

DISASTER PREPAREDNESS EXCHANGE (DPX) 2016

ATTERBURY – MUSCATATUCK, INDIANA
 SEPTEMBER 13-14, 2016



"THE ATTERBURY ACCORDS"

We are disaster preparedness professionals—first responders, aid workers, technologists, researchers, social media experts, and policy makers. We represent 41 different institutions from academia, government, business, and nongovernmental organizations, working at the tactical, operational and strategic levels with local, regional, and international entities. We are leaders, managers, planners, teachers, and experts, brought together by a shared passion to help.

Working together over two days in September 2016 at Camp Atterbury, Indiana, we agree upon these guiding principles:

- That we each have critical perspectives to offer, based on our unique experiences, outlooks, and fields of interest.
- That while we have achieved great things in disaster response and management, more focus is needed on Preparedness, especially on preparing together in a united effort – a "UNITED CAUSE."
- That Disaster Preparedness must be centered on community-level perspectives and action.
- That Preparedness must include planning for transition and sustainment in response and execution.
- That communication at and across all levels is key to working together effectively.

Finally, we believe that the continued collaboration of a diverse and engaged Preparedness community is essential, and we will strive to nurture this community and the sharing of information and practice as we prepare for the future.

DPX Participants

DPX Participants

14 September 2016



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All pictures depicted within this document are reflective of events and exercises that occurred at the Atterbury-Muscatatuck Conference and Training Center

Round table and white board images document interactions among the Disaster Preparedness Exchange participants during discussions held at the Atterbury-Muscatatuck Conference Center. Some of the drawings (cover & pages 16-18) were created by Willow Brugh (<http://viz.bl00cyb.org>) and are released under Creative Commons BY-SA unless otherwise negotiated.



OVERVIEW

THE COLLABORATIVE & ADAPTIVE SECURITY INITIATIVE (CASI)



Under the direction of Frank DiGiovanni, Director for Force Training in the Office of the Assistant Secretary of Defense (Readiness)/ Force Training, the Collaborative & Adaptive Security Initiative (CASI) is a training outreach program designed to bring together the diverse communities that become involved in field operations around the world. The Initiative's logic is that collective work of distinct entities can benefit from experiencing shared learning programs and creating connections across individuals and organizations that regularly work alongside each other in complex environments.



INDIANA NATIONAL GUARD
INNG was instrumental as the host for the DPX event through their orchestration of events and support throughout.

BACKGROUND

On September 13 and 14, 2016, the Collaborative and Adaptive Security Initiative (CASI) and Indiana National Guard hosted the Disaster Preparedness Exchange (DPX) at the Atterbury-Muscatatuck conference center to explore and examine how people from different organizational and professional backgrounds prepare for and train in relation to Disaster Preparedness (DP). The lab brought together members of academia, non-profit, non-governmental, private sector, military, and other US government agencies as well as regional and local personnel.

Over the course of two days participants shared their deep convictions and concerns about the state of DP. They discussed their different viewpoints surrounding DP; posed questions to the group; identified perceived gaps; debated potential solutions; and discussed new technologies with a central focus on knowing if our plans today meet the challenges associated with larger and more devastating disasters that are sure to come: Are we are prepared, trained, and rehearsed before the need occurs?

As a learning experience, DPX used the convergence of diverse participants with different backgrounds, professions, experience and frames of reference to focus conversation so as to better understand DP and how to be better prepared in the future.



METHODS

This Exchange was not a typical conference or seminar. All the participants were experts – in different professions, experience, organizations – and were personally invited to attend. Information was shared through four different forums of communication.

Five separate **Conversations** were moderated either by Mr. DiGiovanni or MG Carr. This was done in plenary session, with general comments and notes captured on whiteboard. These were interactive sessions focused on one topic.

An interactive experience was provided by participating and observing an ongoing **Indiana Homeland Security Training Event** at the Muscatatuck Urban Training Center. This was a simulated earthquake exercise involving more than 300 emergency responders. Four different scenarios were identified for observation and participation by the DPX participants. These involved: 1) Flooded Community Rescue (with drone reconnaissance), 2) Establishment of an Operations Center, 3) Parking Garage Rescue, and 4) Cyber vulnerabilities and implications during a disaster.

The third forum was short presentations. Prior to the event, all participants were invited to **Share Knowledge** on a topic they thought would be of interest to the group. The responses fell into four categories: interagency, social media, open source, and innovation. Using an “Ignite-type” format, each presenter was limited to 5 minutes, immediately followed by the next talk. Comments or questions were only allowed at the end of the category, after everyone had presented in that topic.

The last forum was a **Round Table** event designed around a format similar to “World Café.” A list of topics for brainstorming was provided. Two sessions occurred where members around eight tables discussed the various challenges associated with disaster preparedness. The results of these two sessions were then discussed in plenary session, moderated by Mr. DiGiovanni. The graphics in this report were taken from the tabletop notes produced by the individual groups during these discussions.

OUTCOMES & OBSERVATIONS

From post DPX surveys, the participants discussed a wide range of issues and thoughts related to the exchange, but three central themes were evident in the comments.

- **DIVERSITY OF THE PARTICIPANTS:** the ability to see other perspectives was a significant enabler.
- **NETWORKING:** being able to meet and get contact information from others in the field expanded members influence.
- **ABILITY TO LEARN FROM OTHERS:** to see what else is out there and expand one’s knowledge in the world of disaster preparedness.

DPX TIMELINE

DAY 1 SEPTEMBER 13

10:00AM -10:30AM CONVERSATION #1

WELCOME AND INTRODUCTIONS

WHAT CAN THIS GROUP SHARE, LEARN, AND ACCOMPLISH?

10:30AM -11:00AM CONVERSATION #2

WHAT IS DISASTER PREPAREDNESS?

WHAT DOES IT MEAN TO BE PREPARED, AND HOW DOES THAT DIFFER FROM DISASTER RESPONSE, MANAGEMENT, OR RESILIENCY?

12:30PM -4:30PM

TOUR OF MUSCATATUCK URBAN TRAINING CENTER AND OBSERVATION OF INDIANA DEPARTMENT OF HOMELAND SECURITY EXERCISE

DAY 2 SEPTEMBER 14

08:30AM -08:45AM CONVERSATION #3

REFLECTIONS ON YESTERDAY

WHAT DID YOU EXPERIENCE YESTERDAY?

08:45AM -09:15AM CONVERSATION #4

HOW DOES THE MILITARY ASSIST?

HOW DOES THE MILITARY CONTRIBUTE TO PREPAREDNESS?

09:15AM -2:00PM

IGNITE KNOWLEDGE SHARING

WORLD CAFE ROUND TABLES

2:15PM -4:30PM CONVERSATION #5

DEVELOPING PREPAREDNESS

HOW DO WE IMPROVE THE STATE OF PREPAREDNESS ACROSS ORGANIZATIONS, DISCIPLINES, REGIONS, NATIONS, etc.?

COMMITMENT TO ACTION

HOW CAN WE WORK TOGETHER? HOW DO WE MOVE FORWARD?



