

CEOS SEC-299 Report

Entity: SIT Chair Team

Prepared By: SIT Chair Team

Updates on issues raised during the last CEOS SEC teleconference

- SIT TW 2023 dates have been very problematic in avoiding conflicts with existing schedules. An email was sent to the community proposing Oct 17-19. So far no objections. The Thailand Plenary will be late November 2023 so this still allows time to address issues between the two meetings.

Issues requiring discussion/decision during current CEOS SEC teleconference

- None.

Other highlights, activities, actions, projects, collaborations

- Following the “New Space” session at the SIT TW and the decision to assemble a Task Team to further develop the ‘New Space & Future CEOS’ topics and initiatives, the New Space Task Team Terms of Reference (ToRs) are being drafted. A first draft version should be distributed to CEOS SEC members next week. The ToRs will be shared with CEOS ahead of the Plenary, and presented to the CEOS Principals participating in the Plenary, for endorsement.

Carbon & Biomass

- SIT Chair Team is cooperating with the AFOLU Roadmap Team leads and Lead Author, Ben Poulter (NASA), to forge the way forward on the Roadmap following the ESRIN workshop. A team call is scheduled for 6 December. It is likely that the GHG and AFOLU roadmaps will in due course need to demonstrate together consistently how CEOS overall will respond to the challenges of the Paris Agreement and the GST, incorporating bottom-up and top-down approaches to an eventual Monitoring and Verification System.
- The CEOS GST Portal has been updated ahead of the UNFCCC COP-27 meeting in Egypt. A number of dataset profiles have been updated. A new website section on ‘User Stories and Inspiration’ has been added with articles being contributed by GEOGLAM and SilvaCarbon. thanks to the dataset coordinators and to Ian Jarvis and Sylvia Wilson. All content is available in English, French and Spanish at ceos.org/gst.

CEOS-ARD

- The CEOS-ARD Oversight Group, LSI-VC, and representatives from WGCV and WGISS provided input on the draft OGC ARD SWG Charter and ISO NWIP. Funding and organisational delays on the OGC side means that the process will be delayed. We welcome the opportunity to take a bit more time and have further discussions between the CEOS and OGC teams to develop a strong foundation for any ARD standards that might follow.
- LSI-VC and the CEOS-ARD Oversight Group are working with interested parties (e.g., WGISS, WGCV) to formulate an action for CEOS Plenary to further define and develop the concept of a CEOS Interoperability Framework.
- CEOS-ARD has been represented at Pecora 2022, GEO Week (via the CEOS booth), and this week at the Very High-resolution Radar & Optical Data Assessment (VH-RODA) 2022 Workshop which is being held in ESA-ESRIN, Frascati (Italy), from 7 to 10 November 2022.

Upcoming meetings or events

- SIT-38 will be held at ESA ESRIN (Frascati, Italy) in the week of 27th March 2023. Tue 28th March will be assigned to side meetings and Wed 29th and Thu 30th March will be the main days for SIT-38.
- The SIT Technical Workshop will be held 17-19 October 2023 at ESA ESRIN (Frascati, Italy).

CEOS SEC-299 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Actions:

295-02	Marie-Claire Greening (CEO) to provide guidance to SST-VC on how to proceed with coordination between CGMS and SST-VC.	IN PROGRESS <i>Contact has been made with the SST-VC; the need is currently being framed</i>
---------------	--	--

The SST-VC are currently discussing and framing the need internally, and this needs to be completed before the CEO can assist / advise.

Recommend this action be closed.

GEO Week 2022 (18th GEO Plenary, 59th GEO ExCom, & side meetings)

GEO Week 2022 took place in Accra, Ghana from 31st October to 4th November 2022. The theme for the week was “Global Action for Local Impact”. The meeting was attended by CEOS leadership, represented by the Ivan Petiteville (SIT Chair) and the CEO, both of whom attended the GEO Executive Committee meetings and the GEO Plenary, as well as some of the side meetings and events. Additionally, an SEO team, led by Brian Killough and David Borges, ran a CEOS booth in the main exhibition hall throughout the week.

The GEO Plenary opened with a keynote address from the Vice President of Ghana, Dr Mahamudu Bawumia. In his address, he explained that a Ghanaian space policy and associated implementation plan had recently been agreed and a new “Ghana Space Agency” will hopefully be approved in 2023.

