

# Meeting Minutes of the Subcommittee on Disaster Reduction

04 September 2014, 10:00 a.m. to 12:00 p.m., White House Conference Center Lincoln Room

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

## Co-chairs

David Applegate (USGS)  
Margaret Davidson (NOAA)  
Dennis Wenger (NSF)

## OSTP Liaison

Tamara Dickinson (OSTP)

## Designated Representatives

**BLM** *Edwin Roberson*  
**CDC** *Mark Keim*  
**DHS** Mary Ellen Hynes  
**DHS/FEMA** *Roy Wright*  
**DHS/USCG** *Robert Thomas*  
**DOD** *Al Johnson*  
**DOE** *Patricia Hoffman*  
**DOT** *Sheila Duwadi*  
**EOP/OMB** *Michael Clark*  
**EOP/OSTP** Tamara Dickinson  
**EPA** Brendan Doyle  
*Stephen Clark*

**FERC** Marsha Palazzi (T)  
**HUD** Dana Bres  
**NASA** *Craig Dobson*  
**NGA** *Patricia Allen Aquinas*  
**NGB** *TBD*  
**NIH** *Aubrey Miller*  
**NIST** Steve Cauffman (T)  
**NOAA** *Margaret Davidson*  
Christopher Strager  
**NPS** Marcy Rockman  
**NSF** *Dennis Wenger*  
**OPHS** Estella Jones (T)

**State** *Fernando Echavarría*  
**USACE** *Steven Cary*  
*Dimitra Syriopoulou*  
**USAID** Sezin Tokar  
**USDA** *TBD*  
**USFS** *Elizabeth Reinhardt*  
*Carlos Rodriguez-Franco*  
Matt Rollins  
**USGS** David Applegate  
**USNRC** *Steven West*

## Other Attendees

**BLM** Ronald McCormick  
**DHS** Sara Cohen (T)  
Meredith Lee  
**DOI** Jenna Sloan (T)  
**EOP/NSC** Heather King  
**HUD** Naveen Jawaid (T)  
**NASA** Gerald Bawden

**NGA** Robert Kluba  
**NIH** April Bennett  
**NSF** Gregory Anderson (T)  
**USDA** Glenn Bethel (T)  
**USFS** Jason Steinmetz  
**USNRC** Thomas Nicholson  
Nathan Siu (T)

**EU** Thomas de Lannoy  
**STPI** Chris Clavin  
Zoe Petropoulos  
**SDR Secretariat** Bret Schothorst  
Barbara Haines-Parmele

## Agenda

10:00 Welcome and Introductions  
10:05 Report from the Co-chairs and Approval of Minutes  
10:10 Report from the OSTP Liaison  
10:15 Briefing: Natural Disasters and the NSC Strategic  
National Risk Assessment  
10:30 Update: WH Innovation for Disaster Response and  
Recovery Demo Day  
10:45 Round Robin: South Napa Earthquake Investigations  
11:10 Presentation: EU Priorities for Global Disaster Risk  
Reduction  
11:50 Close and Next Actions

## Handouts

- September Meeting Agenda
- Draft July Meeting Minutes
- Handout on WH Innovation for Disaster Response and Recovery Demo Day

## **I. Welcome and Introductions**

National Science and Technology Council (NSTC) Subcommittee on Disaster Reduction (SDR) Co-chair David Applegate (USGS) called the September meeting to order at 10:04 a.m. in the Lincoln Room of the White House Conference Center (WHCC), and participants introduced themselves.

## **II. Report from the Co-chairs and Approval of Minutes**

The July monthly meeting minutes draft was approved with no changes.

