**Minutes V1.0**

**252nd CEOS SECRETARIAT MEETING**

Thursday 18 July 2019

Chaired by VAST-VNSC

**Participants**

**CEO:** Steven Hosford

**COM:**  Astrid-Christina Koch

**ESA:** –

**EUMETSAT:** Robert Husband

**GEO SEC:** Doug Cripe

**ISRO:** –

**JAXA:** Osamu Ochiai, Yukio Haruyama

**NASA:** Christine Bognar

**SIT Chair Team:** Steve Volz, Kerry Sawyer

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

**SEO:** Brian Killough

**VAST-VNSC:** Pham Anh Tuan (Chair), Truong Thanh Nguyen, Mai Thu, Matthew Steventon, Stephen Ward

**WGCapD:** Prakash Chauhan, Nancy Searby

**WGClimate:** Jörg Schulz

**WGCV:**  Cindy Ong

**WGDisasters:** Simona Zoffoli

**WGISS:** Mirko Albani, Rob Woodcock

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

Pham Anh Tuan (VAST-VNSC, CEOS Chair) welcomed everyone to CEOS SEC-252. An additional AOB item on the 53rd CEOS Newsletter was added to the agenda.

1. **Action Status**

Pham Anh Tuan (VAST-VNSC, CEOS Chair) noted that most open actions will be covered during the course of the meeting, but he called for any additional updates now. None were raised.

1. **2019 CEOS Plenary Update**

Pham Anh Tuan (VAST-VNSC, CEOS Chair) reported:

* So far 40 people have registered to participate in the 2019 CEOS Plenary. 24 people have requested personalised invitation letters, six of which have been issued by VNSC. VNSC will continue to provide letters until the end of July and will make sure every request is fulfilled.
* Further registrations should be made as soon as possible to ease planning.
* The venue for the Plenary will be the Pan Pacific Hotel. Ms. Linh will send out information regarding hotel room reservations next week.
* Regarding the Ha Long technical tour, those that have registered their attendance will be requested to send a scan of their passport so tourist insurance can be obtained. Ms. Ngoc from VNSC will be in contact next week regarding this matter.

1. **CSIRO/GA SIT Chair 2020-2021 Priorities Update/Response**

Adam Lewis (GA, SIT Vice Chair Team) presented:

* The SIT Vice Chair team has started a broad consultation of its draft prospectus for the 2020-21 SIT Chair term. In addition to the discussion at SEC last month and the sharing of draft materials, we have reached out to a number of groups and agencies of particular relevance to the proposed outcomes. Thus far we have had discussions with and/or input from:
  + GCOS in relation to the Carbon and Biomass thread and the GCOS requirements update in particular;
  + GHG Roadmap Team in relation to the milestones in support of the 2023 Stocktake;
  + WGCV/LPV and CEOS Biomass Protocol teams in relation to the Biomass outcomes;
  + LSI-VC regarding the ARD strategy;
  + WGCV, taking the opportunity of the meeting hosted in Perth this week by CSIRO as Chair;
  + ESA and NASA CEOS Principals.
* Feedback has been very positive and encouraging that we are on the right track. Any further comments are welcome from SEC. As a reminder, the guiding principles followed in drafting the prospectus are:
  + Evoking the original vision for SIT – putting Principals to work on significant challenges to be addressed by coordination and observing system harmonisation; we ask that you come to SIT-35 ready to be challenged to commit to pull us forward on important common goals – for SIT to make a difference.
  + Focused: a few priorities – reflecting major thrusts across civil EO programmes and priority needs, with more debate and decision by Principals towards the outcomes. We ask CEOS to acknowledge that all meetings cannot provide reporting of all CEOS business.
  + Reflecting existing important activities that would benefit from being escalated, elevated and expedited. Most of what we propose is underway or planned and of great importance to many CEOS agencies. We are not setting our sights low. In general, we have made a conscious decision to focus on outcomes rather than organisational matters.
* Noting this last point, we have looked at our proposed outcomes and related them to existing CEOS Work Plan Tasks/Deliverables. This analysis is [here](https://docs.google.com/spreadsheets/d/1m9ET8J362jf2QjTwVpWoNYso4XI4rq-c51X4aqH4phs/edit#gid=73472855&range=A1).
* The targets and milestones will continue to be refined in consultation with CEOS stakeholders and investor agencies, and a revised prospectus brought to SIT Technical Workshop and to the Hanoi Plenary. We hope that SEC agencies find them considered and well-directed, and that we can count on your active engagement during our term for their realisation.