CONVERSATION 1

INTRODUCTION

Mr. Frank DiGiovanni, Director, Force Training, Office of the Secretary of Defense opened the DPX event and proposed three questions to the group:

Why are we here?

Why were you invited?

What can this group share, learn, and accomplish?

He then invited each person to stand as he announced each sector represented which included academia; military; private sector; non-government and non-profit organizations; other US government organizations, as well as regional and local organizations.

RESPONSES

From the discussion resulting from the posed questions, there were several concepts (listed below) provided by the participants to which many would resurface within the dialogue in the following two days.

- Knowing Players and Capabilities
- Communications (language and physical)
- What Has Been Done?
- Situational Awareness
- Rapid Early Assessments
- Mass Casualties
- Outside US Too
- Lack of Diversity
- Lack of Overarching Leadership
- Plan is Just a Plan
- Nonprofit/Innovations
- Private Sector Investment
- Closing Gaps
- Planning – More Unified
- Impact of Technical and Social Media
- Bridge Across Sectors
- Use Lessons Learned
- Politics
- Empower Local Communities
- Integrations, Deploy New Technology
- Evidence-based Decision-making
- What Are Our Needs?
- International Organizations
- What are The Capabilities of Each Group?
- Networking
- How to Affect Preparedness, Response, & Recovery
- Work on Reconstruction
- DoD Integration
- Work Together to Plan
- NORTHCOM Integration



WHAT IS PREPAREDNESS?

When posed with the question, “What is preparedness?” a variety of answers was provided, summarized below:

- State of mind
- Training
- Rehearsal
- Mental Muscle Memory
- Personal and Organizational Contacts
- Knowledge
- Empathy and Respect
- Formal Agreements
- Design of Systems & Processes
- Responding with Sustainment/Transition Considerations
- Updated Contingency Planning
- Awareness of Stress and Human Performance
- Awareness of Diversity of Those Afflicted
- Awareness of Local Culture

UNIFIED CAUSE

After the initial introductions and discussions concerning what is preparedness, the first central theme of the DPX became evident: **UNIFIED CAUSE** needs to be central to leadership and across all sectors. When a disaster occurs, all the various entities involved with rendering assistance need to come together into a single unit or group in order to achieve maximum effect. Being “unified” is easier said than done and thus what we should aim to achieve this goal in our efforts to prepare.





Indiana Emergency Responders Take Part in Full-Scale Disaster Response Exercise

The Indiana Department of Homeland Security (IDHS) led a full-scale disaster exercise for more than 300 emergency responders from various parts of the state that went from Monday, September 12 through Thursday, September 15.



The exercise, taking place at the Muscatatuck Urban Training Center in Jennings County simulated an earthquake in Indiana, resulting in damage and the need for evacuation, fire management, and search and rescue, among other tasks.

“These exercises are one of the best ways Indiana’s emergency personnel can practice disaster plans and procedures,” said John Erickson, Public Affairs Director for IDHS. “This intense week allows responders to learn from near real life experience that will help them better serve Hoosiers in a real-life event. This is as real as it gets without an actual disaster.”



Participants faced a realistic disaster setting that included flooded homes, debris-littered streets, multiple buildings of many types and survivors in need of medical attention. The center allows all aspects of the response effort to be executed and evaluated without placing any lives at risk. IDHS

Districts 1, 2, 3 and 4 will participate in the week-long training exercise. IDHS Districts 5, 7, 8, 9 and 10 will also participate as “exercise control,” helping to stage and simulate the activities necessary for the full-scale training.



All four IDHS Districts participating in the training sent Incident Management Teams, as well as other elements from their districts. District 1 and 2 are sent water rescue teams. District 2 sent their Technical Rescue Team and District 1 is also sent a mental health team. District 3 and 4 sent law enforcement and District 3 sent their K-9 teams. District 4 included fire and emergency medical services (EMS) in their training group.

Each IDHS Incident Management Team is comprised of professional emergency responders who volunteer to support other emergency response agencies around the state.

Other agencies and organizations that took part in the exercise included the Indiana Department of Natural Resources, the Indiana Department of Transportation, the Indiana State Department of Health, the Indiana State Police, the Indiana Department of Environmental Management, Integrated Public Safety Commission, Ohio All Hazard Incident Management Team and the Indiana National Guard.



DPX Participants were able to observe an Indiana Homeland Security Exercise at the training center.

Press release from the Indiana Department of Homeland Security, 12 Sep 2016



VIGNETTES AT MUSCATATUCK

CYBER SECURITY

Interactive exercise formulated to explore cyber security and the physical effects of a cyber-attack in a variety of scenarios. Session included a discussion of a real-world exercise that illustrates the weaknesses associated with electrical and water utilities and how systems can be hacked in real time in order to show exactly how a cyber-intrusion could deal a serious, possibly life-threatening blow, to the water or electrical supply.



FLOODED COMMUNITY RESCUE

A live demonstration of the dynamics involved with a water rescue of personnel who have become stranded on the tops of their houses after flooding caused by the earthquake. Illustrates the challenges faced by rescue personnel in moving injured personnel from the roof onto a small rescue craft. Also, a live demonstration of drone usage in a disaster was provided. Click <https://youtu.be/7rwMhDKSp4c> for a 30-second video of the event.

