CEOS SEC-305 Report

Entity: SIT Chair Team

Prepared By: SIT Chair Team

Updates on issues raised during the <u>last</u> CEOS SEC teleconference

- None.

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference

- None.

Other highlights, activities, actions, projects, collaborations

Carbon & Biomass

- WMO will report on their GHG initiative at SIT-38.
- SIT Chair team will provide inputs for EO Handbook on GST strategy, IMEO engagement and more
- Simon Stiell of UNFCCC SEC invited to address SIT-38. No response as yet.

<u>CEOS-ARD</u>

- OGC ARD SWG approval process continuing. CEOS team continues to monitor and engage. Will consider whether a CEOS person would be a good candidate for the open co-chair position.
- CEOS-ARD OG Secretariat is participating in the planning calls for <u>ARD23</u> an industry led workshop on topics related to EO data, ARD, interoperability, access and discoverability, the cloud, etc. We will ensure CEOS Agencies are well represented and informed. There will be a CEOS-ARD session.
- CEOS-ARD Sec joined the WGClimate-18 meeting last week. WGClimate is considering a representative to the CEOS-ARD OG to explore opportunities. Open question whether the CEOS-ARD concept applies to the climate domain. Needs to be end user driven. WGClimate/CEOS-ARD OG will consider a preliminary assessment of some datasets/CDRs in the ECV Inventory against the existing CEOS-ARD Product Family Specifications. Also consider whether there is a need for new PFS for other climate related products. The focus of CEOS-ARD is enabling the non-expert user.

CEOS New Space

- NSTT Meeting on March 6. Discussed status of 'think piece' document which provides some context, background and scope to the CEOS NSTT's activities. This will now be finalised and submitted as a supporting reference document for SIT-38.
- Work continues on the NSTT Activities Working Document with each section now delegated to various CEOS groups. The target is to present this document to the 2023 CEOS Plenary.

SIT-38 Preparations

- Progress draft agenda (dated 7 March) circulated to SEC as an update.
- Also please note that you can still register for the SIT-38 meeting via the meeting website: https://ceos.org/meetings/sit-38/
- On the meeting website, you will also see presentation templates and a shared folder link. Please note that today (7 March) is the deadline for documents for SIT decision. The deadline for presentations is 21 March.
- Awaiting confirmation from Laurent Durieux (GEO Secretariat) on planned participation at SIT-38. Currently there are only 10 minutes on the agenda for GEO Secretariat, including the post-2025 GEO WG this may need to be revisited.

Upcoming meetings or events

- SIT-38 will be held at ESA ESRIN (Frascati, Italy) in the week of 27th March 2023.

- The SIT Technical Workshop will be held 17-19 October 2023 at ESA ESRIN (Frascati, Italy). VW/WG/AHT Day being considered for Monday 16 October (to be discussed at SIT-38).

CEOS SEC-305 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Actions:

None

CEOS Work Plan 2023 – 2025

The final draft (v0.2) of the 2023-25 CEOS Work Plan was completed and circulated to CEOS Principals on Monday 6th March. Principals have been given the opportunity to provide any final substantive comment ahead of virtual endorsement on Monday 20th March. This schedule ensures that we have a fully endorsed version of the 2023-2025 CEOS Work Plan and its associated deliverables by the time we get to SIT Plenary, to be held w/c 27th March.

Upcoming meetings or events

- GEO Executive Committee Meeting, Geneva, Switzerland (22 23 March)
- SIT-38 & Side Meetings, Frascati, Italy (28 30 March)
- WGISS-55 / WGDisasters-19 (joint meeting), Cordoba, Argentina (18 20 April)

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.

