Entity: WGDisasters

Prepared By: Stéphane Chalifoux (Canadian Space Agency) and Simona Zoffoli (Italian Space Agency)

Updates on issues raised during the \underline{last} CEOS SEC teleconference ($\underline{Dot\ points}$)

None

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

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 Disaster Risk Management (DRM) pilot initiatives on floods, seismic hazards and volcanoes continue to make significant progress. Regular provision of satellite data to Pilots and Supersites.
 No issue to report.
- Volcano pilot: In November there was a meeting of Cities on Volcanoes (in Chile). A number of
 pilot participants were there and distributed software to process SAR data. Ecuador is now
 processing its own data. Capacity building is beginning to show results.
- GSNL: San Andreas Fault Natural Laboratory proposal still in evaluation by Data Coordination
 Team (DCT) and there is a need for clarification-precision from space agencies.
- The CEOS Recovery Observatory was triggered on December 22, 2016 to cover the area devastated by Hurricane Matthew in southwestern Haiti. A Haiti mission will take place the week of January 30th led by CNES together with GFDRR and members will meet with national and international partners in Port-au-Prince.
- Landslide Pilot, initiated in 2016 with a focus on detecting, mapping and monitoring landslides in different physiographic and climatic regions, is kicking off shortly with data acquisition. The team had a teleconference on January 25th to discuss activities and the acquisition plan over the primary regions: Nepal and the Pacific Northwest in North America.
- The WG is favourable to join the Global Partnership on Space Technology Applications for
 Disaster Risk Reduction (GP-STAR), coordinated by UNOOSA and contribute to a GP-STAR Side
 Event at the Global Platform for Disaster Risk Reduction in May.

Upcoming meetings or events

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

- Participating at the first 2017 conference call of GP-STAR, on Monday, January 30th.
- The 7th CEOS WGDisasters meeting, hosted by the Italian Space Agency (ASI), will be held in Rome, Italy, from March 14 to 16, 2017.
- A GEO-DARMA (Data Access for Risk Management) Kick-off Workshop will be held the morning of March 14 in conjunction with the March 2017 WGDisasters meeting.
- Global Platform for Disaster Risk Reduction, May 2017, Mexico, organized by The United Nations Office for Disaster Risk Reduction.

Attachments

Entity: WGClimate

Prepared By: Pascal Lecomte (ESA) – Jörg Schulz (EUMETSAT)

Updates on issues raised during the \underline{last} CEOS SEC meeting (Brisbane) ($\underline{Dot\ points}$)

- Next WGClimate meeting will be held next week in Saõ José dos Campos hosted by INPE on February 8th and 9th, 2017.
- Work as continued on the ECV Inventory (see update below). The status will be discussed at WGClimate next week and the overall plan and schedule reviewed.
- A Space Agency Response to the GCOS IN (Implementation Needs) writing team meeting will be held before the WGClimate on February 7th.
- The Core Writing Team is composed as follows:
 - Pascal Lecomte, Jörg Schulz, Mark Dowell, Robert Husband
 - Chris Merchant (Oceanic)
 - Stephan Bojinski (Atmospheric)
 - John Dwyer (Terrestrial)
- Each Chapter Captain has organised teleconferences to prepare next week discussion.

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

- The call to support the population of the Cycle 2 ECV Inventory has been issued on June 2nd as planned, and the deadline for the data collection phase was postponed from the original date of 30th of September to 31st of October, to allow some agencies/responders to complete their input; on the 9th/10th of January all the 'active' Responders were contacted individually and asked to complete/submit their contributions and/or cooperate in the iterative verification process; a few responders are still providing input as I write, and many are now working on the corrections, after a first round of the Verification Process.
- Number of people contacted (WGClimate members from all listed CEOS/CGMS agencies + Focal Points + other effective/potential Responders): ~160.
- Explicit feedback received from UKSA, EUMETSAT, ESA, NASA, NOAA, JAXA, KMA, USGS, UK Met
 Office, DLR, ISRO, EC, INPE, CMA, CNES, CSA, NSC, JMA; no feedback from ASI, Roshydromet.
- Input received from ESA, EUMETSAT, NASA, NOAA, UKSA, CNES, USGS, JAXA, EC, CSA, JMA.
- 150 registered Responders, of which 90 are/were active.
- 722 entries (524 existing data records + 198 planned data records), covering ~80% of the listed physical quantities (spanning across 28 of the 29 ECVs in GCOS-154).
- Verification process ongoing (10% finalised, ~26% being iterated with Responders, 17% under review and re-review). We have about 47% untouched entries by verification mostly because we received a huge number of records over Christmas from NASA JPL.

