Minutes for the FDSN opening plenary

30 July 2017

Kobe, Japan

Attendees:

Xyoli Pérez-Campos (UNAM, Mexico)   Barbara Romanowicz (UC Berkeley)
Reinoud Sleeman (KNMI/ORFEUS)   Won-Young Kim (LDEO, Columbia Uni)
Gary Gibson (Uni of Melbourne, Australia)   Mark Chadwick (GNS Science, New Zealand)
Johannes Schweitzer (NORSAR, Norway)   John Clinton (ETH, Switzerland)
Wen-Tzong Liang (Inst. Earth Sciences, Taiwan)   Goran Ekstrom (LDEO, Columbia Uni)
Seiji Tsuboi (JAMSTEC, Japan)   Marcelo Assumpcao (USP, Brazil)
Masaki Kanao (NIPR, Japan)   Chad Trabant (IRIS, USA)
Jose A. Jara (ICGC)   Florian Haslinger (SED/ETH, Switzerland)
Katrin Hafner (IRIS/GSN, USA)   Bruce Beaudoin (IRIS PASSCAL, USA)
David Jepsen (CTBTO, Austria)   Tim Ahern (IRIS, USA)
Adrienne Moseley (Geoscience Australia)   Wolfgang Lenhardt (ZAMG, Austria)
Dmitry Storchak (ISC)   Michelle Grobbelaar (CGS, South Africa)

Minutes:

Goran Ekstrom chaired the meeting

1) **Welcome and Introductions**

   Goran welcomed everybody to the opening plenary of the FDSN and asked everybody to introduce themselves.

2) **Message from the chair (see attached)**

   The chair delivered a presentation which looked a number of issues, but mainly revisiting the goals of the FDSN:

   1. Development of instrumentation standards
   2. Development of standards for quality control, archiving, and data exchange
   3. Facilitating coordination of station siting
   4. Pursuing and promoting open access to data
   5. Improving access to data in real time

   The chair also touched on the challenges facing the FDSN:

   1. Ensuring preservation of collected data and metadata
   2. Enabling discovery of collected data sets
   3. Maintaining and improving quality of seismological data and metadata

4. Facilitating open access to seismological data

5. Refreshing the FDSN mission

6. Engaging the community that it serves

7. Remaining relevant

3) Regional FDSN reports

3a) Europe – John Clinton presented the report (see attached).

3b) Asia – Gary Gibson presented the report

3c) Africa – no report was given

3d) Latin America and Caribbean – Marcelo Assumpcao presented the report (see attached).

3e) North America – Tim Ahern presented the report (see attached).

4) Working Group updates (preview of WG meeting issues)

Each WG will formulate recommendations and report back at the closing plenary on Friday 4 August 2017.

4.1 WG I: Seiji reported that they will be meeting on Monday 31 July 2017 and will be concentrating on the backbone stations and whether it should be expanded and the definition revisited.

4.2 WG II: Reinoud reported that they will be meeting on Tuesday 1 August 2017 and will be addressing the xml status and issues, as well as OBS data and the future of miniSEED.

4.3 WG III: Tim reported that they will be meeting on Wednesday 2 August 2017 and will be addressing modifications to the web services, progress of DOI's, data centres and QA.

4.4 WG IV: Goran reported that the chair could not attend, but that the group will meet on Friday 4 August and will discuss the report which was sent by the chair.

4.5 WG V: Bruce reported that they will be meeting on Thursday 3 August and will look into SOH standards and QA, the tools available, OBS issues and also tracking moving stations.

5) Membership

5.1 New members since last meeting (acknowledgement)

- South Carolina Seismic Network (CO)
  University of South Carolina
  Representative: Philip Crotwell
- Korea National Seismic Network (KS)
  Korea Meteorological Administration (KMA)
  Representative: Namchul Woo
- Catalan Seismic Network (CA)
  ICGC, Spain

Representative: Jose Antonio Jara
- Texas Seismological Network (TX)
Bureau of Economic Geology, UT Austin
Representative: Alexandros Savvaidis

5.2 Pending applications and potential votes

- OSOP (PA)
OSOP Panama (commercial company operating network)
Representative: Branden Christensen
- ITSAK Strong Motion Network (HI)
IESEE, Greece (strong-motion network)
Representative: Alexandros Savvaidis