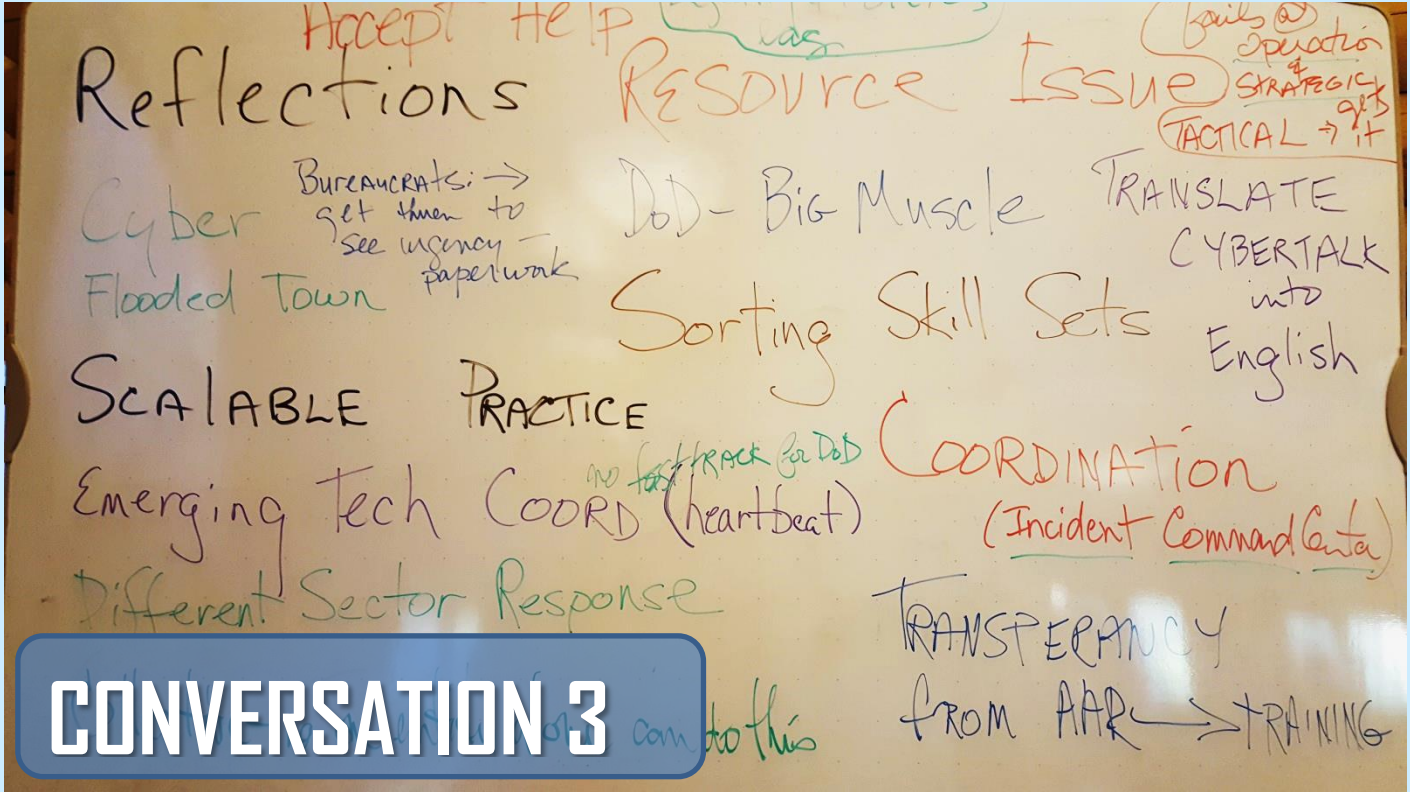
PARKING GARAGE INJURY

Demonstration of a medical triage involving an injured man who suffered wounds from debris associated with a damaged parking garage. Injured person was prepared for movement to the roof for helicopter transport.



OPERATIONS CENTER DYNAMICS

The dynamics of running an operations center during a natural disaster was illustrated to provide a feel for how to stand up an operations center and integrate all the various forms of communications among the different responders as well as the public at large.



YESTERDAY'S EVENTS

DAY 1 SEPTEMBER 13

10:00AM -10:30AM CONVERSATION

WELCOME AND INTRODUCTIONS

WHAT THIS GROUP CAN SHARE, LEARN, AND ACCOMPLISH

10:30AM -11:00AM CONVERSATION

WHAT IS DISASTER PREPAREDNESS?

WHAT DOES IT MEAN TO BE PREPARED, AND HOW DOES THAT DIFFER FROM DISASTER RESPONSE, MANAGEMENT, OR RESILIENCY?

12:30PM -4:30PM

TOUR OF MUSCATATUCK URBAN TRAINING CENTER

REFLECTIONS FROM YESTERDAY

After completing the first day where the participants provide answers to open-ended questions as to why they were invited, purpose of the DPX, and how one defines "preparedness" followed by an excursion to Muscatatuck Training Center, the group discussed what they took away from various events. From this discussion a number of concepts were captured and are listed below:

- Each entity who participates has unique capabilities. How does one sort the various skill sets and coordinate efforts?
- Disaster Preparedness is not a one-man show but is a "collective" of efforts where limited resources must be unified in effort to address a myriad of urgent issues.
- Emerging technology can be powerful tool, but a coordinator of these tools is required.
- Cyber language is a barrier that needs to be stated in plain English.
- Incident command center is required to centralize and coordinate efforts. Bureaucratic impediments must be understood in order to understand the urgency.
- Need to capture lessons learned for future training through transparency in After Action Reports.



VARIOUS THOUGHTS AND COMMENTS DURING THE DPX

- *DoD is the “heavy-lifter” in a disaster preparedness; they need to recognize they are there in support of the “LFA” (lead federal agency) in CONUS and through the embassy to support the Host Nation and then through USAID to support NGOs for OCONUS events.*
- *To civilians, all government agencies appear to be “the government” as a whole. They cannot tell the differences in purpose or function.*
- *USAID JHOC course should be a military requirement for all deployable units.*
- *Tracking innovation needs to occur in some fashion.*
- *We have to learn from our experiences. Short term success may not transfer to long term success.*
- *Gathering big data in order to support decision making is needed. Transparency across DoD and other organization is crucial to develop policies and best practices.*
- *Plans from NGOs, Host Nations, and DoD cannot be conducted in “stove pipe” fashion. Plans to all scenarios need to be integrated in order to preplan what resources may be required.*
- *DoD needs to alter their mindset from being the “do all” organization to one that focuses on sustainment. DoD must engage through the embassy in order to support the host nation and other organizations to develop a sustainable solution.*
- *Need more conferences that include subject matter experts (SME) on Disaster Preparedness. Invite more private/corporate businesses.*
- *Muscatatuck training site was amazing and I would love to conduct training there in the future and will recommend it to others.*
- *This program (DPX) really benefitted me with respect to my career path.*
- *Continue collaborative forums like this, with NGO, interagency, and Academia, as well as integrate into DoD exercises that rehearse Defense Support of Civilian Agencies.*
- *Outstanding hands on training.*
- *An excellent format and venue for a diverse group of participants who were actively involved.*

DPX BY THE NUMBERS

92%

Of participants felt that the round table and knowledge sharing events were the one of the most effective forums during the DPX

88%

Of participants felt the conversations were very engaging and developed new insight on DP

52

Personnel Attended

38

Organizations Represented

- Academia
- Military
- NGO
- Private Sector
- Regional/Local
- Other Government



CONVERSATION 4

WHY ASSIST?

- Helps **SAVES LIVES** and **LIMIT SUFFERING**
- Can help **CONTAIN SOME OF THE NEGATIVE CONSEQUENCES** of major disasters from spreading elsewhere in the world.
- Forge **STRONGER MULTILATERAL SECURITY RELATIONSHIPS** with other countries' militaries.
- Military-supported disaster relief reinforces the view of America as an **INDISPENSIBLE NATION**.
- Helps **BOOST U.S. SOFT POWER** in the world. By assisting in humanitarian emergencies, the U.S. military sends a message that it's a global force for good.

HOW CAN THE MILITARY ASSIST BETTER?

For conversation number four, it was acknowledged by some of the NGO participants that at times they cannot execute their mission without military support. Participants were asked to brainstorm on how the military can better assist during a disaster event whenever the military is called upon to participate. Three central themes arose during the discussion that centralized on the *Ultimate Near Term Goal of Eliminating Suffering*.

