

Expecting the Worst: EM Communications in Uncertain Times

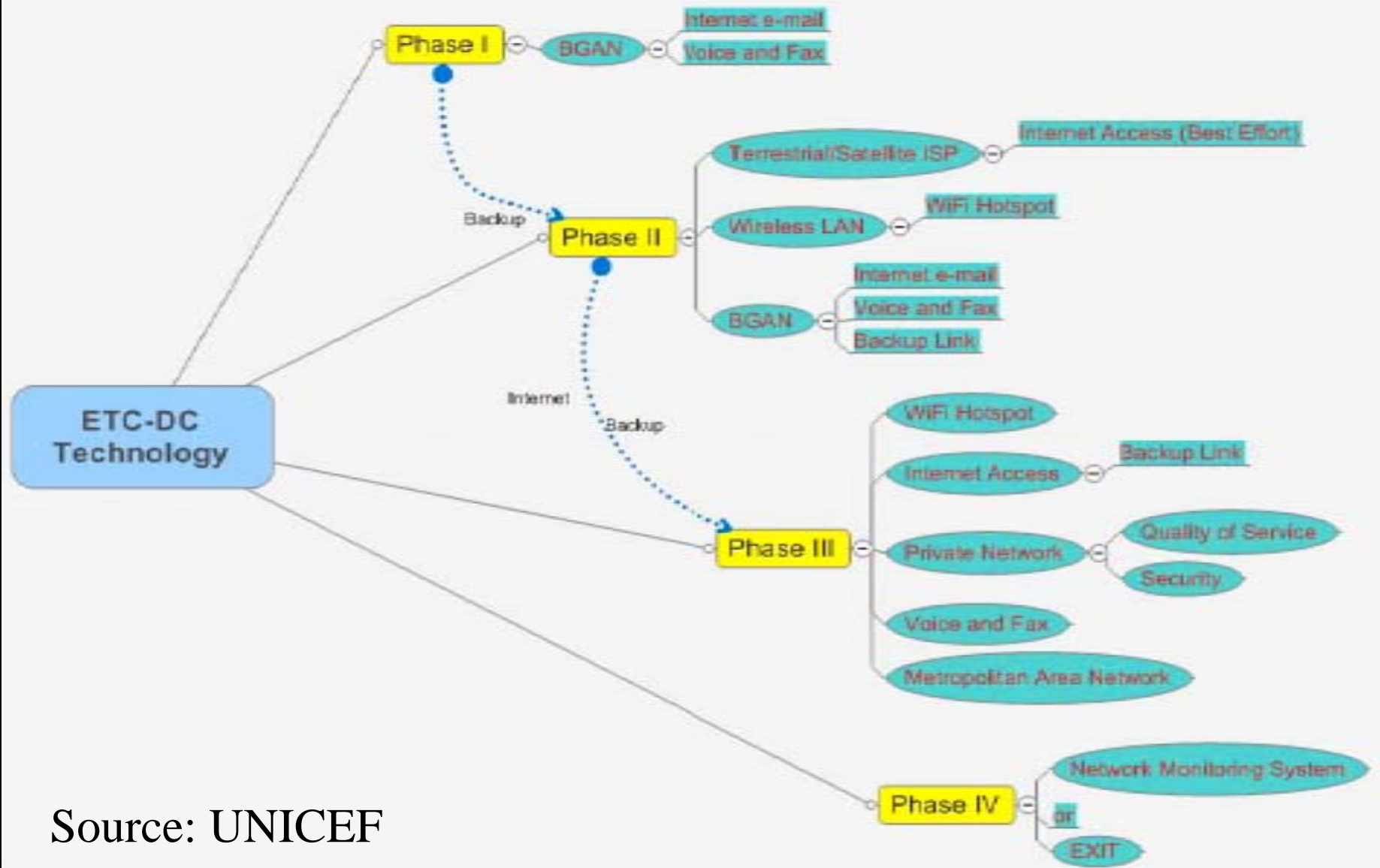
David Hartshorn
Secretary General
GVF

GVF: Awareness, Training, Liaison

- Involvement With:
 - UN-WGET
 - NGO-NetHope
 - Local, State Federal Agencies
 - Private Sector



UN 'Cluster' & Applications



Source: UNICEF

NGO Collaboration & Apps - Stage 1

Stage 1 – Within hours of disaster striking:

First relief worker(s) arrive in hostile environment to survey and assess damage, **transmit pictures, security information, relief materiel and personnel requirements to Head Offices.**

Agencies decide at this stage how deeply involved they will be with relief efforts. This stage characterized by highly **individualized, mobile, temporary and transient computing, communication and power solutions.**

NGO Collaboration & Apps - Stage 2

Stage 2 – Within two weeks of a disaster striking.

Teams begin to arrive on the scene as risk of disease and malnutrition escalates. Requirements are continuous **monitoring** of disaster, **assessment** of victim needs, **management** of relief material deployment between and across aid agencies, personnel **security**, application and **reporting** of donated funds, **uploading** of case studies, pictures and relief reports.

