

UN Machinery: The Challenging Quest for Synergies and Coordination - UNOOSA

Niklas Hedman
United Nations Office for Outer Space Affairs
United Nations Office at Vienna

United Nations Office for Outer Space Affairs

Serves as Secretariat of the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee and Legal Subcommittee

Leads the Inter-Agency mechanisms for coordination of space-related activities within the UN system (UN-Space)

Implements the United Nations Programme on Space Applications, and serves as Executive Secretariat for the International Committee on Global Navigation Satellite Systems (ICG)

Maintains coordination and cooperation with space agencies and intergovernmental and nongovernmental organizations involved in space-related activities

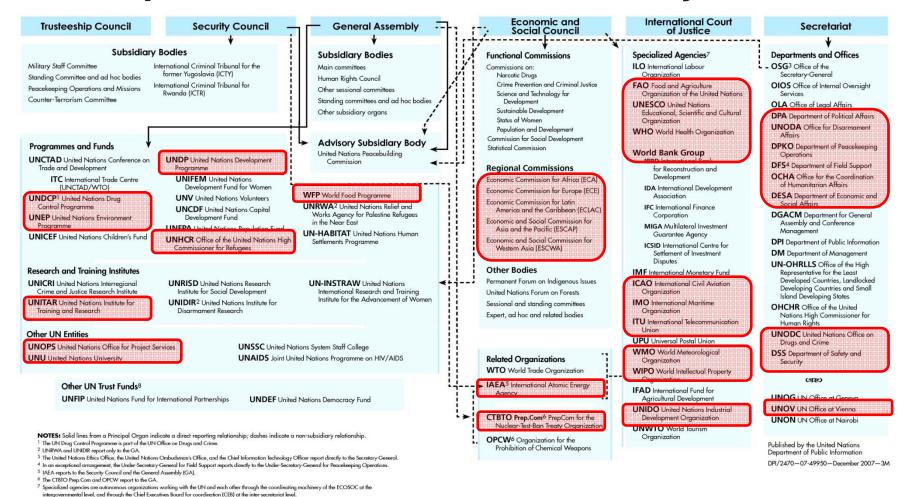
Maintains, on behalf of the United Nations Secretary-General, the Register of Objects Launched into Outer Space and discharges the responsibilities of the Secretary-General under the UN treaties and principles on outer space

Is responsible for the implementation of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) programme

8 UNFIP is an autonomous trust fund operating under the leadership of the United Nations Deputy Secretary-General, UNDEF's advisory board recommends

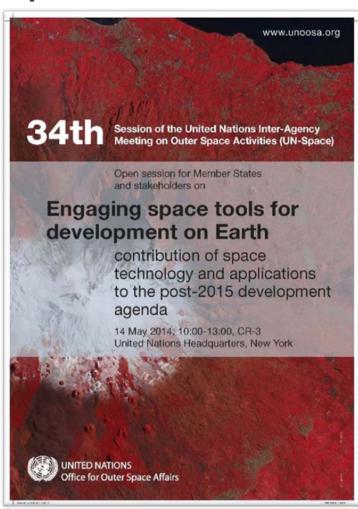
funding proposals for approval by the Secretary-General

Space and the United Nations System



Inter-Agency Coordination on Outer Space Activities

- UN-Space Secretary-General report on coordination of space activities in the UN system 2014-2015 – addressing the post-2015 development agenda
- UN-Space Special report on Space for Global Health (A/AC.105/1091) including in support of UNISPACE+50
- UN-Space Secretary-General report 2016-2017 to address UN system contribution to global space governance in support of UNISPACE+50
- UNOOSA/ITU Guidance on small satellite registration and frequency management, published April 2015
- Joint ICAO/UNOOSA Aerospace Symposium held in Montreal, 18-20 March 2015. Next Symposium in UAE March 2016 (confirmed) and Vienna in 2017 (planned)



Committee on the Peaceful Uses of Outer Space

- Committee on the Peaceful Uses of Outer Space (COPUOS)
 - Scientific and Technical Subcommittee (STSC)
 - 3 Working Groups (Whole; Use of Nuclear Power Sources in Outer Space; Long-term Sustainability of Outer Space Activities): Expert Groups on space weather; global health
 - Legal Subcommittee (LSC)
 - 3 Working Groups (Status of United Nations Treaties on Outer Space; Definition and Delimitation of Outer Space; and Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space)
- Current issues Space agenda today:

Space and climate change	Disaster Management	Space debris mitigation	National space legislation
International mechanisms for cooperation	Long-term sustainability of outer space activities	Definition and delimitation of outer space	Space applications for socioeconomic development
Near-Earth objects	Global Navigation Satellite Systems	Space Weather	GGE-report

COPUOS Coordination Processes and Platforms

- UNISPACE III+5 Action Teams (innovative approach in implementing recommendations of a major conference States members took action and voluntarily coordinated activities under dedicated areas result: ICG, UN-SPIDER, Global health, NEO)
- International Committee on Global Navigation Satellite Systems (ICG)
- Recommendations on international response to near-Earth object impact threat: Space Mission Planning Advisory Group (SMPAG), and International Asteroid Warning Network (IAWN)
- Procedures under the agenda item on long-term sustainability of outer space activities (Working Group and four Expert Groups)
- STSC expert groups on global health and space weather