Steve Volz (NOAA, SIT Chair) indicated that the SIT Technical Workshop agenda will provide ample opportunities to discuss these proposed priorities and ensure a seamless transition from NOAA to the CSIRO/GA Team.

Kerry Sawyer (NOAA, SIT Chair Team) inquired about the CEOS Biomass Protocol Team that was referenced by Adam as this is a new term and Cindy Ong (CSIRO, WGCV Chair) clarified that the CEOS Biomass Protocol Team is under the Land Product Validation subgroup of the WGCV.

1. **CEO Report**

Steven Hosford (ESA/CNES, CEO) reported:

* CEO/Deputy CEO: There has been no progress made on finding candidates for the CEO and DCEO positions, which will both be vacant following the 2019 CEOS Plenary.
* Upgrade of ceos-deliverables.org Deliverables Database and Web Interface: Work is progressing through the SEO to upgrade ceos-deliverables.org. The SEO plans to release a test version of the interface by the 22nd of July. The CEO is seeking people to test this interface and provide feedback during the period 22-26 July. The operational version of the updated interface should be rolled out on August 1st, leaving sufficient time for CEOS Deliverable leads to update their deliverables before SIT Technical Workshop and the 30th September cut-off for CEOS Plenary reporting.
* CEOS Delegation to GEO Ministerial and Plenary: The CEOS delegation list was sent to the GEO Secretariat on June 28th and includes ISRO, GA, CSIRO and NASA participants.
* GEO Ministerial Declaration: An updated version of the GEO Ministerial Declaration should be circulated following the Ministerial Working Group on July 25th. This will be distributed to CEOS Principals with instructions to communicate any comments they might have on this declaration through their national GEO channels.
* Ongoing CEOS Representation in GEO: CEOS representation on the GEO Programme Board expires at GEO Plenary in early November. CEOS leadership must decide to reapply as one of the Participating Organizations or not (this would include identifying CEOS Principal and Alternate(s) to the Programme Board).
* VC/WG/AHT Updates for the CEOS Website: Updates to the information on the CEOS website were solicited by the CEO on June 24th. To date, two sets of updates have been received from P-VC and SDCG-GFOI.

Astrid-Christina Koch (COM) provided feedback on the GEO Ministerial Declaration, noting that it is too long and should be two pages maximum. Steve Volz (NOAA, SIT Chair) confirmed this has already been flagged as an issue and a revision will be made.

Regarding ongoing CEOS representation in GEO, Steve Volz suggested the GEO Programme Board is a good place for CEOS to be involved. Conversely, it is not clear whether CEOS should remain a GEO ExCom Observer, which presents a significant time and travel burden with limited gain for CEOS.

Adam Lewis (GA, SIT Vice Chair Team) stressed the importance of finding a CEO candidate, noting the central role the CEO has in CEOS operation, the CEOS Work Plan, etc.

1. **SIT Chair Report**

Steve Volz (NOAA, SIT Chair) reported:

* 2019 SIT Technical Workshop:
  + The draft agenda was shared with SEC, VCs, WGs, and AHTs on July 16th. All are requested to provide comments and confirm presenter status by July 29th so another version can be sent out to the broader CEOS community.
  + The [registration link](http://ceos.org/meetings/2019-sit-technical-workshop/) is active (25 registrants as of July 16th).
  + The logistics package was shared on June 19th. The recommended hotel is the Pike’s Waterfront Lodge, which has a negotiated government rate. The hotel has agreed to provide transportation for 20 guests to the meeting venue in the morning with afternoon return to the hotel.
  + All are encouraged to make their flight arrangements as soon as possible.
  + VC/WG/AHT Working Day: expected to spend significant time discussing the outcomes from the Working Group and Ocean Virtual Constellation Merger Study Teams.
* July/August SIT Chair Tag-ups with VCs, WGs, and AHTs:
  + Merging the tag-ups was not possible, so separate 30-minute teleconferences will be held with each entity (except in a few cases where two entities are available for a 60-minute teleconference).
  + Call slots are now also available on August 22nd.
  + There was no consolidated response received from SDG-AHT, WGDisasters, OCR-VC, OST-VC, and OSVW-VC.
* Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVCMST) Status:
  + Two teleconferences have been held for each Study Team, with a third teleconference upcoming.
  + A draft report is expected to be ready for SEC review around August 20.
  + There are no predetermined outcomes from the Study Teams; the expectation is to bring the results from the Study Teams to the Working Day and the SIT Technical Workshop.
  + The SIT Chair is planning to have follow-up telecons with CEOS Principals after the SIT TW.
* Action SIT-34-12: Draft language for the proposed VC leadership rotation will be shared by the end of this month.

