## Sixty-fifth session of the Committee on the Peaceful Uses of Outer Space *Vienna, 1-10 June 2022*

#### STATEMENT BY NIKLAS HEDMAN

#### **ACTING DIRECTOR**

#### **UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS**

Mr. Chair, Distinguished Delegates,

On behalf of the Office for Outer Space Affairs (UNOOSA), I welcome you all to this session of the Committee on the Peaceful Uses of Outer Space and thank you for the opportunity to address this session on the work of the Office in my capacity as the Acting Director.

Mr. Chair, Distinguished Delegates,

With the adoption by the General Assembly of its resolution 76/3 on 25 October 2021, we can now make reference to the "Space2030" Agenda and its implementation plan. This comprehensive and strategic document contains valuable tools and mechanisms of high importance to Member States and the work of the Office. By delivering the "Space2030" Agenda to the international community, the Committee once again demonstrated its significance and that of space activities.

Mr. Chair, Distinguished Delegates,

Although the pandemic continues to influence our lives, decisions and delivery of activities, the Office for Outer Space Affairs continued to adapt to the on-going challenges, aspiring to adopt new solutions, and applying them across our activities to guarantee business delivery and a results-driven approach. We are proud that despite the obstacles and challenges, UNOOSA continued its strong legacy of support for the interests of Member States in 2021.

Mr. Chair, Distinguished Delegates,

UNOOSA continuously works with an ever-increasing number of partners, from governmental authorities and space agencies to international organizations, academia, and the commercial space sector. In the Annex to this statement, delegations will find highlights of activities and actions for the year 2022.

In this context, we are pleased to present to you the UNOOSA's Annual Report 2021, which presents the activities of the Office in the past year in a single publication that is now available on the UNOOSA's website. The report highlights all the main projects, initiatives and activities carried out in 2021, as well as features a special chapter dedicated to UNOOSA's activities related to the use of space for climate action. Allow me to offer you a brief glimpse into the activities covered in the Annual Report 2021.

Over the year, we carried on with capacity-building activities as the means to bridge the capabilities gap between and within countries. To help create an equal and diverse space sector globally, we advanced empowerment efforts through the Space4Women Project, amplified voices of young people through Space4Youth and complemented that work with a new endeavour that focuses on supporting persons with disabilities. Through UNOOSA's Space Law for New Space Actors project, we have sustained our effort in fostering responsible space operations and further promote the development of national regulatory frameworks and policies in line with international space law. The Office's UN-SPIDER programme has delivered services and advisory missions in Africa, Asia, and Latin America, strengthening capabilities to address disasters, save lives and prevent damages. Our Access to Space for All initiative in 2021 enabled yet another Member State to become a space-faring nation - Mauritius joined Kenya and Guatemala on this successful journey.

The Bartolomeo programme, under the Access to Space for All initiative, became the first opportunity delivered in partnership with a private sector entity to announce an awardee. A joint endeavour of researchers from Egypt, Kenya and Uganda was selected for a free one-year mission utilizing the Bartolomeo platform at the International Space Station.

We launched the project on "Awareness-raising and capacity-building related to the implementation of the LTS Guidelines" aimed at raising global awareness of the importance of space sustainability. The Project produced a stand-alone publication on the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful uses of Outer Space as well as a stakeholder study report, which focuses on the experiences of States and international intergovernmental organizations implementing the Guidelines.

A series of <u>infographics</u> and <u>podcast episodes</u> that tell the story of space debris, explain the risks and illustrate the solutions available to ensure future space exploration remains sustainable are now also showcased on UNOOSA's website as a result of one more partnership and cooperation.

### Mr. Chair, Distinguished Delegates,

UNOOSA's convening power has facilitated discussions across a range of topics in 2021. Food and Water Systems, Dark and Quiet Skies, Space Exploration, Climate Action, to mention just few examples. The International Committee on Global Navigation Satellite Systems (ICG)'s 15th Annual Meeting as well as the UN/Mongolia Workshop helped advance cooperation in the GNSS domain. We hosted the 7th IAA Planetary Defense Conference, in cooperation with the European Space Agency that brought together close to 700 participants in a virtual 5-day meeting. Moreover, throughout 2021, UNOOSA addressed global audiences through a series of webinars. During the EXPO 2020, UNOOSA not only organized the Space4Women Expert Meeting with Brazil and the United Arab Emirates, but also showcased the work of the UN in and from space to a great variety of stakeholders. The year ended on a high note with an astonishing attendance to our flagship World Space Forum organized with our host country Austria with focus on Space 4 Climate Action.

