EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

Radiocommunications Act 1992

Radiocommunications Spectrum Marketing Plan (3.4/3.7 GHz Bands) 2023

Authority

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications Spectrum Marketing Plan (3.4/3.7 GHz Bands) 2023* (**Marketing Plan**) under section 39A of the *Radiocommunications Act 1992* (**the Act**).

Subsection 39A(2) of the Act provides that the ACMA must, by legislative instrument, prepare a marketing plan for issuing spectrum licences that authorise the operation of radiocommunications devices at frequencies within a part or parts of spectrum specified in a re-allocation declaration made under section 153B of the Act, and within the area or areas specified in that declaration with respect to that part or those parts. Subsection 39A(5) provides that a marketing plan may indicate:

(a) the procedures to be followed for issuing spectrum licences in accordance with the plan;
(b) the timetable for issuing spectrum licences in accordance with the plan;
(c) how the spectrum dealt with under the plan is to be apportioned among the spectrum licences to be issued;
(d) how much of the spectrum dealt with under the plan is to be reserved for public or community services;
(e) the conditions, or types of conditions, that may be included in spectrum licences to be issued.

Purpose and operation of the instrument

The Marketing Plan is for the issuing of spectrum licences that authorise the operation of radiocommunications devices in:

- specified parts of the spectrum within the 3.4 GHz band (3.4 GHz to 3.575 GHz) which are not currently covered by spectrum licences; and
- the 3.7 GHz band (3.7 GHz to 3.8 GHz);

within the corresponding areas specified in the *Radiocommunications (Spectrum Re-allocation – 3.4 GHz and 3.7 GHz Bands) Declaration 2022* (**Re- allocation Declaration**). Together, this spectrum is referred to as the 3.4/3.7 GHz bands.

Background

On 14 July 2022, the ACMA made the Re-allocation Declaration under Part 3.6 of the Act. The Re-allocation Declaration provides that the 3.4/3.7 GHz bands in defined metropolitan, regional and rural areas in Australia are subject to re- allocation by issuing spectrum licences. The Re-allocation Declaration describes the specific frequency ranges in the 3.4/3.7 GHz bands with respect to geographic areas in Australia which are subject to re-allocation by issuing spectrum licences.

The ACMA intends to allocate spectrum licences for the 3.4/3.7 GHz bands in late 2023 (**3.4/3.7 GHz bands spectrum allocation process**) by a combination of direct allocation and auction.

In conducting this allocation, the ACMA is guided by the object of the Act, which requires the ACMA to promote the long-term public interest derived from the use of the spectrum, including by facilitating the efficient planning, allocation and use of the spectrum and supporting the communications policy objectives of the Commonwealth Government. Under section 28C of the Act,

the ACMA is also required to have regard to any relevant Ministerial policy statements, in the performance of the ACMA's spectrum management functions or the exercise of the ACMA's spectrum management powers.

The *Radiocommunications (Ministerial Policy Statement - 3.4–4.0 GHz) Instrument 2022* (**3.4–4.0 GHz Statement**) specifies Commonwealth Government communications policy objectives that apply in the ACMA's performance of its spectrum management functions, and exercise of its spectrum management powers, in relation to the 3.4–4.0 GHz band. The 3.4/3.7 GHz bands fall within the 3.4–4.0 GHz band, and accordingly the ACMA has had regard to the 3.4–4.0 GHz statement in preparing the Marketing Plan.

On 7 December 2022, the Minister for Communications released a statement of expectations for the ACMA (**SoE**). Of particular relevance for the ACMA's spectrum management functions, the SoE outlined the Commonwealth Government's expectation that the ACMA support the Government's communications and media objectives, including:

- promoting investment, innovation and the adoption of new and emerging technologies while continuing to safeguard the interests of consumers and small businesses;
- supporting government policies related to regional, rural and remote Australia including by having regard to relevant ministerial policy statements in the planning and allocation of spectrum to support innovation and competition in these areas;
- promoting the long-term public interest derived from spectrum, including the benefits of technological developments that improve spectrum utilisation.

Operation of the Marketing Plan

The ACMA has made the Marketing Plan in relation to the 3.4/3.7 GHz bands spectrum allocation process.

The Marketing Plan is one of a set of legislative instruments required for the allocation of spectrum licences in the 3.4/3.7 GHz bands, including:

- the *Radiocommunications (Spectrum Licence Allocation – 3.4/3.7 GHz Bands) Determination 2023* (**Allocation Determination**);
- the *Radiocommunications (Unacceptable Levels of Interference – 3.4 GHz Band) Determination 2015* (**Unacceptable Interference Determination**);
- the *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 3.4 GHz Band) 2015* (**RAG Tx**);
- the *Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 3.4 GHz Band) 2015* (**RAG Rx**);
- the *Radiocommunications (Trading Rules for Spectrum Licences) Determination 2023* (**Trading Rules Determination**).

The Marketing Plan divides the 3.4 GHz band into 34 products as set out in Schedule 2, and the 3.7 GHz band into 20 products, as set out in Schedule 1. Each product is defined by a frequency range and geographic region. Products are divisible into an assigned number of individual units of 5 MHz bandwidth called lots. As set out in Schedule 3, there are 28 additional lots (**leftover lots**) of 2.5 MHz bandwidth, that belong to no product.

The Allocation Determination sets out procedures for the direct allocation of leftover lots (as set out below) and for the auctions of 3.4 GHz and 3.7 GHz band spectrum using the two-stage generic lots clock auction format. The auction format involves:

- a primary stage, for the allocation of generic lots of each product
- a secondary stage for any product that has one generic lot remaining after the primary stage (referred to as a **residual lot**)
- an assignment stage for assigning frequencies to the generic lots allocated in the primary and secondary stages.

The ACMA has used this format in the past, including in the 26 GHz band and 850/900 MHz band auctions conducted in 2021.

The Allocation Determination sets out that the 3.4/3.7 GHz bands spectrum allocation process will begin with the direct allocation of leftover lots to those who are both eligible to apply for them, and have applied for them. Next, there will be two auctions. First, the primary, secondary (if there is one) and assignment stages for the auction of lots in the 3.7 GHz band (**3.7 GHz band auction**) will be conducted, and then the primary, secondary (if there is one) and assignment stages for the auction of lots in the 3.4 GHz band (**3.4 GHz band auction**) will be conducted. Any leftover lots which were not directly allocated may be allocated in the assignment stage for the 3.4 GHz band auction.

