

EXPLANATORY STATEMENT

Issued by the Australian Communications and Media Authority

Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015

Radiocommunications Act 1992

Purpose

The *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015* (**Marketing Plan**) specifies the spectrum lots available in the 1800 MHz band allocation, the method by which the lots will be allocated, and the conditions that will apply to spectrum licences issued after conclusion of the allocation process.

Legislative Provisions

The Marketing Plan is made by the Australian Communications and Media Authority (**ACMA**) under sections 39 and 39A of the *Radiocommunications Act 1992* (the **Act**). Under these provisions, the ACMA must prepare a marketing plan before issuing spectrum licences in parts of the spectrum that are the subject of the *Radiocommunications (Spectrum Re-allocation – Regional 1800 MHz Band) Declaration 2015* (**re-allocation declaration**) and *Radiocommunications (Spectrum Designation) Notice No. 1 of 2014* (**designation notice**), made by the Minister for Communications (**Minister**) under subsections 153B(1) and 36(1) of the Act respectively.

Background

Currently, the frequency ranges 1725 MHz–1785 MHz and 1820 MHz–1880 MHz in regional Australia (**the regional 1800 MHz band**) are primarily used for fixed point-to-point links which are authorised under apparatus licences. However, there has been increased demand from the telecommunications industry for the regional 1800 MHz band to be used for Long Term Evolution (LTE) technology (a standard for wireless communication of high-speed data for mobile phones and data terminals), including 4G (fourth generation mobile network technology), to deliver mobile services in regional Australia.

The ACMA has formed a view that spectrum licensing in the regional 1800 MHz band will best be able to accommodate emerging high value uses of the band such as mobile services. Spectrum licences provide licensees with certainty of tenure and the flexibility to deploy different technologies under the same licence. The frequency range 1710 MHz–1785 MHz and 1805 MHz–1880 MHz (**the wider 1800 MHz band**) is already spectrum licensed in all major metropolitan areas. Part of the wider 1800 MHz band (1710 MHz–1725 MHz and 1805 MHz–1820 MHz) is spectrum licensed in regional Australia. The ACMA considers that extending spectrum licensing to the rest of the band would provide the opportunity for more efficient use of spectrum and help to facilitate trading of licences in the band.

On 29 January 2014, the Minister made the designation notice, under subsection 36(1) of the Act, designating that unallocated spectrum in certain geographic areas in the wider 1800 MHz band (**the residual lots**) be allocated by issuing spectrum licences. These residual lots comprise three lots of unallocated spectrum remaining after expiry of spectrum licences previously issued in that part of the wider 1800 MHz band in the following configurations:

- > 2 x 5 MHz in Adelaide;
- > 2 x 2.5 MHz in Regional South Australia; and
- > 2 x 2.5 MHz in Cairns/Townsville.

The specific frequencies and geographic boundaries for these residual lots are set out in the designation notice.¹

On 26 May 2015, following a written recommendation from the ACMA, the Minister made the re-allocation declaration, under subsection 153B(1) of the Act, declaring that specific parts of the 1800 MHz band be subject to re-allocation by issuing spectrum licences. The re-allocation declaration identifies two separate blocks of 60 MHz of spectrum, being the frequency ranges 1725 MHz–1785 MHz and 1820 MHz–1880 MHz. These frequencies will be re-allocated across regional Australia. The specific geographic boundaries for these frequency ranges are set out in the re-allocation declaration.

The re-allocation declaration also sets the re-allocation period. All apparatus licences using the parts of the spectrum described will be cancelled at the end of the re-allocation period, which is 29 May 2017. This is when apparatus licensees must cease operating radiocommunications devices under the cancelled licences (see section 153H of the Act). The re-allocation period is intended to provide sufficient time for incumbent apparatus licensees to leave the regional 1800 MHz band. New spectrum licences issued as a result of the allocation process will only authorise the use of radiocommunications devices after the re-allocation period has elapsed in the coverage area of the spectrum licence.

A re-allocation deadline (29 May 2016) is also specified in the re-allocation declaration. This is the day before the first anniversary of the commencement of the re-allocation declaration. This sets the date by which the ACMA must have allocated at least one spectrum licence for the parts of the spectrum affected by the re-allocation declaration. If this does not occur, the re-allocation declaration will automatically be considered to have been revoked, and will cease to apply immediately after the re-allocation deadline (see section 153K of the Act).

