Data Communication in Emergency Operations

ITU/ESCAP Disaster Communications Workshop,
12 – 15 December 2006,
Bangkok, Thailand

Briefing on ET Cluster-Data Communications

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Tsunami Response

- **First ET Inter-Agency Data Communications Service**

- **In response to a change of communications requirements in emergencies**
  - **Email**
  - **Internet access**

- **Provision of Data Communications**
  - **Fly-Away VSATs/Local ISPs**
  - **Wireless Connectivity**
  - **Wireless LANs**

Emergency Telecommunications Cluster (ETC)- Background

- **Why Data Communications?**
- **Major change of the communication requirements in emergency operations**
- **At the onset of an emergency, the humanitarian community needs immediate access to:**
  - **Email** – electronic mail communications with the rest of the world
  - **File Transfer** – electronic transmission of any type of document to anywhere in the world
  - **ERP** – (Enterprise resource planning) Access to corporate applications for finance, supply, human resources and programme planning
  - **Video** – Video conferencing or broadcasting of important news and events.
  - **Intranet** – Corporate Intranet for information sharing
  - **Internet** – Public Internet for information gathering and sharing

Emergency Telecommunications Cluster (ETC)- Background

- **What is a Cluster?**
- **Created by the Inter-Agency Standing Committee (IASC)**
- ***Mechanism to address identified gaps in response***
- **Enhance the quality of humanitarian action by strengthening partnerships between NGOs and international organizations.**
- **Part of a wider reform process for improving effectiveness of humanitarian response via greater accountability, predictability and partnership.**
- **Emergency Telecommunications Cluster (ETC) created in mid-2005**

Interagency Data Communications ETC model: Advantages

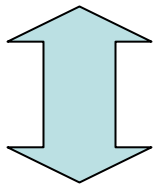
- Reduced infrastructure at emergency location
- Reduced cost
- Quick deployment
- One dedicated interagency support team
- Oversight and accountability
- Improved Coordination

ETC - Data Communication Objective

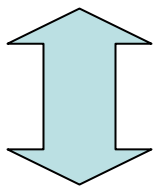
To ensure the rapid establishment of appropriate Data Communication services in emergency areas

