

GENERAL NOTICE NO.16/2022

NATIONAL EMERGENCY COMMUNICATIONS PLAN - INVITATION FOR WRITTEN REPRESENTATIONS

The Eswatini Communications Commission (ESCCOM) is the regulatory body responsible for regulating the communications sector in Eswatini, constituting of telecommunication services and networks, broadcasting services, postal services and the use and allocation of radio spectrum. It derives its mandate from the Swaziland Communications Commission Act no. 10 of 2013.

The Eswatini Communications Commission, hereinafter referred to as the Commission, in exercise of its mandate under Section 7(y) and 7(z) of the Eswatini Communications Commission Act, 2013 has developed the National Emergency Communications Plan, 2022.

The provisions of Section 32 of the ESCCOM Act, 2013, provides for stakeholders and interested persons to make comments on proposed decisions of the Commission. In this regard, the public is hereby invited to submit their written representations on the National Emergency Communications Plan. Representations must be submitted to the Commission no later than **17h00 on 16 September 2022** by post to Eswatini

Communications Commission, P.O. Box 7811 Mbabane, hand delivered or electronically to legal@esccom.org.sz.



DRAFT NATIONAL EMERGENCY COMMUNICATIONS

PLAN

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Abbreviations

ВСР	Business Continuity Plan
САР	Common Alerting Protocol
CDM	Comprehensive Disaster Management
DM	Disaster Management
EAS	Emergency Alert System
ESCCOM	Eswatini Communications Commission
HF	High Frequency
ICT	Information and Communications Technology
ITU	International Telecommunications Union
LMR	Land Mobile Radio
NDMA	National Disaster Management Agency
NECP	National Emergency Communications Plan
NEOC	National Emergency Operations Center
SOP	Standard Operating Procedure
UHF	Ultra-High Frequency
UNISDR	United Nations International Strategy for Disaster Reduction
VHF	Very High Frequency

1. Introduction

1.1 Rationale

The ability of emergency responders to effectively communicate is paramount to the safety and security of the country. Reliable telecommunications are therefore necessary to the management of any emergency as inadequate emergency communications capabilities can adversely affect response and recovery efforts. In this regard, the Eswatini Communications Commission (ESCCOM) along with the National Disaster Management Agency (NDMA) seeks to establish a National Emergency Communications Plan (NECP) to enable and ensure communications availability during the disaster mitigation, preparedness, response and recovery phases, by promoting coordination across all levels of government, between public and private organizations, and within communities at risk.

1.2. Purpose

The purpose of the National Emergency Communications Plan (NECP) is to:

- review the existing emergency infrastructure and processes; and articulates key steps for upgrading the emergency response machinery, taking account of trends in disaster management and emerging technologies.
- 2. outline emergency communication mechanisms and the roles and responsibilities of responder agencies.
- 3. support the continuity of everyday activity and restoration of disrupted services at the earliest possible opportunity
- 4. recommend the integration of broadband to modernize emergency communications; and address the roles of all stakeholders supporting incident communications.
- 5. give focus on the persons, processes, and technology that are critical to efficient emergency communications.
- ensure the availability and interoperability of communications to manage emergency response; establish command and control; maintain situational awareness; and function under a common operating communications infrastructure, for a broad range

of incidents as defined in the National Disaster Management Act, 2006 or any legal instrument under the Act.

1.3. Background

The Kingdom of Eswatini is a small landlocked country nestled between Mozambique in the east and South Africa in the west. The country is exposed to a wide range of hydro-meteorological hazards, including tropical storms and cyclones.

The National Disaster Management Agency has the primary responsibility of coordinating the country's emergency relief agencies and resources to reduce disaster risk and manage emergency response and recovery. The Agency relies on the competencies and capabilities of various stakeholders, both governmental and non-governmental to prepare for, mitigate, respond to and recover from disasters.