One new Member and three new Participating Organisations were welcomed into GEO this year:

- Democratic Republic of Congo
- Sociedad Futura
- Space for Climate Observatory
- West and Central African Research Network

Plenary sessions spanned the following topics:

- *Operational Services for Africa*. Including reporting from a 2-day side Symposium held before Plenary in the conference venue convened by AfriGEO. DE Africa was a key spotlighted success for knowledge transfer across the continent.
- *Earth Observation for Nature-based solutions*. Currently there is a general push to address global goals and targets on biodiversity as the RAMSAR COP in Montreal approaches in November 2022, also a lot of investment around nature-

based solutions and in ecosystem accounting. CEOS was represented by Lawrence Friedl (NASA) who presented our current proposal plans for a CEOS Ecosystem Extent Task Team.

- *Road to GEO post-2025.* A dedicated Working Group looking at GEO post-2025 has been set up and the group provided an interim report to Plenary. Initial considerations towards shaping the GEO Post-2025 Strategy include:
 - Increase equitable access to Earth Observations
 - Optimise the GEO Work Programme
 - Strengthen GEO governance
 - Mobilise new donors, the private sector and, investigate innovative financing
 - Strengthen communications and advocacy
- *Future-proofing National Adaptation Plans.* There was general agreement that GEO should continue, through its Work Programme, to provide technical support for the implementation of national / regional, sector-specific early warning systems in the context of NAP processes.
- *Collective Action on Oceans, Climate and Biodiversity.* GEO are promoting a new direction to integrate ocean, climate and biodiversity communities. In doing so, it would be important to avoid duplicating existing efforts under existing mechanisms.
- *The Way Ahead.* A GEO Expert Advisory Group (EAG) has reviewed the GEOSS concept to assess if it still serves the needs of the GEO user community and to see how it can be bettered. Three options for the future of GEOSS were considered, to:
 - Discontinue if GEOSS is to be found not to fulfil GEO's needs
 - Pivot where the GEOSS content is deemed valuable but that it is not being delivered within the best infrastructure
 - Enhance where existing infrastructure and partnerships were found to be adequate.

These three options would have cost saving / spending implications so the next steps in the process are to further evaluate the various options and to undertake a cost-benefit analysis.

- *Programme Board.* CEOS's membership to the GEO Programme Board (PB) has been approved for the next 3-year period (2023 – 2025).

Visit the GEO Week 2022 website

(<https://www.earthobservations.org/geoweeek2022.php>) for more details.

Upcoming meetings or events

- UNFCCC COP-27 (07 – 18 November)
- CEOS-36 & Side Meetings (29 November – 01 December)

An updated calendar of CEOS meetings / events, and some key external events that the community may find of relevance, is detailed in the following page. If any key meetings or events are missing from this calendar, or if any dates have changed since publication, please contact Marie-Claire.

CEOS and relevant key external Meetings and Events 2022 - 2023

2022

November				
	07-Nov-22	18-Nov-22	UNFCCC COP-27 (EID 09Nov22)	Sharm el-Sheikh, Egypt
	07-Nov-22	10-Nov-22	Very High-resolution Optical Data Assessment (VH-RODA) 2022	Frascati, Italy
	21-Nov-22	29-Nov-22	RAMSAR COP-14	Wuhan, China
	28-Nov-22	04-Dec-22	Oceania Geospatial Symposium	Nouméa, New Caledonia
	28-Nov-22	01-Dec-22	2022 Workshop on EO for Ecosystem Accounting	Virtual
	29-Nov-22	01-Dec-22	36th CEOS Plenary and Associated Side Meetings	Biarritz, France
December				
	12-Dec-22	16-Dec-22	AGU Fall Meeting 2022	Chicago, USA