rch				
	01-Mar-23	03-Mar-23	WGCapD-12	Vienna, Austria & Virtual
	22-Mar-23	23-Mar-23	GEO Executive Committee Meeting #60	Geneva, Switzerland
	23-Mar-23	24-Mar-23	LSI-VC-13	ESRIN, Italy
	27-Mar-23	30-Mar-23	NAP Expo 2023	Santiago, Republic of Chile
	28-Mar-23	30-Mar-23	SIT-38 & Side Meetings	ESRIN, Italy
oril	I			
	03-Apr-23	05-Apr-23	9th International Conference on Remote Sensing and Geoinformation of Environment	Ayia Napa, Cyprus
	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	Joint meeting: WGISS-55 / WGDisasters-19	Cordoba, Argentina & Virtual
	23-Apr-23	28-Apr-23	EGU General Assembly	Vienna, Austria & Virtual
	24-Apr-23	28-Apr-23	ISRSE-39	Antalya, Turkey
lay				-
	09-May-23	11-May-23	GFOI Plenary	Rome, Italy
	16-May-23	18-May-23	CEOS ARD Workshop	San Francisco, USA
	16-May-23	19-May-23	JURSE 2023	Heraklion, Crete
	23-May-23	25-May-23	IAF Global Space Conference on Climate Change and Space	Oslo, Norway
	31-May-23	09-Jun-23	UN COPUOS 66th Session	Vienna, Austria
ine				
	05-Jun-23	09-Jun-23	WGCV-52	Frascati, Italy
	13-Jun-23	14-Jun-23	GEO Symposium 2023	Geneva, Switzerland
	15-Jun-23	16-Jun-23	GEO Programme Board Meeting #26	Geneva, Switzerland
	15-Jun-23	16-Jun-23	GEO Open Data and Open Knowledge Workshop	Geneva, Switzerland
	26-Jun-23	28-Jun-23	CGMS-51 Plenary	Tokyo, Japan
ıly				-
	16-Jul-23	21-Jul-23	IGARSS 2023	Pasadena, USA
ugust				
epterr	04-Sep-23	08-Sen-23	Open Earth Monitor Global Workshop	Bolzano, Italy
	05-Sep-23		WGDisasters-20	Yellowstone, USA
_				Virtual
ctobe	05-Sep-23	06-Sep-23	GEO Programme Board Meeting #27	virtual
	02-Oct-23	06-Oct-23	74th International Astronautical Congress (IAC)	Baku, Azerbaijan
	17-Oct-23		SIT 2023 Technical Workshop & Side Meetings	Frascati, Italy
-	24-Oct-23	26-Oct-23		Paris, France & Virtual
ovem		20-000-23		
eveni	06-Nov-23	10-Nov-23	GEO Week (Ministerial Summit, GEO-19 and ExCom)	Cape Town, South Africa
	13-Nov-23		37th CEOS Plenary and Associated Side Meetings	Chiang Rai, Thailand
_	30-Nov-23		UNFCCC COP-28	Dubai, United Arab Emirates
ecem		12-000-23		sabal, office Alay Enfinates

CEOS and relevant key external Meetings and Events 2023

Legend:

CEOS leadership participation required
For information; CEOS leadership participation optional

CEOS SEC-305 Report

9 March 2023

Entity: Joint CEOS-CGMS Working Group on Climate (WGClimate)

Prepared By: Jeffrey L. Privette (NOAA), Wenying Su (NASA)

Updates on issues raised during the last CEOS SEC teleconference

- WGClimate is currently unable to provide representatives to NewSpace, ARD and Oceans Coordinating teams. Will seek/follow those groups' updates on activities at various meetings; revisit these opportunities in future meetings.
- AFOLU representative name likely forthcoming; to be confirmed.

Issues requiring discussion during <u>current</u> CEOS SEC teleconference

• Few agencies active in WG; limited ability to support multiple CEOS and partner (e.g., GEO, GCOS) initiatives in addition to internal activities

Other highlights, activities, actions, projects, collaborations

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

- WGClimate-18 take-away points
 - Packed 3-day hybrid meeting
 - Focused on setting 2023 priorities, schedules, planning and staffing
 - New format developed with GCOS for Agencies' Response to GCOS IP
 - Requires merged report on Gap Analysis V3/4.1
 - Input to 2023 revision to WGClimate's Coordinated Action Plan
 - o ECV inventory
 - V5 to be released by Plenary (2023); On-hand submissions only
 - Restructuring activity continuing; to be used for V6 (2024)
 - Will advertise Use Case collection via social media, SEO website, etc.
 - GHG Task Team Meeting (Feb. 2nd) Summary
 - Submitted Carbon Work Plan to CEO
 - Compiling lessons-learned from Global Stocktake 1 support

Upcoming meetings or events

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

- CEOS SIT-38: 28-30 March. WGClimate participating virtually
- CGMS-51 Working Group II: 24-28 April. Participating virtually
- WGCV-51: June 5-9. Supporting Day 4 session on Climate
- CGMS-51 Plenary 26-28 June. Likely in-person



• WGClimate-19: 16-17 October (preceding SIT TW). To be confirmed/

(two pages max.)

Entity: WGISS

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

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

- System Level Team meeting was held on Feb. 28. Development of STAC Best Practice was proposed and the team was invited to the CEOS interoperability Framework.
- The 2nd meeting of the CEOS Interoperability Framework was held on 3/1 and discussed components, membership, visions, process, etc. were discussed.
 WGISS members joined the meeting and System Level Team was accepted to contribute to the STAC investigations. The biweekly meeting will be held, and the draft toad map will be input to SIT-38.
- WGISS introduction was given to the joined UNSpace and WGCapD-12 meeting on 3/2.

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

- None

Other highlights, activities, actions, projects, collaborations

(<u>Dot points</u>, 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)

- WGISS-55 April 18-20, Cordova Argentine
- WGISS-56 October 24-26, Paris France

Attachments

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

- None

(two pages max.)

