Fisheries and Marine Resources (Automatic Identification System) Regulations

2016

GN No. 116 of 2016

Government Gazette of Mauritius No. 47of 28 May 2016

THE FISHERIES AND MARINE RESOURCES ACT

Regulations made by the Minister under section 74(1)(e) of the Fisheries and Marine

Resources Act

1. These regulations may be cited as the Fisheries and Marine Resources (Automatic

Identification System) Regulations 2016.

2. In these regulations –

—Act means the Fisheries and Marine Resources Act;

—AIS means the Automatic Identification System;

—AIS monitoring centre means the National Coast Guard Operations Room referred to in

regulation 5;

—Automatic Identification System means an automatic tracking system used on fishing

boats and fishing vessels for identifying and locating nearby boats and vessels by

electronically exchanging data with the nearby boats and vessels, AIS shore stations and satellites;

—communication equipment means a transponder or transmitter equipped with an AIS;

—ICT Authority means the ICT Authority established under the Information and Communication Technologies Act;

—National Coast Guard means the National Coast Guard established under section 3 of the National Coast Guard Act;

—necessary data means the data specified in regulation 5(3)(c);

—transmitter means an electronic device which, with the aid of an antenna, produces radio waves;

—transponder means a wireless communications, monitoring or control device that picks up and automatically responds to an incoming signal.

3. These regulations shall apply to a fishing boat or fishing vessel to which a licence is issued under section 36 of the Act.

4. (1) Subject to paragraphs (2) and (3), every fishing boat or fishing vessel of not less than

12 metres overall length shall, in addition to any vessel monitoring system, be fitted with such AIS as the Permanent Secretary may approve.

(2) Every fishing boat of not less than 12 metres nor more than 24 metres overall length shall be fitted with a Class B AIS transponder.

(3) Every fishing vessel exceeding 24 metres overall length shall be fitted with a Class A AIS transponder.

(4) In this regulation –

—Class A AIS means an automatic identification system which meets the specifications and performance standards as prescribed by the International Maritime Organisation (IMO) Res. No. MSC — 74(69) — Annex 3, set out in the Schedule;

—Class B AIS means an AIS which meets an acceptable standard as the ICT Authority may approve.

5. (1) For maritime security purposes, the National Coast Guard shall monitor the AIS data centrally from the National Coast Guard Operations Room.

(2) The National Coast Guard Operations Room shall receive data from a fishing boat or fishing vessel fitted with AIS through -

(a) direct receiver; or

(b) a vessel, aircraft or shore station fitted with AIS receiver facility.

(3) The owner, agent or master of a boat or vessel fitted with an AIS shall ensure that the

AIS —

(a) does not permit the input or output of false positions;

(b) is not capable of being manually overridden; and

(c) is, at all times, capable of transmitting, to the National Coast Guard Operations

Room, data relating to —

(i) the identification of the fishing boat or fishing vessel;

(ii) the most recent geographical position of the fishing boat or fishing vessel;

(iii) the date and time of the fixing of such position of the fishing boat or fishing

vessel; and

(iv) the speed and course of the fishing boat or fishing vessel.

6. (1) Every master of a fishing boat or fishing vessel shall, except where the boat or vessel is

anchored in the port of Port Louis or within the lagoon area, operate the AIS, at all times, so that

the necessary data are regularly received at the National Coast Guard Operations Room.

(2) Any person who, without lawful authority or reasonable excuse, fails to comply with paragraph (1) shall commit an offence and shall, on conviction, be liable to a fine of not less than 2,000 rupees and not more than 50,000 rupees and to imprisonment for a term not exceeding 2 years.

(3) Where a fishing boat or fishing vessel is anchored in the port of Port Louis, the master of the boat or vessel -

(a) may, after giving prior notification to the National Coast Guard Operations Room, switch off the AIS;

(b) shall operate the AIS not less than 6 hours before leaving the port, so that the necessary data is duly transmitted to the National Coast Guard Operations Room.

(4) The master of a fishing boat or fishing vessel shall -

(a) forthwith report any malfunctioning of the AIS to the National Coast Guard Operations Room;

(b) repair or replace, as the case may be, the faulty AIS within 30 days of the report

of malfunctioning made under paragraph (a); and

(c) report the position of the boat or vessel, at least once every 4 hours, to the National Coast Guard Operations Room during the period of repair or replacement.

(5) Where the master of a fishing boat or fishing vessel reports a malfunctioning of the MS under paragraph (4)(a) more than 3 times within a period of 12 consecutive months, the owner, agent or master, as the case may be, shall have the AIS replaced.

7. Any person who, without lawful authority or reasonable excuse -

(a) removes the MS from a fishing boat fishing vessel;

(b) interrupts in any way the power supply of the AIS of a fishing boat or fishing vessel;

(c) obstructs in any way the antenna connected to the AIS of a fishing boat or fishing vessel;

(d) alters in any way the data transmitted by the AIS of a fishing boat or fishing vessel;

(e) causes a break in the transmission of data by the AIS of a fishing boat or fishing

vessel;

(f) disconnects the AIS of a fishing boat or fishing vessel;

(g) permits the input or output of any false position by the AIS of a fishing boat or

fishing vessel;

(h) tampers or interferes with the AIS of a fishing boat or fishing vessel;

(i) damages, destroys or renders inoperative the AIS of a fishing boat or fishing

vessel; or

(j) contravenes these regulations,

shall commit an offence and shall, on conviction, be liable to a fine of not less than 2,000 rupees

and not more than 50,000 rupees and to imprisonment for a term not exceeding 2 years.