At its core, is the ability to coordinate and organize emergency personnel from various organizations including, the Defence Force, Police Services, Fire and Emergency Services, to respond to incidents of different scales and magnitudes on a required basis. Their ability to respond in real time is essential to establishing command and control of an emergency or disaster, maintaining situational awareness; and responding effectively to a broad range of incidents.

An emergency situation may escalate into a disaster, either due to its very nature, or as a consequence of an insufficient response to the initial event. The magnitude of the event will require resource mobilization on a regional or even international scale. Communication related to a disaster includes activities well beyond an alert requesting emergency response, which is normally made through available telecommunications. It involves communication within each responder agency and among all responder agencies at the disaster site. Additionally, it also allows all responder agencies at the disaster site to communicate with other organizations outside of the affected area.

Currently, alerts and updates regarding impending disasters which may impact the public are disseminated via public radio and television broadcast stations, social media and public telecommunications networks. Early warning systems currently used by the NDMA are:

- Radio and TV broadcasting networks-wired and wireless
- Short Messaging Systems on Telecommunications Networks

The failure of telecommunications and broadcasting infrastructure following natural or manmade disasters can seriously hamper relief operations. When telecommunications infrastructure is damaged, network connectivity is disrupted or networks become congested: Response and recovery efforts are delayed and there is difficulty coordinating efforts, all of which affect the quality and timeliness of relief services. When broadcast transmitting infrastructure is damaged the disaster management agencies are severely handicapped in communicating alerts and updates to the public.

Emergency telecommunications and broadcasting facilities ought to be constantly upgraded to employ new technologies and or retrofitted to ensure resilience.

1.4. Objectives

The primary objectives of the National Emergency Communications Plan are to:

- Foster a better telecommunications/ICT industry coordination and response for disaster management;
- Enable all emergency responders to communicate and share information on a reliable and flexible system across all agencies in the event of a threat or hazard, as needed and when authorized;
- Identify a contingency system which allows emergency response agencies to maintain communications in the event of damage to or destruction of their primary communications infrastructure
- Develop a resilient system for public notification, alerts and warnings.
- Establish systems and processes for the restoration of basic telecommunication services (voice and data) within 72 hours in affected areas.
- Establish a contingency emergency communications system for contacting regional and international agencies.

2.Regulatory Framework

The Eswatini Communications Act, 2016 Section 6(a)(c)(d), 7(y)(z)(aa) respectively, gives the Commission a mandate amongst others to:

- regulate and supervise the operation of electronic communications networks and the provision of electronic communications services in Eswatini;
- regulate and supervise the provision of radio and television broadcasting services and the content of those services;
- promote the development of innovative, secure, modern and competitive communications infrastructure and the delivery of related services;
- ensure the operation of communications networks and communications services during times of public emergency
- establish, with assistance from the Ministry, a National Emergency Office to coordinate affairs between Government agencies, electronic communications, broadcasting and other utility providers in times of national emergencies
- recommend the approval of the Minister a national priority restoration policy and practice to
- ensure that adequate communication facilities are available on a preferential basis to public authorities, such as, fire authorities, the police service, hospitals, the defense force, etc., in times of public emergencies as declared by the Government or as a result of network outages;

Action item 1: Ensure emergency response personnel can communicate:

- As needed, on demand, and as authorized
- At all levels of government
- Across all disciplines

3. Response Arrangement

- 3.1. Communications Infrastructure
- 3.1.1. Existing Primary Communications Infrastructure

The National Disaster Management Agency, Police and Fire Emergency use the public telecommunications networks for their daily operations including emergency preparedness. Additionally, the Defense Force, Police Service and Fire and Emergency Services also own private VHF national land mobile radio networks that they use to conduct their own individual operational activities.

Similarly, the NDMA also use the government owned national radio and television stations for communication during times of emergency.

3.1.2. Upgrade of Primary Communication Systems

LMR technology has progressed over time from conventional analogue voice service to complex systems incorporating digital and trunking features. These enhancements have improved the security, reliability, and functionality of voice communications. In order to satisfy the demands for voice, video and data communication, local agencies need to rely on a hybrid approach, using both commercial and private networks comprised of landline, terrestrial wireless and satellite communications.

