Sustainable Space for Sustainability on Earth



organized by the United Nations Office for Outer Space Affairs (UNOOSA) in collaboration with Germany, Peru and United Arab Emirates

03 - 05 December 2024

UN-CAMPUS Platz der Vereinten Nationen 1 – 53113 Bonn, Germany

DAY 1, Tuesday, 03 December 2024

All sessions and coffee breaks will take place at Altes Abgeordnetenhaus (AAH) Upper Conference Room (main room) and Lower Conference Room (overflow room w/participation opportunity)

8:00 - 9:30 REGISTRATION AND COFFEE

Opening

Master of Ceremony: Markus Woltran

9:30 – 11:00 Ms. Aarti Holla-Maini Director United Nations Office for Outer Space Affairs

Ms. Aarti Holla-Maini serves as the Director of the United Nations Office for Outer Space Affairs (UNOOSA), leading its management and administration, ensuring alignment with mandates from the UN General Assembly, COPUOS, and UN policies. Ms. Holla-Maini brings to this position over 25 years of professional experience in the space sector including in managerial and advocacy functions:

Ms. Anna Christmann Federal Government Coordinator of German Aerospace Policy

Dr. Anna Christmann is the Aerospace Coordinator of German Federal Government and the Commissioner for Startups and the Digital Economy at the Federal Ministry of Economic Affairs and Climate Action. She has been a member of the German Bundestag since 2017 and is part of the parliamentary group Alliance 90/ The Greens.

& Mr. Walther Pelzer Director General German Space Agency at DLR

Mr. Walther Pelzer is the Director General of the German Space Agency (DLR), coordinating the conception and implementation of Germany's space programme, as well as its contributions in space matters in European organizations such as ESA, EUMETSAT and the EU. After working in industry in Germany, the USA and Austria, Mr Pelzer held positions in the ministries of the German state of North Rhine-Westphalia before joining DLR. He studied Mechanical Engineering in Aachen, holding a PhD from, the Fraunhofer Institute IPT and a MBA in Switzerland and the USA.

9:30 – 11:00 Mr. Salem Al Qubaisi Director General UAE Space Agency

His Excellency Eng. Salem Al-Qubaisi is the UAE Space Agency's Director General and has more than 20 years of public and private sector leadership experience in military aviation, security, and defense. He is responsible for setting the Agency's strategic direction, delivering on its mandate to strengthen the space sector, and contributing to the nation's vision for sustainable economic growth and diversification.

Mr. Roberto Antonio Melgar Sheen Head of the Peruvian Space Agency CONIDA

Mr. Melgar Sheen, serves as the Chief of the Peruvian Space Agency. Previously holding significant positions, including Deputy Commander of the Cyber Defense Group and Director of the Peruvian Air War College. He holds advanced degrees in aerospace and business administration and is currently pursuing a Doctorate in Business Administration.

Ms. Nicole Unterseh Deputy Mayor of the Federal City of Bonn

Ms. Unterseh is the Honorary Deputy Mayor of Bonn and a member of the City Council. She has held several key roles in local politics, including Deputy District Mayor of Bad Godesberg, member of the District Council, and spokesperson for the Bündnis90/Die Grünen parliamentary group. Her focus areas include environmental and nature conservation, urban planning, and housing.

Moderator: Ms. Silke Hüttemann German Space Agency

Ms. Hüttemann leads the UN Affairs Department at the DLR Space Agency, overseeing Germany's engagement with the United Nations on space-related initiatives. The department's work includes fostering partnerships, representing Germany in key forums, and contributing to the advancement of legal and technical frameworks for space activities.

11:00 - 11:30 COFFEE BREAK



Session I – Retrospective

Action 56 of the UN Pact for the Future calls for strengthened international cooperation for the exploration and use of outer space for peaceful purposes and for the benefit of all humanity. The session will reflect on the Summit of the Future, preparatory activities such as the UN/Portugal conference "Management and Sustainability of Outer Space Activities" and the implementation of the Space2030 agenda.

11:30 – 12:45 **Ms. Antje Leendertse** Permanent Representative of Germany to the UN in New York Ambassador Antje Leendertse serves as Germany's Permanent Representative to the United Nations in New York. Throughout her career with the Federal Foreign Office, she has held several key positions, including Political Director and State Secretary.

introduced by **Mr. Rüdiger Bohn** Permanent Representative of Germany to the UN in Vienna

Mr. Rüdiger Bohn is the Permanent Representative of the Federal Republic of Germany to the United Nations and other international organizations in Vienna. He has served in various diplomatic postings, including at the German Embassy in Washington, the German NATO Delegation in Brussels, and the German Embassy in Amman.

