# Hawke's Bay Marine Oil Spill Contingency Plan

## Annex 3
## Communications

Nō te rere moana Aotearoa
MARITIME NEW ZEALAND

HAWKE'S BAY REGIONAL COUNCIL

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# Annex 3 – Communications

## 3.1 Communications Overview

Effective communications systems are critical to the success of any response. It is essential that personnel in the field have the ability to easily communicate to those in the Incident Management Team (IMT), whether they are located in the field or in the Emergency Coordination Centre (ECC).

There are a number of methods of communication that may be used during a response and responders will deem what is most appropriate according to the situation. On most occasions, communications will be via the cellular network or marine VHF network, depending upon the location of the spill.

## 3.2 Methods of communicating

### *3.2.1 Mobile Phones*

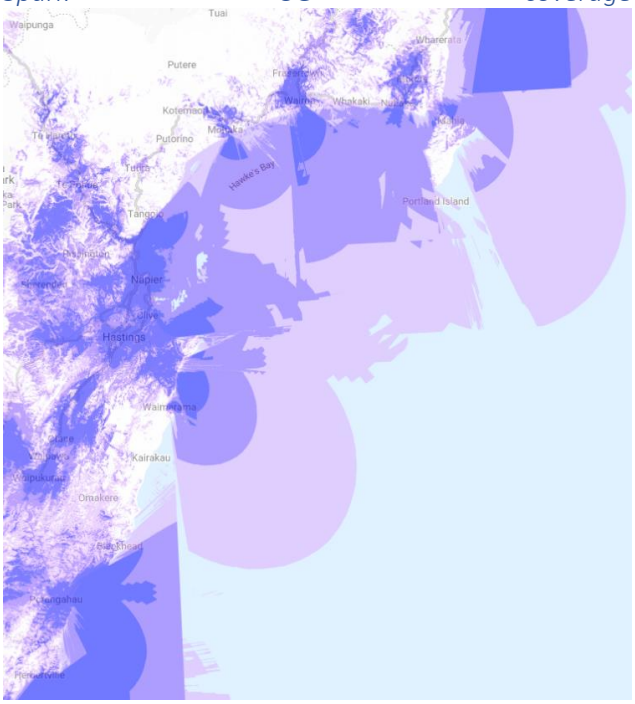
Mobile phones are the most common method for communications between the field operations and the IMT location. Mobile phones enable voice, text, email and web communications all on one device. The majority of spill personnel have access to a mobile phone to use in response.

There are some limitations to using mobile phones in the field, which are outlined below:

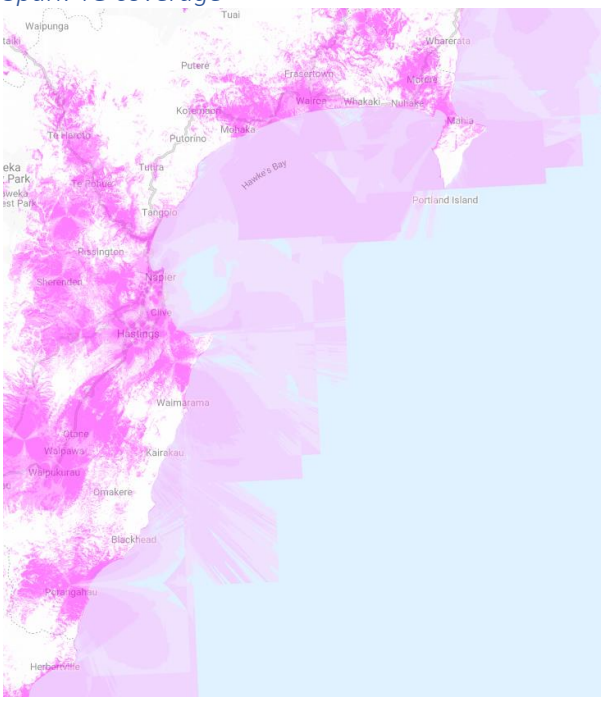
### *Mobile signal coverage (Inc. 3G and 4G data)*

There are two main network operators in Hawke's Bay: Spark and Vodafone. Other network providers piggy-back onto the networks of these two companies (Skinny, 2Degreess etc). Coverage across the central part of the region is generally very good, however, coverage can become limited to the north and South, as shown in the maps below:

*Spark 3G coverage*

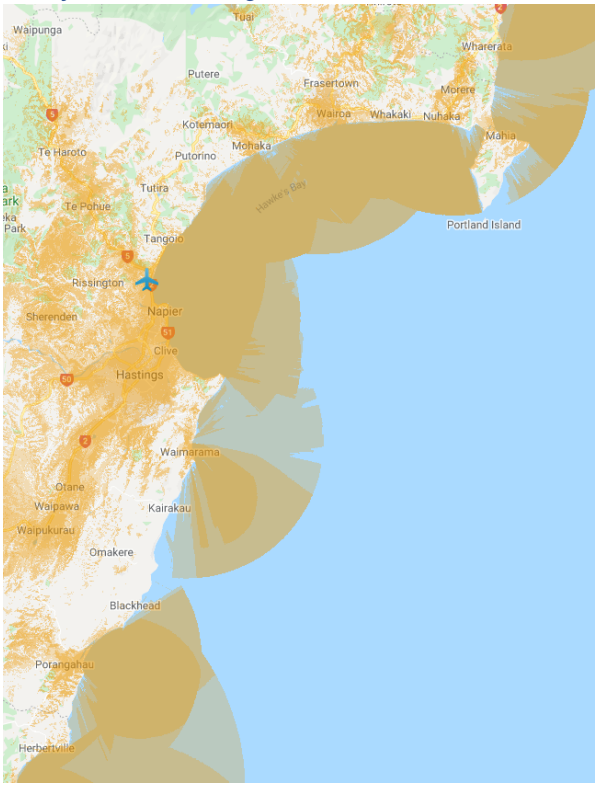



*Spark 4G coverage*

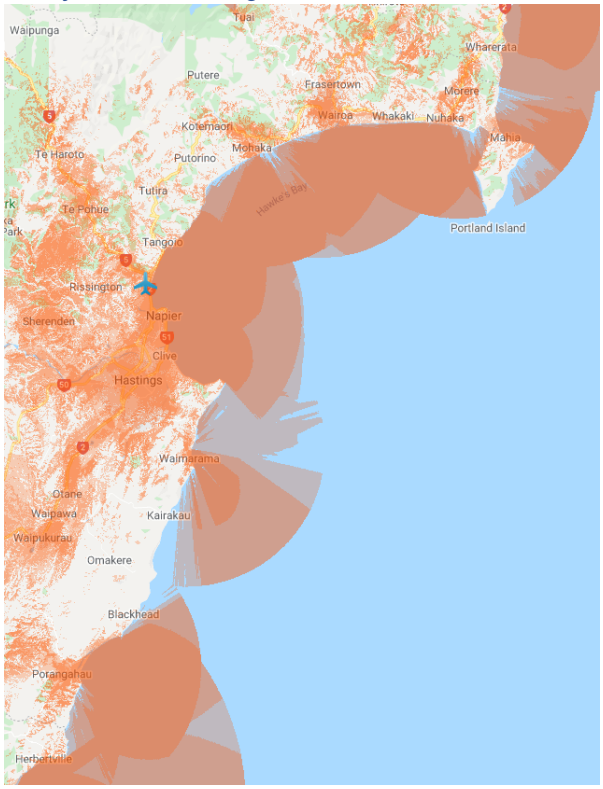



*Darker colour indicates better coverage. White indicates no coverage.*

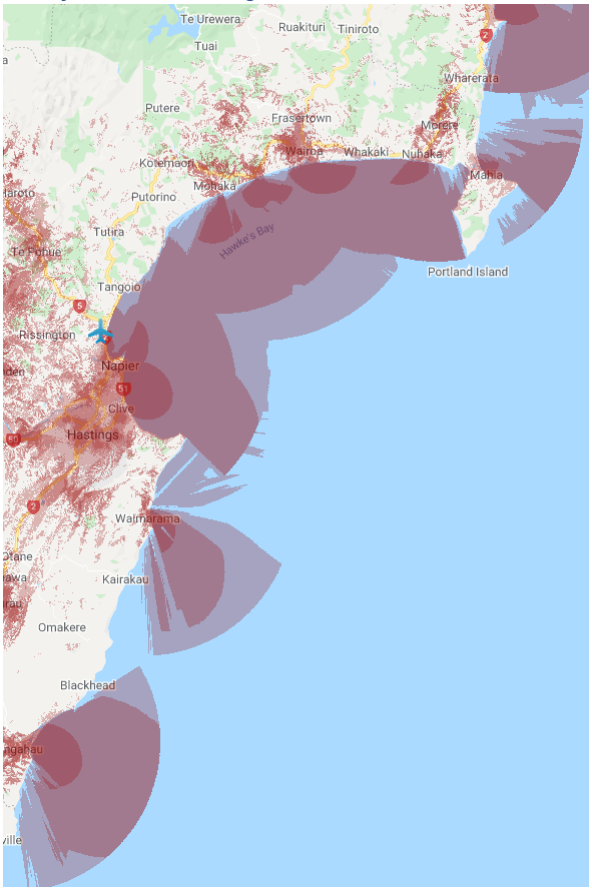
*Vodafone 2G Coverage*



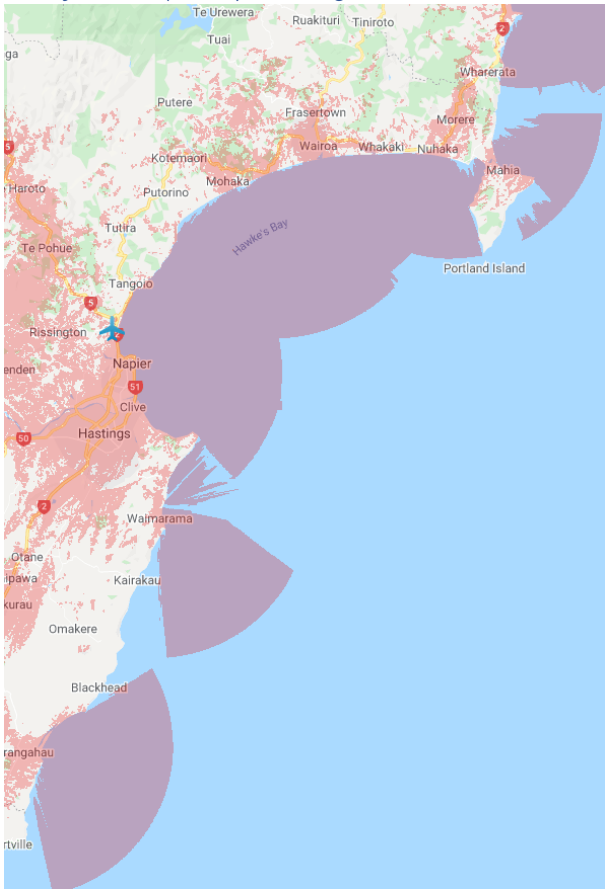

*Vodafone 3G Coverage*




*Vodafone 4G Coverage*




*Vodafone 4G (Voice) Coverage*




*Darker colour indicates better coverage. White indicates no coverage.*

### *Battery and charging requirements*

Most modern mobile phones have good battery life when on standby, however, extended use can drain the batteries quickly. In addition, most phones available today charge via USB cable, requiring an electrical outlet or USB outlet in a vehicle or battery pack.

If required, battery packs for those in the field to maintain charge can be purchased from most electrical outlets. In addition, most of the vehicles in the HBRC fleet have USB outlets in them. Should additional cables be required they can also be purchased from most electrical outlets.

If chargers are needed for the HBRC ECC facility, then HBRC IT helpdesk may be able to assist. Phones can be charged from USB outlets on laptops, so only additional cables are required. These can be purchased easily from Noel Leeming or the Warehouse. If the response is operating from the Group ECC in Hastings, then a supply of cables and charges are kept in the centre to enable phones to be charged during response.

## *3.2.2 VHF Radio networks*

### *Marine VHF Network*

The marine VHF network covers the entire coast of New Zealand and is used for communication between vessels and from vessels to the shore. The broadcast range on the VHF network will depend on the device used (Handheld vs. base station) and the distance from a signal repeater).

HBRC has a small number of handheld marine VHF radios for use in the field. Marine VHF is also available on all spill response support vessels listed in Annex 1.