The ITU, 2013 recommends the use of:

Voice communications as the most suitable mode for the real-time transmission of short messages. Its applications in disaster communications include point-to-point wired field telephone links; Very High Frequency (VHF) and Ultra High Frequency (UHF) hand-held or mobile transceivers (LMR systems); and satellite phones. It also includes public address systems and broadcasts via radio.

3.1.3. Digital Land Mobile Radio System

As articulated above, responder agencies like the Defense Force, Police Service and Fire and Emergency Services also own private VHF national land mobile radio networks that they use to conduct their own individual operational activities. In the event of an emergency, there is a need to activate a National Emergency Operations Center (NEOC), where responder agencies will need to setup stations at the NEOC to establish and maintain communications between the agency and the NDMA.

Therefore, the NEOC will/consists of a conglomeration of various LMR systems assembled in a common room. Most responders are unable to communicate across agencies because they operate on private systems limited to their internal use. There is no exchange across these private communications systems since communication across agencies is restricted.

Therefore, there is clearly a need for an improved communications system to facilitate interoperability among all responder agencies. The primary communications system should consist of a resilient modern digital LMR network which shall enable all agencies to communicate with each other and also with the NDMA. It should also support time-sensitive, lifesaving tasks, including rapid voice call-setup, group calling capabilities, high-quality audio, and guaranteed priority access to the end-user.

Recognizing that radio systems support lifesaving operations; the networks should be designed to achieve a high level of reliability and be able operate efficiently in harsh natural and man-made environments. They should be high capacity networks designed with redundant systems and be capable of providing wide area coverage. The networks should be installed on secured and resilient infrastructure facilities providing coverage across the nation.

Emergency response agencies should also update or develop new strategic plans to evaluate current emergency communications capabilities, and address gaps by deploying of new technologies e.g. broadband, Next Generation 112 and use of social media platforms.

Action item 2: Enhance coordination, interoperability and effective use of public safety communications resources at all levels of government and across agencies

3.2. National Emergency Operations Centre (NEOC)

A secure, soundproof Communications Centre should be established at the National Emergency Operations Centre (NEOC), equipped with back-up power and water; and designed to accommodate the operators from responder or support agencies and their radio communications equipment.

The Communications Centre should ensure that agencies are provided adequate space and power for operating their radios. Additionally, agencies would be responsible for the setup

and dismantling of their work station before and after an emergency. The radios must be installed and not cause interference to any other radio. Considering that several operators will be sharing space in the Communications Centre, all operators must use headphones and keep noise levels to a minimum.

Action item 3: Establish a National Emergency Operations Center to accommodate all responder agencies under one roof

3.3. Stand-by Emergency Repeater Station

LRM systems carry the risk of structural damage during a disaster. The NDMA should acquire and maintain a fully functional, standby transportable VHF repeater station which can be easily deployed to any suitable location, and activated in the event that the existing VHF network repeater stations become inoperable.

The transportable stations should be tested regularly to ensure proper operation. The stations should be equipped with adequate reserve fuel and standby power for self-sufficient operation for at least seven (7) days.

3.4. Emergency Directory

The NDMA should maintain an Emergency Directory which shall be kept in the NEOC and in the Communications Centre at NDMA. This directory shall contain all contact information for persons and agencies responsible for disaster relief both in digital and hard copy formats. The Directory shall be updated continuously to ensure currency.

Action item 4: Maintain and update an Emergency Directory containing all contact information for persons and agencies responsible for DM

3.5. Wide Area Network

Internationally, emergency responder agencies such as FEMA in the USA, the Canadian Public Safety Operations Organization in Canada and the Emergency Response and Recovery Unit of the UK are upgrading their communications infrastructure to enable real time voice, video and data transmissions. They are increasingly augmenting their Land Mobile Radio capabilities with commercial broadband services for disaster planning and preparation and, in some cases, procuring private broadband local area networks (LAN) with faster data capabilities. This allows for transmission of voice, video and data in real time over their private LANs.

