

## **EMERGENCY PREPAREDNESS AND RESPONSE**

### **THE ROLE OF INFORMATION TECHNOLOGY AND TELECOMMUNICATION**

The important health consequences of large-scale disasters are mass casualty and potential communicable disease outbreaks. In such situations, health sector faces challenges such as issues involving pre hospital and hospital care; early warning system for disease outbreaks and disease control measures; essential supply, communication and mobility needs; and restoration and rehabilitation of health facilities. To effectively face these challenges, the following areas need strengthening:

- Pre hospital care
- Inter sectoral coordination
- Surveillance and control of disease outbreaks
- Emergency early warning system
- Capacity building

The recent advances in the field of information technology and telecommunication can be put into effect to support the health sector in the disaster management. Application of information technology can strengthen the e - health system (telemedicine), emergency early warning system, disease surveillance system and supply chain management system. However, telecommunication system failure due to overloading and system damage due to the disaster itself, and issues of information technology architecture such as lack of connectivity / networking and lack of hardware / software could hamper this. In this respect, donor agencies could assist the affected countries.

Use of modern technology such as satellite telephones and VHF / UHF systems could help to counteract the telecommunication system failure to some extent in disaster situations. Donor assistance is required for the establishment of such systems. Until such time, use of existing control rooms with radio communication facilities such as police control rooms could be used for this purpose.

**Dr. S. Terrence G. R. de Silva,**  
**Deputy Director General (Medical Services),**  
**Ministry of Health, Sri Lanka.**