Report of the WGCapD-2 Meeting

The 2nd meeting of WGCapD was held in Frascati, Italy, from March 04-06, 2013. There were **17 participants**:

Hilcéa Ferreira, INPE
Jacob Sutherlun, NOAA
Kerry Sawyer, CEOS CEO (NOAA)
Kim Keith, CEOS SEO (NASA)
Dieter Hausamann, DLR
Maurizio Fea, ESA
Antonios Mouratidis, ESA
Fulvio Marelli, ESA
Ivan Petiteville, ESA
Joao Vianei Soares, GEO Secretariat
Paidamwoyo Mangara, SANSA
Nale Mudau, SANSA
Jane Olwoch, SANSA
Natassa Antoniou, Secure World Foundation
Tiffany Chow, Secure World Foundation
Mario Hernandez, UNESCO
Lorant Czaran, UNOOSA

And **11 virtual attendees**:

Tania Maria Sausen, INPE
Laércio Namikawa, INPE
Laurent Durieux, IRD
SP Aggarwal, ISRO
Shefali Agrawal, ISRO
YVN Krishna Murthy, ISRO
Nancy Searby, NASA
Wendy Schreiber-Abshire, UCAR
Bruce Muller, UCAR
Bruce Pengra, UGSG
Eric Wood, USGS

We had 3 days of meetings (see the final agenda in **Annex I**). All presentations can be downloaded from:

http://www.ceos.org/index.php?option=com_content&view=category&layout=blog&id=169&Itemid=263

The **list of actions** from the meeting can be found in **Annex II**.

Day 1 focused on status of main projects (E-learning Course, DEM Workshop and Internet web-based seminars – Webinars) and presentations by individual agencies/partners/projects. Each organization/agency focused on what they have done in terms of capacity building and data democracy that could serve as catalyst within WGCapD or work as a project in the scope of the group.

Activities presented ranged from an E-learning course to Webinars to activities concentrated on the sustainable use of space. Agencies presented a number of ongoing educational initiatives with different target audiences, including final users, universities, college educators, secondary school students and elementary school students.

The project presented by **DLR and ESA (Practical EO Education for Students and Teachers)** will be included as one of the main projects of WGCapD, since it follows the criteria defined for an activity to be considered a WGCapD contribution:

1. Value added coordination among multiple CEOS members (2 or more).
2. Should involve one or more user organizations (NGO, Gov. Agency, industry, universities, regional collaborators, target audience, etc.).
3. Capability to measure progress through milestones, user/professional evaluations, and other follow up activities.
4. Meet at least one of the 4 objectives of data democracy with preference of meeting multiple objectives.

Based on the need to develop an overarching strategy, an issue highlighted at the WGCapD-1 meeting in 2012, Jacob Sutherlun presented a new project proposal: **Inventory of capacity building activities**.

The rationale includes:
1- Capacity building activities are being carried out across the globe by various organizations
2- Lack of coordination leads to less than efficient use of limited resources
3- Many organizations are simply not aware of many of the capacity building activities focusing on the use of space-derived data

The primary objective of this project is to compile all current capacity-building efforts on the use of space-derived Earth observation (EO) data for societal benefits into an easily updateable format. Once completed, the project will serve as a comprehensive resource of ongoing capacity-building efforts, helping those actors involved better coordinate their existing activities and possibly inform future planning.

There was a long discussion about this proposal and suggestions included format of questionnaire, how to update it, how to get funds to implement the project, connections with GEONetCab project, among others.

Eric Wood presented a new USGS/ UNEP Project Proposal - Africa's Historical Aerial Photography - Preserving 75 Years of Earth Observations aiming to seek possible synergies with our group.

