

## EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

*Radiocommunications – Maritime Omnibus Variation 2019 (No.1)*

***Australian Communications and Media Authority Act 2005***

***Radiocommunications Act 1992***

### Authority

The Australian Communications and Media Authority (**ACMA**) has made the *Radiocommunications – Maritime Omnibus Variation 2019 (No.1)* (the **Variation Instrument**) under subsection 64(1) of the *Australian Communications and Media Authority Act 2005* (the **ACMA Act**), paragraph 107(1)(f) and subsection 132(1) of the *Radiocommunications Act 1992* (the **Act**) and in accordance with subsection 33(3) of the *Acts Interpretation Act 1901* (the **AIA**).

Subsection 64 (1) of the ACMA Act provides that the ACMA may make a written determination defining 1 or more expressions used in specified instruments, being instruments that are made by the ACMA under 1 or more specified laws of the Commonwealth.

Paragraph 107(1)(f) of the Act provides that an apparatus licence is subject to such conditions (if any) as the ACMA may, by legislative instrument, determine in relation to that particular type of apparatus licence.

Subsection 132(1) of the Act provides that the ACMA may, by legislative instrument, issue class licences.

Under subsection 33(3) of the AIA, where an Act confers a power to make, grant or issue any instrument of a legislative character, the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

The Variation Instrument and the instruments it amends or varies are disallowable legislative instruments for the purpose of the *Legislation Act 2003* (the **LA**).

### Purpose

The purpose of the Variation Instrument is to amend or vary the following instruments that apply to the Very High Frequency (VHF) component of the maritime mobile band:

- *Radiocommunications (Interpretation) Determination 2015* (the **Interpretation Determination**);
- *Radiocommunications Licence Conditions (Maritime Coast Licence) Determination 2015* (the **Maritime Coast Licence Determination**);
- *Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015* (the **Maritime Ship Licence Determination**);
- *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015* (the **Class Licence**).

Maritime radio in Australia provides search and rescue assistance to ships in distress, while also providing commercial and recreational communications uses for maritime purposes. A large block of spectrum for maritime purposes is provided for in the VHF maritime mobile band and the regulatory framework that regulates channel arrangements and uses is provided for in the instruments identified above. The VHF maritime mobile band consists of channels operating in the frequency range 156.000 MHz to 162.050 MHz, apart from those portions within this frequency range that are allocated to the land mobile service.

The description of the changes made in the Variation Instrument is set out in **Attachment A – Detailed description of instrument.**

## **Background**

As Australia's spectrum regulator, the ACMA manages the spectrum in accordance with the *Radiocommunications Act 1992* (the Act), which sets out objectives for spectrum management, which is done using a range of regulatory tools. These include powers relating to frequency planning, licensing and technical standards.

The VHF maritime mobile band refers to the following radio frequency ranges:

- > 156.000 MHz to 157.450 MHz
- > 160.600 MHz to 160.975 MHz
- > 161.475 MHz to 162.05 MHz.

These frequency ranges are derived from the ACMA's Radiocommunications Assignment and Licensing Instrument (RALI) MS 42, *Frequency Plan for the VHF Bands 70 - 87.5 MHz and 148 - 174 MHz*, when read together with the International Telecommunication Union (ITU) Appendix 18, *Table of transmitting frequencies in the VHF maritime mobile band*<sup>1</sup>, of the ITU Radio Regulations.

The VHF maritime mobile band is broken up into harmonised channels that are a mix of duplex and simplex channels.<sup>2</sup> The use of these channels is extremely broad and ranges from ship to ship, ship to shore, ship to satellite and on-board communications. Radio equipment is installed on all large ships and many seagoing small craft including recreational and fishing vessels. A maritime VHF radio set is a combined transmitter and receiver and only operates on standard, international maritime frequencies known as channels.

Maritime VHF radios mostly uses simplex transmission, where communications can only take place in one direction at a time. However, within the VHF maritime mobile band, there are several duplex transmission channels where communications can take place in both directions simultaneously when equipment at both ends allows it. Each duplex channel has two frequencies assigned to it.

