GUIDANCE FOR DEVELOPING A LOCAL DIGITAL RESPONSE NETWORK [DRN]

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For more information on the Digital Humanitarian Network (DHN) please visit:
digitalhumanitarians.com

You can read more about how the DHN was established at the
Co-founders Story
Are you a passionate individual who wants to help harness local digitally-enabled volunteers or groups in response to emergencies? Great! But, how are you going to do it? How about becoming a central figure and coordinating these groups so that any response is more than the sum of all its parts? Have you considered creating a Digital Response Network? If this describes your desire and you answered the questions positively, then this guidance is for you! Welcome to the world of digital humanitarian response.

~ the Authors
As the widespread proliferation of technology changes how communities engage and respond to crisis, new mechanisms, such as Digital Response Networks (DRNs), emerge with the potential to facilitate collaboration and situational awareness between responders and local communities. DRNs are social networks of physical responders (e.g., local government, authorities, emergency responders, communities) and digital responders i.e. Volunteer & Technical Communities (V&TCs) connected through a central hub. They are often considered a network-of-networks. This guide will step you through creating a localized DRN by describing a) the purpose and required capability of a DRN, b) considerations before creating a DRN, and c) how to setup and sustain the DRN hub and larger network.

**DRN PURPOSE**

The purpose of a DRN is to build resilience into local communities by connecting local V&TCs with one another and the larger response community to enhance communication, coordination and information sharing.

**DRN CAPABILITY**

A DRN should be able to:

- Provide virtual and/or physical **surge or supplementary capacity** (mainly technical), and
- Provide **situational awareness**

A DRN achieves these goals by:

- Mobilizing and providing a **Focal Point** within a 24-hour time frame, for the **intake and coordination of requests** between:
  - local / regional response organizations or communities and local and, if necessary, international V&TCs, and
  - international humanitarian response organizations and local responders (physical and/or digital)

To achieve this level of capability, a DRN must possess the capacity to:

- Establish and manage a network of networks (the Network Hub),
- Promote the network to build community trust and engagement, and
- Provide the technical capacity required to accommodate incoming requests

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1 Volunteer & Technical Communities (V&TCs) are volunteer-based communities who apply technical skills to assist with disaster & humanitarian response, but also supplement technical capacity in projects beyond crisis (Capelo & Chang, 2012).

2 Community resilience is defined as the “ability of communities and households to absorb, adapt to and recover from shocks or stresses” (OCHA, 2015, p3).

3 A Focal Point can be a physical location like an Affected Persons Information Centre, or virtual location. If building a local DRN, it is generally expected the focal point will be locally. However, you may need to review based on the situation and your communities need.
BEFORE YOU BEGIN

Before building a DRN, it’s important to consider the following:

01 **THE NEED** -- Is there a need? If so, what is the need? What is the problem you’re trying to solve?

02 **THE SOLUTION** -- Is a digital response network the solution? What is already out there? Do I need to create a new network or can I tap into existing ones? Is there an interest in creating a DRN?

03 **THE BENEFITS** -- What benefits would a digital response network offer?

04 **THE RISKS** -- Are there risks associated with creating a DRN? Are these risks manageable? Do the benefits outweigh the risks?

05 **THE ETHICS** -- Do your activities follow the humanitarian principles (humanity, impartiality, neutrality and operational independence)?

06 **THE CAPACITY** -- Do you have the time and the resources? Do you have access to reliable information communication technologies? Is your technically literacy high?

07 **SUSTAINABILITY** -- Do you have the resources and a plan for longer term network sustainability of the network?

“TIP! Get a quick and accurate assessment of the need for a DRN by asking these questions to focal points within the local response agencies, V&TC organizations, local community leaders and potential DRN core team members.”
THE NETWORK HUB

First, you must establish and sustain the core of the network, the Network Hub. It is responsible for establishing and developing the larger DRN. It must be able to administer, sustain and promote the DRN.

DEPENDENCY: Leadership

Responsibility: Establish and sustain the network, making key decisions about the design, implementation, and operation. Suggested commitment is 1 year, then play a supportive role to the CEO or equivalent afterwards.
Example: Leader can be 1-2+ people, or a segment of a new/existing organization or network.

DEPENDENCY: Core Team

Responsibility: Internal operations - Manage administrative, outreach, legal, funding elements of the DRN; External operations - Develop, collaborate, coordinate, communicate and sustain the larger DRN
Example: A minimum core team could include one director, one program manager and one financial/grant writer and, if possible, one legal advisor.

