

2 0 2 1 World SPACE FORUM

Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology



Federal Ministry Republic of Austria European and International Affairs

## United Nations / Austria World Space Forum Space4Climate Action

06 - 09 December 2021

Organized jointly by The United Nations Office for Outer Space Affairs (UNOOSA), The Austrian Federal Ministry for Climate Action, Environment, Mobility, Innovation, and Technology, Energy (BMK) The Austrian Federal Ministry for European and International Affairs (BMEIA)





	DAY 1: 06.12.2021				
Afternoo	Afternoon: Youth Session				
		The global population will soon reach 8 billion, and currently, we have the largest generation of young people in history. As we strive to create a better tomorrow, we need to listen to the future generation as an essential asset in ensuring that our pledges become a reality.			
14:00 - 16:00	Youth Session	The 2030 Agenda for Sustainable Development, with its 17 Sustainable Development Goals, is a call for action to promote prosperity while protecting the planet. Empowerment of young people is a cross-cutting element. In recent years, young people globally have taken an active role, demanding action by the policy and decision makers, private sector and other stakeholders. At the same time, they have led by example. This session will help further elevate these voices and			
		institutionalize the role of space in climate action with the inclusion of the youth perspective.			
16:00 - 17:00	Special Event	Exhibit opening in the Rotunda			
18:30 -	Official Welcome and opening Ceremony	Vienna City Hall			

	DAY 2: 07.12.2021					
	Morning					
		Acting towards 2030				
10.00	Keynotes	1. Building on the success of the World Space Forums in 2019 & 2020, the World Space Forum 2021 offers a platform for showcasing concrete national, space agency, private sector or civil society actions in support of the work of the United Nations, especially in the area of Climate Action				
10:00 - 10:30		2. The World Space Forum 2021 brings together space agency leaders, space experts and policymakers from regional and local institutions, private organizations, academic institutions, non-governmental and international organizations.				
		3. The World Space Forum is designed to function as platform of exchange for the different stakeholders from governmental representatives, civil society and academia as well as the private sector to jointly progress on the discussion on the future of Space.				





10:30 - 13:00	Special Event	Climate change is a cross-cutting issue affecting countries and communities globally. The civilization as a whole faces this challenge and only through joint effort and with buy-in from all relevant stakeholders and citizens we can make a different and halt the rapidly changing climate driven by human activities. All countries must come together to find efficient, replicable and scalable solutions that take into context the local, national, regional and global differences. Commitments under the Paris Agreement remain short of necessary levels and science, technology and innovation are not yet scaled to their maximum potential. This special event will seek to build on the important role of space in addressing this major crisis and raise ambition in placing it at the centre of decision and policy-making, and climate action.
Lunch Br	eak	
		Afternoon
14:00 - 15:30	Session One	Partnership, Coordination and CooperationThe most vital aspect for success in conceptualizing and expanding access to space benefits for climate action is international cooperation and partnerships within but also outside of the space community. Over the course of the 2020 WSF edition and previous events organization by UNOOSA, it was underlined that multi-stakeholder approach is the only means to effectively address global challenges. In the space sector, a range of multilateral, collaborative ventures exist striving to expand our understanding of the planet and its process and the impact of human activities on its spheres, and collect, generate and disseminate novel solutions for addressing climate change.
Coffee Break		
16:00 - 17:30	Matchmaking Session	<ul> <li>The contemporary space sector is defined by increasing diversity and number of both providers and users of space solutions enabling a wide range of opportunities to learn from one another and work together. Often, however, organizations, companies or individuals might find it difficult to connect with other stakeholders across different areas of space exploration and utilization.</li> <li>The World Space Forum 2021 provides a unique international networking and matchmaking opportunity to spark ideas and forge new partnerships between various actors.</li> <li>This session will serve as a food for thought for future development of dedicated capacity-building activities of UNOOSA in line with the collected needs and recommendations from both sides. Defining the needs and developing tailored solutions in the space sector ultimately benefits the broader community.</li> </ul>





