



International Committee on
Global Navigation Satellite Systems

AGENDA

Eighteenth Meeting of the International Committee on Global Navigation Satellite Systems

Wellington, New Zealand

6 – 11 October 2024

Sunday, 6 October 2024	
<i>Venue: Tākina Wellington Convention Centre (50 Cable Street, Te Aro, Wellington)</i>	
<i>Time: Wellington (New Zealand) Local Time (UTC+13 hours)</i>	
12:00 – 15:30	On-site Registration
30TH MEETING OF THE PROVIDERS' FORUM	
13:00 – 17:00	<p>FIRST MEETING OF THE PROVIDERS' FORUM</p> <p><i>Chairperson: Jeffrey AUERBACH, United States</i></p> <p><i>Attended by only the Providers. The primary purpose is: (i) to discuss the agenda and meeting procedures for ICG-18 and the 30th Meeting of Providers' Forum; (ii) to develop response or suggest amendments to the Working Groups draft recommendations; (iii) to address any other matters; (iv) to compose a temporary drafting group on the preparation of the Providers' Forum report.</i></p>
13:00 – 15:00	Opening Remarks and Review of the Providers Forum Agenda
	Open Service Information Dissemination
	Service Performance Monitoring
	Spectrum Protection: Interference Detection and Mitigation
	Multi-GNSS Demonstration Project in the Asia/Oceania Region
	ICG Information Centres: Regional Centres for Space Science and Technology Education (affiliated to the United Nations)
	Potential Areas of Coordination between ICG and the international organizations
	Other matters
<i>15:00 – 15:20</i>	<i>Coffee Break</i>
15:20 – 16:20	<p>Meeting with the Working Groups Co-Chairs</p> <p><i>Attended by only the Providers and the co-chairs of the Working Groups. The primary purpose is: (i) to identify issues for discussion in the working groups; and (ii) to consider their reports on the status of the implementation of the agreed recommendations from the previous ICG meetings.</i></p>
16:20	First meeting of the Providers' Forum <i>(continued as needed)</i>
17:00	Adjourn

7 – 11 October 2024

**PLENARY SESSIONS OF THE INTERNATIONAL COMMITTEE ON
GLOBAL NAVIGATION SATELLITE SYSTEMS (ICG)**

Monday, 7 October 2024	
<i>Venue: Tākina Wellington Convention Centre (50 Cable Street, Te Aro, Wellington)</i>	
<i>Time: Wellington (New Zealand) Local Time (UTC+13 hours)</i>	
08:00 – 17:30	On-site Registration
08:45	<i>Participants called into plenary room</i>
09:00 – 09:40	OPENING SESSION AND OFFICIAL WELCOME <ul style="list-style-type: none"> - <i>Honourable Chris PENK, Minister for Land Information, New Zealand</i> - <i>Amy GUIHOT, Australian Deputy High Commission, Australia</i> - <i>Sharafat GADIMOVA, United Nations Office for Outer Space Affairs</i>
<i>09:40 – 10:00</i>	<i>Group Photo/Coffee Break</i>
10:00 – 17:35	FIRST PLENARY SESSION OF ICG <i>Chairperson: Matt AMOS, Land Information, New Zealand</i> <i>Attended by all. The primary purpose is for the GNSS system and augmentation providers to present the status and future plans for their systems, and an opportunity for the ICG members, associate members, observers and invited observers to provide updates on recent developments in their organizations and associations with regard to GNSS services and applications. All presenters will identify issues for discussion in the ICG plenary sessions and/or the ICG working groups meetings.</i>
10:00	Adoption of Agenda
	Providers System and Service Updates
10:05	Global Positioning System (GPS), <i>Harold MARTIN and Christopher ERICKSON, United States of America</i>
10:25	Galileo System Update, <i>Juan Pablo BOYERO, European Commission</i>
10:45	BeiDou Navigation Satellite System, <i>LU Xiaochun, China</i>
11:05	<i>(virtual)</i> Global Navigation Satellite System (GLONASS), <i>Ivan REVNYVIKH, Russian Federation</i>
11:25	Navigation with Indian Constellation (NavIC) and GAGAN, <i>P.S. SURA, India</i>
11:35	Pseudolite System for RLV-LEX and future ORE Mission, <i>Ashish SHUKLA, India</i>
11:45	Status Update on the QZSS Quasi-Zenith Satellite System (QZSS), <i>KISHIMOTO Motohisa, Japan</i>
12:05	Presentations by Members, Associate Members, Observers and Invited Observers on Matters of Interest to ICG
12:05	SouthPAN Programme Update, <i>Matt AMOS, New Zealand</i>
<i>12:25 – 13:25</i>	<i>Lunch Break</i>
13:25	Presentations by Members, Associate Members, Observers and Invited Observers on Matters of Interest to ICG (continued)

