



وكالة الإمارات للفضاء
UAE SPACE AGENCY



PROGRAMME

United Nations/United Arab Emirates High Level Forum

“Space as a driver for socio-economic sustainable development”

Organized by the

United Nations Office for Outer Space Affairs

and the

United Arab Emirates

Hosted by the

United Arab Emirates Space Agency and the Mohammed Bin Rashid Space Centre

6 – 9 November 2017

Dubai, United Arab Emirates

Monday, 6 November 2017	
Venue: Grand Hyatt Dubai Hotel Conference Centre, <i>Sheikh Rashid Road, Oud Metha Road</i>	
08:00 – 17:00	On-site registration
Opening and welcome remarks	
Grand Hyatt Dubai Hotel Conference Centre: <i>Al Ameera Ball Room</i>	
09:00 – 09:30	Welcome and opening addresses <ul style="list-style-type: none"> ▪ Mohammed AL-AHBABI, <i>Director General, United Arab Emirates Space Agency</i> ▪ TBC, <i>Mohammed Bin Rashid Space Centre</i> ▪ Simonetta DI PIPPO, <i>Director, United Nations Office for Outer Space Affairs</i>
09:30	Setting the scene, <i>Simonetta DI PIPPO, United Nations Office for Outer Space Affairs</i>
10:00	Assessing synergies between GNSS and Earth-observation in the development and market penetration of applications, <i>Simonetta DI PIPPO, United Nations Office for Outer Space Affairs and Carlo des DORIDES, European GNSS Agency</i>
10:25 – 10:45	<i>Coffee Break</i>
Session 1: Space Economy	
<i>The wealth of options and arguments on why space is important for society, the need to guarantee access to space activities, and the need for a cooperative regulatory instrument mechanism for cooperation to ensure the benefits of space for societies.</i>	
<i>Moderator: Andre RYPL, Brazil</i>	
<i>Rapporteur: Markus WOLTRAN, United Nations Office for Outer Space Affairs</i>	
10:45	<ul style="list-style-type: none"> ▪ The Luxembourg SpaceResources.lu Initiative: Vision, Goals, Challenges, Actions, <i>Georges SCHMIT, Luxembourg</i>
11:00	<ul style="list-style-type: none"> ▪ ESA Grand Challenge: A Space 4.0 Initiative, <i>Luca DEL MONTE, ESA</i>
11:15	<ul style="list-style-type: none"> ▪ “New Space”: Private capital and public support enabling growth of a wider array of “Space Players”, <i>Paola LEONI, Italy</i>
11:30	<ul style="list-style-type: none"> ▪ Enabling the Space Revolution - A Historic Opportunity for Humanity, <i>Rick TUMLINSON, Deep Space Industries</i>
11:45	<ul style="list-style-type: none"> ▪ Community in Space: A Complimentary Campaign to Establishing the Global Framework of Principles and Policies to

	Improve the Community to be built in the Space Domain, <i>Jose OCASIO-CHRISTIAN, LLC</i>
12:00	<ul style="list-style-type: none"> Global Space Facility 4 Development - GSF4D: Operational CORPUS Fund and Facility to Deliver Commitments for Space2030 towards SDGs, <i>Milind PIMPRIKAR, CANEUS International</i>
12:15	<ul style="list-style-type: none"> New Generation Recoverable Satellite - An Advanced Space Platform for Space Environment Utilization, <i>Xin LIU and Chen JIWEI, Tan MEI, CAST, China</i>
12:30	<ul style="list-style-type: none"> New Space Industry, <i>Talal AL QAISI, UAE Embassy Trade & Commercial Office</i>
12:45	<ul style="list-style-type: none"> <i>Adnan ALRAIS, MBRSC</i>
13:00 – 14:00	<i>Lunch Break</i>
Session 2: Space Society	
<i>The attainment of the goals set by the 2030 Agenda for Sustainable Development with the support of space and how space can be a driver for social and economic sustainable development.</i>	
<i>Moderator: Luc ST-PIERRE, United Nations Office for Outer Space Affairs</i>	
<i>Rapporteur: Romana KOFLER, United Nations Office for Outer Space Affairs</i>	
14:00	<ul style="list-style-type: none"> Human space activities for SDGs, <i>Chiaki MUKAI, Japan Aerospace Exploration Agency</i>
14:15	<ul style="list-style-type: none"> The new SpaceLand Center in Mauritius: benefits for Asian and African Countries, <i>Celeste PETRAROLI and Carlo VIBERTI, SpaceLand</i>
14:30	<ul style="list-style-type: none"> <i>Rawewan NUTPRAMOON, Thailand</i>
14:45	<ul style="list-style-type: none"> UAE space sector contribution to the Sustainable Development Goals (SDGs), <i>Noora AL RAFI and Mariam AL ZAROUNI, United Arab Emirates</i>
15:00	<ul style="list-style-type: none"> <i>Antoine GEISSBUHLER, Switzerland</i>
15:15	<ul style="list-style-type: none"> Global partnership, <i>Giovanni RUM, Italy</i>
15:30	<ul style="list-style-type: none"> Geospatial solutions for sustainable development, <i>Bruce MCCARRON, United Nations Development Programme</i>
15:45	<ul style="list-style-type: none"> Moon Economic Forum / Lunar Development Initiative, <i>Sebastian STRAUBE, Interstellar Ventures</i>
16:00	<ul style="list-style-type: none"> Economic social and legal aspect of space activities in Africa: example of Morocco, <i>Mohamed Said RIFFI TEMSAMANI, Morocco</i>
16:15 – 16:30	<i>Coffee Break</i>
Presentation Session 3: Policies and strategies for promoting sustainable development	

