

National Science & Technology Council Subcommittee on Disaster Reduction (SDR)

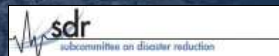
Overview Presentation of the SDR, U.S. National Platform, and Sendai Framework

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U.S. Agency for International Development



National Science & Technology Council Subcommittee on Disaster Reduction (SDR)

- SDR is an element of the President's National Science & Technology Council (NSTC), charged with establishing clear national goals for Federal science and technology investments in disaster reduction.
- Composed of 28 different Federal departments and agencies, and currently co-chaired by NOAA, OSTP, and USGS.
- Promotes interagency cooperation for natural and technological hazards and disaster planning.
- Facilitates interagency approaches to identification and assessment of risk and to disaster reduction.
- Advises the Administration about relevant S&T resources and the work of SDR member agencies pre- and post-disaster.
- Designated by Department of State to serve as U.S. National Platform for the UN International Strategy for Disaster Reduction (UNISDR).



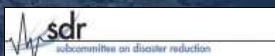
National Science & Technology Council Subcommittee on Disaster Reduction (SDR)

- Centers for Disease Control and Prevention
- Department of Defense
- Department of Energy
- Department of Homeland Security
- Department of Housing & Urban Development
- Department of the Interior
- Department of State
- Department of Transportation
- Environmental Protection Agency
- FEMA
- NASA
- National Geospatial-Intelligence Agency
- National Guard Bureau
- National Institute of Standards and Technology
- National Oceanic and Atmospheric Administration
- National Science Foundation
- U.S. Agency for International Development
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Agriculture
- U.S. Forest Service
- U.S. Geological Survey
- U.S. Public Health Service
- U.S. Nuclear Regulatory Commission



U.S. National Platform

- SDR serves as the U.S. National Platform for the United Nations International Strategy for Disaster Reduction (UNISDR) as designated by the Department of State.
- Tasked with developing U.S. positions on the original Hyogo Framework for Action (HFA) 2005-2015 as well as the successor strategy to the HFA, the Sendai Framework for Disaster Risk Reduction 2015-2030.
- U.S. positions on disaster risk reduction issues informed by listening to multi-sectoral perspectives from non-governmental organizations, academic institutions, local and state officials, and private corporations.
- Current focus on how the U.S. tracks domestic disaster losses as it relates to our reporting expectations to be set forth by UNISDR for disaster reduction targets and indicators in the Sendai Framework.



SDR Working Groups

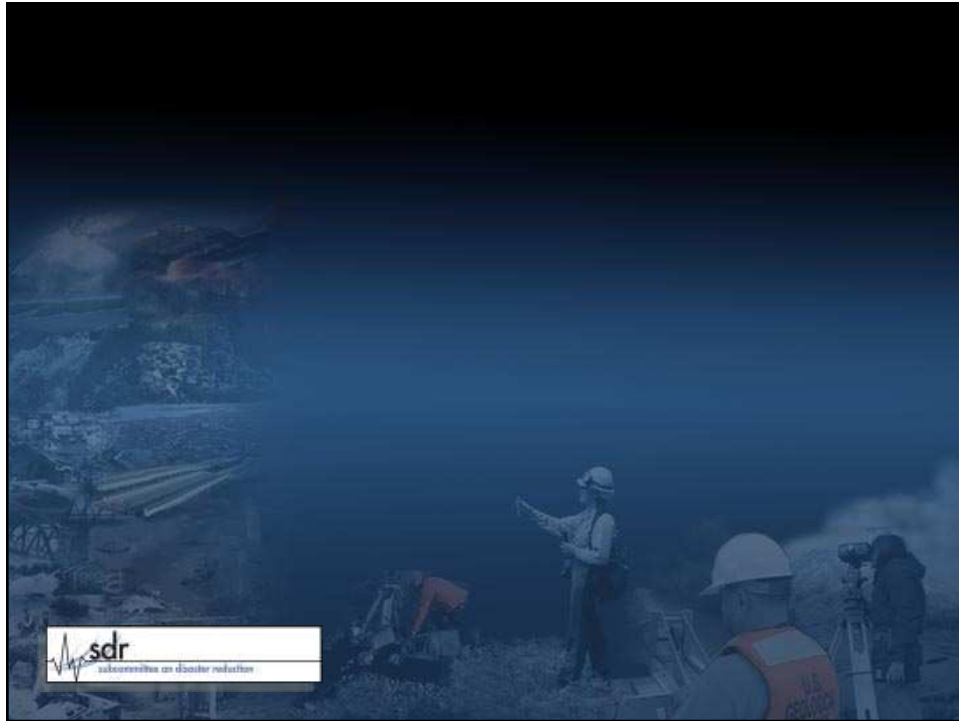
- International Disaster Risk Reduction Working Group
- National Preparedness S&T Task Force
- Space Weather Operations, Research, and Mitigation Task Force
- Technology and Innovation for Disaster Preparedness Working Group
- Wildland Fire S&T Task Force
- Windstorm Working Group



