



UNDER THE GLOBAL LEADERSHIP OF



World Food
Programme

The Role of the Regulator in Disaster Management Tabletop Simulation Exercise

**USTTI
Disaster
Communications
Planning
June 14 2023**

Joe Burton

Goal of this SIMEX

*To demonstrate the role of
telecommunications regulators in
different parts of the disaster
management cycle*



Lovely
Islands

The situation

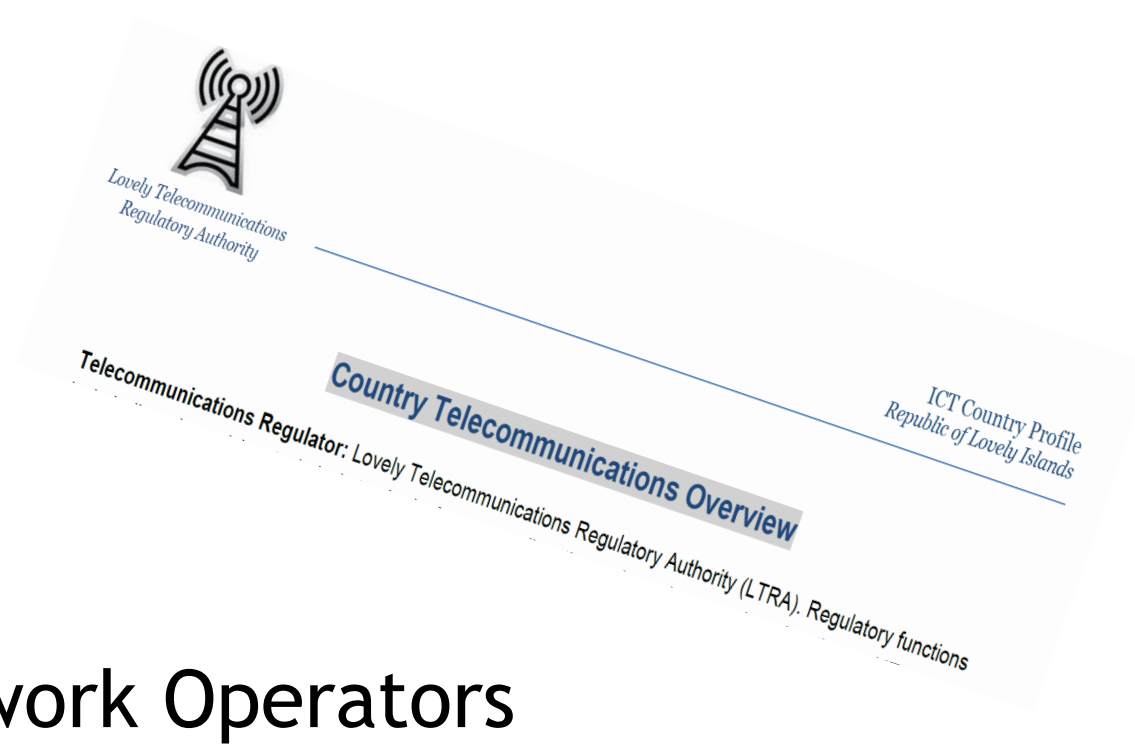
- We are currently in declared tropical cyclone (TC) season.
- The Lovely Weather Service (LoWS) has been monitoring an area of low pressure located several hundred kilometres off the Lovely group of Islands.
- This morning, LoWS has officially classified the system as ***Tropical Cyclone UTI***.
- TC Uti is tracking eastward at about 25 km/h.
- Lovely has ***2 mobile network operators***, i) ***Lovely Link*** and ii) ***Lokal Telekom***
- ***The Lovely Internet Communications Network (LIC) submarine cable lands in Town 2 in Upper Lovely and Town 3 in Lower Lovely.***
- ***Lovely has ratified the Tampere Convention***
- ***Lovely's national Independence day holiday weekend is about to begin!***