This stage is characterized by small (up to 10 people), often roving groups who need easy-to-setup-and-takedown **computing, communication and power** solutions

NGO Collaboration & Apps - Stage 3

Stage 3 – From one month following disaster to multiyear.

Agencies provide resources for **building reconstruction, counseling, family reunification, food distribution, water purification, etc.** thus becoming part of the community over a long period of time.

This stage is characterized by larger (20 or more people) groups in fixed office scenarios with the **potential of moving** to different office locations as the situation unfolds.

Source: NetHope

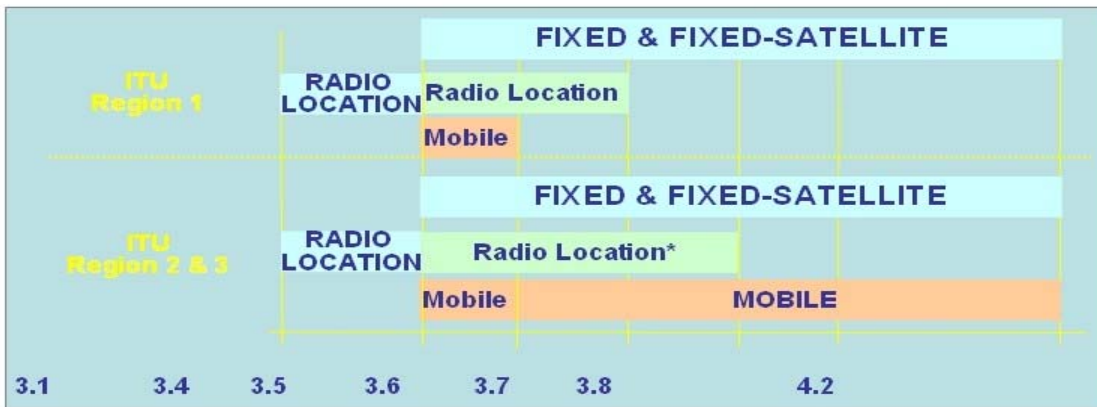
Addressing The Global Spectrum Crisis



ITU WRC-07 C-Band Spectrum



ELECTROMAGNETIC & SENSOR SYSTEMS DEPARTMENT



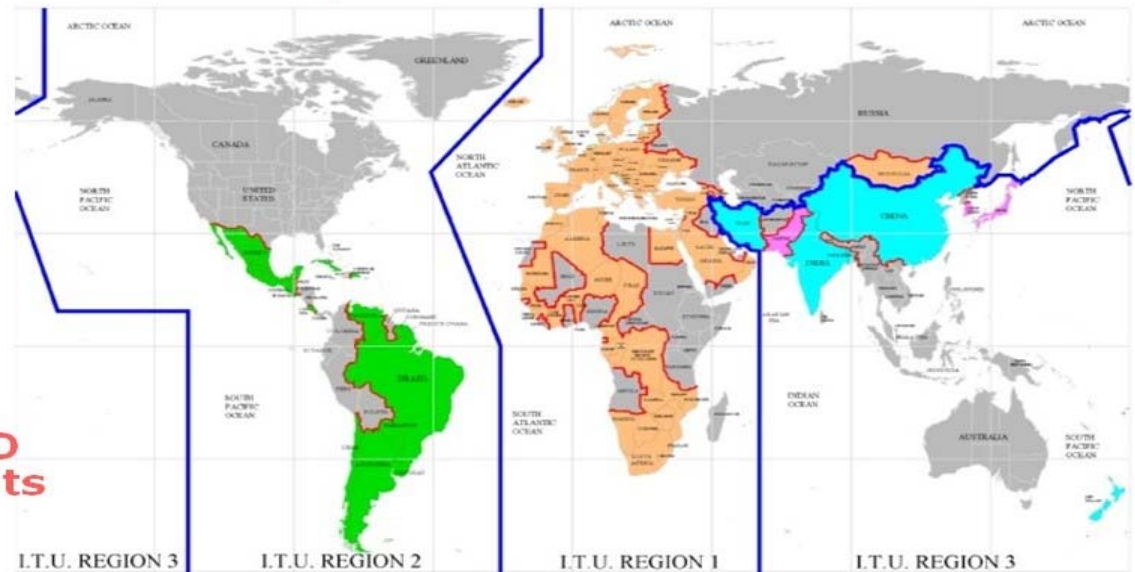
**No Change in ITU
Radio Regulations
Table on 3400-4200
(victory?)**

* Primary U.S. by Footnote 5.433

**Post WRC-07 'Opt-In'
Foot Noted Countries
(Mobile 3.4-3.6 GHz)**

- 3400-3500 Mobile
- 3400-3600 Mobile
- 3400-3600 Mobile
- 3400-3500 Mobile

**PFD
Limits**



From Uncertainty to Certainty

- Response vs. Preparedness
- Where's the ROI?
- Sharing Resources?
- Multi-Use?
- Interoperability?