

## **2019 CEOS Chair Initiative progress report (August 20<sup>th</sup>, 2019)**

2019 CEOS Chair Initiative Team

The progress of 2019 CEOS Chair Initiative activities are as follows:

### **Forest monitoring for the Mekong**

- Algorithms:
  - o Developed by VNSC: combination of SAR data and Optical data. Using Sentinel-1 for SAR data; Landsat and Sentinel 2 for optical data
  - o Developed by CESBIO: using time series of Sentinel-1 data
- In situ data: 2018 and 2019 data of central highland, Vietnam
- Validation: on-progress. VNSC will create the forest monitoring product for Vietnam and using in-situ data for validation. From validated model of Vietnam, the forest map of other country in Mekong region will be created. Validation will be helped by CESBIO/CNES staff in September.
- We also test with ALOS-2 data for 4 countries (intended 3 years, up to 2017)
- Forest change map on VDC will be prepared to display for the demonstration at CEOS plenary to show collaboration result. There are should be 2 presentations: Forest change map on VDC developed by VNSC and Forest change map on VDC developed by CESBIO/VNSC.

### **Rice monitoring for the Mekong**

- Algorithm developed by VNSC for the Mekong Delta and Red River Delta have been validating by using in situ data and extending to whole country. CNES CESBIO analyses the Sentinel-1 backscatter time series for different rice ecosystems and tests the ESA GEORICE rice mapping algorithms in 4 countries. JAXA&RESTEC analyses the ALOS-2 backscatter time series with JAXA's rice crop monitoring tool named "INAHOR" NEO (machine learning version) and generating prototype of rice crop map in 2018 rainy season using available ground observation data and statistical information for 4 countries in cooperation with 4 countries related organizations (Deadline: August 2019).
- VNSC will use the in-situ data over the Red River Delta and Mekong Delta region to validate the rice map provided by CNES CESBIO and JAXA&RESTEC (Deadline: September 2019).
- Rice maps on VDC will be prepared to display for the demonstration at CEOS plenary to show collaboration result (Deadline: September 2019).

# CEOS SEC Report

Entity: CEO

Prepared By: Steven Hosford (ESA/CNES)

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## 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.** Thanks to those who tested the interface and provided feedback. Some changes have been made according to the feedback provided. Having missed the scheduled roll-out date of 1<sup>st</sup> August it has been challenging to maintain constant progress on the development over the month. Significant delays have therefore been experienced in rolling out the operational version of the updated interface. A further teleconference is scheduled before 30/08 to determine final updates and establish a roll-out target date. Despite these delays the operational version of the updated interface should be available with sufficient time for CEOS deliverable leads to update their deliverables well before the 30<sup>th</sup> September cut-off for Plenary reporting. An email will be sent to all to announce the availability of the updated interface.

## Issues requiring discussion/decision during current CEOS SEC teleconference

- **GEO issues including: Ongoing CEOS representation in GEO; GEO Ministerial Declaration.**
  - **Ongoing CEOS representation in GEO.** CEOS representation on the GEO Programme Board expires at GEO Plenary in early November. GEO Secretariat sent a call for nominations on 28/08, including the possibility for current PB members whose term ends in 2019 to re-nominate representatives for a new term. If CEOS wishes to re-nominate it must send the PB nomination form by Friday 27<sup>th</sup> September. Before doing this CEOS should identify who might represent CEOS in PB.
  - **GEO Ministerial Declaration.** The latest version of the GEO Ministerial Declaration was circulated by GEO Sec at the end of July. It was transferred by the CEO to CEOS Principals with instructions to communicate any comments they might have on this declaration through their national GEO channels.
- **CEOS email listserv update.** Update of the CEOS email listservs has uncovered some implementation issues with regards default behaviour of the new software or some missing email addresses. There will be a complete check on the current lists compared with pre-change lists to ensure coherence. A group of 4 list administrators (AMA software support, Matthew Steventon, Kim Holloway, CEO) has been established and will operate under the authority of the CEO.

## Upcoming meetings or events

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

# CEOS SEC-253 Report

**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 Final agenda shared with all on 27 August, along with current registrants and a few logistical helpful hints
- o VC/WG/AHT Working Day final agenda shared with all who expressed interest in attending – expect significant discussion on the outcomes from the Working Group and Ocean Virtual Constellation Merger Study Teams.
- o Scratch bringing the mosquito repellent and instead bring rain and cold-weather gear, boots, environmentally sustainable coffee and water containers.

