
Fisheries (Geospatial Position Reporting Devices) Circular 2017

Issuing Authority

This circular is issued under regulation 6 of the Fisheries (Geospatial Position Reporting) Regulations 2017 by Martyn Dunne, Chief Executive of the Ministry for Primary Industries.

Introduction

This introduction is not part of the circular itself, but provides the background and broad purpose of the circular.

The Fisheries (Geospatial Position Reporting) Regulations 2017 require commercial fishing permit holders to use a Geospatial Position Reporting device (GPR) to provide information to the Ministry for Primary Industries about their position while fishing.

The Regulations and this circular come into effect for all trips starting on or after 1 October 2017, and apply to all devices carried and operated under the Regulations, unless an exemption applies.

Existing VMS systems will automatically be re-registered as GPR systems, and no action is required by permit holders with existing VMS systems in order to comply with this regulation or circular.

The key requirement of this circular is that position reports must be transmitted to MPI in near real time during all commercial fishing.

This circular sets out the minimum legal requirements for the devices and systems used to provide position reports, and specifies the content of position reports.

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1 Title

- (1) This circular is the Fisheries (Geospatial Position Reporting Devices) Circular 2017.

2 Commencement

- (1) This circular comes into force on 1 October 2017.

3 Purpose

- (1) The purpose of this circular is to specify the standards and requirements applying—
- a) to geospatial position reporting devices (GPR devices) required to be carried on fishing vessels; and
 - b) to the transmission of position reports from GPR devices to MPI.

4 Application

- (1) This circular applies only all GPR devices carried and operated under the Fisheries (Geospatial Position Reporting) Regulations 2017 (unless an applicable exemption, issued under regulation 11 of those regulations applies).

5 Definitions

- (1) In this circular:

Act means the Fisheries Act 1996

AIS device means a GPR device that—

- a) uses the Automatic Identification System; and
- b) uses, as its principal communication provider, a communication provider that has an all-of-government contract with MPI (which, at the date this circular is made, is Kordia Limited)

ASDO means the approved service delivery organisation (under Part 15A of the Act) known as Commercial Fisheries Services Limited and trading as FishServe.

automatically means without human intervention

communication provider means any person who receives and onsets position reports transmitted from a GPR device that are intended to be provided to MPI

fishing activity means activity that, if it resulted in fish being caught, would require a fish catch report under the Fisheries (Reporting) Regulations 2017 to be completed

fishing vessel means any of the following (as referred to in regulation 5(1) of the Regulations):

- a) a New Zealand fishing vessel;
- b) a foreign licensed fishing vessel;
- c) a registered fish carrier;
- d) any other kind of vessel used for commercial fishing, except tenders deployed from any vessel using any purse seine net

GPR device means a geospatial position reporting device (including any associated components) that—

- a) is used for the purposes of the Regulations; and
- b) creates position reports and transmits them to MPI via a principal communication provider; and
- c) is registered by the ASDO as required by regulation 7 of the Regulations

MPI means the Ministry for Primary Industries

principal communication provider, in relation to a GPR device, means the communication provider who, under a contract with MPI, is responsible for transmitting position reports sent by the device to MPI

(whether or not the report goes via other communication providers before getting to the principal communication provider)

Regulations means the Fisheries (Geospatial Position Reporting) Regulations 2017

SDA means the service delivery agency that provides operational support to the commercial fishing industry under contract to MPI and that receives event reports from permit holders for further transmission to MPI following validation. (At the date this circular is made, the SDA is Commercial Fisheries Services Ltd, trading as FishServe.)

- (2) Any term that is defined in the Act or Regulations and used but not defined in this circular has the meaning set out in the Act or Regulations. (Key terms defined in the Act include **fishing**. Key terms defined in the Regulations include **commercial fisher** and **fishing trip**).

Part 1: Basic requirements

6 Operation of GPR devices

- (1) Every GPR device must automatically create position reports—
- that comply with clause 7; and
 - are transmitted to MPI at the intervals required by clause 9.

7 Content of position reports

- (1) Every position report must contain the following information, in the order shown:

Parameter	Form of information
Unique ID	A unique identifier such as an MMSI (Maritime Mobile Service Identity) number that is derived from an IMN (Intelligent Mobile Network) or from an IMEI (International Mobile Equipment Identity)
Date/time/position	In UTC using 24-hour clock (ie, YYYYMMDDHHMMSS) (eg 20170320125643)
Latitude of position	Decimal latitude WGS84 (eg -36.3456)
Longitude of position	Decimal longitude WGS84 (eg 174.4567)
Speed over ground	Knots, to at least 1 decimal resolution (eg 10.1)
Heading, or course over ground	Degrees (eg 0-359)
Rate of turn*	Degrees per minute
Type of report*	Must show which of the following type of report it is: Normal First position Power up Power off Other

* These parameters are not required for AIS devices.

