

## **Minutes FDSN Plenary sessions**

**Dates: Sunday (January 11, 2009) and Friday (January 16, 2009)**

**Place: IASPEI General Assembly, Cape Town, South Africa**

### **Presentations:**

#### Global developments:

- Introduction, status etc FDSN (FDSN; Gerardo Suarez)
- IRIS-DMC (FDSN) and EarthScope developments (IRIS; Tim Ahern)
- GSN developments and GEO status (IRIS; Rhett Butler)
- Greenland (GLISN, Rhett Butler)
- CTBTO developments (CTBTO-IDC; Lassina Zerbo)

#### Regional developments:

- Europe and surroundings (ORFEUS; Torild van Eck)
- Caribbean (UPRM; Christa von Hildebrandt by Gerardo Suarez)
- South and central America (Gerardo Suarez)
- Asia (JAMSTEC; Seiji Tsuboi)
- Geoscope (IPGP, Eleonore Stutzmann)
- MedNet (INGV, Marco Olivieri)

#### Other networks presentations:

- Russia (GRAS, Alexei Malovichko)
- Algeria (CRAAG, Karim Yelles)
- Nigeria (OAUIFE, Adepelumi Adekunle, by Torild van Eck)

#### Working Group reports:

- WG1 station siting (Seiji Tsuboi, presented by Rhett Butler). [Report ppt file](#)
- WG2 data exchange and data centers (Bernard Dost). [Minutes](#)
- WG3 data products and tools (Tim Ahern). [Report ppt file](#)
- WG4 CTBTO coordination (Jim Lyons). [Report ppt file](#)
- WG5 Mobile networks (Jim Fowler). [Report ppt file](#)

All presentations are available on the FDSN web site under meetings (<http://www.fdsn.org/FDSNmeetings.htm>).

### **Discussions + additional information from the presentations:**

#### FDSN backbone and station overview.

Within WG1 and the Plenary there has been a discussion how most effectively obtain a 'complete' overview of the existing and operational BB stations and the FDSN stations. Tim Ahern, Rhett Butler, Torild van Eck and Gerardo Suarez will assist Seiji in activating regional people and network operators to release network station information to complete a new overview.

#### GEO.

Rhett Butler requests discussions within the FDSN how to organise us within GEO. The FDSN Executive choose Gerardo Suarez to be contact person for GEO task DI-09-1b 'Seismograph Networks improvement and coordination'. There will be an FDSN team with a.o. Rhett Butler, Domenico Giardini, Torild van Eck, and Tim Ahern assisting Gerardo with the work.

#### CTBTO:

Lassina Zerbo notes that the auxiliary stations are opened up for Tsunami Warning system. The stations in Egypt and Pakistan have not yet been constructed.

Discussion on data availability started in the Plenary but was mainly conducted in the FDSN WG4 session.

Gerardo and Torild will keep the FDSN up-to-date on developments on CTBTO and FDSN developments regarding data availability and ISS projects. Possible actions will be coordinated closely with IRIS and ORFEUS.

After the presentations by Lassina Zerbo and Ola Dahlman, it was agreed that FDSN would request data from selected IMS stations to conduct scientific research. This request for data would fall under the auspices of the International Scientific Studies (ISS) of the CTBT. The data requested will be sent to the FDSN data center, backfilling the data from the time the station initiated activities. FDSN would send a letter to the CTBT to request the data for specific stations. All members of FDSN were asked to identify those IMS stations in which they are interested. Requests should be sent to Torild or to Gerardo before February 28 of this year. At the meeting, some FDSN members identified already some stations in which there was an interest. FDSN will provide CTBT with data quality PDF's for those IMS stations received in the FDSN data centre.

#### FDSN members:

Gerardo Suarez notes a number of missing FDSN members: CTBTO, INGEOMINAS (Colombia), RSN.UNAM (Mexico), FUNVISIS (Venezuela), CENAI (Cuba), Cayman Islands

#### FDSN archives:

Data re-distribution should be accompanied with appropriate available statistics that can be provided to the data providers.

