**Minutes V1.0**

**332nd CEOS SECRETARIAT MEETING**

Thursday, 20 February 2025

Chaired by UKSA

**Participants**

**AC-VC:** Barry Lefer

**Executive Officer Team:** Irena Drakopoulou, Lefteris Mamais

**CSA:** Frédéric Fournier, Carmen Marcu

**ESA:** Marie-Claire Greening

**EUMETSAT:**  Robert Husband

**GA:** Jonathon Ross, Maggie Arnold

**JAXA SIT Chair Team:** Osamu Ochiai, Satoshi Uenuma, Teppei Sato

**NASA:** Julie Robinson, Christine Bognar

**NOAA:** Katy Matthews

**SEO:** Dave Borges

**UKSA CEOS Chair Team:** Harshbir Sangha, Beth Greenaway, Niall Bradshaw, MattSteventon, Libby Rose, Harvey Jones

**WGCapD:** –

**WGCV:**  Cody Anderson

**WGClimate:** Wenying Su

**WGDisasters:**  Laura Frulla

**WGISS:**  Tom Sohre

1. **UKSA CEOS Chair Welcome and Action Review**

Harshbir Sangha (UKSA, CEOS Chair Team) welcomed participants to SEC-332. Harshbir reviewed the agenda, and no additions or changes were requested.

**Action Review**

An update was provided for the following open CEOS SEC action:

SEC-330-03: *COAST-VC co-leads to compile a summary of CEOS representation and activities at the UN Ocean Conference 2025, and share this information with CEOS SEC. Related meetings should be shared with the CEOS Executive Officer for addition to the CEOS calendar.*

* Matt Steventon (CEOS Chair Team) noted this action is now closed. COAST-VC has compiled a [list of events](https://docs.google.com/document/d/1CW93rklGgnsCHaS8ja-9cWGJyQgC1n3umj-QUCtrePU/edit?usp=sharing) for the information of the SEC.

1. **CEOS Chair Report**

Harshbir Sangha (UKSA, CEOS Chair Team) and Niall Bradshaw (UKSA, CEOS Chair Team) reported:

* Paul Bate (UKSA, CEOS Chair) provided an opening address for the [ESA BioSpace25 conference](https://biospace25.esa.int/) last week, and will also provide keynotes at the ‘Growing the Space Economy Together’ event (Glasgow, UK; 26-27 February, 2025) and ISRSE-40 (Farnborough, UK; 17-21 March, 2025).
* The CEOS Chair will soon send a letter seeking nominations for the role of CEOS Chair for 2027.
* Regarding the Global Methane Pledge (GMP), the Climate and Clean Air Coalition (CCAC) have asked UKSA, as 2025 CEOS Chair, to provide a short brief on the methane best practices work ahead of the Climate and Clean Air Conference (Brasília, Brazil; 16-21 March, 2025). The UK Department for Energy Security and Net Zero (DESNZ) will take up the role as CCAC Co-Chair following this event, enhancing their ability to further advocate for the best practices work.
* 125 students are set to attend the first CEOS in Schools international webinars (26 February, 2025) from the UK, Japan, South Africa, Australia, Canada, and Thailand. The webinars will focus on the use of space-based Earth observation for natural disasters and the urban environment, using local examples. There will be a second webinar in late March, focusing on biodiversity.
* The UKSA CEOS Chair and JAXA SIT Chair teams are arranging a SIT-40 side meeting on space agency relationships with national UNFCCC COP negotiators and delegates. A concept note will be shared with the CEOS Secretariat soon. All agencies will be invited to share their experiences to help identify barriers and opportunities.
* In response to SEC action 331-03 regarding a meeting to discuss the status of CEOS’ relationship with the GEO Secretariat, the CEOS Chair Team would like to ensure this is not limited to the Troika and will seek to gather viewpoints from across the CEOS community. Christine Bognar (NASA) supported this approach.

*Discussion*

* Jonathon Ross (Geoscience Australia) and Marie-Claire Greening (ESA) expressed support for the SIT-40 side meeting on space agency relationships with national UNFCCC COP negotiators and delegates and will plan to attend.
* Katy Matthews (NOAA) suggested that CEOS needs increased clarity on the outcomes desired from collaboration with GEO. She added that the new GEO Work Programme is set to be approved at the GEO Global Forum (Rome, Italy; 5-9 May, 2025), after which it could be a good time for renewed discussion between CEOS and GEO Secretariat leadership.