Suggested Attributes for Network Administrators and Members:
- Passionate, energetic, collaborative, conflict resolution skills, neutral, dedicated, reliable,
- hybrid connections (well connected in V&TC and local communities), high technical literacy,
- mobilizer / good at getting people involved, willing to build relationships

DEPENDENCY:
Operating Environment for Physical and Virtual Coordination

Physical: Prior to crisis, use site(s) to meet people, host workshops etc., and during crisis, as a focal point for communication and coordination. At a minimum, ensure one site and one alternate site are identified (in case relocation is required). Potential locations could include tech labs or co-working spaces.

Virtual: Tools and platforms to facilitate communication (email, web conferencing, chat), collaboration, coordination, data creation, storage and analysis, data visualization, social media tools, decision making, online promotion, project management and hazard specific situational awareness.

Note: Ensure system redundancy for events with communications/power failure

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4Hub composition can be dictated by the needs identified from the development of plans & policy described later in the document
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DEPENDECY: Plans & Policy to Govern Operations

1. MISSION & VISION
2. ORG. STRUCTURE
3. LEGAL & LIABILITIES
4. GOVERNANCE & DECISION MAKING
5. ETHICS & PRINCIPLES
6. BRANDING & PROMOTION
7. COMMS.
8. FUNDING
9. MEMBERSHIP
10. DATA MANAGEM.
11. EMERGENCY MANAGEM.
12. CONCEPT OF OPERATIONS (CONOPS)
13. ACTIVATION LEVELS

1. MISSION & VISION
   - Have a clear unifying mission and vision to ensure cohesion

2. ORG. STRUCTURE
   - Decide whether you will be centralized, decentralized, or a hybrid between the two

3. LEGAL & LIABILITIES
   - Determine if you should become a legal entity, and if so, consider incorporating, registering as an NGO/NPO or a Limited Liability Organization (LLO)

4. GOVERNANCE & DECISION MAKING
   - Identify who will make decisions, who will have authority and responsibilities, and how authority will be assigned, revoked and distributed across organizations

5. ETHICS & PRINCIPLES
   - Verify and identify mechanisms to ensure operations follow humanitarian / ethical protocols

6. BRANDING & PROMOTION
   - Build visibility and credibility through branding and promotion of the LHN. Identify what you wish the image to be, the brand, and how it will be disseminated

7. COMMS.
   - Outline a process and frequency for regular contact, and a mechanism and protocol to ensure discussions are captured, open and available to all members

8. FUNDING
   - Identify if funding is required for staff, resources, events, etc., and estimate how much, who will seek, manage and receive the funding

9. MEMBERSHIP
   - Create terms of membership including how to join, participate (e.g. participation and behavioural rules), and leave the network. If applicable, identify different types of membership (e.g. volunteers, staff, technologists, data providers, and activating partners)

10. DATA MANAGEM.
    - Identify the types of data you will work with and how it be collected, stored and shared. Specify who will collect, own and have access to it. Isolate potential sensitive data and determine data security measures

11. EMERGENCY MANAGEM.
    - Ensure the network can continue to function during crisis through development of Standard Operating Procedures (SOPs) (e.g. Handoff plans), call trees, emergency plans, risk analysis, exercising plans and protocols, etc.

12. CONCEPT OF OPERATIONS (CONOPS)
    - Internal Normal Operations -- process for how people will work together on a daily basis
    - Internal Crisis Operations -- an incident management process considering roles & responsibilities, communications, coordination, collaboration, span of control, etc.
    - External Normal Operations -- Isolate the stakeholders you serve, rely on and are impacted by, and determine how you will function with each stakeholder group
    - External Crisis Operations -- Understand existing external crisis response systems and identify how the LHN and V&TCs can integrate into these processes as a focal point for coordination. Identify how you will manage existing volunteers and accept and accommodate emergent ones

13. ACTIVATION LEVELS
    - Identify the different levels of activation for escalating crises, including triggers and activities for each level, and which external supports and stakeholders will be activated at each level. Connect levels with internal and external ConOps identified
Once a functional hub is established, you can create the broader Digital Response Network. The DRN will consist of physical and digital responders, i.e. individuals and organizations associated with V&TCs capable of providing support in crisis, and local response individuals and agencies that will require help.

