

CEOS SEC-288 Report

Entity: SIT Chair Team

Prepared By: SIT Chair Team

Updates on issues raised during the last CEOS SEC teleconference

- Follow-up on action 287-01

287-01	SIT Chair Team to suggest a discussion for the CEOS-GEO bilateral meeting regarding CEOS contribution to the development of the GEO Strategy 3.0.	31 December 2021
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The topic has been added to the draft agenda of the CEOS-GEO Bilateral meeting (see “Upcoming meetings or events”).

Issues requiring discussion/decision during current CEOS SEC teleconference

- None

Other highlights, activities, actions, projects, collaborations

Working Teams

- Planning for the next round of ‘VC Chats’ has started, with calls being planned for the coming weeks.

CEOS ARD Oversight Group

- The team is being assembled (current list below). Six of the seven VCs are currently represented; discussions ongoing with AC-VC. Team will meet in late January (exact date TBD) and establishing terms of reference will be one of the initial tasks.

Ferran Gascon (Lead)	SIT Chair Team
Jonathon Ross / Andreia Siqueira	LSI-VC
Steve Labahn	LSI-VC
Peter Strobl	LSI-VC
Maycira Costa	OCR-VC
Mark Higgins	OST-VC
Raj Kumar Sharma	OSVW-VC
Chris Kidd	P-VC
Matthew Steventon	Secretariat
Ed Armstrong	SST-VC
Medhavy Thankappan	WGCV
Philippe Goryl	WGCV
Makoto Natsuisaka	WGISS
Marie-Claire Greening	CEO

Upcoming meetings or events

- SIT-37 is fixed for the week of 28th March 2022. The decision on in-person vs virtual or hybrid format is yet to be taken pending clarity on the pandemic circumstances locally and with CEOS member agencies. If virtual, the meeting will be held from 29 to 31 March 2022. For the time being, considering the trend of the pandemic in Europe, a virtual meeting is the most likely option.
- CEOS-GEO Bilateral: the meeting will take place on 8-9 February, and will be co-chaired by the CEOS Strategic Implementation Team (SIT) and the GEO Secretariat (GEOSEC). A draft agenda has been prepared by the CEO and consolidated with comments from both the SIT Chair team (ESA) and the CEOS Chair team (CNES). It is now being with the GEO Secretariat for review.

CEOS SEC-288 Report

Entity: CEO

Prepared By: Marie-Claire Greening

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

None

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

Planning and Agenda for the CEOS-GEO coordination meeting

Planning for the annual coordination meeting between CEOS and GEO is underway. The meeting will be held virtually for the second year in a row due to continuing COVID restrictions. The meeting will take place over two days from 8th to 9th February 2022, with 3 hours of discussion time each day.

A preliminary agenda (v0.4) was circulated to the SEC ahead of this meeting, on 10th January 2022, and CEOS SEC members have been asked for feedback on the suggested agenda items and to identify any further items that may benefit from focused discussion time with GEO. Draft v0.4 includes a set of carefully selected topics that have been considered to potentially benefit from focused discussion time with GEO. The plan is for CEOS and GEOSEC experts to be invited to lead specific topical agenda items, and the draft agenda includes some ideas for suggested named leads that could be invited to attend the coordination meeting at designated topical slots in the agenda. Please let Marie-Claire know of any further feedback or comment no later than CoB Friday 14th January 2022, after which the agenda will be finalised with GEO and session leads will be invited.

Progress of the CEOS Work Plan 2022-2024

The CEOS Work Plan covers a forward-looking three-year period, and an annual review and update of the plan takes place at the beginning of each year. The aim for this year's annual update, which will ultimately become the 2022-24 CEOS Work Plan, is that it be endorsed virtually just before SIT-37 at the end of March. The following is the schedule for review, update and endorsement:

- 8th January 2022: Review and update requests sent to all entities who are responsible for each section of the Work Plan and to those specifically responsible for the deliverables it informs.
- 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

EC-PHORS – external request from WMO

On 23rd December 2021, the CEOS chair received an official letter from WMO inviting CEOS to nominate a representative to the Executive Council on Polar and High Mountain Observations, Research and Services (EC-PHORS).