UNITY OF EFFORT

- Interoperability is an area of weakness that needs to be understood and addressed
- USAID staff should be nested with combatant commanders
- USAID is making integration progress
- DoD support to USAID should strive to integrating DoD's capabilities
- From the NGO perspective, NGOs need to explore ideas about how to conduct civilian-military liaison



BARRIERS TO SUCCESS

- Disaster Preparedness (DP) is not a combatant command's (CCMD) top priority. CCMDs have other pressing priorities, a lack of the resources to address DP, and DP is not a core mission. Essentially, execute DP with what you have.
- US Military response to a disaster is highly dependent upon neutrality being present; else the host country will question the military objectives.
- How countries set conditions is critical for success of the mission. Local knowledge and local response is paramount. Effort will not be a success without the support and buy-in of the populace. Need to understand the politics at the local level.
- Capabilities are often limited so why not establish reach-back that could provide capability?



ARE WE READY, HAVE WE TRAINED?

- Military needs "to train for the mission" to succeed (but do they really know what the mission is?)
- Conducting exercises similar to *Vibrant Response* develops the skills and lessons learned to succeed during an actual event.
- Army will only get better in planning by conducting exercises in DP.
- Military is often a pickup game which is not a virtue of success – need to train joint force commanders.
- Exercises also assist in promoting opportunities for cross-region collaboration.
- Need more opportunities for planning conferences which will assist in the growth of integration.





IGNITES: KNOWLEDGE SHARING

IGNITE¹ is a

presentation format where a speaker is given only 5 minutes to present 20 slides which advance automatically. This presentation style requires speakers to make their points quickly, with the goal to inspire and “ignite” thoughts and discussion on the subject matter.

IGNITE PRESENTATIONS – 5 MINUTE DOWNLOAD

Prior to lunch on day two, the DPX hosted an IGNITE-styled event in which several of the participants shared topics they are passionate about relevant to their area of expertise. The topics organized into four groups: Interagency, Social Media, Open Source, and Innovation.

INTERAGENCY

Training JTF Commanders for Disaster Events - Mike Hess



Based on his personal experiences supporting Iraq with USAID, Mike Hess’s key points included understanding that the local leadership needs to remain at the center of relief efforts, despite the vast amount of resources, organization, and infrastructure that outside organizations, such as the military may be able to provide.

Defense Coordinating Officer / Element – COL Frederic Drummond, USA

Defense Coordinating Officers anticipate and conduct defense support of civil authorities (DSCA) operations during natural and man-made disaster incidents, coordinating Title 10 forces and resources in support of the Federal Primary Agency (PA) in order to minimize impacts to the American people, infrastructure and environment. See

http://www.unicornriot.ninja/wp-content/uploads/2016/06/DCO_REGION_V_OHIO_CONF.pdf

¹ <http://www.ignitetalks.io/>



Office of Foreign Disaster Assistance - Liz Lukasavich

The Office of US Foreign Disaster Assistance (OFDA) incorporates Preparedness in three distinct ways:

- I. OFDA’s MANDATE encompasses the fundamental aims of humanitarian action:
 - Saving Lives (Urban Search and Rescue)
 - Alleviating human suffering (assessing and addressing basic needs)
 - Reducing economic and social impact of disasters (livelihoods)
- II. OFDA’s Toolkit
 - Funding
 - Commodities
 - Personnel and Services
- III. Cross Cutting Themes
 - Strengthening Partnerships
 - Protection of Vulnerable Populations
 - Investing in Disaster Risk Reduction and Resilience (DRR)

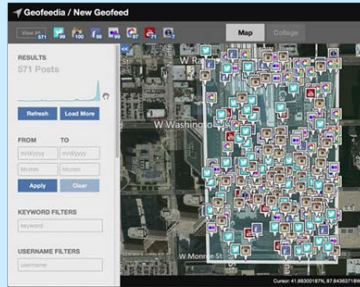
See <https://www.usaid.gov/who-we-are/organization/bureaus/bureau-democracy-conflict-and-humanitarian-assistance/office-us>

SOCIAL MEDIA

Online Communities: Enhancing Recovery Efforts

Dr. Thomas Chandler

How do online communities form during a disaster? How do they interact with response entities? How can they enhance recovery efforts? Social media provides a venue for those affected by disaster events by sharing their observations in real-time. Dr. Thomas Chandler discussed this subject and also introduced a powerful software tool, Geofeedia, which enables disaster preparedness personnel to monitor all social media posts generating from any geographic location. More information on this tool can be found at geofeedia.com, and by clicking on the graphic here to view a [YouTube video](#). Also see <http://www.tc.columbia.edu/faculty/tec11/>



Digital Response Ecosystem - Willow Brugh

There are digital tools which allow us to do truly new things in addition to information gaining and sharing. Digital tools might be in the form of crowd sourced maps about needs and outages made from Twitter updates and hashtags, or images composited from a drone for an overview of an affected region for locating the most damaged areas, or heavy statistical modeling based on datasets from multiple sources for more precise resource distribution. The introduction of these new methods, processes, and tools for digital response can either increase the chaos of response or alleviate it. See the following links:

- https://digitalresponse.aspirationtech.org/index.php?title=digital_response_ecosystem_map
- <https://cyber.harvard.edu/events/luncheon/2015/03/Brugh>

Mike Hess is a former Assistant Administrator in the Bureau for Democracy, Conflict and Humanitarian Assistance at USAID. He is currently the president of M&TCH Consulting.

COL Frederic Drummond is the US Army Region 5 Defense Coordinating Officer (DCO), and serves as the Defense Department’s senior active-duty representative, working closely with FEMA, state and local officials during a natural or manmade disaster in the Great Lakes region, covering Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Liz Lukasavich is in the Military Liaison Team in the Office of US Foreign Disaster Assistance (OFDA) at USAID, serving as the Federal lead agency for international disaster assistance, responsible for leading and coordinating the US government response to disasters overseas.

Dr. Thomas Chandler is an Associate Research Scientist at the National Center for Disaster Preparedness, The Earth Institute, Columbia University and an Adjunct Assistant Professor at Teachers College, Columbia University. He focuses on the human impact of natural disasters, geographic and social networks, community preparedness, and sustainability education.

Willow Brugh is a Community Leadership Strategist for Aspiration, a values-driven nonprofit technology organization. Most of her work is at the overlap of humanitarian/disaster response and technology. She believes that affected communities are always the first responders, and by listening we increase equality, justice, and surge capacity.



Devin Balkind works at the intersection of the nonprofit sector; the free, libre, and open source (FLO) movement; and locally-focused community organizing initiatives to help each effort benefit from the best practices of others.

Steven Mather is a manager at Cleveland Metroparks, an organization that conserves significant natural resources and enhances people's lives by providing safe, high-quality outdoor education, recreation, and zoological opportunities.

Mohamed Hilmi is a humanitarian shelter and reconstruction specialist. Currently, he is managing the humanitarian Shelter and Settlement Working Group and Disaster Risk Reduction Working Group at InterAction, to collectively improve the collaboration, capacity, practice and policies of stakeholders who respond to humanitarian disasters or crises.

Kristin Stevens is the Director of Program Development at Field Innovation Team ([FIT](#)). FIT maintains situational awareness of impending disasters while simultaneously working on disaster preparedness and disaster risk reduction at local, state, national, and international levels.

