Minutes of Meeting CEOS WG Disasters Teleconference # 17 January 25, 2017 7:00 – 9:00 EST/ 13:00 – 15:00 CET Draft as of February 6, 2017

Participants: Vanessa Aellen (GEO), Philippe Bally (ESA), Gerald Bawden (NASA), Stéphane Chalifoux (CSA, WG Chair), Agwilh Collet (CNES), Andrew Eddy (Athena Global, consultant to CSA), Stu Frye (NASA), Steven Hosford (CNES), Dalia Kirschbaum (NASA), Dorella Papadopoulou (Argans, ESA consultant), Mike Pavolonis (NOAA), Ivan Petiteville (ESA), Mike Poland (USGS), Sigrid Roessner (GFZ), Stefano Salvi (INGV), Kerry Sawyer (NOAA), Francoise Villette (EC), Zhou Zeng-Guang (AOE), Simona Zoffoli (ASI, WG Vice-Chair).

1. Adoption of agenda (all)

The order of Volcano and Flood pilots were switched in the agenda.

2. CSA chairmanship - introductory remarks (Stéphane)

Stéphane wished the group well for 2017. It will be a complex year with reporting on three thematic pilots that are closing, and also the need to have a clear way forward in these thematic areas. The RO was triggered in December for Haiti, and GEO-DARMA is ramping up.

3. Review of Minutes (Teleconference # 16) and open actions (Andrew; all)

The minutes were adopted as circulated prior to the call (after modifications form DLR from initial draft). The actions were reviewed and a list of currently open actions and those closed is included at the end of these MoM.

4. Recovery Observatory (Steven)

a. Triggering status - Hurricane Matthew

The RO was officially triggered on 22 December 2016 by the CEOS Chair, in application of the RO Triggering Process Paper. Agwilh Collet joined CNES and the RO team as technical support. He and Helene de Boissezon will lead RO for CNES side. A Haiti mission will take place next week, led by CNES together with GFDRR. Helene, Andrew and Aurelie Sand will participate from CNES, and meet with national and international partners in Port-au-Prince. These include the Centre national d'infromation Geospatiale (CNIGS), the Comie interministeriel pour l'amenagement du territoire (CIAT), L'Observatoire national pour l'environnement et la vulnerabilite (ONEV, part of the Environment ministry), UNDP, UNEP, WHO and others The mission aims to solidify the partnership and validate information

needs as articulated in the Recovery Observatory Operations Plan Preliminary Draft. Work has begun to instantiate the web portal (target end Feb). A 2nd Haiti meeting (user workshop) planned 2nd quarter (Late April or June) in Haiti.

The ROOT is being updated, and data plan for agencies will be circulated mid-February. CSA indicated that while they were not part of the initial Haiti RO team, they are prepared to consider contributing data if there is a need for RADARSAT data. A formal request should be made to Stephane once the needs are properly identified.

A separate mailing list is being created for the Haiti RO. Send Andrew an e-mail if you want to be on this list.

b. Demonstrator update

Andrew provided information on the Malawi and Nepal demonstrators, which has been summarized in a separate e-mail to the ROOT. Both activities are wrapping up, with feedback being sought from the end users on the products tested. In Malawi, the focus of the effort was on agricultural monitoring and infrastructure. In Nepal, the product developed dealt with housing reconstruction monitoring. All demonstrator activities expected to be wrapped up by end of February.

5. DRM pilots (pilot Leads, Brenda)

a. Volcano pilot

Mike Poland provided an update. Cordon-Caulle has been an active volcano for us. It had been very active earlier, but this had waned. It has now restarted and ALOS-2 data is very useful here. Much of the rest of the area is business as usual. Discussions have not taken place on the European element of global programme yet. There is a need to tag up with CNES and ASI offline. USGS has expressed an interest to be a global home base, but the challenges of doing this right now are significant (federal hiring freeze currently in place). Mike wondered what will happen after March if no new data is forthcoming from ALOS-2? Andrew recommended the 2017 quota be requested in its entirety for the end of March to ensure data are used.

Powell Center may be one mechanism to go forward as we move forward. Matt Pritchard and Mike Poland are trying to work through the Powell Center to come up with a vision for how to use EO for on-going volcanic monitoring. Does not however come with independent funding.

