

– WORKSHOP ANNOUNCEMENT –

ECGS & ESC/EAAE Joint Workshop



- *First Circular* -

Earthquake and Induced Multi-Risk Early Warning and Rapid Response



SAVE THE DATE!
November 18-20, 2015

Luxembourg

ORGANIZATION

Adrien Oth

European Center for Geodynamics and Seismology
Luxembourg

Stefano Parolai

GFZ German Research Centre for Geosciences
Germany

SCIENTIFIC COMMITTEE

A. Ansal	Özyeğin University, Turkey
C. Cauzzi	ETH Zürich, Switzerland
M. Dolce	Department of Civil Protection (DPC), Italy
K. Goda	University of Bristol, UK
T.H. Heaton	Caltech, USA
M. Hoshiba	JMA, Japan
I. Iervolino	University of Naples, Italy
A. Oth	ECGS, Luxembourg
S. Parolai	GFZ, Germany
F. Wenzel	KIT, Germany
A. Zollo	University of Naples, Italy

SCOPE OF WORKSHOP

In recent years, significant advances have been made in the development of earthquake early warning systems in various earthquake-prone regions around the world. In simple terms, these systems take advantage of the fact that information about the onset of a potentially damaging earthquake can be processed and transmitted faster via modern communication tools than the speed of the travelling seismic waves, allowing to issue warnings on the order of seconds up to minutes in some cases before the damaging waves reach the target of interest to be

protected. While some of these systems are at a very mature state, in particular in regions where excellent infrastructure is available (e.g., California, Japan), this is not the case in many economically developing countries. Some of these countries face an extraordinary level of seismic risk, yet large-scale seismic networks cannot be funded, and the principles used in such elaborate systems are not simply transportable to these situations. Significant research efforts are still underway to develop optimal systems for such cases, allowing for the extraction of a maximum of information from a minimum number of recordings.

Earthquake early warning does however not stop with the estimation of the ground shaking that the target may expect in the seconds/minutes to come. In many regions, the situation is highly complicated by the potential generation of earthquake-triggered secondary effects, such as tsunamis or landslides. It is also crucial to take into account the specific requirements of the end users in order to make early warning useful for society. For example, critical facilities such as nuclear power plants, large dams, chemical factories, public transportation systems etc. present highly variable such requirements and as rule also involve the need for advanced real-time structural monitoring.

These non-trivial tasks require intense collaboration between scientists and engineers who design the decision-making-implementation systems, and thus need to be addressed at the interface of these communities. With this workshop, we wish to provide a platform to gather around one table scientists and engineers, including researchers and engineering practitioners, to discuss and look for solutions to the problems still encountered and foster their collaboration.

TENTATIVE PROGRAM

The following aspects will be discussed in dedicated sessions:

- Earthquake early warning algorithms: state-of-the-art and recent developments
- Tailor-made multi-risk early warning for varying targets & socio-economic contexts
- Early warning in society
- Real-time structural monitoring, damage and loss assessment
- Multi-risk methodologies for earthquake-induced effects (e.g., tsunamis, landslides)
- An integrated view on risk assessment and early warning

VENUE

The conference will be held in close proximity to the center of Luxembourg City, the cosmopolitan capital of the Grand Duchy of Luxembourg.

Luxembourg was a fortress city with reputation to be unseizable, strategically located between the French Kingdom and the German Empire. It was one of the major strongholds in Europe from the 16th Century through its dismantlement in 1867.

Today, Luxembourg is well known as an international Financial Center and for hosting key institutions such as the European Parliament and the European Court of Justice. It is a dynamic and modern city, was European Capital of Culture for the second time in 2007, and is part of the World Heritage List of UNESCO. Enjoy its Old Quarters, fortifications, museums, exhibitions and more.

TENTATIVE SCHEDULE

Jul. 3, 2015	Abstract submission deadline
Jul. 3, 2015	Student/Young scientist travel grant application deadline
Sep. 1, 2015	Early-bird registration deadline
Oct. 16, 2015	Final registration deadline
Nov. 18-20, 2015	ECGS Workshop
Feb. 28, 2016	Submission deadline for proceedings

ABSTRACTS

Required for program selection. Abstract volume will be distributed at workshop registration.

Guidelines:

Due:	July 3, 2015 by e-mail to earlywarning2015@ecgs.lu
Length:	maximum 2 pages including figures.
Margins:	A4, 2.54 cm top/bottom margins 3.17 cm right/left margins
Font:	Title: Arial 12 Bold, centered Authors and affiliation: Arial 9 Text: Times New Roman 12
Color:	will be printed in black and white
Format:	MSWord

PROCEEDINGS

Will be published in the *Cahiers du Centre Européen de Géodynamique et de Séismologie*. More information and guidelines will be given on the workshop website.

FOR MORE INFORMATION PLEASE CONTACT

<p>Ms Corine GALASSI ECGS 19 rue Josy Welter L-7256 Walferdange Grand Duchy of Luxembourg Tél. +352 33.14.87-1 Fax: +352 33.14.87-88 Email: earlywarning2015@ecgs.lu</p>

**Regularly updated
information is available at**

<http://www.ecgs.lu/eewrr2015>

A limited number of young scientist travel grants will be made available, please check the website for more information.

Details on the venue, registration fees, practical information, etc. will be published on the website by 6 March 2015.