Ms. Isi Casas del Valle P. Space Generation Advisory Council

Ms. Casas del Valle is a Space Lawyer and consultant specializing in space outreach and public relations for international organizations. She serves as Community Manager at the European Southern Observatory, South America Regional Coordinator for the Space Generation Advisory Council, and Lecturer in Public International Law. Her work includes fostering international collaboration in the space sector

Ms. Carolina Rêgo Costa Portuguese Space Agency

Carolina Rêgo Costa is the Legal Officer at the Portugal Space Agency, with extensive experience in science, technology, and higher education policy. Over 15 years, she has served as a legal adviser and cabinet head for Ministers and Secretaries of State. A former legal adviser at Fundação para a Ciência e Tecnologia, she also represented Portugal on the INL Council.

Mr. Zhigang Bian Vice Administrator China National Space Administration

Moderator: Mr. Markus Woltran United Nations Office for Outer Space Affairs

Markus Woltran is a Programme Officer in the Office of the Director of the United Nations Office for Outer Space Affairs (UNOOSA). He supports the Director of the Office in diverse strategic and policy relevant areas as well as external relations and interagency affairs. He supports key activities and leads the organisation of international conferences, workshops, expert meetings and symposia.

- 12:45 13:00 Group Picture
- 13:00-14:15 LUNCH BREAK

DAY 1 (continued), Tuesday, 03 December 2024



13:15 – 14:00 Lunch Break Event "World Café: Future of Space Exploration - Foresight Concept" organised by the academic network SichTRaum, the European Space Policy Institute (ESPI), the German Aerospace Industries Associations (BDLI) and further partners

Session II – Space4SDGs

Master of Ceremony: Gina Petrovici

As the planet faces increasing environmental and societal challenges, it requires strong partnerships and global cooperation in order to achieve the goal of sustainable development. Space science and technology bring an abundance of unique and fundamental benefits to humanity. The session explores how space tools enable and drive sustainable development by providing essential data for climate action, disaster management and monitoring progress on global commitments in sustainable development goals.

14:15 – 14:30 **KEYNOTE:** Revisiting Space as a Driver for Sustainable Development

Ms. Sarah Ryglewski Minister of State for Sustainable Development, Federal Chancellery Ms. Sarah Ryglewski, serves as the Minister of State to the Federal Chancellor. She is responsible for federal-state cooperation. She is also tasked by the Federal Cabinet with overseeing sustainable development, in this role, she chairs the State Secretaries' Committee for Sustainable Development.

14:30 – 15:40 **PANEL 1: Leveraging Space Tech for Climate Action**

Mr. Pakorn Apaphant Geo-Informatics and Space Technology Development Agency

Pakorn Apaphant is currently the Executive Director of Geo-informatics and Space Technology Development Agency (Public Organization), GISTDA, Thailand. He is specialized in Remote Sensing, GIS, and Digital Photogrammetry, as well as space related technologies. Under his leadership, the policy "GI for All" is implemented with the aim to utilize Geo-Informatics technology to effectively contribute Climate actions and to be beneficial to everyone. He also served as the Chair of the Committee on Earth Observation Satellites (CEOS) and has promoted "Earth Observation for Better Environment, Economy, and Humanity.

Mr. Lorant Czaran United Nations Office for Outer Space Affairs

At UNOOSA, Mr. Czaran is currently the Chief of UN-SPIDER in Vienna and Officer-in-Charge for the Space Applications Section. Starting at the U.N. Headquarters (Cartographic Section), Mr. Czarans carreer stretches over several stations at UN institutions, , as the Department for Peacekeeping Operations, ReliefWeb at UNOCHA and the (GRID3) Project at the United Nations Population Fund in New York, leading the geospatial modernization of UNFPA. In his current role he represents the United Nations in the Committee on Earth Observation Satellites (CEOS) and ISO/TC211.

Mr. Joel Joseph S. Marciano Philippine Space Agency

Dr. Marciano is the Director General (DG) of the Philippine Space Agency (PhilSA), a position that holds the rank of a Cabinet Secretary and serves as Presidential Adviser on Space Matters. He is also a Full Professor at the University of the Philippines and was the UP-Dado Banatao Fellow at the University of California Berkeley and UC San Diego.From 2014-2020, he led the development of the Philippines' Diwata microsatellites and Maya nanosatellites, ground infrastructure and data operations.

Mr. Prashanth Marpu Bayanat

Dr. Prashanth Marpu, VP of R&D at Bayanat, leads the company's commercial space program. Previously an Associate Professor at Khalifa University, he is an expert in space systems, artificial intelligence, and environmental monitoring, serving in several international committees on advancing Earth Observation.



14:30 – 15:40 PANEL 1: Leveraging Space Tech for Climate Action

Mr. Madin Maseh Maldives Space Research Organisation

Madin Maseh is the President of the Maldives Space Research Organisation (MSRO) and a Business Intelligence Team Lead in the Financial Crimes Intelligence Unit at Prudential plc. With a background in aerospace studies from the International Space University and a BA in International and Strategic Studies from the University of Malaya, Maseh brings expertise in space and security.