In the report from the Co-chairs, Applegate reminded SDR members that the World Meteorological Organization (WMO) is hosting an upcoming Conference on the Gender Dimensions of Weather and Climate Services that will take place November 5-7, 2014, in Geneva, Switzerland. The conference is bringing together a diverse mix of stakeholders who are leading work globally to address gender and empower women around weather and climate information services. The focus areas for the conference include health, water, agriculture and food security, and disaster risk reduction (DRR). DRR items for the conference are highlighted at: <http://www.wmo.int/genderconference/Disaster%20Risk%20Reduction>. Applegate encouraged agency representatives to contact Caroline Corvington of NOAA ([caroline.corvington@noaa.gov](mailto:caroline.corvington@noaa.gov)) by Monday, September 8 to submit ideas for speakers or side events.

Applegate also noted that the SDR Wildland Fire Science and Technology Task Force co-chairs held a two-day planning meeting in August to discuss the best way forward to achieve the group's objectives as laid out in its charter. The Task Force is required to complete a report summarizing the findings of the functional tasks defined in the charter by January 2015, with the end goal to identify opportunities and mechanisms for increased Federal coordination and cooperation to support the development, access, and application of science and technology before, during, and after wildfires. In order to meet this requirement, Task Force leaders decided to move forward with a series of requests for information from Task Force agency representatives in order to most accurately inform the group's assessments. Regarding a meeting schedule going forward, the Task Force is tentatively planning to gather its full membership for a half-day meeting (either morning or afternoon) in Washington, DC, once during each of the weeks of October 8 and December 20 as it works through and reviews progress on the task items for the group's final report. To engage in the Task Force's activities moving forward if agencies have not already, Applegate noted to please contact the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)).

Sezin Tokar (USAID) reminded members that the Subcommittee's International Working Group (IWG) will meet the same day as the full SDR in the afternoon from 1:00 p.m. to 2:30 p.m. in the WHCC Lincoln Room. At the working group's September meeting, the IWG will discuss the pre-zero draft of the UNISDR post-2015 disaster risk reduction framework, known as HFA2+, as well as solicit U.S. input to the upcoming World Conference on Disaster Risk Reduction (WCDRR) and its preparatory committee process meetings July 14-15, 2014, (PrepCom1) and November 17-18, 2014, (PrepCom2) in Geneva, Switzerland. The WCDRR will be held March 14-18, 2015, in Sendai, Japan.

## **III. Report from the OSTP Liaison**

In the report from the OSTP Liaison, Tammy Dickinson (OSTP) stated that two new working groups will be formally spun up under the auspices of the SDR in the near future focused on: 1) tech innovation for disaster preparedness, response, and recovery; and 2) space weather. The working group on tech innovation for disasters will focus on preparing for the launch of [disasters.data.gov](http://disasters.data.gov) website, identifying gaps where free tools/apps/platforms could improve outcomes, sharing new datasets and moving open data policies forward, and helping develop Challenge Statements for the tech community to address. The working group on space weather will comprise various Executive branch agencies and EOP entities and will assist OSTP in creating a National Space Weather Strategy and Action Plan. More information on these groups and opportunities for agency participation will be made available when they are officially chartered in the coming months.

In other items relayed from OSTP, Dickinson noted that Todd Park, Assistant to the President and U.S. Chief Technology Officer, will assume a new post starting in September as a senior technology adviser to the White House based in Silicon Valley, California. Park will lead the effort to recruit top talent and ideas from the Bay Area to help the Federal government overhaul its utilization of information technology and data innovation. She added that OSTP has been working with CEQ and other EOP organizations on the recent climate data initiative rollout and the pending release of a climate resilience toolkit in October as part of the Climate Action Plan. Dickinson stated that Dr. Holdren also attended a follow-on meeting of the Hurricane Sandy Task Force principal representatives last month, and OSTP was tasked to lead an interagency effort to evaluate green infrastructure post-Sandy under the NSTC Subcommittee on Ecosystem Services. The report is due in December, so Dickinson asked SDR members to be on the lookout for the formal opportunity to contribute to that effort via OSTP.