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

- o Completed 14 tag-ups with ALL CEOS entities. Many thanks to all who participated in the calls and for the thoughtful discussions.

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

- o Assessment reports shared with all and available on the SIT TW website. Expect all SIT TW attendees to read the reports, share with agency colleagues, and come prepared to discuss and conclude how to move forward for Plenary.

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

SIT-34-12	<b>SIT Chair Team</b>	<b>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.</b>	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
	<i>Rationale: Detail the proposal for VC leadership rotation.</i>		
8/7/19 – draft language shared with SEC, VCs, WGs, and AHTs with request to provide edits by 30 August.			
SIT-34-13	<b>SIT Chair Team</b>	<b>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.</b>	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
	<i>Rationale: Detail the proposal for ad hoc team review.</i>		
8/7/19 – draft language shared with SEC, VCs, WGs, and AHTs with request to provide edits by 30 August.			

- o Draft language shared with SEC, VCs, WGs, and AHTs on 7 August. Only SST-VC has provided comment (minor change). We will discuss during the Working Day and the Workshop, proper. All SIT TW attendees are requested to familiarize themselves with the proposed language so we can discuss and come to agreement on what to send forward for decision at CEOS Plenary.

No.	Actionee	Action	Due date
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<b>SIT-34-01</b>	<b>CEOS VC Co-Leads, WG Chairs/Vice Chairs</b>	<b>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.</b>	<b>30 June 2019</b>
	<i>Rationale: Information on CEOS website is not current.</i>		

- Friendly reminder to update website content

<b>SIT-34-08</b>	<b>CEOS Agencies</b>	<b>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.</b>	<b>1 July 2019</b>
	<i>Rationale: Demonstrate Agency support to the SDGs.</i>		

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

– **Reports from the Virtual Constellations.**

- CNES has identified a new Co-Lead for the OST-VC – Ms. Annick Sylvestre-Baron. Annick will be on board in the next few weeks
- NASA has identified a new Co-Lead for the SST-VC – Dr. Edward Armstrong (JPL). Ed will take over Co-Lead duties from Ken Casey in October.

**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)**

- None

**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 10<sup>th</sup> for side meetings and September 9<sup>th</sup> for VC/WG/AHT(AHWG) Working Day (by invitation).

**Attachments**

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

NONE

# CEOS SEC Report

**Entity:** GEO SEC

**Prepared By:** Doug Cripe (GEO Secretariat)

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## Upcoming meetings or events

### GEO Week 2019 4-8 November 2019, Canberra, Australia

- Side-events finalized:
  - Key Side Events will address major challenges, opportunities and issues (9 on Monday 4<sup>th</sup> ; 6 on Tuesday 5<sup>th</sup>)
  - Targeted Side Events will be of interest to specific regional, thematic and programmatic communities (12 on Monday; 14 on Tuesday)
  - Key and Targeted Side Events will run concurrently during their time slots, but not overlap with each other.
  - CEOS-sponsored
    - Monday 14:30-16:00*
      - Big EO: Big Data
      - EO for DRR
    - Tuesday 10:30-12:30*
      - Downscaling GEO: Delivering impact at national and local levels
      - Delivering on SDGs Tuesday 10:30-12:30
- Lightning Talks will be held on the GEO Week 2019 Ideas Stage, featuring short presentations on a variety of topics important to GEO community. Registration open until start of GEO Week.
- Affiliated Side-events to be held in venue close to main GEO Week events. Registration still open, small fee.
- Industry Track 5<sup>th</sup> - 7<sup>th</sup> November, registration still open, small fee. Designed to explore key issues that impact both the global EO sector and broader areas that relate to this activity (ie; financing, SMME development, big data, artificial intelligence, machine learning, internet of things). Featured events as of now include:
  - Leadership Dialogue: Industry and GEO (Space Industry Association of Australia (SIAA) and Earth Observation Australia (EOA))
  - End User Forum: Problem Pitch and Panels (FrontierSI)
  - Australia-Europe Industry Workshop (FrontierSI/EARSC)
  - Development Finance: Landscape and expectations (open discussion)
  - Earth Observation 2.0 (CSIRO)
  - Asia-Oceania Industry @ GEO (open discussion)
- Exhibition runs concurrently with Industry Track
- Plenary: series of background papers on Climate, SDGs, DRR and Broadening GEO Engagement to inform discussion segment.
- Ministerial: Declaration sent to GEO Principals end of July for comment by 6 September.

