



## **Executive Summary**

### **IAEE/COSMOS International Strong Motion Committee (ISMC)**

#### **Special Session at the 16WCEE Santiago, Chile**

**13 January 2017, 2-4pm**

The vision statement for COSMOS ([www.cosmos-eq.org](http://www.cosmos-eq.org)) is to “become a global focal point of international leadership” for the strong motion community. Its mission is to advocate for and promote strong-motion monitoring, with the ultimate goal being the application of strong-motion measurements toward improved earthquake resistance of the built environment through research and engineering practice. It is with this vision in mind that COSMOS continues to be focused on bringing together the international community of strong motion data providers and users through regular forums at conferences, and through the activities of the international committee of the COSMOS organization.

During the previous world conference in Lisbon, one of the action items brought up was to make the COSMOS international committee a more formal organization under the auspices of the IAEE. Terms of reference for this committee were developed and submitted to the IAEE president, and approved in November of 2016. The first official meeting of the IAEE/COSMOS International Strong Motion Committee (ISMC) was thus this meeting at the 16WCEE in Santiago, Chile. The meeting took place as part of a combined special session organized within the 16WCEE that covered both the ISMC as well as the noninvasive site characterization guidelines project within COSMOS. This executive summary is for the ISMC meeting.

At the 16WCEE, COSMOS hosted a booth advertising the special session and the ISMC meeting to the public, soliciting participation of the community, as well as providing information about other COSMOS projects and tools, and the [strongmotioncenter.org](http://strongmotioncenter.org) website.

The ISMC meeting had 45 representatives from 14 countries around the world. The meeting opened with a quick summary of the previous world conference meeting, and the resolution of the previous action item, the formalization of the new joint IAEE/COSMOS committee. Based on the IAEE bylaws, the first order of business was to agree to the committee chair, co-chair, and secretary. It was decided by the group (with no objections) to have the ISMC chair be Dr. Jamison Steidl (representing COSMOS), the co-chair be Prof. Masayoshi Nakashima (representing IAEE), and the secretary be Sean Ahdi (UCLA). A sign in sheet was distributed around the room and participants were asked for contact information and to self-select if they were interested in joining the ISMC. Of the 45 participants, 24 selected to join the ISMC (participant list attached).

The ISMC objectives, provided to the IAEE within the terms of reference, were presented to the meeting participant by Dr. Steidl. These objectives are summarized below:

- IAEE/COSMOS Joint Committee Objectives:
  - Bring together worldwide strong motion (SM) network operators to increase data awareness, discuss common issues, and learn from each other;
  - Bring together worldwide SM users to provide feedback to the network operators;
  - Increase cooperation on data dissemination through new data portals and tools being developed worldwide and through the COSMOS Virtual Data Center (VDC) search engine;
  - Bring together international SM network data providers and users to collaborate on development of standards and tools for collection and use of SM data;
  - Facilitate exchange of info on the availability and use of SM data by practicing design engineers;
- ISM Committee Membership?
  - Open to participation in committee activities by all who are interested and motivated by the objectives (listed above).
  - IAEE bylaws mandate selection of Chair, Co-Chair, and Secretary:
    - Chair: Jamie Steidl
    - Co-chair: Masayoshi Nakashima
    - Secretary: Sean Ahdi

Following the presentation of the new ISMC objectives, a presentation of the new web-based communication tool developed for use by the ISMC was given. The COSMOS Networks Forum page (<http://cosmos.eri.ucsb.edu>) provides individual network pages to list basic information about the network, and provide links back to each network providers own website. It also provides an events and news page, and bulletin board style forum pages to help increase communication. This Networks Forum page was another action item that came out of suggestions and discussions from the previous meeting in Lisbon. Participants were walked through the main pages of the new site/tool, and shown how to register for an account. As a result, we now also have the Centrao Sismologico Nacional (CSN) of University of Chile, our first South American network represented on the COSMOS Network Forums page.

The last topic of discussion during the meeting was in regards to the COSMOS virtual data center (VDC). Recent developments worldwide with respect to implementing new database technologies, web services for access to data, and new stand-alone and web-based processing tools have brought up the issue of modernization of the VDC. There was a vigorous discussion with significant agreement that modernization was important but that we should try to adopt some standards to make the network to network communications and metadata and data transfer easier. There was also some discussion about adopting additional more modern output formats other than the ASCII80 format that currently is used. The primary action item from this meeting and discussion was to form a subcommittee on database modernization, web services, and data formats.



Table 1: IAEE/COSMOS International Strong Motion Committee Participant List

First Name	Last Name	Affiliation	Country	
Sean	Ahdi	UC Los Angeles	USA	*
Leonardo	Alcantara	UNAM	Mexico	*
Michael	Asten	Monarch Univ.	Australia	
Pierre-Yves	Bard	ISTERE/IFSTTAR	France	*
Ruben	Boroschek	U. de Chile	Chile	*
John	Cassidy	GSC	Canada	*
Carlos	Cauzzi	ETH	Switzerland	
Phillipo	Correa	CODELCO	Chile	
Ernesto	Cruz	EQCO Engineering	Chile	
Dragi	Dojcinovski	UKIM	Macedonia	*
Donat	Fah	SED-ETHZ	Switzerland	*
Alonso	Gomez	UAM	Mexico	
Jeremy	Gosselin	UVic	Canada	
Vladimir	Graizer	NRC	USA	*
Hamid	Haddadi	CGS	USA	*
Koichi	Hayashi	Geometrics	USA	
Manuel	Hobiger	SED-ETHZ	Switzerland	*
Fabrice	Hollender	CEA	France	
Sharlie	Huffman	HEL	Canada	*
Yavuz	Kaya	UBC	Canada	*
Tadahiro	Kishida	UC Berkeley	USA	
Monica	Kohler	Caltech	USA	
Albert	Kottke	Bechtel	USA	*
Martin	Lawrence	BCHydro	Canada	
Felipe	Leyton	CSN	Chile	*
John	Louie	UN Reno	USA	
Nadia Eda	Macavilca Rojas	UNI	Peru	
Antony	Martin	Geovision	USA	
Amaia	Martinez	UBC	Canada	
Sheri	Molnar	Western Univ.	Canada	
Gonzalo	Montalvo	Univ. Concepcion	Chile	*
Fortunato	Oneto	PUCV	Chile	
Tomas	Orrego	PUCV	Chile	
Yefei	Ren	IEM-CEA	China	*
Julio	Rojas-Bravo	Univ. de Cusco-UNSAAC	Peru	*
Alexandros	Savvaidis	UT, Austin	USA	*
Juan Carlos	Singaicho	EPN Quito	Ecuador	
Jamison	Steidl	UC Santa Barbara	USA	*
Carlos	Ventura	UBC	Canada	
Liam	Wotherspoon	Univ. of Auckland	New Zealand	*
Quancai	Xie	IEM-CEA	China	*
Chun-Hsiang	Xuo	NCREE	Taiwan	*
Alan	Yong	USGS	USA	*
Mendi	Zare	IIEES	Iran	*

\* Indicates interest as SM committee member