(PARALLEL SESSIONS)	
Presentation Session 3A: Policies and strategies for promoting sustainable development (in parallel)	
<i>Room: Al Ameera 1</i>	
<i>Moderator: Sebastian STRAUBE, Interstellar Ventures</i>	
<i>Rapporteur: Yeshey CHODEN, Bhutan</i>	
16:30	<ul style="list-style-type: none"> ▪ Considerations on how to maximize the use of space technology in support of the Sustainable Development Goals, <i>Krystal WILSON, Secure World Foundation</i>
16:40	<ul style="list-style-type: none"> ▪ Remote sensing applications in support of public sector in Lebanon, <i>Ghaleb FAOUR, Lebanon</i>
16:50	<ul style="list-style-type: none"> ▪ Growing knowledge and experience in space technology in Kazakhstan, <i>Assyl BAKASHEVA, Kazakhstan</i>
17:00	<ul style="list-style-type: none"> ▪ The development of satellite communications in Lao PDR, <i>Singthong KHAMONE, Lao PDR</i>
17:10	<ul style="list-style-type: none"> ▪ Applications of space technology for socio-economic benefits in Mongolia, <i>Damdinsuren AMARSAIKHAN, Mongolia</i>
17:20	<ul style="list-style-type: none"> ▪ National space policy alignment with SDGs, <i>Naser BIN HAMMAD, UAE Space Agency</i>
17:30	Adjourn
17:30 – 19:30	Side event session Global Partnership
Presentation Session 3B: Policies and strategies for promoting sustainable development (in parallel)	
<i>Room: Al Ameera 3</i>	
<i>Moderator: Ganiyu AGBAJE, Nigeria</i>	
<i>Rapporteur: Zhu ZIHUA, Space Generation Advisory Council</i>	
16:30	<ul style="list-style-type: none"> ▪ Turkish space program, <i>Kuzu LOKMAN, Turkey</i>
16:40	<ul style="list-style-type: none"> ▪ Space technology for sustainable development in Sudan - Initiative at University of Khartoum, <i>Rayan IMAM, Sudan</i>
16:50	<ul style="list-style-type: none"> ▪ Characterization of locations and durations of ionospheric irregularities causing GNSS signals scintillation over the low latitude regions in Africa, <i>Joseph OLWENDO, Kenya</i>
17:00	<ul style="list-style-type: none"> ▪ Space-based geospatial information for food security, <i>Basuti BOLO, Botswana</i>
17:10	<ul style="list-style-type: none"> ▪ Application of remote sensing for disaster and social risk management in MENA regions, <i>Iskander TLILI, Tunisia</i>
17:20	<ul style="list-style-type: none"> ▪ <i>Abdulla BU SHEHAB, MBRSC</i>
17:30	Adjourn

