CEOS SEC Report

(two pages max.)

Entity: SIT Chair

Prepared By: CSIRO/GA

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

None

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

 Draft response to WMO regarding OSCAR has been produced by SIT Chair Team and will be shared with SEC ahead of the SEC telcon for review. This includes reference to OSCAR sustainment and a 'strong GCOS' per Plenary discussion.

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)

- SIT Chair team is planning new rounds of consultation and update calls with CEOS working teams. These include: periodic all hands calls; and small group calls with individual VCs to confirm expectations and value proposition for their CEOS engagement.
- CSIRO is firming up the plans for the proposed CEOS Biomass Validation workshop. Now planned for Canberra in the week of 2nd 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. (Pitch opportunities to make a case for resources is a concept we seek to trial at SIT-35). Attendance at the Canberra event from related CEOS agencies is appreciated.
- SIT-35 (confirmed dates as mentioned below): more information to come soon, including a link for attendees to book their accommodation directly (special rates at the Wrest Point Hotel before 30th January 2020)
- On the Carbon and Biomass front, EC/JRC plans to bring together the GHG and AFOLU communities, to explore a more integrated approach to convention engagement by space agencies. Very preliminary dates are the week 8-12 June 2020 (the week following the IWGGMS conference in Darmstadt, so a lot of the GHG community will be in Europe). Planning is underway and firmer details available soon. Please notify your related programme and mission staff.
- We have discussed with the SEO about collaboration to generate a CEOS Year Highlights Reel for the first time for Plenary in Oct 2020. This would be something we can use both internally and externally to report and promote CEOS work.
- GEO Week hosting was intense but rewarding. Thanks to all CEOS colleagues who made the trip – including Brian Killough providing the CEOS booth!
- Pending a successful renomination at the February Programme Board meeting, the SIT Chair(s) 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 tems in the Canberra Declaration adopted by Ministers at the 2019 Summit.

 We updated CEOS representation to GEO Programme Board - Andreia Siqueira (GA) with alternates Amy Parker (CSIRO) and incoming CEO Kerry Sawyer.

In future updates we will provide more details around progress on our 3 nominated priorities of ARD, Carbon and Biomass, and the SDGs

Upcoming meetings or events

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

- The CEOS-GEO bilateral is scheduled for 3-4 February 2020, in Geneva (for SIT Chair Team, SIT Vice Chair Team, CEOS Chair and Team, SEO, Incoming CEOS Executive Officer). SEC suggestions for topics invited.
- SIT-35 is confirmed for Hobart on 24-26 March, 2020.
- LSI-VC will also convene in Hobart the 2 days following for efficiency.
- SIT-TW is confirmed for Zagreb, with the expectation that side meetings will be 9th Sep and the main meeting on 10th and 11th September, 2020.
- GEO Plenary date and location now confirmed Port Elizabeth, South Africa, 2-6
 November
- 34th CEOS Plenary will be held October 19-21, 2020, in Ahmedabad, India.

Attachments

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

CEOS SEC-258 Report – November 2019

Entity: SEO

Prepared By: Brian Killough (NASA)

Issues requiring discussion/decision during CEOS SEC teleconference

None

Updates on issues raised during the last CEOS SEC teleconference

None

Upcoming meetings or events

Brian Killough is attending the AGU Conference in San Francisco, CA on Dec 9-13. He will be
presenting an eLightning talk on " An Open Data Cube (ODC) Water Application Demonstrating
the GEO Knowledge Hub (GKH) and Supporting the Sustainable Development Goals (SDG)".

Other highlights, activities, actions, projects, collaborations

(e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The SEO participated in several side meetings at the GEO Plenary. These included an Ideas Stage
 presentation on the use of the Africa 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 3 days. There was significant interest in the following topics ... ARD and access to Landsat and Sentinel archives, GFOI, GEOGLAM, Disasters and Data Cubes.

CEOS SEC-258 Report

(two pages max.)

Entity: WGDisasters

Prepared By: NASA Chair

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

No updates

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

No issues

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)

- 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.
- WGDisasters is working to update their Disaster Risk Management (DRM) EO
 Strategy document. 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.
- New GEO/LEO/SAR Flood Pilot Proposal under development. Intend to submit for decision at SIT-35.
- WGDisasters 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.
- USGS SIR from Powell Centre to be distributed to WGDisasters on publication.

Upcoming meetings or events

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

- AGU 2019, December 2019
- Cities on Volcanoes, Remote Sensing Workshop, May 2020
- Understanding Risk Forum, May 2020

Attachments

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

CEOS SEC Report

(two pages max.)