Allocation of leftover lots

There are 28 leftover lots in the 3.4 GHz band. The presence of leftover lots is a result of previous allocation of licences in the 3.4 GHz to 3.7 GHz frequency band.

The leftover lots are configured to align with the frequency configuration of existing adjacent spectrum licences, so some regions may have 2 leftover lots of 2.5 MHz, resulting in one less generic 5 MHz lot in the corresponding product for that region than otherwise would have been the case.

The ACMA has identified the adjacent product and adjacent licensee of each leftover lot as set out in Columns 4 and 5 of the table in Schedule 3 to the Marketing Plan. An adjacent licensee for a leftover lot is the current licensee of a spectrum licence which authorises the use of spectrum adjacent to the leftover lot, in the same geographic region as the leftover lot.

The adjacent licensee of a leftover lot (or a related body corporate of the adjacent licence) may apply to be directly allocated the leftover lot. This is an efficient allocation of spectrum, as the adjacent licensee should be able to use the bandwidth to complement their existing spectrum holdings.

Adjacent licensees who apply to be directly allocated leftover lots for a set price will be allocated those lots immediately after the eligibility deadline (or extended eligibility deadline, if there is one) in accordance with the procedures set out in the Allocation Determination. Any remaining leftover lots will be allocated during the assignment stage of the 3.4 GHz band auction to each bidder who:

- is allocated lots of a product with the same region as the leftover lot; and
- has frequencies assigned to those allocated lots that are adjacent to the frequencies of the leftover lot.

Spectrum licences to be allocated

The technical conditions to be included in the spectrum licences allocated in accordance with the Marketing Plan and Allocation Determination are set out in the Marketing Plan, including the sample spectrum licence at Schedule 7. The broader technical framework is set out in the following legislative instruments:

- Unacceptable Interference Determination;
- RAG Tx;
- RAG Rx.

The technical framework places constraints on, and regulates the use of, spectrum licences to allow licensees to operate services while managing interference to and from other services operating in other (or the same) parts of the radiofrequency spectrum. Core conditions (in accordance with section 66 of the Act) will be included in spectrum licences to:

- define their geographic boundaries;
- define their range of frequencies;
- set out-of-area radio emission limits;
- set out-of-band (unwanted) radio emission limits.

The Marketing Plan, including the sample spectrum licence at Schedule 7, sets out other licence conditions proposed to be included in spectrum licences issued in the 3.4/3.7 GHz bands. The sample spectrum licence set out in Schedule 7 to the Marketing Plan contains information relating to core and other licence conditions that may apply to the operation of radiocommunications devices under a spectrum licence. However, the spectrum licences issued as a result of the 3.4 GHz band auction or the 3.7 GHz band auction may contain additional or different conditions.

The Marketing Plan includes provisions regarding licence issue, commencement and duration. The Marketing Plan also sets out what statements relating to renewal will be included in spectrum licences issued in the 3.4/3.7 GHz bands.

In accordance with the Marketing Plan, spectrum licences issued in the 3.4 GHz band will commence immediately and expire on 13 December 2030, and spectrum licences issued in the 3.7 GHz band will commence on the later of the day the licence is issued or 8 weeks after the ACMA announces the auctions' results, and expire 20 years and 8 weeks after the ACMA announces the auctions' results.

A provision-by-provision description of the Marketing Plan is set out in the notes at **Attachment A**.

The Marketing Plan is a disallowable legislative instrument for the purposes of the *Legislation Act 2003* (**the LA**).

The Marketing Plan is also subject to the sunsetting provisions of the LA.

Documents incorporated by reference

Subsection 314A(2) of the Act provides that an instrument under the Act may make provision in relation to a matter by applying, adopting or incorporating (with or without modifications) matters contained in any other instrument or writing as in force or existing at a particular time or from time to time. The Marketing Plan incorporates the following documents by reference, as existing from time to time, or otherwise refers to them:

- the Australian Spectrum Map Grid 2012, published by the ACMA, and available free of charge from the ACMA's website at www.acma.gov.au;

- the Radiocommunications Assignment and Licensing Instruction No. MS 32 (**RALI MS 32**), published by the ACMA, and available free of charge from the ACMA's website at www.acma.gov.au;
- the Radiocommunications Assignment and Licensing Instruction No. MS 44 (**RALI MS 44**), published by the ACMA, and available free of charge from the ACMA's website at www.acma.gov.au;
- the Radio Regulations, published by the International Telecommunication Union (**ITU**). The Radio Regulations contain Articles, Appendixes, Resolutions and Recommendations of the ITU relating to international radiocommunications coordination. The Radio Regulations are available, free of charge, from the ITU's website at www.iteu.int.

The Marketing Plan also incorporates the document titled "LTE; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation (3GPP TS 36.211 version 14.6.0 Release 14)", published by the European Telecommunications Standards Institute, as it existed at the time the *Australian Communications and Media Authority (Radiocommunications Licence Conditions – 3.4 GHz and 3.6 GHz Bands Interference Management) Direction 2018* was made (17 July 2018).

The Marketing Plan also incorporates the following Acts and legislative instruments (including by the adoption of definitions), as in force from time to time, or otherwise refers to them:

- the Act;
- the *Acts Interpretation Act 1901*;
- the *Administrative Appeals Tribunal Act 1975*;
- the Allocation Determination;
- the *Australian Communications and Media Authority Act 2005*;
- the *Australian Radiofrequency Spectrum Plan 2021* (being the current spectrum plan made under subsection 30(1) of the Act);
- the *Corporations Act 2001*;
- the *Income Tax Assessment Act 1997*;
- the *International Tax Agreements Act 1953*;
- the LA;
- the *Radiocommunications (Aircraft and Aeronautical Mobile Stations) Class Licence 2016*, or any instrument replacing that class licence;
- the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023*, or any instrument replacing that plan;
- the *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015*, or any instrument replacing that determination;
- the *Radiocommunications (Interpretation) Determination 2015*, or any instrument replacing that determination;
- the *Radiocommunications (Register of Radiocommunications Licences) Determination 2017*;
- the *Radiocommunications (Spectrum Re-allocation – 3.6 GHz Band for Regional Australia) Declaration 2018*;
- the RAG Rx;
- the RAG Tx;
- the Re-allocation Declaration;
- the Trading Rules Determination;
- the Unacceptable Interference Determination, or any instrument replacing that determination.

