CEOS SEC-310 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

Carbon & Biomass

- The recent CEOS-IMEO workshop has resulted in a number of ad-hoc WGs being established to follow up actions. CEOS agencies are represented in all of them, coordinated by the SIT Chair Team.
- Good news for GEO-TREES and funding from the Bezos Earth Fund: https://www.si.edu/newsdesk/releases/bezos-earth-fund-grants-12-million-smithsonian-support-major-forest-carbon-project
- The product harmonisation team has a 3 year grant from NASA to support their "Harmonizing Biomass Maps With Policy Needs: Development of National Prototypes for the Global Stocktake" project
- Our friend and colleague Joana Post who had the RSO role at UNFCCC is moving to IOC.
- SIT chair team has discussed with GEOSec a joint CEOS-GEO activity in the UAE pavilion at COP 28

CEOS-ARD

- CEOS (Patrick Quinn of NASA) has been voted as co-chair of the OGC ARD SWG. Patrick has been added as a member of the CEOS-ARD Oversight Group and he is supported by members of the LSI-VC, CEOS-ARD Oversight Group and the secretariat. CEOS will seek to ensure broad community representation in this SWG, including the commercial sector and New Space. It is critical that such a standard has broad buy-in and adoption.
- The SAR CEOS-ARD team led by Ake Rosenqvist (JAXA) is making good progress on their Harmonised SAR CEOS-ARD Product Family Specification (PFS). This will be the focus of an LSI-VC team call in August, where we may see endorsement of this document.

CEOS New Space

- The NSTT is progressing with the white paper. 15 agencies are contributing content on their experiences with New Space.
- Some topic-specific recommendations have been suggested, but the way forward for CEOS and New Space following Plenary remains unclear.
- New Space will be a key discussion topic at SIT Technical Workshop, to discuss the way forward following the close of the task team at CEOS Plenary.

EOHB 2023 for GST1

- Thanks to SEC and many other CEOS groups and individuals that contributed and/or commented on the EOHB drafts. The materials are now with the designer and aiming at an October release as a dynamic scrolling website and PDF.

Upcoming meetings or events

- SIT Technical Workshop 2023 will be held at ESA/ESRIN 17-19 October.

CEOS SEC-310 Report

Entity: CEO

Prepared By: Marie-Claire Greening

Actions:

309-01	CEOS Chair to send an official invitation to GEO Secretariat Director, Yana Gevorgyan, for the 2023 CEOS Plenary.	Complete Letter sent 17Jul23
308-02	CEOS Executive Officer to prepare a collective assessment of CEOS interactions with GEO via an analysis of CEOS Work Plan and interactions with CEOS entities.	In Progress Due SIT TW

GEO Executive Committee

The GEO Executive Committee (ExCom) took place from 17 - 18 July 2023. The CEO attended the meeting remotely for CEOS; CEOS is an Observer to the ExCom. Highlights from the meeting included:

- **GEO Post-2025 Strategy**. The GEO Post-2025 Strategy is in its final drafting stage; the final version should be delivered in around two weeks' time. CEOS Members had the opportunity to provide final comments on this draft to the CEO if they had not already done so through their Member State. All comments received were passed on to the GEO Post-2025 Working Group. After this final round of consultation with GEO Member States, Participating Organisations and Associates, the dedicated working group on this strategy have been focusing on refining the remaining issues, including:
 - Concern over the seeming restriction on using the "Triple Planetary Crisis"
 as the main driver when other aspects steer the work of GEO. To overcome
 this, the wider context will be better stressed in the document to show that
 these are not the only elements that will define the thematic priorities.
 - The use of the term "Earth Intelligence", which many initially suggested may
 well be a term that Ministers would not feel able to sign up to. The working
 group have focused on providing a very clear definition of the term that will
 sit alongside its use.
 - The need to be explicit throughout the document and to reemphasise that GEO is intergovernmental and that this is a core strength of the organisation.

Positive comments from the ExCom included that the document is appropriately visionary. The strategy is also well-formulated in that it stresses the call for equity, a voice for all, and service delivery to community.

