

Meeting Minutes of the Subcommittee on Disaster Reduction

7 February 2008, 10:00 a.m. to 12:00 p.m., Department of Commerce Room 5215

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

Officers

David Applegate (USGS), Chair
Margaret Davidson (NOAA), Vice-Chair

NSTC Liaison

Gene Whitney (OSTP)

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 Ronald Huntsinger
CDC Mark Keim
DHS Bruce Davis
DHS/FEMA David Maurstad
DHS/USCG Steven Cohen
DOD Al Johnson
DOE Patricia Hoffman
DOT Sheila Duwadi

EOP / OSTP Gene Whitney
EPA Peter Jutro
HUD David Engel
NASA Steve Ambrose
NGB Daniel Bochicchio
NIH Allen Dearry
NIST William Grosshandler
NOAA Margaret Davidson

NSF Joy Pauschke
OPHS Sven Rodenbeck
State Jordan Muller
Fernando Echavarria
USACE Barbara J. Sotirin
USAID Peter Morris
USDA / USFS Susan Conard
USGS Paula Gori (T)

Other Attendees

EPA Steve Clark
FEMA Mike Buckley
NGB James Engstrand
NOAA David Green

NOAA Nell Codner
NSF Dennis Wenger
NSF Robert O'Connor
OFCM Mark Gunzelman

State Paul Birdsall
USDA / USFS Mike Hilbruner

Agenda

10:00 Introductions/Approval of 1/08 Meeting Minutes
10:05 Report from the Chair
10:20 Briefing on DHS Science & Technology
11:00 Space Weather Implementation Plan
11:10 Communications/Distribution Strategy for
Implementation Plans
11:45 Close and Next Actions

Handouts

- Agenda
- January Meeting Minutes
- Draft Communications/Distribution
Plan for Implementation Plans

I. Call to Order and Approval of Minutes

Subcommittee on Disaster Reduction (SDR) Chair David Applegate (USGS) called the meeting to order at 10:05 a.m. Following introductions around the table and on the phone, the minutes for the previous meeting (January 10, 2008) were approved as presented.

II. Report from the Chair

Applegate will work with NOAA's SDR representatives to arrange a briefing for next month's meeting on the recent deadly tornadoes that struck the south-central US this past week, hopefully including a discussion of how the actions described in the Grand Challenges implementation plan for tornadoes could make a difference in the future based on the experiences of this event.

For the wildfire white paper, Applegate reported that agency inputs to the set of questions posed had been received from NOAA, USGS, US Forest Service, NIST, NASA, EPA, FEMA, and BLM. While the process is taking longer than hoped, there is progress toward a draft for the next meeting.

Applegate repeated his previous requests for annual agency funding commitments to SDR and offered agency-specific letters for any who would find it helpful for making the case for SDR support.

Applegate noted that the U.S. Group on Earth Observations (USGEO) is undertaking a priority-setting effort for earth observations associated with each of its societal benefits areas, including hazards. There will be a liaison to SDR to ensure coordination, and he expects good usage of previous jointly prepared documents.

On OSTP liaison Gene Whitney's behalf, Applegate made the group aware of the draft American Meteorological Society statement on space weather, which is open for public comment until

At an SDR leadership call earlier in the week, it was agreed that an all-day SDR retreat should be arranged to focus on the transition to the next Administration and linkages with climate change. More on that as plans develop.

Applegate reported that vice-chair Margaret Davidson is working on a reciprocal SDR briefing to the Climate Change Science Program leadership, following on the presentation given by CCSP's Mary Glackin last year.

ACTION (All): Applegate will re-send electronic version of the support request letter to the SDR agency representatives with meeting summary. Please let him know if a personalized letter to the SDR representative or someone else in your agency will help this process along.

ACTION (Applegate): Distribute link to American Meteorological Society draft position statement on space weather for public comment.

III. Presentations

A. Briefing on DHS Science & Technology

Randel Zeller, Director for Interagency Coordination in the Department of Homeland Security (DHS) Science and Technology (S&T) Directorate, provided the group with a briefing on the directorate's mission and interest areas. The S&T Directorate supports basic and applied homeland security research to promote revolutionary changes in technologies. Roughly half the \$830 million annual budget is in product transition. Another 10 percent goes to innovative technologies through the Homeland Security Advanced Research Program Agency (HSARPA). Twenty percent goes to

enabling research with long-term (greater than eight years) payoff and geared toward taking research risks that will lower the downstream risk in procurement. The rest is driven by maintaining labs.