Ms. Alma Okpalefe World Space Week

Alma Okpalefe is the Executive Director of the World Space Week Association, where she is responsible for coordinating the global celebration of the UN-declared World Space Week. As a lawyer with nearly two decades of experience in the satellite industry, Alma has worked as Legal Counsel for Nigerian Communications Satellite (NIGCOMSAT) and has contributed to various communication satellite projects across Africa. Beyond her legal career, she is the Chair and Co-founder of Isaiah's Hope Foundation, an organization dedicated to leveraging space technology to enhance healthcare access in underserved communities across Africa.

Moderator: Ms. Violette Rolin Permanent Mission of France to the UN in Vienna

Ms Violette Rolin is a career diplomat, currently serving as First Secretary at the Permanent Mission of France to the United Nations and International Organisations in Vienna. Her work experience includes stations at the European Directorate at the French Ministry of Foreign Affairs, as well as the at the Ministry of Health and Social affairs. She holds a Master's Degree in International Relations and Economics from SciencesPo Paris and a degree in Political Sciences from the Free University of Berlin.

15:45 - 16:15 COFFEE BREAK

16:15 – 17:05 **PANEL 2:** Stronger Together – International Cooperation in Disaster Management and Emergency Response

Mr. Yeshurun Alemayehu Adde Ethiopian Space Science & Technology Institute

Mr. Yeshurun Alemayehu Adde serves as the Deputy Minister of Innovation and Technology for Ethiopia, overseeing the Ethiopian Space Science & Geospatial Institute (ESSGI). Prior to this appointment, he held various positions at ESSGI, playing a key role in managing satellite projects, including ETRSS-1 and ET-SMART-RSS. As an educator, Dr. Alemayehu has lectured at multiple universities and is the founder of the African Aeronautics & Astronautics Center.

Mr. Daniel Lanz LANZ AI/Marple Germany

Mr. Daniel Lanz is the Co-Founder of Marple GmbH, with a long carreer in the software technology industry. He has focused on digitisation and pattern recognition. In his role at Marple GmbH, he helped establish CoCuRA with the European Space Agency (ESA) and the Global Organic Textile Standard (GOTS). CoCuRA, a satellite data and AI-based system to support organic cotton certification in India, addresses multiple SDGs, helping to improve the livelihoods of smallholder farmers in India and soon globally.

Mr. Meng Lingjie China National Space Administration

Ms. Daniela Schmidt OHB Germany

Ms. Daniela Schmidt is a member of the Management Board of OHB and a specialist lawyer for international commercial law. OHB is a German space and technology group and one of the leading players in the European space industry. Ms. Schmidt has been a member of the Management Board since January 2022 and is responsible for sustainability, legal affairs and corporate security.

Moderator: Mr. Juan Carlos Villagran UN-SPIDER

Juan Carlos Villagran de Leon is an experimental physicist. For the past 30 years he has been engaged in disaster management efforts, focusing on risk management and early warning systems. He joined UN-SPIDER at the beginning of 2009, and since the end of 2011, he has been the Head of the UN-SPIDER Bonn Office, where he is in charge of the Knowledge Portal, and serves as the Liaison Officer for Africa, Latin America and the Caribbean. Earlier this year he launched a publication addressing the use of Space Technologies in Early Warning Systems.

17:10 - 18:00**PANEL 3:** SDG 17 – Partnership for the Goals

Ms. Marcia Alvarenga dos Santos Brazilian Space Agency

Ms. Alvarenga dos Santos is the Head of the International Cooperation Office at the Brazilian Space Agency. She held previous roles as Head of the Education and Training Division at the National Institute for Space Research. Alongside her role, Ms. Alvarenga dos Santos serves as a voluntary mentor for the UN's Space4Women Project and represents Brazil at COPUOS Legal Subcommittee meetings. She holds a PhD in Law from the Catholic University of Santos, with research interests in space law, small satellites, and space sustainability.

Mr. Magnus Andersson Malmö University Sweden

Prof. Andersson, is an associate professor in economic geography at Urban Studies since 2013. Andersson is active as a researcher in quantitative geography with a focus on spatial analysis of sustainable economic development in particular Landlocked Developing Countries (LLDCs). Mr. Andersson is further appointed member of the United Nations 10-Member-Group tasked to develop multi-stakeholder collaboration for sustainable development.

Mr. Rainer Malmberg IABG Germany

Mr. Malmberg works as Business Development Manager for Space based Services in the geospatial service Division of IABG mbH., holding experience in remote sensing, earth observation and geodata management. His work included several national and international clean energy projects and is currently working closely with the World Bank, ESA and various energy providers on the development of earth observation services for the energy sector.

