



UNITED NATIONS
Office for Outer Space Affairs

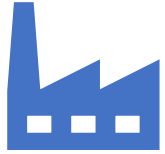
UNOOSA, estd. 1957



**United Nations Office for Outer Space
Affairs**

Lorant Czaran

Chief, Space Applications Session



**Established in NY in 1957
Moved to Vienna in 1992**



**Secretariat to UN Committee on
the Peaceful Uses of Outer Space
(COPUOS) & its subcommittees**



**International cooperation &
capacity development on
**technical, legal, policy, &
scientific** aspects of space**



**Private sector activities -
massive driver of increasing
work of COPUOS**





**CONVENE
R**



**GATEWA
Y**



**CAPACIT
Y
BUILDER**

**Cooperation
among
UN Member
States**



**Developing
space
governance &
policy**

**The UN's
Space
Office**



**Link between space
sector & Member
States needs**

Lead of UN-SPACE

**Access to space-
data & information
& training on space
law and policy**



**Empowering States
to use space
solutions to address
national / global
priorities**



United Nations
Office for Outer Space Affairs

INTERNATIONAL COMMITTEE ON Global Navigation Satellite Systems (ICG)



SPACE4SDGS



- ❑ 2005: ICG represents a unique combination of GNSS service providers and major user groups that seek to encourage **interoperability and compatibility** among the various satellite systems
- ❑ 2007: PF provides ways and means of promoting communication among system providers on key technical issues and operational concepts such as the **GNSS spectrum protection, orbital debris**
 - Consensus reached on *Principle of Transparency* - every GNSS provider should publish documentation that describes the signal and system information, the policies of provision and the minimum levels of performance offered for its open services
- ❑ 2008: Scientific and Technical Subcommittee of UNCOPUOS (UN GA Res. 62/217) started consideration of an agenda item “Recent developments in GNSS”
- ❑ ICG is an **important vehicle** in the multi-lateral arena, as satellite-based PNT becomes more and more a **genuine multinational cooperative venture** (*15 Members and 22 Int’l Org*)



In deliberations within ICG, global and regional system providers agreed that at a minimum, all GNSS signals and services must be **compatible** ("*do no harm*"). To the maximum extent possible, open signals and services should also be **interoperable** ("*better together than separate*") in order to maximize benefits to all GNSS users.

- ⇒ **Education and Training programmes for capacity building**, including the use of GNSS technologies as tools for scientific applications
- ⇒ **Regional workshops on applications of GNSS and ISWI** (in 2024: the Philippines and Germany)





❑ **Information Dissemination and Capacity Building**

(*UNOOSA*): Focused on education and training programmes, promoting GNSS for scientific exploration

❑ **Reference Frames, Timing and Applications**

(*IAG, IGS & FIG*): Focused on monitoring and reference station networks

❑ **Lunar Positioning, Navigation and Timing (PNT)**

(*China, Japan, United States & ESA*): provide guidance to providers and users to ensure that the lunar PNT systems are available, compatible, and interoperable for peaceful purposes for all. The work is to be coordinated with BIPM, IAG, IAU, IOAG, ISECG, SFCG, ATLAC



- ❑ **Publication of a Statement on the Critical Role of the Global Geodesy Supply Chain:** The proposed Statement provides a unifying narrative and authoritative reference for MS, international organizations, and private-sector stakeholders to align policy, funding, and technical initiatives aimed at reinforcing the resilience of the GGSC

https://www.unoosa.org/documents/pdf/icg/2025/ICG-19/ICG-19_WG-D_Recommendation_A.pdf

- ❑ **Organization of Annual Multilateral Cislunar PNT Workshop:** The ICG work with appropriate international organizations to organize a multilateral cislunar PNT workshop on an annual basis to foster open and timely dissemination of information related to cislunar PNT services (February 2026, Vienna)

➤ *Compatibility and interoperability among GNSS, lunar PNT systems, and related lunar surface assets are the focal point of the workshop, including the discussion on the lunar spectrum, lunar reference frames, and lunar time systems*

<https://ioag.org/meetings/cislunar2026/>

- ❑ **Cooperation ICG, FIG, IAG and IGS:** *To focus on reference frames in general with a specific focus on UN initiatives, global and regional frames as well selected national case studies*



UNOOSA as Central Hub for VHR EO Data procurement:

- ⇒ Increase **value for money** for UN system (reduce expenses or increase geospatial data)
- ⇒ Make geospatial data available at **right time** in **right format** to whichever UN entity / end user (country) that needs it
- ⇒ Gain & provide access to archived data & **global datasets** for analysis & services for multiple applications

Acquisition and Sharing of

Enhanced Operational Support Earth Observation Data



Unified, near-real-time EO data access for peacekeeping, humanitarian, climate & other missions

COST & EFFICIENCY GAINS

Consolidated demand, lower licensing cost & reduced administrative burden



LONG-TERM VISION

One coordinator for EO data supporting UN-wide operational capabilities

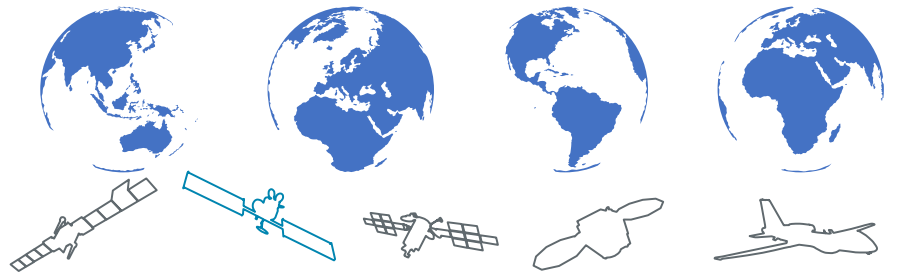


IPEO Mechanism

Inter-Agency Hub for Procurement of Earth Observation Imagery (IPEO)



Enhanced
Functionality &
Synergies through Collaboration



Consolidated contractual terms, common licenses



Interface / API access / distribution mechanism





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