SDR Efforts towards SFDRR Implementation

- U.S. National Platform
- Grand Challenges
- Disaster Loss Data





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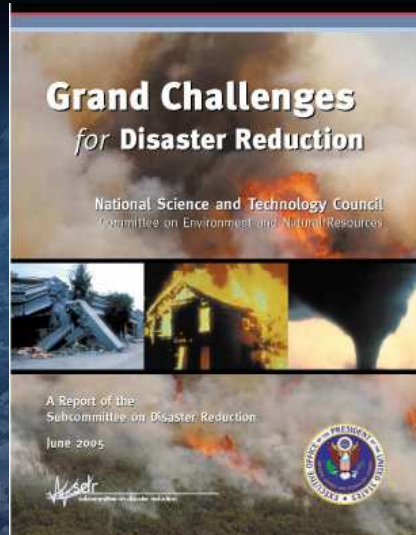


U.S. National Platform

- SDR composed of U.S. Federal Agencies
- Incorporate perspectives of non-federal U.S. stakeholders
- Invite external stakeholder groups to present their latest DRR activities
- National Platform Meeting



Grand Challenges for Disaster Reduction



1. Provide hazard and disaster information where and when it is needed.
2. Understand the natural processes that produce hazards.
3. Develop hazard mitigation strategies and technologies.
4. Recognize and reduce vulnerability of interdependent critical infrastructure.
5. Assess disaster resilience using standard methods.
6. Promote risk-wise behavior.

Implementation Plans Released March 2008

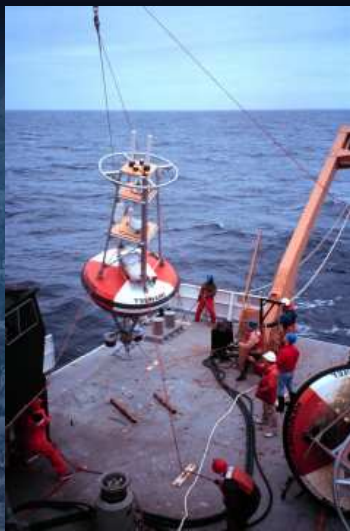
Grand Challenges for Disaster Reduction
National Science and Technology Council
Committee on Environment and Natural Resources

A Report of the Subcommittee on Disaster Reduction
June 2005
Second Printing January 2006

Available at www.sdr.gov

Space weather plan released in 2010.

Grand Challenge 1. Provide hazard and disaster information where and when it is needed.



“To identify and anticipate the hazards that threaten communities, a mechanism for real-time data collection and interpretation must be readily available to and usable by scientists, emergency managers, first responders, citizens, and policy makers.

Developing and improving observation tools is essential to provide pertinent, comprehensive, and timely information for planning and response.”

Warn the right people in the right place at the right time.

Grand Challenge 2. Understand the natural processes that produce hazards.



“Continuous and useful information about the hazard must be available to everyone affected.”

“To improve forecasting and predictions, scientists and engineers must continue to pursue basic research on the natural processes that produce hazards and understand how and when natural processes become hazardous.

New data must be collected and incorporated into advanced and validated models that support an improved understanding of underlying natural system processes and enhance assessment of the impacts.”

