



2025 CEOS Chair Theme

DRAFT Version 0.0, September 2024

Unlocking Earth Observation for Society

This paper communicates the theme of the 2025 UK Space Agency CEOS Chair team to the CEOS community, serving as a focus for discussion leading to the 39th CEOS Plenary. In addition to these proposed headlines, the incoming CEOS Chair team will work closely with the JAXA SIT Chair team to ensure that ongoing CEOS Work Plan objectives are supported and continue – particularly those of the SIT Chair and 2024 CEOS Chair, CSA.

Vast and rapidly growing collections of global satellite Earth observation (EO) data offer immense societal value. However, bridging the gap to use such data to transform public services and grow data-fuelled businesses is an ongoing challenge faced by many countries.

The UK Government is undertaking its own national efforts to encourage better use of satellite EO data by the public sector, primarily through strategic initiatives such as the UK Space Agency's *Unlocking Space for Government* programme.

This is a common priority across CEOS agencies, as demonstrated by the CEOS New Space White Paper, as well as initiatives such as Connect by CNES; ESA's Business Incubation Centres; JAXA's Consortium for Satellite Earth Observation (CONSEO); among others, which are all examples of CEOS Agency efforts to boost economic, societal and environmental development through the application of satellite EO.

NASA's recent Earth Science to Action Strategy recognises that "we have more data and information available to us than ever before – so much so that decision makers cannot access or act on it fast enough, creating a gap between what's available and what people can do with it". One such example is found in the suboptimal use of satellite-based global maps for forest reference levels submitted to the UNFCCC (reference).

The UK Space Agency will use its CEOS Chair year to explore strategies to bridge the gap between satellite EO data and services, seeking to learn from the experiences of CEOS Agencies and identify what we might do better together as an international community to maximise the uptake of EO data for societal impact.

The UK Space Agency will support the JAXA SIT Chair's ongoing efforts to address the climate policy impact of EO data (GST lessons learned study; updated CEOS GST Strategy) and will also accelerate and elevate CEOS work on best practices for measuring methane emissions from space – as another means for unlocking the potential of satellite EO for society.

The UK Space Agency also recognises that, if exposed to the benefits of EO, the next generation will further drive uptake of the technology for service and applications. The 'CEOS In Schools' pilot seeks to inspire the next generation and provide students with a deeper understanding of the applications of EO and

international collaboration, and hopefully inspire careers in Science, Technology, Engineering and Mathematics (STEM) fields. It is hoped this programme will become a fixture within CEOS, to be taken on by future CEOS Chairs.

There are four headline areas of activity proposed for the UK Space Agency's term as CEOS Chair:

#1: Unlocking EO for Public Service

The UK Space Agency will promote discussions between CEOS Agencies on their national strategies to drive uptake, transform public services, and grow data-fuelled businesses. This will culminate with a dedicated side meeting at the 2025 SIT Technical Workshop (September 2025) during which agencies will share their activities and discuss what CEOS might do as an international community to better bridge the gap between data and services for the public sector.

A short paper presenting findings on initiatives from across the CEOS community will be presented for CEOS Principal awareness at CEOS Plenary 2025.

#2: Unlocking EO for the UNFCCC Global Stocktakes

The UNFCCC Global Stocktakes are an important opportunity to unlock EO information for the benefit of society, however EO's impact on the first GST in 2023 was below expectations. Understanding and building upon CEOS efforts is a headline priority for the JAXA SIT Chair team, which is working with WGClimate on a GST Lessons Learned Study. We have a few critical years to learn lessons from GST1 to inform CEOS' approach to the next GST process and ensure that EO data is sufficiently exploited in 2028.

The UK Space Agency will use its position as CEOS Chair to encourage sustained action on the recommendations of the CEOS GST Lessons Learned Study. The CEOS Chair will ensure there is sufficient opportunity for discussion throughout 2025 in preparation for UNFCCC COP30. This may include side meetings around WGClimate-22 (February 11-13, 2025; Harwell, UK), at the ESA Living Planet Symposium (June 23-27, 2025; Vienna, Austria) and influencing the COP30 agendas.

#3: Unlocking EO for the Global Methane Pledge

The CEOS Greenhouse Gas Task Team (GHG TT) is preparing best practices for space-based methane measurements. This activity is of high priority to the UK Government, and the need for these standards have been recognised across many agencies. The UK National Physical Laboratory (NPL) is co-leading the effort alongside NASA JPL, and UK Space Agency will drive this work forward during their term as CEOS Chair.

Such best practices, if appropriately promoted, are a key means to drive uptake of EO data. The UK Space Agency CEOS Chair, with UK government partners, will push for these standards for satellite-derived methane emissions to be adopted as the official method for measuring methane emissions in the framework of Global Methane Pledge, to which 158 countries as well as the European Union are now participating. The goal is to have these standards adopted through an update of the Global Methane Pledge at UNFCCC COP30 in Brazil, in November 2025.

#4: CEOS In Schools and Youth Summit

The UK Space Agency will pilot a CEOS mechanism to inspire global youth collaboration. The goal is to demonstrate to students (approximately 14–16-year-olds) how satellite EO can be used for the benefit of society – to solve global issues on climate, the environment, and disasters, and to highlight the power of international collaboration. Ten CEOS Agencies have already expressed interest in participating.

Across two international workshops, students will learn about EO applications for built and natural environments. To provide continuity with the 2024 CEOS Chair's theme, biodiversity has been chosen as one of the focus areas.

The UK Space Agency team is working with colleagues in the education sector to adapt existing materials, while ensuring focus is placed on international engagement and collaboration, which is unique among existing EO education programmes.

The programme will conclude with the first CEOS Youth Summit, which will be held ahead of the 2025 CEOS Plenary in Bath, UK. Students will have the opportunity to present and discuss their work with CEOS Principals. This is to give youth a voice and to inspire the Principles of CEOS to consider the next generation in its work plans.

An additional activity will involve maintaining an informal working group of participating CEOS members to explore how this strand of activity might be improved and continued by future CEOS Chairs.

The UK Space Agency Team look forward to discussing these plans with the CEOS community.