Other highlights, activities, actions, projects, collaborations (for reference only)

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

None

Upcoming meetings or events (for reference only)

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

Next WGClimate #7 meeting is planned on 7th to 9th February 2017 in São José dos Campos. The first day will be dedicated to the Space Agency response to GCOS IP as requested by SBSTA.

Attachments

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

Links in the text.

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

Prepared By: Andrew Mitchell - Chair (NASA) / Mirko Albani Vice Chair (ESA)

Updates on issues raised during the \underline{last} CEOS SEC teleconference ($\underline{Dot\ points}$)

 WGISS Vice Chair Nomination – Awaiting response from the CEOS agency which expressed interest in putting forward a nominee. They are considering the four-year commitment which would begin in Nov 2017.

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)

- In the 2017-2019 GEO Workplan, the GEO Foundational Task GD-07 (GCI Development) is transitioning to a GEO Initiative titled 'GEOSS EVOLVE'. WGISS has been reviewing and providing feedback to the various GEOSS Evolve work packages related to CEOS data system and access activities. As a GEOSS data provider, WGISS has been assigned to test functionalities of the GCI, the GEOSS data providers and the GEOSS community portals needed to support the requirements.
- Data Stewardship documentation updates:
 - CEOS Associated Knowledge Preservation Best Practices_v0.4:
 - released for review by the GEO Data Sharing group
 - CEOS Persistent Identifier Best Practices_v1.2:
 - The Landing Page recommendations were implemented.
 - EO-DataStewardshipGlossary_v1.2:
 - Annex A has been reviewed to link the Glossary of Science Keywords to other glossaries.
- Continuing to work with the GEODAB (GEO Data Access Broker) team to identify and create best practices for GEO to connect to WGISS Connected Data Assets (FedEO, CWIC and IDN).
- In response to CGMS action item # A44.03 (identify how far WGISS Interoperable standards were adopted), WGISS provided a list of CEOS agencies who have implemented CEOS Opensearch Best Practices: EUMETSAT, NASA, ESA, CNES, USGS, JAXA, ISRO (NRSC) and CCMEO.

Upcoming meetings or events

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

- WGISS 43 April 3-7, 2017 Annapolis, Maryland US
 - o Hosted by NASA
 - Technology Exploration Workshop
 - Future Data Access and Analysis Prototype Systems
 - WGISS GEOSS Interoperability Workshop
- WGISS 44 September 25-29, 2017 Beijing, China
 - o Hosted by Chinese Academy of Sciences

Attachments

CEOS SEC 220 Report - February 2017

Entity: Working Group on Capacity Building and Data Democracy

Prepared By: Senthil Kumar (ISRO), Vice Chair

Updates on issues raised during the last CEOS SEC teleconference

NONE

Issues requiring discussion/decision during current CEOS SEC teleconference

- CEOS WGCapD has evolved a draft version of best practices for efficient trainings. As CEOS WGs, VCs, ADTs may employ their own training methods, this draft version will be circulated to get their views to prepare a final version of the document.
- CEOS WGCapD members participated actively in AmeriGEOSS week last year and will contribute to the trainings again this year. SAR trainings are in coordination with AfriGEOSS. Members will reach out to Asia Oceania (AO)-GEOSS this year to explore training collaboration.
- Cost involved in preparing Capacity Building materials especially making training quality videos are quite expensive. This has been raised by many members.
- CEOS WGCapD intends to work with CEOS WGs, VCs in their training and capacity building initiatives. To this
 end, WGCapD welcomes participation of WGs, VCs in the WGCapD Annual Meet during March 27-29, 2017.

Other highlights, activities, actions, projects, collaborations

- Documentation of different training programs organised by WGCapD is under preparation;
- Training on SRTM-2 DEM applications in Asia has been successfully completed at ICIMOD, Nepal;
- Two SAR Training Workshop were completed successfully in Zambia (2016) and Pretoria (January 2017);
 GeoCab Portal is getting populated with agencies providing access to their datasets.