Although commercial broadband networks do not necessarily meet public safety requirements for critical voice communications, they can provide a range of data capabilities that enhance operational efficiency. Internationally, LMR systems used for critical voice communications remain an integral component of the emergency management; however, emergency responder agencies are using more mobile data services and applications to share information and augment their voice capabilities. The increasing availability of data and information essential to emergency operations and related technologies has enabled more efficient and effective communication and data sharing.

Broadband networks, particularly a nationwide Public Safety Broadband Network (PSBN), can transform the current methods of communications by emergency responders who currently use individual parallel networks to communicate with their respective staff. This is achieved by providing a single network which facilitates simultaneous situational awareness and allows information sharing across responders. Moreover, a nationwide PSBN will offer emergency responder agencies the additional benefit of real time data sharing which is not be readily available on present commercial systems. Additionally, a nationwide PSBN provides coverage to geographic areas that are currently underserved.

A nationwide Public Safety Broadband Wide Area Network (WAN) should be established, integrating new technology into emergency communications operations. The move toward wireless broadband infrastructure will provide the means to transfer large amounts of data almost anywhere, at any time, at much faster rates than those currently available. This high bandwidth connectivity will facilitate easy exchange of media-rich information for emergency response and recovery.

The WAN shall enable access to the internet which can provide support for operations both in the field and at head offices. The power of the Internet, specifically its web-based information services and the integration of wireless (including satellite-based) technologies and high-speed capability on wire connections, will be leveraged to provide disaster managers with access to a large repository of information. In the context of emergency communications, personnel at the site of an event have, first and foremost, the task to save lives. Access to reliable and timely emergency communications will greatly enhance incident management, and emergency responders in the field will not be merely reporting on the incident but will have access to resources which may enable them to take-action to save lives.

Action item 5: Establish a nationwide Public Safety Broadband Wide Area Network to provide emergency operational support

3.6. Telecommunications Systems Contingency

Emergency communication systems are susceptible to various risks such as infrastructural damage or congestion during a disaster. It is necessary to establish protection schemes for the relevant communications systems and also to have contingencies in case the main communication systems becomes inoperable.

The availability of these systems is a function of their reliability and its ability to cope with congestion (resulting from excessive demand). The fixed line telephone system can easily become overloaded. The mobile phone networks are even more prone to overloading than the fixed line network. It therefore becomes critical to constantly upgrade the existing contingency plan.

Fixed and mobile phones are the first choice for emergency communications by both agencies and the public. The public telecommunications network can easily become overloaded and eventually disrupted in disaster situations. Telecommunications service providers have to establish protection schemes for select fixed and mobile connections to enable continuity in times of disaster. These selected connections should be afforded priority access in cases of overloading, and also be restored, on a priority basis, if the network fails.

4.National Emergency Alert for Telecommunications

The Telecommunications industry response to an emergency shall be known as the National Emergency Alert for Telecoms (NEAT). This will take the form of a conference call (voice or video) that can be convened by any Telecommunications provider or the government if they believe that there is a problem or potential problem with the communications infrastructure. The NEAT conference bridge shall be operated by EPTC, MTN or Eswatini Mobile. First responders shall be alerted to call for a NEAT via text, phone call and e-mail. The NEAT call shall convene within one hour of the alert.

The NEAT forum shall be used as a forum to co-ordinate an industry response to a crisis as well as for liaison between industry and government. NEAT calls shall be reconvened regularly until the normal service is restored.

All of the main Telecommunications providers shall be represented on the NEAT communications bridge, including all major fixed, mobile and internet providers as well as the regulator, ESCCOM.

To facilitate the NEAT forum, a Memorandum of Understanding for cooperation in emergency situations should be put in place, accompanied by a non-disclosure agreement which shall protect any shared information from being passed outside the emergency planning community.