#### **IV. Briefing: Natural Disasters and the NSC Strategic National Risk Assessment**

Applegate introduced Heather King from the White House National Security Council (NSC) Staff, who solicited SDR's feedback on how best to incorporate natural hazards into the NSC's update to the Strategic National Risk Assessment, which was originally developed in September 2011 (<http://www.dhs.gov/strategic-national-risk-assessment-snra>).

As background, King highlighted that the Strategic National Risk Assessment (SNRA) was executed by the DHS Office of Risk Management and Analysis in support of Presidential Policy Directive 8 (PPD-8), which called for the creation of a National Preparedness Goal, a National Preparedness System, and a National Preparedness Report. Specifically, the assessment's focus on national preparedness was based on core capabilities that support "strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters."

King noted that the initial version of the SNRA was created over a short, six-week timeframe and needs to be updated more thoroughly and broadly to reflect current national preparedness objectives, refined risk methodologies, and up-to-date data from interagency partners. The NSC is in the process of determining a lead to help coordinate and shepherd input from the agencies into the assessment, and King assured SDR members that the point of contact will be shared when it becomes available. King added that this next iteration of the assessment will be all encompassing and will focus on risk for a 3-5 year outlook window. It will also better reflect the growing risks of natural hazards and the near-term impacts of climate change. In response to a question from Brendan Doyle (EPA), King confirmed that the next SNRA will incorporate chemical, biological, radiological, nuclear, and explosives (CBRNE) risks. Thomas Nicholson (USNRC) asked that the information used in the assessment be co-located somewhere online that would be easily accessible to the agencies, a request to which Dickinson responded by suggesting that it could be posted to an OMB MAX site page or [disasters.data.gov](http://disasters.data.gov).

In addition, and as September is National Preparedness Month, King noted that the White House recently released a memo to all departments and agencies requesting participation in any of several ways, including: 1) promotion of National Preparedness Month and America's PrepareAthon! at speaking opportunities and events leading up to the national day of action on September 30; 2) use of your department or agency website and social media channels to promote participation in National Preparedness Month and America's PrepareAthon! throughout the month (e.g., post PrepareAthon! web banners, a video greeting, or a blog message on your website encouraging participation); 3) hosting a preparedness fair at your department or agency and promotion of activities your department or agency will take to support America's PrepareAthon! and the September 30 National Day of Action; and 4) registering your participation at <http://www.ready.gov/prepare> and conducting an America's PrepareAthon! drill or exercise in your department or agency on or around September 30.

Please contact King ([Heather\\_C\\_King@nsc.eop.gov](mailto:Heather_C_King@nsc.eop.gov)) or Eric Letvin ([Eric\\_J\\_Letvin@nsc.eop.gov](mailto:Eric_J_Letvin@nsc.eop.gov)) of the NSC Staff to get your agency involved in National Preparedness Month and with the development of the SNRA update.

#### V. Update: WH Innovation for Disaster Response and Recovery Demo Day

Applegate introduced Meredith Lee from DHS S&T, who briefed the SDR on the recent White House Innovation for Disaster Response and Recovery Demo Day that was held July 29. This event brought together emergency managers, first responders, technologists, entrepreneurs, and local, state, and Federal officials to share and learn about open-source tools and resources that will make a tangible impact in the lives of survivors of large-scale emergencies.

According to Lee, more than 250 people came to the White House to participate in the Demo Day, and the event was also live-streamed to more than 1,250 people. Over 20 briefings and live demos were given at the afternoon program by Federal agencies, non-governmental organizations, and private sector entities, including FEMA, DHS S&T, HHS, DOE, NGA, USGS, EPA, USAID, NSC, OSTP, Google, Microsoft, Airbnb, NPR, and Twilio. In the morning portion of the Demo Day, participants attended six workshops to identify challenges where open data, social media, predictive analytics, sharing economy platforms, standards, and user-centered design can be applied to improve disaster preparedness, and disaster response and recovery efforts. A summary of the presentations given at the White House Innovation for Disaster Response and Recovery Demo Day can be found at:

[http://www.whitehouse.gov/sites/default/files/microsites/ostp/white\\_house\\_innovation\\_for\\_disaster\\_response\\_-\\_2014-july29.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/white_house_innovation_for_disaster_response_-_2014-july29.pdf).