- 2023 GEO Week. GEO Week this year will be held in Cape Town, South Africa and includes the GEO Ministerial, GEO Plenary and ExCom. Registration to the meeting is now open via the meeting web page. CEOS is currently formulating its delegation with in-person attendance expected from the SIT Chair, CEO and SEO. The SEO are planning on hosting a CEOS booth during the event.
- Ministerial Declaration. The dedicated working group who has been drafting the 2023 GEO Ministerial Declaration had its priorities as: setting a positive, optimistic tone; building on progress and being future-focused; and endorsing the post-2025 strategy without repeating it. The first draft is 4 pages long, but the ultimate plan is for it to be 2 pages in length. Comments on this first draft are currently being considered and incorporated into a second draft version.
- GEO Programme Board. A report was made from the GEO Programme Board, including an update on the recent GEO Symposium, GEO Open Data and Open Knowledge Workshop, the GEO Work Programme and its incubators, the GEO Working Groups, and the GEO Engagement Teams. The PB is led by three co-chairs and Andiswa Mlisa (SANSA) recently stepped down as one. An virtual election is currently underway for her replacement.
- GEO Global Ecosystems Atlas. The first convening meeting on the GEO Global
 Ecosystems Atlas incubator had been held earlier this year and had been attended
 by many engaged stakeholders. The GEO ExCom was informed about the beginnings
 of the development of a proposal for seed funding for the project to fund a
 dedicated project manager and some expert consultant time, to pay for meetings
 and travel, and to fund the development of a use case demo. The eventual aim is
 for the Global Ecosystems Atlas to become a GEO flagship.
- GEO Urban Heat and Health. The second incubator project focuses on urban heat and health, and this is making good ground after collaboration with WMO in the formulation of a Global Heat Resilience Service concept.
- **GEO Infrastructure Development Task Team**. The GEO Infrastructure Development Task Team (GIDTT) is currently being re-established with the goal to assess the technical feasibly and the requirements (institutional and financial resources, and governance model) for the evolution of GEO's infrastructure. The team is in the process of being brought together with the first meeting planning for September 2023. CEOS will be represented on the GIDTT by the SEO.
- **GEO Secretariat Budget**. For 2024 and beyond, the expenditures to fulfil GEO's ambitions appear to be outgrowing the expected contributions from its members.

This would impact near-term decisions, such as reducing the scope of initiatives or deferring them. Discussion time was spent during the ExCom on ways to attract more funding into the Trust Fund, and on ways that funders may be able to invest in specific projects, which may be a more attractive proposition for some having a more tangible outcome.

• **GEO Website revamp**. The GEO Secretariat have contracted out website design support to develop a new structure and design for a new GEO website.

Upcoming meetings or events

- IGARSS 2023, Pasadena, USA (16 21 July)
- WGDisasters-20, Yellowstone Park, Montana, USA (5 9 September)
- GEO Programme Board #27, Virtual (5 6 September)
- 74th International Astronautical Congress (IAC), Baku, Azerbaijan (2 6 October)
- WGClimate-19, Frascati, Italy (16 17 October)
- SIT 2023 Technical Workshop & Side Meetings, Frascati, Italy (17 19 October)
- WGISS-56, Paris, France (24 26 October)
- 2023 GEO Week, Cape Town, South Africa (6 10 November)
- 37th CEOS Plenary & Side Meetings, Chiang Rai, Thailand (14 16 November)
- UNFCCC COP-28, Dubai, UAE (30 November 12 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

2023

July				
	04-Jul-23	06-Jul-23	19th International Workshop on Greenhouse Gas Measurements from Space	Paris, France & Virtual
	06-Jul-23	07-Jul-23	Al for Good Global Summit: Accelerating the UN SDGs	Geneva, Switzerland
	17-Jul-23	18-Jul-23	GEO Executive Committee Meeting #61	Geneva, Switzerland
	16-Jul-23	21-Jul-23	IGARSS 2023	Pasadena, USA
	31-Jul-23	04-Aug-23	UN Global Geospatial Information Management 13th Session	New York, USA
August				
	07-Aug-23	12-Aug-23	AmeriGEO Week	San Jose, Costa Rica
Septemb				
	04-Sep-23	08-Sep-23	Open Earth Monitor Global Workshop	Bolzano, Italy
	05-Sep-23	09-Sep-23	WGDisasters-20	Yellowstone Park, Montana, USA
	05-Sep-23	06-Sep-23	GEO Programme Board Meeting #27	Virtual
	25-Sep-23	30-Sep-23	WGCV IVOS subgroup meeting #35	Oberpfaffenhofen, Germany
	29-Sep-23	01-Oct-23	30th Workshop on Space Technology for Socio-Economic Benefits: "Challenges and Capacity- building Opportunities for Emerging Space Nations"	Baku, Azerbaijan
October				-
	02-Oct-23	06-Oct-23	74th International Astronautical Congress (IAC)	Baku, Azerbaijan
	02-Oct-23	04-Oct-23	EuroGEO Workshop 2023	Bolzano, Italy
	03-Oct-23	05-Oct-23	Earth Observation for Carbon Markets Workshop	Frascati, Italy
	03-Oct-23	05-Oct-23	Observations within the Global Greenhouse Gas Watch	Geneva, Switzerland
	10-Oct-23	12-Oct-23	LSI-VC-14	Frascati, Italy
	10-Oct-23	13-Oct-23	GEO BON Conference	Montreal, Canada
	16-Oct-23	16-Oct-23	WGClimate GHG Task Team meeting	Frascati, Italy
	16-Oct-23	17-Oct-23	WGClimate-19	Frascati, Italy
	17-Oct-23	19-Oct-23	SIT 2023 Technical Workshop & Side Meetings	Frascati, Italy
	24-Oct-23	26-Oct-23	WGISS-56	Paris, France & Virtual
Novembe	er			-
	06-Nov-23	10-Nov-23	GEO Week (Ministerial Summit, GEO-19 and ExCom)	Cape Town, South Africa
	14-Nov-23	16-Nov-23	37th CEOS Plenary and Associated Side Meetings	Chiang Rai, Thailand
	13-Nov-23	17-Nov-23	5th International Ocean Colour Science Meeting	St Petersburg, Florida, USA
	27-Nov-23	30-Nov-23	VH-RODA 2023 Workshop	Frascati, Italy
	30-Nov-23	12-Dec-23	UNFCCC COP-28	Dubai, United Arab Emirates
Decembe	er			
	04-Dec-23	08-Dec-23	GSICS / WGCV IVOS Lunar Calibration Workshop	Darmstadt, Germany