After a lengthy discussion on whether or not commercial companies and strong motion network should be accepted as members, it was unanimously agreed to accept OSOP and ITSAK. **It was suggested that the scope of FDSN should be revisited.**

However, there was concern whether or not ITSAK was still interested in membership since the representative was no longer at ITSAK. **Thus, Tim offered to contact the representative and find out who now represents ITSAK**

5.3. Clarification of policy and procedure for member acceptance between meetings

The members agreed that the procedure to follow would be:

- There should be an initial vetting of the applicant,
- Then the application will go out to members via email and will be open for 3 weeks for voting,
- At least a unanimous affirmative vote is required from 5 representatives,
- Should there be at least one negative vote, the decision will be deferred to the next meeting of the FDSN.

6) Executive Committee Election

6.1 Positions to fill
The current positions which are up for elections are Chair, secretary, WGI chair, WGII chair, WGV chair and WGII vice chair. However, Michelle and Bruce indicated that they are willing to stay on as secretary and WGV chair respectively.

6.2. Position of Vice Chair (fill it or not)
Goran was of the opinion that this position should be revisited because then he could have shared some of his responsibilities with somebody in order to continue with the FDSN activities.

6.3. Nominations received so far, and call for nominations

Chair: Sergio Barrientos

Secretary: Michelle Grobbelaar

WGI: Wen Tzong Liang

WGII: John Clinton

WGV: Bruce Beaudoin

WGII (vice): Chad Trabant

7) <u>The meeting was adjourned at 17:05</u>

FDSN 2nd Group Plenary

4 August 2017

Kobe, Japan

Attendees:

Xyoli Perez-Campos (UNAM, Mexico)
Reinoud Sleeman (KNMI/ORFEUS)
Tormod Kvaerna (NORSAR, Norway)
Domenico Giardini (ETH, Switzerland)
Wen-Tzong Liang (Inst. Earth Sciences, Taiwan)
Seiji Tsuboi (JAMSTEC, Japan)
Peter Voss (GEUS)
Jose A. Jara (ICGC)
Catherine Lequegual (Resif)
David Jepsen (CTBTO, Austria)
Bernard Dost (KNMI, Netherlands)
Michelle Grobbelaar (CGS, South Africa)

Ulubey Ceken (AFAD, Turkey)
Eren Tepeugur (AFAD, Turkey)
Mark Chadwick (GNS Science, New Zealand)
Wayne Crawford (IPGP)
Goran Ekstrom (LDEO, Columbia Uni)
Marcelo Assumpcao (USP, Brazil)
Trine Dahl-Jens (GEUS)
Timo Tiira (Uni. Helsinki)
Bruce Beaudoin (IRIS PASSCAL, USA)
Tim Ahern (IRIS, USA)
Wolfgang Lenhardt (ZAMG, Austria)
Florian Haslinger (SED/ETH, Switzerland)

Minutes:

The meeting was again chaired by Göran Ekström.

0) Discussion and Adoption of agenda

   The agenda was adopted.

1) Executive committee election

   No extra nominations were received since the first plenary on 30 July 2017.

   The following people were unanimously voted (no objections and no abstentions) into the corresponding positions:
   Chair: Sergio Barrientos
   Secretary: Michelle Grobbelaar
   WGI: Wen Tzong Liang
   WGII: John Clinton
   WGV: Bruce Beaudoin
   WGII (vice): Chad Trabant

2) FDSN action by email vote

   Goran reiterated that there seems to be a problem with decisions being made every 2 years because it hinders the works which is to be done between meetings. Thus, Goran suggested

that the ToR of FDSN be changed as follows in red and all members voted in favour of the changes:

III. Membership and Organization
• Membership in the FDSN is open to national and international organisations committed to both the development and operation of the broadband digital networks as well as organisations involved in management of data from digital seismograph networks consistent with the goals of the Federation. It is required that each network member will contribute digital waveform data, preferably in real time, from at least one station to the FDSN Archive for Continuous Data as well as to appropriate FDSN Regional Data Centers.
• The structure of the FDSN includes a steering committee and an executive committee.
• The members of the FDSN steering committee will consist of one representative per member organisation who will be appointed or selected from within the organization they represent.
• The members of the FDSN steering committee elect an FDSN executive committee. The executive committee will coordinate the activities of the Federation between meetings and is responsible for the organization and coordination of the steering committee meetings. Members of the FDSN executive committee are elected for a four-year term.
• The FDSN executive committee is headed by a chair, who will be assisted by a secretary and the chairs of all FDSN working groups. The chair of the executive committee will preside over the meetings of the steering committee. Members of the executive committee shall be elected from within the steering committee or the member organizations. Elections to the executive committee take place during steering committee meetings.
• The FDSN steering committee will form all necessary working groups or special technical committees as required to achieve the objectives of the FDSN. Each working group or special technical committee is headed by a chair.
• The FDSN steering committee will deliberate at least once every two years. Special meetings may be called by the chair as necessary for the progress of the FDSN.
• With unanimous executive committee consent, proposed FDSN recommendations and actions can be put to steering committee vote via email. A response deadline of no less than three weeks following the distribution of the ballot must be specified. The ballot will be distributed via the fdsn-representatives@lists.fdsn.org email list.
• Concerning all recommendations made and actions to be taken, each steering committee member of the FDSN will have one vote. A majority of 2/3 voting members will be required for an affirmative vote. Ten members of the FDSN will constitute a quorum for FDSN steering committee meetings and email votes.
• No fees are imposed but voluntary contributions may be requested to cover costs for communications and for organisation of FDSN meetings.
• Any member may resign six weeks after giving written notice to the chair.

3) WG reports and recommendations (see attached reports)

WG1 – the chair presented the report and recommendations. The following recommendations/actions were noted:

1. **The current definition of the FDSN backbone station is distributed to WG-I mailing list and will be discussed in WG-I mailing list to determine if the definition should be amended to expand/contract a number of backbone stations.**
2. **Station inventory will not be updated anymore and the member networks should keep a link to each data center in the station XML.**
3. **There is software to maintain station information which may be useful to update the FDSN station book. It should be checked.**

WG2 – the chair presented the report and recommendations. The following recommendations/actions were noted:

1. **Release a minor version update of StationXML**
2. **Work on a major revision of StationXML related to future developments of mini-SEED.**
3. **Involve OBS community in discussions on, and development of StationXML and the future of mini-SEED.**
4. **EIDA document on quality control was circulated in the mailing list and it seems like the definitions are consistent with IRIS-DMC and will deploy further testing**
5. **Agreed that MSEED2 will remain an accepted FDSN standard, but will continue working on the Development Requirements Document/List of the new format**

WG3 – the chair presented the report and recommendations. The following recommendations/actions were noted:

1. **Investigate with GEMPA about the possibility of adding the matchtimeseries feature to SeisComp3. General consensus was to add matchtimeseries as an "optional" parameter in the station service.**
2. **QuakeML be made an FDSN standard and managed within WGII.**
3. **See if the three services (availability, timeseries, and timeseriesplot) can be added to SeisComp3 if funding can be found.**
4. **Look at the DOI form and see if all required metadata supported to be on the FDSN form from which DOIs are minted. Adjustments in the form may result.**
5. **Continue contacting organisations to become federated data centres. This would mean they still have control over their data, rather than sending it to another data centre where control could be lost.**
6. **Explore building a working group to work on the issue of a registry for FDSN services.**
7. **Further discussion related to the use of https should be handled via email, but that a time limit should be imposed to allow for closure. Suggest a 3 month time limit**

WG4 – Goran presented the report and recommendations on behalf of the chair. Three actions/recommendations were identified:

1. **Complete inventory of IMS data in FDSN archives**
2. **Develop ideas for training/workshops with CTBTO support/participation**
3. **Follow up on national contacts with objective of opening up data from IMS stations**

WG5 – the chair presented the report and recommendations.
The following recommendations/actions were identified:

1. **Identify a small working group to develop proposal for SOH channels.**
2. **Send list out of current methods used by various facilities to correct clock drift for feedback.**
3. **Put together a small working group to develop a short decimation summary paper. Suggested that it would be useful to engage the ObsPy group.**

4. **Send out request for new and updated content for the Web Page (QC tools, stationXML, inventory)**

4) <u>Other Business</u>

4.1 FDSN web pages

Goran appealed to the WG chairs to keep the web pages up to date and suggested the following action items:

- Put 2017 minutes and presentations on the FDSN web site (WG chairs)
- Review of FDSN web site to update and remove bad links (WG chair)
- Review information on members and representatives. Put names of representatives on the web site (not personal contact info.) Göran and Michelle

5) The meeting adjourned at 14:00.