Under subsection 39A(2) of the Act, the ACMA must prepare a marketing plan for issuing spectrum licences that authorise the use of radiocommunications devices in parts of the spectrum described by the re-allocation declaration. Similarly, under subsection 39(1) of the Act, the ACMA must prepare a marketing plan for issuing spectrum licences that authorise the operation of radiocommunications devices within the areas specified in the designation notice.

The Marketing Plan is the document required under these provisions in relation to spectrum licences for the regional 1800 MHz band (specified in the re-allocation declaration) and the residual lots (specified in the designation notice). The ACMA must also determine the procedures for allocating spectrum licences under section 60 of the Act. These procedures are set out in the *Radiocommunications (Spectrum Licence Allocation – 1800 MHz Band) Determination 2015 (allocation determination)*.

¹ It should be noted that there is a typographical error in the designation notice in the description of Regional South Australia. The region is defined by reference to a series of HCIS identifiers in the Schedule to the designation notice and the first identifier listed for Regional South Australia is ‘V1’. ‘V1’ is not a valid HCIS identifier and is in fact in the wrong format as all HCIS identifiers must begin with two letters. The ACMA has taken the view that the reference to V1 should be interpreted to mean ‘GV1’ as it is sequential with the other HCIS identifiers in the relevant Schedule and falls within the regional South Australia area. It is clear from this context that this is the HCIS identifier that was intended to be included. For the avoidance of doubt, Schedule 3 of the Marketing Plan and the re-allocation declaration correctly specify the relevant HCIS identifier.

At present, the regional 1800 MHz band is almost exclusively used for point-to-point fixed links. Some of these services facilitate provision of telecommunications services in regional and remote Australia, including under Universal Service Obligations. Some affected fixed links operators have expressed concerns that setting a two-year re-allocation period was too short to clear all the affected fixed links from the regional 1800 MHz band for a range of reasons. These include:

- > the significant number of links that need to be transitioned;
- > the need to source additional customised equipment to cater for the new, non-standard channel plan and stricter adjacent channel-sharing criteria between fixed links and mobile broadband services;
- > difficulties in obtaining new sites for additional 'hops', including some in national parks and native title land; and
- > financial and/or resourcing constraints.

These fixed link licensees indicated that there is a significant likelihood that they may seek further apparatus licences to licence their existing fixed links after the end of the re-allocation period, pursuant to paragraph 153P(3)(d) of the Act. That provision enables the ACMA to issue such licences at the end of the re-allocation period if it considers that the special circumstances of the case justify the issuing of the licence.

Table 1 in Schedule 6 to the Marketing Plan identifies a number of fixed link apparatus licences that licensees have identified are likely to be difficult to transition out within the re-allocation period. The ACMA is aware that it may be asked to consider issuing apparatus licences under paragraph 153P(3)(d) of the Act close to the time when the current apparatus licences are due to be cancelled at the end of re-allocation period. The ACMA will not consider whether special circumstances would justify the issue of such licences until such time. However, these apparatus licences are listed in the Marketing Plan to alert potential bidders, to the best current state of the ACMA's knowledge, about the possibility that applications for the issue of apparatus licences based on special circumstances might be made. This does not, and cannot, preclude the possibility that other applications for apparatus licences based on special circumstances may also be made, that are not related to the licences listed in Table 1 in Schedule 6 to the Marketing Plan.

The ACMA must consider any such applications under paragraph 153P(3)(d) at the time they are made, taking into account all circumstances and relevant considerations at that time. However, based on the information provided by fixed link licensees to date, the ACMA anticipates that such applications would be for only as long as needed to transition the services, generally expected to be less than 12 months.

Marketing Plan Operation

The Marketing Plan is one of a set of legislative instruments that gives effect to the re-allocation declaration and designation notice to allocate the specified range of frequencies in the 1800 MHz band (a complete list of the relevant instruments is provided at the end of this section).

The purpose of the Marketing Plan is to describe the spectrum 'products' that will be offered at auction. In doing so, it identifies the spectrum that will be allocated and defines how this spectrum will be divided into lots for applicants (bidders) to acquire in the auction process, or possibly for a pre-determined price. In addition, it sets out some of the technical and non-technical conditions that may apply to spectrum licences and other matters that licensees should take into account when operating radiocommunications devices under a spectrum licence.

The Marketing Plan also notes the methods by which the ACMA will conduct the allocation, although limited details of the allocation procedures and related administrative arrangements are included in

the Marketing Plan. Full details of the allocation procedures are set out in the allocation determination. The ACMA considers that a price-based method of allocation, namely an auction, is the most efficient means of allocating this spectrum. The ACMA has chosen the Simultaneous Multiple Round Auction (**SMRA**) methodology, delivered through a secure online system, as the method to conduct the auction.

