

Collaboration Support

for

Disaster Management in Global Humanitarian Relief

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Agenda

- The Context of Disaster Management
 - DM as a Dynamic Supply Chain
 - Taxonomy of Disasters
 - Scope of Disaster Management
 - Actors in DM
- Need for Collaboration
- Requirements for Collaboration Support for DM
- Current State of Collaboration Support

Disasters

● A Situation involving

LARGE SCALE

HUMAN SUFFERING

Figures on 1991 to 2000 Disasters

Disasters	No.	People killed	People affected	Estimated damage in million of USD
1. Natural disasters	2,557	665,598	2,107,401,000	786,705
Hydro-meteorological disasters	2,292	605,407	2,088,220,000	546,326
<i>Floods</i>	888	97,747	1,442,521,000	272,818
Geophysical disasters	265	60,191	19,180,000	240,379
<i>Earthquakes</i>	211	59,249	17,023,000	239,601
2. Non-natural disasters	2,146	86,923	64,200	23,080
Grand total	4,703	752,521	2,108,025,000	809,785

Source: "2001 World Disasters Report", IFRC. EM-DAT, CRED, University of Louvain, Belgium

Varieties of disasters

Natural Disasters	
1. Hydro-meteorological	<ul style="list-style-type: none">• Avalanches/landslides• Droughts/famines• Extreme temperatures• Floods• Forest/scrub fires• Wind storms• Other (insect infestation, waves/surges)
2. Geophysical	<ul style="list-style-type: none">• Earthquakes• Volcanic eruptions
Non-Natural disasters	
1. Industrial	<ul style="list-style-type: none">• Chemical spill• Collapse of industrial structures• Explosion• Fire, gas leak, poisoning, radiation
2. Miscellaneous	<ul style="list-style-type: none">• Collapse of domestic/non-industrial structures• Explosion• Fire
3. Transport	<ul style="list-style-type: none">• Air, rail, road and water-borne accidents

Source: “2001 World Disasters Report”, IFRC.

Taxonomy

● Speed of Onset

- Catastrophe – Gujarat Earthquake
- Slow Onset Disasters – HIV epidemic

● Cause

- Natural, Man-Made, & Hostilities

● Scope of Response

- Local vs. Global
- Single Agency vs. Multilateral

Gujarat Earthquake timeline

Date	Activity
Friday , 26 Jan 2001	<p>India</p> <ul style="list-style-type: none"> • Earthquake • Indian Red Cross releases relief items <p>Geneva</p> <ul style="list-style-type: none"> • Issuance of Press Release/Information Bulletin • Secretariat Task Force meeting • Participating NSs put in alert for Emergency Relief Units (ERU) deployment • Preliminary appeal: CHF 2 m to assist 50,000 people • Release of CHF 200,000 from the Disaster Relief Emergency Fund (DREF) • 8 Fact Assessment and Coordination Team (FACT) members mobilized
Saturday, 27 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> • New Press Release/Situation Reports • Procurement order for shelter and blankets (local procurement) • Support to participating NSs for allocation/tracking of commodities & shipping arrangements <p>India</p> <ul style="list-style-type: none"> • Indian Red Cross and Delegates from IFRC's regional office at earthquake site • Indian Red Cross supplies arrive • GSM network coverage by Ericsson
Sunday, 28 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> • New Press Release • Coordination with NSs • Order of deployment for 2 referral hospital and water sanitation ERUs <p>India</p> <ul style="list-style-type: none"> • The government of India welcomes "acts of solidarity" • Arrival of FACT team leader, water sanitation, relief & health experts in Bhuj

Pictures



Off-loading of plane at Bhuj Airport

Goods arriving at the Rubhalls



Gujarat Earthquake timeline

(continued)

