

CEOS SEC Report

Entity: CEO

Prepared By: Steven Hosford (ESA/CNES)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- **CEO/DCEO.** There has been no progress made on this issue to my knowledge.
- **Upgrade of ceos-deliverables.org deliverables database and web interface.** Work is progressing through the SEO to upgrade ceos-deliverables.org. SEO/AMA plans to release a test version of the interface by 22/07. The CEO is seeking people to “test run” this interface and provide feedback during the period 22/07 to 26/07. The operational version of the updated interface should be rolled out on 1st August leaving sufficient time for CEOS deliverable leads to update their deliverables before SIT Technical Workshop and the 30th September cut-off for Plenary reporting.

Issues requiring discussion/decision during current CEOS SEC teleconference

- **GEO issues including: 2019 GEO Symposium; CEOS Delegation to GEO Ministerial and Plenary; Ongoing CEOS representation in GEO; GEO Ministerial Declaration.**
 - **2019 GEO Symposium.** The 2019 GEO Symposium took place from 27th - 29th May in Geneva. On this occasion the Symposium was more “inward facing” and focused on the development of the GEO Work Programme for 2020-2022. The symposium was structured around the three engagement priorities (Paris, Sendai, SDGs) and included sessions on some targeted subjects such as the GEO Knowledge Hub. The majority of the symposium was presentations, but several interactive sessions were organised. Some of the major takeaways were: the need to encourage collaboration between GWP activities; the need to link GWP activities to national reporting channels; the need for more interactive discussion sessions and participation of the commercial sector in the GEO WP and the Symposium.
 - **CEOS Delegation to GEO Ministerial and Plenary.** The CEOS delegation list was sent to the GEO Secretariat on 28th June and includes ISRO, GA, CSIRO and NASA participants.
 - **Ongoing CEOS representation in GEO.** CEOS representation in GEO Programme Board expires at GEO Plenary in early November. CEOS must decide if it would like to apply to continue to be one of the Participating Organisation representatives or not (this would include anticipating who might represent CEOS in PB).
 - **GEO Ministerial Declaration.** An updated version of the GEO Ministerial Declaration should be circulated following the Ministerial Working Group on 25th July. This will be distributed to CEOS Principals with instructions to communicate any comments they might have on this declaration through their national GEO channels.

- **VC/WG/AHT updates for the CEOS website.** Updates to the information on the CEOS website were solicited by the CEO on 24th June. To date, two sets of updates have been received from P-VC and SDCG.

Upcoming meetings or events

- LSI-VC-8/GEOGLAM/SDCG-16, 4th-6th September, Anchorage
- CEOS-CGMS WGClimate-11, (TBC) 2nd-6th September, Anchorage
- SIT Technical Workshop, 9th-12th September, Fairbanks

CEOS SEC-252 Report

(two pages max.)

Entity: SIT Chair Team

Prepared By: Kerry Sawyer (NOAA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- N/A

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- **SIT 2019 Technical Workshop**

- o Draft agenda shared with SEC on 16 July. Requesting all to provide comments and confirm presenter status by 29 July so we can send another version out to all.
- o Registration link is active (25 registrants as of 16 July).
- o Logistics package shared on 19 June. We have a recommended hotel – Pike’s Waterfront Lodge – with negotiated government rate. The hotel has graciously agreed to provide transportation for 20 guests to the University in the morning and afternoon.
- o Request all make their flight arrangements as soon as possible.
- o VC/WG/AHT Working Day – expected to spend significant time discussing the outcomes from the Working Group and Ocean Virtual Constellation Merger Study Teams.
- o Bring mosquito repellent.

- **July/August SIT Chair Tag-ups with VCs, WGs, and AHTs**

- o Best efforts to merge the tag-ups has been thwarted by schedules so we are “unjoining” and will be holding separate 30-min telecons with each entity (except in a few cases where we two entities are available for 60-min telecon). Also added another option – 22 August. No consolidated response received from SDG AHT, WGDisasters, OCR-VC, OST-VC, OSVW-VC.