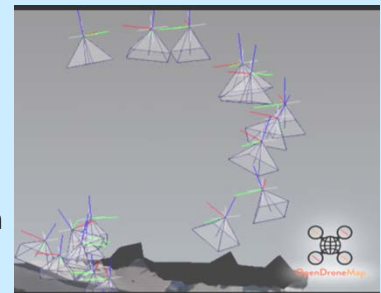
OPEN SOURCE

Open Source Data - Devin Balkind

How do we connect grass root capabilities and NGO/Government agencies? Self-organized ordinary people with prior relationships can leverage technology to respond to disasters locally, while institutions have the most valuable resources and global capabilities. The [Sahana Eden project](#) provides a free, libre, open-source (FLO) codebase to provide a flexible, modular platform for rapidly deploying information management systems for disaster management and humanitarian use cases. See <http://vitamindwb.com/open-tech-and-open-data-the-key-to-whole-community-engagement-at-iaem-2015/>, and the Occupy Sandy Story at <http://www.anser.org/Docs/The%20Resilient%20Social%20Network.pdf>

Open Drone Mapping - Steven Mather

Open Drone Mapping provides high fidelity processing of aerial drone imagery. Aerial photos are transformed in a 3D cloud and mesh, which is interlaced with actual photos to permit analysis. As an open-source, cloud-based information system capable of fusing drone imagery, this capability has potential applications in high resolution topographic surveys following disaster scenarios. See this YouTube video demonstration: https://youtu.be/0UctfoeNB_Y



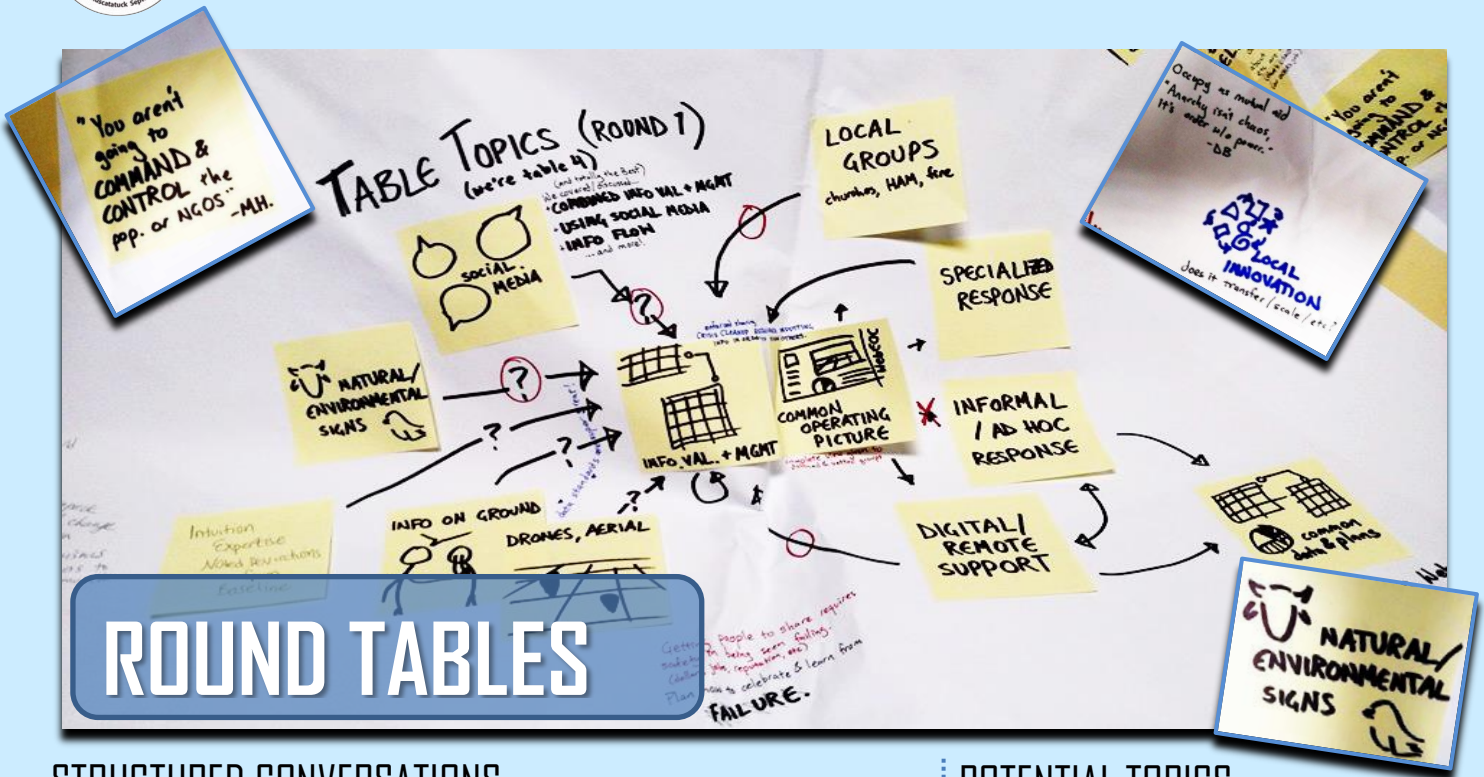
INNOVATION

Affected Population - Mohamed Hilmi

During disaster response the context and voice of the affected population matters most. It is key to effective response, but more so for preparedness planning and execution. See the InterAction website at: <https://www.interaction.org/>

Field Innovation Team - Kristin Stevens

Kristin discussed notable projects including a Drone Do-Tank that explored the use of drones in emergency response and conducted with UN partners; response to Washington state mudslides; a robotics petting zoo conducted in support of unaccompanied youths in the US/Mexico Border Crisis in 2014; and exploring use of a Smart Charging System in support of the Syrian refugee crisis in Lebanon. Drones for Disaster Relief – see <https://vimeo.com/180700304>



ROUND TABLES

STRUCTURED CONVERSATIONS

On the second day during lunch, the DPX hosted a round table event similar to the World Café Method². Based on an eight table format with approximately seven participants each in two 20 minute sessions, this was a structured conversational process intended to facilitate open and frank discussion, and link ideas within the larger group to access the "collective intelligence" and collective wisdom of the DPX participants. A list of potential topics was provided but each table was invited to explore their own interests.

From the two sessions, eight concepts were captured:

1. Marrying our Methods
 - Optimal goal is "Unity of Effort"
 - Money is not the driving force; time is and must be accounted for within efforts.
 - Who are we trying to help? What are their needs?
 - Interoperability among all actors is integral to success.
 - We need to understand local context of country.
 - Could we be trained in "design thinking;" human centered approach?
 - How can we drive interoperability into our training?
 - What components are we missing from our exercises?
 - Where is the executive summary of what works and fails

POTENTIAL TOPICS

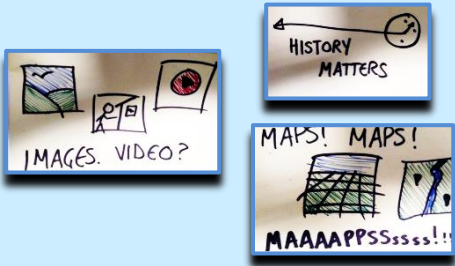
Participants were provided the following list of topics that they could chose to discuss at the eight round tables, or they could choose their own topics.