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| **332-01** | CEOS Chair Team to poll the Secretariat to find a time for a dedicated meeting to discuss experiences regarding CEOS engagement with GEO. Ahead of the meeting, Secretariat members will be invited to share any views and experiences to inform the agenda. Key areas for collaboration with GEO, including activities proposed for the new GEO Work Plan, should be considered. | **7 March 2025** |

* Marie-Claire Greening (ESA) thanked UKSA for the CEOS Chair’s intervention at BioSpace25 (Frascati, Italy; 10-14 February, 2025). The conference produced many useful recommendations which will inform the CEOS Biodiversity Study Team’s (BST) work in 2025.
* Matt Steventon (CEOS Chair Team) briefly reported some BioSpace25 observations shared with him by Gary Geller (NASA/JPL; BST Co-Lead). Gary noted that the workshop run by the CEOS Biodiversity Study Team yielded valuable information on users’ barriers to using EO data for biodiversity. The new GEO Ecosystem Atlas project manager, David Patterson, was also in attendance, and discussions between him and the Biodiversity Study Team members proved useful in understanding the way forward. Matt suggested the Biodiversity Study Team be invited to SEC-333 for a full report on outcomes from BioSpace25.

# SIT Chair Report

Osamu Ochiai (JAXA, SIT Chair Team) reported:

* Registration and logistics information for SIT-40 (Fukuoka, Japan; 8-10 April, 2025) have been circulated. More than 60 people are registered, with the majority specifying in-person attendance. The SIT-40 agenda was shared with the CEOS SEC mailing list just prior to SEC-332. The SIT Chair team welcomes feedback via email or comments and suggestions directly in the document at any time. The link will be distributed to all of the CEOS mailing lists and registered participants on March 3, 2025.
* SIT-40 will cover the SIT Chair’s two themes climate policy impact, which will include the endorsement of the UNFCCC Global Stocktake (GST) Lessons Learned study undertaken by WGClimate and confirmation of the plan for an update of the CEOS GST Strategy; and Greenhouse Gas observation coordination, including progress on the *Common Practices for Quantifying, Reporting, Validating, and Assessing Facility Scale Methane Emissions Using Remote Sensing*  and their presentation at UNFCCC COP 30, and the CEOS Carbon roadmaps. There are also numerous thematic topics requested by the CEOS Working Groups and Virtual Constellations.
* The SIT Chair Team attended WGClimate-22 (Harwell, UK; 11-13 February, 2025) to support WGClimate. Good discussions were held around the GST Lessons Learned document and support for UNFCCC. The SIT Chair has now circulated the document to the CEOS community for information and feedback.
* The SIT Chair Team is also continuing its efforts to increase engagement between IMEO and WMO’s Global Greenhouse Gas Watch (G3W).
* The UNCCD External Request review is currently progressing through Step-C. Responses from LSI-VC, the Biodiversity Study Team and the SDG Coordination Group will be compiled and presented to SIT-40, before a formal response to UNCCD is drafted.

**Atmospheric Composition (AC-VC) Report**

Barry Lefer (NASA, AC-VC Co-Lead) reported:

* AC-VC will hold a meeting alongside the 21st International Workshop on Greenhouse Gas Measurements from Space (IWGGMS-21) from June 9-13, 2025 in Japan. There will also be a meeting of the WGCV Atmospheric Composition Subgroup.
* Shobha Kondragunta (NOAA) is leading the development of a Roadmap for PM2.5 Observations, as a follow-on to the white paper “*Monitoring Surface PM2.5: An International Constellation Approach to Enhancing the Role of Satellite Observations”, which was* endorsed by CEOS in 2022.
* NASA is leading the development of a white paper titled *"Expanding the Geostationary Atmospheric Composition Constellation: Toward Global Coverage"*. This focuses on geostationary observations of air quality in the global south, and a first draft will be completed by the end of 2025.