- **Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVC MST) Status.**

- o Held two telecons for each Study Team with 3rd telecon upcoming. Expect to have a draft report to share with SEC ~20 August.

- **Review of SIT-34 Actions:**

No.	Actionee	Action	Due date
SIT-34-01	CEOS VC Co-Leads, WG Chairs/Vice Chairs	All CEOS Virtual Constellation Co-Leads, Working Group Chairs and Vice Chairs, and <i>Ad Hoc</i> Team Co-Leads to provide updated content and information for the CEOS website to CEOS SEO, with a cc to the CEO.	30 June 2019
	<i>Rationale: Information on CEOS website is not current.</i>		

- o CEO sent reminder email on 6/24 to all VCs and WGs asking for updates by 30 Jun; as reported by CEO in CEO report, only P-VC and SDCG have provided updates.

SIT-34-08	CEOS Agencies	Any agency that is ready and able to support one, two, three, any or all of the 6.6.1, 11.3.1, and 15.3.1 Indicators are asked to indicate interest to the Co-Leads of the SDG AHT.	1 July 2019
	<i>Rationale: Demonstrate Agency support to the SDGs.</i>		

- o SEO reported during SEC-251 that they had responded regarding SEO’s work on SDGs; unknown if any other responses received.

SIT-34-12	SIT Chair Team	Draft and distribute the proposed language for the proposed VC leadership rotation, which will identify at least 2, no more than 3 Co-Leads, with Co-Leads from any interested CEOS Member or Associate for a two-year, staggered term. Co-Leads can reapply for position.	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
	<i>Rationale: Detail the proposal for VC leadership rotation.</i>		
SIT-34-13	SIT Chair Team	Draft and distribute the proposed language for the proposed <i>ad hoc</i> Team (AHT) initiation cycle for standing up new AHTs. The two-year initial cycle will allow for defining the objective, evaluating the merit and value of the objectives, and determining the appropriate path forward for continued support within CEOS. Language should include AHT closure process.	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
	<i>Rationale: Detail the proposal for ad hoc team review.</i>		

- Language still being developed.

- **Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVCMST) Status.**
 - Held two telecons for each Study Team with 3rd telecon upcoming. Expect to have a draft report to share with SEC ~20 August.
- **Reports from the Virtual Constellations.**
 - Email sent to VCs on 7/12 and no responses received

Other highlights, activities, actions, projects, collaborations

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

- Request from GEO for proposals for the Ideas Stage at GEO Week 2019. Any interest from CEOS entities to submit a proposal?
- Request from GEO to submit abstract for GEO Session at AGU Fall Meeting in December - topic is GEO Knowledge Hub. Any interest?

Upcoming meetings or events

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

- CEOS 2019 SIT Technical Workshop: 11-12 September in Fairbanks, Alaska. September 10th for side meetings and September 9th for VC/WG/AHT(AHWG) Working Day (by invitation). Invitation letter sent on 7 June. Logistics package to follow shortly. Registration link should be active by end of next week.

Attachments

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

NONE

CEOS SEC-252 Report – July 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

- The CEOS exhibition booth proposal was accepted. Costs and details have not been released at this time.

Upcoming meetings or events

- Brian Killough (SEO) will attend the IGARSS conference in Yokohama, Japan on July 29 to Aug 2. He will be co-chairing a session on ARD with Andreia and presenting a paper "The Impact of Analysis Ready Data in the Africa Regional Data Cube".

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 is providing support to some of the Amazon-GEO projects. We have been directly contacts by Ukraine and Kenya for support.
- Brian Killough (SEO), attended the Harvest meeting in Washington, D.C. on 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 (Univ of Maryland) to explore the use of the Africa Regional Data Cube for testing the GLAM (crop anomaly) algorithm at Landsat scale.
- **CEOS Action 32-08:** *NASA SEO to confer with the CEOS Chair to establish a small brainstorming group to explore possible CEOS Agency contributions to the Digital Earth Africa initiative.*

STATUS: The SEO is working with GA (Adam Lewis and Trent Kershaw). 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 Stephen Hosford (ESA/CNES) and Albrecht Schmidt (ESA) regarding ARD solutions to support DE-Africa startup. This work is ongoing.