Upcoming meetings or events

- Preparation of 6th Annual Meet at DLR in March 2017 is underway.
- Preparation SAR training Workshops in Gabon next month is in progress and in Pretoria in the week before ISRSE in May 2017.
- WGCapD prepares to involve in Public Health & EO Workshop in June 2017 and includes lead speakers from WHO, CNES, CSA etc.).
- New Webinar series on SAR and its applications as well as on available SAR missions and archives, including also SAR Data Access.

Entity: WGCV

Prepared By: Kurtis Thome (NASA)/Cindy Ong (CSIRO)

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

- GSICS/WGCV Reference Solar Spectrum web meeting was held December 1, 2016. Follow-on web meeting is planned for Feb. 14, 2017.
- RadCalNet Beta testing is continuing with 15 registered users evaluating the web site. Results of the beta testing will be presented at the WGCV/IVOS meeting in March.

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)

- Opened discussions with CEOS Chair to address the Chair's initiative on Moderate Resolution
 Sensor Interoperability and how WGCV can assist in developing the framework for land moderate resolution interoperability leading to initial case studies.
- Working with LSI-VC to provide input regarding specifications for CARD4L products

Upcoming meetings or events

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

- GSICS Reference Solar Spectrum web meeting on Feb. 14, 2017
- CEOS WGCV / IVOS meeting hosted by University of Arizona, Tucson, March 2017
- CEOS WGCV plenary hosted by USGS, EROS Data Center Sioux Falls, May 2017

Attachments

Entity: CEO

Prepared By: Jonathon Ross (Geoscience Australia)

Updates on issues raised during the $\underline{\textbf{last}}$ CEOS SEC teleconference ($\underline{\textbf{Dot points}})$

219-02	CEOS Executive Officer (CEO) to add a new objective to the 'Concept Note for a CEOS Ad Hoc Team on Sustainable Development Goals' to address the concern raised by Mark Dowell (EC/JRC) during CEOS SEC-219 before circulating an updated copy to CEOS SEC for final approval.	2 December 2016
219-03	CEOS SEC to provide feedback on the draft SDG AHT Concept Note by the 10 th of December, after which the document will be used as the 'baseline' for the work of the team and drafting of its terms of reference.	10 December 2016

Ad-Hoc Team for SDGs

The above actions were completed, and the short-term objectives of the SDG AHT are now defined. The team are now responsible for developing terms of reference.

219-05	Leads of AHTs/WGs/VCs and experts/others to provide initial input for the CEOS Work Plan 2017-2019 by the 14th of January, in accordance with the process presented at CEOS Plenary.	14 January 2017
219-06	SIT Chair Team to coordinate VC input for the CEOS Work Plan 2017- 2019 by the 14th of January.	14 January 2017

- CEOS Work Plan 2017-2019

Input for version 0.5 was due January 14, with it due for distribution by end January. The following table provides a point in time summary of inputs received.

	As at 16/1/2017	As at 19/1/2017	As at 30/01/2017
WGCV	NO	NO - No contact	NO - Advised of delay by Kurt Thome
₩GISS	Received	Received	Received
₩GCapD	NO	NO	NO - Advised of delay by Senthil Kumar
₩GClimate	Received	Received	Received
₩GDisaster	NO - Advised of delay - ETA 18-19/1/201	Received	Received
LSI-VC	NO - Advised of delay - ETA 18-19/1/201	Receieved	Received
AC-VC	Receieved	Receieved	Received
SST-VC	Receieved	Receieved	Received
OST-VC	NO	NO - No contact	NO - No contact
OSVW-VC	NO .	NO - No contact	NO - No contact
OCR-VC	NO	NO - Advised of delay by Paul di Giacomo	Received
P-VC	NO	Receieved	Received
Polar	NO	Received	Received
Biodiversity	Received	Received	Received
BluePlanet	NO	NO - Advised of delay by Paul di Giacomo	Received
Carbon	NO - Input received from JAXA	NO - Advised of delay by Mark Dowell	NO - Advised of delay by Mark Dowell
GFOI	Received	Received	Received
GEOGLAM	Received	Received	Received
SDGs	NO	NO - No contact	Received
FDA	Received	Received	Received
SEO	Received	Received	Received

Remaining inputs are required urgently. Two reminders have been sent. The "no contact" rows are the most concerning, and where relevant SEC are asked to work internally to encourage a response.