17:30 – 18:00	<i>(Informal meeting of the sessions moderators/rapporteurs to prepare conclusions and recommendations for the Forum’s consideration).</i>
17:30 – 19:30	Side event session Global Partnership
Tuesday, 7 November 2017	
Session 4: Space Accessibility	
<i>The various factors of access to space, space technology data and facilities, and the importance of joining a global effort in the development of the entire space arena for the benefit of humanity.</i>	
<i>Moderator: Michael SIMPSON, Secure World Foundation</i>	
<i>Rapporteur: Du HUI, United Nations Office for Outer Space Affairs</i>	
09:00	▪ Dream Chaser Mission, <i>Luciano SACCANI, Sierra Nevada Corporation’s Space Systems</i>
09:15	▪ <i>Taner KODANAZ, Digital Globe</i>
09:30	▪ The Secure World Foundation’s Handbook for New Actors in Space: best practices, capacity transfer, and integrating new actors into the governance domain of space, <i>Christopher JOHNSON, Secure World Foundation</i>
09:45	▪ Lessons learned from end users: the Eurisy strategy to connect space and society, <i>Dominique TILMANS, EURISY</i>
10:00	▪ Sustainability and security at sea in the context of the EU’s Copernicus Earth observation program, <i>Herman GREIDANUS, European Commission</i>
10:15	▪ Building the foundations for an international and cross-sector collaboration for a sustainable and permanent return to the lunar surface, <i>Angeliki KAPOGLOU, Moon Village Association</i>
10:30	▪ <i>Pete WORDEN, Breakthrough Initiatives</i>
10:45	▪ <i>Khaled AL HASHEMI, UAE Space Agency</i>
11:00 – 11:15	<i>Coffee Break</i>
Presentation Session 5: Capacity-Building and Information Dissemination (PARALLEL SESSIONS)	
Presentation Session 5A: Capacity-Building and Information Dissemination (in parallel)	
<i>Room: Al Ameera 1</i>	
<i>Moderator: Krystal WILSON, Secure World Foundation</i>	
<i>Rapporteur: Angeliki KAPOGLOU, Moon Village Association</i>	
11:15	▪ Global PPP effort to create small satellites development facilities

	to provide access to space, space technology data and facilities, <i>Milind PIMPRIKAR, CANEUS International</i>
11:25	▪ Where space can play a role in Bhutan? <i>Yeshey CHODEN, Bhutan</i>
11:35	▪ Organization of scientific research in international space projects, <i>Denis RAKOV, Russian Federation</i>
11:45	▪ <i>Artiom ANISIMOV, EOS Data Analytics</i>
11:55	▪ <i>Andrey MAXIMOV, Precious Payload Inc.</i>
12:05	▪ The Open Universe Initiative, <i>Paolo GIOMMI, Italy</i>
12:15	▪ UAE Initiatives towards space capacity-building, <i>Sheikha AL MESKARI, UAE Space Agency</i>
12:25 – 13:30	<i>Lunch Break</i>
Presentation Session 5B: Capacity-Building and Information Dissemination (in parallel)	
<i>Room: Al Ameera 3</i>	
<i>Moderator: Funmilola OLUWAFEMI, Nigeria</i>	
<i>Rapporteur: Rayan IMAM, Sudan</i>	
11:15	▪ Maximizing the benefits of the UN Regional Centre for Space Science and Technology Education for SDGs, <i>Ganiyu AGBAJE, African Regional Centre for Space Science and Technology Education, Nigeria</i>
11:25	▪ SGAC Asia-Pacific's ten-year outline on promoting future space collaboration among the next generation, <i>Zihua ZHU, Space Generation Advisory Council</i>
11:35	▪ Women as Ambassadors for Space Science Education and Outreach in Nepal, <i>Manisha DWA, Nepal</i>
11:45	▪ Space Agenda, a social media tool for global space-related events, <i>Halit MIRAHMETOGLU, SpaceAgenda</i>
11:55	▪ Expanding space accessibility via capability-building and innovation, <i>Danielle WOOD, United States</i>
12:05	▪ Space for Peace: space technologies as means to achieve the Sustainable Development Goals for a peaceful country, <i>Edgard RODRIGUEZ, Colombia</i>
12:15	▪ <i>Amel AMIN, UAE Space Agency</i>
12:25	▪ <i>Mahmoud HUSSAIN, Egypt's National Authority for Remote Sensing and Space Sciences</i>
12:35 – 13:30	<i>Lunch Break</i>
Session 6: Space Diplomacy	

The attention of governments to the need for regulatory frameworks and mechanisms at national, regional and global levels, as well as the role of international mechanisms for cooperation in the peaceful exploration and use of outer space.