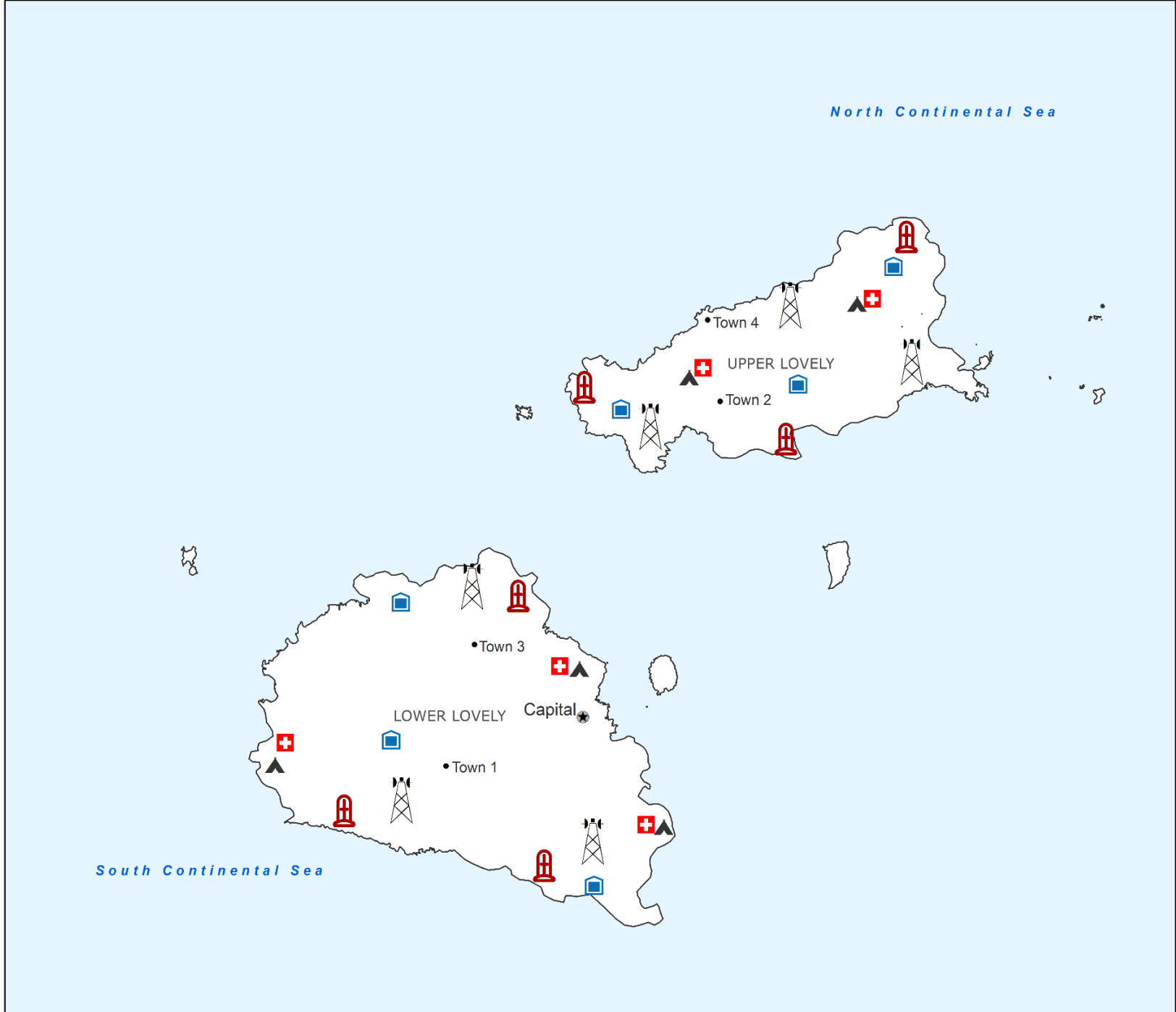
Your role: regulator

1. Read the question and multiple choice responses
2. Answer the question with a show of hands based on the scenario and on your own perspective and understanding
 - there are no wrong answers
3. We'll have a brief discussion following each question & answer
4. Need clarification? Ask the exercise controller!