The SIT Chair TagUps will provide a valuable opportunity to discuss the v0.5 content with VCs and WGs in preparation for pre-v1 which is due for distribution in February.

Note: status of WGCapD input is awaiting clarification – may have been accidentally deleted by the CEO!

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

Expression of interest in Associate status from POGO

POGO Executive Committee agreed that it would be desirable for POGO to become an Associate. The POGO Sec has been advised of the procedure.

WIGOS Vision 2040.

Document circulated on 24 January 2017. The deadline for a response is 15 March 2017. SEC need to consider how CEOS should respond to this request from WMO.

It is proposed that any response will come from CEOS Chair, and be developed by CEOS Chair, SIT Chair and CEO in consultation with ceos-sec.

CEOS SEC should consider whether an email consultation with the CEOS community should be undertaken.

- WGCapD Leadership.

Jane Olwoch will leave SANSA shortly.

According to the Governance and Processes document, the Vice-Chair (Senthil Kumar from ISRO) should assume the role of Chair.

However, SANSA wish to propose another of their staff – Phila Sibandze – to finish the remainder of Jane's term as Chair. The transition to ISRO would occur as scheduled at Plenary 2017.

<u>CEO</u> supports this proposal given SANSA have stepped up to find a suitable solution, and it will not cause any issues for ISRO.

CEO also suggests that CEOS Chair send Jane a thank you letter for her service.

Other Leadership Transitions

2017 will see a number of CEOS leadership roles transition. The following transitions need to be secured for Plenary 2017:

- SIT Vice Chair: New SIT vice-chair required, as NOAA will step up to be SIT Chair
- **CEOS Executive Officer**: New CEO (and DCEO) required as Jonathon Ross's term expires.
- WGISS Vice Chair: New vice-chair required, as Mirko Albani (ESA) steps up to be Chair.
- WGDisasters Vice Chair: New vice-chair required, as Simona Zoffoli (ASI) steps up to be Chair.
- WGCapD Vice Chair: New vice-chair required, as Senthil Kumar (ISRO) steps up to be Chair.
- WGClimate Vice Chair: New vice-chair required, as Joerg Schulz (EUMETSAT) steps up to be Chair.

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)

SANSA Principal and Contact

A new CEO has started and Jane Olwoch is leaving. At this stage it is not known who the SANSA Principal and Contact will be. Updates provided as they become available.

- Members

No news from EU SATCEN (EU) although it is understood they are still interested. No news from MBRSH (UAE).

Upcoming meetings or events

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

- CEO will, along with SIT Chair and SIT Chair Team, attending the GEO PB Meeting on 1-2 February in Geneva. SIT Vice Chair Team and CEOS Chair Team will attend as observers (space permitting!).
- CEO will, along with SIT Chair, SIT Chair Team, CEOS Chair, CEOS Chair Team, attend annual CEOS-GEO coordination meeting on 3 February in Geneva.

Attachments

Entity: SIT Chair Team

Prepared By: SIT team (ESA)

Updates on issues raised during the \underline{last} CEOS SEC teleconference ($\underline{Dot\ points}$)

– None

Issues requiring discussion/decision during $\underline{\text{current}}$ CEOS SEC teleconference $\underline{\text{(Dot points)}}$

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 SIT team is working on the preparation of both the next SIT-32 meeting and the next CEOS-GEO coordination meeting (3 Feb. 2017), taking into account in particular the decisions from the last 30th CEOS Plenary (1-2 Nov. 2016, Brisbane) and from the GEO-XIII Plenary (9-10 Nov. 2016, St Petersburg).
- The first round of the 2017 teleconferences between the SIT Chair team and the 12 CEOS
 Working Groups and Virtual Constellations will take place in February 2017.
- CEOS will continue to sit in both the GEO Programme Board (PB) and the GEO Executive Committee (ExCom) as Observer, until end 2019.
- The SIT Chair Team and the CEO will participate in the 5th GEO PB meeting on 1-2 February (Geneva). The GEO lead Chair (Robert-Jan Smits, Director-General of DG Research and Innovation, European Commission) will also be present. The support to the SDGs will be of one of the main points to be discussed.
- During the CEOS-GEO coordination meeting (3 February, Geneva), CEOS and GEO will work together, at a strategic level, in 2017 in relation to the following important themes:
 - Sustainable Development Goals
 - Water
 - o Climate
 - o Carbon (incl. the GEO CARBON initiative)
 - Disaster Risk Reduction
 - o Future Data Architectures
 - o Requirements Analysis (including the 'GD-08') process

The discussion will focus on the strategic, rather than programmatic, dimensions of the cooperation.