#### Workshops:

Gerardo proposes to organise a metadata workshop by IRIS in Brazil in 2010. Tim Ahern promises to look at this option.

#### Publications:

Two publications have been made in 2008:

- Suarez, G., T. van Eck, D. Giardini, T. Ahern, R. Butler and S. Tsuboi, 2008. The International Federation of Digital Seismograph Networks (FDSN): An Integrated System of Seismological Observatories. *IEEE Systems Journal*, vol 2, no 3, 431 – 438.
- Suarez, G., T. van Eck, R. Butler D. Giardini, and T. Ahern, Contribution of the International Federation of Digital Seismographic Networks (FDSN) to the Global Earth Observation System of Systems, *The Full Picture*, 145, 2008

Two publications are planned:

- Barbara Romanovich will write a historical overview of the FDSN
- Gerardo Suarez has been invited for an SRL article on the FDSN.

#### Next meetings:

- Regional FDSN meeting at the AGU Joint Assembly 08–13 August 2010, Iguassu Falls, Brazil
- FDSN General Assembly at the IUGG 27 June – 8 July 2011, Melbourne, Australia ([www.iugg2011.com/](http://www.iugg2011.com/)). Also the 25<sup>th</sup> anniversary of the FDSN.

#### Diverse comments on specific developments:

- Gerardo Suarez mentions that Brasil is planning a new national BB network and Chile proposes national network (65 BB, 140 GPS, >200 accelerometers). Contact Sergio Barrientos. Initiative triggered by a small Tsunami in one of the Fjords.
- Seiji Tsuboi mentions the Gloria meeting in which networks around the Pacific were encouraged to coordinate. Unfortunately there has been no funding to continue this initiative.
- Eleonore Stutzmann mentions that GEOSCOPE is storing French Volcano data
- WG3 (products and tools) should cooperate with WG1 regarding planned products.
- WG3 proposed standard receiver function programs. Johannes Schweitzer considering the danger of uncritical application of the tool.
- WG 3 will focus next year on the development of a standardized tomographic model input mechanism and the related support applications. The Json and netCDF formats are here considered. More info can be found on: [www.bo.ingv.it/eurorem/model\\_table.html](http://www.bo.ingv.it/eurorem/model_table.html)
- WG5 (mobile networks). Jim Fowler would like to encourage the use of the web view tool for visualising the on-going, planned and past projects.
- Tim Ahern suggests enhancement of the mobile networks activity within the FDSN. For more information see minutes FDSN WG 5 on mobile networks.
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Gerardo Suarez and Torild van Eck, 26-01-2009

## Attachment 1

<b>Attendants first plenary session FDSN, Sunday 11 January 2009; 16:30 -18:30</b>		
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## Attachment 2

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## **Appendix 2. FDSN Executive meeting notes:**

Date: 13 January 2009. Place Cape Town IASPEI General Assembly.

Present: Tim Ahern, Domenico Giardini, Rhett Butler, Torild van Eck, Seiji Tsuboi, Gerardo Suarez, Bernard Dost, Jim Fowler, Jim Lyons.

Short summary of all working groups are given. The minutes and presentations of the working groups provide the details.

General issues:

WG1. Issue compiling the station overview requires a lot of work. Response from network operators is limited and Josep Vila's experience with the ORFEUS overview clearly shows the amount of labour involved.

Consequently, Tim Ahern, Rhett Butler, Gerardo Suarez and Torild van Eck will assist Seiji in approaching regional people and network operators in providing station information.

WG4. Discussions with the CTBTO people, notably the contributions of Ola Dahlman, Lassina Zerbo and John Coyne were very helpful. We will follow up on the different proposed alternatives: start requesting older backfill of data; special data requests for projects with FDSN as data broker, joint FDSN (or members) and CTBTO projects; ISS project formulations; request only stations that are lacking in the FDSN archives.

China. Regrettably no representative attended the FDSN meetings.

Next FDSN meetings (see minutes Plenary session)

Gerardo and Torild, 27 January 2009