The Memorandum of Understanding shall allow the sharing of human and material resources amongst providers when required in an emergency. This will ensure that all Telecommunications Operators who take part in a NEAT call can discuss problems with their own and other operator's networks in the knowledge that this information will be treated confidentially.

4.1. Spectrum Management

In the event of an emergency where the severity is such that frequency management issues are raised during meeting with network operators, this may impact on ESCCOM, who should then be alerted.

ESCCOM is legally responsible for frequency management: any alert to ESCCOM can take place via the ESCCOM NEAT representative, or alternatively through the Ministry of ICT.

In certain (extreme) circumstances, MNO's may require license variations to allow them increased flexibility for a limited period of time – should this be required, ESCCOM's involvement is necessary to legally clear this.

This is most likely to be required following a major emergency – should a service provider be required to incorporate use of different or additional services. For example:

- Should the military require civil spectrum to be requisitioned, e.g. for emergency communications, license conditions would require alteration by ESCCOM
- In the event of a collapse of an MNO's network, changes in the management of spectrum may be required and would need license alteration by ESCCOM

4.2. Equipment Type Approval and Importation

ESCCOM will facilitate waiving of type approval requirements for telecommunication/ICT critical equipment during disaster response and recovery. This will help minimize delays in importing of equipment by service providers for disaster relief efforts to effectively allow quick deployment to areas with greatest need.

Accordingly, government shall prioritize incoming communications equipment as being essential to response, and expedite the importation process of critical telecommunication/ICT equipment for disaster response, e.g., exemptions from duties and tariffs, clear expedited processes and streamlined paperwork. In addition, once the equipment needs to be returned to the place of origin, expedited processes should be in place to help streamline the return process.

Action item 6: Establish a NEAT to collaborate telecoms industry mitigation/response to a crisis

5.Public Notifications and Warnings

Resilient public alert and warning tools are essential to saving lives and protecting property during emergencies. The United Nations International Strategy for Disaster Reduction (UNISDR) in January 2000, initiated the development of an International Early Warning Programme (IEWP) which aims to build disaster-resilient communities. The IEWP stresses the importance of Disaster Risk Reduction as an integral component of sustainable development. The goal of the programme is reducing human and economic loss and damage to the environment due to hazards.

The primary objective of alerts and warnings is to communicate potential threat and safety related information to advise and protect the public. Prior to anticipated incidents (e.g., hurricanes, severe storms, or floods), the government may issue alerts and warnings such as evacuation notices or other information to help the public prepare. Following an incident, the exchange of time-sensitive information on response and recovery-related services from government agencies to the general public is vital. Early warning systems are now widely recognized as worthwhile and a necessary investment to help save lives.

The country is at risk to various hazards such as severe storms, floods and extreme heat waves. Currently, the NDMA issue public alerts, warnings, and incident-related information which they receive primarily from the government agencies responsible for monitoring and tracking these hazards (Meteorological Services, Police, Fire Services, etc.). The messages are sent by the NDMA directly to the media and broadcasting networks for public broadcast. These messages are also sent by email to responder agencies, private sector entities, and nongovernmental organizations through the public telecommunications service companies.

The NDMA through ESCCOM, engages both mobile telecommunications providers to broadcast emergency information via SMS to mobile handsets. These broadcasts can target the public in specific geographical locations or be sent nationwide.

Additionally, the NDMA may use social media to relay information to the public.

Considering the critical need to relay time-sensitive information about response and recovery services to the general public both during and after a disaster, the NECP requires:

1. All licensees of national 'Free to Air' radio and television broadcasting services, telecommunications providers to:

- Conduct an annual risk analysis of their critical facilities, in accordance with the company's established internal audit procedures, and take measures to reduce their network vulnerability.
- Create a Disaster Plan which addresses, among other issues, operational continuity and methods for maintaining basic services during a disaster.
- 2. That the NDMA enter into arrangements with the licensees to make more resilient their stations and transmission infrastructure i.e. to be cyclone and flood resistant and self-sufficient for at least seven (7) days.
- 3. That the NDMA establish a redundant, dedicated cyclone-resistant two-way communications system between the licensees and the NEOC for the relay of alerts, warnings and relief information for broadcast to the public.
- 4. That this system shall be:
 - Designed to withstand category 3 cyclone force winds
 - \circ Equipped to operate on standby power and fuel for a period of seven (7) days
 - Equipped with a base station only (no portable radios shall be used on this network), connected to an emergency power supply, and secured at the premises of all the participating organizations
 - Designed with resilient repeater stations to ensure reliable two-way communications
 - Inspected and tested regularly to ensure operability of all the equipment.