Moderator: Kenneth HODGKINS, United States of America

Rapporteur: Niklas HEDMAN, United Nations Office for Outer Space Affairs

13:30	<ul style="list-style-type: none"> ▪ Improved global space governance and new opportunities for the future, <i>Kuan-Wei CHEN, Canada</i>
13:45	<ul style="list-style-type: none"> ▪ UNISPACE+50 and beyond, <i>Andre RYPL, Brazil</i>
14:00	<ul style="list-style-type: none"> ▪ North-South and cross-industry cooperation for space exploitation, <i>Magda COCCO and Isabel ORNELAS, VdA</i>
14:15	<ul style="list-style-type: none"> ▪ Global partnership for Space Exploration, <i>Miyake MASAZUMI, Japan</i>
14:30	<ul style="list-style-type: none"> ▪ Space sustainability and global space governance - the potentials of on-orbit servicing operations, <i>Szewai CHIU, United Kingdom</i>
14:45	<ul style="list-style-type: none"> ▪ The National Space Policy's overarching principle of space activities contributing to economic growth and socio-economic development, <i>Nomfuneko MAJAJA, South Africa</i>
15:00	<ul style="list-style-type: none"> ▪ Development of an International Framework Space Weather Services for UNISPACE+50 in the context of the Space2030 agenda, <i>Ian MANN, Canada</i>
15:15	<ul style="list-style-type: none"> ▪ Long-term sustainability of space activities, <i>Naser AL RASHEDI, United Arab Emirates</i>
15:30	<ul style="list-style-type: none"> ▪ <i>Omran SHARAF, United Arab Emirates</i>
15:45 – 16:00	<i>Coffee Break</i>

**Presentation Session 7: International Initiatives and Case Studies
(PARALLEL SESSIONS)**

Presentation Session 7A: International Initiatives and Case Studies (in parallel)

Room: Al Ameera 1

Moderator: Nomfuneko MAJAJA, South Africa

Rapporteur: Manisha DWA, Nepal

16:00	<ul style="list-style-type: none"> ▪ Progress of BRICS Remote Sensing Satellite Constellation, <i>Hui JIANG, China</i>
16:10	<ul style="list-style-type: none"> ▪ Application of spatial information technology in disaster mitigation and disaster relief, <i>Xijin FENG, China</i>
16:20	<ul style="list-style-type: none"> ▪ Use of satellite images for monitoring and evaluation of development projects and programmes in inaccessible area - Case of North Mali, <i>Aboubacar TOURE, UNDP Mali</i>
16:30	<ul style="list-style-type: none"> ▪ Monitoring environmental variables and earth system phenomena

	from space using nanosatellite technology, <i>Kleber NACCARATO, Brazil</i>
16:40	<ul style="list-style-type: none"> ▪ Space as cosmic laboratory, <i>Andrea V. MACCIO, Abu Dhabi NYU</i>
16:50	<ul style="list-style-type: none"> ▪ <i>Meera ALSHAMSI, United Arab Emirates</i>
17:00	<ul style="list-style-type: none"> ▪ Use of space applications, <i>Abdulla AL MARAR, United Arab Emirates</i>
17:10	Adjourn
17:00 – 17:30	<i>(Informal meeting of the sessions moderators/rapporteurs to prepare conclusions and recommendations for the Forum's consideration).</i>
17:30 – 19:30	Side event session Global Partnership (as needed)
Presentation Session 7B: International Initiatives and Case Studies (in parallel)	
<i>Room: Al Ameera 3</i>	
<i>Moderator: Rick TUMLINSON, Deep Space Industries</i>	
<i>Rapporteur: Basuti BOLO, Botswana</i>	
16:00	<ul style="list-style-type: none"> ▪ Microgravity research and applications: roles in economic prosperity and poverty reduction, <i>Funmilola OLUWAFEMI, Nigeria</i>
16:10	<ul style="list-style-type: none"> ▪ Preserving human history in space - a path to sustainable development and peace, <i>Michelle HANLON, For All Moonkind, Inc., United States</i>
16:20	<ul style="list-style-type: none"> ▪ Spaceflight meets geriatrics, <i>Nandu GOSWAMI, Austria</i>
16:30	<ul style="list-style-type: none"> ▪ <i>Enrico FLAMINI, Italy</i>
16:40	<ul style="list-style-type: none"> ▪ Cyber Security Law, its regulation and relevance for outer space, <i>Pavan DUGGAL, India</i>
16:50	<ul style="list-style-type: none"> ▪ Directed Energy & Kinetic Systems – the new threats for the critical space infrastructure, <i>Marius Eugen OPRAN, Romania</i>
17:00	<ul style="list-style-type: none"> ▪ Thor's Hammer: ASATs, cyberspace and human development, <i>Roy BALLESTE, United States</i>
17:10	Adjourn
17:00 – 17:30	<i>(Informal meeting of the sessions moderators/rapporteurs to prepare conclusions and recommendations for the Forum's consideration).</i>
17:30 – 19:30	Side event session Global Partnership (as needed)