The Marketing Plan also refers to the *Australian Communications and Media Authority (Radiocommunications Licence Conditions – 3.4 GHz and 3.6 GHz Bands Interference Management) Direction 2018*, as in force on the day it was made (17 July 2018).

The Acts and legislative instruments listed above may be obtained from the Federal Register of Legislation (www.legislation.gov.au).

Consultation

Before the Marketing Plan was made, the ACMA was satisfied that consultation was undertaken to the extent appropriate and reasonably practicable, in accordance with section 17 of the LA.

From September 2022 to January 2023, the ACMA convened a short-term industry technical liaison group (**TLG**) to provide advice on modifications to the existing 3.4 GHz to 3.7 GHz frequency band spectrum licence technical framework (**technical framework**) to incorporate the frequencies and areas specified in the Re-allocation Declaration.

The TLG was asked to consider and provide advice to the ACMA on numerous technical aspects of the technical framework including:

- technical conditions on the spectrum licence, such as the core conditions included in accordance with section 66 of the Act;
- modifications to the Unacceptable Interference Determination, the RAG Rx and the RAG Tx; and
- modifications to Radiocommunications Assignment and Licensing Instruction No. MS 47, published by the ACMA and available on its website at www.acma.gov.au.

The ACMA developed papers which outlined its proposed approach to the technical framework. These papers were made available by the ACMA to the TLG members for comment and are available on the ACMA's website. The ACMA had regard to the views expressed by the TLG members when preparing the Marketing Plan and other instruments for the 3.4/3.7 GHz bands spectrum allocation process.

A draft version of the Marketing Plan was released for public consultation on 13 February 2023, together with the consultation paper *Draft instruments for the 3.4/3.7 GHz bands auction* (**draft instruments consultation**). The draft instruments consultation closed on 29 March 2023.

The ACMA received 11 public submissions in response to the draft instruments consultation. The ACMA had regard to the views of stakeholders during finalisation of the Marketing Plan.

On the issue of licence commencement and duration, three stakeholders supported aligned licence terms for the 3.4 GHz band with adjacent existing 3.4 GHz band licences (which expire on 13 December 2030), and 20 year licence terms for licences issued in the 3.7 GHz band. One stakeholder proposed that all 3.4/3.7 GHz bands spectrum licences should be allocated for approximately a 7 year term, aligning expiry with adjacent existing 3.4 GHz band licences. One stakeholder proposed a common commencement date for all licences. Having considered these views, the ACMA decided that the 3.4 GHz band spectrum licences should expire on 13 December 2030, and the 3.7 GHz band spectrum licences should be issued for a term of 20 years (the maximum permitted under the Act). The ACMA considers that allocating licences for these durations best meets our allocation objectives by striking the balance between supporting investment certainty for licensees, and facilitating licence trading with adjacent spectrum licensees. Supporting investment certainty and facilitating licence trading may further the Commonwealth Government's communications policy objective of promoting competitive markets (see the 3.4–4.0 GHz Statement).

On the issue of licence renewal statements, stakeholders expressed a diverse range of views on the ACMA's proposal to include a public interest statement for the renewal of licences issued in the 3.4 GHz band, but not for those issued in the 3.7 GHz band. One stakeholder suggested that a public interest statement should be included in all spectrum licences, while another suggested that the defragmentation of the 3.4 GHz to 3.8 GHz frequency band should be explicitly included in the statement. Three stakeholders supported the licence renewal statements as proposed by the ACMA. Having considered these views, the ACMA decided that the renewal statements for the spectrum licences to be issued in the 3.4 GHz band should provide for a renewal process that is aligned, to the extent possible, with the renewal process for those existing licences in the 3.4 GHz band. The existing licences in the 3.4 GHz band do not have renewal statements, and their renewal process is set out in various provisions of the Act.

On the issue of frequency lot configuration, stakeholders were generally supportive of the ACMA's proposal for the spectrum available at auction (other than the leftover lots) to be configured into 5 MHz lots. One stakeholder expressed a preference for 10 MHz lots. Having had regard for these views, the ACMA decided that the spectrum should be configured into 5 MHz lots.

On the issue of geographic lot configuration, stakeholders were generally supportive of the suggested geographic licence boundaries (that is, that spectrum products should align, to the extent possible, with the geographic areas that were used for spectrum products in the 3.6 GHz band auction held in 2018). One stakeholder disagreed and proposed the geographic configuration of the 3.4 GHz band products should align with existing licences in the 3.4 GHz band. Having had regard for these views, the ACMA decided to configure the spectrum products so that they align geographically, to the extent possible, with the areas used for the 3.6 GHz band auction in 2018.

On the issue of the conditions that would apply to spectrum licences to be issued in the 3.4/3.7 GHz bands, stakeholders were generally supportive of the proposed technical conditions. Stakeholders identified several minor editorial corrections, including in relation to the out-of-band unwanted emission limits specified in Schedule 6 to the Marketing Plan. The out-of-band unwanted emission limits for the 1 GHz to 19 GHz frequency range specified in the draft of the Marketing Plan was a mean power of -36 dBm, but should have been a mean power of -30 dBm. Some stakeholders recommended the inclusion of an equivalent isotropically radiated power (**EIRP**) limit for radiocommunications transmitters operating in the 3.7 GHz band to assist in the management of interference to aeronautical radionavigation services. After considering the issue, an EIRP limit was included in the Marketing Plan as a condition of spectrum licences to be issued in the 3.4/3.7 GHz bands. Some stakeholders recommended that other co-existence measures with radio altimeters operating in the 4200 MHz to 4400 MHz frequency band be applied to radiocommunications transmitters operating under a spectrum licence in the 3700 MHz to 3800 MHz frequency band. After considering the issue, the Marketing Plan now provides that a condition will be included in spectrum licences that effectively requires compliance with some parts of Radiocommunications Assignment and Licensing Instruction No. MS 47, which deals with protection of radio altimeters.

Regulatory impact assessment

An early assessment of the proposal to make the allocation instruments was conducted by the Office of Impact Analysis (**OIA**), based on information provided by the ACMA, for the purposes of determining whether a Regulation Impact Statement (**RIS**) would be required. OIA advised that a RIS would not be required because the proposed regulatory change is minor or machinery in nature – reference number OBPR22-01921.

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 cause a statement of compatibility with human rights to be prepared in respect of that legislative instrument.