## CEOS Executive Officer Report

Irena Drakopoulou (CEOS Executive Officer Team) reported:

* CEOS 2025-2027 Work Plan updates from Working Groups, Virtual Constellations and other groups are due by close of business, 20 February, 2025. The final draft version of the Work Plan will be shared with CEOS Principals on March 1, 2025, with a three week review period planned. The plan is to virtually endorse the Work Plan before it is presented for information at SIT-40 (Fukuoka, Japan; 8-10 April, 2025).
* To close action CEOS-38-01 (regarding an assessment of the level of activity of Virtual Constellations), a summary of findings has been compiled, and will be shared with the CEOS Secretariat soon for final feedback and amendments.
* CEOS SEC action 329-03 (regarding a review of CEOS Agency engagement and points of contact) is ongoing. All CEOS Agencies that were not present at CEOS Plenary 2024 have been contacted. Once feedback has been received, the CEOS website and corresponding mailing lists will be updated with up-to-date contact information.
* The Executive Officer team has met with the Institute of Space Studies of Catalonia and the Kenyan Space Agency (KSA) to discuss potential membership of CEOS. Other meetings are planned with the Philippine Space Agency, the ERATOSTHENES Centre of Excellence (Digital Innovation Hub for Earth Observation in Cyprus), and the Hellenic Space Agency.
* The opening plenary session at BioSpace25 (Frascati, Italy; 10-14 February, 2025) was moderated by the CEOS Executive Officer. The session included presentations from CNES, CSA, ESA, JAXA and NASA regarding new and planned EO missions that will support biodiversity. BioSpace25 also presented an opportunity for the Executive Officer to meet with the CEOS Biodiversity Study Team (BST) and the co-chairs of the GEO Biodiversity Observation Network, as well as the head of monitoring for the UN Convention on Biological Diversity (CBD). The terms of reference for the BST will be shared with the CEOS Secretariat for final input and review.
* The Executive Officer participated in the GEO Programme Board meeting, which focused on reviewing submissions for the post-2025 GEO Work Programme. The final proposed content will be presented to the GEO Executive Committee on 4-5 March, 2025.
* The Executive Officer has also volunteered for the GEO Task Force on Innovative Funding for the GEO Work Programme.
* UNESCO has sponsored the Executive Officer to participate in the Steering Committee meeting of the Global Ocean Observing System (GOOS) (Paris, France; 19-21 February, 2025). The primary reason is to present the work of COAST-VC, as well as to discuss CEOS and satellite data support for coastal and ocean monitoring more broadly.

*Discussion*

* Marie-Claire Greening (ESA) asked for clarification on the motivation for the Executive Officer to volunteer for the GEO Task Force on Innovative Funding for the GEO Work Programme. Irena will ask Steven Ramage to clarify this point.

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| **332-02** | CEOS Executive Officer to clarify the decision to volunteer for the Innovative Funding Task Team of the GEO Programme Board (via email to the CEOS Secretariat mailing list). | **7 March 2025** |

* Irena Drakopoulou (CEOS Executive Officer Team) clarified that once the CEOS 2025-2027 Work Plan inputs have been compiled the final document will be shared for review by the CEOS community with a one-week deadline before it is then shared with CEOS Principals on 1 March, 2025.

## CEOS Systems Engineering Office (SEO) Report

Dave Borges (SEO, NASA) reported:

* The CEOS SDG Coordination Group is actively working to finalise a response to the UNCCD external request and to prepare their inputs for the CEOS Work Plan revision.
* CEOS SDG Coordination Group perspectives, content, and EO Support Sheets have been included in the IAEG-SDGs *“Rescuing the SDGs”* paper. The paper has been adopted as a formal background document for the 56th Session of the UN Statistical Commission (New York, USA; 4-7 March, 2025). A virtual side event addressing this topic is currently ongoing, with Neil Sims (CSIRO) representing CEOS.
* A CEOS exhibition booth is planned for the GEO Global Forum 2025 (Rome, Italy; 5-9 May, 2025). An expression of interest for a CEOS exhibition booth has also been submitted for ESA’s Living Planet Symposium (Vienna, Austria; 22-27 June, 2025).
* CEOS-ARD and CEOS Interoperability Handbook inputs are under development for the [Cloud Native Geospatial (CNG) Conference](https://2025-ut.cloudnativegeo.org/) (Utah, USA; 30 April to 2 May, 2025).

## Working Group Impacts & Key Issues for Discussion

**WGCapD**

WGCapD was not represented at the teleconference but did provide a written report prior to the meeting.