The organization is divided into explosives, chemical/biological (50 percent of the budget), command/control/interoperability, border/maritime, human factors, and infrastructure/geophysical. Examples of the last include game-changing technologies that range from steering hurricanes to building levees that do not deplete the Gulf of Mexico. Zeller indicated that DHS S&T should be the Underwriters Laboratory for first-responder technology, testing to be sure it works. He also emphasized the importance of Special Programs working with the intelligence community, International Liaison to collaborate with global partners to develop compatible technologies, and the Homeland Security Institute, a federally funded research and development center.

The Infrastructure Protection/Geophysical Division focuses on the technology gaps identified by the DHS Office of Infrastructure Protection working with operators of critical infrastructure, 90% of which is privately owned. The Human Factors Division works with social scientists on social-behavioral threat analysis, biometrics of hostile intent, and how to get the public to respond to warnings. The Border and Maritime Security Division seeks creative solutions for the huge challenge of safely and quickly handling container traffic into the country. The Chemical/Biological Division is working on a shift to wireless detection networks, building labs that look at animal diseases and undertake bioforensics research. Activities of the Command, Control & Interoperability Division include working toward dealing with governance issues that are a major challenge for emergency response. A question was raised about what has been done to deal with communication interoperability, and Zeller noted both progress and ongoing challenges. He gave an example of a new technology being the use of Twitter text messaging allowing local fire departments in San Diego to tap into community networks on fire location and then overlay those reports on Google Earth. The Explosives Division seeks to deploy creative and cost-effective countermeasures for shoulder-launched missiles, including deployment of GlobalHawk unmanned aerial vehicles flying at 65,000 feet above airports.

Zeller emphasized to the agency representatives that if they see a niche, he would like to hear from them. He noted alignment with the DOE national laboratories and indicated that NASA has been a good partner. DHS is working with industry on collaborative projects and has a Capstone Integrated Product Team process for S&T transition to generate investment portfolio and spending plans. Unfortunately, the innovation portfolio is where Congress looks to cut because of the longer-term payoff.

He singled out several programs: the Homeland Innovative Prototypical Solutions program is exploring the ability to provide rapid levee strengthening and repair during failure to avoid catastrophic flooding in places like Sacramento and Reno; the Secure Against Fire and Embers (SAFE) program is seeking to understand why building that did not burn down in the southern California fires survive and to develop technologies to protect houses in the path of oncoming fires.

The President's science advisor, John Marburger, has identified two focus areas for homeland security R&D: Countering the improvised explosive device (IED) threat before the bomb goes off, and better scientific understanding. He noted that \$15 million has been added for IED research and that the directorate is trying to get balance in its basic research portfolio.

ACTION (Applegate/Secretariat): Place Zeller presentation on the SDR members website. Provide links to reports described in presentation.

B. Space Weather Implementation Plan

Mark Gunzelman from the Department of Commerce Office of the Federal Coordinator for Meteorological Services and Research walked the group through the revised draft Space Weather implementation plan that has been prepared through the National Space Weather Council. This plan will be going into the clearance process shortly and then join the other 14 plans. Gunzelman pointed out that recent satellites provide much more detailed means of studying the sun, which in turn can be applied to improved forecasts of space weather, the impacts of which are expected to grow with the growth in the scale of GPS-dependent commerce. He cited the December 2006 disruption of airline communications as an example with vulnerability especially great for the increasing number of trans-polar flights.

Gunzelman noted that the recent external National Space Weather Program assessment headed by Lou Lanzerotti of the New Jersey Institute of Technology emphasized the need to build awareness of the hazard from space weather. The assessment dovetails well with the Grand Challenges, which provide the basis for the program's new strategic plan that in turn links to the implementation plan. Together, these documents provide the building blocks for a consistent plan of action for the coming decade. Gunzelman noted that the AMS statement discussed earlier in the meeting was also derived from the recommendations in the Lanzerotti report. Following the presentation, Bill Grosshandler of NIST expressed interest in linkages with the space weather program.