As part of her summary of the event, Lee posed a challenge question that was developed at the Demo Day to SDR members: *How might we provide “Social Media, Unplugged” – a means for first responders and emergency management organizations to easily and securely extract emerging insights to better inform and coordinate disaster response?* Please reach out to [disastertech@ostp.gov](mailto:disastertech@ostp.gov) to provide agency input to Lee’s challenge question:

- 1) Challenge details: How is this done today? What are the limitations?
- 2) Example “wish list” capabilities: Frame without dictating specific tech details.
- 3) Impact: What does success look like?
- 4) Information for planning team: What opportunities are available (pilot testing, collaborations, etc.)?

Lee also announced in her briefing that The Feast, DHS S&T, Intel, and the global design firm IDEO will host a “Civic Hardware Hackathon for Disaster Preparedness” on Friday and Saturday, October 10-11, 2014, at Pioneer Works in the Red Hook neighborhood of Brooklyn, New York. The event is targeted at technologists and entrepreneurs working on disaster resilience projects and government and private sector leaders fostering and accelerating innovation. It is also supported by corporate partners such as Microsoft, IKEA, SparkFun Electronics, 3D Systems, The Red Hook Initiative, Do Good Bus, and more.

At the hackathon, Lee noted that technologists, entrepreneurs, and innovator teams will:

- Spend two intense days with enthusiastic tech/design/innovation gurus and peers focusing on team trajectory for growth and building solutions that stick;
- Get one-on-one feedback on prototypes from end-users, including field testing time with first responders, emergency managers, and other stakeholders in the disaster resilience community; and
- Pitch a vision/hackathon goal (the next step in developing their prototype) and amplify end-of-the-weekend progress with a diverse audience of potential partners, mentors, and sponsors.

She stated that government and private sector leaders and mentors will:

- Spend two intense days with enthusiastic tech/design/ innovation gurus and peers contributing to a collaborative effort to build solutions that stick;
- Have the opportunity to discover, shape, and leverage emerging technologies and innovations at the source with key stakeholders in the field and at the hackathon site;
- Increase public awareness for your mission and strengthen dialogue with a diverse community poised to contribute; and
- Foster civic engagement and innovation in disaster preparedness.

Contact Lee at [disastertech@ostp.gov](mailto:disastertech@ostp.gov) to get your agency involved in the “Civic Hardware Hackathon for Disaster Preparedness” or to participate in future events focused on improving technology innovation for disaster preparedness, and disaster response and recovery.

## **VI. Round Robin: South Napa Earthquake Investigations**

Applegate facilitated a round robin discussion on the M6.0 Napa, California earthquake that occurred in the early morning hours of August 24 with an epicenter just north of the West Napa Fault Zone. USGS and NASA provided formal presentations as part of the discussion, with NSF and NIST contributing additional information.

According to Applegate, the earthquake was the largest in the Bay Area since 1989, and about 80,000 residents experienced severe shaking and another 200,000 felt strong to very strong shaking according to initial reports. The earthquake injured 200, cut power to 70,000, and caused extensive damage, especially to older or unreinforced masonry structures; however, there were no fatalities as the area dodged a bullet in terms of losses of life. The earthquake had a light aftershock sequence relative to other California quakes, with about 30 aftershocks above M2.5 and the largest just under M4.0. Applegate outlined that the probability for an aftershock event larger than the initial earthquake is below 1 percent. Applegate noted that despite the earthquake’s relatively low destruction level, scientists will be able to learn a tremendous amount about shaking impacts for the area from the strong motion seismic data and geodetic data of the initial earthquake and its aftershocks, which will serve as a reminder of its vulnerability.