Upcoming meetings or events

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

- First round of the 2017 SIT teleconferences with the 12 VCs and WGs: February 2017.
- 5th GEO PB meeting: 1-2 February 2017, Geneva
- Next CEOS-GEO Coordination meeting: 3 February 2017, Geneva
- 1st GEO Excom meeting of 2017: 9-10 March 20176, Geneval
- 32nd CEOS SIT meeting and side-meetings: 25-27 April 2017 at ESA Headquarters in Paris (France).
- 2017 SIT Technical Workshop: 11-14 September 2017, at ESA ESRIN, in Frascati (Italy).

Attachments

Entity: GEO SEC

Prepared By: Osamu Ochiai (GEO Secretariat)

Updates on issues raised during the \underline{last} CEOS SEC teleconference ($\underline{Dot\ points}$)

– 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)

- GEO Work Programme 2017-2019 updated after GEO-XIII discussion
- 9th GEOSS Asia-Pacific Symposium adopted Tokyo statement under the theme of "Earth Observations Supporting the Implementation of the SDGs in the Asia Pacific Region"
- Opportunities for GEO associated funding calls H2020 and NASA ROSE
- Geospatial World Forum 2017 in Hyderabad, India
- United Nation World Data Forum, Pretoria, South Africa

Upcoming meetings or events

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

- Feb 1-2, GEO Program Board, Geneva
- Feb 3, CEOS-GEO Sec bilateral meeting, Geneva
- Mar 9-10, GEO Executive Committee meeting, Geneva
- May 8-12, 37th ISRSE Symposium (ISRSE-37), Tshwane, South Africa
- May 12-13, 2017 GEO Work Programme Symposium, Tshwane, South Africa
- May 31- June 2, 3rd Blue Planet Symposium, College Park, Maryland, USA
- June 19-21, 11th GEO European Projects Workshop, Helsinki, Finland

Attachments

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 will be visiting the University of Geneva and UNEP-GRID on February 14 to discuss the Switzerland Data Cube pilot project progress. A meeting will be held with GEO on February 15 to give a report on the CEOS Data Cube plans and Analysis Ready Data (ARD).
- The SEO will be traveling to Australia on February 27 to March 3 to meeting with CSIRO and GA on a number of CEOS Data Cube topics. The SEO, GA and CSIRO are actively involved in several Data Cube pilot projects. This annual face-to-face meeting of the three groups has been critical to our planning and sustained progress.

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 Data Cube development team visited the SERVIR (Huntsville, Alabama, USA) team on on Jan 24-25 to train the SERVIR team to install and operate Data Cubes and to explore SERVIR Data hub collaborations for the future, with an emphasis on Vietnam and the Mekong region. The team identified 5 specific tasks that it will pursue in the coming year to evaluate the use of Data Cubes to support SERVIR applications.
- The SEO visited World Bank on February 1 to give them a briefing on the recent progress of the CEOS Data Cube initiative. Several small prototype data cubes have been developed for Togo (Africa), Tonga (Pacific Islands) and Cortijo (Colombia) to demonstrate how the the data management technology can uniquely support their international project applications. A report will be given at the CEOS SIT meeting on the World Bank interactions.
- The SEO continues to make progress on the Data Cube core technology. The new cloud-based (Amazon) user interface is now open to the public for testing (http://ec2-52-201-154-0.compute-1.amazonaws.com/) and now includes features for NDVI anomaly and landslides (SLIP). Work continues on development of a prototype coastal erosion algorithm, a QGIS Data Cube plugin, and change detection (CCDC).

