# Meeting Minutes of the Subcommittee on Disaster Reduction

04 September 2008, 10:00 a.m. to 12:00 p.m., Department of Commerce Room 6800

Italics indicate absent members. "T" indicate members participating via teleconference.

#### **Officers**

David Applegate (USGS), Chair (T) Margaret Davidson (NOAA), Vice-Chair (T) Dennis Wenger (NSF), Vice-Chair

## **NSTC Liaison**

## **Working Group Chairs**

**Earth Observations Working Group** Steve Ambrose (NASA), Co-Chair Tim Battista (NOAA), Co-Chair Bruce Quirk (USGS), Co-Chair

### **Infrastructure Task Group** Joy Pauschke (NSF), Chair

**Resource Impacts Task Group** Susan Conard (USFS), Chair

## **Designated Representatives**

**BLM** Edwin Roberson Ronald Huntsinger CDC Mark Keim **DHS** Bruce Davis **DHS/FEMA** Mike Buckley **DHS/USCG** Steven Cohen **DOD** Al Johnson **DOE** Patricia Hoffman **DOT** Sheila Duwadi Cheryl McQueary (T) Tim Schmidt (T) EOP / OSTP

## **EDA** Audrey Clarke **EPA** Peter Jutro Stephen Clark FERC Berne Mosley **HUD** David Engel **NASA** Steve Ambrose **NGA** Stephen Homeyer NGB Daniel Bochicchio **NIH** Allen Dearry **NIST** William Grosshandler

NOAA Margaret Davidson (T) Al Robinson

Jack Hayes

David Green

**NSF** Joy Pauschke Dennis Wenger

**OPHS** Sven Rodenbeck (T) State Cari Enav Fernando Echavarria USACE Barbara J. Sotirin Dimitra Svriopoulou **USAID** Sezin Tokar **USDA** Melissa Simpson **USFS** Susan Conard **USGS** David Applegate (T) Paula Gori

### Other Attendees

**BLM** Bob Bewley **DHS/FEMA** Stephen Carruth **NOAA** Nell Codner (T) John Gaynor

**USGS** Gregory Snyder (T) Secretariat Emily Wallace Barbara Haines-Parmele **NGA** Kurt Rodgers State Sarah Gelinas

### Agenda

10:00 Welcome and Introductions 10:05 Approval of Meeting Minutes 10:10 Report from the Chair 10:20 Report from IDRC Conference 10:25 UN/ISDR Action Items 10:35 Report from the Vice-Chairs 10:45 Presentation: Satellite Resolution Requirements for Disaster Relief 11:15 Prioritize Actions from Retreat and Planning Workshop 11:55 Close and Next Actions

#### **Handouts**

- Agenda
- July Retreat and Planning Meeting Minutes
- Presentation: Satellite Imagery Use for Natural Disasters
- Summary of Proposed SDR 2008/2009 Roadmap

#### I. Call to Order and Introductions

Subcommittee on Disaster Reduction (SDR) Vice-Chair Dennis Wenger (NSF) called the meeting to order at 10:08 a.m.

### II. Approval of July Retreat Minutes

Minutes from the July Retreat and Planning Workshop were approved with amendment from John Eichelberger (USGS).

### **III.** Report from the Chair

David Applegate (USGS) began his report by noting his departure at 11am to attend a hurricane response meeting.

Applegate reminded the group of the Hill briefing scheduled for September 19<sup>th</sup>. The briefing will discuss recent natural hazard events, including Hurricanes Gustav and Ike, California wildfires, and China's Sichuan earthquake, to illustrate the Grand Challenges for Disaster Reduction. Speakers include:

- David Applegate, Senior Science Advisor for Earthquake & Geologic Hazards, U.S. Geological Survey, and Chair, Subcommittee on Disaster Reduction
- Ken Graham, Meteorologist-in-Charge at the NOAA/National Weather Service New Orleans/Baton Rouge Office
- Richard Lasko, Assistant Director, Fire and Aviation Management, U.S. Forest Service

Applegate also encouraged SDR members to attend the 23<sup>rd</sup> Disasters Roundtable workshop: "Making the World Safer from Disaster: The US Role" which will be held on **Thursday, October 2<sup>nd</sup>, 2008** in Room 100 of the National Academies Keck Center at 500 Fifth Street NW, Washington DC.

