**Summary Notes**

**WGISS – DSBS Team**

**February 13, 2012**

Guy Seguin and Karen Moe began the meeting with brief introductory remarks. The joint WGISS-Disaster SBA Team Meeting was suggested by both groups as it became clear that a major focus of WGISS activity over the coming months would be disaster-related.

Attendees: Karen Moe (NASA – co-chair), Guy Seguin (CSA – co-chair), Dan Beardsley (NOAA), Christiane Bognar (NASA), Andrew Eddy (AG for CSA), John Evans (GST for NASA), Brian Killough (NASA), Jennifer Lewis (NOAA), Francis Lindsay (NASA), Daniel Mandl (NASA), George Percivall (OGC), Ivan Petiteville (ESA), Kerry Sawyer (NOAA; CEOS DCEO), Julie Silva (UMaryland), Espen Volden (GEO Sec).

WGISS activity on the Disasters Enterprise Architecture began last summer. New activity considered what was going on in other areas and felt an enterprise view of disaster management form a GEOSS and CEOS perspective was missing. From an information systems perspective, new approaches could be brought forward and would affect in a positive way the ability of agencies to respond.

Guy Seguin presented an overview of the work of the disaster SBA team (see presentation in annex).

Stuart Frye presented on the Caribbean Satellite Disaster Pilot (see presentation in annex).

Dan Mandl made a presentation on the Namibia Pilot (see presentation in annex).

There was a lot of discussion on automated tasking. Ideally, we have three modes, with criteria to select which mode when tasking. The idea is to come up with an automated interface with an e-mail announcing that the image has been acquired. These services require that agreements and policy be in place before an event takes place. The enterprise architecture aims to integrate this analysis. For commercial providers, changing an approach may mean changing it for everybody. This can be expensive.

SEO – data acquisition planning work. What are the thoughts on new data sets and missions? What are the issues with acquiring new data sets? Yes, new data sets are being sought, particularly new civilian data, or even with regard to commercial missions.

The work on the Namibian pilot is now being housed on a “cloud”. The project is now up to one Petabyte. These resources are contributed, which means they do not cost the program anything. About 150 Radarsat scenes are going up to the cloud right now. Additional servers being added as required. When the program put up imagery on the Hungarian sludge, they received over 250,000 hits. It crashed the NASA server. Using the Cloud offers users a whole new dimension of services, in particular for working on information within the cloud (cloud computing), and, for the time being, the Cloud services are being offered free of charge.

What are the issues with real clouds inhibiting the imagery?

Cloud cover is an issue but it is weeded out through the image selection process algorithms. But what we are really working on is an integrated optical/radar map of what is there, with radar filling in the blanks.

Shelley Stover made a presentation on gap analysis (see annex). A new approach was adopted in June based on instrument type. The process was presented in September. Final results of analysis now presented. Once these results have been analysed and reviewed, the team will decide how to adapt this process to other disasters types.

There are additional constraints not currently considered such as data downlink issues, data policy constraints, etc.

There are still issues with the repeat cycle. There is incorrect information on revisit for SAR data. These issues need to be cleaned up before the results are more broadly circulated.

Ivan Petiteville suggested the need for thinking about the interpretation of results. Cosmo-SKYMED was cited as an example. The satellite system is not considered as a complete system, but as individual satellites, when in fact they operate as a system, greatly increasing revisit capabilities. The work completed to date requires a thorough vetting to ensure information collected is valid. Shelley Stover indicated much of the data was collected by students and required verification before further presentation of the results.

CEOS is proposing to survey all CEOS agencies for data access policies. Brian Killough discussed the CEOS planning. These results should be integrated with gap analysis work. Some participants questioned this because it was felt that data policies are not always as straightforward as they appear. There are ways to obtain data for good science work that are otherwise deemed to be commercial, for example. While data policy information is important, the mere fact that a policy makes data appear to be less available should not be included as an actual data gap.