DAY 3: 08.12.2021				
Morning				
		The providers perspective: Space Solutions		
09:30 - 11:00	Session Two	Sharing the same diagnosis for the causes, effects, and evolution of climate change is required for an effective, well-informed and multi-stakeholder climate action. Space assets have for long contributed to expanding our knowledge about the world around us and they have become irreplaceable tools for offering high resolution and broad-scale monitoring of our planet, providing global, uniform, sustained over years and regularly repeated data. More than half of the Essential Climate Variables depend on satellite measurements and numerical weather models across the world see an even higher dependence. Possessing empirical evidence for a better understanding and more accurate predictions of the evolution of climate, is a pre-condition for improved mitigation, adaptation and resilience measures and risk assessment.		
Coffee Br	reak			
11:30 - 13:00	Session Three	<ul> <li>The user perspective: What is needed?</li> <li>Users globally are conceptualizing new space solutions to sustain and advance the growth of space economy but also to create a better tomorrow. Food and water security, disaster management, renewable energy generation, preservation of nature, habitats and biodiversity, combating crime and many others - all areas strongly benefiting from our ability to launch and utilize hardware in Earth orbit.</li> <li>Under the leadership of UNOOSA, the only Office dedicated to space affairs in the UN system, the World Space Forum will provide a unique platform for stakeholders to gather and exchange on current and future activities in line with Space 4 Climate Action. The World Space Forum will facilitate sharing of best practices and cooperation between all relevant stakeholders in support of the Sustainable Development Goal 13 "Climate action".</li> </ul>		
Lunch bre	eak			
		Afternoon		
14:00 - 15:30	Session Four	World Space Forum Action ReportAs we have entered the Decade of Action, the World Space Forum seeks to step up its efforts and ensure that the benefits of space are brought to everyone, everywhere. By facilitating the exchange of best practices and more inter-agency collaboration in support of the SDGs, space exploration, science and technology can finally become more universally used as one of the key tools. Stakeholders are encouraged to submit reports on their activities and are invited to present them at the World Space Forum.		
Coffee Break				
16:00 - 17:30	Poster Session	Ignite Session (5 minutes, 20 slides, 15 seconds)		





	DAY 4: 09.12.2021			
Morning				
9:00 - 10:00	Matchmaking Session	<ul> <li>The contemporary space sector is defined by increasing diversity and number of both providers and users of space solutions enabling a wide range of opportunities to learn from one another and work together. Often, however, organizations, companies or individuals might find it difficult to connect with other stakeholders across different areas of space exploration and utilization.</li> <li>The World Space Forum 2021 provides a unique international networking and matchmaking opportunity to spark ideas and forge new partnerships between various actors.</li> <li>This session will serve as a food for thought for future development of dedicated capacity-building activities of UNOOSA in line with the collected needs and recommendations from both sides. Defining the needs and developing tailored solutions in the space sector ultimately benefits the broader community.</li> </ul>		
9:30 - 11:00	Session Five	Recommendations, innovative and new approachesTo successfully bridge the space capabilities gap, inclusiveness is key. Special focus must be devoted to involving non-spacefaring and emerging nations in legal, policy, scientific and technical developments related to space exploration and utilization. No less important is the necessity to involve youth, especially young girls, and women.With progress in mind, one cannot look at the space sector as an exclusive and self-reinforcing field. A holistic approach is required in order to maximize the contribution of space towards a better future. Integration of different types of technologies and fields, such as Artificial Intelligence, Machine Learning, Big Data, 3D manufacturing, Blockchain and many others, will amplify the transformative power of space activities. Such interplay allows for novel data mining and data analytics techniques with uses ranging from climate and ecosystem modelling, mapping of the Earth, space debris monitoring and alert signalling, or the integration of human perspectives and trade-offs into decision-making.		
Coffee Br	reak			
12:00 - 13:30	Closing Session	The way forward As we embark on the Decade of Action to deliver the global goals, space agencies all over the world continue to achieve remarkable ends in pursuit of the SDGs, including SDG 13 "Climate Action". UNOOSA, as the gateway to space in the United Nations, is well placed to bring this range of global activity into one place to encourage the coordinated direction needed to maximise impacts of such efforts.		
Farewell	Coffee			