During **Day 2** we continued with presentations by agencies along with some very interesting educational and training resources available:

1- USGS: LSI portal, ASMET (African Satellite Meteorology Education & Training)
2- Examples of Datasets "Supported" by USGS: National Land Cover DB, National topography (DEM, LiDAR), NIDIS, VegDRI (drought), Phenology, Global Multi-resolution Terrain Elevation Data, GeoSur - Development of a Geospatial Information Network for South America (DEM derivatives), International Charter, Landsat Browse products, Afghanistan Portal, FEWS-NET (famine early warning), LPDAAC (MODIS, ASTER with NASA), Global mangrove database, West Africa Landcover.
3- ESA's ibook (http://www.esa.int/Highlights/ESA_s_first_iBook)
4- METeD learning modules: UCAR (University Corporation for Atmospheric Research) - https://www.meted.ucar.edu/ and COMET Program (http://comet.ucar.edu/).
5- ESA – Tiger Project and other resources

Regarding the internal coordination of WGCapD with other WG´s, Ivan Petiteville, presented, on behalf of **CEOS ad hoc Disaster Team**, possible support our group could give to DRM(Disaster Risk Management) Capacity Building Activities. Growing political interest in DRM might be an opportunity for space agencies to play a major role in near future. Recent major international conferences, publications and declarations from decision-makers explicitly refer to the necessity to increase the means of observations including from satellites. A WGCapD person was invited to join the CEOS DRM team and to participate to all activities, making the liaison with the WG itself.

During the Discussion Session, some questions were raised, leading to a very fruitful debate:

➢ **How can the WG support the CB activities within CEOS? Looking at VC's and WG's**
One idea was to have VC's and WG's have an E-Learning point of contact for us. We could work with that person to develop and/or coordinate E-Learning courses for those specific areas. The inventory would also serve as a coordination tool for VC's to see what the other ones were doing. A subset of the inventory might be useful for in-CEOS coordination

➢ **How do we help users find the training resources that are available from individual resources?**
WGCapD website includes a link called "Resources" which shall be populated with various kinds of links to teaching material, GEONetCab Portal, databases etc.

➢ **How can we improve the visibility of CEOS and particularly WGCapD within our own organizations?**
Our group should have a top-level role, stimulating, coordinating and creating opportunities! Data Democracy is the focus!

Some other **key decisions** from the meeting were:

1. SANSA will be next WGCapD Vice-Chair (2014-2015)

2. 3rd WGCapD meeting will be hosted by ISRO in Dehradun, India. Date still to be defined: February/March 2014

3. Date & Place of 4th WGCapD annual meeting (2015) – Waiting for "candidates"

4. Telecons (All): April 3, May 15, June 12, August 7, Sep 18, Oct 2. – 1 PM UTC

ANNEX I
FINAL AGENDA

Monday, March 4, 2013
Day 1 – Background and laying out ideas for activities
Magellan Conference Room @ ESA/ESRIN

	Welcome and Opening Session	
0	Registration	8:30 – 9:00
1	Welcome and Opening Remarks (Chair/Vice Chair)	9:00 – 9:10
2	Round of Introductions (ALL)	9:10 – 9:30
3	Adoption of Agenda (ALL)	9:30 – 9:40
4	Report overall achievements over 2012: new members and participants, connections with other projects, participation in events (Chair)	9:40 - 10:15
5	Outcomes of 2012 CEOS Plenary and 2013 CEOS Work Plan (Kerry Sawyer, CEOS CEO)	10:15 – 10:45
	Status of main projects	
6	E-learning Course (Chair)	10:45 – 11:15
BREAK		**11:15 – 11:30**
7	DEM Workshop (Vice-Chair)	11:30 – 12:00
8	WGCapD 5-year Work Plan (Background, Draft Proposal) – we need volunteers for this! (Chair)	12:00 – 12:30
9	Education Programs Synergies (Dieter Hausamann, DLR)	12:30 - 13:00
LUNCH		**13:00 – 14:30**
	Status of main projects (continued)	
10	Inventory of capacity building activities (project description) (Vice-Chair)	14:30 – 16:00
11	Webinars (would also be included as resources in the website) (Eric Wood, USGS) (online)	16:00 – 16:20
BREAK		**16:20 – 16:50**
	Presentations by individual agencies/partners/projects (Each organization/agency should focus on what they have done in terms of capacity building and data democracy that could serve as catalyst within WGCapD or work as a project in the scope of the group.: 10 min for PowerPoint's (5-7 slides) + 10 min for discussions	
12	USGS – Presentation and USGS/ UNEP Project Proposal - Africa's Historical Aerial Photography - Preserving 75 Years of Earth Observations (Eric Wood, USGS) (online)	16:50 – 17:10
13	NASA capacity building activities (Nancy Searby, NASA) (online)	17:10 – 17:30
14	DRM(Disaster Risk Management) Capacity Building activities (Ivan Petiteville, ESA, CEOS ad hoc Disaster Team)	17:30 – 18:00
ADJOURN		**18:00**
Ice-Breaker in ESRIN		**19:00**