CEOS SEC 252 Report

Entity: WG/SIT Chair Team/CEO Team/CEOS Chair Team/SEO/Ad Hoc Team/GEO SEC

Prepared By: Simona Zoffoli (Italian Space Agency), David Green (NASA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

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

- General
 - The Wg Disasters agreed to review the Term of Reference considering as a reference the Sendai Framework for Disasters Risk reduction. The new ToR will be presented to the SIT in September.
 - The update of the GEO Community activity “EO 4 DRM” for the GEO workplan 2020-2022 has been submitted to GEO.
 - A team of volunteers from the WG Disasters started the discussion about reviewing the CEOS Disaster Risk Management Observation Strategy document.
- Initiatives/Projects:
 - Volcano Demonstrator team shared the Volcano Demonstrator Implementation Plan, that is currently under review
 - No major updates from other initiatives since the last report.

Upcoming meetings or events

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

- CEOS WG Disasters meeting n.12, University of Iceland /Nordic Volcanological center, Iceland, September,23-27, 2019

Attachments

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

CEOS SEC 251 Report

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

Prepared By: Mirko Albani - Chair (ESA), Rob Woodcock – Vice-chair (CSIRO)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

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

- Preparation of next WGISS-48 meeting is continuing. Follow-up sessions on STAC Technology, ARD tools, Data Cubes and state of art Big Data technologies like Machine Learning and Artificial Intelligence are going to be organised.
- “CEOS Agencies Participation/Contribution to WGISS” table (showing the different WGISS sub-groups, their scope, CEOS agencies interest/benefits, and skills of representatives) is posted on the WGISS web-site to advertise and stimulate participation to WGISS; reorganization and streamlining of the WGISS Website will be started in preparation of WGISS-48.
- The new CEOS web page (<http://ceos.org/ourwork/lessons-learned-best-practices/>) is being populated with best practices and white papers produced by all Working Groups to improve collaboration and knowledge sharing.
- *Collaborations with:*
 - **WGCV:** joint teleconference held on 9 July: progress and next steps in the use of data cubes in support to CAL/VAL activities and on the CEOS data Maturity Matrix evolution discussed; WGISS will intervene remotely during WGCV-45 meeting.
 - **WGCapD** for technology and user oriented webinars (*Action FDA-05 and DATA-11*): a user webinar focusing on existing (pre)operational Exploitation and Application Platforms targeting the academic community will be organised in October.
 - **WGClimate** on ECV/CDR datasets registration in IDN as first step for accessibility through WGISS Connected Data Assets Infrastructure (*Action DATA-09*): registration of ECV inventory V3.0 datasets into CEOS IDN is being addressed in cooperation between the WGISS ESA team and WGClimate chair.
 - **SDG-AHT:** a set of SW tools and space-born CEOS agencies datasets relevant for SDG Indicators identified by the **SDG-AHT** is being further analysed by WGISS to facilitate discovery and access through WGISS systems.
 - **Carbon Team** on prototype carbon portal development (*Action CARB-15*): New major release is planned before the WGISS-48 meeting with updates based on user feedback.
 - **WGDisasters:** cooperation on generic recovery observatory under discussion.
 - **GEO:** new version of the GEO Work Plan under review to identify where WGISS can contribute with Data Management Principles, WGISS Connected Data Access and Future Data Architectures.
- **Data Preservation and Stewardship**
 - Detailed proposal for GEO Data Management Principles Implementation Guidelines (DMP IG) improvement/update in relation to CEOS WGISS Maturity Matrix finalised. To be shared with the newly formed GEO Data Sharing and Management Working Group.