13:25	Status and Perspectives of Navigation in Italy-2024 Update, <i>Mauro CARDONE, Italy</i>
13:40	Korea Positioning System (KPS) and Korea Augmentation Satellite System (KASS) Updates, <i>Sujin PARK and Byungseok LEE, Republic of Korea</i>
14:00	ESA Vision on the Future of Navigation, <i>Javier BENEDICTO, European Space Agency</i>
14:15	ESA's LEO-PNT In-Orbit Demonstrator Programme, <i>Roberto PRIETO, European Space Agency</i>
14:30	ESA's Genesis Mission – A Mission for the World, <i>Werner ENDERLE, European Space Agency</i>
14:45	ESA Moonlight, NovaMoon and Lunar Pathfinder Programmes, <i>Javier VENTURA-TRAVESET, European Space Agency</i>
15:00 – 15:15	<i>Coffee Break</i>
15:15	Presentations by Members, Associate Members, Observers and Invited Observers on Matters of Interest to ICG (continued)
15:15	Japan Lunar Navigation Satellite System and International Collaboration for Lunar Augmented Navigation Service (LANS), <i>Masaya MURATA, Japan Aerospace Exploration Agency, Japan</i>
15:25	JAXA LEO PNT and Demonstration Mission Under Planning, <i>Masaya MURATA, Japan Aerospace Exploration Agency, Japan</i>
15:35	Update on GNSS Space Users and Lunar PNT, <i>Joel PARKER, United States, Masaya MURATA, Japan, Xinuo CHANG, China, Werner ENDERLE, European Space Agency</i>
15:50	GDGPS High Accuracy Products for Real-Time GNSS Applications: Supporting Public and Scientific Communities, <i>Attila KOMJATHY, United States</i>
16:00	WRC-23 and Beyond, <i>Hon FAI NG, International Telecommunication Union (ITU)</i>
16:10	FIG - Status Updates in 2024, <i>Ryan KEENAN, International Federation of Surveyors (FIG)</i>
16:20	International GNSS Service: Recent Achievements toward Strategic Goals, <i>Alisson CRADDOCK, Léo MARTIRE, Ryan RUDDICK, Elisabetta D'ANASTASIO, International GNSS Service (IGS)</i>
16:30	(virtual) Galileo's Authentication, <i>Ignacio FERNANDEZ, European Commission</i>
16:50	(virtual) Development of RTCM SC-134 Messages for GNSS-based High-Integrity Precise Positioning Applications, <i>Capua ROBERTO, Radio Technical Commission for Maritime Services (RTCM)</i>
17:00	(virtual) India's First GNSS-Reflectometry Payload in Micro-Satellite Bus, <i>Ananya RAY, India</i>
17:05	(virtual) SUPARCO's GNSS activities, <i>Iftikhar KHAN, Pakistan</i>
17:15	UK GNSS Resilience in a PNT System of Systems, <i>Elena PAYNE and Mark BRAMMER, United Kingdom</i>
17:25	A Robust Global Geodesy Supply Chain, <i>Nicholas BROWN, United Nations Global Geodetic Centre of Excellence (UN-GGCE)</i>
17:35	Adjourn
18:00 – 20:00	Welcome Reception - Tākina Wellington Convention Centre

Tuesday, 8 October 2024	
08:00	On-site Registration
08:30 – 09:40	<p>APPLICATIONS AND EXPERTS SEMINAR</p> <p>Use of GNSS for natural hazard preparedness, resilience and response</p> <p><i>Chairperson: Martine WOOLF, Geoscience Australia, Australia</i></p> <p>Attended by all. The primary purpose is for GNSS experts to offer their views on GNSS today and vision for the future. The audience will have an opportunity to ask the panel members questions.</p>
08:30	<i>(virtual)</i> The Galileo Emergency Warning Satellite Service and Its Contribution to Resilience and Response to Hazards, <i>Eric GUYADER, European Commission</i>
08:40	Yearly Report of the WG-D Task Force on Applications of GNSS for Disaster Risk Reduction, <i>Naofumi TAKAMATSU, Jun SHEN, Léo MARTIRE, Working Group D Task Force</i>
08:50	GNSS in support of natural hazard preparedness and resilience, <i>Roberto PRIETO, European Space Agency</i>
09:00	GeTEWS Oceania Joint Workshop on GNSS enhanced Disaster Risk Reduction, <i>John LABRECQUE, United States</i>
09:10	Considerations for GNSS as part of a multi-sensor approach to Tsunami Early Warning, <i>Anna KAISER and Elisabetta D'ANASTASIO, New Zealand</i>
09:20	<i>(virtual)</i> IGS Real Time Service, <i>Axel RÜLKE, International GNSS Service</i>
09:30	<i>(virtual)</i> NavIC enabled Water level Gauge (NEWLG) for Water Resource Study and Management, <i>Kalpesh Kumar BORSADIYA, India</i>
09:35	Closing remarks
<i>09:40 – 10:00</i>	<i>Coffee Break</i>
10:00 – 15:40	<p>WORKING GROUPS MEETINGS (Parallel Sessions)</p> <p>WG S – Systems, Signals and Services</p> <p><i>Co-chairs: Jeffrey AUERBACH, United States and Sergey REVNIVYKH, Russian Federation</i></p> <p>WG B - Enhancement of GNSS Performance, New Services and Capabilities</p> <p><i>Co-chairs: Nilesh M. DESAI, India, CHANG Xinuo, China and Mr. Daniel Blonski, European Space Agency</i></p> <p>WG C – Information dissemination and capacity building</p> <p><i>Co-Chairs: Sharafat GADIMOVA, United Nations Office for Outer Space Affairs and New Zealand/Australia</i></p> <p>WG D – Reference Frames, Timing and Applications</p> <p><i>Co-chairs: Zuheir ALTAMIMI, International Association of Geodesy, Leo MARTIRE, International GNSS Services and Ryan KEENAN, International Federation of Surveyors</i></p>
<i>12:30 – 13:30</i>	<i>Lunch Break</i>
13:30 – 15:40	Working Groups Meetings – Parallel Sessions (continued)
<i>15:40 – 16:00</i>	<i>Coffee Break</i>