Applegate stated that a prototype earthquake early warning (EEW) system worked well during the event and generated a warning five seconds after the earthquake’s origin time and provided up to 10 seconds of advanced warning for the San Francisco, Oakland, and Berkeley, CA areas. In response to a question from Christopher Strager (NOAA) on how an EEW system would alert people in the area, Applegate underscored that alerts would be disseminated through a variety of communication mechanisms both public and private that have been previously established through Federal partnerships with the University of California, Berkeley, the California Institute of Technology, and other local organizations.

Applegate also highlighted USGS tools such as ShakeMap, ShakeCast and the Prompt Assessment of Global Earthquakes for Response (PAGER) that provided immediate post-earthquake information in the aftermath of the event. Applegate stated that PAGER translated shaking levels into direct impacts and loss estimation information and correlated ShakeMap with population density databases to estimate the scale of potential disaster. ShakeMap fed a number of different products like ShakeCast to prioritize repair activities. Regarding the overall damage sustained to the area from the Napa earthquake, a major Presidential disaster declaration request from California Governor Jerry Brown is still pending, with initial economic losses estimated at \$300 million.

Regarding the important role that geospatial and remote sensing technology will play post-event, Applegate stated that LiDAR imagery will be acquired to identify subtle features of the earthquake and paleoseismology study sites and added that InSAR is currently being used to identify locations of ruptures and to model fault slips at depth. Gerald Bawden (NASA) stated that interferogram information has been

gathered by the ARIA project using data from COSMO-SkyMed and by UK COMET using the new Sentinel-1a, and that an additional radar tasking has been requested via NGA and others (COSMO-SkyMed, TerraSAR-X, and RADARSAT-2). He added that the NASA UAVSAR was flown by the Jet Propulsion Laboratory at the request of USGS. Greg Anderson (NSF) mentioned that the UNAVCO university-governed consortium has been conducting post-earthquake activities, which are detailed online at: <http://www.unavco.org/highlights/2014/south-napa.html>. Post-earthquake investigations are also ongoing under the National Earthquake Hazards Reduction Program (NEHRP), which is led by NIST.

To relay additional information about your agency's ongoing post-earthquake investigations, please contact the SDR Secretariat ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)).

## **VII. Presentation: EU Priorities for Global Disaster Risk Reduction**

Applegate introduced Thomas de Lannoy from the European Commission, who provided a presentation to the SDR on EU priorities for the post-2015 global disaster risk reduction framework known as HFA2+ that is a follow-on from the Hyogo Framework for Action (HFA) that was initiated in 2005.

From the EU's perspective, the new HFA2+ document must be inclusive of five overarching principles:

- 1) Improving accountability, transparency and governance;
  - a. Set of standards and accountability tools
  - b. Periodic peer review mechanisms
  - c. Data improvements and exchange
  - d. Enhancement of governance at all levels
  - e. Strong role of regional intergovernmental organizations
- 2) Delivering results in the form of targets and indicators to measure progress and encourage implementation;
  - a. New monitoring system to measure progress
  - b. Develop action-driven and result oriented targets
  - c. Support a regional approach to targets building on the regional strategies
  - d. Develop indicators measuring the impact of disasters over time to track progress
- 3) Strengthening the contribution to sustainable and smart growth;
  - a. Disaster proofing in financial decisions
  - b. Partnerships across public, private and other stakeholders
  - c. Role of insurance and market-based instruments
  - d. Innovative technologies and instrument
  - e. Science-policy interface
  - f. Joint approach with climate adaptation and focus on underlying risk drivers
- 4) Addressing vulnerabilities and needs in a comprehensive framework; and
  - a. Whole-of-society approach empowers vulnerable groups and promotes the role of women
  - b. Build resilience in all urban areas and rural settings by comprehensive risk assessments
  - c. Include conflict, technological risks, small local disasters, and global shocks and stresses
- 5) Ensuring coherence with the international agenda.
  - a. Integrate disaster risk management and climate change adaptation policies into the international sustainable agenda
  - b. Policies, goals, targets and their monitoring mutually supportive and reinforcing objectives
  - c. The role of international law (duty to prevent)

The information presented by de Lannoy will be useful as the SDR International Working Group (IWG) works to determine U.S. positions on HFA2+ for the World Conference on Disaster Risk Reduction (WCDRR) preparatory committee process meetings July 14-15, 2014, (PrepCom1) and November 17-18, 2014, (PrepCom2) in Geneva, Switzerland. The upcoming WCDRR will be held March 14-18, 2015, in Sendai, Japan.

