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| **Radiocommunication Study Groups** |  |
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| Source: Document 5B/TEMP/73  Subject: Recommendation ITU-R M.1371-5 |  |
| **25 November 2020** |
| **English only** |
| Working Party 5B | |
| LIAISON STATEMENT TO INTERNATIONAL MARITIME ORGANIZATION, INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE Authorities AND Comité International Radio-Maritime on the revision of Recommendation ITU-R M.1371-5 | |
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ITU-R Working Party (WP) 5B, at its meeting on 9th to 19th November 2020 continued working towards the revision of Recommendation ITU-R M.1371-5 and considered liaison statements from International Maritime Organization (IMO) to ITU-R WP 5B on the revision of Recommendation ITU-R M.1371-5 and on Autonomous maritime radio devices and identities in the maritime mobile service from 1st April 2019.

Herewith WP 5B provides the proposed revisions of Recommendation ITU-R M.1371-5 and highlights the following proposals for your consideration:

Navigational status

In consideration of the IMO liaison statement to ITU-R WP 5B on the revision of Recommendation ITU-R M.1371-5 –Technical characteristics for an automatic identification system using time division multiple access in the VHF maritime mobile frequency band, WP 5B proposes to amended the Navigation Status as follows:

0 =under way making way ,

1 = at anchor,

2 = not under command,

3 = restricted manoeuvrability,

4 = constrained by her draught,

5 = moored,

6 = aground,

7 = engaged in fishing,

8 = under way under sail,

9 =  under way not making way ;

11 = power-driven vessel towing astern (regional use),

12 = power-driven vessel pushing ahead or towing alongside (regional use);

13 = reserved for regional use,

14 = active locating device,

15 = undefined  (default) or a locating device under test

Autonomous Maritime Radio Devices (AMRD)

In consideration of IMO liaison statement to ITU-R WP 5B on Autonomous maritime radio devices and identities in the maritime mobile service and subsequent publication of ITU-R M.2135 - Technical characteristics of autonomous maritime radio devices operating in the frequency band 156-162.05 MHz, WP 5B proposes to:

– include Mobile AtoN (MAtoN) as another type of aid to navigation (AtoN) in message 21 – AIS AtoN Report,

– create new more efficient, single slot, carrier-sense access (CSTDMA) AIS message for MAtoN and other AIS AtoN Reports, that would operate on a non-interfere basis with other AIS devices,

– include DSC Class M (MOB), AIS SART, EPIRB AIS to indicate when they are manually deactivated, by broadcasting a safety related text message that states for example for DSC Class M (MOB): MOB manually OFF versus MOB ACTIVE.

Ship Type

WP 5B proposes to update the Ship Types to mitigate the ambiguity of using ‘engaged’ to define a ‘type’ of ship, and, add more types to improve the granularity of AIS data. Further, WP 5B invites IMO to provide information on whether dangerous cargo should still be reported via message 5 “ship type” when another message (ASM IFM 25) exists to report this information in greater detail.