**DEPENDENCY: Network Members & Community Buy-In**

**CHANNELS FOR RECRUITMENT & SUSTAINABILITY**
- Face-to-face meetings
- Awareness and training workshops
- Hackathons / Random Hacks of Kindness
- Crisis Camps / Unconference / SkillShares
- Meetups

**MEMBERSHIP**
The DRN should consist of an eclectic blend of individuals, organizations and networks from V&TCs, local responders and the community. Suggested members include:
- *Formal Responders* - Local decision makers, government, authorities, emergency responders, military;
- *Informal Response Community* - NGO/NPOs, VOSTs, VOADs, CERTs, RRNs, etc.;
- *V&TCs* - Local and global V&TCs (e.g. the Digital Humanitarian Network);
- *Regional / International Responders* - international organizations, humanitarian response organizations, relief and response agencies, iNGOs/NPOs;
- *Local Community* - Local Leaders e.g. head of a community organization, local groups, universities and schools, community groups / churches, tech labs & co-working spaces, etc.;

**DEPENDENCY: Collaborative & Sustainable Relationships**
The following outlines best practices for building sustainable relationships and building collaboration between physical and digital responders and the local community.

**01 Local Responders**
- **Share Operational Requirements & Workflows** -- share Concept of Operations (ConOps), identify needs for V&TC support, channels for decision making / permission;
- **Mandate V&TC collaboration** -- mandate official role to coordinate with V&TCs; mandate DRN as an emergency support function for formal response organizations;
- **Create a Memorandum of Understanding (MOU)** -- Specify the workflow of the operation and level of service expected between networks;

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5 NGO/NPOs - Non-Government Organizations / Non-Profit Organizations, VOST - Virtual Operational Support Teams, VOADs - Voluntary Organizations Active in Disaster, CERTs - Community Emergency Response Teams (CERTS) or Computer Emergency Response Teams, RRNs - Rapid Response Networks
02 V&TCs

- **Promote V&TC awareness** -- share what they can do, how to access their service, whether and how they provide or accept volunteers, how they engage with the community;
- **Provide “Train the Trainers” workshops** -- train individuals from local response organizations on the capacity and benefits of working with V&TCs so that they may champion collaboration in their own environment;
- **Provide reliable and consistent service.**

03 Both

- **Run Hybrid Focus Groups** -- identify overlaps in workflow between local and V&TCs, community capacity, level of preparedness and needs, and scope opportunities for V&TC collaboration;
- **Communicate regularly** -- ensure regular, ongoing face-to-face meetings;
- **Practice regularly** -- Use tabletop exercises to bring partners together and practice through simulated crisis; activate during remote emergencies or during non-crisis events that could benefit from V&TC capacity;
- **Collaborate on Projects** -- co-produce together prior to crisis to build trust and operational capacity;
- **Follow Data Standards** -- Use open data standards and protocols to facilitate data sharing;
- **Learn together** -- physical or virtual sharing of knowledge and lessons learned, internal training on new technologies, or operational approaches.

04 Internal

- **Promotion** -- Encourage the local community to engage by promoting that V&TC participation can help build skills & knowledge to make them more employable
- **Acknowledge Volunteers** -- Post crisis ensure volunteers receive compensation / thank yous;
- **Create Space** -- Create virtual/physical space for the free flowing exchange of ideas, for open discussion;
- **Partner strategically** -- Connect and affiliate with existing reputable networks; capture diversity by recruiting individuals and groups representing different cultural, gender, and age groups;
- **Monitoring & Evaluation** -- seek constant feedback from clients, run lessons learned workshops or perform a post-facto analysis following an event;
- **Customize for your context** -- Identify any context specific considerations or limitations for DRN operation and engagement using STEEPLE analysis;
- **Identify and Manage Risks** -- Identify any risks to your operation from the STEEPLE analysis; more specifically identify potential physical, digital, psychological, legal or organizational risks ; implement measures to prevent, mitigate and prepare for these risks;

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6 See “Impact Evaluation Framework” developed by OCHA for guidance
7 Modified from Makos (2015), STEEPLE analysis includes Socio-Cultural (cultural/demographic factors), Technological (barriers to entry, infrastructure, dependence, rates of change and uptake), Environmental (natural environment), Economical (exchange rates, inflation, economic health), Political (government regulations, political stability, legislation and policy), Legal (compliance, liability, health and safety) and Ethical (social values) elements.
8 See “Exploring the Citizen-Driven Response to Disaster in Cyberspace” by Phillips(2015) for additional information on risk
• **Address Potential Challenges** -- Anticipate challenges including high turnover of volunteers, complexities associated with funding, virtual operating environment restrictions and dynamic nature, interpersonal dynamics, governance versus autonomy, competing mandates in DRN members, cost and benefit of physical versus virtual needs in a crisis, initiative may be advocacy related, and heavy reliance on technology.

## NEXT STEPS!

Having read through this guidance, we congratulate you on having taken one of your first steps to building your own Digital Response Network! Building a community is an exciting undertaking. And, building one that helps people during times of crisis is even more rewarding. Let's help change the world.

For support in the process, feel free to contact the *Digital Humanitarian Network*, the authors or editors.

*Good luck!*

## REFERENCES