- Possible improvement of CEOS WGISS maturity matrix is being evaluated to include FAIR principles and to consider relevant work done in the Research for Data Alliance (RDA) and World Meteorological Organization (WMO) Expert Group on Data Management.
- **Data Discovery and Access (WGISS Connected Data Assets Activities, Action DATA-2)**
 - Technical solution for the implementation of a single map-based front-end/portal within the IDN to discover and access CEOS agencies data through WGISS CDA back-end is being discussed. A CEOS branding on IDN/CWIC/FedEO entry pages will also be implemented in this context.
 - 150 EO data collections from JAXA have been registered in IDN, access at granule level through FedEO will be implemented in the upcoming months.
 - System Level Team is working on NOAA request for IDN registering their Southern Ocean collection dataset. NOAA OneStop datasets being registered/updated in the International Directory Network (IDN) and granule search/access is being implemented through CWIC.
 - CWIC tests with National Remote Sensing Center of China (NRSCC) ChinaGEOSS platform for metadata harvesting not yet started.
 - FedEO activities progressing with DLR and EUMETSAT and to be resumed with ROSCOSMOS.
 - CEOS IDN, CWIC and FedEO searchable through the GEOSS Platform (*Action DATA-16*).
- **Interoperability and Use**
 - Open Source Software Inventory ready for deployment on the WGISS Web site. The same structure/approach will be used to implement on the WGISS website the FDA elements inventory resulting from CEOS Workplan *Action FDA-08*.
 - A report on how the Google Dataset Search Tool allows discovery of CEOS agencies data has been prepared including contributions from DLR, ESA and NASA. Report will be finalised with input from USGS and NOAA and circulated by end of July.
 - CEOS agencies services metadata being defined for an initial set of EO services use cases; they will be used to make CEOS agencies services discoverable through the IDN interface and possibly link them to data discovery and access.
 - Federated Identity Management (Single Sign on) white paper was finalised and circulated to all WGISS members for comments/feedback (*Action DATA-13*).
- **Technology Exploration**
 - Next webinar targeting the academic community and focusing on existing (pre)operational Exploitation and Application Platforms is planned in October.
 - A template for gathering inputs from agencies on current/planned use of Machine Learning and Artificial Intelligence technologies is being prepared.

Upcoming meetings or events

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

- **Φ-week** event focusing on EO Open Science and FutureEO - September 9-13 hosted by ESA/ESRIN, Frascati.
- EARTH OBSERVATION OPEN SCIENCE 2019 CONFERENCE – September 25-27 hosted by ESA/ESRIN, Frascati.
- WGISS-48 – October 8-11, Ha Noi, Vietnam, hosted by VAST/VSNC.

CEOS SEC-252 Report

(two pages max.)

Entity: WGCapD

Prepared By: Prakash Chauhan (Chair/ISRO) and Nancy Searby (Vice Chair/NASA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

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- The training report was completed for WGCapD work plan deliverable CB-39, provide the hands-on training for AEM as well as for CONAFOR and CONACYT on multiple fire-related topics.
- Website updates are being collated for a comprehensive WGCapD update.
- Plans are proceeding to provide a regional science meeting followed by training in Johar Bahru, Malaysia with the participation of NASA, ISRO, JAXA, VNESC etc. during July 22-24, 2019. The training will be conducted during July 25-27, 2019. This is part of WGCapD work plan deliverable CB-32 to provide regional trainings on land use and land cover trainings. WGCapD chair will participate in the science meeting and will inaugurate the training program.
- Progress continues on the deliverables due Q3.

CEOS SEC Report

(two pages max.)

Entity: Ad-hoc SDCG for GFOI

Prepared By: Stephen Ward, SDCG SEC

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- Just noting that the forthcoming joint meeting in Anchorage in September with LSI-VC and GEOGLAM will trial a meeting format that anticipates the inclusion of agriculture and forest/biomass subgroups within LSI. Meeting will be hosted by USGS on 4-6 September.

Other highlights, activities, actions, projects, collaborations

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

- SDCG new WP is in development.
- Good dialogue with FAO on development of Open Data Cube backend to the SEPAL tools suite in use by many countries.
- USGS Co-Chair for SDCG confirmed as Chris Barber from Sioux Falls.

Upcoming meetings or events

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

- As above

Attachments

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