6.Emergency Alert System

The World Meteorological Organization (WMO) and the ITU developed the Common Alerting Protocol (CAP) in 2007 as an international standard format for alerting and public warning. CAP is designed for all hazards and for use by all media, ranging from sirens to cell phones, faxes, radio television, and various digital communications networks based on the internet. It is used by emergency managers in various countries, including the US, Canada, UK, Australia and numerous Central and South Asian countries. CAP is the recommended standard employed by countries that developed Emergency Alert Systems (EAS). Cell broadcasts should be used as an efficient mechanism by emergency managers to send one-touch notifications to cell phones in affected areas.

An EAS provides an added tool to the suite of available emergency communication systems. This tool provides emergency managers with a mode of direct access to radio and television broadcast networks and operators, as well as other broadcast media. It is a national public and warning scheme which allows state officials to address the public during national emergencies over television and radio broadcast networks and wired and wireless cable television systems. The EAS allows broadcasters to send emergency information quickly and automatically through a method of automatic interruption of regular programming.

Action item 7: Develop an Early Warning System to allow quick dissemination of emergency alerts

7. Telecommunications and Public Information Exchange

Telecommunications infrastructure is critical to emergency preparedness, public health and economic well-being. Telecommunications technological developments have given the general public (including the corporate community) the ability to remain in contact with one another, manage finances, share information from anywhere in the world all at any time, and more.

The unavailability of telecommunication services can impact public safety and security, disrupt security and response services, and have disastrous economic consequences. The telecommunications industry is a critical national infrastructure and therefore requires priority restoration post emergency.

The public telecommunications networks provide the necessary wired (i.e. fixed line) and wireless (i.e. mobile and fixed wireless access) telecommunications services to both emergency responders and the general public. Typically, a public network is designed to allow about 5-10% of the subscribers to call and receive calls at the same time (ITU (Telecommunications Development Bureau) 2013). However, in emergencies more people make calls and tend to talk longer resulting in jamming, blocking or congestion of the network. This may escalate into a telecommunications emergency.

Individuals often provide situational awareness to their family members and communities during incidents. This function is primarily supported by commercial networks, including the increased use of social media during emergencies. This function also applies to communications and information sharing from and between private sector entities that support government response, including utilities and critical infrastructure operators that share information on the availability of their services and resources.

It is necessary that our telecommunications infrastructure be able to withstand cyclones and flooding to enable our citizens to maintain basic communications during all phases of an emergency.

Recognizing that the public telecommunications networks are used for voice, video, and data services (including internet access), prudent risk management of these facilities can reduce the impact of disasters by limiting the disruption to daily life and by allowing families to stay in contact with loved ones. The inability to communicate with family members and the uncertainty that is arises is but one telling way in which disasters can cause panic and anxiety. The public telecommunication service providers shall ensure that their Business Continuity Plans (BCPs) support the NECP in accordance with the conditions of the ESCCOM Act, 2013, Guidelines on Disaster Recovery Planning for the Telecommunications Industry, 2021 and license conditions as prescribed. The service provider shall conduct an annual risk analysis of their critical telecommunication facilities and take measures to reduce their network vulnerabilities.

The BCP shall include strategies for operating during and recovery from an emergency. The BCP shall clearly outline the mechanisms for service restoration to subscribers. Additionally, timeframes for service restoration to key public services, such as hospitals/health centers should also be included in the BCP.

