

1 - General Information

<u>Date:</u> Sunday, April 14, 2024 <u>Time:</u> 09:00-16:30 CEST

<u>Venue:</u> TU Wien, Wiedener Hauptstraße 8-10, 1040 Vienna (Freihaus)

Room: Seminar room **DA green 02A** – (2nd floor)

Meeting Website: https://ggos.org/event/ggos-governing-board-bureaus-meetings/

<u>Presentation Slides</u>: https://cloud.ggos.org/index.php/s/WkpApsBJyme275q

2 - Schedule

Minutes

09:00 - 11:15: GGOS Governing Board meeting (GB members & invitees only):

30 min: General GGOS business report [L. Sánchez, B. Miyahara, B. Soja and contributions from H.

Kutterer, T. Melbourne and M. Schmidt]

30 min: Coordination Office report [M. Sehnal, A. Craddock, K. Elger] 30 min: Implementation Plan and key ongoing activities [L. Sánchez]

15 min: Discussion – Any other Business [All]

15 min: Coffee break

<u>11:30 – 12:15: GGOS Bureau of Products and Standards BPS meeting</u> (open for public):

15 min: BPS introduction and report [D. Angermann]

15 min: Advances in the definition of the Essential Geodetic Variables [D. Angermann]

15 min: Discussion [All]

11:45-13:00: Lunch Break

13:00 – 16:30: GGOS Bureau of Networks and Observations BNO meeting (open for public):

Role of the Bureau [José Rodríguez, Martin Lidberg, Mike Pearlman]

Standing Committee Reports

PLATO [Alexander Kehm]
 Missions [C.K. Shum]
 Data and Information [Justine Woo]

Metrology of space geodetic infrastructure [Ryan Hippenstiel, Cornelia Eschelbach]

Coffee break - 15 Minutes

Services Reports

IGFS [George Vergos]
 IVS [Rüdiger Haas]
 ILRS [Mike Pearlman]
 IGS [Allison Craddock]
 IDS [Guilhem Moreaux]
 PSMSL [Chanmi Kim]

• Discussion on Other Topics

[blue -> virtual participants, black -> in-person]

GGOS GB & Bureaus Meetings 2024 Minutes



3 – Report to the GGOS Governing Board

The main purpose of this meeting was to give an update of recent activities of GGOS and offer time for discussions. Main topics included:

- New Director of the GGOS Bureau of Networks and Observations (BNO): Michael Pearlman announced his decision to step down from the position of BNO Director. A call for nominations for his successor was published on 13 December 2023 with a deadline of 26 January 2024. The GGOS Governing Board considered the nominations and on 15 February 2024 elected José Rodríguez (Instituto Geográfico Nacional, Yebes Observatory, Spain) and Martin Lidberg (Lantmäteriet, Sweden) as Director and Deputy Director respectively.
- GGOS Strategic Plan 2024 2034: The new GGOS Strategic Plan (see https://zenodo.org/records/10605594) was unanimously approved by the GGOS Governing Board on 25 January 2024. The IAG Office was informed about this Plan and Daniela/Christina distributed this document to the IAG EC members by e-mail on 7 February 7.
- GGOS Implementation Plan: The GGOS President and the operational components of GGOS (Coordinating Office, BNO and Bureau of Products and Standards BPS) are defining action items to implement the Strategic Plan. The action items are designed to last a maximum of four years and follow the SMART criteria: Specific, Measurable, Achievable, Relevant, Time-bound. The general concept for the implementation plan was presented at the GGOS Governing Board meeting and feedback was collected from the attendees. This feedback will be incorporated in the implementation plan document. This document will be distributed to the GGOS Governing Board members, who will be asked to provide feedback by late May 2024.
- Definition of Essential Geodetic Variables (EGVs): The Chair of the GGOS Committee on EGVs, the Director of the BPS and the GGOS President have developed a concept for the definition of EGVs and propose a first draft of a catalogue of EGVs. This catalogue contains 18 EGVs based on 51 geodetic products. A white paper has been prepared for internal review to assess the concept and feasibility of the proposal. A first review will be carried out by the GGOS Science Panel (between 8 April and 15 May), once the feedback from the Science Panel has been integrated into the white paper, a second review should be carried out by the GGOS Governing Board (June or July), and once the feedback from the GGOS Governing Board has been integrated into the white paper, we will submit it to the IAG Executive Committee members for a new review. Once the concept has been accepted / approved / endorsed by the IAG Executive Committee, we will launch a dissemination and consultation exercise with the global geodetic community in order to achieve a general consensus.
- Update of the GGOS Book: The GGOS book (https://doi.org/10.1007/978-3-642-02687-4) was published in 2009, so its content is approximately as it was in 2007. The IAG Strategy Retreat in 2019 identified as an urgent task to update the book through a supplement or a special issue of a journal. The GGOS Science Panel members initiated a reading of the book on 22 March 2024 to identify missing topics/updates and to define how much needs to be updated. Based on this

Minutes



review, we will call for a pool of contributing authors and decide on the best option to publish the update. This activity will take about two years.

Project "Characterisation of the ionised atmosphere in terms of essential variables": GGOS is leading a joint initiative between IAG and the International Association of Geomagnetism and Aeronomy (IAGA) to establish a multidisciplinary network of scientists to integrate geodetic and geophysical technologies for comprehensive monitoring of the ionised atmosphere with respect to essential Earth observation variables. We have prepared and submitted a project to the International Union of Geodesy and Geophysics (IUGG) Grants Programme 2024 - 2025 to obtain funding to organise a thematic meeting in conjunction with the GGOS Days 2024. The IUGG decision on the grant will be published in early June.