- ...from the Victim's Viewpoint/Understanding the Other
- Military Support for Aid Workers
- Maximizing & Supporting Volunteer Efforts (on-site & remote)
- Information Validation & Management
- Social Media Planning
- Logistics Transfer Points
- Preparing/Planning with Sustainment and Transition in Mind
- Digital/Remote Expertise
- Communications – Information Flow
- Communicating with the Public
- What Don't We Know?
- What Do We Do Wrong?
- Identifying Existing Mechanisms
- Marrying Our Methods – Hybridization of Preparedness in Planning
- Disaster Preparedness in Conflict Zones/Unstable Areas
- Preparing for DoD's Role in Epidemics
- Developing Robust, Corruption-Resistant Relief Systems
- Understanding the Situation on the Ground

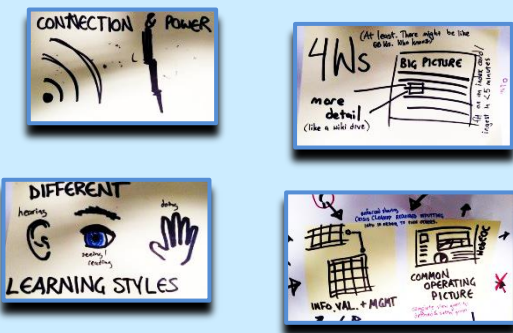
² <http://www.theworldcafe.com/key-concepts-resources/world-cafe-method/>



AVAILABLE INFORMATION



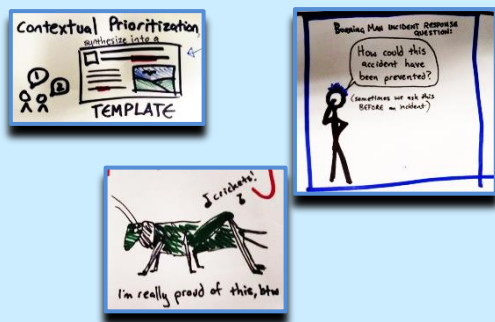
PROCESSING & DISTRIBUTION



VERIFY & UPDATE DATA



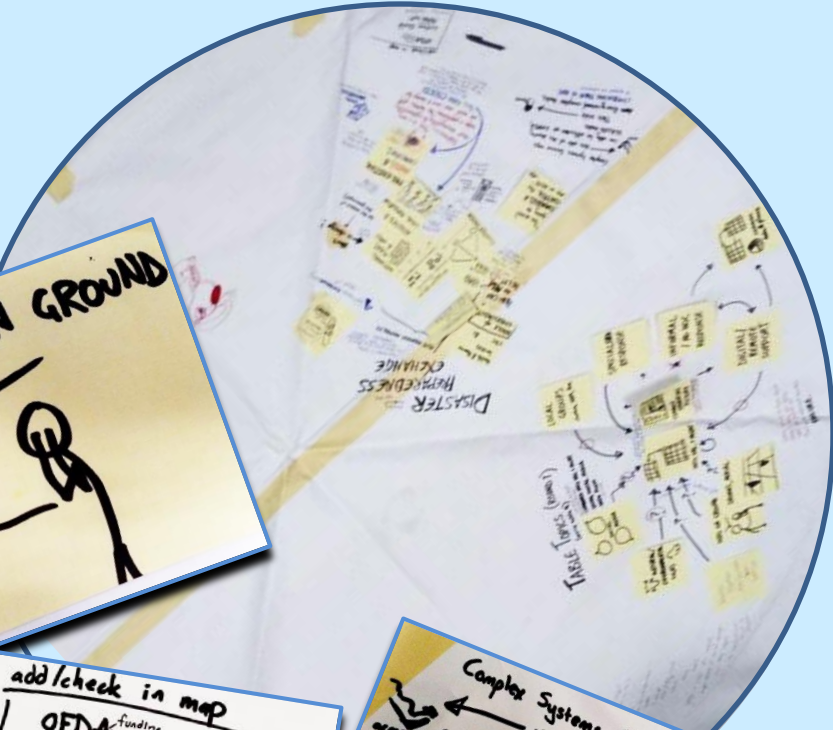
CAPTURE LESSONS LEARNED



2. Military Support to Aid Workers
 - Enable NGOs to do their jobs.
 - Understand process and players, DoD sets security first.
 - Who tells DoD who to work with?
3. Understanding Situation on the Ground
 - Problems of scaling to the need and how to collect information
 - Is the vast amount of information in a usable format and what is usable? What do we trust? Trust networks?
 - How to catch imagery and the need for accurate maps?
 - How to capitalize on different learning styles?
 - How do you find the same information every time and should we have a template for information?
 - Information needs to be relevant and just in time (JIT).
4. De-stigmatize Consequences of Sharing/Lessons Learned
 - Fear of Failure.
 - Plan to accept and learn from failure.
 - Getting people to share requires safety in acknowledging failure.
5. Preparing for DoD's Role in Epidemics
 - Need to understand that there is frequently a conflict of priorities between DoD and host country. DoD focuses on assisting in quarantine efforts, evacuating US citizens, and providing public information.
 - For a global epidemic, resolving who facilitates establishment of quarantine is not easily defined.
 - Domestically, FEMA is in charge and the relations between FEMA and DoD can be trying. FEMA want everything everywhere now and looks at DoD as grunt work with resources. DoD is in supporting role to all other agencies.
6. Prepare and Plan with Sustainment
 - Knowing resources and when and where you can get them.
 - Transition to Recovery? A lot of support is lost because it's not dramatic?
 - Putting what you planned into action – don't reinvent the wheel.
 - Define or pick a category of sustainment: political, operators, & capability.
7. Define Disaster Preparedness
 - What are the levels of preparation of all entities to include training, education, and experience?
 - How do you measure a level of preparedness?
 - What is the level of disaster and how to match up the talent?
8. Social Media Planning
 - Social media "person" to collect data.
 - Validate data.
 - Need to integrate social media into plans.

DRONES, AERIAL

INFO ON GROUND



AFFECTED & LOCAL POPULATION
(at the consent of the governed?)

listen in, try to sense in air (& be creepy)

PRE-EXISTING NEEDS & CAPACITIES

Occup "Anat" it's

shrink in crisis

Addressing This in a way that strategically & systemically helps a population be better off, we must also care & design for This. (AKA CIVICS)

Take the thing you & military are notorious for quashing. ♥

That your totally awesome training base is created on the ruins of a necessary but dissolved social service is an irony not lost on me.

add/cheek in map

add/cheek in map

OFDA ^{funding, connections, personnel}

Gotham Shield ^{MAIAZ}

FEMA test

Scouting - Network relationship - projects

"create a comment for response" -Down

Complex Systems Science says this side of the drawing can only be effective at SIMPLE, SCALED tasks.