Concluding his report, Applegate noted that Jon Kolak of USGS has been detailed to the OSTP and will likely be given SDR as part of his portfolio.

#### IV. Report from IDRC Conference in Davos, Switzerland

Steve Ambrose (NASA) provided a report from the International Disaster and Risk (IDRC) conference held in Davos, Switzerland, August  $25^{th}-29^{th}$ . Ambrose noted that the Grand Challenges session was well received as was the NASA Earthquake/Wildfire session. He also passed a copy of the Risk Wise publication around, noting the SDR/GC article placed near the front.

The 2009 IDRC conference will be held in Kenya. Ambrose encouraged SDR to remain in touch with the group.

Dennis Wenger (NSF) asked if the conference focused more on science or policy. Ambrose indicated that the focus was more on policy due to the presence of high level Group on Earth Observation (GEO) and International Strategy for Disaster Reduction (ISDR) representatives.

Mike Buckley (FEMA) asked how many U.S. participants were present at the conference. Ambrose indicated that a handful of U.S. participants were present. Sezin Tokar (USAID) noted that a USAID representative was in attendance.

Susan Conard (USFS) asked if copies of the RiskWise publication would be available at a future SDR meeting. Ambrose indicated that a few copies would be available. Stephen Homeyer (NGA) requested a copy.

#### V. UN/ISDR Action Items

Dennis Wenger (NSF) reminded the group that SDR is the U.S. National Platform for ISDR. As a result, Applegate has been involved in responding to two information requests from the ISDR.

David Applegate (USGS) indicated that the first ISDR request is a questionnaire on the national progress review for the Hyogo Framework for Action. The results of the questionnaire will feed into the June 2009 platform meeting. Applegate requested a review of the questionnaire in terms of one's own agency detail by October 6<sup>th</sup> for review and discussion at the October 9<sup>th</sup> meeting.

The second ISDR request is a questionnaire that came from the UN/ISDR Platform for the Promotion of Early Warning. A strawman response has been developed for review by agencies with early warning responsibilities designated by executive order. The Secretariat has identified individuals from these agencies with expertise in the identified hazards for a detailed review and response of the strawman questionnaire by Thursday, Sep. 25<sup>th</sup> for discussion at the October 9<sup>th</sup> meeting.

John Gaynor (NOAA) noted the semantic issue of warning vs. early warning and noted that the SDR will need to pay careful attention as this comes together.

Margaret Davidson asked if the U.S. is the only one to parse that definition. Sezin Tokar (USAID) asked about international capabilities on issues such as famine. Applegate noted that SDR must look at capacity even if it is brought to bear internationally.

Mike Buckley (FEMA) noted that the same is true on a state/local level, noting that FEMA would like to review the questionnaire.

Susan Conard (USFS) asked about parsing observations vs. forecasts vs. warnings. Applegate indicated that he would review the Stafford Act but recommended capturing explanations within the response that are not formally called warning systems.

### VI. Report from the Vice-Chairs

Margaret Davidson (NOAA) noted that she is presenting to the Climate Change Science Program (CCSP) on September 16<sup>th</sup> and will emphasize the synergy between climate adaptation and disaster reduction. She will circulate the presentation to SDR for review in advance of September 16<sup>th</sup>.

Dennis Wenger (NSF) noted that he is now a member of the ISDR Science Advisory Panel. The second meeting of this panel will be held from October 28 – 30 in Geneva to review the global assessment effort.

Paula Gori (USGS) asked if it would be useful to Dennis to know what each agency is doing that could impact the ISDR Panel. She noted that the USGS belongs to a number of groups supported by the UN. Dennis indicated that it would be beneficial and asked SDR members to report on any ISDR or UN activities their agency may be involved in. The Secretariat will compile a list of all agency International affiliations/memberships to discuss at the October 9<sup>th</sup> SDR meeting.

