



Event Concept Note

UNOOSA Expert Meeting: Making Space4Women in the Decade of Action on the occasion of the 2021 International Day of Women and Girls in Science

Date: 11 & 12 February 2021

Location: Meeting will be held virtually

Time: 13:00-17:00 (Vienna time) February 11th,
8:30-12:00 and 13:30-17:00 (Vienna time) February 12th

Background

Underrepresentation of women in STEM education and careers continues to persist in both developed and developing countries. Recent studies show that women are underrepresented as researchers in STEM fields in all regions, and less than 30% of the world's researchers are women¹. In the aerospace industry, women comprise no more than 20% of the workforce, a figure that has changed little in the last three decades².

Women's equitable participation in STEM education and careers is both an economic imperative and a precondition to support many of the Sustainable Development Goals. The changing nature of work is modifying existing jobs and creating new ones which require skills in science, technology, engineering and math. Space technologies are rapidly emerging as critical infrastructure for applications ranging from education to climate monitoring and represent great potential to support many of the SDGs. However, millions of women and girls are not receiving the education and career support necessary to be equal participants and beneficiaries of this changing landscape.

Several factors contribute to low participation rates among women and girls in space and STEM education and careers. These include: (1) gender stereotypes and bias in formalized education and societal expectations, (2) inequality in the labor market and wage gaps, (3) a lack of female STEM teachers in secondary school, (4) inadequate information and career guidance, and (5) a lack of appropriate role models³.

The Space4Women project and associated web portal was launched one year ago, on the 2020 International Day of Women and Girls in Science to address Sustainable Development Goal 5 and specifically to promote space technology to:

- Facilitate access to education and jobs in the space sector

¹ UNESCO, 2015. UNESCO Science Report. <https://en.unesco.org/unescosciencereport>

² J. David, 2014. Ratio of women in aerospace unchanged for 20 years. Herald Business Journal. <https://www.heraldnet.com/business/ratio-of-women-in-aerospace-unchanged-for-20-years>

³ A. Alam, 2020. Mapping gender equality in STEM from School to Work. UNICEF. <https://www.unicef.org/globalinsight/stories/mapping-gender-equality-stem-school-work>



- Provide policy-relevant advice and awareness-raising to institutions and governments on ‘Space for Women’ and ‘Women for Space’
- Facilitate capacity-building on access to and use of space-technology
- Promote a mentoring and networking platform to connect women and girls with role models in the field and career and educational resources.

Objectives and expected outcomes of the expert meeting

On the International Day of Women and Girls in Science in 2020, the Expert Meeting announced the creation of the Space4Women initiative and focused on awareness-raising about key issues related to gender equality in space and STEM, contributing factors to gender inequality in these fields, and implications on the attainment of the Sustainable Development Goals. While awareness-raising remains an important objective, the focus of this year’s meeting is on translating these findings to action.

Sessions in this event will discuss gender dimensions of key STEM and space-related challenges as well as existing and potential solutions. The discussion sessions are structured around the following objectives and should contribute to the continued development of the UNOOSA Space4Women initiative.

Objectives	Outcomes
Provide actionable, policy-relevant advice for enabling gender equality in space and STEM education and employment.	Document recommendations, best practices and advice for industry and organizations developing or implementing space technologies to work towards gender-equitable participation and benefits.
Promote access to STEM and space resources and career guidance, as well connections with role models in the field.	Expand and strengthen the professional network of women in space and related fields globally.
Enable progress towards SDG 5 in space and STEM fields at local, national, and international levels.	Share knowledge and highlight best practices for participants and leaders in STEM and space fields to translate to their communities.

- What are the main challenges and opportunities for gender-responsiveness in space as well as STI/STEM fields?
- What are the policy measures and good practices in the space arena to attract and retain women and girls, achieve gender parity and fully leverage women and girls’ potential?





- What are the challenges and opportunities for leveraging STI to better address the needs of and empower women and girls in the space sector?

Themes

The discussion will be guided by the following themes and questions:

1. *Addressing the pipeline problem: Inclusion and equity in space and STEM education and the workforce*

What resources and programs are effective at attracting and retaining women and girls in space and STEM fields?

Improving measurement and understanding of gender equality in STEM⁴ and space – how do we assess and track the impact of initiatives to increase women’s involvement in and benefits from space technologies? What metrics and indicators are meaningful for assessing gender equality in space and STEM?