The regional 1800 MHz band spectrum to be re-allocated will be divided into 144 auction lots that are defined by geographic area and bandwidth range. The regional 1800 MHz spectrum has been disaggregated into 12 geographic licence areas that cover regional parts of Australia. In each licence area, 12 lots of 10 MHz each will be available in a paired configuration (2x5 MHz). A lot will consist of a block of 5 MHz in each of the lower (1725 MHz–1785 MHz) and upper (1820 MHz–1880 MHz) parts of the regional 1800 MHz band. The paired configuration enables the use of technologies such as 4G Long Term Evolution (LTE), used to deliver mobile broadband services. In addition, there will be three residual lots, comprising two lots of 5 MHz each in a paired configuration (2x2.5 MHz) in North Queensland (Cairns/Townsville) and Regional South Australia, and one lot of 10 MHz in a paired configuration (2x5 MHz) in Adelaide. These residual lots will be allocated simultaneously with the regional 1800 MHz band spectrum.

The technical conditions applied to spectrum licences are drawn from the ACMA's technical framework developed for the 1800 MHz band in consultation with industry stakeholders. The technical framework is also partly set out in the Marketing Plan sections on licence conditions and the sample spectrum licence. Technical matters are also set out in the following legislative instruments:

- > *Radiocommunications Advisory Guidelines (Additional Device Boundary Criteria – 1800 MHz Lower Band) 2012;*
- > *Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 1800 MHz Band) 2012;*
- > *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012;*
- > *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012.*

These technical parameters place constraints on and regulate the use of spectrum licences to allow all licensees to operate services without causing undue interference to other services operating in other parts of the radiofrequency spectrum. Core conditions (in accordance with section 66 of the Act) will apply to spectrum licences in terms of:

- > defining their geographic boundaries;
- > defining their range of frequencies;
- > setting out-of-area radio emission limits;
- > setting spurious and non-spurious radio emission limits.

In addition, the Marketing Plan discusses other relevant obligations, including spectrum trading rules, use by third parties and registration of transmitters with the ACMA. Licence commencement and licence duration are also described.

Spectrum licences re-allocated under the re-allocation declaration will commence from the day after the end of the re-allocation period, i.e. on 30 May 2017. Spectrum licences for residual lots will commence on the day the licence is issued, i.e. after payment of the balance of the winning price, or balance of the pre-determined price, if applicable. If no such balance is owing, the relevant spectrum licence will commence immediately following the conclusion of the allocation process in accordance with the allocation determination. All licences will have an expiry date of 17 June 2028.

A sample spectrum licence provided in Schedule 7 to the Marketing Plan also contains information relating to core and other conditions that may apply to the operation of radiocommunications devices for provision of a service under the spectrum licence. The spectrum licences issued by the ACMA may contain additional or varied conditions.

A description of each section in the Marketing Plan is provided in Attachment A.

Consultation

The ACMA has consulted extensively with stakeholders about its plans for the re-allocation of the regional 1800 MHz band generally, and on the Marketing Plan in particular. A variety of communication methods have been used to reach as many stakeholders as possible at each stage of the re-allocation planning process.

In 2012 the ACMA commenced consultation with stakeholders to identify appropriate future licensing arrangements in the regional 1800 MHz band that would balance the needs of both existing and prospective licensees.

In March 2013, the ACMA released *1800 MHz—a shared strategy: Issues paper 2* for public consultation which sought comment on the preferred licence type for prospective operators in the 1800 MHz band in regional and remote Australia.

Responses to the consultation did not unanimously support spectrum licensing arrangements in the band. For example, three mobile carriers, who hold different amounts of spectrum in metropolitan and regional areas of the band, sought different outcomes for the band. Some stakeholders believed that the ACMA should consider further developments in shared spectrum access arrangements to meet demand rather than a single licensing arrangement. There was strong support for different geographic categories of remote and regional Australia to have different licensing arrangements.

The outcome of the ACMA's consultation process in 2013 demonstrated that incumbent fixed services (using fixed links) would materially constrain the deployment of proposed mobile services. Over 2013, the ACMA worked with mobile network operators to attempt to develop a consensus based solution that would facilitate the deployment of new mobile services while coordinating with the incumbent fixed links.

However, a consensus could not be reached, and therefore in November 2014 the ACMA announced that it was proposing to recommend a re-allocation process for the regional 1800 MHz band via an auction of spectrum licences. The ACMA considered this to be the most transparent and equitable method to progress access to the band.