## Attachments

See attached GEO Week 2019 Information Update.



# GEO WEEK 2019 MINISTERIAL SUMMIT

#GEOWEEK19

4-9 NOVEMBER / CANBERRA, AUSTRALIA



## GEO Week 2019: Information Update July 31

### Registration

**Member and Participating Organization Delegation Lists** are now due to the GEO Secretariat using the form found [here](#).

Following the receipt of delegation lists, official delegates will receive an individual registration link via email which must be completed. For those delegates requiring a visa support letter, this can be obtained through the registration process sent via email.

**Ministers** will soon receive an invitation that includes an RSVP form. It is critical that this is returned indicating that:

- a. The Minister will attend; or
- b. They are authorising someone else to represent them at the Summit

Where no such delegation is made the country may still participate and speak but please note: The Member will be lower in the protocol order and will not formally be represented at the Ministerial level.

**Registration is also open for non-delegates** wishing to attend the [Industry Track, Side Events and Exhibition](#). Registration is open [here](#).

- The **Side Events** on 4<sup>th</sup> and 5<sup>th</sup> of November (free)
- The **Industry Track** on 6<sup>th</sup> and 7<sup>th</sup> of November (a registration fee is payable)

**Media must also register** to attend GEO Week 2019 via email to [secretariat@geosec.org](mailto:secretariat@geosec.org)

### GEO Week 2019 Ministerial Summit

With permission of South Africa as Lead Co-Chair for 2019, the Draft Agenda for the GEO Ministerial Summit is now available on the GEO Week 2019 website [here](#). This draft addresses feedback received on the preliminary draft agenda circulated earlier in the year.

Draft copies of the thematic papers for the Ministerial Summit are available for the following sessions:

- [The importance of Earth observations for sustainable economic development](#)
- [Earth observations for developing nations](#)
- [Towards an inclusive and diverse GEO](#)



# GEO WEEK 2019 MINISTERIAL SUMMIT

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## Draft Ministerial Declaration

The Draft Ministerial Declaration text has been circulated to Members for comment **by 6 September available [here](#)**. This round of consultation is restricted to Member governments, but Participating Organisations may work with their Member government representatives.

## GEO-XVI Plenary

The Draft Agenda for the GEO-XVI Plenary is now available on the website [here](#).

## GEO-XVI Plenary Statements

Members and Participating Organisations are invited to submit Written Statements to the GEO-XVI Plenary. These statements will be published on the GEO Week 2019 website and App as they become available, ensuring other delegations have your thoughts on the Plenary discussion topics when they arrive in Canberra. Email your plenary statements to [secretariat@geosec.org](mailto:secretariat@geosec.org)

## Side Events

The programme of Key Side Events and Targeted Side Events is now available on the GEO Week 2019 website [here](#). Side event organisers will continue to provide additional updates so please check the website for the schedule of events.

We are now issuing a call for Affiliated Side Events to be led by members of the GEO community using the form found [here](#).

## Ideas Stage

Proposals for talks on the GEO Week Ideas Stage are still welcome. The Ideas Stage provides an informal platform for short Lightning Talks, use the request form [here](#).

## GEO Week Pacific Island Discussions

We are pleased to announce a suite of activities convened as the GEO Week Pacific Island Discussions, which will focus on how the GEO community can increase its efforts to support the Pacific Island Countries and Territories grow their Earth Observing capabilities.



# GEO WEEK 2019 MINISTERIAL SUMMIT

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The GEO Week Pacific Island Discussions will start on Monday 4 November with a high-level, scene setting Key Side Event with VIP speakers exploring the challenges for the region across three lens: governance, sustainability and technology.

The themes and issues explored in this lively discussion will continue in a series of targeted, outcomes-based discussions and presentations on the Ideas Stage throughout the week. To get involved in participating or leading an activity as part of the GEO Week Pacific Island Discussions please register your interest to [Emma.Luke@ga.gov.au](mailto:Emma.Luke@ga.gov.au) by 10 September 2019.

## Exhibition

The EO Exhibition will host a wide range of Earth observation innovators from around the world showcasing the latest in Earth observation data and technology, and offer a diverse programme of lightning talks and demonstrations for visitors. Any final requests for space in the EO Exhibition are due, as space is almost filled.

Note that we have included low-cost booth options specifically designed for SMMEs, with simple set up. View booth options for the Exhibition [here](#).

## Industry Track

The Industry Track will bring the world's leading tech, space and geospatial companies together with those that need Earth observation-enabled digital products.

