

Regulatory Framework for Disaster Recovery Planning for the ICT Industry

Kingdom of Saudi Arabia

1. INTRODUCTION

- 1.1 Pursuant to the provisions in the Telecommunications Act (Act) and the Telecommunications Bylaw (Bylaw) related to safeguarding the public interest and user interest, CITC has analyzed the current situation in the Kingdom of Saudi Arabia (KSA) to assess the Disaster Preparedness and Recovery planning of the Facilities Based Providers (FBPs). It is found that there is a necessity to establish comprehensive Disaster Recovery plans to ensure the continuity of essential facilities as well as to implement the provisions related to facilitating emergency communication users.
- 1.2 Communications infrastructure is among the first to get severely damaged in disasters, making communication very difficult or impossible. Therefore emergency communication facilities are essential.
- 1.3 Preparedness is critical to the Disaster Recovery (DR) in order to mitigate the adverse impact on life and property.
- 1.4 Development of a Regulatory Framework is required for better Disaster Preparedness and Recovery planning and ensuring that the FBPs are able to accomplish their obligations through a consistent approach and in line with international best practices. The Regulatory Framework shall cover the following important aspects of disaster planning:
 - 1.4.1 Preparedness planning like backup power supplies, spare network capacity and redundancy in networks, to mitigate impact of potential disasters.
 - 1.4.2 Setting up Disaster Recovery plans.
 - 1.4.3 Enabling emergency communications during disasters, like the communications among authorities, among authorities and users, and among users themselves.
- 1.5 The Ministry of Communications and Information Technology (MCIT) and CITC are responsible for DR supervision and coordination in the ICT industry, to ensure best Disaster Preparedness for such cases, and support the First Level Responders (FLRs) in their DR efforts.

2. REGULATORY FRAMEWORK

The Regulatory Framework establishes the roles and responsibilities of the various players - the MCIT, CITC and the FBPs - for DR in the ICT industry.

2.1 Definitions

The words and expressions defined in CITC Statutes shall have the same meaning when used in this document. The following words and expressions shall have the meaning assigned to them below, unless the context says otherwise:

ICT means Information and Communications Technology sector.

Disaster means an emergency situation that could cause damage or lead to it, or could lead to, a business and services interruption, disruption, loss, incident or crisis that affects a significant number of people.

Disaster Preparedness planning means putting in place procedures to increase resilience of the network and other infrastructure to confront any disaster and mitigate its potential impact.

Disaster Recovery (DR) planning means putting in place procedures to be undertaken to restore normalcy of operations in the aftermath of disasters. This includes identifying the recovery strategies for all critical business functions, establishing recovery management organization and process, and creating recovery plans for various levels of business functions.

Facilities Based Provider (FBP) means a service provider who builds, owns and operates a public telecommunication network.

First Level Responders (FLRs) are those agencies that are normally immediately involved in rescue and recovery operations at the disaster site(s). The first level responders typically include civil defense, public security and healthcare providers. The final list of FLRs will be defined at a later stage in coordination with the Civil Defense.

Resilience means the ability of an organization, staff, system, network, activity or process to absorb the impact of a business interruption, disruption and/or loss; and ensure continuity of basic services to the end user.

ICT DR Committee: is an advisory body led by the CITC and represented by the FBPs. The ICT DR Committee shall coordinate the DR Plans of FBPs and provide the necessary recommendations to CITC on various DR related issues.

2.2 Responsibilities of the Various Players for DR Planning in the ICT Industry

2.2.1 The MCIT has the following responsibilities in accordance to Article 25 of the General Plan to implement the Civil Defense tasks:

- a) Ensure that the concerned parties (CITC and FBPs) are taking the necessary procedures and actions to ensure the continuous provision of telecommunication services throughout the KSA under all circumstances and conditions; devise plans, regulations and arrangements to achieve this purpose.
- b) Establish a regulation to take advantage of communication services to alert users of potential danger and its end, as well as to spread awareness messages to users.
- c) Take all the necessary procedures to protect their properties, and to intensify security guarding procedures.

2.2.2 The CITC shall undertake the following responsibilities:

- a) Take necessary procedures and actions to ensure the continuous provision of ICT services throughout the KSA under all circumstances and conditions; devise plans, regulations and arrangements to achieve this purpose.
- b) Take all the necessary procedures to protect their properties, and to intensify security guarding procedures.
- c) Ensure that all the FBPs, carry out their responsibilities during any disaster, and take necessary actions to ensure compliance with the responsibilities listed in this regulatory framework.
- d) Issue guidelines on DR planning.
- e) Set a timetable for the FBPs for the development, update and approval of DR plans.
- f) Monitor the DR plan tests of any FBP.
- g) Instruct any of the FBPs regarding resource sharing with other FBP(s) in all circumstances required for public safety.
- h) Allocate the spectrum for emergency communications equipment.

- i) Coordinate with the concerned authorities to receive authorized disaster warning messages and notify these to the FBPs for immediate broadcast.

2.2.3 The ICT DR Committee shall undertake the following responsibilities:

- a) Establish coordination and resource sharing agreements among the FBPs for better disaster management.
- b) Provide recommendations to the CITC on various issues related to Disaster Recovery.
- c) Identify procedures to spread awareness about correct usage of telecommunication services by users during disasters.
- d) Coordinate with the concerned party for the support of humanitarian relief and assistance organizations.
- e) Coordinate with the various FLRs to facilitate the accomplishment of their DR activities.

2.2.4 Each FBP shall undertake the following responsibilities:

- a) Develop and update its DR plans, and submit them to CITC for approval. These DR plans shall be tested at least once every two years.
- b) Develop and implement procedures to improve Disaster Preparedness and notification using the guidelines issued by the CITC. The procedures implemented shall be detailed in the DR planning report to be submitted to CITC.
- c) Establish repair teams that can be quickly deployed in the aftermath of a disaster for rapid restoration and repair of any damaged telecommunication facilities.
- d) Design and implement campaign to create corporate awareness to ensure successful DR.
- e) Identify one representative from the Senior Management to manage and implement DR plans. This representative shall also represent the FBP in the ICT DR Committee.
- f) Secure all necessary facilities and installations required for DR.
- g) Provide an annual report on DR planning to CITC.

- h) Notify CITC of any outage, and provide status updates till service is restored, in accordance to notification procedures issued by CITC in this regard.
- i) Broadcast authorized warning messages.
- j) Identify procedures to spread awareness about correct usage of telecommunications services by users during disasters.