8. It shall be a defence for a person charged with an offence under regulation 6(2) or 7, in

respect of any conduct, to prove that he has lawful authority or reasonable excuse for that

conduct.

9. These regulations shall come into operation on 1 August 2016.

Made by the Minister on 27 April 2016.

SCHEDULE

[Regulation 4(4)]

RECOMMENDATION ON PERFORMANCE STANDARDS FOR AN UNIVERSAL SHIPBORNE AUTOMATIC IDENTIFICATION SYSTEM (AIS)

1 Scope

1.1 These performance standards specify the requirements for the universal AIS.

1.2 The AIS should improve the safety of navigation by assisting in the efficient navigation of ships, protection of the environment, and operation of Vessel Traffic Services (VTS), by satisfying the following functional requirements:

1. in a ship-to-ship mode for collision avoidance;

2. as a means for littoral States to obtain information about a ship and its cargo; and

3. as a VTS tool, i.e. ship-to-shore (traffic management).

1.3 The AIS should be capable of providing to ships and to competent authorities, information from the ship, automatically and with the required accuracy and frequency, to facilitate accurate tracking. Transmission of the data should be with the minimum involvement of ship's personnel and with a high level of availability.

1.4 The installation, in addition to meeting the requirements of the Radio Regulations, applicable ITU-R Recommendations and the general requirements as set out in resolution A.694 (17), should comply with the following performance standards.

2 Functionality

2.1 The system should be capable of operating in a number of modes:

1. an —autonomous and continuous mode for operation in all areas. This mode should be capable of being switched to/from one of the following alternate modes by a competent authority;

2. an —assigned mode for operation in an area subject to a competent authority responsible for traffic monitoring such that the data transmission interval andlor time slots may be set remotely by that authority; and

3. a —polling or controlled mode where the data transfer occurs in response to interrogation from a ship or competent authority.

3 Capability

3.1 The AIS should comprise:

1. a communication processor, capable of operating over a range of maritime

frequencies, with an appropriate channel selecting and switching method, in support

of both short and long range applications;

2. a means of processing data from an electronic position fixing system which provides a

resolution of one ten thousandth of a minute of arc and uses the WGS-84 datum;

3. a means to automatically input data from other sensors meeting the provisions as

specified in paragraph 6.2;

4. a means to input and retrieve data manually;

5. a means of error checking the transmitted and received data; and

6. built in test equipment (BITE).

3.2 The MS should be capable of:

1. providing information automatically and continuously to a competent authority and

other ships, without involvement of ship's personnel

2. receiving and processing information from other sources, including that from a

competent authority and from other ships;

3. responding to high priority and safety related calls with a minimum of delay; and

4. providing positional and manoeuvring information at a data rate adequate to facilitate

accurate tracking by a competent authority and other ships.

4 User interface

To enable a user to access, select and display the information on a separate system, the

AIS should be provided with an interface conforming to an appropriate international marine

interface standard.

5 Identification

For the purpose of ship and message identification, the appropriate Maritime Mobile

Service Identity (MMSI) number should be used.

6 Information

6.1 The information provided by the AIS should include

1. Static:

- IMO number (where available)

- Call sign & name

- Length and beam

- Type of ship

- Location of position-fixing antenna on the ship (aft of bow and port or starboard of centerline)

2. Dynamic:

- Ship's position with accuracy indication and integrity status

- Time in UTC*

- Course over ground

- Speed over ground

- Heading

- Navigational status (e.g. NUC, at anchor, etc. - manual input)

- Rate of turn (where available)

- Optional - Angle of heel (where available)**

- Optional - Pitch and roll (where available)**

3. Voyage related:

- Ship's draught

- Hazardous cargo (type)***

- Destination and ETA (at masters discretion)

- Optional - Route plan (waypoints)**

4. Short safety-related messages

6.2 Information update rates for autonomous mode

The different information types are valid for a different time period and thus need a different

update rate:

- Static information: Every 6 minutes and on request

- Dynamic information: Dependent on speed and course alteration

according to Table 1

- Voyage related information: Every 6 minutes, when data has been

amended and on request

- Safety-related message: As required

*Date to be established by receiving equipment.

**Field not provided in basic message.

***As required by competent authority

TABLE 1

Type of ship Reporting interval

Ship at anchor 3 minutes

Ship 0-14 knots 12 seconds

Ship 0-14 knots and changing course 4 seconds

Ship 14-23 knots 6 seconds

Ship 14-23 knots and changing course 2 seconds

Ship >23 knots 3 seconds

Ship> 23 knots and changing course 2 seconds

Ship Reporting Capacity — the system should be able to handle a minimum of 2000 reports per minute to adequately provide for all operational scenarios envisioned.

6.3 Security

A security mechanism should be provided to detect disabling and to prevent unauthorised alteration of input or transmitted data. To protect the unauthorized dissemination of data, the IMO guidelines (Guidelines and Criteria for Ship Reporting Systems*) should be followed.

7 Permissible initialization period

The installation should be operational within 2 minutes of switching on.

8 Power supply

The MS and associated sensors should be powered from the ship's main source of

electrical energy. In addition, it should be possible to operate the AIS and associated sensors

from an alternative source of electrical energy.

9 Technical characteristics

The technical characteristics of the AIS such as variable transmitter output power,

operating frequencies (dedicated internationally and selected regionally), modulation, and

antenna system should comply with the appropriate ITU-R Recommendations.