Mr. Hinrich Paulsen Mundialis Germany

Mr. Paulsen is the Co-founder and partner of mundialis, specialised in the analysis of remote sensing data and the processing of voluminous geodata using high-performance computing centres. He holds many years of experience in management and development, human resources and finance, and is primarily responsible for Earth Sustainability Monitoring projects.

Mr. Juan Carlos Villagran UN-SPIDER

Juan Carlos Villagran de Leon is an experimental physicist with extensive experience in disaster management, specializing in risk management and early warning systems. After joining UN-SPIDER in 2009 Mr. VIllagran now serves as the Head of the UN-SPIDER Bonn Office, where he oversees the Knowledge Portal and serves as the Liaison Officer for Africa, Latin America, and the Caribbean. Additionally, he published a work focused on the application of space technologies

Moderator: Mr. Gustavo Henriquez CONIDA Space Agency of Peru

With 23 years of experience in space activities, Mr Henríquez specializes in Space Technology and its Applications, particularly satellite imagery. As Head of the Office of Cooperation and International Relations, Peruvian Space Agency, he is dedicated to advancing space development in Peru, focusing on the execution of policies, programs, and projects that contribute to the strategic goals of the Peruvian government.

19:00 - 23:00

Dinner Reception at the Foyer of the Art Museum Bonn

hosted by the UAE Space Agency (no pre-registration required, business attire) Address: Bundeskunsthalle, Helmut-Kohl-Allee 4, 53113 Bonn (walking distance)



DAY 2, Wednesday, 04 December 2024



8:00-9:00 REGISTRATION AND COFFEE

Session III: Sustainable Space Activities

Master of Ceremony: Franziska Knur

"We are living through an age of increased access to and activities in outer space. The growth in the number of objects in outer space, the return of humans to deep space, and our expanding reliance on outer space systems demand urgent action... The opportunities for people and planet are enormous, but there are also risks that must be managed." (Action 56 of the Pact for the Future). The session discusses initiatives to enhance the safety and sustainability of space activities.

9:00 – 9:15 **KEYNOTE: The Importance of Space Safety**

Ms. Aarti Holla-Maini United Nations Office for Outer Space Affairs

9:15 – 10:00 **PANEL 4:** Keeping Space Clean – New Approaches to Space Debris Mitigation

Ms. Dorota Englender European Space Agency

Dorota holds a position as legal officer in the Legal Services Department of the European Space Agency (ESA). In this capacity, she serves as legal advisor of ESA's Space Safety Programme and provides a full spectrum of legal advice, including for ESA's active debris removal and in-orbit servicing (ADRIOS) activities. She is part of the ESA Delegation to the Legal Subcommittee at UNCOPUOS and assists ESA Member States, upon their request, on questions relating to their national space legislation. Dedicated to capacity building and sharing of expertise, Ms. Englender frequently lectures on space law topics, both within and beyond ESA.

Mr. Stefan Frey Vyoma Germany

While working for the Space Debris Office at the European Space Agency, Dr Frey has become an advocate for a sustainable use of Outer Space. He further strengthened his expertise as a PhD candidate at the Politecnico di Milano, studying orbital fragmentations and their effects on neighbouring satellites. Being a co-founder and CEO at Vyoma, he applies his knowledge to work towards a solution to ensure safe access to space – today, and for future generations.

Ms. Carolin Frueh COSPAR PEDAS Committee, Purdue University

Prof. Frueh is the Harold DeGroff Associate Professor of Aeronautics and Astronautics at Purdue. She is the director of the Purdue Optical Ground Station, and the chair of the International Committee on Space Research (COSPAR) Panel on Potentially Environmentally Detrimental Activities in Space (PEDAS). Dr. Frueh's research and expertise is in Space Domain Awareness in the near-Earth and Cislunar space, she has authored over 100 scientific publications.

Moderator: Mr. Ernst Pfeiffer HPS Group Germany

Mr. Pfeiffer is the CEO of HPS High Performance Space Structure Systems GmbH, specializing in advanced space technologies, including deployable systems and nanosatellite equipment. He serves as the spokesman for the German Space-SME Committee "AKRK" within DLR and is involved in several key space associations, including the Bavarian Aerospace Cluster and BDI NewSpace Initiative.



10:00 – 10:45 PANEL 5: Cleaning Space Up – Prospects and Challenges of Active Debris Removal

Ms. Camilla Colombo Politecnico Milano Italy

Ms. Colombo is an Associate Professor in Orbital Mechanics, with a current research focus on orbital dynamics, space debris and asteroids. She further serves as delegate for the Inter Agency Debris Coordination Committee and the UN mandated Space Mission Planning Advisory Group for mission to asteroids. Ms. Colombo holds a Master degree in Aerospace Engineering from Politecnico di Milano and a PhD in Aerospace Engineering from the University of Glasgow.

