

CEOS SEC-289 Report

Entity: SIT Chair Team

Prepared By: SIT Chair Team

Updates on issues raised during the last CEOS SEC teleconference

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

- None

Other highlights, activities, actions, projects, collaborations

New Space

- SIT Chair Team will meet soon for a 3rd time with the representatives of the International Methane Emissions Observatory (inc UNEP) to explore possible new collaborative ideas between CEOS, GHGSat and UNEP. A relevant agenda item will feature on the SIT-37 agenda.

Working Teams

- By 9th February all 7 of the Virtual Constellations will have met with the SIT Chair team for an informal chat on progress, issues and obstacles. The compendium of notes from these calls will be shared for information of CEOS SEC.

CEOS ARD Oversight Group

- 13 volunteers have joined the CEOS ARD Oversight group , led by ESA (Ferran Gascon, Sentinel-2 Mission Manager).
- The Oversight Group met on 3 February. Participants: CEO, SIT Chair team, representatives from VCs (LSI, OST, OCR, P) as well as from WGISS and WGCV. Fruitful meeting, good brainstorming, with 5 concrete actions.
- Working to bring Terms of Reference for the Oversight Group to SIT-37.

Upcoming meetings or events

- SIT-37 is 29th - 31st March 2022. The meeting format is virtual. A week at a glance for the meeting will be shared with CEOS SEC for this week's meeting - soon followed by a draft agenda.
- SIT TW we hope will allow the first in-person CEOS meeting in more than 2.5 years. Currently we are planning for that outcome.

CEOS SEC-289 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Updates on issues raised during the last CEOS SEC teleconference (Dot points)

288-01	CEOS Executive Officer to draft an initial response letter from the CEOS Chair to WMO regarding the EC-PHORS request. The letter will acknowledge receipt of the request and let WMO know that it is under consideration by CEOS.	SEC-289
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Action 288-01 has been completed.

A letter acknowledging receipt of the request for a CEOS representative to be nominated to the Executive Council of EC-PHORS was signed by the CEOS Chair and sent to WMO on 4th February 2022.

288-02	WGCapD Chair to communicate with the CEOS Executive Officer regarding potential CEOS representation at the meeting of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS), which will take place from 7-18 February 2022.	28 January
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Action 288-02 has been completed.

The WGCapD Chair and CEO met to discuss UN COPUOS representation. It was agreed that WGCapD would seek to present EOTEC DevNet at the upcoming meeting of the Scientific and Technical Subcommittee (STSC) in February 2022. Additionally, it was agreed to explore the benefits of providing an official written statement to UN COPUOS Plenary in July 2022. CEOS has an observer seat at UN COPUOS.

Issues requiring discussion/decision during current CEOS SEC teleconference (Dot points)

CEOS-GEO Coordination meeting

The annual CEOS-GEO Coordination meeting will be held from 8th to 9th February 2022. Due to the timing of this meeting, which will take place after the submission date of this written report, a verbal report on the CEOS-GEO Coordination meeting will take place during the SEC telecon.

Progress of the CEOS Work Plan

Updates to the 2022-24 CEOS Work Plan, and the deliverables it informs, have been coming in, and the formulation of a full draft of the new three-year Work Plan is well underway. The following is the schedule for review, update and endorsement:

- 11th February 2022: Deadline for receipt of all reviews and updates to the Work Plan text and deliverables, including detailed definition of any new deliverables to be defined for the next Work Plan period.
- 18th February 2022: Full new draft of Work Plan to be sent out for final review by CEOS membership and CEOS entities
- 4th March 2022: Deadline for receipt of all final comments to the full Work Plan draft
- 7th March 2022: Final version of Work Plan to be sent out to CEOS Principals seeking their virtual endorsement ahead of SIT Plenary
- 21st March 2022: Virtual endorsement of 2022-2024 CEOS Work Plan
- 28th March 2022: SIT Plenary week

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)

None

Upcoming meetings or events

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

- CEOS – GEO Coordination meeting (8 – 9 February)
- GEO Programme Board #22 (22 – 24 February)
- WGCapD-11 (23 – 25 February)