The programme for the Industry Track is now available on the GEO Week 2019 website [here](#).

## The EO Industry Platform

The EO Industry Platform provides a platform to pitch a company, product, or innovation. Companies and innovators can now request a spot on the EO Industry Platform by sending an email to [GEOIndustryTrack@ga.gov.au](mailto:GEOIndustryTrack@ga.gov.au)

Member and Participating Organization delegates may attend the Industry Track without a separate registration. Non-delegates must register and a small fee is payable. For more information download the Industry Track Prospectus [here](#).





# GEO WEEK 2019 MINISTERIAL SUMMIT

#GEOWEEK19  
4-9 NOVEMBER / CANBERRA, AUSTRALIA



## Making Announcements at GEO Week

GEO Week 2019 comes at an important time in the work of GEO. Members and Participating Organizations wishing to announce new investments and commitments to the success of GEO can talk with the GEO Secretariat about how to get the most impact by engaging Media Partners and international and local journalists with your announcements.

## Contact us

The following table highlights key contact points for GEO Week 2019:

Topic	Contact point
Industry Track	<a href="mailto:GEOIndustryTrack@ga.gov.au">GEOIndustryTrack@ga.gov.au</a>
Official Side Events	<a href="mailto:GEOSideEvents@ga.gov.au">GEOSideEvents@ga.gov.au</a>
Member and Participating Organization attendance	<a href="mailto:secretariat@geosec.org">secretariat@geosec.org</a>
Ministerial attendance	<a href="mailto:GEOMinisterial@ga.gov.au">GEOMinisterial@ga.gov.au</a>
Communications (including announcements)	<a href="mailto:secretariat@geosec.org">secretariat@geosec.org</a>
Pacific Engagement	<a href="mailto:Emma.Luke@ga.gov.au">Emma.Luke@ga.gov.au</a>
All other enquiries (including programme)	<a href="mailto:secretariat@geosec.org">secretariat@geosec.org</a>

## CEOS SEC-253 Report – August 2019

Entity: SEO

Prepared By: Brian Killough (NASA)

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### Issues requiring discussion/decision during CEOS SEC teleconference

- None

### Updates on issues raised during the last CEOS SEC teleconference

- The CEOS exhibition booth for the GEO Plenary is accepted and paid. Costs were paid by the SEO (4450 AUD, or 3020 \$US). Thanks to the Australian team, as these costs are MUCH lower than other GEO venues in the past. The SEO will reach out to CEOS representatives attending the meeting to support staffing of the booth. In addition, the SEO will seek content from CEOS representatives in the coming months.

### Upcoming meetings or events

- None

### 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)

- Brian Killough attended the IGARSS conference in Yokohama, Japan on July 29 to Aug 2. He co-chaired a session on ARD with Medhavy (GA) and presented a paper "The Impact of Analysis Ready Data in the Africa Regional Data Cube".
- **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 Report-253

**Entity:** WGClimate

**Prepared By:** Jörg Schulz (EUMETSAT)

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## **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)**

- Gap analysis ongoing, encountered issues finding people and will eventually de-scope ECV analysis to less ECVs than originally planned. Will spend almost a full day on this at WGClimate 11. Expect that report is ready for Plenary but endorsement should be done virtually afterwards to give enough time for review. We think it is sufficient if the Inventory, gap analysis report and updated coordinated action plan is endorsed by end of the year.
- GHG Monitoring Task Team has continued to work on the road map and started to consolidate actions into items that can be integrated into a Gantt chart view of the activity;
- Still no time to address 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.) but will come;
- Still no time to address the web content on ceos.org but will consider in November.

## **Upcoming meetings or events**

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

- WGClimate, 4-6 September, Anchorage, AL, USA. Joint sessions with LSI-VC is planned. Agenda is done. Participation will be rather low (too far away and too close to end of summer break in Europe);

## **Attachments**

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

## CEOS SEC 253 Report

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

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

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### 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)