Mr. Pat Mathewson Astroscale United Kingdom

Ms. Olga Stelmakh-Drescher Exolaunch

Dr. Stelmakh-Drescher is a Chief Policy, Legal & Government Relations Officer at Exolaunch. and has worked in the space sector since 2003, including a decade of governmental and parliamentarian engagement in which she acted as a space strategy development and implementation advisor to multiple governments. Dr. Stelmakh-Drescher is also the company representative to the ESA NewSpace Advisory Board to the ESA Director General and to the ESPI General Assembly.

Mr. Raman Umamaheswaran DoSpace India

Moderator: Mr. Manuel Metz German Space Agency

Dr. Manuel Metz is Head of the Space Debris Research and SST Technologies Group at DLR Space Agency. He serves as HoD of DLR Space Agency to the Inter-Agency Space Debris Coordination Committee (IADC) and advises the German UN COPOUS delegation on space debris matters. As such, he also participated in the LTS and LTS2.0 working group discussions

10:45 – 11:15 COFFEE BREAK

11:15 – 12:05 **PANEL 6: Global Initiatives towards Zero Debris**

Mr. Muryah Alshahrani Saudi Space Agency

Muryah Alshahrani is a General Director at the Saudi Space Agency (SSA), specializing in strategy development, technical infrastructure planning, and fostering global collaborations to advance space sustainability and innovation. Prior to joining SSA, he served as an Expert Space Segment Engineer at ARABSAT and held pivotal roles at KACST and Lockheed Martin, contributing to critical space missions and the integration of space and ground systems. In his role Mr. Alshahrani is currently focused on promoting global partnerships and initiatives to ensure the long-term sustainability of space for future generations.

Mr. Rodrigo Leonardi Brazilian Space Agency

Dr. Rodrigo Leonardi, is currently the director of the Brazilian Space Agency (AEB). He previously held key positions at AEB, including Research, Development, and Innovation Coordinator and Satellite and Applications Coordinator. Dr. Leonardi was involved in shaping the Brazilian Space Activities Program 2022-2031 and has contributed to several scientific publications. Recognized for his work on the Planck mission, he received the Gruber Prize for Cosmology and multiple NASA awards, and has organized major space-related events. Dr. Rodrigo holds a mathematics degree from the University of Brasilia and a Ph.D. in astrophysics from INPE.



11:15 – 12:05 Ms. Marta Salieri European Space Agency

Marta Salieri is a Space Sustainability Engineer at the European Space Agency (ESA), where she focuses on advancing sustainability standards and active debris removal efforts. Prior to ESA, she held a senior role at UNOPS, providing procurement oversight to support the United Nations Sustainable Development Goals.

Moderator: Mr. Nicholas Shave Astroscale United Kingdom

Mr. Shave is the Managing Director of Astroscale UK, with over 30 years of experience in the space sector. He has held senior roles in engineering, sales, and management at organizations including Inmarsat, CGI, Logica, and the UK MOD Defence Research Agency. Previously, he served as Vice President of Strategic Programs at Inmarsat and is currently the Chair of UKspace, the trade association for the U.K. space industry. He is also a Councillor and Fellow of the Royal Aeronautical Society. Shave holds an MSc in Spacecraft Technology and Satellite Communications from University College London and an MBA.

12:10 - 13:00

PANEL 7: Advancing a Multilateral Approach to Space Traffic Management

Mr. Pascal Faucher EU Space Surveillance and Tracking

Mr. Faucher is the Chairman of the European Union Space Surveillance and Tracking Partnership (EU SST) and the co-Chairman of the European Union Industry and Start-ups Forum on Space Traffic Management (EISF). With extensive experience at CNES headquarters, he has contributed to defense and security programs focused on space security, situational awareness, traffic management, and sustainability. Mr. Faucher holds a Master's Degree in Ocean, Atmosphere, and Biosphere, as well as a Ph.D. in Physical Oceanography.

Ms. Laura Jamschon Mac Garry University of Buenos Aires, Argentina

Laura Jamschon Mac Garry is a lawyer graduated from the University of Buenos Aires. She holds an LL.M. from the University of Vienna and a PhD from Sapienza University of Rome. She teaches at the University of Buenos Aires and the University of Belgrano while serving as a career diplomat. Dr. Jamschon Mac Garry was a member of the D&QS SATCON Working Group, which contributed to the International Astronomical Union's Dark and Quiet Skies report. She is a full member of the International Institute of Space Law (IISL) and participated in the IISL Working Group on Light Pollution.