The statement of compatibility set out below has been prepared to meet that requirement.

Overview of the instrument

On 14 July 2022, the ACMA made the *Radiocommunications (Spectrum Re-allocation—3.4 GHz and 3.7 GHz Bands) Declaration 2022* (**Re-allocation Declaration**) under section 153B of the *Radiocommunications Act 1992* (**Act**). The Re-allocation Declaration provides that the parts of the spectrum known as the 3.4/3.7 GHz bands, across defined metropolitan and regional areas in Australia, are subject to re- allocation by issuing spectrum licences.

Subsection 39A(2) of the Act provides that the ACMA must, by legislative instrument, prepare a marketing plan for issuing spectrum licences that authorise the operation of radiocommunications devices at frequencies within a part or parts of spectrum specified in a re-allocation declaration made under section 153B of the Act, and within the area or areas specified in that declaration with respect to that part or those parts. Subsection 39A(5) provides that a marketing plan may indicate:

(a) the procedures to be followed for issuing spectrum licences in accordance with the plan;
(b) the timetable for issuing spectrum licences in accordance with the plan;
(c) how the spectrum dealt with under the plan is to be apportioned among the spectrum licences to be issued;
(d) how much of the spectrum dealt with under the plan is to be reserved for public or community services;
(e) the conditions, or types of conditions, that may be included in spectrum licences to be issued.

The ACMA has made the *Radiocommunications Spectrum Marketing Plan (3.4/3.7 GHz Bands) 2023* (**Marketing Plan**) under section 39A. Subject to the operation of the allocation limits set out in the *Radiocommunications (Spectrum Licence Allocation – 3.4/3.7 GHz Bands) Determination 2023*, any person may apply to be allocated a spectrum licence in accordance with the Marketing Plan.

Human rights implications

The ACMA has assessed whether the 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 instrument and the nature of the applicable rights and freedoms, the ACMA has formed the view that the instrument does not engage any of those rights or freedoms.

Conclusion

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

Attachment A

Notes to the *Radiocommunications Spectrum Marketing Plan (3.4/3.7 GHz Bands) 2023*

Part 1–Preliminary

Section 1 Name

Section 1 provides for the Marketing Plan to be cited as the *Radiocommunications Spectrum Marketing Plan (3.4/3.7 GHz Bands) 2023*.

Section 2 Commencement

Section 2 provides for the instrument to commence at the start of the day after the day it is registered on the Federal Register of Legislation.

The Federal Register of Legislation may be accessed free of charge at www.legislation.gov.au.

Section 3 Authority

Section 3 identifies the provision of the Act that authorises the making of the Marketing Plan, namely section 39A of the Act.

Section 4 Purpose of the instrument

Section 4 lists the main matters described by the Marketing Plan. For a more complete understanding of allocation procedures, the Marketing Plan should be read in conjunction with the Allocation Determination.

Section 5 Interpretation

Section 5 defines a number of key terms used throughout the Marketing Plan. A number of other expressions used in the Marketing Plan are defined in the Act.

Section 5 also provides that, in the Marketing Plan, a reference to a part of the spectrum, a frequency band or a frequency range includes all frequencies that are greater than but not including the lower frequency, up to and including the higher frequency.

Section 6 References to other instruments

Section 6 provides that in the Marketing Plan, 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
- a reference to any other kind of instrument or writing is a reference to that other instrument or writing as in force or existing from time to time.

Part 2–Allocation of spectrum licences

Section 7 Simplified outline of this Part

Section 7 sets out a simplified outline of Part 2.

Section 8 Parts of the spectrum

Section 8 provides that spectrum licences in the 3.4/3.7 GHz bands will be allocated and issued in the manner described in the Marketing Plan and the Allocation Determination.

Section 9 How spectrum licences will be allocated

Section 9 provides that spectrum licences in the 3.4/3.7 GHz bands will be allocated in accordance with procedures set out in the Marketing Plan and the Allocation Determination. This includes a multi-stage auction process for both the 3.4 GHz band and 3.7 GHz band, and the direct allocation of leftover lots in the 3.4 GHz band for a pre-determined price.

Section 9 includes a note to the effect that neither the ACMA nor the Commonwealth accepts any liability for any loss or damage suffered by any person in the 3.4/3.7 GHz bands spectrum allocation process. The note is advisory, rather than having any substantive effect, and recommends that persons intending to participate in the allocation of spectrum licences should obtain independent legal, technical and financial advice before applying to participate.

Section 10 The allocation process

Section 10 describes how the ACMA has divided up the parts of the 3.4/3.7 GHz bands specified in the Re-allocation Declaration, other than the leftover lots, into products: the 3.7 GHz products as described in Schedule 1, and the 3.4 GHz products as described in Schedule 2, to the Marketing Plan. There are twenty 3.7 GHz products and thirty-four 3.4 GHz products. Each product is described by its geographic area and frequency range. Section 9 classifies the products as either metropolitan products or regional products, except for the Regional WA Central Middle product. This classification is relevant to application of the allocation limits that are set out in the Allocation Determination.

Each of the products is, in turn, divided into units called lots. Each lot is defined by a frequency range (**bandwidth**) and a specific geographic area (**region**). The number of lots of each 3.7 GHz product that is available at auction is set out in column 5 of the table in Schedule 1 to the Marketing Plan, and the number of lots of each 3.4 GHz product that is available at auction is set out in column 5 of the table in Schedule 2 to the Marketing Plan. Not all products have the same number of lots available. In total, there are 260 lots on offer in the 3.7 GHz band, and 300 lots on offer in the 3.4 GHz band, each representing a 5 MHz bandwidth in a particular region.

There are 28 further lots (**leftover lots**), which are parts of the 3.4 GHz band, that are not lots of a product. Each leftover lot represents a 2.5 MHz bandwidth in a particular region that is set out in the table in Schedule 3 to the Marketing Plan. In column 5 of the table in Schedule 3, the adjacent licensee of each leftover lot is listed. As set out in the Allocation Determination, if an applicant in the 3.4/3.7 GHz bands spectrum allocation process is an adjacent licensee for a leftover lot, or the related body corporate of such a licensee, the applicant will be eligible to apply to be directly allocated the leftover lot at the set price for the leftover lot. Once the eligibility deadline has passed, each such applicant will be allocated the relevant leftover lot.