The regulatory framework for maritime radio, including planning the use of channels, begins at the international level. For most countries, including Australia, planning starts through participation in the ITU. The ITU maintains the Radio Regulations, which regulate radiocommunications services on an international basis and govern the utilisation of radio frequencies. The frequency allocations for the maritime mobile band are detailed in Article 5 of the ITU Radio Regulations. The basis for the structure of the VHF maritime mobile band is Appendix 18 of the ITU Radio Regulations, which

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<sup>1</sup> Before 2015, the VHF radiofrequency channelling arrangements were also identified in *Statutory Rules No. 354 – VHF High Band Frequency Band Plan*. This was allowed to sunset on 1 October 2015 and the broad-spectrum ranges used for maritime mobile services are now recorded in RALI MS 42.

<sup>2</sup> Duplex communication allows transmit and receive simultaneously, whereas simplex is limited to transmit or receive at any given moment.

defines the channel numbering and the permitted use for each maritime VHF channel on an international basis.

Australia is a signatory to the Constitution of the International Telecommunication Union and Convention of the International Telecommunication Union. The ITU Radio Regulations, made under these instruments, are revised by the ITU World Radiocommunication Conferences, normally held every four years. The Australian VHF maritime mobile allocations and permitted use of the channels are generally consistent with the ITU Radio Regulations, however there are some instances where channels and permitted uses are different to that provided in Appendix 18 of the Radio Regulations. In accordance with Article 4.4 of the ITU Radio Regulations, national differences in allocations are subject to conditions:

- that associated radio installations do not cause harmful interference to the radio services or communications of other ITU Members that operate in accordance with the provisions of the ITU Radio Regulations, and
- that the possibility of harmful interference from such services and communications is accepted.

Within the Australian context, in addition to the *Australian Radiofrequency Spectrum Plan 2017* (ARSP), the ACMA specifies the permitted uses and conditions applicable to the use of the VHF maritime mobile band in the following 4 legislative instruments and in an administrative band plan:

- > [Radiocommunications Licence Conditions \(Major Coast Receive Licence\) Determination 2015](#)
- > [Radiocommunications Licence Conditions \(Maritime Coast Licence\) Determination 2015](#)
- > [Radiocommunications Licence Conditions \(Maritime Ship Licence\) Determination 2015](#)
- > [Radiocommunications \(Maritime Ship Station – 27 MHz and VHF\) Class Licence 2015](#)
- > [RALI: MS 42 – Frequency Plan for the VHF Bands 70 - 87.5 MHz and 148 - 174 MHz](#) (administrative band plan)

A number of maritime terms are also defined in the [Radiocommunications \(Interpretation\) Determination 2015](#).

## **Consultation**

At WRC-12 and WRC-15, the conferences made a number of updates to Appendix 18. In addition, in late 2016, the ACMA was presented with a proposal for a maritime VHF channel plan by interested licensed maritime radio users that incorporated the changes made at WRC-12 and WRC-15, as well as changes to increase the number of available channels and make other arrangements that suit local requirements.

In December 2018, the ACMA consulted extensively with the public on how best to implement changes to the current regulatory framework to improve safety-of-life arrangements while also providing benefits to the Australian maritime community. The consultation paper included a draft Variation Instrument identifying the proposed changes. The consultation period was from 6 December 2018 to 1 February 2019. The ACMA received 10 submissions in response to the consultation paper. The majority of submissions supported the changes outlined in the draft Variation Instrument. Stakeholders also identified some editorial errors that have been rectified in the Variation Instrument.

## Regulatory Impact

The ACMA consulted with the Office of Best Practice Regulation (the **OBPR**) on the requirement for a Regulation Impact Statement (**RIS**). The OBPR advised that the Variation Instrument does not warrant the preparation of a RIS because the Variation Instrument is likely to have only minor and machinery impacts on industry and recreational users. The reference number for the OBPR's assessment is OBPR ID 24623.

## Documents incorporated by reference

The Variation Instrument incorporates, or otherwise refers to, the ITU Radio Regulations, an ITU-R Recommendation<sup>3</sup>, an ACMA Standard and an ACMA administrative instrument, as follows:

- Appendix 17, ITU Radio Regulations of the International Telecommunication Union
- Appendix 18, ITU Radio Regulations of the International Telecommunication Union
- Recommendation ITU-R M.2092 (WRC-15) of the International Telecommunication Union
- *Radiocommunications (VHF Radiotelephone Equipment – Maritime Mobile Service) Standard 2018*
- Radiocommunications Assignment and Licensing Instrument (RALI) MS 42, *Frequency Plan for the VHF Bands 70 - 87.5 MHz and 148 - 174 MHz*.

