Global Symposium for Regulators (GSR-19)
Tabletop Emergency Simulation Exercise

1. Context

The number of people affected by disasters is on the rise in the world. In this context, timely, predictable and effective information and communications technology (ICT) services are a critical necessity for saving lives and achieving resilience. This allows for better response and coordination among response organisations, as well as improved decision-making through timely access to critical information.

Meeting emergency and disaster relief telecommunications objectives requires the involvement of numerous stakeholders, importantly including telecommunications regulators. In emergency situations, regulatory provisions and guidance – including regarding equipment and frequencies – enables provision of time-saving assistance to be rendered to affected communities.

2. Simulation Exercise Objectives

The exercise's primary objectives are to:

- demonstrate that regulators are an integral part of the emergency preparedness and response ecosystem
- help guide regulators through the preparedness and response phases using reference documents and model National Emergency Plans
- highlight the roles of the other key stakeholders involved in the disaster and emergency management cycle (e.g. telecommunications line ministries, national disaster management offices, mobile network operators, satellite providers and technology providers)

3. Simulation Exercise Format

The simulation exercise will be in the form of a tabletop exercise.

Participants will assume the role of a telecommunications regulator and will work through a scenario that includes some parts of the disaster and emergency management cycle.

The exercise will be run using questions that participants will answer in a multiple-choice format, using an e-voting app (direct poll). Responses will be displayed and analysed in real-time.

The questions and multiple-choice answers will be translated into languages for which translation services are offered.

This reference and background material is also posted on the documents page of the ITU-GSR 19 website for advance reading.

Participants are advised to bring internet enabled smart phones and/or devices.

Background material

*Lovely Telecommunications
Regulatory Authority*

Country Telecommunications Overview

Telecommunications Regulator: Lovely Telecommunications Regulatory Authority (LTRA). Regulatory functions include *licensing, pricing, technical standards, frequency allocation, universal access, broadcasting and IT.*

Telecommunications Ministry: Lovely Ministry of Telecommunications – *policy maker*

Tampere Convention: Ratified in 2006

National Emergency Telecommunication Plan (NETP): Yes

 Country Hazard Information	**Tropical cyclones** **Earthquakes** **Tsunamis** **Floods** **Volcanic activity** **Epidemic**
 Telecommunications Channels	**International country code**: 8922 **Satellite earth stations**: 5 **Cellular mobile subscriptions**: 65,000 (2018) **Internet country domain name**: .oi **Internet users:** 100,000 (2018) **Mobile operators:** Lovely Link (70%), Lokal Telekom (30%) **Fixed-line operator:** Lovely Link **Internet Service Providers:** Lovely Link, Lokal Telekom **TV & Radio:** Lovely Broadcasting Corporation (LBC) **Submarine Cable:** Sea Link Cable Company with landing points in Upper and Lower Lovely **3G and 4G:** connectivity using fibre

Early Warning Systems (EWS): Siren-based early warning system along the coast in Upper and Lower Lovely. Operated by the Lovely National Disaster Management Office (NDMO).

Unmanned Aerial Systems (drones): may be operated with prior authorisation from both Lovely Civil Aviation Authority (LCAA) and Lovely Telecommunications Regulatory Authority (LTRA).

Electricity Provider: Lovely Energy Ltd. Responsible for generation, transmission and retail.

Transport Networks: International airport in capital city; **roads:** 50km paved; 900 km unpaved; **ports:** International Port of Lovely.

| Document #
LNETC0719 | Document Title:
Emergency Telecommunications Standard Operating Procedure | Print Date: | **LN-ETC members**
1) Telecommunications ministry
2) Telecommunications regulator
3) NDMO
4) Mobile operators & ISPs
5) Police, Fire & Rescue
6) Weather Service
7) All TV & radio stns
8) Lovely Energy Co. |
|---|---|---|---|
| Revision #
3.2 | Prepared By:
ETC sub-committee | Prepared: 26 May 2019 | |
| Effective Date:
31 May 2019 | Reviewed By:
Black, Nancy | Reviewed: 29 May 2019 | |
| Standard/regulation:
Standard | Approved By:
Lovely National Emergency Telecommunications Cluster (LN-ETC) Coordinator | Approved:
31 May 2019 | |

Purpose: to **coordinate emergency telecommunications** in Lovely **during disaster response**

Scope: this document **covers roles and responsibilities** defined by the Lovely National ETC and contained in the Lovely National Emergency Telecommunication Plan (NETP)

