

# 43rd Directing Board Ersatz Meeting I – Minutes

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*Location:* 2-hour Zoom session (virtual meeting)  
*Date:* 25 September 2020  
*Note taker:* Dirk Behrend  
*Version history:* 19 October 2020

Attending Board members: Axel Nothnagel (Chair), James Anderson, Dirk Behrend, Johannes Böhm, Patrick Charlot, Francisco (“Paco”) Colomer, Alet de Witt, John Gipson, Rüdiger Haas, David Hall, Hayo Hase, Nancy Kotary, Evgeny Nosov, Chet Ruszczyk, Gino Tuccari, Stuart Weston.

Absent: Jinling Li.

Guests: Alexander Neidhardt, Oleg Titov.

## 1. Welcome

Axel Nothnagel welcomed the attending Board members and Alexander Neidhardt and Oleg Titov as guests.

## 2. Approval of agenda

The Board approved the agenda for the ersatz meeting.

## 3. Seamless auxiliary data storage (Alexander Neidhardt)

The Task Force on Seamless Auxiliary Data Storage led by Alexander Neidhardt has established an operational data system managed by Zabbix and SysMon and interfacing with the NASA Field System. The GUI-based system is running at BKG stations and was tested at Onsala. Earlier versions of the system were demonstrated at the Technical Operations Workshop (TOW) and the General Meeting (GM). PR work is needed to motivate more sites to adopt it. The IVS Network Coordinator, Stuart Weston, will prompt individual stations to install the local client for regular data transfer. James Anderson will prepare an IVS Resolution on monitoring critical telescope front and back end parameters.

## 4. IVS Web presence

The IVS Web presence has evolved over time and currently has a distributed approach with various Web sites (e.g., Coordinating Center, Outreach Office, Combination Center, Analysis

Coordinator). The Coordinating Center (CC) Web site (“ivscc”) is dated and needs to be redesigned to follow current NASA guidelines. In the same step, using a more holistic approach, the new version of the Web site could be organized to integrate better the various IVS-related Web services and to reposition underused functions within the Web site structure hierarchy. The CC started looking into this and is working on a NASA-internal future release document for ivscc. The implementation of the proposed changes then depends on available resources.

## **5. Preparations of DB elections**

The preparations are well under way. The Election Committee prepared and distributed the Call for Nominations for the DB elections. The deadline for nominations to representative positions is November 8, 2020. The voting mechanism is being looked into (either via email or using a Web-based service).

## **6. Responses on IVS Infrastructure Development Plan 2030**

Three stakeholder groups responded with comments to the infrastructure plan distributed on July 21, 2020. In general, the overall concept of the plan was implicitly affirmed (no direct criticism); most comments focused on improving the formulations and pointing out the lack of describing financial issues. The Board agreed on only making minor edits to the text, replying in individual letters to the three stakeholder groups, and distributing the final edited version for a last round of possible feedback.

## **7. Approval of IVS CRF Committee**

The charter of the planned CRF Committee was updated by incorporating the suggestions made by the Board at its last meeting (June 25): it now includes formal aspects (like chairmanship) and the administrative and operational parts are separated out. The CRF Committee will function as an interface to the ICRF working group. It is anticipated that a future ICRF will include an optical frequency (i.e., *Gaia*) as fourth frequency and that the IVS will cover one of the four frequencies. After clarification of an institutional issue, the DB will vote on establishing the CRF Committee electronically.

## **8. Approval of OPC plans**

The observing plan 2021 of the legacy network was approved and is basically hashed out. In addition to five standard T2 sessions, there will be two T2++ sessions (20+ stations, increased data rate of 512 Mbps, spanned bandwidth of 720 MHz at X-band), which lend themselves to do some publicity work. The VGOS observing program in 2021 is constrained by the correlator resources as well as by the limited number of Mark 6 modules. The OPC decided to postpone the start of the weekly cadence of 24-h VGOS-O sessions in 2021 to (at least) the second quarter of the year. The Coordinating Center will look into ways on how to organize additional correlation capacity and how to request further purchases of Mark 6 modules. The required upgrades for

operational VGOS Intensives on the baseline K2-Ws in 2021 made progress. Wettzell has a 2 x 3 Gbps link and USNO a 10-Gbps link. An upgrade of Kokee to 1 Gbps is scheduled for the fall.

## 9. Approval of proposal of ETH Zurich

The Board approved the proposal of ETH Zurich to become an Associate Analysis Center. The group consists of Benedikt Soja (lead), Matthias Schartner, and Grzegorz Kłopotek.

## 10. Automatic scheduling with VieSched++

The Vienna and Wettzell groups established a service of automatically scheduling all sessions in the IVS Master Schedule based on the VieSched++ scheduling software. The system is operational since June 2020 and by now successfully scheduled over 150 sessions. In general, the service can be used by any scheduler of IVS series, either routinely or in case of urgency. The system is capable of reducing the scheduling workload and simplifying quality control. VieSched++ Auto is openly available via GitHub ([https://github.com/TUW-VieVS/VieSchedpp\\_Auto](https://github.com/TUW-VieVS/VieSchedpp_Auto)). The schedules are published at [https://www.bkg.bund.de/DE/Observatorium-Wettzell/IVS-VLBI-Operations\\_Center/IVS-VLBI-Operations\\_Center.html](https://www.bkg.bund.de/DE/Observatorium-Wettzell/IVS-VLBI-Operations_Center/IVS-VLBI-Operations_Center.html)

## 11. Miscellaneous

The Board discussed the proposed ANTCAL (antenna calibration) format and opined that the station log files of individual sessions are the official record of the respective measurements taken. Any group is free to devise their own filtering software, but there is no need for an additional official IVS format for antenna calibration data.

At a meeting of ITU-R Working Party 7D (WP 7D – Radio astronomy), the CRAF-VGOS group presented a *Question* to the ITU introducing VGOS. The *Question* was rejected in its current form due to a veto by the U.S. group that wants the term “global change” removed. The next meeting will be held in April 2021.

## 12. Next face-to-face meeting (at next EVGA meeting?)

The next face-to-face meeting is not coming soon; it is unlikely to have one in connection with the EVGA meeting in Paris, France.

## 13. Next meeting by telecon on December 18, 2020 @ 12–14 UT

The Board agreed to hold the next virtual meeting via Zoom on 18 December 2020 @ 12–14 UT.