The ITU is a United Nations specialised agency for information and communications technologies. It makes the ITU Radio Regulations and ITU-R Recommendations which constitute a set of international technical standards developed by the Radiocommunication Sector of the ITU. They are available to be downloaded for free from the ITU's website at [www.itu.int](http://www.itu.int). The ITU documents are incorporated as existing from time to time, as permitted by subsection 314A(2) of the Act.

RALI MS 42 is an administrative instrument made by the ACMA. It is available for download from the ACMA's website at [www.acma.gov.au](http://www.acma.gov.au). It is incorporated as existing from time to time, as permitted by subsection 314A(2) of the Act.

## Statement of compatibility with human rights

Subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* requires the rule-maker in relation to a legislative instrument to which section 42 (disallowance) of the LA applies to prepare a statement of compatibility, which is set out below.

## Overview of the Variation Instrument

The Purpose of the Variation Instrument is to amend or vary the following instruments:

- *Radiocommunications (Interpretation) Determination 2015*;
- *Radiocommunications Licence Conditions (Maritime Coast Licence) Determination 2015*;
- *Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015*;
- *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015*.

These amendments and variations are made to:

- Allocate channels 75 and 76 for satellite Automatic Identification System (AIS) (earth-to-space) to provide enhanced satellite detection of larger vessels the option to use the

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<sup>3</sup> All International Telecommunication Union Radio Regulations and Recommendations can be found at <https://www.itu.int/en/ITU-R/Pages/default.aspx>.

channels for navigation-related communications in accordance with Appendix 18 of the ITU Radio Regulations

- Include protection of VHF Data Exchange System (VDES) channel arrangements, including providing the option to merge channels to create a 100 kHz VDES channel
- Include protection of Application Specific Message (ASM) channels
- Provide of a number of channels identified in Appendix 18 of the ITU Radio Regulations that are not yet included in the legislative instruments being amended or varied
- Provide greater protection to existing search and rescue (SAR) functions by limiting use of channel 6 for SAR operations only.
- Make a number of additional 'editorial' changes to update or modify the above legislative instruments.

The ACMA has determined that it is possible to coordinate around any existing services to allow new services to operate. Furthermore, the variations to the *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015* do not affect the spectrum allocated, to be allocated or to be re-allocated by issuing or re-issuing spectrum licences.

### **Human Rights Implications**

The ACMA has assessed whether the Variation Instrument is compatible with human rights, being the rights and freedoms recognised or declared by the international instruments listed in subsection 3(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* as they apply to Australia.

Having considered the likely impact of the Variation Instrument and the nature of the applicable rights and freedoms, the ACMA has formed the view that the Variation Instrument does not engage any of those rights or freedoms.

### **Conclusion**

The Variation instrument is compatible with human rights as it does not raise any human rights issues.

## **ATTACHMENT A**

### **Detailed description of the instrument**

#### **Section 1 Name**

This section provides for the instrument to be cited as the *Radiocommunications – Maritime Omnibus Variation 2019 (No.1) (Variation Instrument)*.

#### **Section 2 Commencement**

This section provides that the Variation Instrument commences at the start of the day after it is registered on the Federal Register of Legislation.

#### **Section 3 Authority**

This section identifies the provisions that authorise the making of the Variation Instrument, namely subsection 64(1) of the *Australian Communications and Media Authority Act 2005* and paragraph 107(1)(f) and subsection 132(1) of the *Radiocommunications Act 1992*.

#### **Section 4 Amendments – *Radiocommunications (Interpretation) Determination 2015***

This section identifies that the *Radiocommunications (Interpretation) Determination 2015*, specified in Schedule 1 of the Variation Instrument, is amended as set out in the items in that Schedule.

#### **Section 5 Amendments – *Radiocommunications Licence Conditions (Maritime Coast Licence) Determination 2015***

This section identifies that the *Radiocommunications Licence Conditions (Maritime Coast Licence) Determination 2015*, specified in Schedule 2 of the Variation Instrument, is amended as set out in the items in that Schedule.