- (2) Position data in position reports must be accurate to within 15 m RMS (root mean squared), such that 98% of the positions are within this range.

8 When vessel deemed not to be used for fishing or transportation

- (1) A vessel is deemed not to be being used for fishing or transportation, and therefore does not need to carry an operating GPR device, if the vessel has its engine turned off and it is—

- a) Stationary on land; or
- b) Moored at a place that has road access to it.

Part 2: Transmission

9 Transmission frequency either moderated or fixed

- (1) Every GPR device must be set up to transmit position reports to MPI at—
 - a) a moderated frequency; or
 - b) a fixed frequency approved by MPI for that device in relation to the relevant principal communication provider.
- (2) Once a GPR device is set up to operate at either a moderated frequency or a fixed frequency, the frequency cannot be changed except as required by MPI.
- (3) For GPR devices transmitting at a moderated frequency,—
 - a) the frequency must be able to be set and changed only by MPI; and
 - b) the device must be capable of achieving a frequency of anything between 10 minutes and 24 hours; and
 - c) no-one (other than MPI) must be able to detect when MPI changes the frequency, or what the frequency is at any time.
- (4) The frequency of a GPR device (other than AIS devices) transmitting at a fixed frequency is set when the device is first turned on and remains the frequency of transmission unless or until MPI requires it to be changed.
- (5) Every AIS device must transmit at the fixed frequency of one position report every 3 minutes.

10 Transmission capability

- (1) The system used to transmit position reports to MPI must be capable of transmitting reports—
 - a) from anywhere at sea; and
 - b) from anywhere within New Zealand; and
 - c) so that 98% of reports reach MPI within 10 minutes after they are sent.
- (2) The transmission system must—
 - a) transmit position reports to MPI only via a principal communication provider (whether or not the report goes via other communication providers before reaching the principal communication provider); and
 - b) transmit position reports immediately from the principal communication provider to MPI; and
 - c) if position reports are sent to a principal communication provider via other communication providers, transmit reports immediately from one communication provider to another.

11 Transmission failure

- (1) If a lack of service means that a position report cannot be transmitted when it is due, the GPR device must be capable of holding that report, and any later reports, until the service is resumed, for at least 24 hours after the first report failed to transmit.
- (2) The requirement in subclause (1) does not apply to AIS devices.

12 Security of transmission

- (1) Every GPR device must use a means of transmitting position reports that—
 - a) maintains the confidentiality of the data; and
 - b) maintains the integrity of the data; and

- c) does not allow the data to be intentionally or unintentionally intercepted by third parties.
- (2) However, subclause (1)(a) does not apply if there is an agreement between the principal communication provider of a device and MPI that data sent from the device may be shared with 1 or more third parties or classes of third party.
- (3) Subclauses (1)(a) and (b) do not apply to AIS devices.

13 Ownership of information transmitted

- (1) Data transmitted by a GPR device (other than an AIS device) to MPI is owned by MPI from the moment it is sent from the device.
- (2) Data transmitted by an AIS device is owned by MPI from the moment it is forwarded to MPI by the principal communication provider used with that device.

Part 3: Registration of devices

14 Application for registration

- (1) Every application to register a GPR device with the chief executive must be done by making an application to the ASDO.
- (2) The application must include the following:
 - a) the serial number shown on the casing of the device:
 - b) the product name:
 - c) the name of the manufacturer of the device:
 - d) the principal communication provider used with the device:
 - e) the transmission medium used for the device:
 - f) a unique identification of the device in a form specified by the ASDO.

Part 4: Technical characteristics of GPR devices

15 Power-on, power-off, and malfunction messages

- (1) When a GPR device is turned on, the device must automatically send a “power-on” message to MPI, along with a position report created at the time.
- (2) If a GPR device is turned off, before it loses power it must send a “power-off” message to MPI, along with a position report created at the time.
- (3) If a GPR device turns off before a “power-off” message is sent to MPI as required by subclause (2), when the device is next turned on the device must send a message immediately to MPI that includes the reason for, or an explanation of, the power-off.
- (4) The requirements in subclauses (1) to (3) do not apply to AIS devices.
- (5) If a GPR device is not creating or transmitting position reports as it should be, the device must alert someone on board to the malfunction.

16 Serial number of devices

- (1) The serial number of a GPR device must be on its outside casing in a form that means that it cannot be changed by anyone other than the manufacturer or the manufacturer’s agent.