Supporting information


- ICT country profile
- Outage reports from the Mobile Network Operators
- Connectivity maps
- Lovely's National Emergency Telecom Plan
- SOP for emergency telecommunications disaster response






SIMULATION EXERCISE ONLY

 EMERGENCY TELECOMMUNICATIONS CLUSTER








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Lovely Islands

Country Overview

Humanitarian Features

-  National Capital
-  Major Town
-  Mobile network operator
-  Siren Systems
-  Warehouse
-  Clinic
-  Shelter

0 25 50
Miles

SIMULATION EXERCISE ONLY

Telecommunications and humanitarian features

Lovely Weather Service (LoWS) advisories

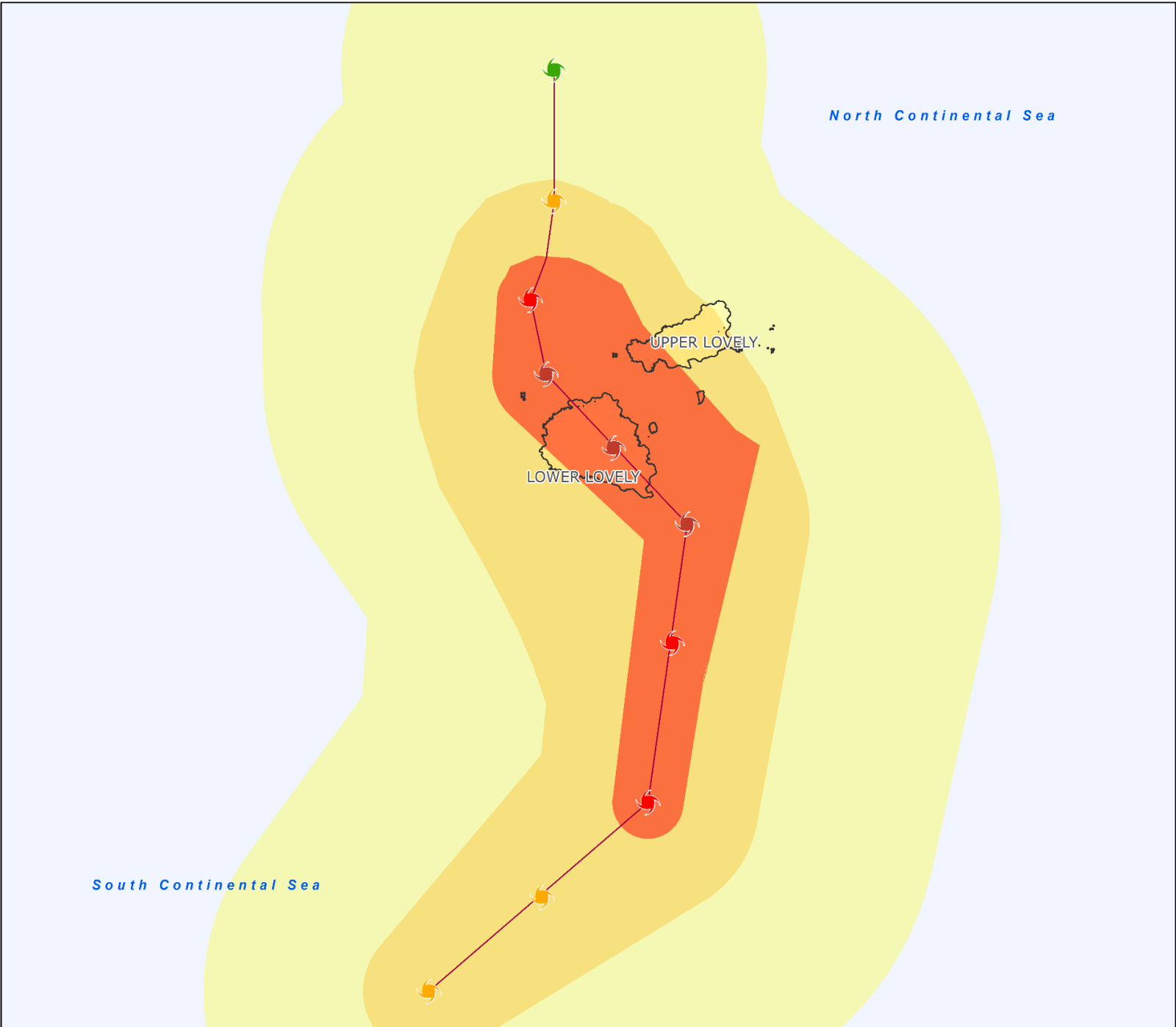


➤ LoWS advisory 1



- TC Uti rapidly strengthened over past 24 hours and has grown into a Category 4 cyclone with 225 km/h winds, moving at roughly 2km/h.