CEOS has a very clear and well-defined procedure for assessing external requests of this nature as set out in the [CEOS External Request Process Paper](#). This process incorporates a linear 4 step decision tree (from STEP-A to -D). The first step (STEP-A) necessitates that the CEOS chair, SIT chair and CEO assess if certain basic criteria have been met, as defined in the process paper (see p.3, section 3 of the *CEOS External Request Process Paper*). In consultation with the CEOS Chair, SIT Chair and CEO, CEOS has undertaken this initial assessment and it was concluded that this external request does indeed meet all the necessary baseline criteria. The assessment of the request is thus now moving on to STEP-B of the process (see p.3 section 4 of the *CEOS External Request Process Paper*).

The first action in STEP-B is to share this letter with the CEOS SEC, which was done on 11th January 2022, to seek any initial reaction and guidance. It is clear that Earth observations over Polar and High Mountain regions are a critical element in weather predictions and in climate change studies. It may well be that already within the CEOS membership there are existing representatives to EC-PHORS, or maybe there is a desire within the WGs to become more involved. These are topics to be included for discussion and consideration in STEP-B of the process as we reach out to relevant CEOS members and entities. The SIT chair and the CEO invite any comment from the SEC at any time during this process. Of course, in considering any new external request, it is always worth remembering that CEOS is a ‘best efforts’ organisation and as such has finite resources available to it. This is why there is such a defined and considered procedure in place to assess external requests of this nature.

Any insights or reactions to this external request from WMO / EC-PHORS are welcome during this assessment process, but no later than Friday 4th February. Email response is invited to the SIT Chair, Ivan Petiteville (Ivan.Petiteville@esa.int), &/or the CEO, Marie-Claire Greening (marie-claire@greeningconsulting.co.uk).

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 Troika (18 January)
- GEO Programme Board #22 (1 – 3 February)
- CEOS – GEO Coordination meeting (8 – 9 February)
- WGClimate Gap Analysis Workshop (22 – 25 February)

Attachments

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

Updated CEOS calendar of meetings / events attached to the SEC agenda. If any key meetings or events are missing from the calendar, please contact Marie-Claire.

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)

- SLT (System Level Team) telecon was held on Tue December 21st, 2021. The activities related to WGISS connected data assets, CWIC, FedEO, IDN and dMMT were reported. Discussions on “CEOS Best Practices for Service Metadata and Discovery” were made and the need for a common implementation of STAC, which could be an area of cooperation with GEO, was reminded.
- WGISS EXEC meeting was held on Jan. 11th, 2022. The update of the CEOS Work Plan 2022-2024 was requested to the chairs of the WGISS interest groups. The session coordination for the WGISS-53 was started.

Upcoming meetings or events

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

- WGISS-53 formally planned as a face-to-face meeting will be held for Mar. 22nd-24th, 2022 as the virtual one due to spreading of the omicron mutant for COVID-19. A joint symposium with WGCV in the meeting will be postponed to WGISS-54 as a result of the discussion with WGCV.

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)

- Participation of newly created space agencies in CEOS: Several countries have created space agencies recently. Requirement for becoming a CEOS Member or Associate are
 - Member:
 - Governmental organizations that are international or national in nature and are responsible for a civil space-based Earth observation program currently operating, or at least in Phase B (detailed design phase) or equivalent of system development, are eligible for membership in CEOS.
 - Associates:
 - 1. Governmental organizations that are international or national in nature and currently have a civil space-segment activity in Phase A/pre-Phase A (concept feasibility and definition phase) or equivalent of system development, or a significant ground-segment activity that supports CEOS objectives
 - 2. Other existing satellite coordination groups and scientific or governmental bodies that are international in nature and currently have a significant programmatic activity that supports CEOS objectives

New space agencies can become as associate (depending on the definition of *significant*). WGCapD would like to propose their participation in WGCapD so they can:

- Support the process of training need assessment
- Benefit and contribute to capacity-building efforts of WGCapD members
- Get a first contact with CEOS so they become associates and members in the future.

For discussion/decision: WGCapD would like to engage with new space agencies for the aforementioned purposes.

- Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space will take place from 7 to 18 February. CEOS is an observer to the Committee and can:
 - Make a statement
 - Potential agenda items:
 - 6. Space technology for sustainable socioeconomic development.
 - 7. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth’s environment.
 - 9. Space-system-based disaster management support
 - Make a technical presentation

WGCapD would like to showcase EOTEC DevNet during the meeting to increase the reach of the network.