Strategy

Preparedness & Planning



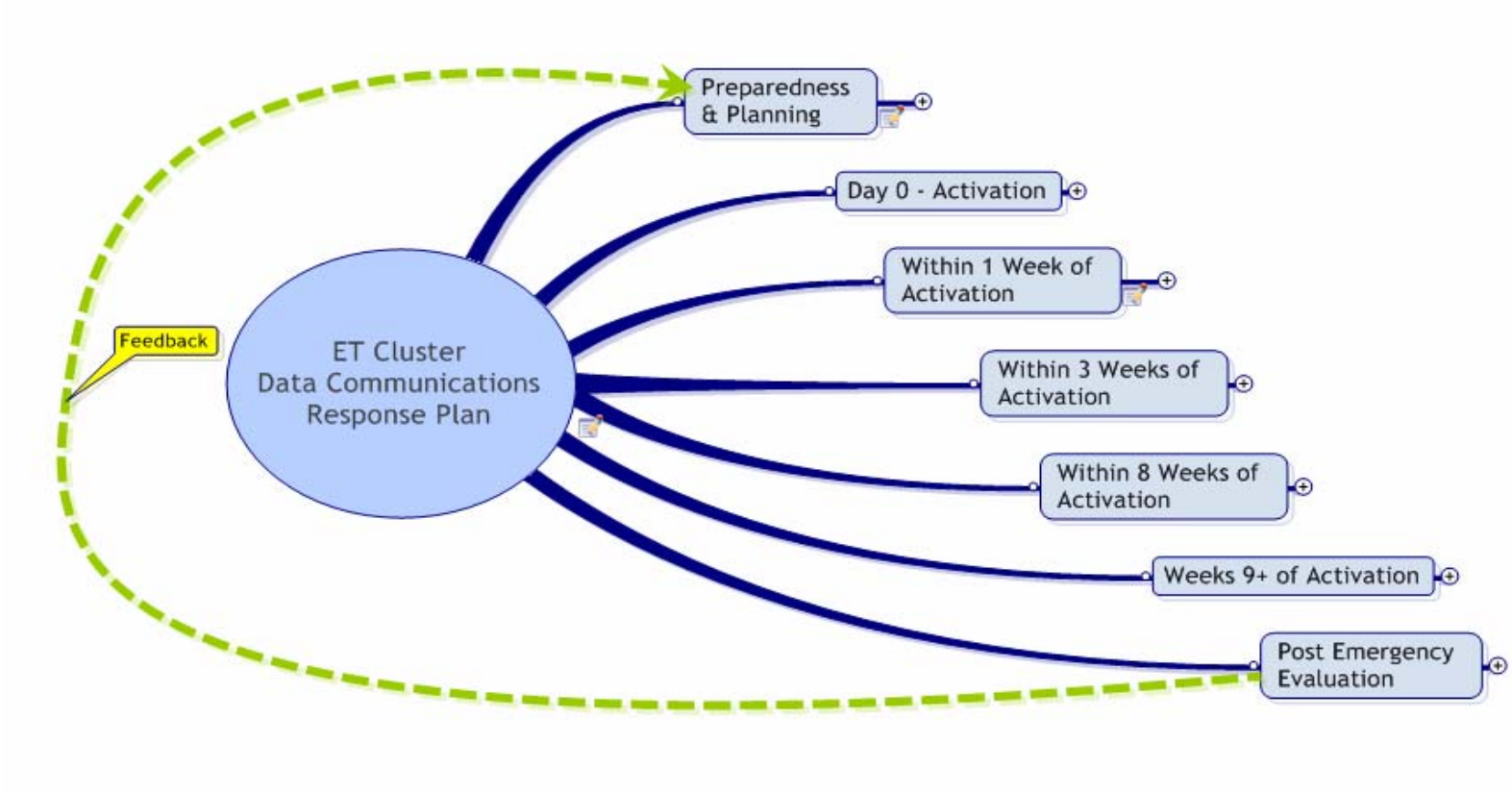
Emergency Response



Post Emergency Evaluation

ET Cluster Data Communications

Overall Model



Preparedness & Response

People

- **Human Resources**
  - –UNICEF – capacity building
  - –Standby Partners
  - –Inter-agency / NGO
  - –Private Sector
- **Competencies**
  - –Responder Support
  - –Coordination Support
  - –Technical Support
  - –Trainers

Process

- **Supply and Logistics**
  - –Rapid delivery
  - –Strategic Storage/Pre-stock
- **Governance**
  - –Coordination
  - –Monitoring
  - –Reporting
  - –Funding

- **Develop Preparedness Guidelines and Emergency Response Best Practices:**
  - –Service Delivery and Management
    - •Service Implementation
    - •Operational management
  - –Human Resources
    - •Terms of Reference
    - •Accountabilities
    - •Memorandums of Understanding
  - –Standards
    - •Common technical standards

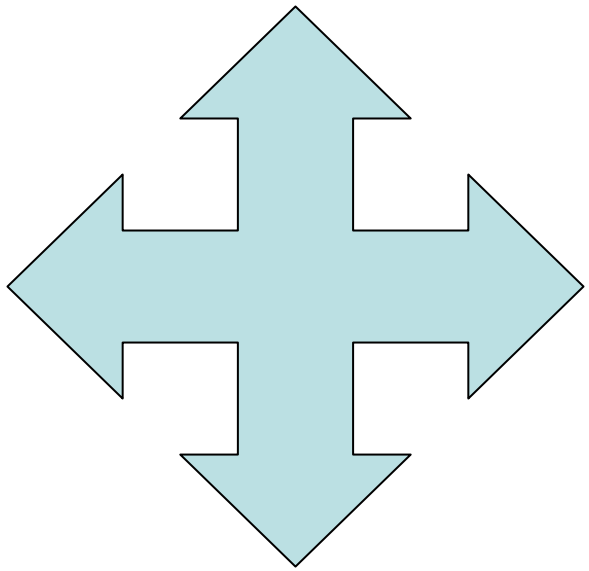
Technology

- **Use of Multiple Technologies**:
  - –Global Mobile Personal Communications by Satellite
  - –VSAT
    - •Ku and C Band
    - •From .96m to 3.8m dishes
  - –Terrestrial Links
    - •T1, ISDN, DSL, Cable, MPLS
  - –Wireless Networking
    - •WiFi, WiMAX, Microwave
  - –Security
    - •Firewalls
    - •VPN
  - –Performance Management
    - •Quality of Service
  - –Applications
    - •Voice and Video
  - –Internet
    - •Local/Global ISPs
  - –Power
    - •Local power, Solar, Battery, Generator

Putting it all together

People

Process



Technology

Response & Service Delivery

Response & Service Delivery

One Response – One Team!