Mr. Roger McNamara American Institute of Aeronautics and Astronautics

Dr. Roger McNamara serves as the Chair of the AIAA Space Traffic Coordination Task Force, where he leads efforts on Active Debris Removal (ADR) missions and updates to the "Satellite Orbital Safety Best Practices" Reference Guide. With a distinguished career in the aerospace industry, his work has included research into orbital debris hazards, advancements in space vehicle design for manned and unmanned systems, and contributions to technological innovation in human deep space exploration. A dedicated member of the AIAA, he has held leadership roles across various committees and initiatives.

Ms. Maruska Strah Slovenian Space Office

Maruška Strah is currently serving as the Secretary in the Slovenian Space Office at the Ministry of Economy, Tourism and Sport of Republic of Slovenia. She has background in the field of space law, focusing on STM, sustainability, and security and is serving as the Co-Chair of the Space Traffic Management Working Group. For her work and extensive contributions to the field of STM, Maruška received the 2023 Space Law Award for Young Achievers by the International Institute of Space Law. Currently, Maruška is pursuing a Ph.D. in Legal Studies at the Law Faculty of the University of Vienna.



12:10 – 13:00 PANEL 7: Advancing a Multilateral Approach to Space Traffic Management

Mr. Gabriel Swiney US Department of Commerce

Mr. Swiney is the Director of the Office of Space Commerce's (OSC) Policy, Advocacy, and International Division in the U.S. Department of Commerce, leading a team responsible for developing and implementing national space policies and advancing the space industry around the world. He previously served at NASA, where he was a Senior Policy Advisor focusing on norms of behavior and legal policy. In his previous role as an Attorney Adviser in the State Department's legal bureau, Mr Swiney served as the head of the U.S. delegation to the COPUOS Legal Subcommittee and was one of the creators of the Artemis Accords. He holds law degrees from Harvard and Oxford, and teached space policy and law at Harvard.

Moderator: Mr. Martin Reynders German Space Agency

Martin Reynders is a Legal Advisor at the German Aerospace Center (DLR), where contribute to space law research and policy. He previously served as a Research Assistant at DLR, where he was part of the project team for the "Cologne Commentary on Space Law" and supported the preparation of international conferences and teaching materials. He holds a law degree from the University of Cologne.

13:00-14:15 LUNCH BREAK

DAY 2 (continued), Wednesday, 04 December 2024

13:15 – 14:00 Lunch Break Event "Orbital Cleanup. Exploring Solutions for Space Debris" organized by the Federation of German Industries (BDI) New Space Initiative

Session IV: Sustainable Lunar Explorations

Master of Ceremony: Markus Woltran

The first United Nations Conference on Sustainable Lunar Activities in June 2024 saw a diverse range of stakeholders engage in constructive dialogue on the conduct of activities on and around celestial bodies in accordance with international law and in a safe, sustainable and peaceful manner. The session will follow up on mission plans and investigate meaningful approaches to information exchange and the involvement of all relevant stakeholders.

14:15 – 14:30 **KEYNOTE: Planned Lunar Activities**

Mr. Salem Al Marri Mohammed Bin Rashid Space Centre United Arab Emirates

H.E. Salem Humaid AlMarri is the Director General of the Mohammed Bin Rashid Space Centre (MBRSC). With over 20 years of experience in the UAE National Space Programme, he has played a pivotal role in the development and execution of significant projects at the Centre, including the partnership with NASA to build the Emirates Airlock on the Gateway Lunar Space Station. He is a member of the International Academy of Astronautics and has represented the UAE at international conferences and the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS). He holds a bachelor's degree in Computer Network Engineering from the Higher Colleges of Technology in Dubai.



14:30 – 15:30 **PANEL 8: Avoiding Terrestrial Mistakes – Sustainable Lunar Activities**

Ms. Kate Breach iSpace

Kate Breach is the Business Director of ispace Europe and an accomplished aerospace engineer with expertise spanning commercial space business development, space policy and regulation, and military aerospace engineering. She has held key business development roles in commercial space companies across New Zealand and Australia, contributing to the growth of the industry. During her tenure with the New Zealand Space Agency, Ms. Breach led the regulation of space launches and collaborated with global entities such as NASA, universities, and international space companies to advance New Zealand's space sector.

Mr. Fei Lingi China National Space Administration

Mr. Gustavo Medina Tanco Instituto de Ciencias Nucleares Mexico

Mr. Medina Tanco is a professor at the Universidad Nacional Autónoma de México (UNAM) and Head of the Space Instrumentation Laboratory (LINX) at the Institute of Nuclear Sciences. He leads the Mexican involvement in scientific instruments under several international space agencies missions, and is at the forefront of the NanoConnect2, NanoSWAI satellites, and the COLMENA lunar project. An elected member of the International Academy of Astronautics (IAA), he holds leadership roles in multiple IAA and IAF committees. He holds a BSc in Physics, a PhD in Sciences, and has authored numerous articles with significant academic impact on the field.