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:

- Letter received from Secretary General of the World Meteorological Organization in support of EOTEC DevNet (letter provided as Annex)

Project status changes:

- Working in the closure of the deliverables for Q4 2021. Collecting reports from members. Two (out of three) deliverables for Q1 2022 have been completed.
- Finalizing the deliverables for workplan 2022-2023. Report to be submitted to CEOS SEO by 11 November.

Upcoming meetings or events

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

- WGCapD annual (WGCapD-11) meeting to take place 23-25 February or 28 February-2 March. An e-mail is being drafted to request participation from CEOS members that are not regularly taking part in WGCapD meetings

Attachments

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

- Letter from WMO SG



Our ref.: 21881/2021/I/SSU

Dr Selma Cherchali
CEOS 2022 Chair
Head of Earth Science Programme
CNES – Science, Applications and Innovation
Directorate
18 Avenue Edouard Belin
31401 Toulouse cedex 9
France

16 December 2021

Subject: Letter of Support for the Committee on Earth Observation Satellites of the Earth
Observation Training, Education, and Capacity Development Network (CEOS EOTEC
DevNet) Project

Dear Dr Cherchali,

The World Meteorological Organization's (WMO) long-term goals and strategic objectives embrace a comprehensive Earth-system approach, with a vision to ensure sustainable development through the best possible services, whether over land, at sea or in the air. WMO is therefore looking forward to strengthening its engagement with the satellite data providers to ensure the benefits of the space-based observations are maximized.

To achieve the above goals WMO engages with its Members in the Regional Associations to establish the regional requirements for satellite observations and training. Furthermore the WMO Rolling Review of Requirements (<https://community.wmo.int/rolling-review-requirements-process>) captures the user requirements across all application areas in the WMO Observing Systems Capability Analysis and Review Tool (OSCAR) (<https://www.wmo-sat.info/oscar/>). Specifically, WMO supports capacity development and training through the WMO Education and Training Programme and the WMO-CGMS Virtual Laboratory for Training and Education in Satellite Meteorology (VLab).

The CEOS initiative EOTEC-DevNet addresses an important need for the coordination of various capacity building, outreach and training activities across the full value chain from space-based observations to down-stream services and end-users.

WMO is therefore supportive of this initiative and in a strong position to contribute not only through the establishment of the user requirements and training, but also for the engagement with the National Meteorological and Hydrological Services (NMHSs) as well as other relevant entities e.g. as covered by the WMO Disaster Risk Reduction Programme, the Flash Flood Guidance System and the Education and Training Programmes.

I wish you all the success with this initiative and looking forward to hearing more on the achievements in the future.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Zhang', written in a cursive style.

Dr Wenjian Zhang
for the Secretary-General

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).

Upcoming meetings or events

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

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- 3rd GHG sensors (OCO-TROPOMI-GOSAT) Calibration meeting, January 7, 2022 (Virtual) (related CEOS deliverable CV-18-02: Greenhouse gas reference standards for interoperability AI due 2022 Q1) (next meeting on April 14). Joint vicarious calibration campaign is scheduled between June 8-13 at Railroad Nevada.
- WGCV-50: March 21-24, 2022 will become virtual considering the quarantine condition in Japan. The joint meeting with WGISS (FtoF) will be postponed.

CEOS SEC-288 Report – January 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

- **David Borges (NASA)** has joined the SEO team. He has extensive experience in CEOS and has supported the Working Group on Disasters for several years. David will be attending future SEC meetings and major CEOS meeting in this new role.
- The SEO hosted the first meeting of the new **SDG Coordination Group** on December 9. Another meeting is planned in the coming month. The group is working on a path forward to complete key deliverables and organize information on the CEOS website. A more formal report will be prepared for the next SIT meeting.
- 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 (coming soon). Further work will include DE-Africa to conduct a country-based use-case.
- The SEO continues to work with the **CEOS Working Group on Disasters** and the **International Disasters Charter** to discuss the potential for the **Open Data Cube (ODC) Sandbox** to support flooding disaster activations. This tool would allow users to take advantage of Sentinel-1 radar data to view time series water extent and flooding recovery. Documentation and training tools are planned for development in the coming months and will be added to the CEOS Work Plan.