registered to receive by email our Internet Quake Detections, i.e. detection of felt earthquakes through the traffic surge they generate on our website. They are also published as a scrolling banner on our website, as well as on the microblogging site Twitter under the username @LastQuake.

A prototype information service is now being tested under the username @emscscsem and we would welcome EMSC members in our tester panel. It is an extension of the existing service

aiming at automatically offering timely information on the majority of earthquakes of interest for the public. They include felt, potentially damaging and large magnitude earthquakes as well as the ones triggering a tsunami watch or alert.

If you want to join the tester panel, first send us an email to give your Twitter username, the service being under test it is closed and new followers have to be accepted.

*Rémy Bossu*



## MARsite project

Since December 2012, EMSC is involved within a new EU project named MARsite - New Directions in Seismic Hazard Assessment through Focused Earth Observation in the Marmara Supersite.

This collaborative project will last 3 years and involves 21 partners from 7 nations of the Euro-Mediterranean area. The partners include universities, research institutes and agencies.

In the last 12 years, Europe experienced destructive earthquakes such as 1999 Izmit (Turkey), 1999 Athens (Greece) and 2009 L'Aquila (Italy). More destructive earthquakes happened earlier: Istanbul in 1509 and 1766, Izmir in 1688, Eastern Sicily in 1693 and Lisbon in 1755. Such a catastrophic event is now expected in the Marmara region, with a probability in excess of 65% in 30 years, due to the existing seismic gap and the post-1999 earthquake stress transfer at the western portion of the 1000km-long North Anatolian Fault Zone (NAFZ), passing through the Marmara Sea



about 15 km from Istanbul. Istanbul is fully aware of this impending problem and the authorities are in the process of taking all conceivable physical and social steps for preparedness and mitigation of the risk.

EMSC leads the Dissemination activities and public outreach strategy package, in collaboration with KOERI. Our role will be to define and interest our targeted audiences and end-users, address the right messages to each of them and use the adapted tools to communicate with them. We will bring to this project our network thanks to our partners, our public visibility through our website but also our recent experience gained from interaction with a larger public thanks to the social networks.

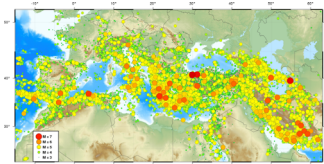
Visit [www.marsite.eu](http://www.marsite.eu) !

Santhi Vélopoulé

## Towards an e-Bulletin

Technical developments now allow to exchange and link distant information to a unique entry point using dedicated communication protocols. Scientists are nowadays, not only interested in phase pickings and seismicity catalogues but also wish to access various seismological data and products related to a particular event. Currently, the Euro-Med Bulletin solely provides parametric data which are mostly targeted for a group of the research community. We aim at expanding its use by developing an e-Bulletin. This electronic portfolio would give access to all scientific (and beyond) information available for a given earthquake. Its content and definition would be developed in coordination with the Seismic Portal and will take benefit of the Workbench evolution. A user customisable interface is also considered.

Thanks to a unique identifier developed within the NERIES project, each seismic event at the EMSC



is assigned a unique identification number (UNID) shared by several institutes. Currently data from the EMSC real time system can be linked to the EMB data through the UNID, including photos, macroseismic questionnaires and special reports. Within the Seismic Portal, seismic waveforms hosted at ODC are already accessible thanks to the UNID. ETH and Gempa also included the UNID in their developments of the accelerometric waveform parametrization module embedded in SeisComp3 for real time strong motion data exchange. Further independent data can also be linked under the same identifier such as moment tensors, shake-maps, etc.

Stéphanie Godey

## The Future Seismic Portal Workbench

The Seismic Portal provides several small web applications to search and present (earthquake data parametric events, broadband waveforms ...). Users can submit queries via several applications providing access to different sort of information. The results are then saved into dedicated "data-carts", which are not offering an homogeneous management of the data and the metadata, showing the limitations of the current approach either in terms of interactivity and sustainability.

The evolution of the portal is integrated into the NERA European project and an idea of a workbench has been proposed. Unlike the current seismic portal's cart, the user workbench will be accessible by a web user interface and by third party services.

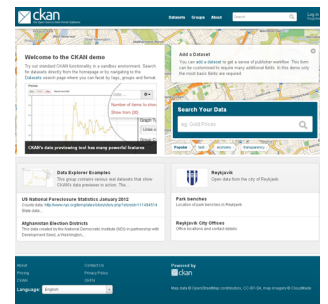
After some investigation, we found a solution fulfilling our needs : a Document Management System. We have chosen the Comprehensive Knowledge Archive Network (CKAN) because it offers nice

features: Open source, use of standards, well documented, python, easy use, plug-in architecture, harvesting, Restful API, Q&A on dataset, comments ...

During the next months we will install, configure and start the integration of the CKAN software into the Seismic Portal.

See you on [www.seismicportal.eu](http://www.seismicportal.eu)

Laurent Frobert



## Prototype diffusion service for earthquake information



The Earthquake Notification Service (ENS) operated by the EMSC has proved to be quick and reliable and has been carrying on attracting an average of 1000 new users per year since 2008. But this service has been historically developed to deal with potentially damaging earthquakes only and uses rather complicated local magnitude thresholds (i.e. M5+ in Europe; M6+ in continental Asia and M7+ worldwide). Our Members wish to have the possibility to receive an email as soon as the EMSC has recorded an earthquake, whatever its magnitude, in a given area. Basically, this service should encompass all earthquakes published on EMSC website.

A beta-version of this service is ready for test and comments for EMSC Members. The principle is the following: for each earthquake, the user receives:

- The very first available location
- The EMSC automatic location (in any), within 30-60 minutes after the earthquake
- The EMSC manual location (if any), in the hours or the day following the earthquake

The message contains the location and the phase pickings in GSE2.0 format and the service is customizable in terms of geographic area and magnitude.

Gilles Mazet-Roux