**Minutes V1.0**

**258th CEOS SECRETARIAT MEETING**

Thursday 14 November 2019

Chaired by ISRO

**Participants**

**CEO:** –

**ESA:** Ivan Petiteville

**EUMETSAT:** Robert Husband

**GEO SEC:** Doug Cripe

**ISRO:** Raj Kumar (Chair), Rajeev Jaiswal, Stephen Ward,

Matthew Steventon

**JAXA:** Osamu Ochiai, Nobutaka Nakagawa, Yukio Haruyama

**NASA:** Christine Bognar

**NOAA:** Chuck Wooldridge

**SIT Chair Team:** Adam Lewis, Jonathon Ross, Flora Kerblat, Andreia Siqueira

**SEO:** Brian Killough

**VAST-VNSC:** Linh Phan

**WGCapD:** Nancy Searby

**WGClimate:** Jörg Schulz

**WGCV:**  –

**WGDisasters:** David Green

**WGISS:** Rob Woodcock

1. **Welcome and Introductions, Review of Agenda**

Raj Kumar (ISRO, CEOS Chair Team) welcomed everyone to the first call of the ISRO CEOS Chair term.

Raj noted that the CEOS and SIT Chair Teams aim to respond to the action from CEOS Plenary regarding increased communication between CEOS management and the Virtual Constellations (VC) by inviting 1-2 VC representatives to each CEOS SEC call as updates necessitate. Adam Lewis (GA, SIT Co-Chair) briefly added further context (this follows previous SIT Chair actions) and noted that the SIT Chair Team will be following up with VC contacts shortly.

1. **Action Status**

**257-01: Schedule for CEOS SEC Teleconferences/Meetings**

Raj Kumar (ISRO, CEOS Chair Team) recalled the proposed calendar for CEOS SEC teleconferences/meetings that was included with the agenda for this call. No objections or issues were raised and so the schedule was adopted.

**257-03: Update of the CEOS Work Plan**

Raj reported that ISRO will initiate the update of the CEOS Work Plan via email later this week. The due date for updates will be December 6.

1. **Letter from the Intergovernmental Oceanographic Commission (IOC) of UNESCO**

It was agreed that a small team of experts be convened to review the letter from IOC in detail and prepare a draft response.

The response is complicated by the lack of concrete requirements and scope for the Decade of Ocean Science. Jonathon Ross (GA, SIT Chair Team) suggested that the CEOS response might outline what CEOS is already working on and then welcome a follow up with more detailed requirements for CEOS to respond to.

Chuck Wooldridge (NOAA) noted that NOAA has a representative on the IOC’s Steering Committee.

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| **258-01** | Chuck Wooldridge (NOAA) jointly with the SIT Chair Team to convene a follow up call to discuss a position statement as a reply to IOC. The reply will note that CEOS has compiled a summary of its planned work and awaits further detailed requirements. | **December 15** |

1. **2019 CEOS Plenary**

Matt Steventon (2019 CEOS Chair Team) thanked everyone for their feedback on the draft minutes of the 2019 CEOS Plenary. He noted that the minutes have now gone out to all participants for a further round of feedback. Final comments are due by COB Friday November 29.

1. **SIT Chair Report**

Adam Lewis (GA, SIT Co-Chair) reported:

* The SIT Chair Team is planning new rounds of consultation and update calls with CEOS working teams. These include periodic *all hands* calls as well as more informal, small group calls with individual VCs to confirm their expectations and value proposition for their CEOS engagement.
* CSIRO is firming up the plans for the proposed CEOS Biomass Validation Workshop. This is now planned for Canberra in the week of 2 March 2020. One of the objectives is to develop a pitch from the CEOS Biomass Protocol Team to Principals at SIT-35 for support to realise the full potential of the Protocol. Attendance at the Canberra event from related CEOS Agencies is appreciated.
* More information regarding SIT-35 (Hobart, 24-26 March 2020) will be coming soon – including a link for attendees to book their accommodation directly (special rates at the Wrest Point Hotel before 30 January 2020).
* On the Carbon and Biomass front, EC/JRC plans to bring together the Greenhouse Gas and AFOLU communities, to explore a more integrated approach to Convention engagement by space agencies. Very preliminary dates are the week of 8 June 2020 (the week following the IWGGMS conference in Darmstadt). Planning is underway and firmer details will be available soon. Please notify your related programme and mission staff.
* We have discussed with the SEO about a collaboration to generate a ‘CEOS Year Highlights Reel’ for the first time for Plenary in October 2020. This would be something we can use both internally and externally to report and promote CEOS work.
* GEO Week 2019 was intense but rewarding. Thanks to all CEOS colleagues who made the trip – especially Brian Killough (NASA, SEO) for staffing the CEOS booth.
* Pending a successful renomination at the February GEO Programme Board meeting, the SIT Co-Chairs will participate on behalf of CEOS in the GEO Executive Committee meeting on 19 and 20 March 2020. The meeting is expected to include a focus on how ExCom can ensure GEO follows up on the terms in the Canberra Declaration adopted by Ministers at the 2019 Summit.
* CEOS representation to the GEO Programme Board has been updated to Andreia Siqueira (GA) with alternates Amy Parker (CSIRO) and incoming CEO Kerry Sawyer (NOAA).
* The CEOS-GEO Bilateral Meeting is scheduled for 3-4 February 2020, in Geneva. The SIT Chair Team, SIT Vice Chair Team, CEOS Chair Team, SEO, and incoming CEOS Executive Officer will attend. A draft agenda has been shared with CEOS SEC and suggestions for further topics are invited.

Jonathon Ross (GA, SIT Chair Team) recalled that the Canberra Declaration adopted by Ministers at the GEO Ministerial Summit had the following points that were particularly relevant to CEOS: it called upon the GEO community to lower the barriers related to the use of large datasets through advancement of the ARD concept, urged GEO to address coordination of in situ observations, a call for public and private entities to work together in a mutually beneficial fashion, and for the GEO community to work to engage more closely with official national statistics offices.

Jonathon also noted the draft emails regarding the OSCAR database have been produced by the SIT Chair Team and shared with CEOS SEC for review. The response to WMO includes reference to OSCAR sustainment and a ‘strong GCOS’ per the Plenary discussion. Revised versions were received from Paul Counet (EUMETSAT). No further comments were heard on the call, so the SIT Chair Team will send the response to WMO and also reach out to the CEOS Agencies identified in the letter from WMO.

1. **GEO SEC Report**

Doug Cripe (GEO Secretariat) reported on GEO Week:

* It was a very successful week. Doug thanked the Australian organising team for their efforts.
* The GEO Executive Committee agreed to move their March 2020 meeting to avoid a conflict with the CEOS SIT-35 meeting. It will now be held 19-20 March 2020.
* The results-oriented GEOSS concept, which includes the GEO Knowledge Hub, was discussed and a proof of concept based on the Sen2Agri software was demonstrated. The Plenary agreed that the Executive Committee should review an implementation plan for the Knowledge Hub.
* Google initiated a programme to offer unlimited use (for a two-year period) of Google Earth Engine. A series of licenses will be issued in response to a call for proposals that is expected to go out next week.
* Doug added that the GEO Ministerial Declaration includes a focus on developing island states. CEOS may be asked to provide specific support along these lines in future. GEO has a number of new members from these nations, with others expected to follow.

1. **SEO Report**

Brian Killough (NASA, SEO) reported:

* Brian Killough is attending the AGU Conference in San Francisco, December 9-13. He will be presenting a talk: ‘An Open Data Cube (ODC) Water Application Demonstrating the GEO Knowledge Hub (GKH) and Supporting the Sustainable Development Goals (SDGs)’.
* The SEO participated in several side meetings at the GEO Plenary. These included an *‘Ideas Stage’* presentation on the use of the African Regional Data Cube to detect illegal mining, a panel on Big EO and Big Data, and an opening address for the *‘Downscaling GEO: Delivering Impact at Local and National Levels’* panel session.
* The SEO hosted the CEOS exhibition booth at the GEO Plenary. There were many visitors to the booth over three days. There was significant interest in Analysis Ready Data (ARD), access to Landsat and Sentinel archives, GFOI, GEOGLAM, disasters and Data Cubes.