2024

January			
28-Jan-24	01-Feb-24	2024 AMS Annual Meeting	Baltimore, USA
February			<u>'</u>
March			
April			
09-Apr-24	11-Apr-24	SIT-39	Tokyo. Japan
10-Apr-24	12-Apr-24	2024 UN Ocean Decade Conference	Barcelona, Spain
14-Apr-24	19-Apr-24	EGU General Assembly	Vienna. Austria
May			•
June			
03-Jun-24	07-Jun-24	CGMS-52 Plenary	USA
July			
07-Jul-24	12-Jul-24	IGARSS 2024	Athens, Greece
13-Jul-24	21-Jul-24	COSPAR 45	Busan, South Korea
August			
September			
October			
14-Oct-24	18-Oct-24	75th International Astronautical Congress (IAC)	Milan, Italy
November			
December			

Legend:

CEOS leadership participation required
For information; CEOS leadership participation optional

CEOS SEC-310 Report

20 July 2023

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

Prepared By: Jeff Privette (NOAA), Wenying Su (NASA)

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

WGClimate named Dr. Darren Ghent as its permanent liaison to the GCOS
Terrestrial Observation Panel for Climate (TOPC). We are grateful to Prof.
John Remedios (UKSA) for Darren's nomination, and to Albrecht von Bargen
(DLR) who has stood since the position became vacant last year. Darren was a
prior TOPC member so ramp-up time should be minimal, a positive since
WGClimate is presently partnering with GCOS on the Space Agency Response
to the GCOS IP.

Issues requiring discussion during current CEOS SEC teleconference

None

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

- WGClimate (Privette) presented an update on activities at CGMS-51 Plenary in Tokyo on June 22nd.
 - Focus: 2023 Work Plan activities
 - Plenary accepted WGClimate's revised approach to developing the Statement to SBSTA, its proposed approach to gaining Plenary approval of the Agency Response to GCOS IP, and its request to meet with CGMS WG Chairs to advance GST2 planning.
 - Raised concerns on GHG issues, including insufficient ground observation/validation systems, the current lack of direction/standards for NewSpace, and the need to engage the new WMO Global Greenhouse Gas Watch to resolve roles and coordinate activities
- Space Agencies' Response to GCOS IP (SARGIP)
 - O Still assessing which action teams will provide 2023 vs. 2024 deliveries
 - Hosting online meeting with GCOS leadership on outcomes of GCOS Joint Panels meeting in June
- Statement for SBSTA at COP-28: Given SBSTA has no backfill for Jo Post on the horizon, WGClimate is working with GEO Climate's Sara Venturi, per advice of Stephan Ward
 - Placeholder poster topics identified for EID
 - Draft Statement expected by Aug 1.

