**Minutes V1.0**

**262nd CEOS SECRETARIAT MEETING**

Thursday 5 March 2020

Chaired by ISRO

**Participants**

**CEO:** Kerry Sawyer

**ESA:** Ivan Petiteville

**EUMETSAT:** Robert Husband

**GEO SEC:** Doug Cripe, Sara Venturini

**ISRO:** Raj Kumar (Chair), Rajeev Jaiswal, Nitant Dube, Matthew

Steventon, Santhi Sree, RP Singh

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

**NASA:** Sandra Cauffman, Christine Bognar, Paula Bontempi, Chris Kidd

**NOAA:** Steve Volz, Chuck Wooldridge, Albert DeGarmo

**AC-VC:** Jay Al-Saadi

**SIT Chair Team:** Adam Lewis, Jonathon Ross, Flora Kerblat, Stephen Ward,

George Dyke, Andreia Siqueira

**SEO:** Brian Killough

**VAST-VNSC:** –

**WGCapD:** Nancy Searby

**WGClimate:** Jörg Schulz

**WGCV:**  –

**WGDisasters:** David Green, Dave Borges

**WGISS:** –

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

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

1. **CEOS Executive Officer Report**

Kerry Sawyer (NOAA, CEOS Executive Officer) reported on the status of the CEOS 2020-2022 Work Plan:

* No change since SEC-261 other than further reconciliation of status for a total of 149 Deliverables. Some outstanding gaps will be followed up over the next couple of weeks.

Kerry also reported that she is still reviewing and updating the CEOS listservs. Relevant entities should expect an action from the CEO in mid-March for input to the lists.

1. **SIT Chair Report**

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

* The intention is to continue with the SIT meeting as planned, despite the issue of COVID-19, unless there is a dramatic change in circumstances. The SIT Chair Team has been reaching out to agency contacts directly to confirm their agency’s travel policies.
* The proposed v1 agenda for SIT-35 has been circulated for any final urgent comments. The final version will be transmitted to all participants, CEOS Agencies and Working Teams on Friday March 6. Details on document and presentation submission will also be sent on March 6.

Adam asked whether the CEO is still able to travel to SIT-35, despite the NOAA decision to withdraw from SIT-35. Steve Volz (NOAA) confirmed that travel approval is at his discretion, however he defers to Kerry Sawyer (NOAA, CEOS Executive Officer) to make the decision regarding her travel to Hobart. This will be discussed further off-line and NOAA will confirm the decision with the SIT Chair via email.

Jörg Schulz (EUMETSAT, WGClimate Chair) noted that the situation within Europe has escalated, with most meetings until the end of April being cancelled. EUMETSAT itself has restricted all travel to Asia, and this includes the travel hubs of the Middle East and Singapore commonly used to access Australia from Europe.

Steve Volz stated that NOAA is ready to support a virtual meeting, despite the time zone difficulties.

Ivan Petiteville (ESA) reported that the situation is changing daily in Italy, with restrictions expanding rapidly.

Paula Bontempi (NASA) shared the NASA position. A travel guidance waiver has been submitted for the 15-person delegation, and an answer is expected today. New travel guidance is also expected to be issued by the agency today. The NASA team is fully prepared to support a virtual meeting.

Osamu Ochiai (JAXA) noted that there are no restrictions on JAXA travel at this stage, though the situation is under review daily. Osamu is not supportive of a virtual meeting, citing time zone challenges, and instead suggested a postponement.

Raj Kumar (ISRO) is also uncertain of the effectiveness of a remote meeting but noted that postponing the meeting could be difficult. He added that there are not yet any travel restrictions for ISRO staff.

Kerry Sawyer noted there is precedence for a SIT meeting being postponed, citing the situation in 2011 with the Tōhoku earthquake in Japan.

Adam Lewis and Jonathon Ross (GA, SIT Chair Team) said that postponement is not an option that is being seriously considered; deferring to a virtual meeting is the likely course of action. The uncertainty of the situation means that things could be worse in the near future. Steve Volz and Paula Bontempi do not support a postponement but rather a slimmed down virtual meeting to maintain momentum of activities.

Christine Bognar (NASA) requested that the SIT Chair Team take an action to send out an announcement detailing final decision dates/points for SIT-35 to support agency planning (both travel cancellations as well as for virtual participation).

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| **262-01** | SIT Chair Team to send an announcement detailing final decision dates/points for SIT-35 to support agency planning. | **March 6** |

*GCOS Evolution*

Stephen Ward (SIT Chair Team) reported:

* The SIT Chair Team has been informed by Carolin Richter (GCOS Director) that her role has been terminated by WMO as part of a number of changes to GCOS being implemented by WMO. Full facts are not yet clear, but the current understanding is:
  + As part of WMO restructuring and cost-cutting, WMO seeks to have GCOS as an internal programme. GCOS comes under the Infrastructure Division (Head: Anthony Rea).
  + The GCOS Steering Council may be a Study Group under a new WMO Commission for Observation, Infrastructure and Information Systems, but would be renewed annually.
  + The GCOS Panels would be maintained as WMO experts, but no longer as joint panels.
* It’s not clear that the GCOS Sponsors and UNFCCC Secretariat have been consulted – there is a fair amount of uncertainty generally. It will no doubt take time for the outcomes to be resolved after the WMO Executive Council in June, but Carolin finishes on April 1. CEOS needs to establish what this means in the meantime for the key document updates and processes.
* ​CEOS and its agencies are heavily invested in the GCOS Framework as a path to UNFCCC and will need to consider the implications of this and how to ensure a strong ongoing relationship between the critical work of GCOS and CEOS’s substantial contributions. There will be no attendance by GCOS at SIT-35.
* SEC is invited to discuss this news and implications for CEOS. Possible actions could include:
  + A letter from CEOS Chair to WMO (Rea) asking for confirmation of the intentions with respect to GCOS and assurance that the key processes in which we are invested will be protected and appropriate.
  + An invitation to WMO to attend a future CEOS meeting to discuss GCOS.
  + Continue the follow up with the UNFCCC Secretariat to ensure that axis is strong, including their attendance at the proposed Copernicus-CEOS GHG-AFOLU Meeting at JRC in July and a response to SIT invitation to a meeting around SIT Technical Workshop in September.
  + Ensure the GEO Secretariat (pursuing observer status in UNFCCC) is up to speed on the news.

Jörg Schulz (EUMETSAT, WGClimate Chair) will start an informal discussion with the UNFCCC Secretariat from the WGClimate perspective, noting that the GCOS Framework is the foundation against which the ECV Inventory is built. WGClimate needs an understanding of how the framework is expected to evolve, particularly noting that issues/insufficiencies were already identified last year. There is the question of whether GCOS will remain representative enough once it is internalised within WMO. We also need to also understand how this WMO restructuring might affect the work of CGMS.

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| **262-02** | WGClimate Chair to work with CEOS SEC to decide the requests for clarification to send to WMO regarding their restructuring and GCOS, and to decide to whom the questions are sent. WGClimate Chair will also follow up informally with contacts at the UNFCCC Secretariat for input. | **For discussion at SEC-263** |

1. **Atmospheric Composition Virtual Constellation (AC-VC) Report**

Jay Al-Saadi (NASA, AC-VC Co-Lead) reported on behalf of the AC-VC Leads:

* Jay will participate remotely in SIT-35. The other two AC-VC co-leads may participate remotely in some sessions.
* For the first time, AC-VC has a third formal co-lead, as previously communicated was our strategic intent. AC-VC welcomed Hiroshi Tanimoto of Japan’s National Institute for Environmental Studies (NIES), on behalf of JAXA. Dr. Tanimoto is an expert on both air quality and greenhouse gases and broadens the regional balance of the leadership team (now North America, Europe, and East Asia).
* AC-VC has also defined topical leads aligned with its deliverables:
  + Diego Loyola (DLR) will lead the evolution of the satellite ozone records activity into its new focus on tropospheric ozone.
  + Shobha Kondragunta (NOAA) will lead the new activity on air quality associated with aerosol.
* AC-VC inputs for the 2020-2022 CEOS Work Plan were submitted in December, including three new deliverables. All previous AC-VC deliverables were closed in Q3 2019. Tasks cover:
  + Evolution of previous satellite ozone records activities to focus on tropospheric ozone.
  + Evolution of previous air quality constellation (for trace gas observations) activities toward implementation of the validation recommendations expressed in the white paper that was endorsed by the 2019 Plenary.
  + New activity on air quality associated with aerosol.
  + Greenhouse Gas deliverables (to be captured in the climate part of the Work Plan).
* The first geostationary air quality mission, Korea’s GEMS onboard GEO-KOMPSAT-2B, was launched successfully by Ariane 5 from Kourou on February 19, 2020.
* AC-VC-16 will be held June 8-10, in Brussels, with BIRA as the local host.

Osamu Ochiai (JAXA) expressed his thanks for accepting Hiroshi Tanimoto as the third co-Lead of the AC-VC, noting that his appointment from NIES was supported by JAXA.

1. **GEO SEC Report**

Doug Cripe and Sara Venturini (GEO Secretariat) reported:

* Doug has been participating in the CEOS-COAST calls. The GEO Secretariat is planning to host a COAST meeting alongside the 2021 CEOS-GEO Bilateral Meeting.
* GEO Secretariat staff held side discussions at last week’s IPCC meeting in Paris with:
  + IPCC Secretariat: suggested that the systematic observation community should start coordinating internally regarding contributions to the global stocktakes. The IPCC Secretariat was planning to raise this suggestion at the next ESA CCI Collocation Meeting; however, this has now been postponed. It will instead be discussed during an informal SBSTA discussion at the June UNFCCC session.
  + Task Force on National Greenhouse Gas Inventories: discussed cooperation opportunities and the convening of a joint IPCC-GEO expert meeting on land representation, the role of remote sensing and field measurements, and uncertainty.
  + Space Climate Observatory (SCO): a meeting will be held in April in Toulouse, during which the first round of project concepts will be discussed. Gilberto Câmara (GEO Secretariat Director) has been invited to attend.
* GEO is considering hosting a side event at COP 26 on Greenhouse Gas Inventories and EO.
* The GEO Google Earth Engine license program proposal deadline will be extended to the end of March.