In February 2015, under section 153G of the Act, the ACMA released a discussion paper *Draft spectrum reallocation recommendation for the 1800 MHz band – Regional areas of Australia* inviting comments from potentially affected apparatus licensees and the public on the terms of the draft recommendation to the Minister to make a spectrum re-allocation declaration for the regional 1800 MHz band. The ACMA received eight submissions from stakeholders. Submitters included carriers, mining, and rail industries as well as government departments who held apparatus licences in the 1800 MHz band.

On 3 March 2015 the ACMA held its *Spectrum Tune-Up— Regional 1800 MHz Band* (the **Tune-Up**), an industry forum which presented stakeholders with details on preliminary approaches being considered on several key parts of the spectrum auction planning process for an allocation of spectrum licences.

Having regard to stakeholder views expressed in submissions and at the Tune-Up, then in accordance with section 153F of the Act, the ACMA made a recommendation to the Minister that he

make a spectrum re-allocation declaration for the regional 1800 MHz band. On 26 May 2015, the Minister made the re-allocation declaration.

The ACMA has engaged with incumbent licensees, prospective new licensees and other public stakeholders during the development of the Marketing Plan and associated allocation instruments. In addition to this, spectrum licensees and industry representatives have provided input into the preparation of the technical framework that supports the 1800 MHz band Marketing Plan through extensive involvement in a technical working panel (the Technical Liaison Group) organised and chaired by staff of the ACMA.

In June 2015 the ACMA released a consultation paper *Draft allocation instruments for the 1800 MHz band auction* inviting comments on the suite of draft allocation instruments, including the draft Marketing Plan. The ACMA received three submissions from three mobile carriers. Views expressed in these submissions have been taken into consideration in subsequent auction planning and drafting of the allocation instruments, including the final version of the Marketing Plan.

Documents Incorporated into the Marketing Plan by Reference or Otherwise Referred to

The Marketing Plan incorporates the following documents by reference, or otherwise refers to them, as existing from time to time (as permitted by subsection 314A(2) of the Act):

- > The Australian Spectrum Map Grid 2012 – The Australian Spectrum Map Grid (**ASMG**) is used to identify geographic areas of spectrum licences. This document describes the ASMG and the Hierarchical Cell Identifier Scheme (**HCIS**) that the Marketing Plan uses to define licence areas. This document is on the ACMA's website: www.acma.gov.au.

The Marketing Plan also incorporates or refers to Acts and other legislative instruments as in force from time to time (as permitted by section 13 of the *Legislative Instruments Act 2003 (LIA)* and subsection 314A(2) of the Act):

- > *Administrative Appeals Tribunal Act 1975*;
- > *Australian Communications and Media Authority Act 2005*;
- > *Income Tax Assessment Act 1997*;
- > *International Tax Agreements Act 1953*;
- > *Radiocommunications Act 1992*;
- > *Radiocommunications Advisory Guidelines (Additional Device Boundary Criteria – 1800 MHz Lower Band) 2012*;
- > *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012*;
- > *Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 1800 MHz Band) 2012*;
- > *Radiocommunications (Interpretation) Determination 2015*;
- > *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015*;
- > *Radiocommunications (Register of Radiocommunications Licences) Determination 1997*;
- > *Radiocommunications (Spectrum Designation) Notice No. 1 of 2014*;
- > *Radiocommunications (Spectrum Licence Allocation – 1800 MHz Band) Determination 2015*;
- > *Radiocommunications (Spectrum Re-allocation – Regional 1800 MHz Band) Declaration 2015*;

- > *Radiocommunications (Trading Rules for Spectrum Licences) Determination 2012*;
- > *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012*.

These instruments and Acts can be found on the ComLaw website: www.comlaw.gov.au.

In accordance with subsection 314A(2) of the Act, a legislative instrument made under the Act may incorporate a matter contained in any other instrument or writing as in force from time to time, even if the other instrument or writing does not exist at the time the first instrument is made.

Detailed Description of the Instrument

Details of the instrument are in Attachment A.

Regulation Impact Statement

Based on advice from the Office of Best Practice Regulation (**OBPR**), no aspect of the Marketing Plan warranted the preparation of a RIS (OBPR references 19077 and 19214).

Statement of Compatibility with Human Rights

In accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*, the ACMA has prepared a Statement of Compatibility with Human Rights (the **Statement of Compatibility**) to consider the human rights implications of the Marketing Plan. The Statement of Compatibility concludes that the content of this legislative instrument does not raise any human rights issues and is therefore regarded as being compatible with human rights. The Statement of Compatibility prepared for this instrument is provided in Attachment B.

