



Space Sustainability: Bridging Initiatives and Perspectives

When: Thursday, March 27, 2025 to Friday, March 28, 2025

Where: Lausanne, Switzerland

Agenda Outline and Concept (as of March 17, 2025)

Context:

2025 marks a pivotal year for space sustainability discussions, with several major events including the biennial ESA Space Debris Conference and the 7th Summit for Space Sustainability (co-hosted by Secure World Foundation). In this context, this workshop aims to bridge various ongoing initiatives and perspectives in the field of space sustainability. While building on educational foundations like the EPFL Space Sustainability course, the focus of this workshop is on addressing the critical challenges of space as a finite resource, including orbital congestion and collision risks, through a multi-stakeholder approach to sustainable practices.

Overview:

This collaborative one-and-a-half-day workshop is co-organized by the Secure World Foundation, the EPFL Space Center, and the EU COST network FOGOS, and in partnership with the ITU, the Swiss Federal Department of Foreign Affairs and the ERC project PlanetStewards. It will convene experts, policymakers, and social scientists to conduct a comprehensive analysis of existing space sustainability capacity-building initiatives. The event aims to evaluate current approaches, identifying where they complement each other and where gaps exist, while introducing fresh perspectives to advance the field. By bringing together diverse stakeholders, the workshop seeks to strengthen the connection between theoretical frameworks and practical implementation in space sustainability.

Objectives

1. Evaluate and compare existing capacity building initiatives
2. Identify synergies and gaps in current approaches
3. Incorporate social science approaches to the assessment of space sustainability
4. Develop viewpoints for future capacity building efforts

Expected Outcomes

1. Bridge between academic learning and practical initiatives in space sustainability
2. Identification of best practices and novel insights from interdisciplinary perspectives
3. Review of barriers and opportunities in information sharing around specific space sustainability issues, and synthesis of findings in draft outline for policy paper



Workshop Structure

Day 1 – Thursday 27th March: 14h00-18h00 – Room BC420 EPFL Campus

1400-1800: Session 1: Stakeholder Mapping- FOGOS team

The workshop will begin with a mapping exercise, focusing on identifying the different meanings and approaches to space sustainability among different actor types, including inter-stakeholder, national/regional, and inter-governmental. The mapping of these differences provides an overview of where conflicts or convergence may arise in the realm of policymaking in view of the various interpretations of space sustainability. It will derive a tentative scheme that serves as input to discussions on the second/main day of the workshop, highlighting the challenges in achieving a more inclusive approach to space sustainability addressing peace/ security, environmental concerns, and social equity.

1400 - 1445: Introduction and plenary discussion

- Brief introduction & aims of the stakeholder mapping exercise.
- A preliminary map based on previous work done, showing which governance instruments are prioritizing which sustainability aspects
- Discuss with participants and restructure as necessary

1445 - 1530: Deep dive on inter-governmental instruments

Participants are invited to move into three break-out groups, each focusing on one major aspect of space sustainability: (1) peace/security, (2) environmental concerns, and (3) social equity. Each break-out group proceeds with a 25 to 30-minute discussion.

- Focusing on inter-governmental instruments, participants will discuss within each break-out group which instruments are most and/or least effective in addressing the chosen sustainability aspect, why, and which instruments have synergies or contradictions.
- Plenary with a rapporteur from each break-out group to summarize in 5 mins.

1530 - 1545: Coffee Break

1545 - 1630: Deep dive on national and regional instruments

Participants are invited to move into three break-out groups, each focusing on one major aspect of space sustainability: (1) peace/security, (2) environmental concerns, and (3) social equity. Each break-out group proceeds with a 25 to 30-minute discussion.

- Focusing on national/ regional instruments, participants will discuss within each break-out group which instruments are most and/or least effective in addressing the chosen sustainability aspect, why, and which instruments have synergies or contradictions.
- Plenary with a rapporteur from each break-out group to summarize in 5 mins.

1630 - 1715: Deep dive on inter-stakeholder instruments

Participants are invited to move into three break-out groups, each focusing on one major aspect of space sustainability: (1) peace/security, (2) environmental concerns, and (3) social equity. Each break-out group proceeds with a 25 to 30-minute discussion.

- Focusing on national/ regional instruments, participants will discuss within each break-out group which instruments are most and/or least effective in addressing the chosen sustainability aspect, why, and which instruments have synergies or contradictions.
- Plenary with a rapporteur from each break-out group to summarize in 5 mins.