At a minimum, both voice and data services on mobile networks shall be prioritized for restoration within 48 hours (or as prescribed in the Quality of Service Regulations, 2016) after a disaster for sites which are accessible and have not suffered severe structural damages (e.g. damage to antennas and tower).

Mobile networks shall maintain at least two (2) cells on wheels (COWs), to be reserved for emergency relief operations. These COWs may be deployed to severely affected communities

which may have lost their normal telecommunications services. Emergency responders providing rescue and relief services in these affected areas shall be allowed priority access to the telecommunications facilities.

Central to ensuring the effectiveness of the NECP, Telecommunications Service Providers shall submit a report of their risk analysis and mitigation/retrofitting procedures to the NDMA and copied to ESCCOM by 30th March annually.

Action item 8: Ensure BCPs for MNOs with prudent network risk management strategies are in place

8.Implementation, Monitoring and Evaluation of the Plan

ESCCOM and NDMA are responsible for the implementation and maintenance of this Plan. The Plan shall be reviewed every year, and/or after each emergency/disaster, or at the discretion of the NDMA and ESCCOM to ensure that it caters for changes in technology and to arising functional demands.

At the time of a disaster event, and following an evaluation of the scale of the event, the NDMA may appoint a person with the responsibility to activate and coordinate the emergency communications processes in accordance with the proposed Standard Operating Procedures (SOP) which shall be developed by the NDMA and be attached to the NECP upon review.

The NDMA and ESCCOM shall jointly review the performance of the emergency communications systems and the SOP following an emergency. Inefficiencies and failures of the emergency communication systems shall be analyzed and revised to prevent reoccurrence.

Accordingly, ESCCOM and the NDMA shall monitor developments in the field of emergency communication and updates from the ITU and other telecommunication agencies, with a view to revising the Plan taking account of emerging technologies and changing best practices.

Action item 9: Review and evaluate the NECP annually factoring in technology advancements

Action item 10: ESCCOM will enforce the Business Continuity and Disaster Recovery Guidelines in the Electronic Communications Sector to ensure resilient infrastructure is in place for emergency communications Action item 12: NDMA will be responsible for implementation, maintenance and evaluation of the Plan in its entirety

9. International Conventions, Cooperation and Assistance

9.1.1 Tampere Convention

The Tampere Convention (1998) is a multilateral treaty governing the provision and availability of communications equipment during disaster relief operations, particularly as it relates to the transport of radio and related equipment across international boundaries. It was ratified at the first Intergovernmental Conference on Emergency Telecommunications (ICET-98) in Tampere, Finland, in 1998, and went into effect on 8 January 2005.

Eswatini is not yet a signatory to the convention. The Convention allows for international aid agencies such as the Red Cross, and ITU, to import radio equipment into the country, for assisting in the aftermath of a disaster. Prior arrangements need to be established with Customs and Excise Division and ESCCOM for the importation and operation of the transmitting equipment in accordance with the Convention. There is need for the country to initiate the procedures to accede to the treaty that leads to its ratification to enable easy disaster relief operations to be supported.

9.2. United Nations

There are other mechanisms within the framework of international cooperation that the country can use to improve disaster recovery management. These include:

- The United Nations Office for the Coordination of Humanitarian Affairs (OCHA);
- the United Nations Office for Disaster Risk Reduction (UNDRR);
- or the Emergency Telecommunications Cluster,

The above organizations can offer a set of tools that countries can use to promote more efficient disaster management. In particular, in relation to international cooperation for the management of telecom/ICTs for Disaster Management, it is recommended that the country work together with the International Telecommunications Union (ITU), considering it

develops different activities on issues of telecommunications for emergencies. These activities include the publication of manuals on emergency telecommunications; emergency radiocommunications specifications applicable to all phases of a disaster; databases of available frequencies for emergency radiocommunication services on land and space, and the International Emergency Preferences Scheme and a Common Alert Protocol, among others.

Action item 13: Ratify the Tampere Convention and collaborate with UN agencies dealing with DM