Guy Seguin discussed the supersites proposal. The users are scientific. There is no plan to outreach to operational end users involved in mitigation and response to volcanoes or earthquakes. There were concerns that data provided would not be used well. There is a need to audit the use of the data in this program to ensure the project is useful.. The UNAVCO site is confusing and difficult to use for the uninitiated. There is a need for a separate site to showcase the results, perhaps through the CEOS website?

Karen Moe made a presentation on the disaster enterprise architecture.... what are the insights on priorities and design criteria for “disaster portals” to share disaster information? This question will be addresses in the coming weeks. There was a general discussion on the notion of enterprise architecture for disasters. There was a general consensus that it is useful to have the collected lessons learned in one place, and to have a consensus opinion on what various terms mean, and how user needs are collated and compared to available resources. The explanation of the disasters process from a separate series of points of view has merit, although it was felt that the group should not limit itself to repeating what had already been done in other areas. It was suggested that the group should go beyond the architecture to ensure that lessons learned are brought into improved practices for the dissemination of data during the full cycle of disaster management. This is a critical target for GEO in 2015 and this group is well positioned to act on this.

George Percivall made a presentation on the internet-scale architecture for GEOSS Design and Interoperability. This is where AIP-5 will take place. AIP-5 will focus on use cases, and disaster preparedness and mitigation is a key use case. The people writing the call for proposals will be responding. It you want a change, respond this week with the suggestions.

Ivan Petiteville made a presentation on last week’s ESA-led meeting... Disasters will be a theme for RIO + 20 and disasters is one of only 7 of these themes. Political attention for disasters is growing. Issues raised:

* several areas not covered by space agencies (phases, disaster types)
* more resources dedicated to response, little for mitigation
* difficulty to access historical data, particularly Charter data
* data sharing costs between countries, licences, costs
* insufficent data sharing
* role of CEOS? Data provision only or also value-added services?
* little linkage between agencies and donors/World Bank
* User needs not well formulated and sometimes unknown by agencies
* difficulty to define well coordinated cross-agency action to response to needs (Background missions for instance)
* Support to DRM by individual agencies is constrained by own interests (types of disaster, areas considered)
* Capacity building and knowledge transfer to be improved

ESA will continue to work on the disaster activity over the coming months and will provide a detailed report with recommendations at the CEOS Plenary in Bangalore this October.

Guy Seguin led a discussion on the CEOS action plan for the new GEO workplan. The results of last week’s planning session in Frascati were presented and improved upon. The final input will be provided during the SIT Technical Workshop on 14 and 15 February. Current list of actions includes (under DI-01):

* C1 – action on satellite data gap analysis work; potential for broader action on bringing space data to disaster managers to support full cycle response
* C2 – geohazard supersites action
* C3 – potential bathymetry action
* C4 – potential action on wildfire monitoring form space
* C5 – further development of Caribbean and Southern African pilots; interest in broadening the pilot model to other geographic areas.

Participants suggested there was a need to ensure CEOS is not stepping into an operational role.

The discussion was adjourned for the day.

Annex 1 – Agenda

13:00   Introduction (Guy Seguin & Karen Moe)  
  
13:10   Report from regional pilots  
  
a.      Namibia Pilot Field Campaign (Dan Mandl)  
  
b.     Caribbean Satellite Disaster Pilot – Status and Sustainability Planning (Stu Frye)  
  
14:10   Satellite data Gap analysis (Shelley Stover)  
  
14:40   Enterprise Architecture Presentation and Discussion (Karen Moe)

15:10 Report on AIP-5 status (George Percival)

15:20   Report from ESA/CEOS Disaster Mtg (Guy Seguin)  
  
15:50   GEO Workplan 2012-2015 and proposed roadmap for CEOS Disaster activity (F. Gaetani and G. Seguin)  
  
16:30   Proposed actions for discussion at CEOS workshop 14-15 Feb (all)  
  
16:50   Wrap up and way forward (Guy Seguin & Karen Moe)