### Mr. Chair, Distinguished Delegates,

Across many of our endeavours, we are greatly appreciative for the support of our partners. As the demand by Member States for our services continues to expand, from legal advisory services to guidance on space object registration or hands-on capacity building

activities, we engage with a variety of stakeholders through strong partnerships to successfully advance and sustain these endeavours.

Mr. Chair, Distinguished Delegates,

I would also like to turn your attention to some of the upcoming events, organized by UNOOSA in cooperation with a variety of partners. In August, we will advance our work on gender equality and empowerment by delivering Space4Women Expert Meeting with the Republic of Korea. The 2022 UN/Austria Symposium will take place from 13 to 15 September 2022 in a virtual format and focus on using space for mitigating and adapting to climate change and supporting sustainability on Earth. And I cannot forget to mention the 4<sup>th</sup> edition of the World Space Forum that will take place in Vienna in December. There is truly much to look forward to in the second half of the year.

Mr. Chair, Distinguished Delegates,

In concluding, let me reassure you of our fullest support in working with Member States to ensure outer space is used responsibly, sustainably and in support of their national development needs, with UNOOSA providing a full spectrum of assistance, from technical, legal, policy, and hands-on capacity-building activities in the space domain.

It has been a truly rewarding journey to be able to work with this growing community of States and other stakeholders in the Space arena, as I bring my 16 years of service to the United Nations to a close. Looking forward to new personal challenges, let me reassure you, on behalf of UNOOSA and my Office colleagues, of continued professional support, dedication, and integrity on behalf of the Office in servicing the Committee and in implementing our mandates across the full spectrum of legal, policy, and hands-on capacity-building activities in this area.


### **Annex**

# HIGHLIGHTS OF SUBSTANTIVE ACTIVITIES OF THE OFFICE AND ACTIVITIES FOR 2022

Secetariat to the intergovernmental meetings of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies

Please refer to Appendix I to the present Annex.

### **United Nations Programme on Space Applications**

Please refer to Appendix I to the present Annex and to documents A/AC.105/1254, A/AC.105/1255 and A/AC.105/1256.

**United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)** 

Please refer to Appendix I to the present Annex and to document A/AC.105/1250.

### **International Committee on Global Navigation Satellite Systems**

Please refer to Appendix I to the present Annex and to document A/AC.105/1251.

## Secretariat to the United Nations Inter-Agency Meeting on Outer Space Activities (UN-Space)

Please refer to Appendix I to the present Annex and to document A/AC.105/1263.

### Secretariat to the Space Mission Planning Advisory Group (SMPAG)

Please refer to Appendix I to the present Annex.

## Regional Centres for Space Science and Technology Education, affiliated to the United Nations

Please refer to Appendix I the present Annex.

### Awareness-raising and Outreach

Please refer to Appendix I the present Annex.

### **Other Activities**

Please refer to Appendix I the present Annex.

### **Resources of the Office**

Please refer to Appendix I the present Annex and to document A/77/6 (Sect.6) (Programme on the peaceful uses of outer space).

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### Appendix I

# 2022 Programme activities, projects and initiatives of the Office for Outer Space Affairs

## Secetariat to the intergovernmental meetings of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies

Activity	Location	Dates
59th session of the Scientific and Technical Subcommittee	Vienna,	7-18 February 2022
	Austria/hybrid	
61 <sup>st</sup> session of the Legal Subcommittee	Vienna,	28 March – 8 April
	Austria/hybrid	2022
65 <sup>th</sup> session of the Committee on the Peaceful Uses of	Vienna,	1-10 June 2022
Outer Space	Austria/hybrid	

## 77<sup>th</sup> Session of the General Assembly

Location	Dates
UNHQ, New York	26-31 October 2022
UNHQ, New York	29 October 2022
	UNHQ, New York