1. **Working Group Reports**

**WGDisasters**

David Green (NASA, WGDisasters Chair) noted the following points for SEC attention:

* Following JAXA’s announcement at GEO Week 2019 that Japan will provide free and open access to the wide-swath observation data from the L-band radar satellites, such as ALOS and ALOS-2, WGDisasters has reached out to JAXA, requesting details regarding schedule and plan details on behalf of GEO-GSNL for monitoring of the Supersites.
* The Chinese delegation to GEO Week 2019 also announced that they will be opening some of their sources of data, and WGDisasters will be following up.
* WGDisasters is working to update its Disaster Risk Management (DRM) EO Strategy document. The purpose of the document is to capture at a high-level the landscape in which the WG undertakes its activities, the partners it aims to engage and the type of activity it means to pursue.
* A new GEO/LEO/SAR Flood Pilot proposal is under development. WGDisasters intends to submit the proposal for decision at SIT-35.
* Geodesy is a topic that has been raised in relation to disasters recently, including at GEO Week 2019, during which a new GEO activity ‘Geodesy for Sendai’ was established. WGDisasters is now considering its potential contributions to this activity.
* WGDisasters is standing by to support CEOS-COAST in terms of disaster risk reduction and resilience themes.
* Volcano Demonstrator: data ordering has started for all Demonstrator regions.
* The value of Digital Elevation Models (DEMs) and the distinction between elevation data and spatial extent data was acknowledged by the GEO Ministerial.

Jonathon Ross (GA, SIT Chair Team) asked whether anyone from WGDisasters will be attending the Asia Pacific Ministerial Conference on Disaster Risk Reduction. David reported he has no confirmation of who will attend, though a call has been put out and participation is expected. Jonathon noted that GA is organising the technical aspects and could provide insights and be a useful point of contact.

**WGClimate**

Jörg Schulz (EUMETSAT, WGClimate Chair) reported:

* The Space Agency Statement to SBSTA-51 was endorsed by CEOS and CGMS on 8 November and forwarded to the UNFCCC thereafter. The statement will be read by Jörg during the opening session of SBSTA-51 on behalf of the ISRO CEOS Chair.
* WGClimate will provide a ten minute oral presentation and two posters to the Earth Information Day at SBSTA-51 on December 3, featuring the ECV Inventory and the GHG monitoring system.
* Drafting of the ECV Inventory Gap Analysis Report and Action Plan is ongoing. Availability for review is envisioned for the end of November, with finalisation planned by the end of the year.
* GHG Roadmap task team leader Mark Dowell (COM) distributed a version of the Roadmap on October 28, for review by November 22. The initial Roadmap is planned to be sent to AC-VC, WGCV, GSICS, CGMS Working Groups, etc. by mid-January 2020 asking for feedback by mid-February 2020. The task team will then revise the document in time for SIT-35 in March.

**WGISS**

Rob Woodcock (CSIRO, WGISS Chair) noted the following point from his written report:

* The GEO Aquawatch team are in discussion with WGISS and the CEOS SEO on how CEOS data might be made more accessible and useful to GEO Aquawatch objectives (in particular those related to inland water). WGISS is currently discussing data discovery and the potential for GEO Aquawatch to engage with the CEOS ARD Strategy. It is fully expected this engagement will expand as it crosses several CEOS groups including WGISS, LSI-VC, and WGCV. The Aquawatch team will review the CEOS ARD Strategy before coming back to WGISS.