The following channels are available on the marine VHF network in Hawke's Bay:

| Channel Number | Primary use for channel |
|---|---|
| M1 | Hawke's Bay Coastguard channel for trip reports, warnings, forecasts and search and rescue operations. Widespread coverage |
| M6, M8, M11, M13, M14 | Working Channels for shipping movements and maritime operations |
| M9 | working channel for planning, response and recovery operations within the harbour of Napier Port |
| M10, M12 | Used by Port of Napier Ltd for shipping movements |
| M16 | Hailing and distress calls / Warnings |
| M62 | Local fishing club and Coastguard. Long range compared to working channels due to repeater. Useful for communicating with recreational vessels |
| M68 | Napier Maritime Radio – marine forecasts, warnings etc |
| M17, M73, M74, M77 | Working channels for general communications. Not available on all handsets |

Initial call-up for response requirements should be through channel 16 or 62. Once call-up is acknowledged move to a working channel (M9, M17, M73, M74 or M77) to continue the conversation.

## *Land-based VHF Networks*

### *HBRC Fleetlink*

HBRC operates a two-way fleetlink VHF system which is fitted in most council vehicles. This system is also available on a number of handhelds held at the main office. This system allows direct links from a vehicle to the HBRC Offices.

**Note:** These devices are incompatible with the HB CDEM Group VHF Network and other emergency VHF channels.

### *HBCDEM VHF Network*

The HB CDEM Group operates a VHF network for use in an emergency. This is supported by a number of repeater stations placed across the region to give widespread coverage. The HB CDEM Group has RT's in each of their vehicles with the channels programmed in and also a number of handheld RT's with the channels. In addition, the HB CDEM Group has mobile base stations with whip aerials to provide relay for messages. These can only be used in short range where line of sight to a repeater is possible.

Most of the devices available to HBRC have both Simplex (line-of-sight) and Duplex (require a repeater) frequencies programmed into them.

The following VHF Channels are available to support response operations:

| Channel Number | Primary use for channel |
|---|---|
| ESB 164 | NZFS CIMS portable repeater (Duplex) |
| ESB 180 | NZFS portable repeater (Duplex) |
| ESX 39 | NZFS CIMS On-scene command (Simplex) |
| ESB 1 | HBRC – CDEM Fixed repeater (Duplex) with Data Over Radio Transmission (DORT) capability |
| ESB 133 | HBRC – CDEM Fixed repeater (Duplex) |
| ESB 164 | NZFS CIMS portable repeater (Duplex) |

### *Portable repeaters*

A number of organisations have portable repeaters that can be deployed to provide extended coverage in areas with poor signal. New Zealand Fire and Emergency can assist with provision of portable repeaters if they are not required for fire operations.

## *Using VHF Networks for communications*

When using either of the VHF network for communications it is important to remember that:

- Anyone using that channel can hear what you say – be careful not to disclose any sensitive information unless absolutely necessary – arrange to provide sensitive information via another method if possible (meet in person etc).
- Listen before you call. Someone else may be using the channel and it will become jammed if more than one user is holding the talk button at a time.
- Speak clearly. Use a normal voice and do not speak too fast. Hold the mic close to your mouth at an angle and talk across it.

- Do not have long conversations. Be brief and to the point to ensure the channel is clear for other users. Always reply as promptly as possible to calls.
- Spell difficult words using the alphabet or phonetic terms. Also ensure that long numbers are given as digits e.g. 1415 should be said “one, four, one, five”.
- When calling up another RT user you should state your call sign followed by their call sign e.g. “Shoreline operations to Survey vessel”

### *Standard Call signs for response*

The following call signs should be used when conducting a response.

| Position | Call sign |
|---|---|
| **Regional On-scene Commander** | ROSC |
| **Operations Manager** | Ops |
| **Shoreline Operations Coordinator** | Shoreline (Add 1,2,3 etc if multiple sites) |
| **ECC** | ECC Base |
| **Coastguard** | CK Rescue |
| **Survey vessel** | Survey 1 |
| **HBRC Survey Boat** | HBRC Survey |

### *3.2.3 Satellite communications*

### *HB CDEM satellite communications*

The HB CDEM Group has several Satellite communications assets that could be utilised to support a spill response if not being used as part of a civil defence response.

#### *Iridium Go and BGAN Satellite base station*

HB CDEM has several iridium Go units that enable mobile phones to be utilised on the satellite network. In addition, HB CDEM have a BGAN Satellite base station that can be used to provide a Wi-Fi network for a laptop or phone. This is can be run with a mains power supply, battery or from a vehicle battery.

#### *Portable satellite communications trailer*

The HB CDEM Group owns a portable satellite communications trailer that is able to provide communications in the field, including a Wi-Fi network for up to 10 devices at a range of 500m.