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.

b. Seismic Pilot

Dorella provided a short report. ALOS-2 and Sentinel-1 data are being used to examine the NZ earthquake. COMET produced an interferogram within 7 hours of event. Velocity fields and strain maps being produced under objective B – broad area processing being pursued. Under Obj A, more optical work going on in complement to SAR work already well-underway. There was a face-to-face meeting in January between Dorella and the pilot leads to look at processing tools and e-collaboration as next steps. There is an issue with JAXA data stopping end of March 2017. CNES will continue to provide data to November. CSA does not have an issue continuing to December 2017. DLR was not present to state their position on when data would cease flowing for the pilot.

The pilot asks that data collections continue observations beyond the end of March. A reflection has begun on a new initiative in the context of CEOS WG. This will be presented in March at the meeting of the WG. A proposal will be made to modify the agenda accordingly.

Action 17/1: Stephane to write to JAXA contact to determine whether ALOS-2 data will be available for pilots from March to November 2017, and more broadly to address ALOS-2 data policy for the WG.

c. Flood pilot

Stu Frye reported. There have been floods in Thailand, Myanmar, Argentina. Stu met with Roberto Rudari of CIMA to discuss possible hosting of Global Flood Dashboard. CIMA indicated a demo could be put up, but an on-going source of funding is required to maintain this on an on-going basis. A small budget would help for the demo. There is also a NASA call end of February that might provide some resources. A bid will be put in, with results in April or May. Up to three years funding is planned for this activity.

Stu encouraged the RO team to look at RADARSAT and other images for the RO. Drone data collected should also be included. Agwilh will contact Stu to be sure that all the relevant CEOS products are identified.

d. Landslide pilot

Dalia and Sigrid presented on the landslide pilot. They are still working on study regions and AoIs. In Nepal, the AoIs are along a few major highways. This is also of interest to WB transport group and they will provide economic data to see how landslides and landslide monitoring can have a positive financial impact. In the Pacific NorthWest (PNW), study regions are defined and tasking requests are being formulated. Team call scheduled later today. A survey was circulate dot identify data and capabilities. Jean-Philippe is taking lead to work with the GEP group to be sure GEP investment is leveraged. Jean-Philippe and Sigrid will attend Rome meeting and also a team meeting at EGU in Vienna in April. Abstract submitted to EGU to present pilot activity. Other experimental regions to be addressed next year.

e. Data issues and/or other issues (Charter data access)

Action 17/2: Andrew to write to Brenda and capture outstanding actions requested of her in a single e-mail.

6. GSNL update (Stefano)

a. San Andreas Fault Natural Laboratory update

A meeting was held at AGU. A series of new proposals is expected, probably in February. Up to three proposals: Chile, DR of Congo, Peru (Andes – multi-hazard supersite proposal). In March, we should discuss this multi-hazard aspect at the WG meeting. It is a change of the objectives of GSNL. For the San Andreas Fault proposal, DLR has indicated that commercial acquisition conflicts will cause significant problems for data provision if the site is to request specific data, but it is possible that these commercial data (ordered separately from the natural laboratory) could be provided for scientific use. CSK has agreed to support, but must look at quotas. CSA and JAXA will not be providing data. There are two supporting agencies. Is that enough? Stephane indicated that two agencies was enough for a formal request to be made.

Action 17/3: Stefano to send an official e-mail to Stephane regarding SAFNL.

If proposals received in February and they are revised by mid-March, can they go forward to the SIT or must we wait for November Plenary? The time is short but it can be tried. If it is really finalized mid-March (if space agencies provide the DCT with answers after being requested to review the proposal), and the SIT meeting is held at the end of April, perhaps it is feasible.

7. Status of GEO-DARMA development (Ivan)

Andrew presented the status of GEO-DARMA. A first teleconference of the Sub-group was held and minutes were circulated, as well as proposals for Steering Committee (SC) members, and a list of possible organisations to be contacted as partners in each region. Ideally one or two from each region will join and help define the Concept that will be put forward and discussed in detail a the Concept Workshop, planned during the Global Platform of UNISDR in Cancun (specific date not set, but during the 22-26 May period of the larger conference). Prior to that, a small Kick-Off Workshop will be held in Rome at ASI, the morning of 14 March, from 9 to 12. It has been included in the WG Disasters agenda that was circulated. WG members are encouraged to attend to review possible paths forward for GEO-DARMA. The first phase of GEO-DARMA (Concept Phase) will wrap up in summer 2017, and the first projects are expected to be put forward for approval at the fall CEOS meetings.