Upcoming meetings or events

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

- GCOS and WGClimate Leadership bilateral meeting on outcomes of GCOS Joint Panel Workshop in June: Aug. 9, Virtual (Wenying, Jeff)
- WMO Observations in the Global Greenhouse Gas Watch: 3-5 Oct., Geneva
- WGClimate-19: 16-17 October (preceding SIT TW), Frascati (Jeff)
- SIT Technical Workshop: 18-20 October (following WGClimate-19), Frascati (Jeff)
- CEOS Plenary, 14-16 November, Thailand (Jeff)
- COP-28, Earth Information Day, 30 Nov 12 December, Dubai UAE (Jeff, Wenying)
- AGU Session: Planning for Observation Continuity: Scientific Needs, Decision-Support Value, and the Practical Challenges, 11-15 December, San Francisco.

(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>)

- Technology Exploration Interest Group had a monthly meeting and an ad-hoc meeting regarding the AI/ML white paper initiative. AI/ML experts from NASA and UK in addition to WGISS members joined the latter meeting and discussed the context of the white paper. The team would welcome more participation of AI/ML experts and CEOS members' recommendations for that.
- WGISS EXEC meeting was held on Jul. 7th and the information on the interoperability framework and the CEOS new space task team were shared. Agenda coordination for WGISS-56 to be held in Oct. was initiated. Special session for cloud use might be planned by inviting CGMS and SEO.
- CEOS ARD OG, which considers OGC standardization for STAC extension of CARD4L, and WGISS, which is trying to develop a STAC Best Practice has started to communicate. The intentions of both teams were shared, and further communication is expected.
- The monthly meeting of CEOS interoperability framework was held on Jul. 12. Factors drafted by the focus champions were reviewed and those to be included and to be excluded are discussed. Based on the discussions, focus names were updated and factor reallocations were made to avoid multiple assignment of a same factor to multiple focuses. The renamed focuses are as follows.
 - 1 Semantics (vocabulary)
 - **2** Architecture (structure)
 - 3 Data Formats (syntactic)
 - Interfacing (accessibility)
 - Quality
 - 6 Policy
- CSIRO newly nominated Matt Paget (CSIRO, Senior scientist in Earth observation data and systems) as its WGISS principal in accordance with the WGISS message at SIT-36. The nomination is expected to drive WGISS cloud investigation, which is an inevitable element for interoperability data and use.

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

(<u>Dot points</u>, e.g. meetings, conferences of relevance, visits)

- WGISS-56 October 24-26, Paris France, hosted by CNES
- WGISS-57 TBD

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 (Dot points)

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)

An ad-hoc group inside WGCapD is analyzing options for improving the reusability of learning objects. The ad-hoc group meet on 27 June with a presentation of ISRO and NASA on data repositories and learning methods..

<u>United Nations Needs Identification and Needs Repponse:</u>

The WGCapD monthly meeting took place on 4 May and the discussion was centred around a document compiling needs from the presentations of UN entities that took place during the joint UN-Space/WGCapD-12. The document is work in progress and it is available here. There is a form to insert resources matching the needs (form here).

→ Inputs through the form are very much welcomed

For Awareness

- Allocation of 5G (IMT band) and X-Band SAR. Presentation from DLR: Protection of the Earth observation in x-band.
 - Please note that studies suggest that this issue has the potential to impact operational systems and systems under development which are serving critical applications. If you want to know more, please contact Ralf Ewald (ralf.ewald@dlr.de).
- Presentation from Paraguay Space Space Agency, CyT Paraguay, Water Observatory team and University Alabama in Huntsville on the use of GEOGloWS for floods in Paraguay
- Please register to join EOTEC DevNet (https://eotecdev.net/register). Please also note that the next round of EOTEC DevNet Flood working groups will take place 19-20 July, to register: https://eotecdev.net/upcoming-meetings-regional-floods-working-groups-july-19-20

Requests from Members for capacity-building support:

- Requestor: ISRO. Request to suggest suitable subject matter expert on the topic " Artificial Intelligence (AI), Machine Learning (ML) & Deep Learning (DL) Libraries and APIs in Python" from any institution other than India. Flyer attached: Geoprocessing Using Python. Dates 17-28 July.
 - -> ASI replied to the request.
- Requestor: United Nations Inter-Agency Mechanism on Outer Space **Activities** . Request for training on Space technology and Earth observation for early warning. Date: 17 October. Location: Brindisi, Italy.
- Requestor AEP and CyT. Request for a training on ENSO for decisionmakers: Requestor AEP and CyT

Attachments

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

Needs document: available here.