VII. Presentation: Satellite Resolution Requirements for Disaster Relief – Alan Robinson, Management and Program Analyst, NOAA/NESDIS/International & Interagency Affairs Alan Robinson (NOAA) began his presentation by noting that the NOAA Commercial Remote Sensing Licensing (CRSL) Program has a regulatory responsibility to license the CRS satellite industry. Licenses allow companies to hold high resolution data for 24 hours before distribution to non-U.S. Government approved entities. In 2004, high resolution data hold limits for electro-optical (EO) satellites were: 0.82m Panchromatic (PAN) and 3.2m Multispectral (MS). The CRS industry and first responders asked NOAA to seek a waiver from the 24-hour data hold for disasters. In March of 2006, NOAA requested and received SDR guidance in developing requirement based parameters to develop conditions for a waiver. As a result of the waiver, NOAA's commercial remote sensing licensees were authorized to distribute imagery collected at better than 0.82m Panchromatic (PAN) and 3.28m Multispectral (MS) data Ground Sample Distance (GSD) for use immediately before, during, or after a disaster event occurring in the U.S. or in other countries, with the exception of Israel. At the time, no capability for better than 0.5m PAN and 2.0m MS existed.

Robinson noted that EO high resolution data hold limits changed from 0.82m PAN and 3.2m MS to 0.5m PAN and 2.0m MS. As a result, NOAA is currently examining a waiver for 0.5m PAN and 2.0m MS data hold limits and is seeking SDR input again to answer the following:

- 1. For a disaster recovery situation, what is the value of satellite data with a resolution better than 0.5m PAN and 2.0m MS GSD vice 0.5m PAN and 2.0m MS GSD or worse? Specifically, what advantages to disaster relief and recovery operations will satellite data with a resolution better than 0.5m PAN and 2.0m MS GSD provide vice using 0.5m PAN and 2.0m MS GSD or worse?
- 2. What are the negative impacts if data better than 0.5m PAN and 2.0m MS GSD is not provided?

Susan Conard (USFS) noted that the difference in technology is not significant for Forest Service use and asked if there is an absolute limit precluding any release within 24 hours. Robinson noted that a lower limit does exist somewhere that would prohibit the release within 24 hours due to national security reasons.

Stephen Homeyer (NGA) noted that resolution requirements are dependent on what one is looking for. He also indicated that airborne assets can be utilized to obtain higher resolution data and encouraged NOAA to utilize these assets when available. Homeyer also cautioned the group against counseling NOAA in favor of the new waiver solely because the technology is available.

Fernando Echavarria (State) inquired about the status of shutter release data (SRTM). Homeyer noted that he believes policies were put into place and released but will follow-up to be certain.

Mike Buckley (FEMA) asked how the security risk changed when going from .5 to .4 resolution. Homeyer indicated that he could not answer the question. He also noted that with the availability of airborne assets for specific and high resolution needs why bother?

Paula Gori (USGS) noted that USGS utilizes satellite data as a "first cut" and airborne assets for detailed information and to explain the physical attributes of what happened.

Margaret Davidson (NOAA) also noted that NOAA orchestrates aircraft coverage after an event as does DOT. NOAA integrates and uses assets wherever they may be based.

Homeyer (NGA)noted that the construct of satellite imagery and sensor sets vary across the board. Integration across disperate platforms/sensors is the challenge of the future.

Conard (USFS) reiterated that aircraft observations provide better information from a wildfire perspective but there is often not enough budget or aircraft available to see all the fires. As a result, satellite must continue to be relied upon.

Sezin Tokar (USAID) reminded the group that no civil airborne assets are available outside U.S. borders; USAID relies on satellite.

Kurt Rodgers (NGA) reiterated that .5 vs. .46 is imperceptable to the untrained eye noting that no real additional information can be discerned. There may be perceptable change at .41.

Fernando Echavarria (State) asked if the taxpayer wants to buy the best imagery available, why not let them. How can we put additional tools in the toolbox to obtain quick cost-effective imagery?

Wenger thanked Robinson for his presentation. Concluding the discussion, he noted that a teleconference call will be convened in the next week or two to further discuss the issue and draft a strawman response that can be circulated prior to the 10/9 meeting for SDR approval.

#### VIII. Prioritize Actions from the Retreat and Planning Workshop

Dennis Wenger (NSF) reviewed the six primary components of the draft SDR 2008/2009 Roadmap identified at the July Retreat and Planning Workshop for Committee discussion.

SDR members were asked to review the existing SDR Grand Challenge Implementation Matrices available on the internal SDR website as the first step in developing a *Grand Challenges for Disaster Reduction* accompaniment document.

