

SPACE FOR ARCTIC

Accelerating the use of space for climate action and civil protection

2-3 July 2024

Clarion Hotel The Edge

Tromsø, Norway

PROGRAMME



in collaboration with



ABOUT THE WORKSHOP

The Arctic is warming up to four times faster than the rest of the planet. The melting of sea ice, retreating glaciers, and thawing permafrost all threaten local lives and livelihoods and serve as a stark warning to all of us. Yet, amidst these challenges, opportunities emerge for sustainable prosperity.

Space technologies offer a powerful tool to address these challenges and unlock economic growth across the Arctic. ESA has been working for the past 40 years to monitor and protect Earth through space, including monitoring the fragile Arctic region. Together with Eurisy, the Norwegian Space Agency (NOSA), and the Norwegian Polar Institute (NPI), ESA welcomes you to the international workshop:

Space for Arctic: Accelerating the Use of Space for Climate Action and Civil Protection.



09:00 - 10:00 WELCOME

- 09:00 – 09:15 Welcome address by Christian Hauglie-Hanssen, Director General, NOSA
- 09:15 – 09:25 Welcome message from the Ministry of Trade, Industry and Fisheries of Norway (video)
- 09:25 – 09:30 Welcome message by Josef Aschbacher, Director General, ESA (video)
- 09:30 – 09:45 Setting the scene by Pascal Legai, Head of The ESA Crisis Response Office and Senior Security Adviser to the Director General, ESA
- 09:45 - 10:00 Keynote speech by Sara Olsvig, International Chair of the Inuit Circumpolar Council (ICC) (remote)

10:00 - 10:30

COFFEE BREAK
Flash Talks





10:30 - 12:15

SPACE FOR SUSTAINABLE ECONOMIC DEVELOPMENT

The Arctic faces unprecedented environmental challenges, yet it holds valuable natural resources like oil, gas, minerals, and fish, offering economic opportunities. However, resource exploitation must be approached responsibly to sustain the region's socio-economic and environmental integrity. Balancing economic development, environmental protection, and indigenous rights is crucial. Space technology offers tools for identifying resources, monitoring the environment, and supporting decision-making. This panel's aim is to explore how space technologies can promote sustainable development in the Arctic while ensuring responsible resource management and community well-being.

10:30 - 10:45 PRESENTATION

Michelle Hermes Policy Officer, EARSC, on the Sentinels Benefits Studies (SeBS)

10:45 - 12.15 PANEL SESSION

MODERATOR: **Annalisa Donati** Secretary General, Eurisy

SPEAKERS: **Ole Morten Olsen** Director of Enterprise Development and Innovation, NOSA

Benoit Mathieu Managing Director, OHB Sweden

Maja-Stina Ekstedt EVP Sustainability & Public Relations, K-SAT

Beatrice Iren Fløystad Leader, Saami Association of Norway (NSR)

Dr, Dwayne Ryan Menezes Founder and Managing Director, Polar Research and Policy Initiative (PRPI)

Mads Qvist Frederiksen Executive director, Arctic Economic Council (AEC)

12:15 - 13:45 LUNCH BREAK



13:45 - 15:30 SPACE FOR SAFETY

The Arctic's remote and harsh conditions pose diverse safety challenges, including search and rescue, navigation safety, environmental protection, and disaster management. Early warning systems are crucial for addressing emergencies and mitigating risks associated with Arctic travel, tourism, and commercial activities. Satellites equipped with search and rescue transponders swiftly detect distress signals, while satellite-based systems track vessel movements and monitor ice conditions, reducing the risk of accidents. Remote sensing satellites provide critical environmental monitoring and aid disaster response, facilitating efficient relief operations. Collaboration between Arctic stakeholders and the space industry ensures safety and security for the region's people and environment. Additionally, the ESA's Civil Security from Space programme (CSS) supports disaster management and emergency response through various satellite technologies, enhancing the competitiveness of participating states in civil security domains.

13:45 - 14:00 PRESENTATION

Chrisopher Topping

Acting Head of Civil Security from Space Programme Office & Rapid & Resilient Crisis Response Accelerator Lead, ESA on the Civil Security from Space Programme

14:00 - 15.30 PANEL SESSION

MODERATOR: **Isabelle Duvaux-Bechon**

Senior Advisor – Civil Security from Space/Rapid and Resilient Crisis Response, ESA

SPEAKERS: **Rosario Ruiloba**

Director of Business Development, Unseenlabs

Michael Byers

Canada Research Chair in Global Politics and International Law, University of British Columbia