#### **Section 6 Amendments – *Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015***

This section identifies that the *Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015*, specified in Schedule 3 of the Variation Instrument, is amended as set out in the items in that Schedule.

#### **Section 7 Variations – *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015***

This section identifies that the *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015*, specified in Schedule 4 of the Variation Instrument, is varied as set out in the items in that Schedule.

#### **Section 8 References to other instruments**

This section provides that in the instrument, unless the contrary intention appears:

- a reference to any other legislative instrument is a reference to that other legislative instrument as in force from time to time; and
- a reference to any other kind of instrument is a reference to that other instrument as in force or existing from time to time.

## **Schedule 1 – Amendments**

### ***Radiocommunications (Interpretation) Determination 2015***

#### **Items 1 and 3 – Schedule 1**

Schedule 1 has been updated to include new definitions for Application Specific Messages (ASM), VHF Data Exchange and VHF Data Exchange System (VDES). This is due to the inclusion of new provisions for these services in the following instruments:

- *Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015;*
- *Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015.*

A definition for VHF maritime mobile band has also been included.

#### **Item 2 – Schedule 1**

The definition *Automatic Identification System (AIS)* in Schedule 1 has been modified to define AIS as a system that uses automatic tracking technology in the VHF maritime mobile band.

## **Schedule 2 – Amendments**

### ***Radiocommunications Licence Conditions (Maritime Coast Licence) Determination 2015***

#### **Item 1 – Section 1.2 (note)**

The note to section 1.2 has been modified to state that all legislative instruments must be registered on the Federal Register of Legislation as maintained under the *Legislation Act 2003*.

#### **Item 2 – Subsection 1.4(1) (definition of ACA)**

Subsection 1.4 has been updated to remove the reference to Australian Communications Authority (ACA).

#### **Item 3 – Subsection 1.4(3) (note 2)**

Note 2 to subsection 1.4(3) has been modified to state that all Commonwealth Acts and legislative instruments are registered on the Federal Register of Legislation and maintained under the *Legislation Act 2003*.

#### **Item 4 – Paragraphs 3.4(1)(a) and 4.6(1)(a)**

These paragraphs has been modified to change the reference from ACA to ACMA.

#### **Item 5 – Schedules 2, 3, 4, 5 and 7 (note 2)**

Note 2 has been modified to identify that the frequencies in these schedules are those prescribed in Annex 2 of Appendix 17 of the ITU Radio Regulations that came into force on 1 January 2017.

#### **Item 6 – Part 2 of Schedule 1 (table item 201)**

This item has been repealed.

#### **Item 7 – Schedule 2 (table item 20)**

This item has been modified to reflect a minor editorial change.

#### **Item 8 – Schedule 3 (table item 15)**

This item has been modified to reflect that stations operating on channel 70 are to operate at a maximum transmitter power of 83 watts EIRP.

#### **Item 9 – Schedule 6 (table)**

The table has been updated to include the following channels for the purpose of communication between ship and coast stations:

156.950 MHz	channel 1019
160.825 MHz Tx / 156.225 MHz Rx	channel 64
160.875 MHz Tx / 156.275 MHz Rx	channel 65
161.500 MHz Tx / 156.900 MHz Rx	channel 18
161.550 MHz	channel 2019



## **Schedule 3 – Amendments**

### ***Radiocommunications Licence Conditions (Maritime Ship Licence) Determination 2015***

#### **Item 1 – Section 1.2 (note)**

The note to section 1.2 has been modified to state that all legislative instruments must be registered on the Federal Register of Legislation as maintained under the *Legislation Act 2003*.

#### **Item 2 – Section 2.7**

Section 2.7 has been updated to reflect that maritime ship stations using the Automatic Identification System must operate on a frequency, power and purpose identified in Part 11 of Schedule 2.

#### **Item 3 – After section 2.7**

This item adds two new maritime mobile technologies, VHF Data Exchange System (VDES) and Application Specific Messages (ASM). VDES is a radiocommunications system that operates between ships and shore stations on AIS, ASM and VHF Data Exchange frequencies in the VHF maritime mobile band.

New section 2.8 provides that persons must operate a maritime ship station for VDES communications only on a frequency and output power identified in Part 12 of Schedule 2.