Wednesday, 8 November 2017	
08:00 – 08:45	<p>Special Session: Space Debris</p> <p>How serious is the space debris threat? How can we leverage the international efforts towards mitigation of space debris?</p> <p><i>Moderator: Sumaya AL HAJERI, United Arab Emirates Space Agency</i></p> <ul style="list-style-type: none"> ▪ <i>Khaled AL HASHEMI, UAE Space Agency</i> ▪ <i>Niklas HEDMAN, United Nations Office for Outer Space Affairs</i> ▪ <i>Michael LINDSAY, One-Web</i> ▪ <i>Michael SIMPSON, Secure World Foundation (TBC)</i>
UNISPACE+50 SEGMENT OF HIGH LEVEL FORUM	
09:00	<p>Introductory Remarks:</p> <ul style="list-style-type: none"> ▪ <i>Chairman, United Arab Emirates Space Agency</i> ▪ <i>TBC, Mohammed Bin Rashid Space Centre</i> ▪ <i>Simonetta DI PIPPO, United Nations Office for Outer Space Affairs</i>
09:30	<ul style="list-style-type: none"> ▪ <i>Presentation of Summary of the Sessions held on 6 and 7 November 2017</i> ▪ <i>Presentation of the recommendations of the “Global Partnership” side event</i>
10:00	<ul style="list-style-type: none"> ▪ <i>Atchaka SIBUNRUANG, Minister of Science and Technology, Thailand</i>
<p>HIGH LEVEL PANEL: International Cooperation and Challenges towards UNISPACE+50</p> <p><i>International cooperation and challenges towards UNISPACE+50 and Space2030 in order for the international community to lay the basis for the use of space for the benefit of all humankind and to be able to collectively address cross-border concerns.</i></p>	
<p><i>Moderator: Simonetta DI PIPPO, United Nations Office for Outer Space Affairs</i></p> <p><i>Rapporteur: Markus WOLTRAN, United Nations Office for Outer Space Affairs</i></p>	
10:10 – 11:00	<p>PANELLISTS:</p> <ul style="list-style-type: none"> ▪ <i>Space in the 21st century - a view from Europe, Didier LENOIR, European Union</i> ▪ <i>Salem AL MARRI, Assistant Director General for Science & Technology Sector</i> ▪ <i>Global partnership in space exploration and innovation, Kenneth HODGKINS, United States</i> ▪ <i>Realizing Space2030 through multilateral cooperation - APSCO’s Perspective, Xinjun LI, Asia-Pacific Space Cooperation Organization</i>