Section 9 provides that the ACMA will set a lot rating for the lots of each product in accordance with the Allocation Determination (there will be no lot ratings for the leftover lots). All lots, including leftover lots, will be available for allocation in accordance with the Allocation Determination.

Section 9 gives a description of how the 3.4/3.7 GHz bands spectrum allocation process will be conducted. The Allocation Determination provides for the two-stage generic lots clock auction format to be used, which involves a primary stage and a secondary stage (each for bidding on the number of frequency-generic lots of each product a person wishes to acquire), and an assignment stage (for

bidding on a frequency range to be assigned to the lots won by a person during the primary and secondary stages). Two auctions will be conducted: first, the 3.7 GHz band auction, and then the 3.4 GHz band auction.

If a leftover lot has not been directly allocated in the manner described above, then the leftover lot may be allocated during the assignment stage for the 3.4 GHz band auction. If, during the primary stage or secondary stage for the 3.4 GHz band auction, one or more bidders is allocated a lot of the adjacent product of a leftover lot, as listed in column 4 of the table in Schedule 3 to the Marketing Plan, and that leftover lot was not directly allocated as described above, then the frequency range options provided to these bidders participating in the assignment round will include an option that covers the frequencies of the leftover lot. If, for a bidder, this option is the winning option during the assignment stage, the leftover lot is allocated to that bidder. The set price of a leftover lot assigned to a bidder in this manner will not be included in the winning price or spectrum access charge for issuing spectrum licences to this bidder.

Section 9 provides that the ACMA will issue a spectrum licence to each winning bidder allocated one or more lots in the 3.7 GHz band auction, and a spectrum licence to each winning bidder allocated one or more lots in the 3.4 GHz band auction (which includes any directly allocated leftover lots). The spectrum licence issued to each winning bidder for lots of the 3.4 GHz band will also include any leftover lots allocated to that bidder in the assignment stage of the 3.4 GHz band auction.

Full details of auction procedures are set out in the Allocation Determination, which is available from the Federal Register of Legislation.

Section 11 Advertising the allocation process

Section 11 provides that the ACMA will advertise the details of, and invite persons to take part in, the 3.4/3.7 GHz bands spectrum allocation process, in accordance with the Allocation Determination.

Section 12 Participating in the allocation process

Section 12 provides that detailed information about the application requirements and the auction process will be made available by the ACMA in an applicant information package (**AIP**), to be published in accordance with the Allocation Determination. The AIP will be made available when the ACMA advertises the 3.4/3.7 GHz bands spectrum allocation process under the Allocation Determination. The mandatory contents of the AIP are set out in the Allocation Determination.

The AIP will contain information about the 3.4/3.7 GHz bands spectrum allocation process for potential participants. It will describe how to apply to participate in the 3.4/3.7 GHz bands spectrum allocation process and will include copies of all necessary documents to participate.

Section 12 also states that information about how to apply to participate in the 3.4/3.7 GHz bands spectrum allocation process is included in the Allocation Determination.

Part 3– Spectrum licences to be issued

Section 13 Simplified outline of this Part

Section 13 sets out a simplified outline of Part 3.

Section 14 Issue of spectrum licences and payment of spectrum access charges

Section 14 sets out when the ACMA will issue spectrum licences in the 3.4/3.7 GHz bands. The ACMA will issue a spectrum licence to a winning bidder as soon as practicable after the winning bidder pays to the ACMA the balance of the total winning price.

The Allocation Determination sets out the relevant procedures for payment of spectrum access charges in more detail.

Section 15 Commencement of spectrum licences

Section 15 provides that a spectrum licence in the 3.4 GHz band issued as a result of the Allocation Determination will come into force immediately.

This section provides that a spectrum licence in the 3.7 GHz band issued as a result of the Allocation Determination will come into force on the later of the day the licence is issued, or 8 weeks after the ACMA publicly announces the results of the 3.4/3.7 GHz bands spectrum allocation process.

Section 16 Duration of spectrum licences

Section 16 provides that a spectrum licence in the 3.4 GHz band issued as a result of the Allocation Determination will remain in force for a period starting on the day the licence comes into force and ending on 13 December 2030. This is the same date that existing spectrum licences in the 3.4 GHz band are due to expire.

Spectrum licences issued in the 3.7 GHz band will remain in force for a period starting on the day the licence comes into force and ending 20 years and 8 weeks after the ACMA publicly announces the results of the 3.4/3.7 GHz bands spectrum allocation process.

Section 17 Statements relating to renewal

Under subsection 65A(1) of the Act, each spectrum licence must include a renewal statement, to the effect that the licence cannot be renewed, may be renewed at the ACMA's discretion, or may be renewed at the ACMA's discretion so long as specified circumstances exist. If the renewal statement is to the effect that the licence may be renewed:

- subsection 65A(10) requires the licence to include a 'renewal application period statement', to the effect that a specified period of time is the renewal application period for the licence. During the renewal application period, the licensee can apply to the ACMA for a renewal of its licence;
- subsection 65A(15) permits the licence to include a 'renewal decision-making period statement', to the effect that a specified period of time is the renewal decision-making period for the licence (during which the ACMA can decide, on application by the licensee, whether to renew the licence);
- subsection 65A(17) permits the licence to include a 'public interest statement', to the effect that the ACMA will not renew the licence unless the ACMA is satisfied that it is in the public interest to do so.

Section 17 of the Marketing Plan provides that each spectrum licence issued in the 3.4/3.7 GHz bands will include a renewal statement that the licence may be renewed at the discretion of the ACMA.

For each licence issued in the 3.4 GHz band, section 17 provides that the licence will:

- include a renewal application period statement specifying the renewal application period to be a period of 2 years ending when the licence expires. The renewal application period will therefore start on 14 December 2028 and end on 13 December 2030.
- include a renewal decision-making period statement specifying the renewal decision-making period to be the 6 month period commencing after an application for renewal is made;
- include a public interest statement to the effect that the ACMA will not renew the licence unless the ACMA is satisfied it is in the public interest to do so.

For each licence issued in the 3.7 GHz band, section 17 provides that the licence will:

- include a renewal application period statement specifying the renewal application period to be a 12 month period that begins on the day 5 years before the licence is due to expire;
- include a renewal decision-making period statement specifying the renewal decision-making period to be the 2 year period beginning immediately after the renewal application period ends;
- not include a public interest statement.