This side does fine-grained, complex tasks.

COMBINING THEM IS KEY.

at equal, not substituent.

add/cheek in map

OFDA ^{funding, connections, personnel}

Gotham Shield ^{MAIAZ}

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CLUSTER SYSTEM

"You aren't going to COMMAND & CONTROL the pp. or NGOs" -MH.

STANDARD FORMS TO ACCEPT REQUESTS

or let magic talk to themselves (rebuilds trust) (will take time, commit mental)

that

Round 2

* **Timeline 15**

- **Disaster Prep in Civilian World**
- **Response Coordination, Civilian World**
- **As we asked: As we go, that's what we get. National Security = Who's already there?**
- **RPE / RPE**
- **Don't let things come to Domestic Disturbances**

What's changing our change?

Because they're functions, so one is

to connect and compare and connect them into the room together

to decide even if they would which they won't

works a while we speak larger ideas of social change how they happen the mechanisms so as to provide

Innovation



THEMES

- UNITY OF EFFORT
- RELATIONSHIPS & TRUST
- PLANNING
- INFORMATION
- COMMUNICATIONS
- TRAINING
- LIMITED RESOURCES

WHERE DO WE GO FROM HERE?

From all participants, the DPX was considered a success and provided many different perspectives on how organizations can better prepare for the next disaster. We also acknowledged we must **plan to be ready—not “if” but “when”** the next disaster occurs. Each member will take a collection of new information and perspectives back to their respective organizations; but what are the next steps and how do we continue to grow on this effort?

Can we apply what we have learned in this DPX to an upcoming disaster exercise such as USNORTHCOM’s exercises in April 2017?

Can we get more agencies involved in a future DPX to broaden the scope even more than what occurred in this event?

Should we focus our efforts toward two separate efforts; domestic and international due to some significant differences in how each event is focused and managed?

How do we sustain community and continue to share knowledge?



Academia

- [Columbia University](#)
- [Georgetown University](#)
- [Indiana State University](#)
- [Indiana University](#)
- [John Carroll University](#)
- [Purdue University](#)
- [Uniformed Services University of the Health Sciences](#)
- [University of Southern California](#)
- [Wabash College](#)

Other US Government

- [Federal Law Enforcement Training Centers](#)
- [The Office of U.S. Foreign Disaster Assistance \(USAID\)](#)

Military

- [Defense Health Agency](#)
- [Illinois National Guard](#)
- [Indiana Air National Guard](#)
- [Indiana National Guard](#)
- [Naval Support Activity Crane - N37](#)
- [Peacekeeping and Stability Operations Institute \(PKSOI\)](#)
- [The Joint Staff - j15](#)
- [The National Guard Bureau](#)
- [Under Secretary for Personnel and Readiness](#)
- [USARNORTH](#)
- [U.S. Northern Command \(USNORTHCOM\) - J36](#)

Non-Governmental (NGO) and Non-Profit (NPO)

- [Aspiration](#)
- [CrisisMappers](#)
- [Field Innovation Team](#)
- [Information Technology Disaster Resource Center](#)
- [Interaction](#)
- [Sahana Foundation](#)
- [Samaritan's Purse](#)

Private Sector

- [Global Rescue](#)
- [Nestlé Waters North America](#)
- [Walmart](#)

Regional Local

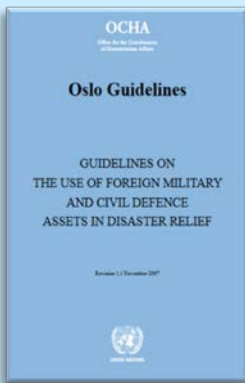
- [Cleveland MetroParks](#)
- [Indiana Department of Homeland Security](#)
- [Indiana State Department of Health](#)
- [Indiana Task Force 1](#)
- [Virginia Task Force 1](#)
- [Wayne Township Fire Department](#)



SOURCES OF INFORMATION

During the DPX a number of the participants referred to various resources that were relevant to disaster preparedness. Documents cited discuss the interaction of agencies with the military as well as how non-military agencies conduct their operations during a disaster event. The following pages provide a brief summary of the publications mentioned as well as hyperlinks to the full document on the web.

INTERNATIONAL – UNITED NATIONS

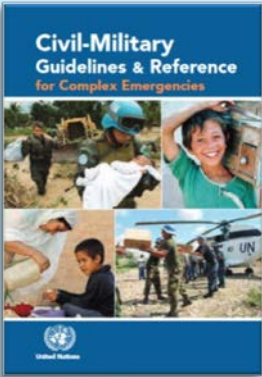


Oslo Guidelines is a U.N. (Office for the Coordination of Humanitarian Affairs (OCHA)) document that addresses the need for principles and standards and provides improved coordination in the use of Military and Civil Defense Assets in Disaster Relief. The guidelines establishes the basic framework for formalizing and improving the effectiveness and efficiency of the use of foreign military and civil defense assets in international disaster relief operations.

Hover over a document's picture and click to view to each document hyperlink.

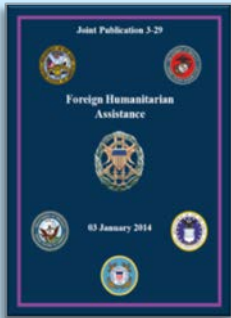


Guidelines On The Use of Military and Civil Defense Assets To Support United Nations Humanitarian Activities in Complex Emergencies provides guidelines for the use of international military and civil defense personnel, equipment, supplies and services in support of the United Nations (UN) in pursuit of humanitarian objectives in complex emergencies. It provides guidance on when these resources can be used, how they should be employed, and how UN agencies should interface, organize, and coordinate with international military forces with regard to the use of military and civil defense assets.

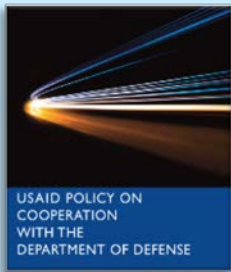


Civil-Military Guidelines & Reference for Complex Emergencies is the first collection of core humanitarian principles developed by the United Nations (UN) and the Inter-Agency Standing Committee (IASC) on civil-military relationship in complex emergencies. Its aim is to assist humanitarian and military professionals to deal with civil-military issues in a manner that respects and appropriately reflects humanitarian concerns at the strategic, operational and tactical levels in accordance with international law, standards and principles.

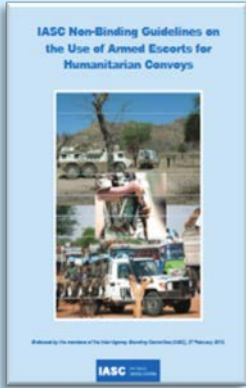
INTERNATIONAL – INTERAGENCY AND MILITARY INTERACTION



Joint Publication 3-29 Foreign Humanitarian Assistance provides an overview of foreign humanitarian assistance (FHA), including foreign disaster relief (FDR). It explains US policy and legal authorities related to FHA; discusses interagency coordination, roles and responsibilities, and principal organizations for FDR; covers aspects of planning unique to FHA operations; and highlights aspects of joint force execution and assessment related to FHA operations.