Entity: WGCapD

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

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

Not applicable

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

- WGCapD ViceChair role

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

The Joint UN-Space/CEOS WGCapD-12 took place from 1-3 March. Hereafter please find a summary of the meeting:

The meeting in numbers:

- 187 unique participants from more than 160 entities registered
- 24 UN entities presented their work connected to Earth observation
- 18 Space agencies made presentations
- 4 Working groups of CEOS presented their work

The meeting revolved around five topics:

- Education/Training
- User Uptake
- Data Access
- Software Tools
- Infrastructure

It was structured as follows: day 1 – Regional meetings, day 2 – UN entities and CEOS WG, day 3 – CEOS WGCapD members

DAY 1

Key takeaways on needs expressed in regional meetings:

- Africa:
 - More information about open software, open source algorithms and real time applications
 - Education and training on: floods, drought, landslide, wildfires, water extent, crop monitoring and early warning systems
 - Facilitate data access

- Americas:
 - o Indigenous co-development of Earth observation activities and training
 - Training on Disaster Risk Reduction
 - Training at city and county-level
- Asia-Oceania
 - \circ $\,$ Open source techniques and tools for Earth observation data processing
 - o Training on Disaster Risk Reduction
 - Training for decision-makers
- Europe
 - Training for young professionals
 - Needs for open, standardized access to learning resources
 - o Access to free or cheap cloud processing platforms

Concerning barriers there was almost unanimity on some barriers:

- Funding
- Lack of awareness of decision makers

DAY 2

The key takeaway is that Earth observation is already used widely across the UN system for different purposes, although in some cases there is willingness to explore better what it can offer. Some use cases where assistance in terms of capacity building is needed were presented.

DAY 3

There is a wealth of resources already available, some of them already answering the needs expressed by the users. Coordination to respond to user needs expressed will be undertaken by CEOS WGCapD

Next steps:

- CEOS WGCapD chair will reach to the different entities expressing needs to get them qualified so they can be addressed. (e.g. need of ARD or need of high resolution)
- CEOS WGCapD chair to put together the report of the meeting and distribute a draft
- CEOS WGCapD to discuss on a roadmap following the actions derived from the meeting

For action 1 and 2 the deadline is the first week of April before the WGCapD meeting (6 April)

Action 3 will be discussed during the CEOS WGCapD meeting

Upcoming meetings or events

• Next WGCapD monthly meeting is on 6 April

Presentations

Presentation from WGISS, ESA, and the United Nations Office on Drugs and Crime on their work on capacity-building during the February monthly teleconference (attached).

Attachments

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

March 2023

Entity: WGCV

Prepared By: Philippe Goryl (ESA), Cody Anderson (USGS)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

WGCV is setting up a group/task on SITSat (SITSat coordination team). It was
proposed to GSICS to be part of the task team at GSICS plenary early March. The
ToR is being now finalised. The group is being composed. There is a growing
interest in SITSat, both from GSICS and WGCV side.

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

- N/A

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The CEOS New Space Task Team working document is being reviewed and updated. The WGCV contribution is composed by 4 elements: the references (radiometric, geometric, image quality) against the New Space can refer; the intercomparison framework allowing a better understanding of the algorithm; the SITsat which is long term perspective aiming at providing absolute reference from space and the expertise sharing (JACIE, VH RODA).
- Recall from last report: Discussion on Fiducial Reference Measurement (FRM) assessment process took place in February; a draft approach will done based on the review of existing FRM projects. The approach will be review by end of March with the target to present it in a publication in the special Issue "Copernicus Sentinels Missions Calibration, Validation, FRM and Innovation Approaches in Satellite-Data Quality Assessment". The difficulties are now to remain generic but taking into account the specificities of each instruments/domain.
- At last GSICS annual meeting on 1st March, WGCV presented activities that are relevant both for WGCV and GSICS: SITsat task team, FRM assessment, the Maturity Matrix as a tool for assessing and communicating with New Space and the organisation of the workshop on Preflight Calibration and characterisation.
- WGCV progress meeting was held on 7th March. The various progresses and actions were reviewed. Among them, responding to request: "...need for guidance for Hyperspectral cal/val reference site instrumentation." (WGCV-51-ACT-14). It was agreed this would be a useful resource for the cal/val portal; we started to

compiling a list of existing resources covering instrumentation, networks, campaigns, hardware, algorithms, etc. A lot of lessons are learned from RADCALNET, Hypernet, e.g. Multispectral resources often equally applicable to hyperspectral (e.g., radiometry). We aim at having something drafted around SIT-38 time. At WGCV-52 (June 5-9) we will discuss the next steps and longer term approach and propose publishing the finalised document on the WGCV Cal/Val portal page.