**WGClimate**

Wenying Su (NASA, WGClimate Chair) reported:

* The joint meeting of WGClimate and the Greenhouse Gas Task Team was held last week, with 29 WGClimate and 12 GHG Task Team actions recorded. Participation from the UNFCCC Secretariat throughout the meeting was valuable to understand how CEOS and CGMS can best support their goals.
* Wenying thanked Susanne Mecklenburg and the ESA team for hosting the meeting and Mark Dowell (EC-JRC), Jörg Schulz (EUMETSAT), and others who stepped up to ensure the meeting ran smoothly in her absence.
* The Global Stocktake Lessons Learned study received positive feedback. The SIT Chair has now shared the document with the broader CEOS community for review, ahead of planned endorsement at SIT-40 (Fukuoka, Japan; 8-10 April, 2025).
* WGClimate will initiate a ‘UNFCCC COP Tiger Team’, led by WGClimate Vice Chair Vincent-Henri Peuch (ECMWF), to prepare for and coordinate joint CEOS and CGMS contributions to annual UNFCCC COP meetings, including the Earth Information Day and the Joint CEOS and CGMS SBSTA Statement. The team will also develop a comprehensive multi-year engagement strategy aligned with the phases of the GST process, including proactive preparation for party submissions.
* A new activity has begun on expanding the utility of the Essential Climate Variable (ECV) Inventory. Initial steps include defining application/stakeholder typology categories and mapping records in the inventory to these categories.
* The session at WGClimate-22 on national inventories was well received, with five countries presenting their approaches and challenges in using space-based data. The session was a great starting point for discussions, with some ideas discussed to improve support for national inventory teams who wish to use satellite data.
* WMO’s Global Greenhouse Gas Watch (G3W) requested a letter of support from the CEOS Chair and SIT Chair. If there are no objections, the WGClimate Chair will draft a letter on their behalf and share it with the CEOS Secretariat for review.

**WGCV**

Cody Anderson (USGS, WGCV Chair) reported:

* WGCV-55 will be hosted by ISRO, at the National Remote Sensing Centre in Hyderabad, India, from 8-11 July, 2025.
* The annual Joint Agency Commercial Imagery Evaluation (JACIE) Workshop (USGS HQ, Reston, Virginia, USA; 7-11 April, 2025) will be attended by the WGCV Chair and Vice Chair (Medhavy Thankappan of Geoscience Australia). Unfortunately, JACIE is held during the same week as SIT-40, so WGCV leadership is working to find an alternate representative for SIT-40.

**WGDisasters**

Laura Frulla (CONAE, WGDisasters Chair) reported:

* Emails have been sent to WGDisasters members to gather updates for the CEOS 2025-2027 Work Plan.
* The second meeting of the Early Warnings for All (EW4All) subgroup will be held on 11 March, 2025. The meeting aims to define leadership, organise the working format, and discuss the way forward.
* WGDisasters-23 (Catania, Italy; 25-27 March, 2025) will be hosted by the National Institute of Geophysics and Volcanology (INGV) and may include a field trip to Mount Etna.
* WGDisasters-24 (San Carlos de Bariloche, Río Negro, Argentina; September 2025) will be hosted by CONAE. Dates for the meeting are still to be decided.

**WGISS**

Tom Sohre (USGS, WGISS Chair) reported:

* WGISS-59 (Bangkok, Thailand; 24-28 March, 2025) registration is now open, and the agenda is being finalised. The primary focus for the meeting is finalising the draft of the Interoperability Handbook v2.0. As this is a cross-CEOS activity, all are encouraged to join the discussions and review the recommendations.
* WGISS-59 registration numbers are currently low. CEOS Secretariat members are asked to remind staff within their organisations to register (in-person or virtual).

## AOB

No items were raised.

## Adjournment

Harshbir Sangha (UKSA, CEOS Chair Team) thanked the participants of SEC-332. The next CEOS Secretariat meeting will be SEC-333 on 13 March, 2025. The plan for SEC teleconferences/meetings leading up to the 2025 CEOS Plenary is as follows (typically Thursday):

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| SEC-333: 13 March 2025  SEC-334: 8 April 2025 *(at SIT-40)*  SEC-335: 15 May 2025  SEC-336: 17 June 2025  SEC-337: 17 July 2025 | SEC-338: 21 August 2025  SEC-339: 9 September 2025 *(at 2025 SIT TW)*  SEC-340: 9 October 2025  SEC-341: 4 November 2025 *(at CEOS Plenary 2025)* |

The start time for all teleconferences will be 7 AM U.S. Eastern. If there are face-to-face meetings, the times will be advised closer to the dates.