## **Programme on Space Applications (PSA)**

Workshops, symposia, conferences	Location	Dates
Industry Symposum on Dark and Quiet Skies for Science and Society, STSC 2022	Austria	February 2022
UN/China Global Partnership Workshop in Space Exploration and Innovation	Hainan, China	24-28 April 2022 (postponed)
UN/Ghana Conference on the use of space technology for water resource management	Ghana and virtual	10-13 May 2022
UN/Austria Symposium on Space for Climate Actiont	Austria and virtual	13-15 September 2022
UN/International Astronautical Federation Workshop on Space Technology for Socio-Economic Benefits	France	16-17 September 2022
United Nations/Azerbaijan Workshop on the International Space Weather Initiative	Azerbaijan	October 2022
Access to Space for All Workshop	Austria and virtual	Q2 2022
UN/Brazil Open Universe Workshop	Brazil	(postponed)

Initiatives	Deadline/information
Access to Space for All	
Announcement of opportunity: Mohammed Bin Rashid Space Centre on Payload Hosting Initiative (PHI) (1st round)	Announcement on 10 January 2022, deadline was on 17 April, selection is ongoing
Announcement of opportunity: Center of Applied Space Technology and Gravity and German Aerospace Center/DropTES (8th round)	Announcement to be made in second half 2022, deadline for early 2023
Announcement of awardees of 6 <sup>th</sup> round of KiboCube	16 February 2022
Announcement of opportunity: Keldysh Institute of Applied Mathematics/ISONscope(2nd round)	Under discussion
Announcement of opportunity KiboCube	Under discussion
Announcement of opportunity: European Space Agency/HyperGES (3rd round)	Announcement opened on 16 May 2022, deadline for applications in 18 November 2022

Webinar programme on small satellite development track of Access to Space for	KiboCUBE Academy
All	season 2: six new
	lectures added and
	additional lectures to
	be added before the
	end of the year.
	PHI introductory
	webinar hosted by
	UNOOSA on 21
	February 2022.
Webinar programme on hypergravity and microgravity track of Access to Space for	Q&A webinar hosted
All	for HyperGES in
	February. Additional
	webinars for
	HyperGES and
	DropTES are planned
Space for Water	
Space for Water Portal	Continuous content
	and services
Space for People with Disabilities	
Webinar	1 session planned Q4

Fellowships	Location
Fellowship Programme for "Drop Tower Experiment Series" (DropTES)	Germany
Fellowship Programme for "the Large Diameter Centrifuge Hypergravity Experiment Series" (HyperGES)	The Netherlands
UN/Japan Long-term Fellowship Programme 2022 Post-graduate study on Nano-Satellite Technologies (PNST)	Japan
UN/Japan Cooperation Programme on CubeSat Deployment from the International Space Station Japanese Experiment Module (KiboCUBE)	Japan

## **International Committee on GNSS (ICG)**

Activity	Location	Dates
Training Course on Global Navigation Satellite Systems	Nepal (Hybrid)	11-14 January 2022
Training Course on Global Navigation Satellite Systems for Policy and Decision Makers	Virtual	21 January 2022
African Workshop on Global Navigation Satellite Systems and Space Weather	Morocco	9 – 13 May 2022
Reference Frame in Practice: Technical Seminar	Poland	9 – 10 September 2022
African Capacity Building Workshop on Space Weather Effects on GNSS	Italy	3 – 14 October 2022
International Workshop on Machine Learning for Space Weather: Fundamentals, Tools and Future Prospects	Argentina	7 – 11 November 2022
16 <sup>th</sup> Meeting of the International Committee on Global Navigation Satellite Systems	United Arab Emirates	9 – 14 October 2022