Entity: SDCG

Prepared By: Stephen Ward (for CSIRO/NASA)

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

- Following feedback from CEOS Plenary was provided at the least GFOI Leads telcon:
 - CEOS welcomes emphasis on country engagement now we have the MGD/REDDCompass and global data coverage
 - o Request an uptake strategy and plan be developed to show a credible path
 - SDCG proposal to promote model national GFOI demo (Colombia) endorsed by Leads after GFOI Plenary – we now wish to see action in this direction
 - Confirmation of funding status and outlook from the GFOI Leads pending reaction to GFOI Review

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

 SDCG SEC took the initiative to progress the discussion around consolidation of LSI thematic strategies into the LSI-VC structure, including GFOI and GEOGLAM. An outline concept for a trial meeting in Sept (week before SIT TW at ESRIN) has been circulated. More feedback is needed from stakeholders. A copy is provided for SEC 220 and comments welcome also from SEC.

Other highlights, activities, actions, projects, collaborations (for reference only)

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

– None

Upcoming meetings or events (for reference only)

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

GFOI Plenary and SDCG will be in Ho Chi Minh, Vietnam in the week of April 10th 2017. With VNSC possibly taking on CEOS Chair and the progress on a Vietnam Cube pilot, this is a very timely opportunity.

Attachments

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

the integrated LSI meeting paper

DISCUSSION PAPER ON STEPS TO BETTER INTEGRATE LAND SURFACE IMAGING ACTIVITIES WITHIN THE CEOS STRUCTURE

Version 0.1, 20 Dec 2016

Introduction

It has long been assumed that the rebirth of LSI-VC would provide the opportunity of a permanent home within the CEOS structure for the ad-hoc groups in support of the thematic strategies for forests (GFOI/SDCG) and agriculture (GEOGLAM/Ad-hoc WG) – and perhaps others - and enable a more holistic approach to the relevant observing requirements and associated CEOS strategies. A side meeting was arranged in the margins of the Brisbane CEOS Plenary to progress this idea and to explore the first steps on the way. The meeting concluded with an action to define and implement a trial meeting of an 'expanded' LSI-VC with thematic teams/sessions related to forests and agriculture – by co-locating meetings of SDCG, Ad-hoc WG for GEOGLAM, and LSI-VC in September at ESA ESRIN (the week before SIT TW at the same venue). The meeting would test the value of this concept and comprise both plenary ('future' LSI-VC) and thematic sessions – effectively running the regular meetings of 'present' LSI-VC, SDCG, and GEOGLAM WG in parallel, but with common sessions that might represent typical content of a future LSI-VC featuring the thematic teams.

This paper is the first step to outline what such a meeting should look like, who should attend, and what preparation would be needed for its success. Readers are invited to provide comments (to mail@stephenward.net) by Friday 13th January in support of the process of shaping the meeting and the preparatory work by each group. The meeting design will be by consensus of the leadership of the three groups and will include consultation with CEOS Principals at the key meetings in 2017.

Trial meeting plan

Three meeting rooms have kindly been assigned by ESA ESRIN for the days of 6^{th} , 7^{th} , and 8^{th} September. SDCG has also reserved a room for the day prior. The proposed schedule is as follows:

Tuesday 5 th Sep	Wednesday 6 th Sep	Thursday 7 th Sep	Friday 8 th Sep
SDCG Day 1		SDCG Day 2	Morning LSI-VC joint session.
1 further room free @ ESRIN	LSI-VC Joint Session	GEOGLAM WG	Lunchtime close.
		LSI-VC	

Individual groups are free to arrange their individual sessions as suits their agenda and activities, although they may be tasked to prepare for inputs to the joint session on the final day regarding next steps.

The joint sessions will focus on topics of common interest to all groups that are consistent with the vision for a single group with overall responsibility for requirements and strategies relevant to LSI. These are:

1. Land surface imaging requirements and CEOS integrated observing strategy

This session will seek to develop a common understanding of the overall requirements for LSI across the main CEOS activities, including GFOI, GEOGLAM, and perhaps including the Carbon strategy and relevant ECVs from the Climate strategy. Each group will be asked to bring a version of their requirements in a single consistent format that will allow creation of a unified statement. The session might brainstorm the pros and cons of annual maintenance of a unified set of requirements and creation and maintenance of a

corresponding CEOS observing strategy – building on those prepared for GFOI and GEOGLAM. Ideally, some work will be prepared in advance to demonstrate how this integration and response might evolve.