16:00 – 17:30	Working Groups Joint Meeting <ul style="list-style-type: none"> - Global Geodesy - Lunar PNT - PPP Interoperability
17:30	Adjourn

Wednesday, 9 October 2024	
08:00	On-site Registration
08:30 - 10:30	Working Group S and Working Group D Joint Meeting <i>Working Groups B and C members are also invited, if interested</i>
	<ul style="list-style-type: none"> - Multi-GNSS Timing Interoperability - International GNSS Monitoring Assessment
<i>10:30 – 10:50</i>	<i>Coffee Break</i>
10:50 - 12:30	(in parallel) Working Groups Meetings – Parallel Sessions (continued)
<i>12:30 – 13:30</i>	<i>Lunch Break</i>
14:00 – 17:30	Technical Tour
18:00 – 20:00	Social Function

Thursday, 10 October 2024	
08:30 – 10:30	Working Groups Meetings – Parallel Sessions (continued)
<i>10:30 – 11:00</i>	<i>Coffee Break</i>
11:00 – 14:40	SECOND PLENARY SESSION OF ICG <i>Chairperson: Matt AMOS, Land Information, New Zealand</i> <i>Attended by all. The primary purpose is for the Working Groups to present results of their meetings, or any inter-sessional meetings held since the 17th Meeting of ICG. Presentations will include any draft recommendations to ICG.</i>
	<ul style="list-style-type: none"> 11:00 - Presentation by WG B and Discussions 11:40 - Presentation by WG C and Discussions
<i>12:20 – 13:20</i>	<i>Lunch Break</i>
13:20	- Presentation by WG D and Discussions
14:00	- Presentation by WG S and Discussions
<i>14:40 – 15:00</i>	<i>Coffee Break</i>
15:00 – 17:30	SECOND MEETING OF THE PROVIDERS' FORUM <i>Chairperson: Jeffrey AUERBACH, United States</i> <i>Attended by only the Providers. The primary purpose is to discuss any draft recommendations to ICG from the working groups and to develop response or suggest amendments to the draft recommendations.</i>
	(in parallel) Meeting of Members, Associate Members, Observers and invited observers

	<p><i>Chairperson: J.N. MARKIEL, United States</i></p> <p>Theme: Geodesy and related matters</p> <p><i>The purpose is to discuss issues of common concern that have emerged during earlier sessions on Geodesy related matters</i></p>
17:30	Adjourn

Friday, 11 October 2024	
08:30 – 12:30	<p>THIRD PLENARY SESSION OF ICG</p> <p><i>Chairperson: Matt AMOS, Land Information, New Zealand</i></p> <p>Attended by all. <i>The primary purpose is to consider final recommendations as considered by the Providers' Forum. This session will also consider other ICG-related issues.</i></p> <p>Report of the chair of the 30th meeting of the Providers' Forum</p>
	<p>Other matters:</p> <p>Terms of Reference: <i>Terms of Reference of the ICG</i></p> <p>Membership: <i>Member Status of Pakistan in the ICG</i></p> <p>Next meetings of the ICG:</p> <ul style="list-style-type: none"> - 19th meeting of ICG, 2025: <i>Announcement by the Republic of Korea</i> - 20th meeting of ICG in 2026 and the 21st meeting of ICG in 2027: <i>Expression of interest</i>
	Review and approval of the ICG-18 meeting conclusions: Joint Statement
	Concluding Remarks
<i>12:30 – 13:30</i>	<i>Lunch Break and Adjourn</i>