➤ LoWS advisory 2

- TC Uti will make landfall at 8 pm tomorrow on Lower Lovely, with landfall expected in Upper Lovely at 3am



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Lovely Islands

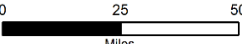
Tropical Cyclone Uti

Wind speed

-  < 110 km/h
-  110 - 185 km/h
-  185 - 240 km/h
-  > 240 km/h

Wind buffers

-  120 km/h
-  90 km/h
-  60 km/h



0 25 50
Miles

SIMULATION EXERCISE ONLY

Tropical Cyclone Uti

Tracking Map

PREPAREDNESS PHASE

Given the projected severity of TC Uti and the fact that It is expected to arrive after working hours, which of these following actions would you recommend the regulator take prior to Landfall?

Should you:

- a) dismiss all employees immediately
- b) notify carriers, licenses holders and key government partners and stakeholders of the activation of the regulatory emergency hotline/center, providing after hours contacts should service outages or communications licensing issues arise
- c) activate the Lovely Disaster Information Reporting System to enable communications carriers to report outages to the regulator.
- d) assign staff members to the National Disaster Management Authority Coordination Center to coordinate on communications issues
- e) A combination of answers b,c and d

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Results

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



Results

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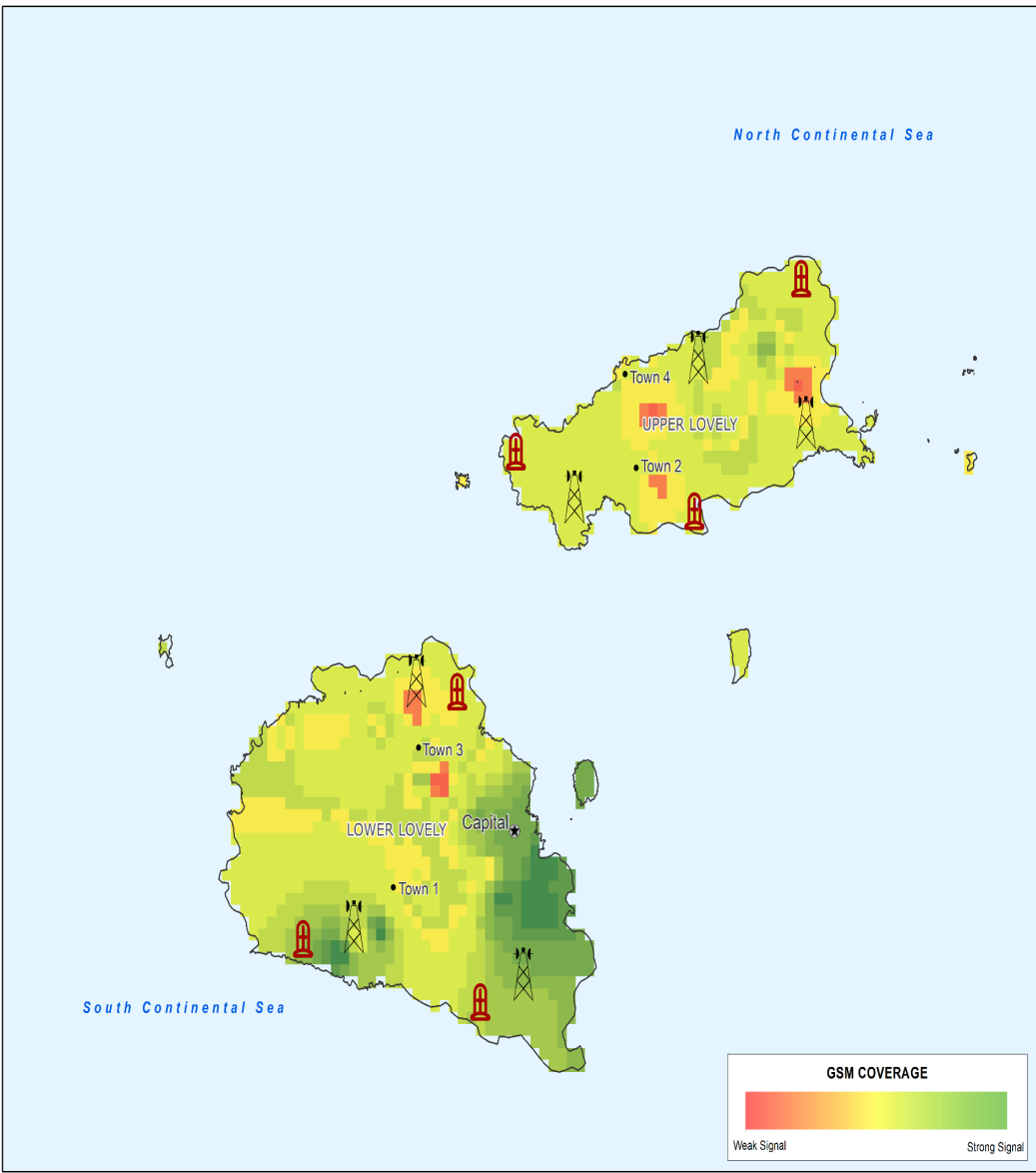
Lovely Islands