2023

January				
	08-Jan-23	12-Jan-23	2023 AMS Annual Meeting	Denver, Colorado, USA
	30-Jan-23	01-Feb-23	WMO International GHG Monitoring Symposium	Geneva, Switzerland
February				
	02-Feb-23	02-Feb-23	CEOS / CGMS GHG Task Team meeting	Geneva, Switzerland
	06-Feb-23	17-Feb-23	UNCOPIJOS STSC 60th Session	Vienna, Austria
	07-Feb-23	08-Feb-23	GEO Programme Board Meeting #25	Geneva, Switzerland
	28-Feb-23	02-Mar-23	WGClimate-18	TBD
March				
	01-Mar-23	03-Mar-23	WGCAPD-12	Vienna, Austria & Virtual
	22-Mar-23	23-Mar-23	GEO Executive Committee Meeting #60	Geneva, Switzerland
	27-Mar-23	31-Mar-23	GEO Open Data and Open Knowledge Workshop (TBD)	ESRIN, Italy
	28-Mar-23	30-Mar-23	SIT-38 & Side Meetings	ESRIN, Italy
April				
	16-Apr-23	21-Apr-23	COSPAR 2023	Singapore
	17-Apr-23	20-Apr-23	38th Space Symposium	Colorado Springs, USA
	18-Apr-23	20-Apr-23	WGISS-55	Buenos Aires, Argentina & Virtual
	23-Apr-23	28-Apr-23	EGU General Assembly	Vienna, Austria & Virtual
	24-Apr-23	28-Apr-23	ISRSE-39	Antalya, Turkey
May				
	16-May-23	19-May-23	JURSE 2023	Heraklion, Crete
	31-May-23	09-Jun-23	UN COPUOS 66th Session	Vienna, Austria
June				
	05-Jun-23	09-Jun-23	WGCV-52	Frascati, Italy
	13-Jun-23	14-Jun-23	GEO Symposium 2023 (TBD)	Geneva, Switzerland
	15-Jun-23	16-Jun-23	GEO Programme Board Meeting #26 (TBD)	Geneva, Switzerland
	26-Jun-23	28-Jun-23	CGMS-51 Plenary	TBD, Japan
July				
	16-Jul-23	21-Jul-23	IGARSS 2023	Pasadena, USA
August				
September				
	05-Sep-23	06-Sep-23	GEO Programme Board Meeting #27	Virtual
October				
	02-Oct-23	06-Oct-23	74th International Astronautical Congress (IAC)	Baku, Azerbaijan
	03-Oct-23	05-Oct-23	WGISS-56	Paris, France & Virtual
	17-Oct-23	19-Oct-23	SIT 2023 Technical Workshop & Side Meetings	Frascati, Italy
November				
	06-Nov-23	17-Nov-23	UNFCCC COP-28	United Arab Emirates
December				
	04-Dec-23	08-Dec-23	GEO Ministerial Summit / GEO-19 and ExCom	Cape Town, South Africa

Legend:

	CEOS leadership participation required
	For information; CEOS leadership participation optional

CEOS SEC Report- 299

(October 2022)

Entity: WGDisasters

Prepared By: L FRULLA (CONAE)- H de BOISSEZON (CNES) – A EDDY (AG)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- Participation to UNOOSA/UN-Spider workshop next week (15-17th nov) for presentation of WG Disasters RO Demonstrator and of the joint WG Disasters / WG CapD initiative about RO for DRM decision makers (Dec 2022 workshop in El Salvador organised with CEPREDENAC + 2 other workshops planned in Africa and Asia in 2023).
- WGDisasters 19 will be held in March or April (dates TBD) 2023 in Argentina (Cordoba Province) at CONAE's Main Receiving Station at the invitation of CONAE. The poll was sent.
- There is the possibility to hold simultaneously WGISS and WGDDis, depending on the results of the poll for selection of the 2nd and 3rd week of March and the week of April 17th.
- WGDisasters 20 will be held on September (dates TBD) 2023 in Yellowstone, USA, at the invitation of USGS (Yellowstone Volcano Observatory).

CEOS SEC Report

(two pages max.)

Entity: WGISS

Prepared By: Makoto Natsuisaka (JAXA) and Tom Sohre (USGS)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- WGISS-EXEC meeting was held on Nov. 3. In addition to the regular agenda, issues related to CEOS Interoperability Framework and CEOS Engagement with Standard Organizations toward CEOS Plenary were discussed with representatives from LSI-VC and WGCV.
- The CEOS Jupyter Notebooks Day was held on Oct. 21st. Concepts and plans toward the Best Practice were shared and discussed with partners. In depth discussions are planned in Nov.
- Participated in CEOS ARD Oversight Group on Oct. 17th.
- TechExpo team had a monthly telecon on Nov. 2nd. Concepts of the AI/ML white paper are explained. After reviewing co-existing works by NOAA, UK, ESIP etc., table of the content and joint work with other organizations will be planned.
- Summary report on WGISS/WGCV joint session in WGISS-54 is being written for CEOS newsletters.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- EAIL (Earth Analytics Interoperability Lab; HPC platform developed on AWS by CSIRO/SEO) continuity has been discussed. CEOS COAST reported their use case (shoreline mapping) and expectation for the future use in WGISS-54, but Robert Woodcock who developed EAIL left WGISS and the continuity is facing the difficulty. Status and expectation for future use in other CEOS entities have been surveyed and the results will be input to CEOS plenary.

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- None

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

- None

CEOS SEC Report

(two pages max.)

