**Minutes for the FDSN opening plenary**

**13 July 2023**

**IUGG 2023, Berlin (M4)**

**Attendees:**

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| Michelle Salmon (ANU, Australia) | Jose Antonio (ICGC, Catalonia) |
| Emilio Talavera | Luciz Margheriti (INGV, Italy) |
| Xyoli Pérez-Campos (UNAM, Mexico) | Fernando Carrilho (IPMA, Italy) |
| Johannes Schweitzer (NORSAR, Norway) | John Clinton (ETH, Switzerland) |
| Wen-Tzong Liang (Inst. Earth Sciences, Taiwan) | Juan Cantavella (IGN, Spain) |
| Jerry Carter (IRIS, USA) | Dmitry Storchak (ISC) |
| Nikolaus Horn (ZAMG, Austria) | Chad Trabant (IRIS, USA) |
| Carlo Cauzzi (ORFEUS, Europe) | Michelle Grobbelaar (CGS, South Africa) |
| Peter Danecek (INGV, Italy) | Tim Ahern (EarthScope-Oceans, USA) |
| Javier Quinteros (GFZ, Germany) | Timo Tiira (Univ. Helsinki, Finland) |
| Winfred Strauch (INETER, Nicaragua) | Alexandros Savvaidis (Univ. Texas, USA) |
| Philip Crotwell (SCSN, USA) | Ryan Gallagher (ISC) |
| Mark Chadwick (GNS Science, New Zealand) | Ludek Vecsey (IG CAS, Czech) |
| George Fromaca (USP, Brazil) | Marcelo Assumpcao (USP, Brazil) |
| Jerome Salichon (GNS, New Zealand) | Jonathan Hanson (GNS, New Zealand) |
| Angelo Strollo (GFZ, Germany) | Nick Ackerley (NRCan, Canada) |
| Will Yeck (USGS, USA) | Martin Vallee (IPGP, France) |
| Bjorn Lund (Uppsala Univ., Sweden) | Peter Voss (GEUS, Denmark) |

**Minutes:**

Michelle Grobbelaar chaired the meeting

1. **Welcome and Introductions**

Michelle welcomed everybody to the opening plenary of the FDSN.

1. **Adoption of the agenda**

The agenda was adopted by the representatives attending the meeting.

1. **Message from the chair**

The chair thanked everyone for attending and emphasised the importance of FDSN. She mentioned that in order for organisations and institutions to maintain their scientific and technical excellence, they need to collaborate with professional societies such as FDSN. However, she was concerned that there was such a low number of membership applications compared to other years and wondered if more outreach is required.

1. **Action tracking list from last plenary**

The follow actions were discussed:

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|  | Item | Status |
| 1. | Michelle should confirm with Jerry Carter whether he would like to accept the position of secretary. If he does not accept, then the steering committee can vote for another candidate. | Nomination committee addressed the vacant position |
| 2. | It was recommended that an adhoc committee/WG should be formed by Execom to:  Formulate a concept/policy document which covers the reasons and background and how to implement licensing and redistribution. The committee should look internationally and should also decide on a time frame. | Outstanding, but Javier, Florian, Jerry, John and Mohamed will discuss before the closing plenary |
| 3. | It was agreed that there should be a committee of 3-5 people that is formed by Execom at about 6 months before the steering committee meeting and should have nominations approximately 6 weeks before meeting (it could be chaired by someone that used to be on Execom and is not interested in being re-nominated). | Done |
| 4. | The WG chairs and Execom have a responsibility to update website and contacting the webmaster ([webmaster@fdsn.org](mailto:webmaster@fdsn.org)). Should share with all (Chairs and Execom) how to make changes. WG chairs are responsible for the content of WG pages and Execom is responsible for the rest. In addition, it was agreed that an email be sent out requesting suggestions to be sent to respective Chairs. | Ongoing |
| 5. | It was agreed that the steering committee request WG3 to tackle the problem of DOI’s and identify any improvements. Javier was asked to type up a summary of the issue in order to address it correctly within WG3. | Javier to present during WG3 meeting. |
| 6. | Chair and Execom to work together with IASPEI secretary general to establish a practical solution and process for management of membership fees. Perhaps request members to also make suggestions. This could also lead to changes in ToR to introduce a treasurer. In addition, there should be a request to institutions to make a commitment to become contributing members. | IUGG in the process of opening an universal account that can accommodate the associations and their commissions. |

1. **Regional FDSN reports**
2. **Europe –** Carlo Cauzzi presented the report.

The report covered the activities of ORFEUS and its associated institutions and data centres. The report covered activities in the European Integrated Waveform data Archive (EIDA), its interface, station book, web services, quality tools, usage statistics, rapid raw and engineering strong-motion databases. Regarding some organisational matters, Carlo suggested to ensure an early distribution of schedule and agenda of the business meetings. Another suggestion was to redistribute the time assigned to the different WGs with focus on the ones that are more active.

1. **Asia –** Wen-Tzong Liang presented the report.

The report mentioned some regional conferences in Singapore and South Korea. There are new web services at Taiwan Seismological and Geophysical Data Management System (GDMS) at <https://gdmsn.cwb.gov.tw>. Taiwan P-Alert Strong Motion Network provides online near real-time PGA display, shake map for each issued earthquake, waveform data download and PGA Animation on <https://palert.earth.sinica.edu.tw>.

1. **Africa –** Mohamed ElGabry presented the report on behalf of the AfSC

The report covered the activities carried out within Africa, specifically the meetings, training courses and a proposed African seismological centre that is working as on a test bed. He also reported that the African Union recognised the African Disaster Mitigation Reference Centre as a centre of excellence.