Grand Challenge 3. Develop hazard mitigation strategies and technologies.



“To prevent or reduce damage from natural hazards, scientists must invent – and communities must implement – affordable and effective hazard mitigation strategies, including land-use planning and zoning laws that recognize the risks of natural hazards.

In addition, technologies such as disaster-resilient design and materials and smart structures that respond to changing conditions must be used for development in hazardous areas.”

“By designing and building structures and infrastructures that are inherently hazard resilient, communities can greatly reduce their vulnerability.”

Grand Challenge 4. Recognize and reduce vulnerability of interdependent critical infrastructure.



“Protecting critical infrastructure systems, or lifelines, is essential to developing disaster-resilient communities.

To be successful, scientists and communities must identify and address the interdependencies of these lifelines at a systems level (e.g., communications, electricity, financial, gas, sewage, transportation, and water).”



“Protecting critical infrastructure provides a solid foundation from which the community can respond to hazards rapidly and effectively.”

Grand Challenge 5. Assess disaster resilience using standard methods



“Federal agencies must work with universities, local governments, and the private sector to identify effective standards and metrics for assessing disaster resilience.

“With consistent factors and regularly updated metrics, communities will be able to maintain report cards that accurately assess the community’s level of disaster resilience.



“Learn from each hazard event...to support ongoing hazard research and future mitigation plans.”

Grand Challenge 6: Promote risk-wise behavior



“Develop and apply principles of economics and human behavior to enhance communications, trust, and understanding within the community to promote ‘risk-wise’ behavior.

To be effective, hazard information (e.g., forecasts and warnings) must be communicated to a population that understands and trusts messages. The at-risk population must then respond appropriately to the information.”

“This is an ongoing challenge that can only be met by effectively leveraging the findings from social science research.”

U.S. Domestic Disaster Losses

- Comprehensive tracking of U.S. domestic disaster losses would serve several functions:
 - There is no accounting across agencies for the total cost to the nation each year of natural and human-made disasters.
 - The nation needs a consistent basis for measuring resilience.
 - A national resource of disaster-related data should be established that documents injuries, loss of life, property loss, and impacts on economic activity.
 - Such a database will support efforts to develop more quantitative risk models and better understand structural and social vulnerability to disasters.

Sendai Framework Targets

- To support the assessment of global progress in achieving the outcome and goal of the Sendai Framework, seven global targets have been agreed upon by UN Member States.
- These targets will be measured at the global level and will be complemented by work to develop appropriate indicators. National targets and indicators will contribute to the achievement of the outcome and goal of the Sendai Framework.



Sendai Framework Targets

- The seven global targets (A-G) are:
- A. Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005–2015;
- B. Substantially reduce number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;
- C. Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;
- D. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;



Sendai Framework Targets

- E. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;
- F. Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Sendai Framework by 2030; and
- G. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.



Sendai Framework Indicators

- A set of indicators (and sub-indicators) are being developed to evaluate the progress of the Sendai Framework targets.
- The UNISDR Open-Ended Intergovernmental Expert Working Group (OEWG) is currently determining which global core indicators UN Member States will use to measure, report, and track progress on targets at the national level.
- The working group is developing its outcomes through consensus. An updated version of the indicators that will include UN Member States' comments from the second session will be released soon.
- Please note that following draft indicators are in progress, and it has **NOT** been agreed upon formally at this point which ones will be the final global core indicators.



Questions

- What domestic disaster loss information is being tracked in the U.S. by both Federal and non-Federal entities? Does it line up with the proposed targets and indicators of the Sendai Framework?
- How is domestic disaster loss information being tracked? What are the accepted collection and methodology criteria? Are both insured and uninsured losses, as well as losses avoided, represented in the data?
- Are there significant gaps in the tracking of domestic disaster loss information? If so, what hazards and data types specifically? How can these gaps most effectively be addressed?
- Does the Sendai Framework set realistic and achievable targets and indicators for the U.S. to measure and report progress against? If so, which agencies will bear the brunt of supplying this information?



More Information



www.sdr.gov