<ul style="list-style-type: none"> ▪ Space cooperation in Latin America, <i>Rosa Maria RAMIREZ DE ARELLANO HARO, Incoming Chair of COPUOS</i> 	
11:00 – 11:15	Discussions and recommendations for UNISPACE+50 and Space2030
11:15 – 11:30	<i>Coffee Break</i>
HIGH LEVEL PANEL: International Cooperation and Challenges towards UNISPACE+50 (continues)	
11:30 – 12:30	PANELLISTS:
<ul style="list-style-type: none"> ▪ Societal challenges of global dimension - Space for Sustainable Development Goals, <i>Friedrich Erwin Rudolf DÄUBLE, Germany</i> ▪ <i>Mohammed Nasser AL-AHBABI, United Arab Emirates Space Agency</i> ▪ Space2030 and the SDGs: Seeking to broaden benefits through synergy, <i>Michael SIMPSON, Secure World Foundation</i> ▪ <i>Bernhard SCHMIDT-TEDD, Chair of the Working Group on the Status and Application of the five United Nations Treaties, Legal Subcommittee of COPUOS</i> ▪ International cooperation and challenges towards UNISPACE+50, <i>Pontso MARUPING, South African Council for Space Affairs</i> ▪ <i>David KENDALL, Chair of COPUOS</i> 	
12:30 – 13:00	Discussions and recommendations for UNISPACE+50 and Space2030
13:00 – 13:45	<i>Lunch Break</i>
13:45	Technical Tour: <i>An informative technical tour to Sharjah Astronomy center will be organized for the Forum participants.</i>
18:30	Gala Dinner
Thursday, 9 November 2017	
08:00 – 08:45	Special Session: Empowerment of Youth in Space Exploration Sector <i>Moderator: Heyam AL BLOOSHI, United Arab Emirates Space Agency</i> Youth representatives from UAE Space Agency, MBRSC, Yahsat, Thuraya, Khalifa University, Sharjah University, UAE University, NY University, American University of Sharjah, Space Generation Advisory Council
HIGH LEVEL PANEL: Space as an Arena for Innovation, Integration and Investment <i>Space2030 as an opportunity for innovation, integration and investment in order to generate the widest participation possible to promote space technology to address issues</i>	

that are transnational in their nature and to deal with global concerns; and to strengthen unified efforts at all levels and among all relevant stakeholders of the space sector in addressing the overarching long-term development concerns of society with concrete deliverables pertaining to space for development.

Moderator: Naser AL RASHEDI, United Arab Emirates Space Agency

Rapporteur: Luciano SACCANI, Sierra Nevada Corporation's Space Systems

09:00 – 10:30

PANELLISTS:

- Fostering innovation and technology transfer in support of socio-economic development, *Gerd GRUPPE, German Aerospace Center, Germany*
- *Gale ALLEN, National Aeronautics and Space Administration*
- *Donato GIORGI, Centre National D'études Spatiales*
- *Mylswamy ANNADURAI, Indian Space Research Organization Satellite Centre*
- *Piero MESSINA, European Space Agency*
- *Chiaki MUKAI, Japan Aerospace Exploration Agency*
- *Mohamed AL JUNAIBI, UAE Space Agency*
- *Andrey AFONIN, ROSCOSMOS*
- *Enrico FLAMINI, Italian Space Agency*

10:30 – 10:45

Discussions

10:45 - 11:00

Coffee Break

HIGH LEVEL PANEL: Space as an Arena for Innovation, Integration and Investment (continues)

11:00 – 12:30

PANELLISTS:

- *Omran SHARAF, Emirates Mars Mission (Hope Probe) (TBC)*
- *Anond Snidvongs, Executive Director, Geo-Informatics and Space Technology Development Agency (GISTDA), Thailand*
- *Jean-Jacques TORTORA, European Space Policy Institute*
- *Frode MAURING, United Nations Development Programme in UAE*
- *OG Peace Mission 2020 - Space diplomacy in the age of New Space, Namira SALIM, Space Trust*
- *Marius-Ioan PISO, Romanian Space Agency*
- *Activating the Next Generation, Clémentine DECOOPMAN, Space Generation Advisory Council*
- *Amer AL SAYEGH, MBRSC*
- *Luc ST-PIERRE, United Nations Office for Outer Space Affairs*

12:30 – 12:45

Discussions

12:45	<p>Review and approval of the recommendations for UNISPACE+50</p> <p><i>Moderator: Niklas HEDMAN, United Nations Office for Outer Space Affairs</i></p> <p><i>Rapporteur: Romana KOFLER, United Nations Office for Outer Space Affairs</i></p>
13:30	<p>Concluding Remarks</p> <ul style="list-style-type: none"> ▪ <i>Simonetta DI PIPPO, United Nations Office for Outer Space Affairs</i> ▪ <i>Mohammed Nasser AL-AHBABI, United Arab Emirates Space Agency, United Arab Emirates</i>
	<p>Adjourn</p>