

## Standard Operating Procedures (SOP) for Emergency Telecommunications

### 1.1 Objectives

- Coordination of national actions to ensure the provision of telecommunication support to the national, division and district administration levels.
- Coordination of the requirement of temporary telecommunication services in the affected areas.
- Coordination for restoration of telecommunication services.

### 1.2 Key Entities

For effective provisioning of emergency telecommunication services and restoration of normal telecommunication services, the Getonia Ministry of Telecommunications (GMOt) and Getonia Telecommunications Regulatory Authority (GTRA) will need support from the following Ministries/Departments/Organizations:

1. Telecommunications service providers
2. Telecommunications Regulatory Authority
3. Ministry of Telecommunications
4. Meteorological Department
5. Department of Seismology
6. Getonia Disaster Management Organisation (GDMO)
7. Civil Aviation Authority
8. Directorate of Police
9. Ministry of Railways
10. Ministry of Defence
11. Ministry of Power
12. Ministry of Road Transport & Highways
13. Ministry of Petroleum & Natural Gas
14. Power Grid Corporation of Getonia Ltd.
15. Ministry of Information & Broadcasting
16. Division and District Administration/Agencies

## 2.0 PUBLIC ALERT PROCESS: Tsunami

### Tsunami

If a tsunami warning is confirmed by the Department of Seismology Officer on Duty, the process will be to immediately contact the 'contact point' of each radio broadcast station with a request to immediately broadcast the pre-recorded Tsunami Alert Message.

### 2.1 Siren System

There are tsunami sirens situated along the coastline of Getonia. Once the tsunami alert is formally issued, this triggers the siren system automatically resulting in the sirens sounding to alert the public of the impending tsunami. A testing plan should be in place, once every quarter a tsunami drill is conducted in Getonia to ensure the systems are running and functional. The sirens should be serviced and maintained once every six months by contracted technicians, with oversight from the Department of Seismology Head Engineer.

### 2.2 Cell Broadcast

Following a formal disaster warning, the cell broadcast messaging system may be used for disseminating updates to the public. The Information Management Officer is to prepare the message (90 characters maximum) based on information provided by the Department of Seismology Officer on Duty, and/or the Pacific Tsunami Warning Centre (PTWC). Messages can be sent to cell subscribers within a defined geo-fenced area. All messages must be approved by the Incident Controller, or in their absence, the NEOC Operations Manager. The cell broadcast message should be shared with Mobile Network Operators (MNOs) for dissemination to mobile phones active in the defined geo-fenced area.

### 2.3 Broadcast Radio (AM/FM)

The GDMO has a Memorandum of Understanding with radio broadcasters in Getonia to break into usual programming to broadcast pre-recorded emergency warnings to notify radio listeners that an emergency is occurring in their area, (including tsunami). Additionally, radio broadcasters will announce any updates on current hazards from information provided by the GDMO or Department of Seismology.

### Emergency Radio Broadcast Station

As a backup facility, an emergency radio broadcast station is deployed in the GDMO Communications Room. The emergency radio broadcast station can be used to broadcast Radio Getonia from the GDMO during times of disaster.

A quarterly test of the emergency radio broadcast system should be conducted by GDMO to confirm that the system is functional. The system is composed of indoor (eg. audio components, computers) and outdoor (eg. transmitter) equipment. The technical components of the emergency radio broadcast station are managed by the Getonia Broadcasting and Television Corporation (GBTC).

## 2.5 GDMO Website

The GDMO website is a key tool for communicating with the public and stakeholders. The content of the website must be updated regularly to ensure that members of the public and the GDMO's partners are provided with officially authorized information. The GDMO website address is: [www.gdmo.gov](http://www.gdmo.gov)

## 2.6 Social Media Channels (Facebook, Twitter)

The GDMO's social media presence is another channel that allows the GDMO to stay in touch with the people inside and outside of Getonia. Social media is an important information source for the public.

The GDMO Facebook page and Twitter feed is managed by the GDMO's Information Management (IM) Officer. The IM Officer is responsible for ensuring that material has been cleared before it is posted on the GDMO's social media channels. The profile picture on all social media channels should be the Getonia DMO logo. The profile name should be: Getonia Disaster Management Office (GDMO). Facebook and Twitter both allow multiple admins on one account (ie. multiple user logins for one account). The IM Officer is responsible for removing access when a person leaves or no longer requires access as part of their job.

The following GDMO staff have admin access to the GDMO's social media:

- IM Officer
- Secretary
- Operations Manager

### Facebook

The GDMO's Facebook page is primarily a one-way broadcast from the GDMO to the public, although comments can be posted by the public on the GDMO's Facebook page. The page is managed by the GDMO IM Officer.

### Twitter

The GDMO's Twitter handle is: @GDMOinfo and is managed by the IM Officer.