1. **Latin America and Caribbean –** Xyoli Pérez-Campos presented the report.

The report covered the network information from: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Cayman Islands, Mexico, Nicaragua, Panama, Uruguay, Venezuela.

1. **North America –** Jerry Carter presented the report.

The report covered the FDSN activities at Earthscope which has 120 552 stations in archive with 16459 permanent stations. Currently there is 933 tebibytes of data and it continues to grow. Earthscope is also focusing on: Citation / Licensing (October 2022 meeting), Legacy Data (community working to preserve), DAS Preparation (standards needed), Shared vocabulary with other geophysical disciplines (e.g., geodesy).

1. **Current Status and improvements of the System of Federated Data Centers? – encourage more data centres**

Chad presented the report and indicated that there are 24 data centres in registry across the world. The features are: data centers control their own entries and information, declaration of priority for data sets (network-granularity), registry enforces uniqueness, multiple options for maintaining information, list of FDSN and non-FDSN web services and human and machine friendly interfaces. From WG3, it was suggested that an email be sent out to solicit more registrations. The email was in a draft form and should be sent out soon.

1. **Working Group updates (preview of WG meeting issues)**

**Each WG will formulate recommendations and report back at the closing plenary on Wednesday 19 July 2023.**

**7.1 WG I:** Wen-Tzong reported that they will be meeting on Friday, 14 July @ 12:00-13:30, in Room R2 and will review the WG1 minutes from 2021, report on progress since the last meeting, any issues that need to be discussed and possible actions.

* **7.2 WG II**: Javier reported that they will be meeting on Saturday, 15 July @ 12:00-13:30, in Room R2, and will review on-going topics such as metadata for legacy datasets, miniseed3: vision for the future and next steps after approval, DAS metadata: the DAS RCN group and what can we expect at the FDSN. In addition they will address topics such as controlled Vocabularies for seismology, best Practices and automated checks for metadata in StationXML and reproducibility: what is the next step into this direction?

**7.3 WG III:** Chad reported that they will be meeting on Sunday, 16 July @ 12:00-13:30, in Room R2, and will be review previous action items, federated authentication overview and status, updates to the FDSN recommendations for DOIs, SeedLink v4 proposal overview and status and a proposal on web services specification change team.

**7.4 WG IV:** Istvan reported that they will be meeting on Monday, 17 July @ 12:00-13:30, in Room M6, and will review the FDSN presentations at CTBTO workshops and progress in the implementation of FDSN web services at the CTBTO.

**7.5 WG V:** Wayne reported that they will be meeting on Monday, 17 July @ 12:00-13:30, in Room M6, and will review recent proposals/actions (such as rapidly changing metadata effort, metadata standard for legacy seismic data, SOH recommendations, digital filters for data decimation, survey of OBS meta/data creation tools/methods), as well as new proposals (such as ocean bottom seismometer meta/data reference).

1. **Membership**

**8.1 Pending applications and potential votes**

Network : National University of Colombia's Seismological Network

The National University of Colombia's Seismological Network (RSUNAL) is an academic initiative active since 2008 with 8 stations around Bogotá. Starting in 2015 we aligned with international sharing requirements by using SEED nomenclature and improving our server and stations to be able to use the seedlink protocol via Seiscomp3 software. Since 2016 we have been installing multiparametric stations adding electric, magnetic, and more recently gas (CO2, CH4, H2) sensors.

The best quality station we have in order to share data is USME, located at 4.48112N and 74.127093W, with a CME 4311 60s seismometer. It is near Bogotá and maintenance is done frequently.

The Sciences Faculty is having some trouble with the web server, when those get fixed you can access our web site: https://redsismologica.unal.edu.co.

The steering committee voted unanimously in favour of the membership.

1. **Proposed changes to the Terms of Reference**

The following changes were proposed for consideration and voting during the closing plenary:

The FDSN executive committee consists of ~~is headed by~~ a chair, ~~who will be assisted by~~ a secretary, a treasurer 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 by ~~from within~~ the steering committee ~~or the member organizations~~. Elections take place during steering committee meetings.

1. **Executive Committee Election (feedback from the nominations committee)**

**10.1** **Positions to fill**

The current positions which are up for elections are secretary, WG1 vice chair, WG2 chair, WG2 vice chair, WG3 chair, WG3 vice chair, WG4 chair and WG4 vice chair.

**10.2. Nominations received so far, and call for nominations**

Florian presented on behalf of the nominations committee:

**Chair** Michelle Grobbelaar

**Secretary** Nick Ackerley

**WG 1** Chair: Wen-Tzong Liang

Vice-Chair: Ludek Vecsey

**WG 2** Chair: Javier Quinteros

Vice-Chair: Philip Crotwell

**WG 3** Chair: Chad Trabant

Vice-Chair: Marcelo Bianchi

**WG 4** Chair: Spiro Spiliopoulos

Vice-Chair: Steven Myers

**WG 5** Chair: Joel Simon

Vice-Chair: Yinshuang Ai

1. **Any other business**

* Concerns were raised about whether the framework to adopt new changes within the working groups should be revisited.
* Mailing lists for the working groups and the steering committee should be updated.
* Should we consider a working group that focuses on multiple disciplines.
* Since there is a project looking into ISO standards for sensors and their calibration, should FDSN be involved?

These points will be addressed during the closing plenary.

1. **The meeting was adjourned at 18:15.**