Although no public interest statement will be included on spectrum licences issued in the 3.7 GHz band, the ACMA must not renew a spectrum licence for a period of 10 years or longer unless satisfied that it is in the public interest to do so, in accordance with subsection 77C(5) of the Act.

Section 18 Core licence conditions

Under section 66 of the Act, there are a number of core conditions which a spectrum licence must include. Section 18 sets out the types of core conditions to be included in a spectrum licence allocated in accordance with the Marketing Plan, including the geographic area and frequency bands in which a radiocommunications device can be operated under a spectrum licence, and the out-of-area and out-of-band emission levels.

Section 19 Determining core licence conditions

Section 19 explains how the core conditions for spectrum licences issued in the 3.4/3.7 GHz bands will be determined.

If a person is allocated lots in both the 3.4 GHz band (including leftover lots) and the 3.7 GHz band, the ACMA will issue two licences to the person (one licence for each band). Otherwise, any other person allocated lots will be issued one licence.

Each licence issued will specify a range of frequencies within which the licensee may operate radiocommunications devices. The range of frequencies will depend on the lots the licensee has been allocated in accordance with the Allocation Determination. If a licensee has been allocated multiple lots in a band, the licence issued may specify the aggregate frequency range for the lots.

Each licence will also specify the geographic area within which the licensee may operate radiocommunications devices. The geographic area will be the region, or regions, described in Schedule 4 to the Marketing Plan for the lots (including leftover lots) allocated in accordance with the Allocation Determination.

The regions are defined by an identifier scheme adopted by the ACMA in 2012, the Hierarchical Cell Identification Scheme (**the HCIS**). Under the HCIS, an area is defined by referring to a set of identifiers which collectively correspond to a single area on the Australian Spectrum Map Grid (**the ASMG**). The ASMG is described in more detail, including the use of geographic co-ordinates to define the ASMG outer boundary, in the Australian Spectrum Map Grid 2012, available from the ACMA's website at www.acma.gov.au.

The ASMG divides the Australian land mass into a grid of squares (cells). There are four levels to the HCIS that are typically used in relation to spectrum licences, with the side lengths of the largest to smallest cells being, respectively, 3 degrees, 1 degree, 15 minutes and 5 minutes of arc. The HCIS names the cells in this tiered structure, with cells of each size given a unique identifier name. Under this system, the region for a lot is comprised of a collection of unique identifiers that cover the required geographic area on the ASMG. Spatial data files available from the ACMA's website may be

used to generate a map of an area defined by a set of HCIS identifiers with geographic information systems software. A HCIS area description to Placemark conversion tool has also been developed and is available online at the ACMA website at www.acma.gov.au.

Indicative maps that illustrate the areas of the regions are shown in Schedule 4 to the Marketing Plan.

Subsections 19(2) and 19(3) of the Marketing Plan provide that the emission limits, which will be licence conditions included in the spectrum licences issued in accordance with the Marketing Plan, will be calculated in accordance with Schedules 5 and 6 to the Marketing Plan. These Schedules are, respectively, used to calculate the maximum emission limits allowable outside the geographic area, and outside the frequency band, of a spectrum licence, and they form part of the core conditions of each licence.

Section 20 Other licence conditions

Section 20 identifies other kinds of statutory licence conditions and other licence conditions that will be included in each spectrum licence issued under the 3.4/3.7 GHz bands spectrum allocation process. These include conditions in relation to payment to the ACMA of applicable charges and taxes, use by third parties, registration requirements for radiocommunications transmitters and residency requirements of the licensee. The ACMA will also include conditions about other matters, including conditions relating to interference management. Some of these conditions are included in the sample licence at Schedule 7.

Each spectrum licence will include a condition about coordinating radiocommunications transmitters in relation to the Western Australian Radio Quiet Zone (**RQZ**) in order to prevent harmful interference to radio astronomy services in the RQZ.

Each spectrum licence will include a condition requiring the licensee to provide protection to any radiocommunications devices operating in a ‘re-allocation zone’ in the 3.4 GHz to 3.8 GHz frequency band in accordance with an apparatus licence. The licensee will have to provide protection in the manner set out in Parts 3, 4 and 5 of the RAG Tx. A ‘re-allocation zone’ is a geographic area where a declaration under section 153B has previously made a part of the 3.4 GHz to 3.8 GHz frequency band available for spectrum licensing, and the re-allocation period for the zone has not yet ended.

Each spectrum licence will include a condition requiring the licensee to follow the procedures specified in RALI MS 44 to manage the levels of radio emissions into ‘earth station protection zones’ in the 3.4 GHz to 3.8 GHz frequency band. The earth station protection zones are set out in RALI MS 44.

Each spectrum licence will include a condition requiring licensees to synchronise operation of radiocommunications devices under the licence with radiocommunications devices operating under another spectrum licence in the 3.4 GHz to 3.8 GHz frequency band, in certain circumstances.

Each spectrum licence will include a condition requiring radiocommunications transmitters operated in the 3.7 GHz to 3.8 GHz frequency band to not exceed a total EIRP of 72 dBm/5 MHz. This condition is included to assist in the management of interference to aeronautical radionavigation services. The need for this condition may be reviewed in the future.

Each spectrum licence will include a condition requiring licensees to manage interference to radiocommunications receivers of the aeronautical radionavigation service operating in the 4200 MHz to 4400 MHz frequency band, in the manner set out in Part 13 of the RAG Tx (which incorporates parts of Radiocommunications Assignment and Licensing Instruction No. MS 47).

Pursuant to section 71 of the Act, the ACMA may include conditions about such other matters as it thinks fit. The ACMA may also include conditions in a spectrum licence that are not included in the sample spectrum licence.

Section 21 Registration of radiocommunications transmitters

Under Part 3.5 of the Act, the ACMA is required to register all spectrum licences, and certain details of radiocommunications devices (except in particular cases) that are operated under each spectrum licence. Section 21 states that all spectrum licences issued pursuant to the Marketing Plan will include a condition that prevents the operation of a radiocommunications transmitter unless all requirements for registering the transmitter under Part 3.5 have been met. This is a mandatory licence condition for inclusion in all spectrum licences, under subsection 69(1) of the Act.

The ACMA has the discretion to refuse to register a radiocommunications transmitter under subsection 145(1) of the Act if it forms the view that operating the transmitter in question will cause unacceptable levels of interference to the operation of other radiocommunications devices, either under the same licence or another licence. For the 3.4/3.7 GHz bands, unacceptable levels of interference are defined in the Unacceptable Interference Determination made under subsection 145(4) of the Act.