Ms. Mamta Patel Nagaraja National Aeronautics & Space Administration United States

Dr. Mamta Patel Nagaraja is the NASA Associate Chief Scientist for Exploration and Applied Research. In this role, she advises the Chief Scientist in exploration, biomedical, and physical sciences performed by and required to send humans in space. Her research expertise is on the molecular effects of microgravity on bone cells. She previously served as a program scientist for space biology, led science communications, served as the lead mechanical engineer for a scientific instrument, trained astronauts, and worked in the Mission Control Center.

Mr. Philipp Reiss Technical University of Munich

Philipp Reiss is a Professor of Lunar and Planetary Exploration at the Technical University of Munich, Germany. Before his current position, he was a post-doctoral research fellow at the European Space Agency (ESA-ESTEC), supporting the development of scientific instrumentation and operational concepts for lunar missions. His research focuses on exploring volatiles and space resources on the Moon and other celestial bodies, as well as developing instruments for the in-situ characterisation of water and planetary regolith.

Moderator: Ms. Gina Petrovici German Space Agency

Gina Petrovici is a legal advisor in the UN Affairs Department of the German Space Agency at DLR, specializing in space law and policy. She leads German delegation efforts for COPUOS meetings and ESA's International Relations Committee. As a key contact for the Artemis Accords, she coordinates common positions on space regulation issues nationally and internationally. Additionally, she lectures on Space Law and co-directs SGAC's policy platform

15:30 – 16:00 COFFEE BREAK



16:00 – 17:00 **PANEL 9:** Paving the Way for Coordination and Cooperation – Information Exchange on Lunar Activities

Ms. Soyoung Chung Korea Aerospace Research Institute

Ms. Soyung Chung is a senior researcher at the Strategic & Planning Directorate at KARI, where she coordinates research strategy and represents KARI at the International Space Exploration Coordination Group (ISECG) and COPUOS. With a strong background in space policy, she has worked in KARI's Space Policy Division and as an expert in the Ministry of Science and ICT. Her international experience includes roles at UNOOSA, UNESCAP, and the Space Policy Institute, and active involvement with the Space Generation Advisory Council and the Asia Pacific Space Generation Workshop.

Mr. Olavo de Neto Bittencourt International Institute for Space Law

Dr. Olavo de Oliveira Bittencourt is a Professor of International Law at the Catholic University of Santos. He has served as an arbitrator for space-related disputes at the Permanent Court of Arbitration and has been deeply involved in international space law through roles with the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and the International Institute of Space Law (IISL). Dr. Bittencourt, is also a key contributor to various space law initiatives, publications, and regional capacity-building efforts in Latin America.

Mr. Antonino Salmeri Lunar Policy Platform

Dr. Antonino Salmeri is an Italian space lawyer and policy analyst at the Open Lunar Foundation, specializing in the governance of space resource and lunar activities. With a PhD in Space Law, he focuses on developing adaptive governance mechanisms and innovative policies for sustainable space activities. Dr. Salmeri holds key roles in the space community, including as Policy & Advocacy Coordinator at the Space Generation Advisory Council

Moderator: Mr. Steven Freeland Western Sydney University

Professor Steven Freeland is an Emeritus Professor at Western Sydney University, Professorial Fellow at Bond University, and Co-Founder of the space law firm Azimuth Advisory. As a leading expert in international and space law, he represents Australia at the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and serves on the Australian Space Agency Advisory Board. He has advised numerous governments on space law and policy, taught internationally, and holds key roles in global organizations like the World Economic Forum's Global Future Council on Space.

17:10 – 18:00 **PANEL 10: Balancing the Needs of Science and Industry**

Ms. Anke Kaysser-Pyzalla German Aerospace Center

Ms. Kaysser-Pyzalla currently serves as Chair of the Executive Board at the German Aerospace Center (DLR). She oversees DLR's extensive research and innovation activities across aeronautics, space, energy, and transportation sectors, contributing to Germany's advancements in sustainable and high-performance technologies.

Mr. Andrew Rush Star-Catcher United States

Andrew Rush is the Co-Founder and former CEO of Made In Space, where he pioneered 3D printing technology for space. He is currently President of Star Catcher Industries, leading efforts to develop the first space-based power grid for satellites in low-Earth orbit. Rush also serves as a member of NASA's Advisory Council and is dedicated to promoting the long-term sustainability of space.



17:10 – 18:00 PANEL 10: Balancing the Needs of Science and Industry

Mr. Tim Stevenson Square Kilometre Array Observatory

Tim Stevenson is the Director of Assurance for the SKA Observatory – the world's leading radio astronomy observatory, now constructing telescopes in the remote areas of South Africa and Australia. He has been an engineer in the service of astronomy and space science since 1982, from the Giotto cometary encounters to the SKA. His responsibilities at the SKAO include Spectrum Management – one arena in which astronomical science overlaps with the needs of industry and wider society.