UNISPACE+50

- A/AC.105/L.297 (roadmap endorsed by COPUOS 2015)
- ■2018 Theme of STSC, LSC and COPUOS marking 50th anniversary of UNISPACE I held in 1968 and take stock of the contribution of the three UNISPACE conferences (I in 1968, II in 1982 and III in 1999) to global space governance
- ■Main proposal by troika of past, present, incoming Chairs of COPUOS
- ■COPUOS unique platform for Interrelationship between major space faring nations and emerging space nations. Space agenda is evolving and becoming more complex. Broader concept of space security. Expanding commercial space sector
- ■Theme of STSC, LSC and COPUOS sessions in 2018

UNISPACE+50 Thematic Priorities and Synergies

- Thematic priorities of STSC, LSC and COPUOS building upon the cross-cutting topics of governance, capacity-building, resiliency, interoperability, and space for sustainable development
- Consideration of governance structures such as national spatial data infrastructures, regional and interregional coordination mechanisms; potential new mechanisms for resiliency and interoperability such as in the fields of DRR, NEO, TCBM and LTS within the broader context of space security
- Connection with broader perspective of space economy; space society; space accessibility; space diplomacy
- Synergies with inter alia Third UN World Conference on Disaster Risk Reduction and its outcome on a framework for disaster risk reduction for 2015-2030; UN Summit in September 2015 to adopt the post-2015 development agenda, including SDGs; COP 21 in Paris November-December 2015

Long-term Sustainability of Outer Space Activities

- Working Group of the Scientific and Technical Subcommittee on the Long-term Sustainability of Outer Space Activities (extended work plan to 2016)
- Core thematic areas:
 - Sustainable space utilization supporting sustainable development on Earth
 - Space debris mitigation, safety of space operations, tools to support space situational awareness
 - Space weather
 - Regulatory regimes and guidance for actors in the space arena
- Areas of expert groups findings: Sustainable development objectives; spectrum protection; space debris mitigation; space debris monitoring; accuracy of orbital data; conjunction assessment (launch phase/orbital phase); space weather prediction and forecasting; registration information; regulatory practices; contact information; prior notice of launches and controlled re-entries; standards for sharing orbital information
- Interlink with the report of the Group of Governmental Experts on Transparency and Confidence-building Measures in Outer Space Activities (A/68/189)
- Within the broader context of LTS proposal on unified platform for near-Earth information and data sharing (Russian Federation); and on establishment of expert group on space objects and events to focus on information sharing required to support the safety of space operations (United States)

COPUOS and the GGE Report

GGE report (A/68/189) and GA resolution 68/50

- •GGE-recommendations include information on national space policy, military expenditure, notifications on status of space objects, safety of space operations (including collision avoidance, scheduled manoeuvres, re-entry risks, emergency situations, intentional break-ups), hazards (natural), visits
- •Resolution decides to refer the recommendations of the GGE report to COPUOS, Disarmament Commission and Conference on Disarmament (CD) for consideration, as appropriate
- ■COPUOS consideration: Agreement in 2014 to consider on priority basis the broader perspective of space security under regular item on "Ways and means of maintaining outer space for peaceful purposes". Consideration of GGE report in 2015 with focus on safety of space operations and long-term sustainability of outer space activities. Contributions by Germany, Italy, Russian Federation and United States (A/AC.105/1080 and Add 1 and 2)
- **"UN-system coordination** is encouraged by the resolution in operative paragraph 5; GGE report paragraph 66 recommends coordination between OOSA, ODA and other appropriate UN entities. COPUOS 58 in 2015 requested OOSA to issue a special report under UN-Space to focus on UN system support in the implementation of TCBMs in accordance with their mandates, and identify how UN entities can assist MS in implementing GGE recommendations. Also address means to coordinate the work of Un entities in line with the overall recommendations of the GGE report

COPUOS Recommendations for the C.1/C.4 Meeting

Report of COPUOS 58 (A/70/20 to be issued). See paras. 327-338

- Recommended panel discussion followed by general debate. Panel comprising Chair of GGE, High Representative for Disarmament Affairs and Director of UNOOSA
- Recommended subtopics: space debris, space weather, the long-term sustainability of outer space activities, TCBMs in outer space activities
- Requested UNOOSA to report on how COPUOS is implementing the GGE recommendations by working to ensure the long-term sustainability of outer space activities
- Suggested concrete outcomes to include the regular exchange of information between UNOOSA, UNODA and other relevant UN entities
- Encouraged increased cooperation between disarmament and civilian space communities in order to address possible challenges to space security and sustainability

Conclusion

- With the adoption of the post-2015 development agenda and the road towards 2030, where "Global Sustainable Development" not only implies the use of space tools, but also requires that space-related activities, as well as outer space environment itself, continue to be sustainable in the long-term
- Near-earth environment is fragile and the broadening of application and space operations and the increased strategic value of space have resulted in a growing need to enhance the safety of space operations, security of space assets, and the long-term sustainability of outer space activities
- Complexity of broader space security encompass security related measures as well as mechanisms for safety of space operations, handling of hazards either by natural causes (near-Earth objects and space weather) or man-made (in-orbit collisions, other emergency situations, loss of control, break-ups, re-entry risks)
- Moving towards strengthened international mechanisms for transparency and confidence-building; space weather coordination; space-traffic management