Kerry Sawyer (NOAA, SIT Chair Team) raised two additional points for SEC attention:

* A request has been received from GEO for proposals for the ‘Ideas Stage’ at GEO Week 2019.
* GEO has also requested abstracts for the GEO Session at the AGU Fall Meeting in December. The topic is the GEO Knowledge Hub.

1. **GEO SEC Report**

Steven Hosford (ESA/CNES, CEO) reported on behalf of Doug Cripe (GEO Secretariat):

* The new GEO point of contact for CEOS will be Doug Cripe.
* Doug will plan to attend SIT Technical Workshop in September and possibly CEOS Plenary in October (though this might be covered instead by Gilberto Câmara, GEO Secretariat Director).
* ‘Ideas Stage’ Call for GEO Week 2019: All information is on the GEO website. A dedicated room at the venue will serve as an informal ‘Ideas Stage’ for 10, 20 and 30 minute talks on GEO-related topics. The Ideas Stage will have presentation capability (HDMI input to large screens), a microphone for the presenter, and live streaming to a global audience. The initial schedule of talks will be released in September 2019, and applications will be open until GEO Week starts at the beginning of November.

1. **SEO Report**

Brian Killough (NASA, SEO) reported:

* The GEO Plenary CEOS exhibition booth proposal was accepted. Costs and details have not been released at this time.
* Brian will attend the IGARSS conference in Yokohama, Japan from July 29th to August 2nd. He will be co-chairing a session on ARD with Andreia Siqueira (GA) and presenting a paper: *"The Impact of Analysis Ready Data in the Africa Regional Data Cube"*.
* The SEO is providing support to some of the Amazon-GEO projects and has been directly contacted by teams from Ukraine and Kenya for support.
* Brian attended the Harvest meeting in Washington, D.C., June 25-26. The meeting was directly linked to GEOGLAM and had participation from African users. Since this meeting, the SEO has connected with Mike Humber (University of Maryland) to explore the use of the Africa Regional Data Cube for testing the GLAM (crop anomaly) algorithm at Landsat scale.
* CEOS Plenary Action 32-08: The SEO is working with GA (Adam Lewis and Trent Kershaw) to explore possible CEOS Agency contributions to the Digital Earth Africa initiative. The primary need from CEOS Agencies is ARD from Landsat, Sentinel, and ALOS. Landsat and ALOS have solutions in place. The SEO is working with Steven Hosford (ESA/CNES) and Albrecht Schmidt (ESA) regarding Sentinel ARD solutions to support Digital Earth Africa. This work is ongoing.

1. **Working Group Reports**

**WGDisasters**

Simona Zoffoli (ASI, WGDisasters Chair) noted the following points for SEC attention:

* The update of the GEO Community Activity “EO 4 DRM” for the GEO Work Programme 2020-2022 has been submitted to GEO.
* WGDisasters agreed to review its terms of reference to take into account the Sendai Framework for Disaster Risk Reduction. The new terms of reference will be presented to SIT Technical Workshop in September.
* A team of volunteers from WGDisasters have started discussions about reviewing the CEOS Disaster Risk Management Observation Strategy (2013).
* The Volcano Demonstrator Team shared the Volcano Demonstrator Implementation Plan, and it is currently under review.

**WGClimate**

Jörg Schulz (EUMETSAT, WGClimate Chair) reported:

* Verification and preparation for the ECV Inventory gap analysis has been completed, and the gap analysis part one (against the GCOS criteria) has started.
* Assembling of the teams for specific ECV analysis is ongoing. WGClimate has encountered some issues finding people and in response will reduce the scope of the ECV analysis to fewer ECVs than originally planned.
* The second draft of the gap analysis report and updated coordinated action plan is expected by September 20th for agency review prior CEOS Plenary.
* The Greenhouse Gas Monitoring Task Team conducted a roadmap meeting in Tokyo on June 9th. The team has started development of the roadmap for implementation. In this context it is important to note that:
  + The draft structure of the roadmap was agreed with one added section on expected outcomes. This is needed to enable benefit on investment considerations.
  + The considerations on needed resources aims to cover actual staff contributed to the task team; contributions such as for workshops; and research priorities for agencies.
  + In addition, the task team works using a project-management-like representation of the roadmap to more easily identify progress and emerging risks during the implementation.
* The Greenhouse Gas Monitoring Task Team currently consists of people representing the acting CEOS and CGMS entities as well as interested agencies’ representatives. The Task Team is looking for further support in particular to increase competence with respect to interfaces to the modelling, *in situ* measurement, and application communities.
* WGClimate will hold its next meeting from 4-6 September in Anchorage, Alaska, USA. Joint sessions with LSI-VC and SDCG-GFOI are envisioned. Jörg thanked Jenn Lacey (USGS) for her support organising the meeting.
* A two-hour side session has been requested during the SIT Technical Workshop week to address two items: present for informal discussion the planned roadmap on the GHG activities to CEOS agencies (which will be formally presented at Plenary) and secondly, launch a new phase of the CEOS Carbon Strategy activities with interested CEOS entities. This side meeting will be coordinated by Mark Dowell (COM), Albrecht von Bargen (DLR, WGClimate Vice Chair), and David Crisp (NASA/JPL).