# **United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

Activity	Location	Dates
3 <sup>rd</sup> International Multi Hazard Early Warning Conference, co-organized by the International Network on Multi Hazard Early Warning Systems (IN-MHEWS)	Bali, Indonesia	23-24 May 2022
Technical Advisory Support to Ghana	Ghana	10-13 May 2022
UN-SPIDER/NASRDA/NEMA/ZFL Regional Expert Meeting for Western Africa	Abuja, Nigeria	October 2022
UN-SPIDER Latin America Regional Expert Meeting	Virtual	Q3 2022
UN-SPIDER/ZFL Quarterly Webinars for Africa	Virtual	Q1 to Q4 2022
Implementation of Flood Guide project with Copernicus GLOFAS, Airbus Defense and Space and ZFL in Ghana, Guatemala, Mexico, Nigeria, Peru, and South Africa	Virtual	Q1 to Q4 2022
Geospatial World Forum	Amsterdam, Netherlands	May 2022
Technical advisory mission to Armenia	Armenia	May 2022
Technical advisory support to Mongolia	Locally recruited expert	January and February 2022
Technical advisory support to Sri Lanka	Locally recruited expert	January to April 2022
Technical advisory mission to the Philippines	The Philippines	Q3 2022
Promoting regional cooperation in using space-based information within the South Asia region	Ahmedabad, India	Q3 2022
Asia-Pacific Ministerial Conference on Disaster Risk Reduction	Brisbane, Australia	Q3 2022
Promoting regional cooperation in using space-based information within the Western Asia region	Luxor, Egypt	Q4 2022
UN-SPIDER International Conference	Bangkok, Thailand	Q4 2022
International training programme (APSCO, AIT, NDRCC)	Bangkok, Thailand	Q4 2022

### Capacity-building in space law and policy

Activity	Location	Dates
United Nations/Chile Conference on Space Law and	Virttual, with Co-	10-12 May 2022
Policy: Governance and Legal Perspectives on Space Activities in Earth Orbit and Beyond	Organizer Chile	

United Nations Technical Advisory Mission to Rwanda	Virtual	19-21 January 2022
United Nations Technical Advisory Mission to Asia Pacific Region	Virtual	24-26 January 2022
United Nations Technical Advisory Mission during African Space Week 2022	Virtual	September 2022
United Nations Technical Advisory Mission to the Philippines	Manila	Q4 2022
United Nations Technical Advisory Mission to Malaysia	Kuala Lumpur	Q4 2022
United Nations Technical Advisory Mission to African Region	Vienna	Q4 2022

## **Inter-agency coordination (UN-Space)**

Activity	Location	Dates
UN-Space meeting and open informal session	Indonesia	Q3-4 2022

# Secretariat of the Space Mission Planning Advisory Group (SMPAG) and other capacity-building activities in the area of near-Earth Objects and planetary defence

Activity	Location	Dates
18th Space Mission Planning Advisory Group (SMPAG)	Vienna, Austria	9 - 10 February 2022
Meeting		
19th Space Mission Planning Advisory Group (SMPAG)	TBC	Q3 2022
Meeting		
SMPAG First hypothetical impact threat exercises	Virtual	Q1 to Q4 2022

## **Regional Centres**

	Location
Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)	New Delhi, India
African Regional Centre for Space Science and Technology Education in French Language (CRASTE-LF)	Rabat, Morocco
African Regional Centre for Space Science and Technology Education in English Language (ARCESSTE-E)	Ile-Ife, Nigeria
Regional Centre for Space Science and Technology Education in Latin America (CRECTEALC)	Puebla, Mexico
Regional Centre for Space Science and Technology Education for Western Asia (RCSSETWA)	Amman, Jordan

Regional Centre for Space Science and Technology Education in Asia and the	Beijing, China
Pacific (RCSSTEAP)	

## Awareness-raising and Outreach

United Nations/International Days and Anniversaries	Dates
International Day of Women and Girls in Science	11 February 2022
International Women's Day	8 March 2022
World Water Day	22 March 2022
International Day of Human Space flight	12 April 2022
World Day to Combat Desertification and Drought	17 June 2022
International Asteroid Day	30 June 2022
International Moon Day	20 July 2022
International Youth Day	12 August 2022
World Space Week	4-10 October 2022
International Day for Disaster Reduction	13 October 2022
International Day of Persons with Disabilities 2021	21 December 2022

Exhibitions	Location	Dates
Space for Our Planet	UNHQ, New York	October – November
		2022