Attachments

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

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

CEOS and relevant key external Meetings and Events 2022

Start Date	End Date	Meeting/Telecon	Location
January			
23-Jan-22	27-Jan-22	2022 AMS Annual Meeting	Houston, USA & Virtual
February			
7-Feb-22	18-Feb-22	UNCOPUOS STSC 59th Session	Vienna, Austria & Virtual
8-Feb-22	9-Feb-22	CEOS-GEO Coordination Meeting	Virtual
14-Feb-22	18-Feb-22	Ocean Carbon from Space Workshop	Virtual
22-Feb-22	24-Feb-22	GEO Programme Board Meeting #22	Virtual
23-Feb-22	25-Feb-22	WGCapD-11	Virtual
March			
14-Mar-22	18-Mar-22	AC-VC 18th meeting	Virtual
15-Mar-22	17-Mar-22	WGDisasters-17	Virtual
15-Mar-22	16-Mar-22	GEO Executive Committee Meeting #57	Virtual
21-Mar-22	25-Mar-25	WGClimate-17	Virtual
22-Mar-22	25-Mar-22	WGCV-50	Virtual
22-Mar-22	24-Mar-22	WGISS-53	Virtual
29-Mar-22	31-Mar-22	SIT-37	Virtual
April			
4-Apr-22	7-Apr-22	37th Space Symposium	Colorado Springs, USA & Virtual
May			
2-May-22	6-May-22	2022 GEO Symposium	TBD
18-May-22	20-May-22	WGClimate Gap Analysis Workshop	Darmstadt, Germany & Virtual
23-May-22	27-May-22	2022 Living Planet Symposium	Bonn, Germany
June			
1-Jun-22	3-Jun-22	GEO Programme Board Meeting #23	TBD
1-Jun-22	10-Jun-22	UNCOPUOS 65th Session	Vienna, Austria
6-Jun-22	11-Jun-22	XXIV ISPRS Congress	Nice, France & Virtual
15-Jun-22	17-Jun-22	CGMS-50 Plenary	Geneva, Switzerland & Virtual
27-Jun-22	1-Jul-22	UN Ocean Conference	Lisbon, Portugal
27-Jun-22	1-Jul-22	23rd GHRSSST International Science Team meeting	Barcelona, Spain & Virtual
July			
12-Jul-22	13-Jul-22	GEO Executive Committee Meeting # 58	TBD
16-Jul-22	24-Jul-22	COSPAR 44	Athens, Greece & Virtual
17-Jul-22	22-Jul-22	IGARSS 2022	Kuala Lumpur, Malaysia & Virtual
August			
September			
6-Sep-22	8-Sep-22	GEO Programme Board Meeting #24 (GEO PB-24)	TBD
8-Sep-22	9-Sep-22	LSI-VC meeting	ESRIN, Italy
12-Sep-22	16-Sep-22	SIT 2022 Technical Workshop	ESRIN, Italy
18-Sep-22	22-Sep-22	73rd International Astronautical Congress (IAC)	Paris, France
October			
23-Oct-22	27-Oct-22	Pecora Conference	Denver, Colorado, USA
31-Oct-22	4-Nov-22	GEO Week 2022/GEO-XVII and ExCom-59	TBD & Virtual
November			
7-Nov-22	18-Nov-22	UNFCCC COP-27	Sharm el-Sheikh, Egypt
29-Nov-22	1-Dec-22	36th CEOS Plenary and Associated Side Meetings	Biarritz, France
December			
12-Dec-22	16-Dec-22	AGU Fall Meeting 2022	Chicago, USA

Legend:

CEOS participation required
For information; CEOS Participation optional

CEOS SEC Report

(two pages max.)

Entity: WGDIs

Prepared By: P FERRIER, H De BOISSEZON (CNES), L FRULLA (CONAE), 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)

- The Volcano demo report has been received (action DIS-19-01)
- DIS-19-02 cancelled (update to Santorini Report on priorities for geohazard community) due to lack of interest following solicitation for input
- Seismic Demonstrator Report (action DIS-19-03) delayed to Q2 2022.
- Flood Pilot with GEO-LEO-SAR for areas of intensive flood risk. Report expected in March 2022 (DIS-20-06)
- Update to CEOS Workplan on track to be submitted 11 February
- Participation of the WGDIs to next EGU General Assembly 2022 (3–8 April 2022, in Hybrid mode)
- Biennial reports from the Iceland, Virunga volcanoes and Southern Andes Supersites received.
- Joint WG CapD – WG Dis activity planned, related to the Recovery Observatory Demonstrator and dedicated to Decision Makers in post crisis and recovery, after disasters
- WG Disasters to host special session at ISPRS in June 2022 – Innovative Applications of Satellite Data for Risk Management and Disasters (highlighting selected WGD activities)

Upcoming meetings or events

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

- WGDIs meeting # 17 scheduled from March 15 to March 17 (remotely)

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: WGClimate

Prepared By: Albrecht von Bargaen (DLR), Jeff Privette (NOAA)

**Updates on issues raised during the last CEOS SEC teleconference
(Dot points)**

Issues requiring discussion during current CEOS SEC teleconference

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)

