



International Committee on Global
Navigation Satellite Systems

WG D MEETING AGENDA

ICG WORKING GROUP D REFERENCE FRAMES, TIMING AND APPLICATIONS

Fifteenth Meeting of the International Committee on GNSS (ICG) Vienna, Austria and Virtual Hybrid

WG-D Leadership Team

- Zuheir **Altamimi** (International Association of Geodesy, IAG)
- Suelynn **Choy** (International Federation of Surveyors, FIG)
- Allison **Craddock** (International GNSS Service, IGS)
- Jerome **Delporte** (Centre National D'etudes Spatiales, CNES)
- Allison **Kealy** (International Association of Geodesy, IAG)
- Mikael **Lilje** (International Federation of Surveyors, FIG)
- Mayra **Oyola** (International GNSS Service, IGS)
- Gerard **Petit** (Bureau International des Poids et Mesures, BIPM)
- Patrizia **Tavella** (Bureau International des Poids et Mesures, BIPM)

Note that this agenda is presented in a condensed format due to hybrid participation

Link to [Overall ICG-15 AGENDA WG-D Meeting Agenda Outline](#)

(Morning (CEST) of Monday 27 Sept., with follow-up morning of Thursday 30 Sept, as required.)

Co-Chair's Note: Presentation format to include a combination of "homework" long format presentations/reports provided in advance for asynchronous reading, with a short/condensed "highlights and issues in need of discussion" report during the meeting time.

Monday, 27 September (9:00-12:30)

9:00-11:00 Task Force on Timing References

Chair(s): J. Delporte, G. Petit, P. Tavella

- 9:00-9:10 Welcome to attendees, virtual tour-de-table, overview of day's agenda.
- 9:10-9:20 *TF on timing references: update/review of actions since last ICG and way forward*
(G. Petit, P. Tavella, J. Delporte)
- 9:20-9:30 *New future section 4 of Circular T*
(P. Defraigne, G. Petit)
- 9:30-9:40 *Improvements in the VNIIFTRI Primary Frequency Standard and National Time Scale UTC(SU)* (1. Silvestrov)
- 9:40-9:50 *Galileo timing performances monitored by the GRC-MS*
(J. Delporte)
- 9:50-10:00 *Onboard Autonomous Frequency Jump Detection and Correction method*
(Akshay Khare)
- 10:00-10:10 *Traceability of NavIC System time to UTC(NPLI)/Indian Standard Time*
(Suresh Dakkumalla)
- 10:10-10:20 *Operationalization and performance of In-house Timescales for NavIC Precise Time Facility*
(Akanksha A Bharadwajan)
- 10:20-10:30 *Differential Code bias estimation of NavIC Satellites using Spherical harmonic function*
(Yogesh Lingwal)
- 10:30-11:00 Discussion
- 11:00-11:20 Coffee Break
- 11:20-12:30 Task Force on Geodetic References
Chair: Z. Altamimi
- 11:20-11:30 *Galileo Geodetic Reference Frame - Status Update*

(W. Enderle, E. Schoenemann, T. Springer *on behalf of the GGSP Consortium*)

11:30-11:40 ESA/ESOC's EOP EOP Estimation and Prediction Activities - Status Update'

(E. Schoenemann, W. Enderle, S. Bruni, V. Mayer, M. Otten, T. Springer)

11:40-1 1:50 *Compatibility of Terrestrial Reference Frames used in GNSS broadcast messages during an 8 week period of 2019* (link to paper) **fSLIDES!**

(Todd Kawakami: Stephen Malys, Jake Griffiths on behalf of authors: Stephen Malys, Russell Solomon, Jason Drotar, Todd Kawakami, Thomas Johnson)

11:50-12:10 Discussion 12:10-12:30

Summarization of Session

Wednesday, 29 September (9:00-15:00)

15:20-15:50 **Joint Working Group Session (S, B, C & D invited): Open Service Information Sharing and Service Performance Monitoring (International GNSS Monitoring and Assessment)**

[please see WG-S Agenda for more information]

15:50-16:30 **Joint Working Group Session (S, B, C & D invited): Precise Point Positioning (PPP) Interoperability**

[please see WG-S Agenda for more information]

16:30-17:30 **Joint Working Group Session (S, B, C & D invited): Interoperability & Service Standards (Multi-GNSS Interoperability - Timing)**

[please see WG-S Agenda for more information]

17:30-18:00 Joint Working Group Session (S, B, C & D invited): Geodetic References
Chair(s): Z. Altamimi

17:30-17:40 *Recent developments in the UN GGIM Subcommittee on Geodesy and UN Global Geodetic Reference Frame*

(Z. Altamimi, on behalf of the UN GGIM Subcommittee on Geodesy Bureau)

17:40-17:50 *Introducing the IGS 2021+ Strategic Plan*

(A. Craddock, on behalf of the IGS Governing Board)

17:50-18:00 Discussion

Thursday, 30 September (9:00-12:30)

Other presentations to be confirmed.

Other Business (to be presented in an All-WG session, time permitting)

Actions and Progress on Recommendations

GNSS Provider ongoing Action (discussed at ICG-14): Update and Maintain **Geodetic and Timing Reference Templates**

Action from ICG-14: NavIC to provide draft update to recommendation #20 to WG-D

Update on WG-D Rec #23 on Satellite Physical and Geometrical Property Information Sharing
(Public Availability of GNSS Metadata)

Joint WG Meetings (coordinated by WG-S, please see WG-S Agenda for most recent information)