**WGISS**

Mirko Albani (ESA, WGISS Chair) noted the following points from his written report:

* Preparations for WGISS-48 are continuing. The meeting will include follow-up sessions on SpatioTemporal Asset Catalog (STAC) technology, ARD tools, Data Cubes, Big Data, machine learning, and artificial intelligence.
* A joint teleconference with WGCV was held on July 9th to progress the use of Data Cubes to support cal/val activities and on CEOS data Maturity Matrix evolution. WGISS also remotely participated in this week’s WGCV-45 meeting.
* CEOS Work Plan Action DATA-09: registration of ECV Inventory v3.0 datasets into the CEOS IDN is being addressed by the ESA WGISS team in cooperation with the WGClimate Chair.
* CEOS Work Plan Action CARB-15: a new major release (with updates based on user feedback) of the prototype carbon portal is planned before the WGISS-48 meeting.

**WGCapD**

Prakash Chauhan (ISRO, WGCapD Chair) noted the following points from the written report:

* The report of the hands-on training for AEM as well as for CONAFOR and CONACYT on multiple fire-related topics has been completed, closing CEOS Work Plan Deliverable CB-39.
* WGCapD team members are collating updates for the CEOS website.
* Planning is progressing for a regional science meeting (July 22-24) followed by training (July 25-27) in Johar Bahru, Malaysia, with the participation of NASA, ISRO, JAXA, and VNSC. This is part of WGCapD’s CEOS Work Plan Deliverable CB-32 on providing regional training on land use and land cover. The WGCapD Chair will participate in the science meeting and will inaugurate the training program.
* WGCapD is seeking a new Vice Chair. All are encouraged to consider possible nominations.

Pham Anh Tuan (VAST-VNSC, CEOS Chair) reported that VAST-VNSC might be able to nominate a person for the soon to be vacant WGCapD Vice Chair position. VAST-VNSC will discuss this internally and follow up.

**WGCV**

Cindy Ong (CSIRO, WGCV Chair) reported:

* WGCV-45 is currently ongoing in Perth, Australia.
* The WGCV CARD4L Peer Review Process has been confirmed and an initial pool of reviewers have been identified.
* CEOS SEC Action **251-02** (Cindy to connect Raj Kumar (ISRO) with the WGCV Microwave Subgroup Chair regarding collaborative efforts with the OSVW-VC) has been completed.

1. **AHT Reports**

**SDCG/GFOI**

Stephen Ward reported on behalf of Osamu Ochiai (JAXA, CEOS Lead for GFOI):

* The forthcoming joint meeting in Anchorage, Alaska, USA in September with LSI-VC and GEOGLAM will trial a meeting format that anticipates the inclusion of agriculture and forest/biomass subgroups within LSI-VC. The meeting will be hosted by USGS from September 4-6.
* A new SDCG Work Plan is in development.
* A good dialogue with FAO has been established around the development of an Open Data Cube back-end to the SEPAL tools suite in use by many countries for forest inventory monitoring.
* The USGS Co-Chair for SDCG has been confirmed as Chris Barber from Sioux Falls.
* The next GFOI Lead meeting will be hosted by UNFCCC in Bonn in September. Osamu is planning to attend. This is a positive development in establishing a closer connection to the convention community.

1. **AOB**

**53rd CEOS Newsletter**

Yukio Haruyama (JAXA/RESTEC) reported that all articles have now been received. He thanked all of the contributors. Yukio sent an email earlier today with edited copies of the articles for review by next Thursday, after which the newsletter will be printed.

1. **Next Meeting and Adjourn**

Pham Anh Tuan (VAST-VNSC, CEOS Chair) thanked everyone for attending, noted that CEOS SEC-253 will be held on August 29, and closed the meeting.