TABLE 53

| ID | Identifiers to be used by ships to report their type |
| --- | --- |
| 00 | Undefined = default |
| 01 | Research vessel |
| 02 | Training vessel |
| 03 | Public vessel |
| 04 | Ice Breaker |
| 05 | Buoy (Aids to Navigation) Tender |
| 06 | Exploration vessel |
| 07 | Support vessel |
| 08 | Construction vessel or floating plant |
| 09 | Production or processing vessel |
| 10 |  |
| 11 | Towing vessel moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 12 | Towing vessel moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 13 | Towing vessel moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 14 | Towing vessel moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 15 | Towing vessel, long-hauler or oceangoing tug |
| 16 | Towing vessel, push-boat or articulated tug-barge (ATB) |
| ~~17~~ | ~~Towing vessel, assist or escort tug~~ |
| 18 |  |
| 19 | Towing vessel, no additional information |
| 20 | Wing-in-ground (WIG) vessel, all ships of this type |
| 21 | WIG moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 22 | WIG moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 23 | WIG moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 24 | WIG moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 25 |  |
| 26 | Self-propelled autonomous watercraft |
| 27 | Self-propelled remotely operated watercraft |
| 28 | Non-propelled watercraft |
| 29 | Wing-in-ground (WIG) vessel, no additional information |
| 30 | Fishing vessel |
| 31 | Tow~~ing~~ boat |
| 32 | Tow, long-hauler ~~ing and length of the tow exceeds 200 m or breadth exceeds 25 m~~ |
| 33 | ~~Engaged in dredging or underwater operations~~ Dredge, survey or cable/pipe-laying vessel |
| 34 | ~~Engaged in diving operations~~ Dive boat |
| 35 | ~~Engaged in military operations~~ Warship or naval auxiliary |
| 36 | Sailing vessel |
| 37 | Pleasure craft |
| 38 | ~~Reserved for future use~~ Pleasure craft capable of 20 knots or more |
| 39 | ~~Reserved for future use~~ Crew boat |
| 40 | High Speed Craft (HSC), all ships of this type |
| 41 | HSC moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 42 | HSC moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 43 | HSC moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 44 | HSC moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 45 |  |
| 46 |  |
| 47 |  |
| 48 |  |
| 49 | High Speed Craft (HSC), no additional information |
| 50 | Pilot vessel |
| 51 | Search and rescue vessel |
| 52 | Harbour Tug |
| 53 | Port or fish tender |
| 54 | Vessel equipped with anti-pollution / firefighting facilities ~~or equipment~~ |
| 55 | Law enforcement vessel |
| 56 | Spare 1 – for assignments to local vessels |
| 57 | Spare 2 – for assignments to local vessels |
| 58 | Medical transport (as defined in the 1949 Geneva Conventions and Additional Protocols) |
| 59 | Ship of States not parties to an armed conflict |
| 60 | Passenger ship, all ships of this type |
| 61 | Passenger ship moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 62 | Passenger ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 63 | Passenger ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 64 | Passenger ship moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 65 | Passenger vessel, with over-night accommodations |
| 66 | Passenger vessel, without over-night accommodations |
| 67 | Passenger ferry service |
| 68 | Passenger ferry car service |
| 69 | Passenger ship, no additional information |
| 70 | Cargo ship, all ships of this type |
| 71 | Cargo ship moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 72 | Cargo ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 73 | Cargo ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 74 | Cargo ship moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 75 | Cargo ship, dry bulk carrier |
| 76 | Cargo ship, container carrier |
| 77 | Cargo ship, lake carrier |
| 78 | Cargo ship, roll-on-roll-off carrier |
| 79 | Cargo ship, no additional information |
| 80 | Tankers, all ships of this type |
| 81 | Tankers moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 82 | Tankers moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 83 | Tankers moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 84 | Tankers moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 85 | Tankers, crude oil carrier |
| 86 | Tankers, chemical carrier |
| 87 | Tankers, LNG carrier |
| 88 | Tankers, product carrier |
| 89 | Tankers, no additional information |
| 90 | ~~All ships of this type~~ |
| 91 | Other type of ship moving DG, HS, or MP cargo, IMO hazard or pollutant category X |
| 92 | Other type of ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Y |
| 93 | Other type of ship moving DG, HS, or MP cargo, IMO hazard or pollutant category Z |
| 94 | Other type of ship moving DG, HS, or MP cargo, IMO hazard or pollutant category OS |
| 95 |  |
| 96 |  |
| 97 |  |
| 98 |  |
| 99 | Other type of ship, no additional information |
| **NOTE 1 – Tankers include Integrated Tug-Barge (ITB) vessels** | |

Note: black text = existing text; grey text = new proposed text

Channel Management

Since the beginning of ITU-R M.1371, it has provided for the ability for tele-commanded channel switching and selection (channel management) for those regions were default AIS frequencies might have been encumbered by other radio users at the time. In 2012, the World Radiocommunication Conference (WRC) designate and protect VHF channels 87B and 88B was AIS 1 and 2, respectively and, thus making channel management unnecessary. WP 5B proposes to remove channel management, DSC which was used as an alternative means to provide it, and the means to operate on more than AIS 1 and 2, ch 75 and ch 76, ensure future AIS devices not infringe on VDE channels.

Transmit power

Working Party 5B proposes to use a spare bit in the VDL messages 1, 2, 3, and 18 to indicate whether said broadcast are at low or high power.

VDES capability indicators

WP 5B proposes to add an additional parameter to message 24B to indicate VDES capabilities, such as whether the unit is AIS only, AIS/ASM, AIS/VDE ASM/VDE-TER, or AIS/ASM/VDE-TER/VDE-SAT. Knowing this information will be integral to deploying VDES networks in the future.

Number of persons on board

Working Party 5B proposes to create a new standard VDL message which will contain information about the number of persons on board a vessel.

The current ASM IFM (16) binary message used to provide the number of persons on board a vessel has a limited capacity of 8,191 persons and is not a standardized implementation. Newer cruise ships could have an occupancy of more than 8,191 persons on board. This new VDL message has a capacity to accommodate up to 32,765 persons on board and would be a standardized implementation.

Long-range equipment interface

Working Party 5B proposes to remove the long-range interface to other equipment requirements.

Long-range applications by broadcast is now supported by the transmission of VDL Message 27 on channels 75 and 76 to support reception of AIS messages by satellites. By this the long-range application by interface to other equipment is superseded.

Action requested

International Maritime Organization, International Association of Marine Aids to Navigation and Lighthouse Authorities and Comité International Radio-Maritime are invited to consider the proposals above and provide their views to WP 5B before its next meeting.

IMO is invited in addition to provide guidance to WP 5B regarding the issue of whether dangerous cargo should still be reported via message 5 “ship type” when another message (ASM IFM 25) exists to report this information in greater detail as referred to in the section “Ship Type”.

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| **Status:** For action |  |
| **Deadline:** 26th April 2021 |  |
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**Attachment:** Preliminary draft of revision of Recommendation ITU-R M.1371-5



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