Stephane recommended that GEO-DARMA review the MoM from the December GP-STAR Meeting. There are possible synergies and perhaps some participants may be interested in GEO-DARMA.

8. Reporting and Handbook (Andrew and Stéphane)

Handbook will be finalized in the next ten days. Final comments from pilot leads expected this week (27 January latest).

Ivan will send information on resolution of pictures to be used after the call (received – 300 dpi minimum).

The plan is to have the document available for the SIT meeting in April.

9. GP-STAR Meeting (December 2016)

Stephane indicated it was worth partnering on this initiative, particularly with initiatives such as GEO-DARMA going forward. GP-STAR is strongly linked to the Sendai Framework. Francoise Villette indicated that she strongly supports the idea that we link to GP-STAR. We should support this and be active. Some activities are already going forward on droughts, floods, volcanoes, sand and dust storms, and tsunamis. CEOS has agreed to contribute on volcanoes and floods (by providing pilot reports) and to help prepare the Mexico meeting. Pilot reports will be examined and side event participation is envisaged. GEO-DARMA plans to contribute to the side event. CNES (and others) will look at GP-STAR and get back to the group on possible contributions if any. A meeting on GP-STAR will take place Monday and Stephane will report to that meeting that CEOS is supportive. These activities may be mentioned in future updates of CEOS WorkPlan. This does not refer imply new activities, but rather linking existing activities. More discussion is planned at March WG meeting.

10. CEOS website updates (Stéphane)

Some key elements received from Philippe and Dorella already. Andrew will see if the landslide page is uploaded. The next step, after urgent updates for GEO-DARMA and the RO, a review of how the group presents itself (full review of web materials and structure, in anticipation of pilot wrap-up for floods, seismic hazards and volcanoes. This review is scheduled for after the April SIT meeting, and before the end of the summer.

11. AOB

a. WG Disasters meeting # 7, Mars 2016, Rome, ASI

Need to know who will attend GEO-DARMA KO if different from WG Disasters. Andrew will coordinate with Simona before the meeting.

Action 17/4: Stephane to send reminder to sign up for 17 March field trip.

Francoise Villette has a suggestion for the agenda – exploring collaboration with other international groups such as collaboration with the International Working Group on Satellite Emergency Mapping (IWG-SEM). Meeting of the two groups back to back would be desirable, but not feasible this time. She will attend WGD on 16 and 17 March. She will send a formal request to add this discussion to the agenda.

b. Global Platform for Disaster Risk Reduction, May 2017, Mexico

Will be a GP-STAR side event we hope, and also a GEO-DARMA Concept Workshop, a separate event, not a side event. David may be attending the Montreal regional meeting 1st week of March. This may be a good opportunity to reach out for GEO-DARMA regionally (Americas).

c. September CEOS WGDisasters meeting # 8 (with CONAE)

The meeting is planned for September 4-8 in Buenos Aires.

Action 17/5: Stephane to send e-mail to group in coming week asking who may attend from 4 to 8 September in Buenos Aires, for planning purposes. Two and half days of CEOS meeting, One and a half day AmeriGEOSS and a joint wrap-up; in parallel, training exercises and simulations.

d. Other?

No other business.

Open Actions:

#	Action	Actionee	Due	Status/ Comments
T17/2	Write to Brenda and capture outstanding actions requested of her in a single e-mail.	A. Eddy	27 January	Open
T17/3	Send an official e-mail to Stephane regarding SAFNL (San Andreas Fault Natural Laboratory)	S. Salvi	15 February	Open
T17/4	Send reminder to sign up for 17 March field trip	S. Chalifoux	27 January	Open
T17/5	Send e-mail to WG in coming week asking who may attend from 4 to 8 September in Buenos Aires, for planning purposes.	S. Chalifoux	27 January	Open
T16/2	Report to JAXA, CSA and ASI on data usage during Hurricane Matthew	S. Frye	End of December	Open. Report under review by FEMA International Relations.
T16/4	Present results of Lefkada earthquake work.	S. Salvi	WGD#7	Open
T16/5	Discuss how to bring European element into global monitoring of volcanoes	M. Poland, S. Hosford, S. Zoffoli.	WGD#7	Open
T16/7	Circulate rough draft of final pilot reports for three thematic pilots that end in 2017.	Pilot leads	15 February	Open
T16/12	Post the comparison document on Obj C and event supersites to CEOS and GSNL websites	Stéphane Chalifoux to send to Kim	27 January	Open

