



**APT RECOMMENDATION ON  
RADIOCOMMUNICATION SYSTEMS FOR EARLY WARNING AND  
DISASTER RELIEF OPERATIONS**

**APT/ASTAP/REC-01 (Rev.1)  
Edition: November 2012**

**Approved by**

**The 36th Session of the Management Committee of the Asia-Pacific Telecommunity  
6 - 9 November 2012  
Bangkok, Thailand**

*(Source: MC-36/INP-25, Decision No. 5 (MC/36))*

**APT Recommendation  
(MC36, Bangkok, 2012, Rev.1)**

**RADIOCOMMUNICATION SYSTEMS FOR EARLY WARNING  
AND DISASTER RELIEF OPERATIONS**

**Scope**

This Recommendation provides guidelines for deployment of wireless communications systems to be used for early warning and disaster relief operations, utilizing Fixed Radio Communication System (FRCS) and/or Mobile Radio Communication System (MRCS). Several ITU and APT references are provided that could be used by APT member countries.

Asia Pacific Telecommunity (APT),

*considering*

- a)* that radio communications are essential for early warning, disaster mitigation, and relief operations in the event of disasters to deal with a serious disruption of the functioning of society, posing a significant widespread threat to human life, health, property or the environment, whether caused by accident, natural phenomena or human activity;
- b)* that administrations may have various growing needs and requirements for disaster-relief radio communications depending on their circumstances;
- c)* that developing technical characteristics and guidelines for the radio communication systems for early warning and disaster relief would promote a common technical basis in planning of those systems;
- d)* that such systems that have a common basis would benefit cooperation between countries for the provision of effective and appropriate humanitarian assistance in case of disasters, particularly in view of the special operational requirements of such activities involving multinational response,
- e)* that terrestrial and satellite systems should complement each other in support of disaster relief radio communication network;

*recognizing*

- a)* that Resolution 646 of World Radiocommunication Conference (Geneva, 2003) “Public protection and disaster relief” urges Member States to facilitate use of telecommunications for the safety and security of the personnel of humanitarian organizations;
- b)* that ITU-R Recommendation F. 1105-2 lists several types of radio communications which are useful in disaster mitigation and relief operations;
- c)* that APT Report USE AND EXAMPLES OF RADIOCOMMUNICATION SYSTEMS FOR EARLY WARNING AND DISASTER RELIEF OPERATIONS provides examples of fixed and mobile radiocommunication systems for early warning and disaster relief operations.

- d) that recommendation APT/AWF-1 gives one example of channelling plan for Radiocommunication systems for Public Protection and Disaster Relief;
- e) that ITU-D SG2 Q.22's Final Report contains many findings that can be referred to when implementing satellite telecommunications for early warning and disaster relief;
- f) that Recommendation ITU-R S.1001-2 provides useful guidelines for the use of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations;
- g) that Report ITU-R S.2151 provides references on the use and examples of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations;
- h) that Recommendation ITU-R M 1854 provides useful guidelines on the use of Mobile Satellite Services (MSS) in disaster response and relief;
- i) that Report ITU-R M. 2149 provides references on the use and examples of Mobile Satellite Service Systems for relief operations in the event of natural disasters and similar emergencies;
- j) that Recommendation ITU-R BT 1774-1 provides useful guidelines on the use of Satellite and terrestrial broadcast infrastructures for public warning, disaster mitigation and relief;
- k) that Recommendation 647 (WRC 07) provides spectrum management guidelines that can be referred to when considering emergency and disaster relief radiocommunication;
- l) that Recommendation ITU-R M 1826 describes harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3;
- m) that Recommendation ITU-R M. 1637 provides useful guidelines on global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations;
- n) that Recommendation ITU-R M. 1042 provides useful guidelines on disaster communications in the amateur and amateur-satellite services;
- o) that Recommendation ITU-D 13 provides useful guidelines on effective utilisation of the amateur services in disaster mitigation and relief operations;
- p) that Report ITU-R M.2033 provides references on the radio communications objectives and requirements for public protection and disaster relief;
- q) that Resolution 644 (Rev. WRC-07) urges the study and work on utilising radiocommunication resources for early warning disaster mitigation and relief operations.

*recommends*

1 that APT members are encouraged to deploy suitable fixed and/or mobile radiocommunication systems for early warning and disaster relief which are described in recognizing a) to q);

*invites APT members and the APT secretariat*

1 to promote further activities for raising awareness of importance and effectiveness of the radiocommunication systems for disaster management.