Upcoming meetings or events

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

- CEOS SIT 28-30 March where the Cal/Val Maturity Matrix will be presented in coordination with the WGISS maturity Matrix as a tool for reporting and communicating with New Space.
- The 2nd meeting of the TIRCALNET group will take place on 20th March.
- Nigel Fox WGCV IVOS is organising a virtual workshop on solar spectra in April.
- CEOS WGCV IVOS is being prepared. Potential date in May 2023.
- WGCV ACWG and AC VC co-organise a joint meeting probably in September.
- JACIE : March 27 30, 2023 USGS Headquarters, Reston, Virginia
- CEOS WGCV TMSG and DEMIX Workshop plenary meeting will be organised in July
 2023 together with the geomorphometry 23 workshop: https://geomorphometry.org/geomorphometry-2023/

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

Entity: SEO

Prepared By: Dave Borges (NASA)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

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

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g., outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The SEO (as the implementation lead of the SDG Coordination Team) has submitted the new set of SDG deliverables to the CEO for the CEOS Workplan. These details will be covered at the upcoming SIT meeting. The tasks include updates to the EO Support Sheets, a Land Degradation Neutrality task, training materials for an ODC application, and communications packages. At SIT-38, the SDG Coordination Team is planning a dedicated side-meeting on Tuesday at 10am, with remote connection available. The Group is finalizing the agenda, inviting all CEOS participants to join the discussions, and is looking to hear from other CEOS entities working on SDG related activities (WGCapD, future SIT Chair team, etc.): if you wish to be involved, please reach out to us (Dave, Brian (SEO), and Flora (CSIRO)).
- At 125th OGC Member Meeting (21 February), a unanimous initial vote started a process to formally vote to approve the new OGC ARD SWG. The formal electronic vote is now underway and ends 15 April, after which the OGC Executive Planning Committee will finalize approval of the new SWG. At that time, a formal OGC press release will be distributed which has been reviewed by CEOS ARD OG, LSI-VC, SEO and CEOS Comms Team.
- CEOS Comms Team (Libby Rose) authored a new article that has been posted on the CEOS home page: "February 2023 Türkiye/Syria Earthquakes: Kahramanmaraş Event Supersite". The article highlights the recent efforts of GEO GSNL, a joint GEO/CEOS WGDisasters Initiative, in response to the recent devastating earthquakes. SEO and CEOS Comms Team will also lead a first, dedicated, CEOS Communications side meeting at SIT-38. All CEOS activity leads are invited to attend and share communications recommendations.

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

- CEOS/GEO Communications Coordination Meeting, Friday, 10 March
- SIT-38 Side Meeting: SDG Coordination Group, Tuesday, 28 March, 10-12 CEST
- SIT-38 Side Meeting: CEOS Communications, Tuesday, 28 March, 16:00-17:00 CEST
- ARD23, Dates TBC, San Francisco, CA
- GEO Open Data Open Knowledge Workshop, 15-16 June 2023, Geneva Switzerland

CEOS Newsletter Published and Planned Articles in 2023

資料4

#	Time	Торіс	Contributor	Status
1	Jan	36 th CEOS Plenary (11/29-12/1)	2022 CEOS Chair (CNES)	Published
2	Jan	New CEOS Chair	2023 CEOS Chair (GISTDA)	Published
3	Feb	UNFCCC COP-27 (Nov)	WGClimate	Final Reviewing
4	Mar	2023 CEOS Work Plan/CEOS-GEO Coordination Meeting	CEOS Executive Officer	To be Discussed
5	Mar	The Turkish/Syria earthquake related(TBD) (Feb)	WGDisastar	To be Discussed
6	Mar	SEO	ex. SEO (Brian Killough)	Requested
7	Mar	GISTDA-SilvaCarbon Workshop(Feb)	GISTDA	To be Discussed
8	Apr	WGClimate Meeting in Tokyo (Mar)	WGClimate	To be Discussed
9	Apr	SIT-38 (Mar)	SIT Chair (ESA)	To be Discussed
10	Nov	SIT Technical Workshop (Oct)	SIT Chair (ESA)	To be Discussed
11	Nov	GEO Ministerial Summit/GEO Week 2023 (Nov)	GEOSEC	To be Discussed
12	Dec	37 th CEOS Plenary (Nov)	2023 CEOS Chair (GISTDA)	To be Discussed
13	Dec	New CEOS Chair	2024 CEOS Chair (CSA)	To be Discussed
14	Dec	New SIT Chair	2024-25 SIT Chair (JAXA)	To be Discussed
15	Dec	In the occasion of UNFCCC COP-28 (Nov)	TBD	To be Discussed
16		Ecosystem Extent Task Team	Team LEAD	To be Discussed
17		Update on MIM Data Base	ESA	To be Discussed
18		Any update related to SWOT	OST-VC LEAD	To be Discussed
19		New Space Task Team	Team LEAD	To be Discussed
20		Update on ECV	WGClimate(EUMETSAT)	To be Discussed