Under subsection 69(2) of the Act, the ACMA may include a condition which exempts particular kinds of radiocommunications transmitters from registration requirements detailed in the mandatory spectrum licence condition as required by subsection 69(1) of the Act. Each spectrum licence in the 3.4/3.7 GHz band will include a condition that radiocommunications transmitters that operate in the 3.4 GHz to 3.8 GHz frequency band with a maximum total radiated power of less than or equal to 28 dBm per occupied bandwidth are exempt from registration (**exempt radiocommunications transmitters**).

This exemption is included in Licence Schedule 3 of the sample spectrum licence at Schedule 7 to the Marketing Plan.

Exempt radiocommunications transmitters are still required to meet all core and other conditions of the licence, including relevant emission limit requirements. Each spectrum licence will also include a condition that the licensee must ensure the operation of an exempt radiocommunications transmitter does not cause harmful interference to other radiocommunications devices operated under a different licence.

Section 22 Sample spectrum licence

Section 22 provides that a sample spectrum licence is included at Schedule 7 to the Marketing Plan. The sample spectrum licence sets out the technical and other conditions that may apply to spectrum licences issued as a result of the 3.4/3.7 GHz bands spectrum allocation process. However, the conditions in the sample spectrum licence may not reflect all of the actual conditions included in a spectrum licence issued in the 3.4/3.7 GHz bands.

Section 23 Advisory guidelines

Section 23 provides that the purpose of the RAG Tx and RAG Rx is to provide a means of coordinating services operating under spectrum licences in the 3.4/3.7 GHz bands.

Part 4–After allocation

Section 24 Simplified outline of this Part

Section 24 sets out a simplified outline of Part 4.

Section 25 Registration of spectrum licences

Section 25 provides that, in accordance with Part 3.5 of the Act and the *Radiocommunications (Register of Radiocommunications Licences) Determination 2017* (**the Register Determination**), the ACMA must register the details of spectrum licences in the Register of Radiocommunications Licences (**the Register**). The Register is a publicly available database on the ACMA's website.

Part 3.5 of the Act and the Register Determination set out the information that the Register is required to contain, including the name and postal address of the licensee, the licence date of issue and expiry date. The Register may also include details of radiocommunications devices operated under a spectrum licence.

Section 26 Third party use

Section 26 provides that a licensee may permit third parties to operate radiocommunications devices under any spectrum licences it holds. Any such arrangements must comply with Division 1 of Part 3.2 of the Act, which includes provisions governing third party use.

Section 27 Trading in spectrum licences

Section 27 provides that a licensee may assign, or otherwise deal with, the whole or any part of a spectrum licence in accordance with Division 5 of Part 3.2 of the Act. The Trading Rules Determination made under section 88 of the Act provides further details about rules for trading in spectrum licences. In part, these rules define the minimum block of spectrum and geographic area that may be traded to a third party and must be retained by the licensee.

Section 28 Agreements about emission limits

Section 28 provides that a licensee in the 3.4/3.7 GHz bands may enter into an agreement about emission limits.

A spectrum licence may authorise the operation of radiocommunications devices in a part of the spectrum, in a particular geographic area. The combination of the part of the spectrum and geographic area can be called a **spectrum space**. A spectrum licence may authorise the operation of radiocommunications devices in more than one spectrum space. Given the nature of the 3.4/3.7 GHz bands spectrum licence allocation process, it is very likely that licences issued as a result of the process will authorise the operation of radiocommunications devices in multiple spectrum spaces.

Licensees of licences that have adjacent to spectrum spaces may wish to enter into agreements that allow a licensee to exceed their emission limits specified in the core licence conditions. The word 'adjacent' can refer to spectrum spaces that share a geographic boundary, a frequency boundary, or both, or that overlap frequencies and geographic areas.

Section 28 notes the provisions of Schedules 5 and 6 to the Marketing Plan, which underpin such agreements.

When such an agreement is in place, that agreement effectively sets the emission limits that apply to that spectrum space. Schedules 5 and 6 require that such an agreement must be in writing.

Section 29 Spectrum licences that are about to expire

Section 29 sets out the actions that the ACMA takes under the Act when spectrum licences are about to expire. In accordance with section 78 of the Act, the ACMA will publish a notice from time to time about spectrum licences that are due to expire within the period specified in the notice. The notice will invite expressions of interest from persons wishing to obtain spectrum licences relating to the relevant parts of the spectrum. The notice will be published on the ACMA's website.

Section 30 Renewal of spectrum licences

Section 30 sets out that the ACMA may renew spectrum licences in accordance with Division 3A of Part 3.2 of the Act. The ACMA may request further information in connection with an application for renewal, in accordance with section 77B of the Act.

The ACMA must not renew a spectrum licence for a period of 10 years or longer unless satisfied that it is in the public interest to do so, in accordance with subsection 77C(5) of the Act. If the ACMA renews a spectrum licence, the conditions of the new spectrum licence need not be the same as those of the licence it replaces.

Section 31 Re-allocation of spectrum licences

Section 31 sets out that, if a spectrum licence is not renewed, the ACMA may re-allocate the spectrum licence in accordance with section 80 of the Act, and issue it to the person to whom it is re-allocated.

SCHEDULE 1 3.7 GHz products

Schedule 1 defines the 3.7 GHz band products that will be offered during the 3.4/3.7 GHz bands spectrum allocation process. A product for the purpose of the Marketing Plan is the set of spectrum lots that have the same frequency range and region. For each 3.7 GHz band product, this Schedule lists the product name, frequency range, region, and number of lots available. Column 1, Product ID, has been included to reflect the name of the product as it will appear in the auction system, and is for information only.

SCHEDULE 2 3.4 GHz products

Schedule 2 defines the 3.4 GHz band products that will be offered during the 3.4/3.7 GHz bands spectrum allocation process. A product for the purpose of the Marketing Plan is the set of spectrum lots that have the same frequency range and region. For each 3.4 GHz band product, this Schedule lists the product name, frequency range, region, and number of lots available. Column 1, Product ID, has been included to reflect the name of the product as it will appear in the auction system, and is for information only.

SCHEDULE 3 Leftover lots

Schedule 3 defines the leftover lots that will be offered during the 3.4/3.7 GHz bands spectrum allocation process. It lists the lot name (the name of the leftover lot), frequency range, region, the adjacent product and the adjacent licensee.