- For next SIT Technical Workshop, during the Virtual Constellation day, WGISS will present data exploitation and activities in cooperation with WGCapD.
- Preparation of next WGISS-48 meeting is the main focus. 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. Blockchain technology will be also introduced.
- “CEOS Agencies Participation/Contribution to WGISS” table (showing the different WGISS sub-groups, their scope, CEOS agencies interest/benefits, and skills of representatives) is now finalised and will be distributed and posted 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:** In July during the WGCV#45 meeting a session on WGCV/WGISS joint activities has been held to discuss progress and next steps in the use of data cubes in support to CAL/VAL activities and on the CEOS data Maturity Matrix evolution. Ad-hoc telco are being scheduled focusing on the aforesaid topics.
  - **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 is being organised in September.
  - **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. Analysis on CEDA portal which includes the UK EO holdings is started.
  - **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:** the new version is online. Carbon Portal demo will be organised at the occasion of the next WGClimate meeting in September. Possibility to support the Forest Monitoring initiative through the WGISS carbon portal being explored in cooperation with VSNC representatives and a teleconference is planned in September.
  - **WGDisasters:** cooperation on generic recovery observatory under discussion. A WGDisasters Generic RO white paper will be shared with WGISS when it becomes

available, to identify any integration opportunities where WGISS could support WGISS Generic RO technical requirements.

- **GEO:** new version of the GEO Work Plan under review to identify where WGISS can contribute with Data Management Principles and FAIR 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 will be presented at WGISS#48 meeting.
  - 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)**
  - System Level Team is working on NOAA request for IDN registering their Southern Ocean collection dataset.
  - System Level Team is working on determining which metrics the IDN, FedEO and CWIC support and to identify the commonalities for the WGISS federation. The metrics are of usage and on failures rates, in order to identify weak elements and resolving them.
  - The ECVs mapping between NASA and ESA datasets is finalised. The focus now is on ECV of WGISS.
  - New discussion on discovery and access of data and platforms useful for in the SDG.
  - 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 be implemented.
  - Japan Meteorological Agency (JMA) and Korea Meteorological Administration (KMA) will be contacted in the upcoming months to trigger possible registration of their respective data assets in CEOS IDN.
  - 150 EO data collections from JAXA have been registered in IDN, access at granule level through FedEO will be implemented in the upcoming months.
  - 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 to be 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 under finalisation and 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 finalised including contributions from DLR, ESA and NASA.
  - Services metadata for an initial set of EO services use cases will be defined and circulated for possible adoption in WGISS. They should then be used to describe CEOS agencies services with the goal to make them discoverable through the IDN interface and possibly link them to data discovery and access.
  - First draft version of the Federated Identity Management (Single Sign on) white paper was finalised and circulated to all WGISS members for comments/feedback (Action DATA-13).
- **Technology Exploration**
  - A webinar on Agile Framework has been held in July. It explored how the Scaled Agile Framework could allow large development teams to meet their users' needs in a collaborative, agile manner.
  - Next webinar targeting the academic community and focusing on existing (pre)operational Exploitation and Application Platforms is planned in September.

- 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)**

- 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-253 Report

*(two pages max.)*

**Entity:** WGCapD

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

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## **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)**

- CEOS WGCapD Vice Chair contributed towards trainings during AMERIGEO week 2019 Lima Peru, which was held during Aug 19-23, 2019. Provided training and capacity building support on the topic of SAR for vegetation studies and Ecosystem monitoring to participants of AmeriGEO with training opportunities as part of their annual AmeriGEO Week for work plan action CB-35.
- CEOS FDA webinar is now scheduled on Sep 6, 2019 as part of WGCapD and WGISS collaboration.
- A regional science meeting followed by training in Johar Bahru, Malaysia with the participation of NASA, ISRO, JAXA, VNSC etc. was completed during July 22-24, 2019. The training was conducted during July 25-27, 2019 and inaugurated by WGCapD chair. This is part of WGCapD work plan deliverable CB-32 to provide regional trainings on land use and land cover trainings.
- Progress continues on the deliverables due Q3.

# CEOS SEC Report 253

**Entity:** WGCV

**Prepared By:** Cindy Ong (CSIRO) & Akihiko Kuze (JAXA)

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**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)**

- The location, time and host for WGCV 46 has now been confirmed. It will be held 23-27 March 2020 at Caltech in Pasadena, USA and hosted by NASA.
- The location, time and host for WGCV 47 has now been confirmed. It will be joint meeting with WGISS and will be hosted by ROSCOSMOS 14-18 September 2020 in Sochi, Russia;
- The joint letter initiating the pre-flight calibration workshop has now been signed by Mitch Goldberg the chair of GSICS. The workshop is now on schedule to occur in the second quarter of 2020.

**Upcoming meetings or events  
(Dot points, e.g. meetings, conferences of relevance, visits)**

- Second ACIX2/CMIX workshop to be held at ESRIN (evaluation of the comparison results) in the time frame of September 2019.

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