Network Coverage

Pre Tropical Cyclone Uti

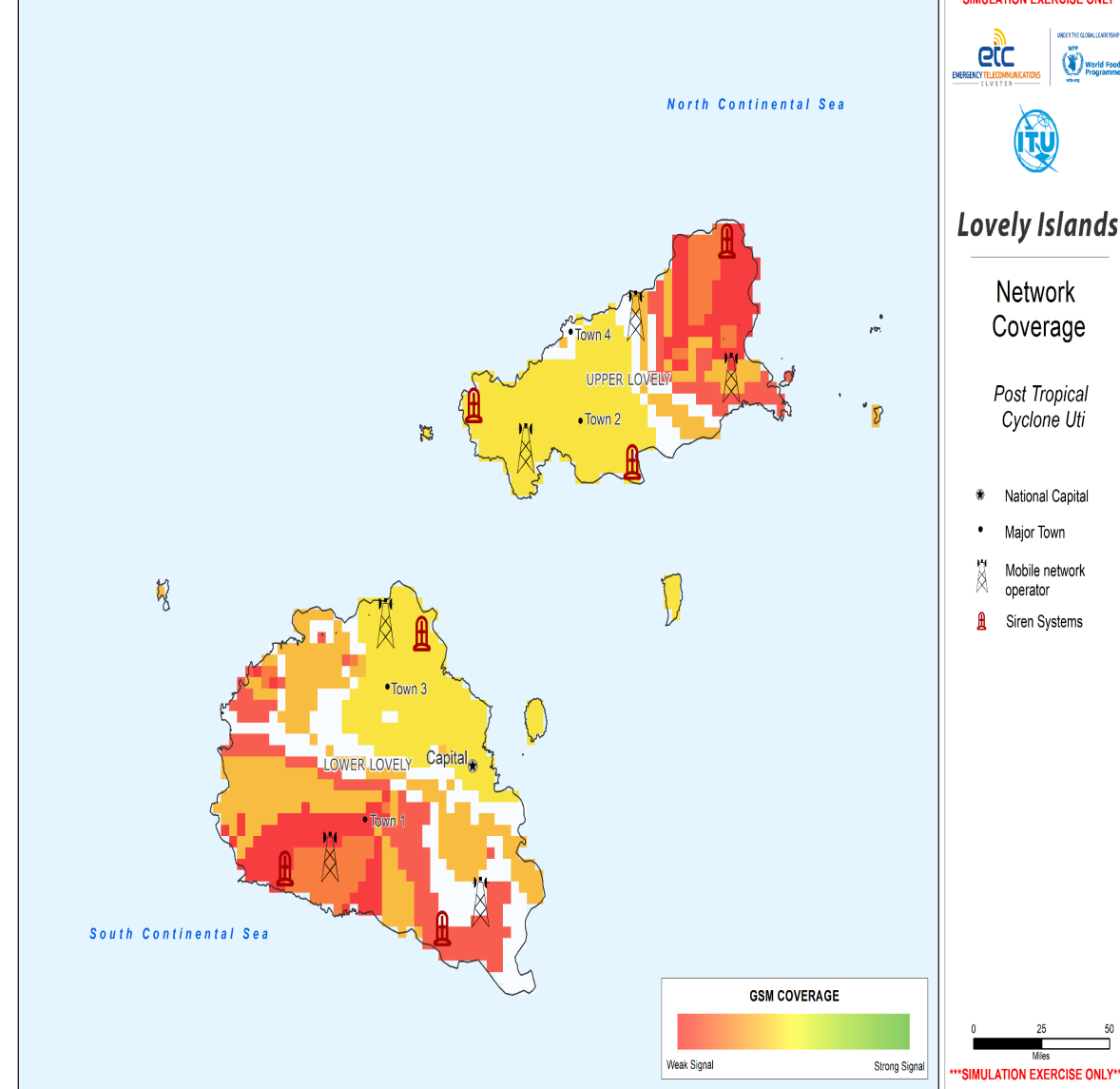
- * National Capital
- Major Town
- Mobile network operator
- Siren Systems