IV. Discussion

B. Communications/Distribution Strategy for Implementation Plans

Emily Wallace provided an update on the printing status for the implementation plans. The original Grand Challenges vision document has been reprinted, having gone through the original 2,000 copies that were printed in 2005. Eleven of the 14 plans are on their way to press, and the remaining three will be going soon. The folders have been designed; they will include a letter from OSTP Director Marburger, which has been cleared. They should be available on-line within the next two weeks in both high-resolution and low-resolution versions with the latter being a more manageable file size. The plans themselves should be back from the printer the week of February 18th.

The group reviewed the draft communications/distribution plan. Plans include:

- SDR will be relying on agency representatives to brief their agency leadership; let us know how many hard copies are needed; distribution will be arranged at the next meeting; SDR can provide a cover letter;
- There was general agreement on the utility of having a set of Powerpoint slides on the overall Grand Challenges posted on the SDR internal website in Powerpoint rather than Acrobat PDF format would be helpful;
- A draft White House press release is being developed;
- A briefing will be provided to the Committee on Environment and Natural Resources at its next meeting; briefings for other entities in the NSTC structure are possible;
- Gene Whitney will coordinate White House distribution and briefing offers;
- SDR leadership will work with the OSTP congressional affairs office on distribution and briefing offers to Congress;
- Copies of the implementation plans will be distributed at relevant conferences and NRC Disasters Roundtable workshops;
- Copies will be sent to key stakeholder organizations, including those participating in the coalition supporting the Congressional Natural Hazards Caucus; and

- Copies will be sent to key international coordination bodies such as the International Strategy for Disaster Reduction, World Bank, and International Oceanographic Commission.

The matrices that were prepared last year when OMB sought an alternate approach to agency role identification have been kept up to date by the Secretariat; they will be made available for agencies to adapt, for example creating an agency-specific cross-cut. In addition to agency-specific matrices, Codner pointed out that the overall matrix would also be helpful to point out partnerships. Similarly, David Green suggested that it would be valuable to do multi-agency briefings. Steve Clark suggested that a cross-cut for the infrastructure grand challenge would be useful to brief the relevant DHS coordinating councils. Grosshandler suggested that it would be helpful to have agency contact lists for each of the plans to facilitate collaboration and connections.

Additional distribution suggestions are welcome, particularly accompanied by contact information.

ACTION (All): Let Emily or Dave know how many copies of the implementation plan packets your agency wants to have.

ACTION (All): Let Emily or Dave know how you use the implementation plans, including when you link to the plans from your agency sites.

ACTION (All): Let Emily or Dave know of additional distribution suggestions, including relevant contact information.

V. Adjournment

Applegate thanked Zeller and Gunzelman for their presentations, NOAA for hosting, and the group for coming. The meeting adjourned at 11:45 a.m.

VI. Future Meetings

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

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|---------------|----------------|-------------------|------------------|
| March 6, 2008 | June 5, 2008 | September 4, 2008 | December 4, 2008 |
| April 3, 2008 | July 3, 2008 | October 3, 2008 | |
| May 3, 2008 | August 7, 2008 | November 6, 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 David Applegate (applegate@usgs.gov).

VIII. Contact Information for SDR Leadership

David Applegate, Chair, 703-648-6715, applegate@usgs.gov
 Margaret Davidson, Vice Chair, 843-740-1220, Margaret.davidson@noaa.gov
 Gene Whitney, NSTC Liaison, 202-456-6081, gwhitney@ostp.eop.gov

IX. Summary of February Actions

| Action | Lead | By When |
|--|-------------|-------------|
| Let Applegate know if you would like a personalized support request letter to the SDR representative or someone else in your agency. | SDR Members | Standing |
| Distribute link to American Meteorological Society draft position statement on space weather for public comment. | Applegate | 18 February |

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|---|-----------------------|-------------|
| Place Zeller presentation on the SDR members website. Provide links to reports described in presentation. | Applegate/Secretariat | 29 February |
| Let Emily or Dave know how many copies of the implementation plan packets your agency wants to have. | SDR Members | 28 February |
| Let Emily or Dave know how you use the implementation plans, including when you link to the plans from your agency sites. | SDR Members | Standing |
| Let Emily or Dave know of additional distribution suggestions, including relevant contact information. | SDR Members | 28 February |