A new GGOS Affiliate: A GGOS Affiliate is a national or regional organisation that coordinates geodetic activities in that country or region. GGOS Affiliates provide a forum for multi-technique space geodetic discussions, work to improve the quality of space geodetic observations, and encourage cooperation between the various agencies in that country or region that own, operate and maintain the space geodetic infrastructure there. In addition to the existing GGOS Affiliates (GGOS Japan and GGOS D-A-CH), we received a new proposal from our Spanish and Portuguese colleagues to establish the GGOS IberAtlantic Affiliate. This proposal was evaluated and approved by the GGOS Directing Board on 12 April.

GGOS Interaction with the UN Global Geodetic Centre of Excellence (UN-GGCE): GGOS is cooperating with the UN-GGCE in different ways: (1) In monthly regular meetings, the GGOS Coordinating Office and UN-GGCE report and agree on outreach activities. Presently, a joint short video on reference frames is being developed. The basis of this video are the previous videos released by GGOS. (2) The GGOS BPS and BNO are supporting the UN-GGCE activities related to the survey on needs and challenges of the IAG Services. (3) Various GGOS representatives participated in the Second Meeting of the UN-GGCE International Advisory Committee and the Fourth Plenary Meeting of the UN Sub-Committee on Geodesy, 18 – 21 March in Bonn, Germany.

Joint Commission 2, IGFS and GGOS Symposium GGHS2024 (Gravity, Geoid and Height Systems 2024), Thessaloniki, Greece, September 4-6, 2024: For the first time, GGOS is a direct sponsor of a Gravity Symposium. In addition to participating in the scientific organising committee, we are planning to contribute with presentations dedicated to GGOS topics in order to promote GGOS activities within the gravity field community.

GGOS Topical Meeting on the Atmosphere and GGOS Days 2024, Potsdam, Germany, October 7 – 11, 2024: Michael Schmidt (FA GSWR) and Robert Heinkelmann (IERS Analysis Coordinator) proposed to have a GGOS meeting on ionosphere and space weather. After some feedback with GGOS, the proposal is extended to the neutral atmosphere covering the topics of

- The GGOS FA on Geodetic Space Weather Research (GSWR)
- The Joint Study Group 1: Al for GNSS Remote Sensing of the FA Artificial Intelligence for Geodesy (AI4G)
- The potential new GGOS FA on "Combined Tropospheric Products" (with support from IAG Services)
- Additional contributions from IAG Commission 4 and study groups of the Inter-Commission Committee on Theory

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 The GGOS FA Geohazards Monitoring by evaluating the possibility of improving tsunami early warning systems based on the analysis of ionospheric perturbations.

The idea was also extended to interact with colleagues from the International Association of Geomagnetism and Aeronomy (IAGA), in particular

- IAGA Interdivisional Commission on Space Weather
- IAGA Division II: Aeronomic Phenomena
- IAGA Division V: Geomagnetic Observatories, Surveys and Analyses

In the next two weeks the session descriptions of the meeting will finished and the call for participation will be open.

For more details please see the presentation available at: https://cloud.ggos.org/index.php/s/WkpApsBJyme275q

4 - Participants

	GB	BPS	BNO
in person	19	17	15
virtual	20	15	13
total	39	32	28



Some of the in-person participants between the GGOS GB and the BPS meeting.

Participants	GB	BPS	BNO
Aletha de Witt	V	V	V





Alexander Kehm	X	Х	Х	
Allison Craddock	Х	X	Х	
Andres Calabia	V	V		
Andy Matthews	V	V	V	
Annette Eicker	X			
Basara Miyahara	X	X	Х	
Benedikt Soja	X		**	
C K Shum			V	
Chanmi Kim	Х	Х	X	
Christoph Förste	X	X	**	
Christopher Kotsakis	V	V	V	
Claudia Tocho	V		V	
Clément Corude	•	<u> </u>	V	
Cornelia Eschelbach	V	٧	V	
Daniela Thaller	X	X	<u> </u>	
Derek van Westrum	V			
Detlef Angermann	X	Х	Х	
Elisabetta D'Anastasio	V	V	V	
Elizabeth Bradshaw	V		V	
Esther Azcue	V			
George Vergos	Х	Х	Х	
Guilhem Moreaux			Х	
Haixia Lyu	V			
Helena Ribeiro	V			
Jose Manuel Ferrandiz	Х	Х	Х	
José Rodríguez	Х	Х	Х	
Julia Azumi Koch	V	V		
Jürgen Müller	V			
Justine Woo X				
Karine Le Bail	V	V	V	
Kirsten Elger	Х	Х		
Krzysztof Sośnica	V			
Laura Sanchez	Х	Х		
Lucia McCallum	Х	Х		
Luisa Magalhaes	V	V		
Martin Lidberg	х	Х	Х	
Martin Sehnal	Х	Х	Х	
Mike Pearlman		V	V	
Nadia		V		
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Minutes

Nivaldo Destro		Х	х
Rebekka Steffen	X		
Rüdiger Haas			Х
Ryan Hippenstiel	V	V	V
Ryan Ruddick	V		
Toshimichi Otsubo	V	V	V
Yamin Dang	Х	Х	Х