Entity: WGClimate

Prepared By: Jörg Schulz (EUMETSAT), Chair

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

none

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)

- SBSTA-51 statement endorsed by CEOS and CGMS, validated on 8 November, and forwarded to UNFCCC. Statement will be read at opening session of SBSTA-51;
- Preparation for COP-25/SBSTA-51 ongoing as planned after move of the meeting from Santiago to Madrid;
- WGClimate will provide a 10 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. Poster titles are:
 - Space-based capabilities to deliver Climate Data Records for Essential Climate Variables, Authors: Schulz et al.
 - A global constellation of space-based observations of Greenhouse Gases: measurement approaches, datasets, and applications in support of the Global Stocktake, Authors: Crisp, Dowell, von Bargen, et al.
- Gap analysis report and action plan drafting ongoing, still fighting issues with slow responds from agencies. Availability for review is envisioned for end November;
- GHG roadmap, Task team leader Mark Dowell distributed a version on October 28, for review by November 22. Initial Roadmap is planned to be send to AC-VC, WGCV, GSICS, CGMS WGs, etc. by mid-January 2020 asking for feedback by mid-February 2020. Then the task team will revise it for SIT-35;
- Unchanged status on Action 238-07 (WGClimate Chair to work with the SEO to ensure climatemonitoring.info is appropriately advertised on ceos.org and via CEOS social media.) and update of CEOS WGClimate web content on ceos.org but we still consider it after gap analysis report and SBSTA-51 is finished.

Upcoming meetings or events

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

Plan emerged that next WGClimate meeting will be in Japan shortly after SIT-35 (TBC)

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

CEOS SEC Report

(two pages max.)

Entity: WGISS (Working Group on Information System and Services)

Prepared By: Robert Woodcock - Chair (CSIRO), Makoto Natsuisaka - Vice-chair

(JAXA)

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

None

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)

- The WGISS-48 meeting was held in Hanoi, Vietnam from October 8-11th hosted by VNSC. The complete agenda and presentations from the meeting are available at http://ceos.org/meetings/wgiss-48/. The meeting was well attended and included important presentations and discussion on emerging topics including:
 - Data Cube interoperability
 - Evolution of the CEOS Discovery and Access infrastructure using emergent standards for metadata (STAC) and updates to the OGC and related standards (SKOS, WFS 3.0 and OGC API)
 - o EO data formats for the efficient distribution and analysis in the Cloud
- The GEO Aquawatch team are in discussion with WGISS on how CEOS data might be made more accessible and useable to the GEO Aquawatch objectives. WGISS is currently discussing data discovery and the potential for GEO Aquawatch to engage with the CEOS ARD Strategy so CEOS data is suitable for water quality applications. It is fully expected this engagement will expand as it crosses several CEOS groups including WGISS, LSI-VC and WGCV.
- The CEOS IDN is being updated to support "services and tools" discovery in addition to its current data capabilities. This involves the development of appropriate services metadata and governance regimes to ensure information is accurate and up to date, as has been achieved for data discovery.

Upcoming meetings or events

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

WGISS-49 will be hosted by CONAE, and held in Buenos Aires, Argentina, April 20 to 23, 2020. Registration and information: http://ceos.org/meetings/wgiss-49/

Attachments

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

CEOS SEC-258 Report

(two pages max.)

Entity: WGCapD

Prepared By: Nancy Searby (Chair/NASA) and Pham Thy (Vice Chair/VNSC)

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

None

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)

- CEOS WGCapD welcomed our new Vice Chair Pham Thi Mai Thy, VNSC, at the CEOS Plenary.
- Introduction to Radar multi-lingual MOOC's at <u>'Echoes in Space</u>' by ESA, DLR, and U of Jenna were made available on September 16th for one year (CB-28). In addition, ESA has 2 related MOOCs open:
 - MOOC "Earth Observation from Space: The Optical View": https://www.imperativemoocs.com/courses/the-optical-view
 - MOOC "Monitoring Climate from Space": https://courses.imperativemoocs.com/monitoring-climate-from-space
- A 5-part webinar series on Geospatial Technology for Wildfire Management, supported by ISRO, NASA, ECMWF was held Oct 1-29, 2019 (CB-28).
- The training calendar pilot is live at https://training.ceos.org. Looking for feedback on structure & format, entries from all agencies on training events and other ad hoc events (CB-21).
- A mini MOOC with Canadian Space Agency will be available by mid-next year. The Mini-MOOC is in several languages; the English and German versions and should be able to publish by end of November. There will be a French version and that will be ready by beginning of 2020.
- The Webinar "Basics of Hyperspectral Remote Sensing (HRS), Applications of HRS in Agriculture, Applications of HRS in Water Resources, Applications of HRS in Geology, Applications of HRS in Air Pollution" (4 Weeks) will start in November (CB-29-2019-1)
- The Webinar "Overview of Remote Sensing, Flood Mapping, Monitoring and Modelling, Forest Fire Monitoring and Risk Assessment, Earthquake Studies" (4 Weeks) was completed (CB-29-2019-2).
- A regional hands-on training in Thailand on land cover land use change topics is scheduled
 Dec 17-19, focused on LCLUC climate impacts in the coastal zone (CB-32-2019-1 & 3).