Tuesday, March 5, 2013
Day 2: WGCapD Connections and Outreach
Magellan Conference Room @ ESA/ESRIN

	Presentations by individual agencies/partners/projects (continues depending on number of presentations)	
15	ESA Capacity Building Activities (Francesco Sarti, ESA)	9:00 – 9:20
16	Capacity Building @ DLR (Dieter Hausamann, DLR)	9:20 – 9:40
17	Capacity building: IIRS/ISRO initiatives (Dr. YVN Krishna Murthy, Director IIRS and Director CSSTEAP)(online)	9:40 – 10:00
18	UNOOSA Capacity Building Activities (Lorant Czaran, UNOOSA)	10:00 – 10:20
BREAK & GROUP PHOTO		**10:20 – 10:40**
	Presentations by individual agencies/partners/projects continues	
19	SANSA Capacity Building Activities (Jane Olwoch, SANSA)	10:40 – 11:10
20	ESA's ibook (Fulvio Marelli, ESA)	11:10 – 11:30
21	Capacity Building Activities in 2012 - Secure World Foundation (Tiffany Chow, SWF)	11:30 – 11:50
22	Discussions - Possible Synergies (ALL)	11:50 – 12:30
LUNCH		**12:30 – 14:00**
	CEOS/GEO and CEOS Connections with WGs, VCs	
22	General Overview of GEO Workplan 2012-2015 (João Vianei Soares, Geo Secretariat)	14:00 – 14:30
23	Results of the CEOS-GEO Actions Workshop and Overview of Contributions of WGCapD to GEO 2012-2015 Work Plan (Kerry Sawyer, CEOS CEO)	14:30 – 14:40
24	Involvement of WGCapD in the development of the capacity building-relevant CEOS-GEO Actions and WGCapD contributions to the GEO 2012-2015 Work Plan (Hilcea Ferreira, INPE)	14:40 – 15:00
25	Internal Coordination: Connections with WGs and VCs (Jacob Sutherlun, NOAA)	15:00 – 16:00
BREAK		**16:00-16:30**
26	Connections with SST (Sea Surface Temperature) VC - ESA project LearnEO (Pierre Philippe Mathieu / Val Byfield)	16:30 – 17:00
27	Linking Training Resources – UCAR (University Corporation for Atmospheric Research) (Wendy Schreiber-Abshire, Bruce Muller) (online)	17:00 – 17:15
28	Discussions Possible Synergies (ALL)	17:15 – 18:00
ADJOURN		**18:00**
HOST DINNER - bus transportation will be arranged		**19:00**

Wednesday, March 6, 2013
Day 3 – *Mapping out Future Activities and Wrap-up*
Magellan Conference Room @ ESA/ESRIN

	Calendar and Future interactions	
29	Other Important and related meetings (Chair/Vice-Chair)	09:00 - 09:15
30	Next GEO MEETINGS (João Soares, Geo Secretariat)	09:15 - 09:30
	Outreach	
31	WEBSITE, Availability of resources, portals etc. (All)	09:30 – 10:00
	Discussion of Strategic Direction of the WG	
32	Possible Future Transition of CEOS CB to GEO CB (All)	10:00 – 10:30
33	Suggestions of new activities (All)	10:30 – 11:00
BREAK		**11:00 – 11:30**
34	Telecons (All)	11:30 – 11:50
35	Next WGCapD Vice-Chair (2014-2015) and Other Issues (All)	11:50 – 12:20
36	Date & Place of 4th WGCapD annual meeting (3ʳᵈ WGCapD meeting will be hosted by ISRO)	12:20 – 12:40
37	Wrap-up and Closure (ALL)	12:40 – 13:00
LUNCH		**13:00 – 14:30**
	DEM Workshop Walk-Through – (Those not involved in DEM Workshop may choose to participate or not)	
38	Walk through DEM workshop details (Jacob Sutherlun, NOAA)	14:30 - 16:00
ADJOURN		**16:00**

