Guidelines on Information & Communication Systems

1) Introduction — Paradigm shift in DM at Global level
   - Natural Hazard Profile in India and special features of ICT (Information & communication Technology)
     - ICT For Flood Managements — Special Features — Warning, Foreca[st] Preparedness
     - ICT For Cyclone · Managements — Special Features — " "
     - ICT For Earthquake Management — Special Features — " "
     - ICT For landslide Management — Special Features " "

2) Requirement of ICT Network During various Phases of Disaster Continuum
   - ICT For Mitigation phase
   - ICT For Preparedness Phase
   - ICT For Response phase
   - ICT For Recovery Phase
   - GIS Platform For Holistic DM
   - Action Points

3) Existing Communications Base and ICT Support — Situation Analysis.
   - Existing Telecommunication Network of various Service Providers Govt Agencies
   - National Emergency communication Plan, Ministry of Home Affairs, Govt of India
   - Disaster Management Support Network of ISRO
   - Cyclone Forecasting & warning Network
   - Flood " " "
   → Drought " " - "
   → Tsunami " " "

4) Need For GIS Based National Disaster Management Information System
   → GIS Database
   - Development of Vulnerability Analysis & Risk Assessment Tools
   → Participatory Agencies and Nodes in NDMIS

5) Establishment of National Disaster Communication Network
   - Technology Issue
   - Network Management segment
   - ~~Commu~~ Connectivity From National to State Headquarters
     → " " State Headquarters to District HQ's
     → " " District HQ's to Sub-Divisions Block
     → Forecasting & Early warnings

6) Emergency Operations centres : Connectivity, Database & Applications Development
   - Flow of Information For EOC's at Different levels
   - Command & control
   - Application & Database at National Emergency Operation centres
   - " " at State " "
   - " " at District " " "

7) Facilities Provided at Emergency operation centres
     → Facilities at NEOC (National Emergency operation centres)
       & SEOC (State Emergency operation centres)
     → " " DEOC's (District Emergency operation centre)
   - Incident Commander at Affected Site
   - Mini Mobile communication pack at District Headquarters

8) Technological challenges For Implementation of NDCN
   - Language Barrier
   - Creation of call centres & websites
   - logistic support & Maintanance
   - Action Points

9) Technology, Emergency Trends & R&D requirements
   → Satellite phones
   - Single channel Per Carrier
   - Convergence of voice, Video and Data Services
   - Signal Transmission & Mobile communication Technologies For Cellular Service
   - wifi Technology