- **Develop strong partnerships**
  - –We cannot do it alone!

- **Service oriented response**
  - –Phased approach with pre-defined response timeframes
  - –Within each phase, services, resources and activities are defined

ETC model – Phase I

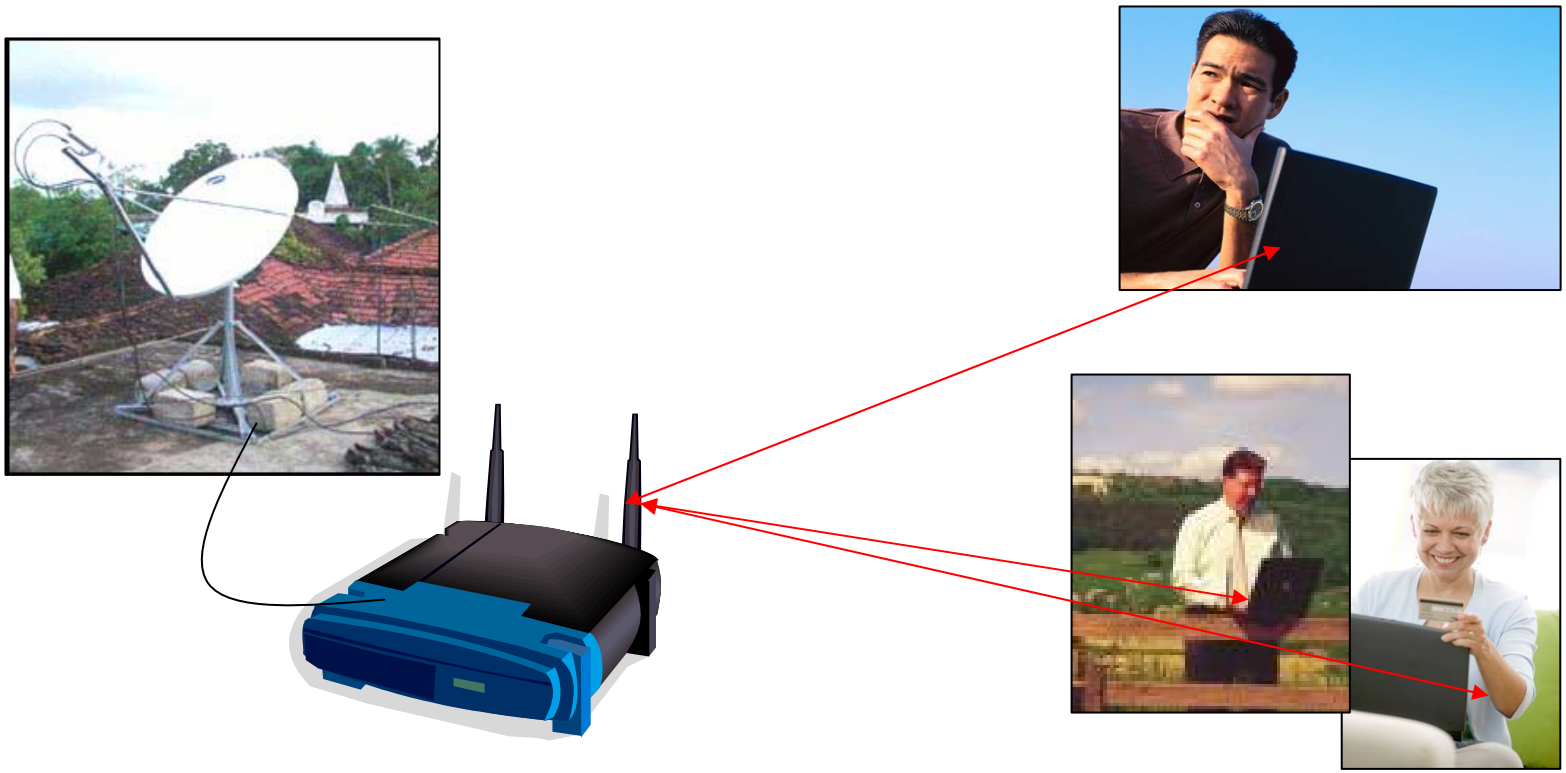
Timeframe: 24 hours to 30 days

Key responders will be provided with web-based email access from a single point of presence in the intervention area, allowing organizations/NGO's to communicate essential data and security information.