DETAILED DESCRIPTION OF THE INSTRUMENT

Part 1 Introduction

Section 1.1 – Name of Plan

This section gives the name of the Marketing Plan as the *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015*.

Section 1.2 – Commencement

This section specifies that the Marketing Plan commences on the day after it is registered on the Federal Register of Legislative Instruments.

Section 1.3 – Purpose of this Plan

This section describes the matters contained in the Marketing Plan. The Marketing Plan should be read in conjunction with the allocation determination for a more complete understanding of all allocation procedures.

Section 1.4 – Definitions

This section provides definitions of terms used in the Marketing Plan.

Part 2 Allocation of spectrum licences

Section 2.1 – Purpose of this Part

This section states the matters that are covered by Part 2, namely the procedures and timetable for allocating spectrum licences in the 1800 MHz band as set out in the Marketing Plan.

Section 2.2 – Parts of the spectrum

This section states that spectrum licences in the 1800 MHz band (as defined in the re-allocation declaration and designation notice) will be allocated and issued in the manner described in the Marketing Plan and accompanying allocation determination.

If the re-allocation declaration is revoked under the Act, the Marketing Plan will have no effect. The declaration will be taken to have been revoked if no spectrum licence is allocated by the re-allocation deadline of 29 May 2016.

Section 2.3 – How licences will be allocated

This section states that the primary means of allocating spectrum licences in the 1800 MHz band will be by auction using the SMRA methodology. The rules and procedures that apply to the auction are set out in the allocation determination. However, the ACMA may offer to allocate spectrum licences for a pre-determined price if it considers that conducting an auction may not be necessary.

In the circumstances that not all spectrum on offer is allocated in the auction, the ACMA may choose to hold a further allocation procedure or procedures. The method used and the configuration of the spectrum offered in any subsequent allocation process will be determined by the ACMA at a later date.

Section 2.4 – Lots for the auction

This section sets out how categories of lots for the auction have been determined. It also states that an auction, or allocation for a pre-determined price, will be held in accordance with the procedures set out in the allocation determination.

It explains that the spectrum being re-allocated in the 1800 MHz band has been divided by the ACMA into smaller blocks (referred to as *lots*) for auction. Each lot is defined by a specific geographic area (region) and a frequency range (and resultant bandwidth), as set-out in Schedule 2.

Lots have also been given a category for the purposes of the auction. Categories are based on the 1800 MHz spectrum made available for re-allocation under the re-allocation declaration (regional 1800 MHz band) and the 1800 MHz spectrum made available for allocation under the designation notice (residual lots). For the auction, all lots in the regional 1800 MHz band (144 lots in total) have been placed in Category 1, whereas the three residual lots have been further divided into Category 2 (two lots) and Category 3 (one lot). The categories are defined by the frequency ranges and bandwidths set out in Schedule 1.

Category 1 lots cover twelve regions, with twelve lots in each of the regions, and will each consist of 5 MHz in the 1725 – 1785 MHz band (1800 MHz lower band) paired with 5 MHz in the 1820 – 1880 MHz band (1800 MHz upper band).

Category 2 lots, one in North Queensland (Cairns/Townsville) and one in Regional South Australia, will each consist of 2.5 MHz in the 1710 – 1712.5 MHz band paired with 2.5 MHz in the 1805 – 1807.5 MHz band.

A single Category 3 lot covers the Adelaide region and consists of 5 MHz in the 1770 - 1775 MHz band paired with 5 MHz in the 1865 – 1870 MHz band.

This section states that the ACMA will notify applicants of the lot rating set for each lot under subsection 4.6 of the allocation determination. Lot ratings determine the relative value of a spectrum lot for the purpose of the auction. Each lot is ascribed a lot rating, with lots regarded as being of higher value given a higher lot rating. All lots in a region within the same category will have the same lot rating.

Lot ratings play an important role in the auction. As part of the registration process, each auction applicant is required to nominate a total (or aggregate) amount of lot ratings for the lots that they want to obtain. This will set their initial eligibility points, which is a numerical quantity that limits the number of lots (in terms of their combined lot ratings) that an applicant can bid for during the auction. The initial eligibility points, in combination with the dollar value of initial eligibility points set by the ACMA under subsection 4.6 of the allocation determination, will be used to calculate an applicant's eligibility payment or amount to be secured under a deed of financial security, or a combination of both. An eligibility payment must be made, and/or a deed of financial security must be given, to the ACMA prior to the eligibility deadline set by the ACMA for the auction.