Entity: WGCapD

Prepared By: Jorge Del Rio Vera (United Nations Office for Outer Space Affairs)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- Not applicable

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- Not applicable

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- Outputs

Summary of the status of Q3 deliverables:

- CB-20-07 Best Practice Guide to E-learning → Ongoing
- CB-20-12 Collaborative Feasibility Study → **Completed**
- CB-22-03 Webinar on satellite remote sensing for urban heat islands → **Completed**
- CB-22-02 Webinar on air quality data access and analysis from geostationary satellites → Course dates 11, 18, 28 October (Registration → [Accessing and Analyzing Air Quality Data from Geostationary Satellites](#))

Q4 Deliverables (10 deliverables, all of them in progress):

- CB-22-04 Earth Observations and Recovery Observatories: Capacity Building for Decision Makers
- CB-22-05 Indigenous Mapping Workshop 2022
- CB-20-23 AmeriGEO Contribution
- CB-21-03 Earth Observation Training, Education, and Capacity Development Network (EOTEC DevNet) Tools and Information Collection
- CB-22-10 Sentinel selected applications: practical training with Jupyter Notebooks on the ESA EO Platform
- CB-21-04 Zero Hunger MOOC
- CB-22-16 Indigenous Mapping Workshop
- CB-22-15 Third Vietnam School of Earth Observation (VSoEO 3)
- CB-22-09 Chesapeake Bay Feasibility Study
- CB-20-24 Remote Sensing Training in Africa

One outstanding deliverable from Q2: Space-based observations for Meteorological Hazards.

- Upcoming opportunities/milestones

WGCapD vicechair nomination

- Letter to CEOS principals drafted.

Metadata standards for learning objects:

- Meeting to take place towards the end of October, beginning of November. Date to be decided.

- Presentations

- Presentation of WGCapD during WGDisasters-18
- Presentation of WGCapD during WGISS-54

Upcoming meetings or events

WGCapD annual meeting

- Meeting to take place in Vienna, from 1-3 March. The meeting will take place in hybrid format.

Next WGCapD meeting will take place on 5 December at 13:00 UTC

Presentations

Presentation from AGEOS during WGCapD November monthly teleconference. Request from AGEOS to receive capacity-building on forests and biomass (see attached presentation).

Presentation from WGDisasters during WGCapD November monthly teleconference (see attached presentation)

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC Report

(two pages max.)

Entity: WGCV

Prepared By: Akihiko Kuze (JAXA) Philippe Goryl (ESA)

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- CEOS GHG task team (October 13) presentation on CAL-VAL 2022 activities for GHG sensors
- 17th Joint CEOS / CGMS WGClimate Meeting (October 21) Presentation on WGCV overview and recent activities
- ESA The Very High-resolution Radar & Optical Data Assessment (VH RODA) (Nov. 7) Presentation “CEOS Working Group Calibration validation WGCV for Newspace”
- SAR Subgroup, Synthetic Aperture Radar Workshop 2022 (CEOS SAR WGCV 2022) (October 18-21) at the Canadian Space Agency Headquarter Conference Centre

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- CEOS Plenary in France, the WGCV chair will report WGCV work summary and ask the endorsement of the vice chair nomination.

CEOS SEC-299 Report – November 2022

Entity: SEO

Prepared By: Brian Killough (NASA) and David Borges (NASA)

Issues requiring discussion/decision during CEOS SEC teleconference

- None

Updates on issues raised during the last CEOS SEC teleconference

- None

Upcoming meetings or events

- None ... we need a break !!!

Other highlights, activities, actions, projects, collaborations

- The SEO (Brian and Dave) attended the **Pecora Conference** in Denver, Colorado, USA on October 24-28. The SEO presented material on the ODC Sandbox and ARD (3 presentations). The meeting was very well attended and there was significant interest in CEOS ARD and the Open Data Cube. The SEO also attended a Pecora Workshop titled, *Envisioning the Future of International Earth Observations Collaboration*, led by USGS. Public and private stakeholders discussed the benefits and future of ARD, global EO data access in future cloud architectures, and addressing user needs through global collaboration.
- The SEO team (Brian, Dave, Libby, Oguz) attended the **GEO Plenary in Ghana** to support the CEOS exhibition booth and several side meeting sessions. The SEO participated in sessions on DE-Africa, Disasters, and post-2025 GEO. Attendance at the CEOS exhibition booth was significant. Libby did an outstanding job answering questions about CEOS and managing all of the details throughout the week ... thanks! The SEO will compile a booth report and "lessons learned" for the CEOS Plenary.