Files: One-pager MEMO DLR presentation, DLR Protection of XBand radar satellite frequencies

Files: GLOGLoWS_SERVIR_6_July and AEP presentation and Video from CyT

July 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>)

N/A

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)

- A CEOS WGCV LPV Workshop was held the week after WGCV-52. The aim of this series of Workshops is to regularly review the status of Cal/Val reference data (networks, sites, campaigns), Cal/Val best practices and tools and assess their maturity level for supporting the validation of satellite-derived land products, among which: albedo, biophysical variables (LAI, fAPAR), land surface temperature, soil moisture, land cover, biomass, fires, and snow products. The meeting was extremely successful owing to:
 - The number of contributions (50 orals, 40+ posters), the number of participants (120+ registered of which 90% in person), and the international attendance.
 - The outstanding quality of the presentations and the variety of EO thematic areas covered (https://nikal.eventsair.com/lpve-2023/agenda), showing overall clear progress in terms of technological solutions and scientific methods.
 - The lively and inspiring discussion sessions, with a set of clear recommendations and needs, which are being synthetized in a communication paper to be submitted at AGU EOS journal (https://eos.org/).
- The organisation of the Pre-Flight Calibration Workshop is progressing well.
 The joint GSICS/WGCV organisation committee has resumed. The tentative dates for the workshop will be: 19-20-21 November 2024 at ESA/ESTEC in the Netherlands.
- The SITSat Task Team Terms of Reference were endorsed; the group composition is under finalisation. It will include participation of GSICS representatives.

- Terrain Mapping Subgroup (TMSG) held its plenary in July 2023. Among others, DEMIX status was discussed. As result of DEMIX, a publication was submitted for presenting approaches to inter-compare a range of candidate digital elevation models (DEMs) based on pre-defined criteria and statistically sound ranking approach: "DEMIX Method Ranks COPDEM and FABDEM as Top 1" Global DEMs", Conrad Bielski, Carlos López-Vázquez, Carlos Grohmann, Peter L. Guth, The TMSG DEMIX Working Group https://doi.org/10.48550/arXiv.2302.08425.
- During the TMSG meeting, database for Ground Control Point for Very High Resolution sensors was also discussed. That would be a good contribution to New Space. Similarly, A DataBase for radiometric calibration and validation in support of New Space was discussed with IVOS. A prototype of this Data Base will be presented at IVOS meeting in September in DLR and then in VH RODA in Frascati in November.
- A new Terrain Mapping Subgroup Co-Chair is sought. All nominations welcome.
- WGCV-53 is being planned (tentatively) in Argentina, Cordoba, preferably 4-8 March. Currently confirming with CONAE.

Upcoming meetings or events

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

- CEOS WGCV IVOS meeting will be organised in DLR Germany at the end of September 2023.
- CEOS WGCV SAR subgroup workshop will be organised in DLR in October 2023.
- CEOS WGCV AC subgroup together with CEOS ACVC will organised a workshop in Brussel in October 2023 (tbc).

Attachments

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

LPV Meeting – Frascati 12-14 June 2023



Entity: SEO

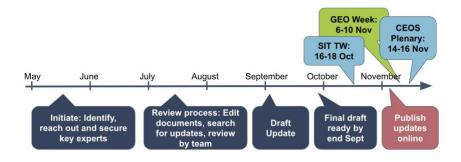
Prepared By: Dave Borges (NASA)

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)

- SEO hosting CEOS Booth at IGARSS 2023 in Pasadena, CA this week (07/17-21), highlighting ongoing CEOS activities via digital and print material contributed from multiple WG, VC, etc.
- The SDG Coordination Group continues to meet monthly to ensure the WP deliverables are on track, and discuss any issues/opportunities (last meeting 29th June, and next one is 25th July).
 - The agenda now includes an item for the SIT Chair & CEO to provide SDGrelevant updates from other CEOS entities, so that the CG can assess whether actions need to be taken to highlight the activity (>communications or coordination for joint WP deliverables).
 - Ongoing progress on SDG deliverables, in particular strong engagement with UNCCD and GEO LDN to assess EO data supply and needs for specific small islands (e.g. Pacific).
 - The group proposed a timeline to help EO Support sheet leads deliver their review by Plenary:



- The SDG CG has invited Martyn Clark (GEOSEC Urban Resilience Coordinator) and Julie Chamberlain (new GEO EO4SDG Lead, NASA) to join the group to ensure a direct liaison with GEO.
- The SDG CG has also:
 - Submitted a self-nomination (17th July) for the GEO EO4SDG 2023
 Awards including key achievements, impacts, and testimonials
 - Submitted requests to host side-meeting to host at 2023 SIT TW and Plenary
 - Provided inputs for the New Space White Paper (several members inputs to be consolidated and submitted)
 - Provided inputs for communication materials displayed at IGARSS,
 Pasadena

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

- GEO Week / Ministerial Summit, Cape Town South Africa, 6-10 November.
 - o EOI submitted and confirmed; SEO to host CEOS exhibition booth.