2. Analysis Ready Data

This is core LSI-VC business but with significant effort across all groups. The session will review overall status, take stock of activities in each group, ensure that resources are adequate, ensure that a master schedule is in place, and assign actions around the specifications, ingesters, data production etc.

3. Pilots

The 2017 pilots are within the purview of the FDA team, but these demonstrations often relate to CEOS initiatives such as GFOI and GEOGLAM and are powered by the ARD work being led by LSI-VC. The joint session is an opportunity to review the status and exchange views among the groups as to next steps on these pilots and ensure a coordinated approach across the various activities.

4. Global Data Flows

LSI has already identified this effort pioneered by SDCG as the basis for future activity. The joint session will review the conclusions of the SDCG analysis, invite similar analysis from the GEOGLAM group in advance if possible, and consider the impact on priorities for CEOS LSI activities going forward.

The first day of the joint sessions will be comprised of these 4 topics. The closing half-day session will consist of:

5. Future LSI-VC Work Plan

Each group will communicate the key activities within its work plan with a view to developing an understanding as to which are common among the groups and should be within a future LSI-VC Work Plan, and whether they are included in the current plans.

6. Next steps brainstorming

on the process for building on the trial meeting to achieve a 'future' LSI-VC, if indeed it is concluded to be appropriate. The session will include:

- Practical considerations presented by all groups, around the annual calendar of their respective constituencies, their membership, their capacity and work plans, logistics around larger meetings etc;
- Discussion of which issues must remain within the expert thematic groups and which might be 'centralised';
- A review of lessons learned from the trial meeting;
- Open discussions around different scenarios for the next steps (ideally prepared in advance).

A certain amount of preparation will be necessary to stimulate the required discussion and responsibilities for this should be established early. The state of play should be reported to SIT-32 in April to obtain feedback from Principals.

Entity: CEOS ad hoc Working Group on GEOGLAM

Prepared By: George Dyke and Alyssa Whitcraft (GEOGLAM Sec), for Brad Doorn (NASA HQ)

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 (Dot points)

 The GEOGLAM ad hoc WG strongly supports the proposed the joint meetings in September, and would like to suggest a planning call with representatives from GEOGLAM, SDCG, LSI-VC and ESRIN, if possible prior to SIT-32, to start laying the groundwork for the meetings.

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)

- Inputs for the GEOGLAM EO requirements review are still slowly trickling in from JECAM sites. The focus is on ensuring the quality of the requirements, and that they are *right*, rather than *soon*, though the nominal target remains 2017 Plenary. In addition, the scope of the process has grown to take advantage of interest expressed by the community to consider the development of some GEOGLAM 'best practice' guidance (along the lines of the GFOI MGD).
- Inputs for the JECAM annual report are currently being gathered.
- Potential linkages between an Asia-RiCE activity in the Vietnamese Mekong, VNSC, CSIRO, and the CEOS Data Cube are being considered, but coordination remains preliminary.

Upcoming meetings or events

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

- Ian Jarvis (JECAM Co-Lead) is tentatively planning to attend SIT-32 in Paris on behalf of the GEOGLAM secretariat, pending AAFC approval and necessity.
- The May 2017 GEOGLAM EO requirements meeting at ESRIN is NO LONGER being considered.
 That was meant to happen alongside a Sen2Agri/SIGMA/JECAM session that was to be held the week of 19 May, but it was postponed. No firm date for the Sen2Agri meeting has yet been identified.
- A GEOGLAM RAPP workshop focused on grassland observations (optical and SAR) is planned for 16-17 May at ESRIN.
- There will be a GEOGLAM session at both ISRSE in South Africa and Brazilian Remote Sensing Symposium (both in May 2017). The latter will include a 1-day training session on Crop Monitor and GLAM systems.
- There will be an all-hands GEOGLAM implementation team meeting 19-21 June, followed by AMIS IG, 22-23 June 2017, at FAO in Rome.
- The ad hoc WG has reviewed the proposed draft agenda for the proposed joint LSI-VC/SDCG/GEOGLAM meetings week of 5th September at ESRIN, and is in support of taking this plan forward as a trial.
- The possibility of a joint Asia-RiCE/JECAM meeting for rice monitoring activities hosted in Taiwan by TARI/NCU in the Q1/Q2 2018 timeline is being discussed. The meeting will be more focused on science, but CEOS should be aware.