First Responders in Action

ETC model – Phase II

Timeframe: within 3 weeks



Internet “hot-spot” connected to light-weight satellite terminal provides data-connectivity for laptop users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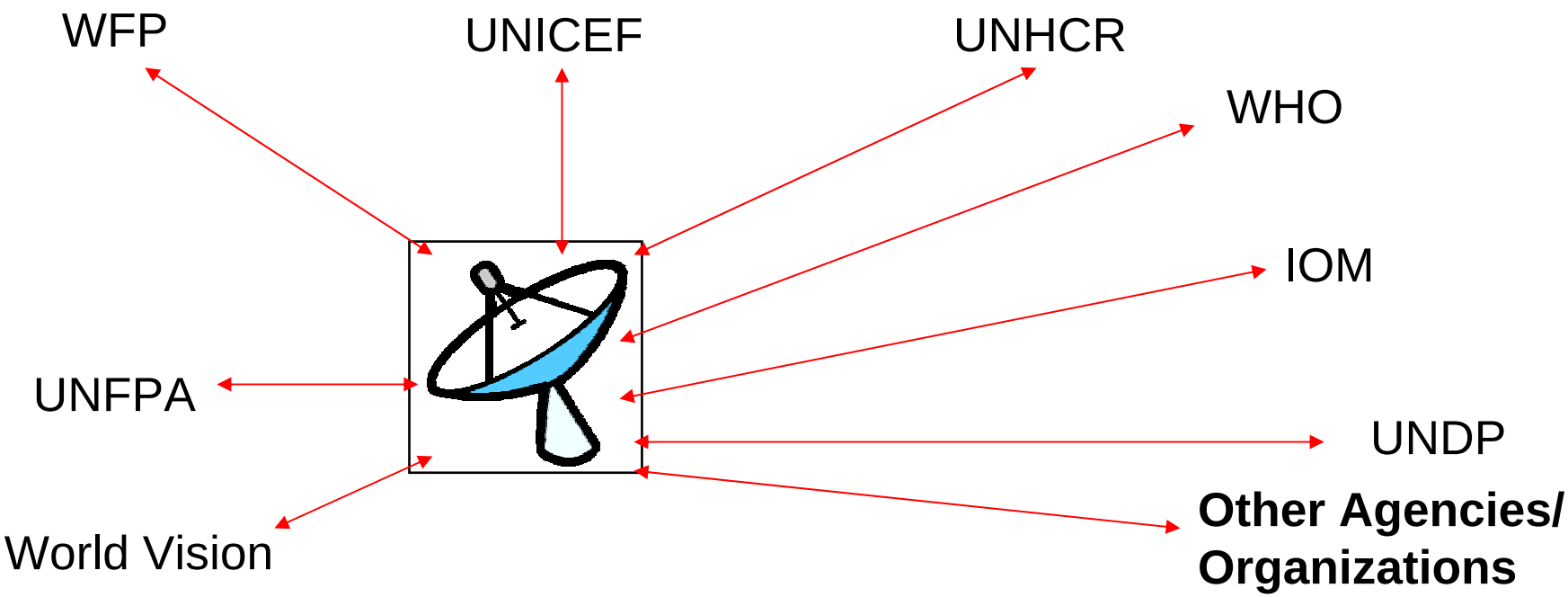
ETC model – Phase III

Timeframe: within 8 weeks



ETC-DC provides other UN Agencies with a more reliable and sturdy Wide Area Network link for Internet access and corporate applications while also providing local inter-agency connectivity through the implementation of a Metropolitan Area Network.

ETC model – Phase IV

Timeframe: Post Phase III Deployment

Mainstreaming or Exit strategy Phase

The objective of ETC-DC in Phase IV is to perform continuous network monitoring and support, streamlining of services to reduce cost and improve reliability and resilience.

Post Emergency Evaluation

- **Results Based**
  - –Feedback directly into preparedness
- **Dynamic**
  - –Continuous monitoring at each response phase
- **ET Cluster level**
  - –To develop benchmarking and indicators

On Behalf of the Emergency Telecommunications Cluster

Thank You

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