SIMULATION EXERCISE ONLY



Before

Tropical Cyclone Uti Network Coverage



After

SIMULATION EXERCISE ONLY

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ITU

Lovely Islands

Network Coverage

Post Tropical Cyclone Uti

- * National Capital
- Major Town
- Mobile network operator
- Siren Systems

IMPACT PHASE

Based on disaster outage reporting by all communications carriers, and infrastructure damage assessments, communications are down North Upper Lovely and South Lower Lovely. Lovely has requested that the Emergency Telecom Cluster (ETC) coordinate the provision of satellite communications services, in collaboration with the National Disaster Management Agency as part of the Emergency Operations Center. 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

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Results

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

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Results

RESPONSE PHASE

Communications as Aid NGOs Communications Without Borders (CWB) and NetFaith, which are providing VSAT communications hubs to hospitals and clinics in coordination with the EOC, called the Lovely regulator Disaster Operations Line to report that 4 of its systems have been held up in customs at the Lovely Airport.

To ensure that communications are available for response and communities, you:

- a) tell the NGOs that they must be imagining this because Lovely has signed the Tampere Convention
- b) suggest that the NGO representatives hand carry communications gear into Lovely in the future, if they are wise
- c) activate NETP Tampere SOPs that call for coordination between the regulator, the EOC and customs so equipment can be released to enable response
- d) both b and c

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Results

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 information via multiple channels (media, broadcast technologies, subscription based services, internet, auxiliary systems, etc);
- b) Send notifications in written, audio and visual formats.
- c) rely on the community to relay relief notifications to deaf and/or blind people;
- d) A, B and C

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Results

Bonus

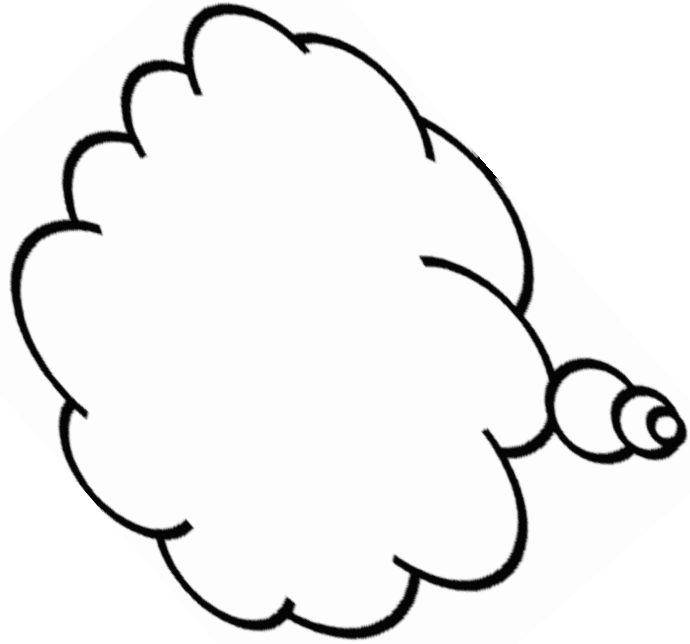
Does your country have a National Emergency Telecommunication Plan (NETP)?

a) yes

b) no

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Results



- Considering the scenario, make one suggestion from a regulatory perspective, to improve emergency telecommunications.
- Which phase(s) does the suggestion apply to?



EMERGENCY TELECOMMUNICATIONS

— C L U S T E R —