Attachments

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

- None.

Entity: FDA Ad-hoc Team

Prepared By: Steve Labahn (USGS)

Updates on issues raised during the last CEOS SEC teleconference (Dot points)

- No further comments were received on the FDA paper circulated on approach and outcomes.
- Several more agencies offered representatives to serve on the 2017 FDA Ad-hoc Team. Team was reconstituted, and CEOS mailing list updated.
- Team meetings held on 13 December 2017 (Kick-off) and 23 January 2017.
- FDA Ad-hoc Team Leads meeting held on 30 January 2017 @ ESRIN in Frascati, Italy.
- Team is focused on several primary areas:
 - Leads preparing for Strategic Assessment meeting (14 February)
 - What should CEOS agencies do together?
 - What should CEOS encourage that individual agencies do better on their own (e.g. best practices, etc.)?
 - What should be considered 'out of scope' for CEOS?
 - SEO confirming specific pilot locations and data needs (5 pilots and several possible contributing data sets)
 - Colombia SEO (Brian Killough)
 - Vietnam CSIRO (Alex Held)
 - USA USGS (Brian Sauer)
 - Europe ESA (Mirko Albani)
 - Australia CSIRO, GA (Adam Lewis)
 - LSI-VC working CARD4L specification and product generation supporting pilot needs
 - WGISS working on technical and architectural insights report (best practices and lessons learned)
 - o Preparing for SIT-32, including Side Meeting (25 April)

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

FDA Ad-hoc Team and the 5 pilots continue to have a significant schedule dependence on LSI-VC for the stewarding of the CARD4L definition and trial production of CARD4L products for the pilots in 2017. FDA stresses the need for LSI-VC to continue its great work and persuade agencies to support this critical initiative.

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)

Upcoming meetings or events

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

- FDA Strategic Assessment Brainstorming Session Tuesday, 14 February 2017
- LSI-VC-3 (Session 4: CEOS Future Data Architectures Pilots) Monday, 20 March 2017
- WGISS-43 (Technology Exploration Workshop, including Future Data Access & Analysis Architectures) – Tuesday, 4 April 2017
- FDA Ad-hoc Team Side Meeting Tuesday, 25 April 2017 @ SIT-32

Attachments

CEOS *Ad Hoc* Team on Sustainable Development Goals

- 2 co-leads now confirmed: Alex Held (CSIRO), MJ Bourassa (CSA until April) and Maurice Borgeaud (ESA)
- the team is growing, we've included other emails from ISRO, EC to the SDG mailing list, feel free to let us know if you wish to be involved
- SDG space related activities to be shared regularly via emailings (World Data Forum, etc.)
- developing draft ToRs and Work Plan
- Involved in the GEO report on EO value brochure that is being prepared for UNSC in March in NYC

Upcoming meetings:

- 1 telecon scheduled Feb 15
- 2-day meeting in Washington DC 8-9 March 2017, in preparation for SIT-32 (finalisation of ToRs to be endorsed)
 - o day 1: CEOS SDG AHT (+GEO people)
 - o day 2: CEOS SDG AHT + external (WB, NGOs, Banks, UN agencies...)

Entity: Moderate Resolution Sensor Interoperability Initiative (MRI)

Prepared By: Gene Fosnight (USGS)

Updates on issues raised during the \underline{last} CEOS SEC teleconference ($\underline{Dot\ points}$)

 New CEOS chair Initiative to coordinate CEOS interoperability investigations within a common framework

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

 USGS proposes the assembly of a core team with chairs from USGS, WGCV and WGISS plus members representing Landsat/Sentinel-2 interoperability, FDA, CARD4L and SAR activities.

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)

 Draft Moderate Resolution Sensor Interoperability Initiative white paper is available for review and comments

Upcoming meetings or events

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

- MRI Framework and Sentinel-2/Landsat interoperability sessions at LSI-VC
- Follow-up side meetings are proposed for WGISS-43 (Annapolis April 2017) and WGCV-42 (Sioux Falls, May 2017)

Attachments