The lots specified in the Marketing Plan will be auctioned in accordance with the allocation procedures set out in the allocation determination, using the SMRA methodology, in accordance with Part 6 and Schedule 1 of the allocation determination; or for a pre-determined price in accordance with the procedures set out in Part 5 of the allocation determination.

At the end of the allocation process, providing that conditions set out in the allocation determination, the Act and other laws are met, the ACMA will issue spectrum licences to successful applicants.

Subsection (7), states that the ACMA may offer to allocate spectrum licences for lots for a pre-determined price, as set out in Part 5 of the allocation determination. This would occur prior to setting the date and time of the first two rounds of the auction, if the ACMA considers that it may not need to conduct an auction to identify the highest value users for the spectrum offered.

Section 2.5 – Advertising the auction

This section refers to the requirement that the ACMA advertise the details of the auction and invite persons to take part, in accordance with the allocation determination (which describes this process in more detail). The ACMA will publish a notice to this effect.

Section 2.6 – Taking part in the auction

This section specifies that detailed information about the auction and the application process will be made available by the ACMA in the Applicant Information Package (**AIP**) in accordance with the allocation determination. The AIP will be made available at the beginning the application process. The contents of the AIP are set out in section 4.5 of the allocation determination.

The AIP will contain important information about the auction for potential participants. It will describe how to apply to participate in the auction, and will include copies of necessary forms and documents to participate in the auction. Section 4.5 of the allocation determination contains a complete list of the documents and forms that will be included in the AIP. These include copies of the legislative instruments that are relevant to the allocation of spectrum in the 1800 MHz band.

This section also states that information about how to apply to participate in the auction is included in Part 4 of the allocation determination.

Part 3 Spectrum licences to be issued

Section 3.1 – Purpose of this Part

This section provides an overview of the matters covered by Part 3. Part 3 describes the spectrum licences that will be issued in accordance with the Marketing Plan, as well as some of the matters that prospective applicants should consider when deciding whether to apply for a spectrum licence to be issued in accordance with the Marketing Plan (prospective applicants should in all cases, seek their own legal, technical and financial advice before applying). It also covers some of the matters that a licensee must take into account when operating a radiocommunications device under a spectrum licence obtained under the Marketing Plan.

Section 3.2 – Issue of licences

This section describes when the ACMA will issue spectrum licences in the 1800 MHz band. The licence will be issued to a successful applicant as soon as practicable after that applicant has paid the balance of the winning price or full balance of any pre-determined price, in accordance with the allocation determination.

Section 3.3 – Duration of licences

This section explains that spectrum licences issued as a result of the auction will be for a fixed term with an expiry date of 17 June 2028. This will enable the new licences to have a common expiry date with the existing spectrum licences in the 1800 MHz band.

If any lots remain unallocated after the auction, the ACMA may choose to allocate some or all of those lots at a later date. This section states that licences for lots allocated afterwards will start on a date to be determined by the ACMA and will have a reduced duration in order to have all licences in the 1800 MHz band expire on the same date, 17 June 2028.

Aligning the expiry dates of all licences in the band will maximise the flexibility available to licensees for spectrum trading. It will also reduce the chance of band fragmentation and will provide the government with more flexibility in planning the re-allocation of this spectrum when licences expire.

Section 3.4 – Commencement of licences

This section specifies when a spectrum licence issued as a result of the auction, or pre-determined price process, will commence. Upon commencement, a licence holder is entitled to use the spectrum in accordance with the conditions of that licence.

Spectrum licences for Category 1 lots (in the regional 1800 MHz band) will commence at the end of the re-allocation period on 30 May 2017.

Spectrum licences for Category 2 and Category 3 lots (residual lots) will commence on the day after payment of the balance of the winning price or full balance of the pre-determined price, or immediately upon issue if the balance is zero.

Different licence commencement dates have been chosen to allow 1800 MHz band spectrum to be used by new licensees as soon as possible. As residual lots are currently vacant, the licences can commence as soon as any payment owing is received by the ACMA. In case of encumbered spectrum, the commencement date is as soon as the incumbent licensees are required to have vacated the band, which is at the end of the re-allocation period.

Section 3.5 – Core licence conditions

Under section 66 of the Act there are a number of core conditions which a spectrum licence must include. This section sets out the type of core conditions, 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 3.6 – Determining core licence conditions

This section explains how the core conditions for spectrum licences issued in the 1800 MHz band as a result of the auction or pre-determined price allocation are determined.