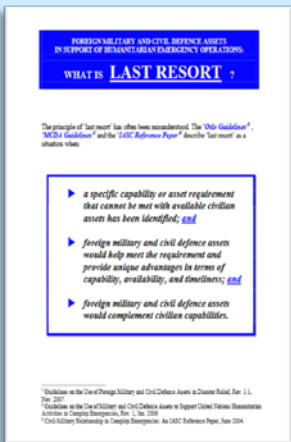
USAID Policy on Cooperation with the Department of Defense established the foundation for cooperation between the United States Agency for International Development (USAID) and the United States Department of Defense (DoD). This policy establishes civilian-military cooperation as fundamental to a whole-of-government approach to contemporary national security challenges in keeping with the increasingly important role of development in advancing national security priorities along with defense and diplomacy.



Inter-agency Standing Committee (IASC) Non-Binding Guidelines on the Use of Armed Escorts for Humanitarian Convoys provides guidelines to assist a wide range of actors on when and how to use military or other forms of armed escorts to accompany humanitarian convoys.



Guidelines for Relations Between U.S. Armed Forces and Non-Governmental Humanitarian Organizations in Hostile or Potentially Hostile Environments facilitate interaction between US Armed Forces and Non-Governmental Organizations that are engaged in humanitarian relief efforts in hostile or potentially hostile environments.



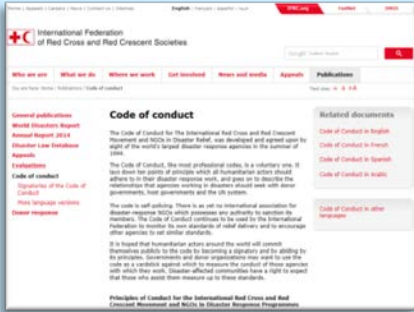
Foreign Military And Civil Defence Assets In Support Of Humanitarian Emergency Operations: What Is Last Resort? When the specific requirement no longer exists or when comparable civilian assets become available to meet the requirement and, therefore, foreign military and civil defense assets no longer provide unique advantages, the situation of 'last resort' ceases to exist and these assets should be phased out and activities should be handed back over to civilian actors at an early opportunity. Even if a situation of 'last resort' is determined to exist, the use of foreign military and civil defense assets should under no circumstances undermine the actual or perceived neutrality, impartiality or operational independence of humanitarian actors, nor jeopardize current or future access to affected populations in need of humanitarian assistance.



INTERNATIONAL – RED CROSS

Code of Conduct for The International Red Cross

and Red Crescent Movement and NGOs in Disaster Relief, was developed and agreed upon by eight of the world's largest disaster response agencies in the summer of 1994. The Code of Conduct is a voluntary one that lays down ten points of principle which all humanitarian actors should adhere to in their disaster response work, and goes on to describe the relationships that agencies working in disasters should seek with donor governments, host governments and the UN system.



The **Sphere Project** is the most widely known and recognized set of common principles and universal minimum standards for humanitarian response. It introduces considerations of quality and accountability to humanitarian response.



DOMESTIC

FEMA Information Sheet: National Preparedness Goal, Second Edition – Overview

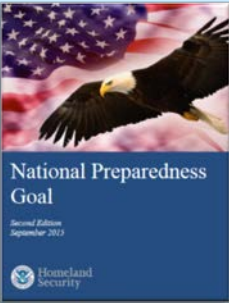
The first edition of the National Preparedness Goal, released in September 2011, described a vision for preparedness nationwide and identified the core capabilities necessary to achieve that vision across the five mission areas—Prevention, Protection, Mitigation, Response and Recovery. The second edition of the National Preparedness Goal incorporates critical edits identified through real world events, lessons learned and implementation of the National Preparedness System.





FEMA Information Sheet: National Preparedness Goal, Second Edition – What’s New

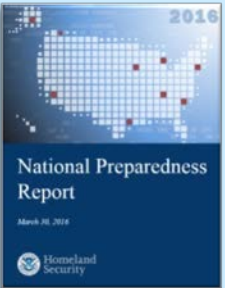
The refresh of the National Preparedness Goal centered on discrete, critical content updates based on lessons learned, real world events and the results of the National Preparedness Report. In working towards development of the second edition of the Goal, FEMA and its whole of community partners focused on assessing the existing core capabilities. Resulting updates to the core capabilities include changes to select titles and definitions and the addition of one new core capability – Fire Management and Suppression.



The National Preparedness Goal reflects the insights and lessons learned from four years of real world events and implementation of the National Preparedness System. It describes our security and resilience posture through the core capabilities that are necessary to deal with the risks we face. The National Preparedness Goal is: A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.



The National Planning System provides a unified approach and common terminology to plan for all-threats and hazards and across all mission areas of Prevention, Protection, Mitigation, Response, and Recovery. In addition, a shared understanding of the types and levels of planning will enable the whole community to think through potential crises, determine capability requirements and address the collective risk identified during the risk assessment process.



The National Preparedness Report provides all levels of government, the private and nonprofit sectors, and the public with practical insights into preparedness to support decisions about program priorities, resource allocations, and community actions. The report identifies cross-cutting findings that evaluate core capability performance, key findings in the Prevention, Protection, Mitigation, Response, and Recovery mission areas, and notable examples of preparedness progress over the past five years.

ADDITIONAL RESOURCES

The Resilient Social Network is a case study on natural and man-made incidents of global consequence, such as Superstorm Sandy, focusing on efforts that improve community resilience. This case study analyzes the formation, operations, and impact of Occupy Sandy during and after Superstorm Sandy. It answers the following questions:



1. What led to the rapid emergence of Occupy Sandy?
2. What was the scope of service Occupy Sandy provided?
3. How did Occupy Sandy choose what services to provide?
4. How was Occupy Sandy governed and managed?
5. What philosophical principles influenced Occupy Sandy?
6. How did Occupy Sandy use technology and social media?
7. What is the state of Occupy Sandy today?

Disaster Sim is a game-based training tool focused on international disaster relief. Trainees take on the role of a joint task force staff member coordinating the US Department of Defense’s (DoD) humanitarian aid and disaster relief efforts in a foreign country following a natural disaster. Among the tasks, trainees must attempt to restore essential services, reconstruct civil infrastructure and provide humanitarian assistance, all while managing interactions with local civil authorities, non-governmental organizations, and other US government relief organizations. They must use their judgment to prioritize and execute lifesaving tasks while operating within DoD limits related to medical relief and infrastructure repairs. Trainee actions in the exercise can impact future interactions and may also influence the overall scenario.



The Cynefin Framework is a decision making tool. It allows leaders to see things from new viewpoints, assimilate complex concepts, and address real-world problems and opportunities. Using the Cynefin framework can help leaders sense which context they are in so that they can not only make better decisions but also avoid the problems that arise when their preferred management style causes them to make mistakes. The framework addresses five domains: Complex, Complicated, Chaotic, Simple, and Disorder.



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