- The manuscript that developed following completing CB-37: White paper describing how CB networks, e.g. UN's, can work together with WGCapD (completed in Q2 and provided to SIT), 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.
- Progress continues on the deliverables due in Q4.

CEOS SEC – 258 Report

(two pages max.)

Entity: SDG AHT

Prepared By: Flora Kerblat and SDG AHT Co-leads Marc Paganini (CSIRO) and Alex

Held (CSIRO)

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

None

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

 Designation of individuals and POC (especially agencies which expressed interest at the Plenary) to contact us and help us deliver our work plan would be highly appreciated (before our SDG call next week)

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)

- After presenting its status and work plan, the SDG AHT has been renewed at the CEOS
 Plenary for another and final year "so the AHT can conclude activities and determine if
 the AHT will transition to a permanent CEOS mechanism or disband." A few additional
 expressions of interest have been noted (incl. UKSA, CNES, NOAA)
- GEO Week in Canberra was intense but rewarding lots of SDG discussions, in most of side-events, and in the Plenary (Discussion on Sustainable Development).
 - Thanks to all CEOS colleagues who made the trip including Brian Killough providing the CEOS booth, and Argie Kavvada and Lawrence Friedl (NASA) who led the SDG key side-event.



- SDG AHT helps to organise the SDG key side-event, and some team members attended (CSIRO: Flora, Neil) – more feedback to be shared by EO4SDG soon.
- CSIRO (led by Neil Sims) won an award at the GEO SDG Awards Ceremony for its work to develop robust land degradation satellite-based mapping methods

- adopted by the United Nations at this week's international Group on Earth Observations (GEO) week in Canberra.
- O Industry Track, in particular EO 2.0 workshop (organised by CSIRO): key big EO data platforms participants/speakers included Maxar (GBDX), Google Earth Engine, ESRI (ArcGIS), UK SA Catapult (CEMS), Sinergise (European Data Cube), CSIRO (EASI platform) lots of case studies, examples on SDG (eg Maxar launched discussions in the interactive session with questions like "What are other ideas for how industry can partner with government/NGOs to support SDG"?)



(Satellite Applications Catapult)









(MAXAR)

- Many interactions about the Pacific and linkages with SDG: Pacific stream with various interesting side-events including how to coordinate all EO activities in the region, and a 'Talanoa Statement' that came out of it.
- CSIRO is organising a Radar information workshop in Fiji in the margins of the Pacific GIS&RS Conference (29th November): space agencies have been informed, and their participation highly encouraged when possible. EO &SDG (in particular Radar satellite requirements) will be discussed.
- SDG AHT has a call scheduled next week (Tuesday) to start planning the upcoming weeks until SIT (organise subteams/work)
- SDG AHT will review and contribute to the new GEO Toolkit paper recently released by EO4SDG

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

SDG AHT call scheduled for Tuesday 19th

- Other SDG meeting options will be discussed with the team [face-to-face side-meeting before SIT, in Europe ~GEO meeting early Feb? Joint session with LSI-VC in Hobart?]
- SIT-35 is confirmed for Hobart on 24-26 March, 2020 (with side-events on 24th March)

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

Draft Plan for No.54 CEOS Newsletter

2019.11.14JAXA/RESTEC CEOS Team

	Articles and Contributors
	(Title of article may change as contributor's choice)
	Report of 2019 CEOS Plenary Outcomes
	2019 CEOS Chair Team (VNSC) 800 words with photo.
	Report of 2019 GEO Week Outcomes
	GEO Secretariat400 words with photo
	Report of 2019 SIT Technical Workshop
	2019 SIT Chair Team(NOAA) 400 words with photo
	Report of CEOS Executive Officer (CEO)
	CEO400 words with photo
	Report of CEOS System Engoneering Office (SEO)
	SEO400 words with photo
	Report of activity of Working Groups
	WGDisasters, WGClimate. WGISS, WGCapD, WGCV
	Each WG Chair 400 words with photo
	Reports of Virtual Constellations
	AC-VC, LSI-VC, OCR-VC, OSVW-VC, OST-VC, P-VC, SST-VC
	Each VC Lead400 words with photo
	Message of 2020 CEOS Chair
	2020 CEOS Chair (ISRO) 400 words with photo
	Message of 2020 SIT Chair
	2020 SIT Chair (CSIRO)400 words with photo
•	Schedule

- Article submission Target: December 16, 2019 (Before X'mas season)
- Editing & Printing : January 2020
- Publication: February 2020