		Hollister		
M6/1	Provide list of megacities (KMZ file) and request input from agencies through DCT on whether these cities are being imaged through background missions.	Simona Zoffoli, Stephane Chalifoux, Jens Danzeglocke, Satoko Miura	WGD#7	Replaces former M4/22; open. Stefano Salvi has provided list of cities to DCT; feedback is requested from DCT agencies with SAR satellites to establish which satellites are imaging which cities.
M6/14	Explore access to new Chinese SAR data for landslide pilot.	Zhou Zeng- Guang	Changed to WGD #7	 The new Chinese SAR satellite GF-3, carrying 1-meter C- band multi- polarization SAR and launched on August 10th 2016, is still in the stage of <u>On-Orbit</u> <u>Calibration and</u> <u>Validation</u>, which will last for 3-5 months. At the moment there is no data sharing policy yet. But so far, some users and institutions of the satellite data have been identified, from whom we are going to discuss if we can get the data.
M6/17	Detail capacity development components of Objective C of the Seismic Pilot.	Stefano Salvi	WGD#7	Open
M6/18	Detail relations of Objective C with Charter – how do these tow fit together, now and in the future	Steven Hosford, Jens Danzeglocke, Kerry Sawyer, Philippe Bally, Francoise Villette	WGD#7	Open
M6/23	Prepare web story on volcano pilot	Mike Poland and Simona Zoffoli	1 st week of March	Open
M6/24	Prepare web story on RO	Helene de Boissezon and	1 st week of October 2017	Open

		A. Eddy		
M5/6	Send information about landslide needs in countries where UN-SPIDER/UNOOSA has had missions	Lorant Czaran	WGD#7	Open. Andrew Eddy has followed up with Lorant.
M5/19	Inform WGD Chair of publications and outreach activities	Each pilot lead	Once a month	Open
M4/11	All agencies with commercial partners to document in a short statement the conditions for accessing data that was acquired previously by a commercial partner and update the Data Access Procedures accordingly.	All agencies; Brenda (for DAP update).	WGD#7	Open. Brenda has circulated request for input. Agencies have not yet responded.
M4/24	Write up elements of NASA GNSS work for possible inclusion in GEO-DARMA	David Green	WGD#7 – GEO-DARMA KO Workshop 14 March	Open

Closed Actions:

#	Action	Actionee	Due	Status/ Comments
T17/1	Write to JAXA contact to determine whether ALOS-2 data will be available for pilots from March to November 2017, and more broadly to address ALOS-2 data policy for the WG.	S. Chalifoux	27 January	Closed. Completed. Answer received.
T16/1	Circulate RO Demonstrator Preliminary Report	A. Eddy	End of December	Closed
T16/3	Present an updated Landslide Pilot Implementation Plan	D. Kirschbaum	Telcon 17	Closed
T16/6	Report on agencies willing to contribute to San Andreas Fault supersite proposal and determine way forward	S. Salvi	Telcon 17	Closed
T16/8	Circulate revised draft of "glossy" report to pilot leads for comments	A. Eddy	End of November	Closed
T16/9	Circulate registration package for March meeting in Rome	S. Zoffoli	Mid- December	Closed
T16/10	Sound out CONAE on dates for September 2017 meeting and examine SIT conflict. Report to Stephane Chalifoux on dates for September meeting.	S. Frye	End November	Closed
T16/11	Share ISRSE Disasters session information with group	Steven Hosford	Telecon 17	Closed

M5/3	Prepare a short note on expectation of role of liaison with user communities and circulate to group by Telecon 14 for further discussion on role of user liaison positions	Lorant Czaran	WGD#6	Closed. Short note provided in September.
M6/4	ASI and DLR to share (in technical terms) the approach used to interface with their image databases (APIs for automatic data requesting; direct links to other databases).	Theodora Papadopoulou to coordinate within ESA	End of November	Closed
M6/12	Break up data table per region and also show overlap with GSNL (Nepal) and share with agencies through DCT.	Dalia Kirschbaum	End of November	Closed
T9/3 and T10/3	Identify hosting for Global Flood Dashboard;	Stu Frye, Bob Kuligowski	Telecon 17	Closed