

# WGII Meeting Minutes

Montreal, Canada

July 13th 2019

Chair: John Clinton

Co-Chair: Chad Trabant

Minutes: Javier Quinteros

## Attendees

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## Presentation

Presentation slides made to WG can be found at:

<https://www.fdsn.org/wg/wgII/>

## Review of Proposed Agenda

Proposed agenda was presented by John Clinton, additional items were solicited. With no comments or additions, the agenda was adopted.

## Review and Approval of 2017 Meeting Summary from Kobe

Minutes from 2017 meeting were approved without comment.

## Important Announcement on WG Chair and vice-Chair roles

Clinton presented a summary of the WG Chair and vice-Chair positions. Clinton is stepping down and Chad Trabant has accepted a nomination for Chair of WG III. To fill these positions, Javier Quinteros (GEOFON) has accepted the nomination of WG Chair and Rob Casey (IRIS DMC) has accepted the nomination of vice-Chair.

## Status of 2017 Action Items

Clinton reviewed the action items from the last meeting. All are considered completed and no comments were offered.

## Review of Next Generation Format (NGF) efforts

Clinton reviewed the timeline and activities completed by the WG, notably the completed process of identifying requirements for the Next Generation Format, aka miniSEED3. It was also reiterated that the WG had unanimously decided that miniSEED2 would *not* be deprecated but remain as choice for anyone that wishes to use it. Furthermore, no candidate format implementations have yet been submitted to the WG for consideration.

Trabant presented status of IRIS's miniSEED3/NGF development effort. The specification is considered to be in a solid state and ready for proposal, barring the discovery of significant issues. An overview of specification differences, matching the WG II requirements for NGF and other enhancements, was presented. Recent work has focussed on the software ecosystem to support the format.

IRIS's libmseed library has been updated, in pre-release, to have full read-write support of miniSEED3. The library also has full read-write support for miniSEED2. Trabant notes that while this is not a "drop-in" replacement of the previous release of the library, ease of application porting was one of the major design goals. IRIS has created a `mseedconvert` program to convert between the two versions. IRIS has also made available a validator (xseed-validator) for the new format. IRIS has also added an extension to its fdsnws-dataselect implementation to return the new format, when the *format=miniSEED3* option is specified.

IRIS invites collaborators to review and provide feedback on both the software and specification. <https://iris-edu.github.io/xseed-specification/>

**ACTION [Trabant]** The invitation to review the IRIS NGF implementation will be extended to the whole working group via the mailing list. IRIS anticipates submitting the specification to the WG as a proposal within the next year.

Barbara Romanowicz asks if there is a high-level explanation of the format and motivations for change, specifically for data users. Trabant says there are high-level motivations listed on the specification site, but that they are not particularly focused on data users and offers to add a section for users to the documentation. Further, IRIS plans on notifying users via its

DS newsletter and would consider having posters at appropriate meetings such as SAGE/GAGE Workshop, AGU, EGU.

Clinton raises the point that datalogger manufacturers produce miniSEED2 natively and SeedLink is an important protocol and some work may be needed to adapt it. Trabant reports that IRIS plans to prototype the use of its NGF format candidate in SeedLink and does not anticipate large problems beyond a software update.

Question about IRIS migrating its archive. IRIS will migrate the archive but it will take some years, and early adoption is anticipated to be done for small, special-case data sets. The community needs time, in particular the software ecosystem needs to be updated.

There could be a problem for back-conversion (from NGF to miniSEED2). Some data could not be available then in miniSEED2.

Trabant: There is still no clear approach to that. During a first transition phase one could use NGF paying attention to use with caution the new features (specifically the length of identifiers), so that it can be back-converted.

Trabant mentions that data size is approximately the same if compared to miniSEED2. However, NGF is simpler to code for process, parse, etc.

## Decision Taking within FDSN WGs

John Clinton presents his proposal for decision taking within WG2 but also for other WGs. 1: proposal, 2: evaluation and adoption.

**ACTION [Clinton]:** Quinteros, Carter, Trabant, Clinton, Danecek will form Core Team to reword the proposal, announce to WG2/3 and propose to Montreal Closing Plenary.

## StationXML

IRIS-ORFEUS working on documentation for existing 1.1 version.

**ACTION [next WG Chair]:** Call for general ideas for further development, with a duration of 3 months. A subgroup will review all comments and do a proposal. Will follow decision taking protocol if accepted.

There are already extensions which could be evaluated. Fork of the official repo could be a solution.

## URN IDs

IRIS provided a proposal for URN IDs on the mailing list in May before the meeting. Trabant reviewed the key issues. URN IDs are needed for NGF. The proposal aims to incorporate existing SEED codes and map both ways if possible.

The proposed FDSN URN ID has the form:

XFDSN:Net\_Sta\_Loc\_Band\_Source\_Position

Note the channel code is now split into each of Band, Source (previously Instrument), Position (previously Orientation).

There was a discussion on what conventions would be used for Large-N and DAS. For temporary networks, a network code of <1-4 chars><4-digit start year> will be proposed.

Quinteros asked how the system could be used for possibly disruptive 'sensors' such as cellphone seismic records or felt reports. Trabant reports that for such citizen science there are options for extensions including hash tags and some "extra" information. Indeed the XFDSN schema itself also does not need to be adhered to.

**ACTION [next WG Chair]:** WG Chair will follow decision taking protocol if accepted.

## QuakeML

Clinton states that ETH intend to send a proposal for QuakeML2.0 to the mailing list and initiate a discussion on whether the community agrees this major effort should be invested in. Quinteros states GFZ favours to add functionality to the existing quakeML1.2 (v1.3) instead of invest resources in 2.0.

**ACTION [Clinton]** Clinton will open the discussion on WG, including new functionality planned to be included in v2.0.

## Event types

Clinton reports that Storchak has agreed to lead an effort that will span both FDSN WG2 and COSOI. This would build on his previous efforts and by including different groups is aimed to extend the conversation to as many affected communities as possible.

**ACTION [Storchak]** Storchak will inform the community about the progress on this discussion and joint effort.

## Other business

QC: IRIS and EIDA need to discuss on how to make existing IRIS *Mustang* and EIDA *wfcatalogue* systems interoperable (e.g. definitions, API specification), though this discussion has moved to WG3.