Date	Activity
Monday, 29 Jan 2001	<p data-bbox="432 378 569 418">Geneva</p> <ul data-bbox="506 427 1724 630" style="list-style-type: none"><li data-bbox="506 427 1104 467">• Secretariat Task Force meeting<li data-bbox="506 475 898 516">• New Press Release<li data-bbox="506 524 1724 565">• First cash request from the field and subsequent transfer to the field<li data-bbox="506 573 1129 613">• First pledges received in Geneva <p data-bbox="432 630 527 670">India</p> <ul data-bbox="506 678 1423 776" style="list-style-type: none"><li data-bbox="506 678 1423 719">• Arrival of Telecom and Logistics FACT members<li data-bbox="506 727 1241 768">• Arrival of Telecom and Hospital ERUs
Tuesday, 30 Jan 2001	<p data-bbox="432 789 569 829">Geneva</p> <ul data-bbox="506 837 1745 1040" style="list-style-type: none"><li data-bbox="506 837 1104 878">• Secretariat Task Force meeting<li data-bbox="506 886 898 927">• New Press Release<li data-bbox="506 935 1745 976">• Full appeal: CHF 25.6 m to assist 300,000 beneficiaries for 120 days<li data-bbox="506 984 1220 1024">• Order of deployment of logistics ERU <p data-bbox="432 1040 527 1081">India</p> <ul data-bbox="506 1089 1713 1292" style="list-style-type: none"><li data-bbox="506 1089 1020 1130">• Arrival of referral hospital<li data-bbox="506 1138 1482 1179">• Arrival of information and reporting FACT members<li data-bbox="506 1187 1713 1227">• Arrival of international relief supplies (tents, shelters and blankets)<li data-bbox="506 1235 1041 1276">• Operational site established
Wednesday, 31 Jan 2001	<p data-bbox="432 1304 527 1344">India</p> <ul data-bbox="506 1352 1503 1393" style="list-style-type: none"><li data-bbox="506 1352 1503 1393">• Arrival of other ERUs and international relief supplies

Pictures

(continued)

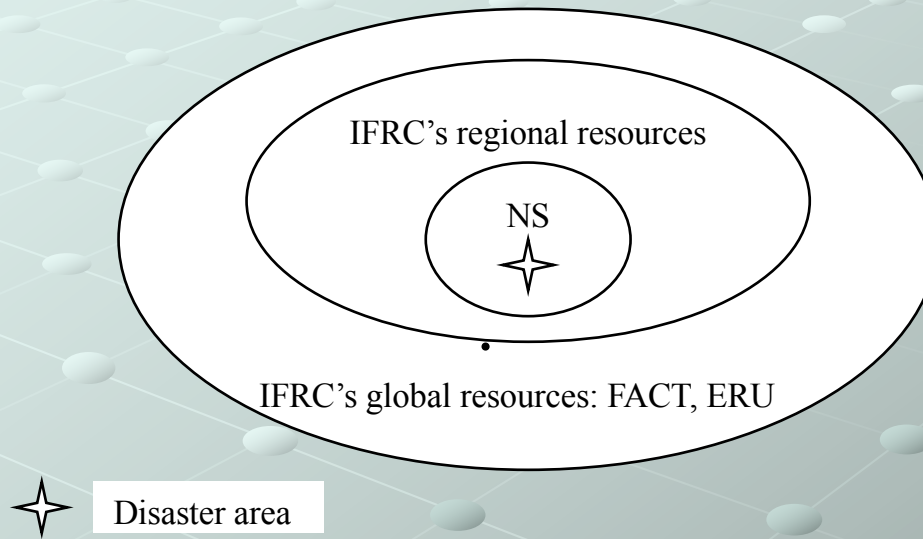


Goods ready to be transported to point of distribution

Overview of the Relief Camp



Concentric Circles of Resource Involvement



Scope of DM Activities

- $DM = DRs + DP + DRb$
- $DRs = \text{Disaster Response}$
 - Immediate
 - Chaotic Conditions
- $DP = \text{Disaster Preparedness}$
 - Steady, Ongoing
- $DRb = \text{Disaster Rehabilitation}$

Implications

- Rhythm of Action and Speed
- Ongoing Discovery of Requirements
- Level of Structure vs. Chaos
- Availability of Resources

Actors in DM

● Red-Cross

- IFRC vs. ICRC

● International Federation of the Red-Cross/ Crescent

- Federation, The Secretariat, and National Society's

● Other NGOs

- Oxfam, Care, MSF,

● Governmental and Military

- Operational Mode – Chain of Command
- Political Sensitivity's

● CNN Effect

Consequences

- Resources are Dispersed across many Actors
- Knowledge about Resource Availability is Dispersed Across Multiple Actors
- Knowledge about Requirements is distributed across Multiple Actors
- Knowledge about Response Actions is Distributed
- Possibly Overlapping Tasks are done by Multiple Actors

The Context of Collaboration – Taking Stock

- Multiple Actors
- Distributed over Multiple Organizations
- Globally Distributed
- Variety of levels of Infrastructure
- Intense Interaction during DRs
- Chaotic and Uncertain
- Slow and Steady during DP and DRb

Consequences

● **“Coordination is sorely needed – but does not exist”**

– Bernard Chomalier - IFRC

Consequences

- Need for bringing together Knowledge from Multiple Sources
 - Distributed
 - Documented and In people's head
- Need to bring together distributed data
- Need for Interaction for Joint deliberations, planning, and coordination.

