IBM Crisis Response Team

Disaster Response Collaboration

Brent Woodworth
Worldwide Segment Manager,
IBM Crisis Response Team

Overview Responsibilities & Experience

The IBM Crisis Response Team (CRT)

- **<u>Global Coverage</u>**

  - IBM International Humanitarian Relief

  On-site emergency management experience :
  1993 – 2006
  70 + Global Events, 40 Countries

  Canada, France, Greece, Colombia, Ecuador, Venezuela,
  Turkey, Virgin Islands, India, Kosovo, Grenada, Mexico
  Grand Cayman, El Salvador, Peru, Rwanda, South Africa,
  Italy, Germany, USA, Thailand, Indonesia, Sri Lanka, Italy,
  Pakistan, United Kingdom, Bermuda, Australia, Brazil, Philippines,
  and many more….

IBM Crisis Response Team

- **International Response & Recovery Events**

- **Rwanda – Genocide & Cholera**
- **Kosovo – War, Refugee Management**
- **Colombia- Earthquake 250,000 impacted**
- **Venezuela – Mudslides – city destroyed**
- **Ecuador – Volcano, mass evacuation, gas**
- **Peru – Earthquake and Tsunami**
- **Mexico – Earthquake**
- **USA –**
    - **Oklahoma City Bombing**
    - **9-11**
    - **Floods: Nevada, CA, Dakota, Mid-West**
    - **Earthquakes: Northridge, Loma Preida**
    - **Hurricanes: Marilyn, Charlie, Katrina, etc.**
    - **Tornados**
    - **Civil Unrest**
    - **Blackout**
    - **Ice Storms**
    - **Fires**

Indonesia –Tsunami
India – Earthquake, Tsunami
Sri Lanka - Tsunami
Thailand - Tsunami
Philippines - Mudslides
Canada – Ice Storms
Greece - Earthquake
Turkey - Earthquake
Grenada - Hurricane
Virgin Islands - Hurricane
Taiwan – Earthquake, Typhoon
Germany - Floods
France – heat wave
Pakistan - Earthquake
Grand Cayman - Hurricane
El Salvador - Earthquake
Australia – Fires
United Kingdom - Disease

" I Lost Everything"

EARTHQUAKE
Turkey - August, 1999

IBM Assignment: Medical Supply Management

Ÿ **Develop and Implement Systems to address:**

Medical Supply Management

- Ÿ Receiving
- Ÿ Inventory management
- Ÿ Tracking - Shipping
- Ÿ Distribution

Ÿ **Operating Environment**

- Ÿ Inadequate Storage Facilities
- Ÿ Limited manpower
- Ÿ 10,000 + categories
- Ÿ 67 donor countries , 20 languages
- Ÿ Eight (8) warehouse locations
- Ÿ Packing Lists missing
- Ÿ Open packages – expired / used drugs

"The sky turned to night"

VOLCANO
Ecuador - October 1999

500,000 TONS of Ash landed on Quito

Guaga Pichincha Volcano

India Earthquake

Bhuj, India
January, 2001

Magnitude 7.9 Earthquake

- Affected Population: 16,972,606
- Human Fatalities: 30,000 +
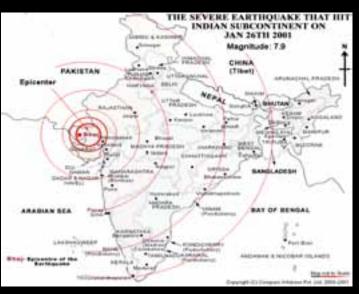- Injured Persons: 68,478
- Destroyed Houses: 228,906
- Damaged Buildings 397,538

India: Gujarat Earthquake Relief

Receipt, Packing and Distribution of Supplies

Field Operation Challenges in Disasters

Environmental, Political, Social, & Economic Issues

• Scale and Impact of Disaster Events

• Infrastructure, voice and data communication system loss & damage

• Rapidly changing environment & unique support requirements

• Individual, bureaucratic and departmental interests: "silo management"

• Multiple responders: UN, NGO, government & business sector coordination

• Resource needs – medicine, shelter, food, supplies, personnel, money

• Chaos, trauma, emotional stress, harsh environment

• Policies, regulations, practices, military activity

• Manual – traditional paper driven systems

• Limited pre-disaster planning & incident command

Tsunami: **Banda Aceh Indonesia**

Meeting with senior government officials

Tsunami: SWIS Satellite Communications System

Tsunami: Restoring Voice and Data Communications

Information Technology & Communications Crisis Management Support Goals:

- Re-establish critical communication support capabilities

- Improve access to critical "Real-Time" decision support information

- Implement data triage procedures

- Provide decision makers with high value information matched against pre-defined decision support requirements

- Design operations for a high stress & limited resource environment

- Facilitate information sharing and communication between relief organizations

- Identify and reduce redundant efforts

- Deliver flexible, interoperable, scalable, and secure technology solutions

- Provide comprehensive reporting & linkage to legacy systems

- Adapt systems to meet regulatory, cultural, social, skill and usage requirements

Management Information System for Aceh Disaster
Sistem Informasi Manajemen Bencona Aceh (SIMBA)

Training Students on SIMBA

[IDP] [LAPORAN] [LOGISTIK] [POSKO] [SYSTEM]

SIMBA
SISTEM INFORMASI MANAJEMEN BENCANA ACEH

INFORMASI IDP
Masukkan data IDP (form A1) / Enter IDP data(Form A1)
Listing data IDP / List IDP data

LOGISTIK
Penerimaan barang / Incoming material
Pengeluaran barang / Outgoing material
Transit barang / Transit material
Listing transaksi / Transaction listing
Listing pergerakan barang / Material movement listing
Inventori / Inventory
Permohonan barang / Material request

PELAPORAN
Masukkan Laporan / Enter report
Listing&cari laporan / Listing&search report

POSKO
Info Posko / Posko info
Staff Posko / Posko staffing
Asset Posko / Posko asset
Data transfer
Data transfer status

SYSTEM ADMIN
Create new Posko
Edit this Posko
Test transfer
Create user
Administer user

Requirements meeting with Government

IBM Indonesia Programming Team in Aceh

SAHANA   - Relief Management System (open source)

Student volunteer with IBM Thinkpad

Training Session on SAHANA

SAHANA sign on screen

Displaced person registration

NGO and relief organization log

Trauma Counseling Training Program

NATIONAL CHILD PROTECTION AUTHORITY - SRI LANKA

NATIONAL CHILD PROTECTION AUTHORITY

Teach the Teacher Class

Tsunami Memory Drawings by school children

IBM Trauma Doctor greeting children at Boosa relief camp

Meeting with displaced children at a relief camp

Sri Lanka

– Trauma Consulting

Katrina   - Long Beach, Mississippi / Storm Surge

Hurricane Katrina: IBM Crisis Response

Missing Person Reunification Project

Working with State of Louisiana to integrate 52 different databases into a single, unduplicated, up-to-date list to find matches easily

Online curriculum management application

Posting the Louisiana state curriculum in an easy to search and access web site

Trauma counseling for teachers

Expert advice on how to welcome evacuees into classrooms, what to expect from children who are living in temporary situations and have experienced stress, and how to recognize and respond to signs of serious trauma

Temporary housing: Tracking and management

Working with the City of Houston to develop a modular application to track and manage temporary housing, match individuals with appropriate facilities and provide for an efficient assignment process

Hurricane Katrina: IBM Crisis Response

Emergency health needs

Working with Centers for Disease Control and the U.S. Department of Health and Human Services to provide access to necessary prescriptions and care for both chronic illnesses and disaster trauma

Jobs4Recovery.com

Working with U.S. Chamber of Commerce, local Chambers in the Gulf, and not for-profit partners to create job post/search web site One-stop access to all major job sites on Web 1-800-volunteer.org site

Points of Light Foundation

Streamline volunteer recruitment prior to and during emergency situations by improving the ability to recruit for specific needs and specialized matching for disaster preparedness and response

Pakistan Earthquake
- Balakot

Pakistan Earthquake   - 70 Operations per day / Limited Anesthesia

Pakistan Earthquake   - Epicenter Landslide Area

Building Global Resiliency

1. Communications and Information Management must be priority items in crisis management planning.

2. Organizational "stovepipes or silos" should be broken down to allow effective information sharing.

3. Emergency Powers Provisions should be established in advance to expedite critical services and eliminate bureaucratic, governance, or procedural roadblocks.

4. Pre-defined "Task Orders" providing full authority to take action, purchase services, supplies, and make payments should be defined, written, and approved in advance of a crisis event.