**WGCapD**

Nancy Searby (NASA, WGCapD Chair) noted the following points from her written report:

* WGCapD welcomed its new Vice Chair Pham Thi Mai Thy (VNSC) at CEOS Plenary.
* The training calendar pilot is live at <https://training.ceos.org>. WGCapD would appreciate feedback on its structure and format. Entries from all CEOS Agencies on training and other *ad hoc* events are encouraged.
* A regional hands-on training in Thailand on land cover land use change topics (with a particular focus on climate impacts in coastal zones) is scheduled for December 17-19. WGCapD is working with GISTDA on this event.
* The white paper describing how capacity building networks, e.g., those of the UN, can work together with WGCapD has been accepted for publication in Space Policy, with the title “Coordinated Capacity Development to Maximize the Contributions of Space Science, Technology and its Applications in Support of Implementing Global Sustainable Development Agendas – A Conceptual Framework” by Senthil Kumar (CSSTEAP), Sergio Camacho (CRECTEALC), Nancy D. Searby (NASA/WGCapD), Joost Teuben (ITC/GEO), and Werner Balogh (WMO).

**WGCV**

WGCV was not represented at SEC-258. The following report was received after the meeting:

* All sub-group leaders are working towards submitting their new deliverables for the next CEOS Work Plan and finalising deliverables that have been completed.
* At a recent workshop on very high resolution sensors (VH-RODA), the commercial sector showed strong interest in being involved in cal/val activities within WGCV (particularly from an ARD perspective).

1. **SDG-AHT Report**

Flora Kerblat (CSIRO) reported on behalf of the SDG-AHT Co-Chairs Alex Held (CSIRO) and Marc Paganini (ESA):

* The SDG-AHT has a call scheduled next week (Tuesday) to start planning through to SIT-35 (organising sub-teams and their work). Participation is open and all are welcome to attend.
* SEC was referred to the written report for further updates on the team’s activities.

1. **AOB**

**CEOS Executive Officer**

Raj Kumar (ISRO, CEOS Chair Team) recalled that Kerry Sawyer (NOAA) has been nominated by NOAA to serve as interim CEO from January. Raj asked for clarification of the process to confirm this nomination.

Chuck Wooldridge (NOAA) referenced the CEOS Governance and Processes document and noted that NOAA has made the offer, and it is now up to the CEOS Chair to make the appointment in writing. ISRO will consult SEC to confirm and then formally reply to NOAA.

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| **258-02** | ISRO to consult CEOS SEC via email regarding the nomination of Kerry Sawyer (NOAA) as CEO for 2020 and following this consultation formally respond to NOAA’s nomination. | **December 9** |

**ISRO 2020 CEOS Chair Priorities**

Raj Kumar (ISRO, CEOS Chair Team) reported that the CEOS Chair Team is working on the priorities previously shared and has been discussing the various initiatives with groups including GEO, WGDisasters, and the International Ocean Vector Winds Science Team (IOVWST). Raj flagged the need for help on Analysis Ready Data for Data Cubes. Nancy Searby (NASA, WGCapD Chair) noted that NASA has various GEO-VENER projects underway and she offered to make a connection to the ISRO priority on renewable energy if useful.

**Draft Plan for the 54th CEOS Newsletter**

Yukio Haruyama (JAXA) shared the proposed outline of the 54th CEOS Newsletter. He will be contacting authors over the next few days seeking articles to be submitted before the Christmas break.

**CEOS-COAST**

Jonathon Ross (GA, SIT Chair Team) asked about the line of reporting for the CEOS-COAST initiative. He suggested SEC might be the most appropriate place for routine updates and discussion. This was agreed by SEC.

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| **258-03** | Chuck Wooldridge (NOAA) to follow up with Paul DiGiacomo (NOAA) regarding regular reporting on CEOS-COAST initiative progress at monthly SEC meetings. Chuck to also ask Paul when the first substantive update can be expected. | **November 30** |

1. **Next Meeting and Adjourn**

Raj Kumar (ISRO, CEOS Chair Team) thanked everyone for attending. CEOS SEC-259 will be held on December 12 at 7 AM US East. The meeting was adjourned.