Requirements for Collaboration Support

- Multi-Actor Participation
- Global in Scope
- Synchronous and Asynchronous
- Should accommodate a variety of Infrastructures
- Various levels of functionality and graceful degradation
- Should include distributed databases, and knowledge bases, expert locaters, multi-media interactions, desk-top sharing

Current Status

- Situation Room – phones, cell phones, and faxes
- Functioning Online Community of Practice (CISM) in Germany – Air Traffic Disasters
- FIU/Bocconi Proposal for Building a Global Online Community of Practice for Humanitarian Disaster relief Logistics

A Community

- A group of **people** bound by a **common cause**, set of values, higher ideal, and/or other ties.
- Sense of community emerges “when enough people engage in **discussion** or **activities** long enough, and with sufficient human feeling, to form **relationships**”

(Rheingold, 1993)

Information and communication technologies

- Enable CoP to form among people working at a **distance**
- Provide backup and redundancy, enabling **hand-over** of community 'memory' of an event, activity or discussion
- Provide **continuity** after an event or activity

Challenges

- Organizational
- Infrastructure
- Ideological
- Infrastructure

Case: CoP for Critical Incident Stress Management (CISM)

- The Practice:

 - Prevention and mitigation of disabling stress following a crisis or disaster

- The Community:

 - An international community of critical incident response teams and communities registered with the International Critical Incident Stress Foundation (ICISF)

- The ICT

 - Internet home: www.icisf.org

- Activities (ICISF)

 - collect and share information about CISM relief teams internationally
 - education, training and support services for all emergency services professions
 - continuing education and training in emergency mental health services for psychologists, psychiatrists, social workers, etc.
 - consultation in the establishment of crisis and disaster response programs for varied organizations and communities worldwide

CISM Team, Germany

CISM in Aviation

- “The main task is to take immediate care of accident victims and people involved in incidents ... to train supporters, to set quality standards for care and therapy measures, to provide scientific assistance as well as ... building up of a network in Germany which effectively unifies the many centres and initiatives already existent in this field.”
- Activities
 - Crisis and disaster response coordination for provision of support (psychological/emotional/material) for the people involved in major incident
 - Community of practice to support CISM Teams
 - ‘in background’: preparation, planning, setting of standards, mutual support and knowledge and information exchange among professionals and ‘permanent’ members of the community, education and training of professionals and ‘supporters’
 - post-crisis (incident-specific): resources, exchange of knowledge and information, support, provision of ongoing therapy
- www.cismteam.de

CISM, Germany

Crisis response procedure

- Call Centre accepts call to emergency number and forwards the request for support to the Coordinator on duty
- Coordinator
 - opens the community support software (FirstClass) and related applications (FC/CISM)
 - establishes a new crisis 'record' and, based on criteria, puts together a (pre-selected) team for the event
 - with click of the mouse, sends an SMS to alert all members (up to 400) and request availability
 - sends email and fax to the necessary administrative organizations (e.g. airlines, national and international aviation authorities) that the CISM Team is involved and provides contact details for CISM Team Coordinator
- Team Members
 - respond by phone, or SMS/email to FirstClass (FC)
- On establishment of final team (usually < 1 hr), Coordinator
 - sends information on task allocation to all members, in FC or by fax
- Coordinator on duty may change and other authorised persons may follow full process because all info is in FC/CISM on server and therefore accessible to any authorised user from any location

CISM Teams: Examples of Communities within the community

● Continuing communities

- Standards of care and legal issues
- Education and training of stress management professionals
- Education and training for incident coordinators
- Family support services
- On-scene support services
- Peer counselling
- De-mobilisation for large-scale disasters
- Coordination of supporters in a crisis
- Sources of funding and other material resources
- Critical incident stress de-briefings

● Crisis communities

- Team membership
- Notices and messages

● Crisis and post-incident communities (incident-specific)

- Victim support
- Support for relatives
- Support for supporters
- Sources of funding and other material resources, appeals etc.
- Communications with the media
- Peer counselling

● Good examples of info shared (no access to community discussion)

- Surface to Air Response Team (US)
www.start4.cism.com