

ICG-18 WG-D Agenda

ICG Working Group D - Reference Frames, Timing, and Applications 18th Meeting of the International Committee on GNSS (ICG)

06 - 11 October 2024, Hybrid in Wellington (New Zealand) and Online

WG-D Chairs

Allison Craddock	International GNSS Service	IGS
Richard Gross	International Association of Geodesy	IAG
Ryan Keenan	International Federation of Surveyors	FIG
Zuheir Altamimi	Institut National de l'Information Géo. [...]	IGN (online)
Jérôme Delporte	Centre National D'Études Spatiales	CNES (online)
Léo Martire	International GNSS Service	IGS (online)
Giulio Tagliaferro	Bureau International des Poids et Mesures	BIPM (online)
Pascale Defraigne	Royal Observatory of Belgium	BIPM (not participating)
Suelynn Choy	International Federation of Surveyors	FIG (not participating)
Mikael Lilje	International Federation of Surveyors	FIG (not participating)
Patrizia Tavella	Bureau International des Poids et Mesures	BIPM (not participating)

WG-D Task Force Chairs

Geodetic References	Zuheir Altamimi
Timing References	Jérôme Delporte
Applications of GNSS for Disaster Risk Reduction (<i>cf.</i> WG-B)	Léo Martire

Various Details and Links

All times are given in local time (Wellington, UTC+13). [Time Zones Helper](#) (to schedule virtual participants in the best way possible). Times before 1000 or after 1700 (LT) are ideal for European/African virtual participants.

Virtual participation WG-D link: **TBD**.

Links: [\[link to the live version of this very document\]](#)
[ICG WG-D Recommendations latest](#)
[ICG-18 \(2024\) Wellington icg18_agenda_v240919.pdf](#)
[ICG-18 WG-D Minutes](#)
[ICG-18 WG-D recommendation A.docx](#)
[ICG-18 WG-D recommendation template.docx](#)
[ICG-18 WG-D Final Statement](#)

WG-D Agenda (last updated: 240927 based on [ICG Agenda v240919](#))

Reminder: all times are given in local time (Wellington, UTC+13).

Key:	WG-D items	items fixed by main agenda	items fixed by coordination with other WGs	breaks
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Sun 06	1200-1530	On-Site Registration		
	1300-1500	First Meeting of the Providers' Forum (attended by Providers only)		
	1500-1520	Coffee Break		
	1520-1620	Meeting with the Working Groups Co-Chairs		
	1620-1700	Providers' Forum (attended by Providers only) - Continued		
Mon 07	0800-1730	On-Site Registration		
	0900-0935	Opening Session + Adoption of Agenda		
	0935-1000	Group Photo + Coffee Break		
	1000-1725	First Plenary Session (see main agenda for details)		
	1225-1330	Lunch Break		
	1455-1515	Coffee Break		
	1725-1800	<i>nothing</i>		
	1800-2000	Welcome Reception - Tākina Wellington Convention Centre		
Tue 08	0800-	On-Site Registration		
	0830-0930	Applications and Experts Seminar <ul style="list-style-type: none"> The Galileo Emergency Warning Satellite Service and Its Contribution to Resilience and Response to Hazards [Eric GUYADER] 		

- Yearly Report of the WG-D Task Force on Applications of GNSS for Disaster Risk Reduction [Naofumi TAKAMATSU, Jun SHEN, Léo MARTIRE]
- GNSS in support of natural hazard preparedness and resilience [Roberto PRIETO]
- GeTEWS Oceania Joint Workshop on GNSS enhanced Disaster Risk Reduction [John LABRECQUE]
- Unlocking GNSS in multi-sensor multi-peril risk reduction initiatives [TBC, Australia]
- (virtual) IGS Real Time Service [Axel RÜLKE]

0930-1030
(60 min)

Welcome and Introductions [*All WG-D Chairs - 10 min*]

WG-D Internal Discussions - Other Items

[*Chairs: all WG-D Chairs*]

01. The IGS Real-Time Service: Present Status and Future Developments
[*Axel RÜLKE - 15 min - online*]

WG-D Internal Discussions - Timing References Task Force 1/2

[*Chairs: Giulio TAGLIAFERRO, Michael COLEMAN*]

02. Title TBD (New Section 4)
[*Giulio TAGLIAFERRO - 15 min - online*]
03. Title TBD (Continuous UTC)
[*Giulio TAGLIAFERRO - 15 min - online*]

[*Safety Margin - 5 min*]

1030-1050

Coffee Break

1050-1230
(100 min)

WG-D Internal Discussions - Timing References Task Force 2/2

04. Inclusion of NavIC in Section-4 of BIPM - An Update
[*Manish CHAWLA - 10 min*]
05. Multi-Clock Combinations and the Clock-RINEX Format
[*Michael COLEMAN - 15 min*]
06. GNSS Timing Performances monitored by GEMOP
[*Jérôme DELPORTE - 15 min - online*]
07. ESA GNSS Time Monitoring
[*Jörg HAHN - 15 min*]
08. ESA-ISRO NAVIC Receiver Calibration
[*Jörg HAHN - 15 min*]
09. NavIC-Galileo Time Offset(NGTO) determination - An Update
[*ESA-ISRO Joint Presenters - 10 min*]