## 3.0 RADIO COMMUNICATIONS (VHF, HF)

### 3.1 HF and VHF Radio

Two-way radio allows the operator to have a conversation with other two-way radios operating on the same radio frequency (channel). Unlike other communication systems (such as mobile phone), messages over the HF and VHF radio system are not private and can be heard by other people listening to the same radio channel. Messages by HF and VHF radio should be brief and to the point so that the channel does not get cluttered.

The GDMO has:

- 1 x HF fixed base station (GDMO HQ comms room, Getcap)
- 1 x VHF fixed base station (GDMO HQ comms room, Getcap)
- 1 x VHF vehicle radio (GDMO HQ, Getcap)
- 8 x handheld VHF radios (GDMO Communications Room – portable devices)

Different HF channels/frequencies are used for contacting specific stakeholders and specific areas of Getonia. The current channel frequencies programmed into the HF radio base station in the NEOC Communications Room are:

| Organisation              | HF Frequency (kHz) | Channel Number: Name    | Channel Description                                                                                                              |
|---------------------------|--------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Getonia DMO (NEOC, LEOCs) | 3260.0             | Channel 0001: GDMO 1    | Depending on the time of day, users need to switch between HF frequencies. Generally higher frequency bands work best during the |
|                           | 5680.0             | Channel 0002: GDMO 1    |                                                                                                                                  |
| Getonia Red Cross         | 7640.0             | Channel 0003: Red Cross |                                                                                                                                  |

|                                      |        |                              |                                                    |
|--------------------------------------|--------|------------------------------|----------------------------------------------------|
| <b>Inter-Island</b>                  | 6990.0 | Channel 0004: Inter Island 1 | day, and lower frequency bands work best at night. |
|                                      | 4552.0 | Channel 0005: Inter Island 2 |                                                    |
| <b>Health</b>                        | 6935.0 | Channel 0007: Health 2       |                                                    |
| <b>Getonia Meteorological Office</b> | 5758.0 | Channel 0008: Meteo 1        |                                                    |
|                                      | 7747.0 | Channel 0009: Meteo 2        |                                                    |
| <b>Ambulance</b>                     | 5136.0 | Channel 0010: Ambulance      |                                                    |
| <b>Police</b>                        | 7767.0 | Channel 0024: Police         |                                                    |

The VHF repeater antenna is installed on the communications tower in the GDMO compound in Getcap. The repeater is installed in the data centre in the GDMO compound. The GDMO VHF channel frequencies programmed into the VHF radios in the NEOC Communications Room and vehicles are:

| VHF Channel               | Tx (MHz) | Rx (MHz) | Channel Description                                       |
|---------------------------|----------|----------|-----------------------------------------------------------|
| <b>GDMO 1</b>             | 163.50   | 168.10   | The channels are programmed in a scan list configuration. |
| <b>GDMO 2</b>             | 163.50   | 168.10   |                                                           |
| <b>SIMPLEX</b>            | 168.10   | 168.10   |                                                           |
| <b>Operations Cluster</b> | 176.525  | 177.275  | Police, Fire, Ambulance, SAR                              |

### Test Schedule

Every week, the Communications Officer should initiate radio checks will all stations in its network (VHF and HF). This testing helps to ensure that the system is functioning as expected.

The radio check test schedule should be prepared by the Communications Officer and all other parties (eg. Met Offices, Police, Division Offices) to be contacted in the weekly radio check should be aware to expect the radio call. Non-response to radio checks should be logged by the Communications Officer and communicated in a weekly report issued by the Communications Officer to management.

As part of the weekly radio testing, basic checks of the GDMO radios should be conducted by the Communications Officer to ensure devices are fully charged, antennas are well-maintained and the equipment is ready for immediate use.

## 4.0 SATELLITE COMMUNICATIONS

### 4.1 Satellite Phones and BGANs

The NEOC Communications Room at GDMO HQ in Getcap is equipped with satellite phones and BGAN terminals for satellite data connectivity. The 'GDMO Emergency Phonebook' contains a list of key contacts with their satellite phones and the satellite phone numbers – this should be updated regularly in consultation with partner agencies.

Satellite phones and BGAN terminals provided by the GDMO is located at each LEOC in the Division Offices. The LEOCs may also maintain their own emergency telecommunication devices beyond what the GDMO has provided.

### 4.1 VSAT

GDMO HQ in Getcap has one fixed VSAT terminal permanently deployed for backup data connectivity in the event that the local ISP service becomes unavailable. GDMO also has a portable VSAT terminal that can be deployed in emergencies.

## 5.0 UNMANNED AERIAL SYSTEMS (DRONES)

### 5.1 Rotary Drones

Staff at the GDMO and Civil Aviation Authority have been trained to fly drones. Four drones have been pre-positioned at GDMO Headquarters in Getcap to be deployed in emergencies for damage assessments.