SCHEDULE 4 Regions

Schedule 4 defines the geographic regions of the lots on offer under the Marketing Plan. It provides the names for the regions, and precise geographic definitions. To define a geographic region, this Schedule lists a set of HCIS identifiers that correspond to the region on the ASMG.

All areas defined in Schedule 4 together align with the areas declared for re-allocation by the ACMA in the Re-allocation Declaration.

A map of each region is also provided, for illustrative purposes only.

SCHEDULE 5 Emission limits outside the area

Schedule 5 sets the limits that will be placed on radio emissions outside a spectrum licence's geographic area, that are produced by radiocommunications transmitters operating under the spectrum licence (**the out-of-area core licence condition**). Under clause 2 of Schedule 5, where there is no specified written agreement, the licensee must ensure the maximum permitted level of radio emission for an area outside the authorised region of the spectrum licence, from a radiocommunications transmitter operating under the licence, does not exceed a total radiated power of 48dBm per 5 MHz.

Clause 1 of Schedule 5 provides for written agreements between the licensee and all affected licensees (those whose licences authorise the operation of radiocommunications devices in spectrum space that adjoins a spectrum space in the first licensee's licence) that specify the maximum permitted level of radio emissions. These agreements may take precedence over the limits in clause 2.

SCHEDULE 6 Emission limits outside the band

Schedule 6 sets the method for determining the limits that will be placed on radio emissions outside the licence's authorised frequency band, referred to as unwanted emissions, that are produced by radiocommunications devices operated under a spectrum licence (**the out-of-band core licence condition**).

This Schedule provides for base emission limits for unwanted emissions by radiocommunications devices operating in the 3.4/3.7 GHz bands under a spectrum licence, which are not covered by a written agreement made between licensees. A written agreement between a licensee and all affected licensees (those whose licences authorise the operation of radiocommunications devices in spectrum space that adjoins a spectrum space in the first licensee's licence) can allow the first licensee to exceed the limits in the out-of-band core licence condition up to the maximum level of radio emissions specified in the agreement.

Different emission limits are set, depending on a number of factors, including the kind of radiocommunications device operated and the frequency range in which the unwanted emission occurs.

SCHEDULE 7 Sample spectrum licence

Schedule 7 sets out a sample spectrum licence for the licences that will be allocated in the 3.4/3.7 GHz bands. It is an example, constructed for the purposes of illustration only, and is not an actual licence. It includes five licence schedules, which are explained below.

Licence Schedule 1 Licence Details, Bands and Areas

This licence schedule sets out the fields for the licensee, the licence issue, expiry and effect dates, and other details of the licence, including the frequency bands of the licence and the geographic area for the licence. It also includes the statements that relate to renewal.

Licence Schedule 2 Core Conditions

This licence schedule includes the core conditions of the licence. Licence Schedule 2 also authorises the operation of radiocommunications devices in accordance with these core conditions.

The core conditions are the conditions in relation to the geographic area and frequency ranges within which radiocommunications devices may be used, the out-of-area core licence condition and the out-of-band core licence condition.

This licence schedule also makes provision for the licensee to exceed the out-of-area and the out-of-band core licence conditions in circumstances where there is a written agreement between the licensee and all affected licensees (those whose licences authorise the operation of radiocommunications devices in spectrum space that adjoins a spectrum space in the first licensee's licence). Where such a written agreement exists, the licensee must comply with the maximum permitted level of radio emission specified in the agreement.

Licence Schedule 3 Statutory Conditions

This licence schedule contains other statutory conditions that apply to the licence relating to liability for taxes and charges, third party operation of radiocommunications transmitters and transmitter registration requirements. It also includes conditions regarding when a radiocommunications transmitter will be exempt from the requirement to be registered, and residency requirements for licensees.

Licence Schedule 4 Other Conditions

This licence schedule contains other licence conditions that may be included by the ACMA in accordance with section 71 of the Act. One such condition imposes on the licensee the responsibility to manage interference between radiocommunications devices operated under the licence, and between radiocommunications devices operated under the licence and under any other spectrum licence held by the licensee (sample conditions 2(a) and (b) in Licence Schedule 4). **Managing interference** is defined as including the investigation of the possible causes of interference and taking steps reasonably likely to reduce the interference to acceptable levels.

Other conditions included in the sample licence under this licence schedule are:

- a condition in relation to interference management for radiocommunications devices that are co-sited (located within 500 metres of each other as measured between the phase centre of the antenna used with each device) (sample condition 3);
- a requirement to provide the ACMA with information to be included in the Register (sample condition 4);
- a requirement to prevent harmful interference to a radiocommunications receiver operating in another country and in accordance with the ITU Radio Regulations (sample condition 5);
- a requirement to comply with specified electromagnetic energy requirements (sample condition 6);
- conditions related to record keeping required for licensees operating radiocommunications transmitters under the licence at communal sites (sample condition 7);
- a requirement to follow the procedures set out in RALI MS 32 in relation to the operation of radiocommunications transmitters in or around the RQZ (sample condition 8);
- a requirement to ensure that operation of a radiocommunications transmitter that is exempt from registration does not cause harmful interference to other radiocommunications devices (sample condition 9);
- a requirement to follow the procedures set out in RALI MS 44 in relation to the operation of radiocommunications transmitters in earth station protection zones (sample condition 10);

- a requirement to manage interference caused by a radiocommunications device that exceeds compatibility requirements specified in the RAG Rx where there is a licensee or authorised third party wishing to resolve the interference (sample condition 11);
- a condition on managing interference caused by unwanted emissions at frequencies outside of the 3360 MHz to 3840 MHz frequency band (sample condition 12);
- a condition to provide protection to radiocommunications devices operating in defined zones and frequency ranges in accordance with the RAG Tx (sample condition 13);
- a requirement that radiocommunications transmitters operated in the 3.7 GHz to 3.8 GHz frequency range do not exceed a total EIRP of 72 dBm/5 MHz (sample condition 14);
- a requirement that licensees must manage interference to radiocommunications receivers of the aeronautical radionavigation service operating in the 4200 MHz to 4400 MHz frequency band, in the manner set out in Part 13 of the RAG Tx (sample condition 15).

Licence Schedule 5 Licence Notes

Example licence notes are included in the sample licence for the purposes of clarification and guidance on the use of the spectrum licence.