5. Memorandums of Understanding (MOU's) between departments and agencies to facilitate information sharing and relief actions should be agreed upon in advance of an event.

Building Global Resiliency

6. Incident Command System (ICS) methodology and Unified Command protocols should be utilized among all responding agencies.

7. Emergency Management Support Systems should be pre-established, updated, and exercised on a regular basis.

8. Implement localized social programs to encourage risk mitigation activities, self reliance, and community resiliency.

9. Build Public / Private sector partnerships to share information and services including emergency management specialists and external support .

10. Simple and well defined procedures and programs work best when combined with education, planning, and testing.

Mitigation

Economic Benefits of Preparedness & Mitigation

US Congressional Report – Independent subcommittee study 12/05:

"A $1 investment in hazard mitigation provides the nation with $4 in future benefits".

- Building a disaster resilient businesses and government agencies communities will reduce costs, limit exposures, and maintain operational continuity while protecting employees, property, reputation, corporate value, and competitive marketplace position.

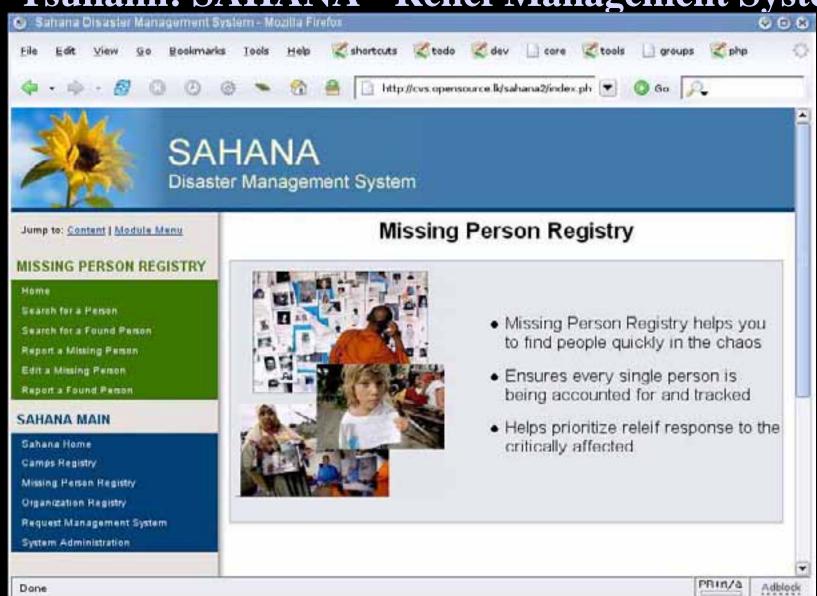# Global Preparedness: Current Status & Long Term Perspective

United Nations:

Ÿ The IBM Crisis Response Team is supporting an effort to build a strong sense of disaster response and relief partnership among the multiple UN agencies, NGO's, business, and independent government representatives.

Ÿ The IBM team has pro-actively met and worked with senior UN and NGO on-site representatives including:

  Ÿ UN Assistant Secretary General for Humanitarian Affairs

  Ÿ UN Joint Logistics Command (UNJLC)

  Ÿ UNICEF – child health, education, equality and protection services

  Ÿ CARE – international relief

  Ÿ WHO – World Health Organization

  Ÿ UNHCR – UN High Commissioner for Refugees, UNDP – UN Development Program

  Ÿ OCHA – UN Office of Coordination for Humanitarian Affairs

Ÿ **SAHANA – Global Open Source System for Emergency Management**

Ÿ The IBM team is supporting the consolidation and enhancement of open systems utilized in response to the Tsunami , the earthquake in Pakistan and the mudslides in the Philippines. The development of an integrated and comprehensive crisis management system embraced by UN agencies will assist multiple countries and communities in pro-actively preparing for , responding to, and recovering from disasters.

Tsunami: SAHANA - Relief Management System

Top 10 Rules of Crisis Management

1. Remain Calm – Think Clearly
2. Respond Decisively – Take Action
3. Do not blame or accuse others
4. Show patience and compassion
5. Maintain your sense of humor
6. Tell the truth, Communicate clearly
7. Do your best work
8. Build and follow your plan effectively
9. Do not overburden yourself - delegate
10. Demonstrate Leadership and Confidence

Thank You

IBM Crisis Response Team
Brent Woodworth
bhwoodwo@us.ibm.com
contact numbers
818-702-6295 USA
818-702-9412 USA