Ms. Shereen Zorba United Nations Environment Programme

Ms. Shereen Zorba is the Head of the Secretariat for the UN Science-Policy-Business Forum on the Environment and Chief of the Science-Policy-Business Interface at UN Environment. With over 18 years of UN experience, she has led initiatives to integrate science and policy for sustainability and previously established the UN Environment's News and Media unit. Her work was instrumental to building influential brands, such as the Emissions Gap Report and other flagships, as well as the UN Environment's Reporting Green initiative.

Moderator: Ms. Mila Alejandra Francisco Ferrada Permanent Mission of Chile to

the UN and International Organisations in Vienna

Mila Francisco is a career diplomat with 20 years of experience at the Ministry of Foreign Affairs. She has represented Chile at the UNODC, OAS, and COPUOS, and served as President of Chile's Diplomatic Association. She holds advanced degrees in history and political science from universities in Germany and Canada.

19:30 – 22:00 Dinner Reception at the Historic City Hall Bonn

hosted by Peru (pre-registration required! Business attire) Address: Altes Rathaus, Markt 2, 53111 Bonn (bus transfer for registered participants)

DAY 3, Thursday, 05 December 2024

8:00-9:00 REGISTRATION AND COFFEE

Session V: Implementation of the Pact for the Future

Master of Ceremony: Markus Woltran

Action 56 of the Pact for the Future reads: "We decide to: (a) Reaffirm the importance of the widest possible adherence to and full compliance with the 1967 Outer Space Treaty and discuss the establishment of new frameworks for space traffic, space debris and space resources through the Committee on the Peaceful Uses of Outer Space; (b) Invite the engagement of relevant private sector, civil society and other relevant stakeholders, where appropriate and applicable, to contribute to intergovernmental processes related to the increased safety and sustainability of outer space." The session will discuss how to meet these objectives at COPUOS.

9:00 – 11:00 PANEL 11 Continuing the Outer Space Dialogue: The Multilateral Way Forward on Space Governance

Niklas Hedman, Vice-Chair of the COSPAR and Former Acting Director of UNOOSA

Mr. Niklas Hedman brings over two decades of expertise in space policy and international space law. Hedman previously led the Committee, Policy, and Legal Affairs Section and served as Secretary of the Committee on the Peaceful Uses of Outer Space (COPUOS) and its subsidiary bodies. Currently, he serves as Vice-Chair of the COSPAR Panel on Planetary Protection. His extensive experience contributed to pivotal developments in space governance, particularly in policy and legal frameworks for international cooperation in outer space.

11:00-11:30 COFFEE BREAK

Closing

Master of Ceremony: Gina Petrovici

11:30 – 13:00 Mr. Andreas Mogensen ESA astronaut & ESA Astronaut Reserve

Andreas Mogensen is a Danish astronaut with the European Space Agency (ESA). He was the first Danish astronaut to fly aboard the International Space Station (ISS). Prior to joining ESA, Andreas served as a pilot in the Danish Air Force. He holds degrees in aerospace engineering from the Imperial College London and the University of Texas. His research interests include guidance, navigation and control of spacecraft during entry, descent and landing; mission analysis and design; and trajectory optimisation.

Mr. Madin Maseh Maldives Space Research Organisation

Representative Host UN World Space Forum 2025

Ms. Aarti Holla-Maini United Nations Office for Outer Space Affairs

Mr. Marco-Alexander Breit Federal Ministry for Economic Affairs and Climate Action

Mr. Marco-Alexander Breit is the Deputy Director General for Aerospace, Maritime Industry, and Security and Defence Industries. Prior to this role, he served as the Head of the Artificial Intelligence Unit at the Federal Ministry for Economic Affairs and Energy. He holds degrees in Political Science and International Political Economy from Heidelberg University and the Catholic University of Leuven.

& Mr. Walther Pelzer German Space Agency

13:00-14:00 LUNCH

- 13:00 17:00 Technical Tour to DLR and ESA Cologne (Pre-registration required! Bus transfer for registered participants)
- 14:00 18:00 Workshop on the Contributions of the Youth to Sustainable Space Activities organized by the European Center for Space Law (ECSL) and Space Generation Advisory Council (SGAC), Upper Conference Room

ALL DAYS



Poster Exhibition

Have a look! A poster exhibit in the atrium allows participants to present and exchange additional ideas and initiatives related to the conference theme "Sustainable Space for Sustainability on Earth".

SPACEBUZZ ONE

Ready for lift-off? Experience a breathtaking flight into space with the SPACEBUZZ ONE! Take a seat on the movable seats, put on VR goggles and experience a 15-minute virtual space flight. Exclusively for participants of the conference and UN campus staff. Information to book a time slot will be provided on site.