Further, where 1800 MHz band spectrum is left unallocated after these allocation processes, the ACMA may choose to allocate this spectrum in a subsequent allocation process. This section also explains that the frequency bands and geographic areas of any such licences will be determined by the Marketing Plan, unless varied.

Each licence will specify the range of frequencies that the licensee has been allocated in accordance with the allocation determination. These will be the frequencies assigned to the spectrum lots obtained through the allocation process. If a licensee has been allocated more than one spectrum lot, the licence issued may specify the aggregate frequency range for the spectrum lots won.

Each licence will also specify the geographic area over which the licence will apply. The geographic area will be the region specified for the spectrum lots that have been allocated as a result of the allocation process. The geographic area, or aggregate geographic area, will correspond to the regions described in Schedule 3 to the Marketing Plan for the lots won.

The regions are defined by an identifier scheme adopted by the ACMA in 2012 (the Hierarchical Cell Identifier Scheme, or **HCIS**). Under this system, areas are 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 with the use of geographic co-ordinates to define the ASMG outer boundary, in the ACMA information paper, *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 (termed cells) of four sizes, with their side lengths respectively being 3 degrees, 1 degree, 15 minutes and 5 minutes of arc. The HCIS scheme is aligned to this tiered structure, with cells at each size given a unique identifier. Under this system, the region for a spectrum lot is comprised of a collection of unique identifiers that cover the required geographic area on the ASMG. Spatial data files (in Shapefile format), which are 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 software.

An indicative representation (map) to illustrate the area of each region is shown in Schedule 3.

Subsections 3.6(3) and 3.6(4) of the Marketing Plan explain that the emission limits that will apply as licence conditions upon the spectrum licences issued in accordance with the Marketing Plan will be calculated in accordance with Schedules 4 and 5 to the Marketing Plan. These Schedules, respectively, are used to calculate the maximum emission limits allowable outside the geographic area, and outside the frequency band, of a spectrum licence and form part of the core conditions of each licence.

Section 3.7 – Other licence conditions

This section identifies other kinds of licence conditions that will also apply to each spectrum licence issued under this allocation process, but which are not included in the core conditions of a licence. These relate to include the obligations for payment to the ACMA of applicable charges before a spectrum licence can be issued, use by third parties, registration requirements for radiocommunications transmitters and residency requirements of the licensee. The ACMA may 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.

This section also stipulates that spectrum licences issued as a result of the auction will be subject to a licence condition that prohibits a specified level of interference from radiocommunications transmitters authorised under an 1800 MHz spectrum licence to specified fixed services, if those fixed services are provided in accordance with an apparatus licence. The licence condition also specifies that the spectrum licensee cannot claim protection from interference caused by such specified fixed services. Specified fixed services are services that are provided using the same parameters as the fixed link services listed in table 1 in Schedule 6 to the Marketing Plan.

This licence condition is included to accommodate the possibility that the ACMA may be asked to consider allowing continued operation of a number of fixed links, which are currently operating in the regional 1800 MHz band and which may need to continue to operate for a period after the end of the re-allocation period.

The effect of section 153H of the Act is that apparatus licences for the fixed link services listed in table 1 of Schedule 6 to the Marketing Plan will be automatically cancelled at the end of the re-allocation period. The ACMA has been made aware that it may not be practicable for the fixed links listed in table 1 in Schedule 6 to the Marketing Plan to be relocated during the re-allocation period. If this occurs, the ACMA may be asked to consider issuing apparatus licences in respect of some or all of these fixed link services at the end of the re-allocation period. The ACMA may consider doing so if satisfied that 'special circumstances' of the particular case justify the issuing of the relevant apparatus licence(s) (see paragraph 153P(3)(d) of the Act).

The ACMA will include a licence condition in spectrum licences, as detailed in subsection 3.7(2) and in Licence Schedule 4 of the sample Licence in Schedule 7 to the Marketing Plan. The condition ensures that any fixed links operated under apparatus licences issued under special circumstances, in accordance with paragraph 153P(3)(d) of the Act, are protected from interference from radiocommunications transmitters operated under spectrum licences obtained under the allocation determination.

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 Marketing Plan or the sample spectrum licence.

Section 3.8 – 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. This section of the Marketing Plan 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 transmitter under subsection 145(1) of the Act if it forms the view that operating the device in question will cause unacceptable levels of interference to the operation of other radiocommunications devices, either under the same or another licence. Unacceptable levels of interference are specified in the *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012* made under section 145 of the Act.