Publications	Symbol/Date
UNOOSA 2021 Annual Report	June 2022
Brochure on Access to Space for All	Q2 2022
Space technologies for Early Warning Systems	Q3 2022
Preparing for an 8 Billion World	
Space2030 Agenda and implementation plan	
GNSS Spectrum Protection and Interference Detection and Mitigation	
Use of space science, technology and applications within the UN System	

Other activities	Location	Dates
World Space Forum	Austria	12–15 December 2022
Space4Women Expert Meeting	Daejeon, South Korea	16-19 August 2022

Space4Youth Competition	Virtual	Q4 2022 (tbc)
Awareness Raising and Capacity Building related to the implementation of the LTS Guidelines Project - Interviews with Member States and development of a stakeholder study report	Virtual	November 2021 - March 2022
UN / Portugal Conference on Space Traffic Management and Global Governance	Portugal	postponed to Q1 2023

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### RESOURCES OF THE OFFICE

### **Human Resources overview\***

Funding Source	2016-2017	2018-2019	2020	2021	2022 (as at 31 January 2022)
Regular Budget Positions	23 (18P/5GS)	23 (18P/5GS)	23 (18P/5GS)	23 (18P/5GS)	23 (18P/5GS)
Extra-Budgetary Positions funded from voluntary cash contributions	4 (2P/2GS)	6 (3P/3GS) 2 (Temp)	5 (2P/3GS) 3 (Temp)	5 (2P/3GS) 3 (Temp)	5 (2P/3GS) 3 (Temp)
Extra Budgetary Positions funding in-kind	8 (6NRL/2JPO)	9 (6NRL/3JPO)	5 (2NRL/3JPO)	6 (3NRL/3JPO)	6 (3NRL/3JPO)
Total Staff*	35	40	36	37	37

<sup>\*</sup> As at 31 December unless otherwise specified. Excludes consultants, contractors and interns.

### Financial resources overview

### Regular Budget

Thousands of United States dollars

2014-2015	2016-2017	2018-2019	2020	2021*	2022**
7 774.3	7 561.8	7 558.7	3 876.6	4 026.2	4 215.1

<sup>\*</sup>Excluding year-end adjustments
\*\*Appropriation

### Extra-budgetary

Thousands of United States dollars

	2021	Donors
Cash	1,248.3	Airbus Defence and Space; Asia Pacific Space Cooperation
contributions		Organisation (APSCO); Austrian Space Forum; AVIO s.p.a.;
received (excl.		Center for Applied Space Technology and Microgravity (ZARM),

prior period		University of Bremen, Germany; Centre for Remote Sensing of
adjustments)		Last Surfaces (ZFL), University of Bonn, Germany; Centre for
T 1' 1	1 0 40 5%	Space Science & Technology Education in Asia & the Pacific
In-kind	1 043.5*	(CSSTEAP); China National Space Administration (CNSA);
Contributions		Delta State University, United States of America; European
		Commission; European Space Agency (ESA); German Aerospace
		Center (DLR); Government of Austria (Federal Ministry for
		Climate Action, Environment, Energy, Mobility, Innovation and
		Technology (BMK); Federal Ministry for Europe, Integration and
		Foreign Affairs (BMEIA)); Government of Brazil (Ministry of
		Science Technology and Innovation (MCTI); Brazilian Space
		Agency (AEB); Brazilian Air Force (FAB); National Institute for
		Space Research (INPE)); Government of Chile; Government of
		France; Government of Germany; Government of Japan;
		Government of Luxembourg; International Astronautical
		Federation (IAF); Iranian Space Agency (ISA); Japan Aerospace
		Exploration Agency (JAXA); Keldysh Institute of Applied
		Mathematics of Russian Academy of Sciences (KIAM RAS);
		Kyushu Institute of Technology (Kyutech), Japan; Mohammed
		Bin Rashid Space Centre (MBRSC), United Arab Emirates;
		Mongolian Geospatial Association (MGA); Prince Sultan bin
		Abdulaziz International Prize for Water (PSIPW); Secure World
		Foundation (SWF); United Kingdom Space Agency (UKSA);
		United States Mission to the International Organizations in
		Vienna; and University of Vienna, Austria.

<sup>\*</sup> As reported to the Office. Not all in-kind donors are able to submit estimated value of the support and services provided to the Office in the delivery of its activities.