New section 2.9 provides that persons must operate a maritime ship station for ASM purposes only on a frequency and output power identified in Part 13 of Schedule 2.

#### **Item 4 – After section 3.13**

This item adds two new maritime mobile technologies, VHF Data Exchange System (VDES) and Application Specific Messages (ASM). VDES is a radiocommunications system that operates between ships and shore stations on AIS, ASM and VHF Data Exchange frequencies in the VHF maritime mobile band.

New section 3.14 provides that persons must operate a maritime ship station for VDES communications only on a frequency and output power identified in Part 12 of Schedule 2.

New section 3.15 provides that persons must operate a maritime ship station for ASM purposes only on a frequency and output power identified in Part 13 of Schedule 2.

#### **Item 5 – After section 5.12A**

This item adds two new maritime mobile technologies, VHF Data Exchange System (VDES) and Application Specific Messages (ASM). VDES is a radiocommunications system that operates between ships and shore stations on AIS, ASM and VHF Data Exchange frequencies in the VHF maritime mobile band.

New section 5.12B provides that persons must operate a maritime ship station for VDES communications only on a frequency and output power identified in Part 12 of Schedule 2.

New section 5.12C provides that persons must operate a maritime ship station for ASM purposes only on a frequency and output power identified in Part 13 of Schedule 2.

**Item 6 – After the heading to Schedule 2 (before note 1)**

This item updates and revises the section numbering referenced in Schedule 2.

**Item 7 – Schedule 2 (note 2 to Schedule heading)**

Note 2 has been modified to identify that the frequencies in Schedule 2 are those prescribed in Annex 2 of Appendix 17 of the ITU Radio Regulations that came into force on 1 January 2017.

**Item 8 – Part 2 of Schedule 2 (table item 214, first column)**

This item has been modified to reflect a minor editorial change.

**Item 9 – Part 3 of Schedule 2 (table items 342 to 356)**

Part 3 of Schedule 2 allocates channels for use as Public Correspondence by Radiotelephony. This Part has been updated to remove the following channels to allow them to be allocated for other purposes such a VHF Data Exchange System (VDES), Port Operations and Ship Movement channels:

- 24 (157.200 MHz and 161.800 MHz)
- 84 (157.225 MHz and 161.825 MHz)
- 25 (157.250 MHz and 161.850 MHz)
- 85 (157.275 MHz and 161.875 MHz)
- 26 (157.300 MHz and 161.900 MHz)
- 86 (157.325 MHz and 161.925 MHz)
- 27 (157.350 MHz and 161.950 MHz)
- 28 (157.400 MHz and 162.000 MHz)

**Item 10 – Part 5 of Schedule 2 (table items 510 to 514)**

Part 5 of Schedule 2 allocates channels for use as Commercial Operations. This Part has been updated to remove channel 6 (156.300 MHz) from Commercial Operations to allow the channel to operate as a Search and Rescue channel only. This Part has also been updated to include two new channels for Commercial Operations use as follows:

- 15 (157.750 MHz)
- 17 (157.850 MHz)

**Item 11 – Part 7 of Schedule 2 (table)**

Part 7 of Schedule 2 allocates channels for use as Port Operations. This Part has been updated to remove channel 6 (156.300 MHz) from this table to allow the channel to operate as a Search and Rescue channel only. This Part has also been updated to include new channels for Port Operations use as follows:

- 64 (156.225 MHz and 160.825 MHz)
- 65 (156.275 MHz and 160.875 MHz)
- 18 (156.900 MHz and 161.500 MHz)
- 1019 (156.950 MHz)
- 1027 (157.350 MHz)
- 1028 (157.400 MHz)

#### **Item 12 – Part 8 of Schedule 2 (table item 807, sixth column)**

Part 8 of Schedule 2 allocates channels for use as Professional Fishing Operations. This Part has been updated to reflect that channel 71 is for use as Professional Fishing Operations on a ‘working’ only purpose. Calling has been removed to allow the ship stations to operate purely as a message exchange service with another station.