Related documents: LN-ETC ToR, Lovely NETP, Lovely National Disaster Management Plan
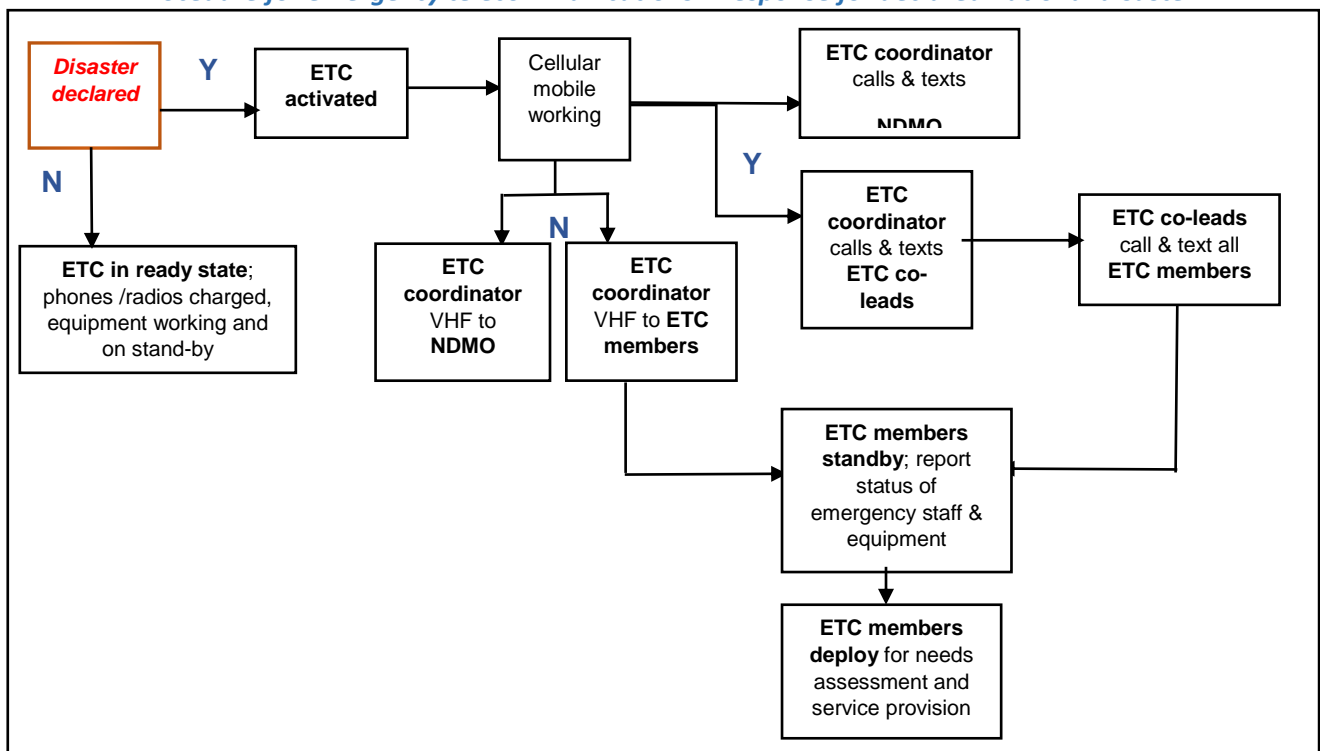
Responsibilities: this SOP is reviewed monthly and, when necessary, updated by the LN-ETC sub-committee

Applicability of SOP: **applies** when the Lovely Islands group has an **officially declared disaster**

Contents of SOP: document details, **procedure**, **process map**, revision history and references

Definitions and acronyms: refer to the Lovely National ETC Terms of Reference (ToR)

Procedure for emergency telecommunications – response for declared national disaster

Simulation exercise (11 July 2019)

- We are currently in declared tropical cyclone (TC) season.
- The Lovely Weather Service (LoWS) has been monitoring an area of low pressure located several hundred kilometres off the Lovely group of Islands.
- This morning, LoWS has officially classified the system as *Tropical Cyclone UTI*.
- TC Uti is tracking eastward at about 25 km/h.
- Lovely has 2 mobile network operators, Lovely Link and Lokal Telekom

Questions:

Question 1: PREPAREDNESS PHASE

The international NGO Border Telecommunications has been tracking TC Uti. They called the Ministry of Development and would like to donate 2-way radio equipment to be used by the community.
The 2-way radio equipment uses the frequency band allocated for emergency telecommunications.
You
a) allow the donation/use of the equipment as is
b) request for the equipment to be re-programmed before donation to use a different frequency
c) ask Border Telecommunications to donate the equipment to the regulator instead
d) ask Border Telecommunications to donate other equipment

Question 2: IMPACT PHASE

Based on the infrastructure damage assessment information, you have decided to use satellite communications to restore service.
Satellite operators have donated capacity.
However, Lovely's telecommunications regulations do not allow for uplink transmission.
Should you
   a) relax the regulations in this instance
   b) decline the capacity donation
   c) accept the donation but only under current regulations
   d) propose another solution?

Question 3: RESPONSE PHASE

The affected population has moved to an area with 95% Lovely Link mobile coverage.
The national disaster management office wants to send urgent SMS messages to the affected population.
You realise that Lokal Telekom customers will not receive the SMS broadcast.
You
   a) ask Lokal Telekom to build new towers faster
   b) regulate/allow local roaming
   c) regulate tower and site-sharing
   d) advise Lovely Telekom to increase their market share by selling new SIM cards to Lokal Telekom customers

Question 4: RESPONSE PHASE

Among the affected population are those who are deaf, blind or cannot read.
To ensure access to information for all, you advise authorities to
  a) send relief messages by SMS only
  b) send relief information via multiple channels
  c) rely on the community to relay relief notifications to deaf and/or blind people
  d) use multiple channels and send notifications in written, audio and visual formats

Question 5: NETP

Does your country have a National Emergency Telecommunication Plan (NETP)?

  a) yes
  b) no