		<p>10. <i>The New Result of GGTO by UTC Pivot and Single Station Method</i> <i>[Haibo YUAN - 15 min]</i></p> <p><i>[Safety Margin - 5 min]</i></p>
	1230-1330	Lunch Break
	1330-1540 (130 min)	<p>WG-D Internal Discussions - Geodetic References Task Force <i>[Chairs: Richard GROSS, Ryan KEENAN]</i></p> <p>11. Monitoring Results of GNSS Reference Frames Compatibility <i>[Igor GUSEV - 15 min - online]</i></p> <p>12. Beidou Coordinate System (BDCS) Status and Future Prospect <i>[Weijing QU - 15 min]</i></p> <p>13. Galileo Terrestrial Frame Update <i>[Werner ENDERLE - 15 min]</i></p> <p>14. ESA's GENESIS Mission – At the Foundation of Navigation <i>[Erik SCHOENEMAN - 15 min]</i></p> <p>15. NavIC-Enabled IGS Stations in India <i>[Neelu Kasat - 15 min - online]</i></p> <p>16. FIG Reference Frames in Practice Manual <i>[Ryan KEENAN - 15 min]</i></p> <p>WG-D Internal Discussions - Disaster Risk Reduction Task Force <i>[Chairs: Léo MARTIRE, Allison CRADDOCK]</i></p> <p>17. Policy Brief Overview and Recommendation to Publish <i>[Léo MARTIRE - 5 min]</i></p> <p>18. Working Session: Brainstorming other ways we can communicate the value and unanticipated benefits of GNSS. <i>[Allison CRADDOCK - 25 min]</i></p> <p><i>[Safety Margin - 10 min]</i></p>
	1540-1600	Coffee Break
	1600-1730	<p>Joint Sessions (all WGs)</p> <ul style="list-style-type: none"> ● Global Geodesy <i>[Nick BROWN, UN GGCE]</i> ● Lunar PNT <i>[Chair: WG-S / Joel PARKER]</i> ● PPP Interoperability <i>[Chair: ?]</i>
Wed 09	0800-	On-Site Registration
	0830-1030 (120 min)	<p>Joint Sessions (nominally WGs S+D, others welcome)</p> <ul style="list-style-type: none"> ● Multi-GNSS Timing Interoperability <i>[Chair: ?]</i> ● International GNSS Monitoring and Assessment <i>[Chair: ?]</i>

	1030-1050	Coffee Break
	1050-1230 (100 min)	TBD: WG-D Internal Discussions and/or Joint Session(s)
	1230-1330	Lunch Break
	1330-1500 (90 min)	TBD: WG-D Internal Discussions and/or Joint Session(s)
	1500-1800	Technical Tour
	1800-2000	Social Function (Venue TBC)
Thu 10	0830-1030	TBD: WG-D Internal Discussions and/or Joint Session(s)
	1030-1100	Coffee Break
	1100-1220	Second Plenary Session <ul style="list-style-type: none"> • WG-B Presentations and Discussions • WG-C Presentations and Discussions
	1220-1330	Lunch Break
	1330-1530	Second Plenary Session - Continued <ul style="list-style-type: none"> • WG-D Presentations and Discussions • WG-S Presentations and Discussions
	1440-1500	Coffee Break
	1500-1730	Second Meeting of the Providers' Forum (attended by Providers only)
	1500-1730	Meeting of Associate Members, Observers, and Invited Observers
Fri 11	0830-1230	Third Plenary Session <ul style="list-style-type: none"> • Report of the chair of the 30th meeting of the Providers' Forum. • Consideration of proposed ICG recommendations (as needed). • Review and approval of the ICG-18 meeting conclusions.
	??-??	Coffee Break
	1230-1330	Third Plenary Session - Other matters and Closing Statements <ul style="list-style-type: none"> • Republic of Korea: Announcement for the 19th Meeting of ICG in 2025.

- Expression of Interest to host the 20th meeting of ICG in 2026 and the 21st meeting of ICG in 2027.

WG-D Participant List

Italics: online participation.

Name	Affiliation	Country
Zuheir ALTAMIMI	Institut National de l'Information Géographique et Forestière	France
Suelynn CHOY	International Federation of Surveyors	Australia
Michael COLEMAN	US Naval Research Laboratory	USA
Allison CRADDOCK	International GNSS Service	USA
Pascale DEFRAIGNE	Royal Observatory of Belgium	Belgium
Jérôme DELPORTE	Centre National d'Études Spatiales	France
Werner ENDERLE	European Space Agency	Germany
Richard GROSS	International Association of Geodesy	USA
Jörg HAHN	European Space Agency	Germany
Ryan KEENAN	International Federation of Surveyors	Australia
Mikael LILJE	International Federation of Surveyors	Sweden
<i>Léo MARTIRE</i>	<i>International GNSS Service</i>	<i>USA</i>
Weijing QU	Shanghai Astronomical Observatory, Chinese Academy of Sciences	China
<i>Axel RÜLKE</i>		<i>Germany</i>
Erik SCHOENEMAN	European Space Agency	Germany
<i>Giulio TAGLIAFERRO</i>	<i>Bureau International des Poids et Mesures</i>	<i>International</i>
Patrizia TAVELLA	Bureau International des Poids et Mesures	France