Wenger discussed the significant overlap between the Climate Change Science Program (CCSP) SAP products and disaster reduction noting the committee's interest in linking SAP 3.3 Weather and Climate Extremes in a Changing Climate, with Grand Challenge #3: Develop Hazard Mitigation Strategies and Technologies as a means of identifying hazard mitigation strategies applicable to climate.

Allen Dearry (NIH) suggested that we look at other SAP products in addition to 3.3. Sue Conard (USFS) supported this suggestion.

Regarding the hosting of a media roundtable, it was suggested by Paula Gori (USGS) and supported by Sue Conard (USFS) to delay the event until the new administration settles down. It was agreed that the media roundtable would be targeted for the 101<sup>st</sup> day of the new administration in May 2009.

SDR members were asked to send Emily Wallace names of scientific associations currently engaged in transition efforts by September 22<sup>nd</sup>.

Margaret Davidson (NOAA) reported that the National Research Council Study on Measuring Community Resiliency is still in need of \$150k to get started.

The next big disaster document titled *Validating the Grand Challenges for Disaster Reduction: Scenarios and Consequences* will be re-circulated by the Secretariat prior to the October meeting for "freshening" and updates by the SDR.

### IX. Close and Next Actions

Mike Buckley (FEMA) announced that David Maurstad (Mitigation Assistant Administrator) has resigned effective the second week of September. Buckley will be the acting Mitigation Assistant Administrator and will serve as the official SDR representative.

Wenger (NSF) thanked members for their participation and noted that a meeting space is still required for the next SDR meeting which will be held on October 9<sup>th</sup>.

## X. Adjournment

The meeting adjourned at 11:57 a.m.

## **XI.** Future Meetings

The SDR meets on the first or second Thursday of every month from 10 a.m. to 12 p.m. unless otherwise noted.

## Thursday, October 9, 2008 (note change)

November 6, 2008

December 4, 2008

### VII. Agenda Items and Other Communications with the Subcommittee

Please send proposed agenda items and any other items intended for distribution to the full Subcommittee to Emily Wallace (ewallace@grs-solutions.com).

## **VIII. Contact Information SDR Leadership**

David Applegate, Chair, 703-648-6714, applegate@usgs.gov Margaret Davidson, Vice Chair, 843-740-1220, Margaret.davidson@noaa.gov Dennis Wenger, Vice Chair, (703) 292-8606, dwenger@nsf.gov

#### **Secretariat**

Emily Wallace, 703-560-7448, ewallace@grs-solutions.com

IX. Summary of May Actions

1A. Summary of Way Actions			
Action	Lead	By When	
SDR financial support: Contact Dave	SDR Members	Standing	
(applegate@usgs.gov) if you would like a			
personalized support request letter to your			
agency			
Contact Emily ( <a href="mailto:ewallace@grs-solutions.com">ewallace@grs-solutions.com</a> ) to	SDR Members	Standing	
receive copies of the Grand Challenges for			
Disaster Reduction Implementation Plan packets			
or CD			
Let Emily or Dave know how you use the	SDR Members	Standing	
implementation plans, including when you link			
to the plans from your agency websites.			
Send Emily or Dave additional distribution	SDR Members	Standing	
suggestions, including relevant contact			
information.			
Let Emily know if you are interested in funding	SDR Members	ASAP	
the National Research Council Study on			
Measuring Community Resiliency.			
Send Emily Wallace names of scientific	SDR Members	22 September 2008	
associations currently engaged in transition			
activities.			

Convene a teleconference call to further discuss Satellite Resolution Requirements For Disaster Relief.	Secretariat and SDR Remote Sensing Experts	23 September 2008
Review and respond to the UN/ISDR Platform for the Promotion of Early Warning questionnaire.	Identified agency experts	25 September 2008
Review and provide comments to the Grand Challenge Implementation Matrices posted on: http://www.sdr.gov/formembers.html; username SDR.member; password SDR#2003. (yes, that's a period at the end).	SDR Members	3 October 2008
Let Emily know of any ISDR or UN activities one's agency may be involved in.	SDR Members	6 October 2008
Review ISDR questionnaire on the national progress of the Hyogo Framework for Action	SDR Members	6 October 2008
Re-distribute Validating the Grand Challenges for Disaster Reduction: Scenarios and Consequences for review and update.	SDR Members	13 October 2008