#### **Item 13 – Part 11 of Schedule 2 (table)**

Part 11 of Schedule 2 allocates channels for use as Automatic Identification System (AIS). This Part has been updated to include two new channels for AIS Satellite (ship-satellite) service use as follows:

- 75 (156.775 MHz)
- 76 (156.825 MHz)

Part 11 also provides that channels 75 and 76 may be used for the purpose of navigation-related communications in accordance with Appendix 18 of the ITU Radio Regulations.

#### **Item 14 – After Part 11 of Schedule 2**

Schedule 2 has been updated to include Part 12 – VHF Data Exchange System (VDES) with the following channels identified for use as VDES:

- 24 (157.200 MHz and 161.800 MHz)
- 84 (157.225 MHz and 161.825 MHz)
- 25 (157.250 MHz and 161.850 MHz)
- 85 (157.275 MHz and 161.875 MHz)
- 1026 (157.300 MHz)
- 1086 (157.325 MHz)
- 2026 (161.900 MHz)
- 2086 (161.925 MHz)

Part 12 also provides that channels 24, 84, 25 and 85 may be merged in order to form a unique duplex channel with a bandwidth of 100 kHz in order to operate the VDES terrestrial component described in the most recent version of *Recommendation ITU-R M.2092* (WRC-15).

Schedule 2 has also been updated to include Part 13 – Application Specific Messages (ASM) with the following channels identified for use as ASM:

- ASM 1 (161.950 MHz)
- ASM 2 (162.000 MHz)

#### **Item 15 – Schedule 4 (note 2 to Schedule heading)**

Note 2 has been modified to identify that the frequencies in Schedule 4 are those prescribed in Annex 2 of Appendix 17 of the ITU Radio Regulations that came into force on 1 January 2017.

#### **Item 16 – Part 2 of Schedule 4 (table item 203)**

Part 2 of Schedule 4 allocates channels for use as Non-Commercial Operations. This Part has been updated to remove channel 6 (156.300 MHz) from Non-Commercial Operations to allow the channel to operate as a Search and Rescue channel only.

## **Schedule 4 – Variations**

### ***Radiocommunications (Maritime Ship Station – 27 MHz and VHF) Class Licence 2015***

#### **Item 1 – Section 2 (note 1)**

Note 1 has been modified to state that all legislative instruments must be registered on the Federal Register of Legislation as maintained under the *Legislation Act 2003*.

#### **Item 2 – Subsection 4(1), after the definition of Act**

This subsection has been updated to include the definition of AMSA (Australian Maritime Safety Authority).

#### **Item 3 – Subsection 4(1) (definition of VHF maritime frequencies)**

The definition of VHF maritime frequencies has been modified for accuracy.

#### **Item 4 – Subsection 4(2) (notes at the end)**

Note 1 to subsection 4(2) has been modified to refer to the *Legislation Act 2003*.

Note 2 to subsection 4(2) has been modified to state that all Commonwealth Acts and legislative instruments are registered on the Federal Register of Legislation and maintained under the *Legislation Act 2003*.

#### **Item 5 – Paragraph 8(2)(g)**

In addition to the provisions at paragraphs 8(2)(a), (b), (c), (d), (e) and (f) regarding persons being qualified to operate stations both within and beyond the Australian territorial sea, subparagraph (g)(i) updates the list to reflect that a person is qualified to operate a ship station within and beyond the Australian territorial sea if the person holds a GMDSS Certificate recognised by the Australian Maritime Safety Authority (AMSA), while subparagraph (g)(ii) modifies the qualifications recognised by the ACMA to refer to the other certificates mentioned in subsection 8(2).

#### **Item 6 – Subsection 8(3), after note 2**

Inclusion of new 'note 3' identifying that the list of recognised equivalent qualifications and licences can be found on the ACMA website.

#### **Item 7 – Subsection 9(2)**

This subsection has been modified to reflect a minor editorial change.

#### **Item 8 – Section 19**

This section has been updated to identify that a person must operate a maritime ship station for AIS purposes only on a frequency and output power and for a purpose identified in Part 2.10 of Schedule 2.

#### **Item 9 – After section 19**

This item adds two new maritime mobile technologies, VHF Data Exchange System (VDES) and Application Specific Messages (ASM). VDES is a radiocommunications system that operates between ships and shore stations on AIS, ASM and VHF Data Exchange frequencies in the VHF maritime frequencies.