1715-1800: Overview & prep for the next day

Return to the overall mapping where organizers and participants jointly put together the three aspects of sustainability addressed by the different stakeholder types. Participants will jointly discuss the gaps and synergies across the instruments and, based on these findings, identify a set of challenges to be further discussed on Day 2.

18:30-20:30 : Aperitive-reception hosted by the Swiss Federal Department of Foreign Affairs at the Montreux Jazz Café @EPFL

Day 2 – Friday 28th March: 09h00-17h00 - Swiss Tech Convention Center

09:00-12:30: Session 2: From Theory to Practice

This session will begin with a set of presentations on several featured initiatives each focused on enhancing space sustainability capacity in one or more dimensions.

- [UNOOSA's Awareness-raising and Capacity-building Activities](#) on LTS Guidelines- Aarti Holla-Maini, Director of the United Nations Office for Outer Space Affairs (UNOOSA)
- [ITU Space Sustainability Portal](#) - Veronique Glaude, Senior Radiocommunication Engineer · International Telecommunication Union
- [European Space Agency's Space Debris Charter](#) and technical booklet - Marie Le Pellec, Space Sustainability Engineer · European Space Agency (ESA)
- EU commission - Vera Pinto, Policy Coordinator at Directorate General for Defense Industry and Space, European Commission
- ESPI capacity building - Alberto Rueda Carazo, Research Fellow at European Space Policy Institute (ESPI)
- COST Action "[Futures-Oriented Governance of Outer Space](#)" (FOGOS) network- Florian Rabitz, Kaunas University of Technology
- World Economic Forum initiatives - Nikolai Khlystov, Lead, Space Technology, C4IR Physical Technologies, World Economic Forum
- [ERC PlanetStewards](#) - Xiao-Shan Yap and Blake Harvey, Utrecht University
- [ERC GreenSpecies](#) - Martina Rusconi, Politecnico di Milano
- [Space Actors & Governance Explorer \(SAGE\)](#) - Cynthia Couette, Université Laval
- Secure World Foundation's [Handbook for New Actors in Space](#)- Ian Christensen, Senior Director, Private Sector Programs, Secure World Foundation
- Space Sustainability Rating - Emmanuelle David, Vice-President, Space Sustainability Rating Association
- EPFL Space Sustainability Hub, [EPFL Space Sustainability course](#) - Emmanuelle David, Executive Director, EPFL Space Center

30 Minute Coffee Break

These presentations will be followed by an interactive discussion to create cooperation and synergies between stakeholders, as well as to build bridges between the initiatives. We will ask how the featured initiatives may contribute to solving the challenges identified based on the mapping results of Day 1. The discussion will provide an overview of the gaps and synergies between the different initiatives and what might be the potential consensus on key priorities in the coming years. The discussion will be led by Johannes Schmied, FOGOS (Nord University Department for Research & Development as well as Nord University Business School).

12:30 - 14:00: Lunch (included in registration), preceded by Group Photo

14:00-15:30: Session 3: Barriers and Opportunities in Info sharing for Space Sustainability

In-order to make progress on addressing specific space sustainability challenges, improved information sharing practices are necessary. Drawing on the stakeholder mapping conducted in the



prior day this session would discuss perspectives on information sharing needs and challenges in two specific areas of space sustainability effort:

- 1400 - 1430: *Panel - Improving Space Traffic Coordination*: Benjamin Guyot, Spacetalk; Aurélie Gillet, EU-SST; Ian Christensen, Secure World Foundation (moderator)
- 1430 - 1500: *Panel - Environmental Impacts of Space Activities: Life-Cycle Assessment and Other Needs*: Marie Le Pellec, European Space Agency; Mathieu Udriot, EPFL; Ian Christensen, Secure World Foundation (moderator)
- 1500-1530: *Interactive Discussion*

Discussion would consider what might incentivize actors (both governmental and nongovernmental) to increase information sharing in these two areas of sustainability efforts, what might discourage them from doing so, the kind of purposes to be served through information sharing, and the principles that underpin these coordination or assessment efforts (e.g. sustainable for whom). Drawing on interdisciplinary perspectives, the discussion will also consider the differences between "data" and "info" sharing in this context (e.g. under which conditions should data become useful, actionable, and accessible due to ethical obligations). It would furthermore explore how the types of products and initiatives discussed in the prior sessions can be most useful in addressing these specific challenges.

15:30-16:00: Coffee Break

16:00-17:00: Session 4: Synthesis and Outcomes

Collaborative development of key findings and outcomes.

This event is based upon work from COST Action < FOGOS, CA CA23118 >, supported by COST (European Cooperation in Science and Technology). COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.