**VIII. Adjournment**

Applegate adjourned the SDR September meeting at 11:47 a.m.

**IX. Future Meetings**

Upcoming SDR meetings in 2014 will be held from 10:00 a.m. to 12:00 p.m. on the dates listed below in the Lincoln Room of the White House Conference Center:

**2014**

- ✓ Thursday, October 2
- ✓ Thursday, November 6
- ✓ Thursday, December 4

**X. 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 the SDR Secretariat Bret Schothorst ([bret.schothorst@mantech.com](mailto:bret.schothorst@mantech.com)).

**XI. Contact Information**

**SDR Leadership**

David Applegate	Co-chair	703-648-6600	applegate@usgs.gov
Margaret Davidson	Co-chair	843-740-1220	margaret.davidson@noaa.gov
Dennis Wenger	Co-chair	703-292-8606	dwenger@nsf.gov
Tamara Dickinson	OSTP Liaison	202-456-6105	tdickinson@ostp.eop.gov

**Secretariat**

Bret Schothorst	703-388-0312	bret.schothorst@mantech.com
Barbara Haines-Parmele	703-388-0309	barbara.haines-parmele@mantech.com

**XII. Summary of September Actions**

Action	Lead	By When
Email Caroline Corvington ( <a href="mailto:caroline.corvington@noaa.gov">caroline.corvington@noaa.gov</a> ) with keynote speaker or side event ideas for the WMO Conference on the Gender Dimensions of Weather and Climate Services taking place November 5-7, 2014, in Geneva Switzerland.	SDR Members and Federal Colleagues	September 8, 2014
Contact Meredith Lee ( <a href="mailto:disastertech@ostp.gov">disastertech@ostp.gov</a> ) to address the challenge question posed in her briefing on the White House Innovation for Disaster Response and Recovery Demo Day.	SDR Members	ASAP

Email Heather King (Heather_C_King@nsc.eop.gov) or Eric Letvin (Eric_J_Letvin@nsc.eop.gov) for agency involvement in the National Security Council's update to the Strategic National Risk Assessment.	SDR Members	ASAP
Contact the SDR Secretariat (bret.schothorst@mantech.com) to participate in upcoming activities of the SDR Wildland Fire Science and Technology Task Force.	SDR Members	Standing
Contact SDR Co-chair Dennis Wenger (dwenger@nsf.gov) if your agency is able to provide funding support to the University of Colorado Boulder's Natural Hazards Center.	SDR Members and Federal Colleagues	Standing
Please consider supporting the work of the SDR and its Secretariat through a contribution from your agency. Let SDR Co-chair David Applegate (applegate@usgs.gov) know if you need an Agency- or Department-specific request letter.	SDR Members	Standing
Email the SDR Secretariat (bret.schothorst@mantech.com) and OSTP Liaison Tammy Dickinson (Tamara_L_Dickinson@ostp.eop.gov) if willing to pilot an assessment of the progress of the short-, mid-, and long-term goals outlined in the SDR <i>Grand Challenges for Disaster Reduction</i> hazard-specific implementation plans.	SDR Members	Standing
Contact OSTP Liaison Tammy Dickinson (tdickinson@ostp.eop.gov) if it would be helpful for OSTP to issue a letter to your agency or department requesting new (or re-affirmed) designation of official representatives. Ideas for other entities that should be represented on the SDR are also welcome.	SDR Members	Standing