- Continuous update of Use Cases; review process ongoing and finalized for around 15 cases; website publication by NOAA/NCEI ongoing
- Preparation of Gap analysis workshop related to Carbon Cycle started; built-up of Organization committee; format definition making use of mini-workshops at different time zones allowing higher attendance;
Because of organization issues workshop had been moved to May 18-20 in advance to Living Planet Symposium allowing hybrid format.
- Ongoing cooperation with GCOS:
 - GCOS science conference
 - Commenting of GCOS implementation plan

Upcoming meetings or events

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

- 18-20 May 2022: WGClimate gap analysis workshop wrt Carbon Cycle ECVs
Agencies invited to nominate experts
- 2nd GCOS Science Conference (17-19 October 2022)
Invitation for abstracts during March 2022 expected
- WGClimate meeting projected for March 22-24 and for June 2022

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: WGISS

Prepared By: Makoto NATSUISAKA (JAXA), Tom Sohre (USGS)

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)

- CEOS work plan 2022-2024 has been developed.
- Data Preservation and Stewardship Interest Group has been updating the “CEOS WGISS Data Management and Stewardship Maturity Matrix”. The updated matrix will be introduced and be discussed at the upcoming WGISS#53 and WGISS#54 meetings jointly with WGCV. A webinar on “How to use the WGISS Data Management and Stewardship Maturity Matrix” is also being prepared in collaboration with WGCapD.
- An AVHRR dataset recovery activity has been started with the goal to unfold and make accessible 1km AVHRR data from regional archives (possibly open and free).
- System Level Team meeting was held on Jan. 25. The interest of WGCapD in the STAC activity was transferred to the team.
- Attended to the CEOS ARD Oversight Group #1 meeting on Feb. 3.

Upcoming meetings or events

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

- WGISS-53 will be virtually held on Mar. 22-24, 2022. Presentations from other WGs, VCs, AHTs would be very welcomed.

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)

- 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)

Interactions:

- Reply prepared for the Secretary General of the World Meteorological Organization on EOTEC DevNet

Project status changes:

- "Earth Observations Toolkit for Sustainable Cities and Human Settlements Training Webinar". Part 3 of the webinar was planned for 10 February. 700 people would attend the training in both Spanish and English languages.
- ESA reported on the training in the context of SELPER (Latinamerican society of experts in remote sensing and geographic information systems). Report attached
- CSA reported on the training for indigenous people carried out in Canada with support from NASA. Report attached.
- Finalizing the deliverables for workplan 2022-2023. Report to be submitted to CEOS SEO by 11 February.

Upcoming meetings or events

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

- WGCapD annual (WGCapD-11) meeting to take place 23-25 February (13:00-16:00 UTC) virtually. Regional meetings to take place the day before:
 - Asia Pacific (5:00 UTC)
 - Americas (20:00 UTC)

- Africa (13:00 UTC)
- Europe (11:00 UTC)

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)

- To consider nominations for the WGCV Vice Chair (October 2022 to October 2024). Presentation by candidates in March (WGCV-50), final vote and selection in October (WGCV-51).

Upcoming meetings or events

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

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- Reviewed the CEOS work plan and deliverables and updated.
- WGCV-50: March 22-25, 2 hours each day, 12:00 UTC (virtual)
- WGCV-51: October 2022, in Tokyo. The joint meeting with WGISS (proposing).

CEOS SEC-289 Report – February 2022

Entity: SEO

Prepared By: Brian Killough (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

Other highlights, activities, actions, projects, collaborations

- The SEO has initiated a project with Sinergise to integrate the **Open Data Cube (ODC)** with the **Sentinel Hub**. This will allow ODC users from around the world to develop or test their algorithms on the Sentinel Hub infrastructure and easily use all of the Copernicus datasets.
- The SEO has been collaborating with Gary Geller (NASA JPL, GEOBON) and Ernst & Young (EY) on the 2022 Data Challenge (coming in March 2022). This project will use CEOS satellite data products (S2, Copernicus DEM, land cover) from the MS Planetary Computer to develop machine learning species distribution models for frogs in Australia, Costa Rica and Africa. This project is a great example of our data supporting the topic of **biodiversity**.
- The SEO has initiated a collaboration with Alyssa Whitcraft (GEOGLAM) to demonstrate soil organic **Carbon stocks and flux estimates** for agriculture lands using CEOS time series satellite data and the Open Data Cube (ODC). The resulting Jupyter notebook algorithms would be open and available to support AFOLU and SDG 15.3.1.
- The SEO is investigating primary AFOLU land cover datasets and developing sample analysis products to support the **Global Stocktake (GST)** initiative. To date, demo land cover products have been developed for 10m ESA World Cover, 100m ESA Copernicus, 300m ESA CCI and 500m NASA MODIS. Initial results suggest interoperable use of these datasets should be avoided as there are large differences in classifications and area estimates. In addition, higher resolution datasets are only recent and lower resolution datasets must be used for past records. In all cases, country-based users should do validation testing.