2. *Space for women and women for space: Implications of rapid and emerging technologies*

Science and technology (including space sciences and technologies) has been identified by the GSDR as a “lever” for action which can catalyze change in the SDGs (including gender equality)⁵. However, without intentional design and inclusive policy, the adoption of new and emerging technologies has the potential to exacerbate and reinforce inequalities at a systemic level. How are women and girls currently benefiting from space technologies? Where do opportunities exist?

Who currently benefits from space technologies, and who is likely to benefit from them if current trends continue? How can space technologies be introduced and implemented so that they do not contribute to widening inequalities?

3. *Space4Women in its second year and beyond: Lessons learned and future directions*

What were the successes and opportunities for improvement from the first year of the Space4Women initiative?

⁴ UNESCO, 2017. Improving measurement of gender equality in STEM. <http://www.unesco.org/new/en/natural-sciences/priority-areas/gender-and-science/improving-measurement-of-gender-equality-in-stem/>

⁵ United Nations, 2019. Global Sustainable Development Report, 2019. <https://sustainabledevelopment.un.org/globalsdreport/2019>



What actions can Space4Women take to best support the mentor network and gender equality initiatives in space and STEM at local and national levels?

What relevant lessons were learned regarding the changes to education and work that resulted from the coronavirus pandemic?

Event Programme

Open Sessions – 11 February 2021

Date/ Time	Event	Details
Opening & Introduction		
13:00 - 13:30	Opening segment	- Introduction to the meeting - Objectives and expected outcomes
	Simonetta Di Pippo, <i>Director, United Nations Office for Outer Space Affairs</i> Markus Woltran, <i>United Nations Office for Outer Space Affairs</i>	
Thematic Segment 1: Space4Women in its second year and beyond: Lessons learned and future directions.		
13:30 - 14:30	Mentor presentations	- Presentations by 2020 Space4Women Mentors about their initiatives and participation in the network
	Vered Cohen Barzilay, <i>Out of the Box Science Accelerator</i> Ghina Halabi, <i>She Speaks Science</i> Thais Russomano, <i>InnovaSpace</i> Maruska Strah, <i>World Space Week</i>	
14:30 - 15:00: Break (30 min)		
Thematic Segment 2: Space for women and women for space: Implications of rapid and emerging technologies		
15:00 - 16:00	Panel discussion	- Panel discussion on gender dimensions and implications of rapid and emerging space technologies
	Shellie Brunswick, <i>Space Foundation</i> Ilaria Cinelli, <i>Aerospace Medical Association</i> Shimrit Maman, <i>Ben-Gurion University of the Negev</i> Ersilia Vaudo, <i>European Space Agency</i>	



Thematic Segment 3: Addressing the pipeline problem: Inclusion and equity in space and STEM education and the workforce		
16:00 - 17:00	Panel discussion	- Panel discussion on measures and actions to address gender equality in recruitment, retention, and metrics for women in STEM and space
	Zainab Azim, <i>G.I.V.E.</i> Cassie Lee, <i>Brooke Owens Fellowship</i> Alessandra Pacini, <i>InSpace</i> Rovani Sigamoney, <i>UNESCO</i>	

Closed Sessions – 12 February 2021

Session 1 (morning)

Date/ Time	Event	Details
8:30-9:15	Consultation and working session	- Designing best practices for space technologies and programs that incorporate contributions from women and diverse sources of knowledge systems, including indigenous knowledge
9:15 – 10:00	Consultation and working session	- Developing meaningful metrics and indicators for assessing gender equality in space and STEM
10:00 – 10:30: Break (30 min)		
10:30-11:00	2020 Space4Women Survey Results	- Closed presentation by UNOOSA to 2020 Space4Women Mentors of survey results
11:00-12:00	Interactive mentor discussion	- Closed discussion with 2020 Space4Women Mentors

Session 2 (afternoon)

Date/ Time	Event	Details
13:30-14:15	Consultation and working session	- Designing best practices for space technologies and programs that



		incorporate contributions from women and diverse sources of knowledge systems, including indigenous knowledge
14:15 – 15:00	Consultation and working session	- Developing meaningful metrics and indicators for assessing gender equality in space and STEM
15:00 – 15:30: Break (30 min)		
15:30-16:00	2020 Space4Women Survey Results	- Closed presentation by UNOOSA to 2020 Space4Women Mentors of survey results
16:00-17:00	Interactive mentor discussion	- Closed discussion with 2020 Space4Women Mentors