ANNEX II
LIST OF ACTIONS

Actions: E-learning Course

2.1 - Work with EUMETSAT to create an online map of GEONetCast stations (GEONetCast Americas, EUMETCast and CMACast). This could be a regional product, but a global product would be good as well. (Jane Olwoch, follow up Lorant Czaran) [December, 2013]

2.2 - Prepare a notice and send out to students, at the beginning of E-Learning sessions, in the chat box asking to mute and stop video. (Kim Keith) [April 15]

2.3 - Spend the next 6 months supporting course initiatives among former students, teaching them how to use the technology – e-learning and RS (Train the Trainers) (Hilcéa Ferreira) [CEOS Plenary, 2013]

2.4 – E-learning course follow-up: After the course finishes, conduct a study to evaluate the impact of the course by following up with students:
- ➢ Send a questionnaire to assess the number of courses taught afterwards, number of students trained.
- ➢ Compile the information by developing a spreadsheet to track students distributing this knowledge.
- ➢ Send reminders in a year or so to see where they are at.

Hilcéa Ferreira [CEOS Plenary, 2013]

2.5 - Develop a lessons learned report of best practices for the E-Learning course. (Hilcéa Ferreira and Eric Wood) [CEOS Plenary, 2013]

Actions – New Initiatives

Practical EO Education for Students and Teachers
2.6 - Include as a main WGCapD project that involves (DLR and ESA) to make it visible. (Dieter Hausamann and Antonios Mouratidis)

Disasters Risk Management
2.7 - Find who is interested in forming a team in CapD to liaison with DRM (UNOOSA, SANSA, SWF, ESA, [DLR], [UNESCO], [INPE] and NOAA) (Jacob to participate in May DRM meeting) [End of May]

Actions - Inventory of capacity building activities
2.8 - Look into funding opportunities for interactive map - EC FP7 (Natassa Antoniou, Kim Keith) Kick start and GOOGLE grants (Tiffany Chow) [Closed]

2.9 - Reach out to IRD (Jean-Christophe Desconnets) and Mark Noort regarding GEONetCab and EOPOWER Projects. (Hilcea Ferreira) [Closed]

2.10 - Redo the questionnaire and distribute to WGCapD for comment. (Jacob Sutherlun, Tiffany Chow and Lorant Czaran) [April 30]

2.11 - Circulate CEOS POC list and fill in. (Jacob Sutherlun) [April 30]

2.12 - Form a team (NOAA, SWF, SEO, ESA, UNOOSA, NASA, USGS). (Jacob Sutherlun) [Closed]

2.13 - Develop a guidelines criterion for a CB product to be considered in the Inventory (broad impact on a lot of people). "Categorizing". (Jacob Sutherlun) [April 30]

Actions - UCAR Resources

2.14 - Interact with WGISS and CWIC to see if we can get UCAR - ESRC (Environment Satellite Center Database) registered in GCI. (Hilcea Ferreira) [May 31]

2.15 - Reach to UCAR to explore opportunities with GLOBE Program. (Nancy Searby)

Actions - General Issues

2.16 - Update the approved TOR, changing WGCCBB to WGCapD and submit to SIT-28. (Hilcea Ferreira and Kerry Sawyer)

2.17 - Look into UNESCO request to gather all types of data for one site on Earth. Possibly starting with a CEOS Supersite. (Mario Hernandez and Jacob Sutherlun) [June 30]

2.18 - Look into previous WGEdu project idea to have charter data made available for training/education. (Jacob Sutherlun and Antonios Mouratidis) [June 30]

2.19 - Start a TanDEM-X pilot project (Jacob Sutherlun and Dieter Hausaman) [December 15]

2.20 - Work with UNOOSA to develop message that we would want to send to TAMs that they carry out (Loran Czaran)

2.21 - Try to incorporate ESA´s resources into WGCapD (TIGER Project and others) (Hilcéa Ferreira and Antonios Mouratidis) [CEOS Plenary, 2013]

2.22 – Explore the development GeoSUR for Africa (CAF) (Eric Wood and Jacob Sutherlun [CEOS Plenary, 2013]

2.23 - Ensure WGCapD representation at GEO Workplan Symposium – June 4-6, 2013, Geneva. (ALL)