Barbara V. Scarnato

Principal Consultant & Earth Observations Lead, DNV

Yannick Arnaud

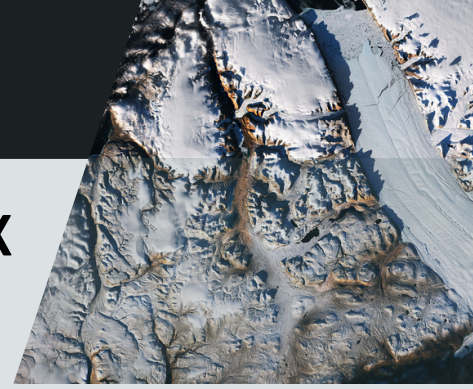
Project Manager, EU SatCen

Flavio Sbardellati

Governmental and Downstream R&I Manager. EU Agency for the Space Programme (EUSPA)

15:30 - 16.00 COFFEE BREAK

Flash Talks 



16:00 - 17:30 SPACE FOR CLIMATE AND ENVIRONMENTAL CHALLENGES

The IPCC Climate Change 2023 report highlights unprecedented global surface temperature increases since 1970, leading to rapid and significant environmental changes in the Arctic. These changes include ice melting, coastal erosion, and biodiversity depletion, impacting both indigenous inhabitants and ecosystems. While melting ice opens economic opportunities such as new shipping routes, it also poses threats like pollution and accidents. Urgent and concerted action is needed to mitigate these effects, protect the Arctic environment, and preserve life in this vital region. Space technology, exemplified by ESA's Earth observation missions like ERS, Envisat, and Copernicus Sentinel satellites, offers crucial monitoring and innovative solutions. Initiatives such as the upcoming Arctic Weather Satellite and Copernicus missions like ROSE-L and Crystal aim to enhance weather forecasting and support EU Arctic policy.

MODERATOR: **Rune Floberghagen** Head of Climate Action, Sustainability and Science Department, ESA

SPEAKERS:

Camilla Brekke	Director, Norwegian Polar Institute
Daniel Robert Leeb	Executive Mission Director / CEO, Iceland Space Agency
Tina H.P. Schoolmeester	Head of Programme, Polar and Climate, GRID-Arendal
Roar Skålin	Director General, Norwegian Meteorological Institute
Bojan Bojkov	Head of the Remote Sensing and Products Division in the Department of Technical Support and Science, EUMETSAT
Teresa Cunha	Senior Project Officer, Safety, Security and Surveillance Department, EMSA

17:30 CLOSING DAY 1 BY PASCAL LEGAI & COCKTAIL RECEPTION

09:00 - 09:25 Keynote

Johanna Davidsson Polar Explorer



09:25 - 09:45 RAPORTEURS CONCLUSIONS

09:45 - 10:15 COFFEE BREAK

Flash Talks

10:15 - 10:45 Φ -LAB NORWAY

10:45 - 12:15 POLICY PANEL

The panel will explore the challenges impacting the region, the opportunities arising across the Arctic, and how space can best address them. Based on the discussions addressed during the Day 1 panels, this panel will try to answer what policies and programmes exist to solve these challenges, and how they can be further developed to support local communities.

MODERATOR: **Bruno Reynaud de Sousa** Professor of International Law, University of Minho

SPEAKERS: **Laurant Jaffart** Director of Connectivity and Secure Communications (D/CSC), ESA

Rolf Skatteboe President and CEO, K-SAT

Morten Høglund Senior Arctic Official at the Ministry of Foreign Affairs, Chair of the Senior Arctic Officials, Arctic Council

Aleksandra Bukala Director of the Department of Strategy and International Cooperation, Polish Space Agency

Thomas Hoerber Professor, Head of the EU*Asia Institute, ESSCA School of Management



12:15 - 12:30 CONCLUDING REMARKS

Pascal Legai Head of The ESA Crisis Response Office and Senior Security Adviser to the Director General, ESA

KSAT VISIT AND RECEPTION



12:45 - 13:00

Travel to facilities.
The bus will depart from Kaigata 4 (100m from Venue) at 12:45.



13:00 - 16:00

Reception at KSAT facilities

Please ensure that you have registered for the visit. If you have not done so, please sign-up at the earliest opportunity.

Not signed up? Contact Henry Boeree (henry.boeree@eurisy.eu) as soon as possible!

Please also ensure that you bring with you a valid ID document, and have this ready as the bus arrives to allow you smooth access to the facilities.

Following the visit, buses will be provided to take attendees back to Tromsø (Clarion Hotel The Edge) or onwards to Tromsø Airport (TOS)

We would like to sincerely thank you for joining the Space for Arctic workshop. We hope you have found the discussions engaging and enlightening. On behalf of the entire organisation team, we wish you a safe return journey, and look forward to working with you again in the future.