New section 20 provides that persons must operate a maritime ship station for VDES communications only on a frequency and output power identified in Part 2.11 of Schedule 2.

New section 21 provides that persons must operate a maritime ship station for ASM purposes only on a frequency and output power identified in Part 2.12 of Schedule 2.

**Item 10 – Part 2.1 of Schedule 2 (note)**

The note has been modified to identify that the frequencies in Part 2.1 of Schedule 2 are those prescribed in Annex 2 of Appendix 17 of the ITU Radio Regulations that came into force on 1 January 2017.

**Item 11 – Part 2.3 of Schedule 2 (table)**

Part 2.3 of Schedule 2 allocates channels for use as Public Correspondence by Radiotelephony. This Part has been updated to remove the following channels to allow them to be allocated for other purposes such as a VHF Data Exchange System (VDES), Port Operations and Ship Movement channels:

- 24 (157.200 MHz and 161.800 MHz)
- 84 (157.225 MHz and 161.825 MHz)
- 25 (157.250 MHz and 161.850 MHz)
- 85 (157.275 MHz and 161.875 MHz)
- 26 (157.300 MHz and 161.900 MHz)
- 86 (157.325 MHz and 161.925 MHz)
- 27 (157.350 MHz and 161.950 MHz)
- 28 (157.400 MHz and 162.000 MHz)

**Item 12 – Part 2.4 of Schedule 2 (table)**

Part 2.4 of Schedule 2 allocates channels for use as Commercial Operations. This Part has been updated to remove channel 6 (156.300 MHz) from Commercial Operations to allow the channel to operate as a Search and Rescue channel only. This Part has also been updated to include two new channels for Commercial Operations use as follows:

- 15 (157.750 MHz)
- 17 (157.850 MHz)

**Item 13 – Part 2.6 of Schedule 2 (table)**

Part 2.6 of Schedule 2 allocates channels for use as Port Operations. This Part has been updated to remove channel 6 (156.300 MHz) from this table to allow the channel to operate as a Search and Rescue channel only. This Part has also been updated to include new channels for Port Operations use, with some channels for transmit and receive, as follows:

- 64 (156.225 MHz and 160.825 MHz)
- 65 (156.275 MHz and 160.875 MHz)
- 18 (156.900 MHz and 161.500 MHz)
- 1019 (156.950 MHz)
- 1027 (157.350 MHz)
- 1028 (157.400 MHz)

#### **Item 14 – Part 2.7 of Schedule 2 (table item 3, column 5)**

Part 2.7 of Schedule 2 allocates channels for use as Professional Fishing Operations. This Part has been updated to reflect that channel 71 is for use as Professional Fishing Operations on a 'working' only purpose. Calling has been removed to allow the ship stations to operate purely as a message exchange service with another station.

#### **Item 15 – Part 2.10 of Schedule 2 (table)**

Part 2.10 of Schedule 2 allocates channels for use as Automatic Identification System (AIS). This part has been updated to include two new channels for AIS Satellite (ship-satellite) service use as follows:

- 75 (156.775 MHz)
- 76 (156.825 MHz)

Part 2.10 also provides that channels 75 and 76 may be used for the purpose of navigation-related communications in accordance with Appendix 18 of the ITU Radio Regulations.

#### **Item 16 – Part 2.11 of Schedule 2 (table)**

Schedule 2 has been updated to include Part 12 – VHF Data Exchange System (VDES) with the following channels identified for use as VDES:

- 24 (157.200 MHz and 161.800 MHz)
- 84 (157.225 MHz and 161.825 MHz)
- 25 (157.250 MHz and 161.850 MHz)
- 85 (157.275 MHz and 161.875 MHz)
- 1026 (157.300 MHz)
- 1086 (157.325 MHz)
- 2026 (161.900 MHz)
- 2086 (161.925 MHz)

Part 2.11 also provides that channels 24, 84, 25 and 85 may be merged in order to form a unique duplex channel with a bandwidth of 100 kHz in order to operate the VDES terrestrial component described in the most recent version of *Recommendation ITU-R M.2092* (WRC-15).

Schedule 2 has also been updated to include Part 2.12 – Application Specific Messages (ASM) with the following channels identified for use as ASM:

- ASM 1 (161.950 MHz)
- ASM 2 (162.000 MHz)