1. **SEO Report**

Brian Killough (NASA, SEO) reported:

* He is attending the Digital Earth Africa Technical Advisory Committee (TAC) meeting in Pretoria, South Africa, March 3-5.
* Brian and Kim Holloway will participate in the WGCapD meeting in Palo Alto, California, March 9-13.
* Brian and several programmers attended an Open Data Cube "hackathon" at Geoscience Australia, February 24-28. Several topics were targeted including Digital Earth Africa and a water project using multiple datasets for time series water detection.
* The CEOS External Request Process Paper Team will release the first draft of the process paper for the SIT-35 meeting. The team consists of representatives from NASA, NOAA, GA, ESA, ISRO, EC and JAXA.

1. **Working Group Reports**

**WGClimate**

Jörg Schulz (EUMETSAT, WGClimate Chair) reported:

* WGClimate-12 has been cancelled due to COVID-19. The meeting will be replaced with a series of teleconferences in the same week.
* The Greenhouse Gas Task Team is still working on their report. This is currently listed as for endorsement at SIT-35, but Jörg does not see the report as being at this stage just yet. In particular the work plan will still be in draft status by SIT-35.

**WGDisasters**

David Green (NASA, WGDisasters Chair) noted the following:

* Regarding Session 7 of the SIT-35 agenda (CEOS Work Plan Deep Dive): the WGDisasters Chair Team has requested additional information regarding the proposed content, format of discussion, and expectations to inform suggestions of alternate WGDisasters deep dive topics.
  + Jonathon Ross (GA, SIT Chair Team) noted these topics were chosen by the SIT Chairs as interesting and significant topics, but they are very welcome to accept alternate suggestions based on further input from WGDisasters. The next agenda will note these topics are TBC, and the SIT Chair Team and CEO will be reaching out to the WGDisasters Chair Team to confirm.
  + David suggested that GEO-DARMA would be a good topic to highlight regional successes and issues/challenges (focus on water and floods). He also suggests highlighting the Landslide Pilot (combines optical and SAR) and its success transitioning from a pilot to operations. The session could close with the GEO-LEO-SAR Flood Pilot and a discussion on CEOS-CGMS collaboration around this topic.
* The face-to-face WGDisasters-13 meeting (Pasadena, California, March 9-13) has been cancelled due to COVID-19, replaced by a series of teleconference sessions over March 9-11. Formal decisions will not take place due to the suboptimal nature of the virtual meeting.
* A side meeting was planned at SIT-35 for discussion at CEOS leadership level on balancing operational and research priorities of CEOS Agency tasks in WGDisasters. Steve Volz (NOAA) suggested that if this is unable to take place as a side meeting at SIT-35, it would be good to follow up through a teleconference instead.

**WGISS**

Rob Woodcock (CSIRO, WGISS Chair) was unable to attend. Apologies were sent in advance.

**WGCapD**

Nancy Searby (NASA, WGCapD Chair) noted:

* The WGCapD-9 meeting will now be held virtually. The agenda will be compressed in response.
* The National Space Research & Development Agency of Nigeria (NASRDA), SANSA, and the Kenyan space agency will be joining the African regional session of WGCapD-9. Good participation is expected across all regional sessions; they are working well as a means to engage more people in the meeting.
* The Space Capacity Development Advisory Board (SCDAB) pitch for SIT-35 can be presented remotely with no issues, should this be necessary.

**WGCV**

Cindy Ong (CSIRO, WGCV Chair) was unable to attend. Apologies were sent in advance and a written report was submitted.

1. **SDG-AHT**

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

* There was a productive face-to-face meeting in February in Geneva with the GEO Secretariat, during which the breakdown of roles and responsibilities between CEOS and GEO were refined. It was also decided that the statement of satellite requirements needed more work, and this has been progressed by the team in the weeks since. Further discussion on the requirements table is planned around SIT-35 during the side meeting.
* SDG Session at SIT-35: a communication will be sent in the next few days to share the status of CEOS work on the SDGs, and to explain how the team is relying on CEOS Agencies to contribute to the discussion in Hobart (including through a *tour de table* about their views on the way forward and available resources). The SDG-AHT would be grateful if the Principals of agencies interested in the topic can actively participate in the discussion and bring new ideas to the table.

1. **AOB, Next Meeting, Adjourn**

Christine Bognar (NASA) thanked Kerry Sawyer (NOAA, CEOS Executive Officer) for her work on the CEOS Work Plan to date. She also thanked the SIT Chair Team for their flexibility on the SIT-35 agenda.

Raj Kumar (ISRO, CEOS Chair Team) thanked everyone for attending. CEOS SEC-263 will be a face-to-face meeting held on the side meeting day of SIT-35 in Hobart, on March 24. For timing and location details, please refer to the SIT-35 agenda.