**Note:** Satellite communications are extremely expensive and should only be used where no other viable alternative is available.

## 3.3 Communications Plans

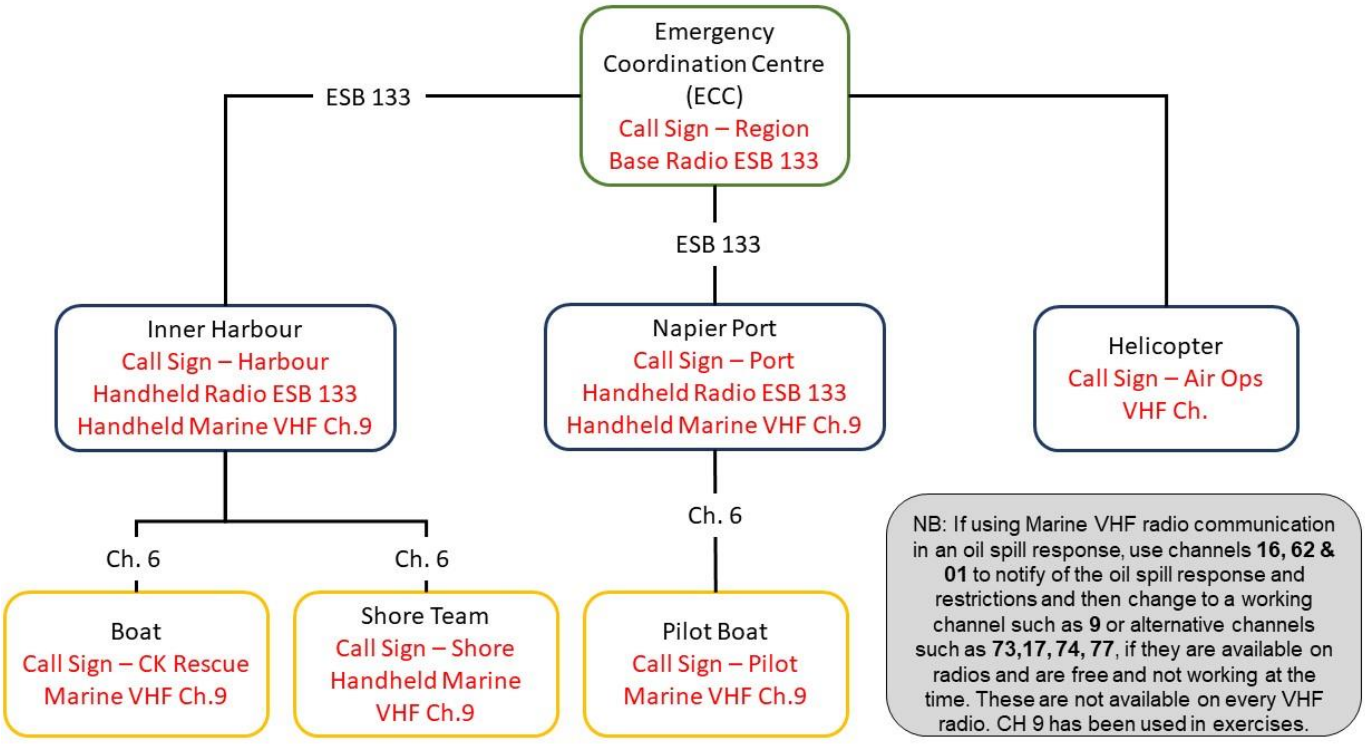
It is important that all team members understand how to communicate with one another in a response. Develop a plan which includes diagrams showing how teams can communicate with one another, keeping lists in alphabetical order, including a hierarchical structure and network diagrams as appropriate, an example is provided in Appendix A. Ensure key cell phone numbers and call signs are provided at the end of the initial briefing. If an event scales up to a Tier 3 event, MNZ may establish a National oil spill communications plan.

## Appendix A Example communications plan

### Key Contact Phone Numbers

| | | | |
|---|---|---|---|
| ROSC | | | |
| Alternate ROSC | | | |
| Alternate ROSC | | | |
| Operations | | | |
| Logistics | | | |
| Planning | | | |
| EOC | | | |
| Air Operations | | | |
| Dispersant Ops | | | |
| Information/Media | | | |
| Wildlife Response | | | |
| Napier Port | | | |
| H&S | | | |
| Harbourmaster | | | |

### Radio Communications



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