Under subsection 69(2) of the Act, the ACMA may include an exemption from the registration requirements within the mandatory spectrum licence condition required by subsection 69(1) of the Act.

Mobile transmitters operated in the 1800 MHz band with a radiated power of less than or equal to 39 dBm EIRP per occupied bandwidth and fixed transmitters operated in the 1800 MHz band with a radiated power always less than or equal to 33 dBm EIRP per occupied bandwidth will be exempt from the requirement to be registered. These devices are still required to meet all the core and other conditions of the licence including emission limit requirements. This exemption is included in Licence Schedule 3 of the sample spectrum licence at Schedule 7 to the Marketing Plan.

Section 3.9 – Draft sample licence

This section states that a sample spectrum licence is available 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 allocation process. However, the conditions in the sample spectrum licence may not reflect the actual conditions included in a spectrum licence issued to a successful applicant.

Section 3.10 – Compatibility requirements

This section explains the purpose of the ACMA Radiocommunications Advisory Guidelines (made under section 262 of the Act) that relate to services operating under spectrum licences in the 1800 MHz band.

Part 4 After allocation

Section 4.1 – Purpose of this Part

This section sets out the purpose of Part 4, which is to explain matters that apply after spectrum licences are issued in accordance with the Marketing Plan.

Section 4.2 – Registration of spectrum licences

This section states that, in accordance with Part 3.5 of the Act and the *Radiocommunications (Register of Radiocommunications Licences) Determination 1997 (Register Determination)*, the ACMA must register the details of spectrum licences in the Register of Radiocommunications Licences (**Register**). The Register is a publicly available database that is available 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, and the date of issue and expiry

date for the licence. The Register may also include details of radiocommunications devices operated under a spectrum licence.

Section 4.3 – Third party use

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

Section 4.4 – Trading in spectrum licences

This section 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. Section 4.5 of the Marketing Plan provides further details about rules for trading in spectrum licences.

Section 4.5 – Trading rules

This section ensures that licensees who wish to trade part or all of a spectrum licence are made aware that they must comply with the trading rules made by the ACMA under section 88 of the Act.

The full trading rules are set out in the *Radiocommunications (Trading Rules for Spectrum Licences) Determination 2012*.

Section 4.6 – Agreements about emission limits

This section notes that licensees who are issued 1800 MHz band spectrum licences that are adjacent to one another may wish to establish agreements that allow a licensee to exceed their emission limits outside the frequency band or out-of-area core licence conditions. The word ‘adjacent’ can refer to spectrum licences that share a geographic boundary, a frequency boundary, or both. This section explains that these agreements can be made by reference to Schedules 4 and 5 to the Marketing Plan.

When such an agreement is in place, that agreement effectively sets the emission limits that apply to that licence under section 3.6 of the Marketing Plan and in accordance with Schedules 4 and 5. Schedules 4 and 5 provide that such an agreement must be in writing.

Section 4.7 – Spectrum licences that are about to expire

This section explains the actions that the ACMA will take to determine market interest in spectrum licences which are about to expire. In accordance with section 78 of the Act, the ACMA will publish a notice 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. This information will be published on the ACMA’s website.

Section 4.8 – Re-issue of spectrum licences

This section explains what the ACMA will do when spectrum licences expire. Under Division 4 of Part 3.2 of the Act, the ACMA may decide to re-issue a spectrum licence to the existing licence holder when it expires, if (relevantly): the licence is used in a class of services determined by the Minister for which re-issuing licences to the same licensee would be in the public interest; or special circumstances exist as a result of which it is in the public interest for that person to continue to hold the licence. Alternatively, the ACMA may offer the spectrum licence for re-allocation by auction, tender, or pre-determined or negotiated price. A re-issued licence may be different to the original licence, including by having different conditions placed on the licensee.

Schedule 1 Categories

This Schedule defines the categories referred to in section 2.4 of the Marketing Plan. There are three categories of lots for the relevant parts of the 1800 MHz band.

Schedule 1 provides details of the categories by number, name, lower and upper paired frequency ranges and bandwidth.

Spectrum within a category is considered to have similar spectrum qualities and spectrum licences will be subject to the same or very similar non-core licence conditions.

The category to which a lot has been assigned is one of several characteristics used to define a lot.

Schedule 2 Lots

This Schedule defines each lot that will be offered during the auction.

For each lot, Schedule 2 lists the lot number, lot name, its category number, its region and lower and upper paired frequency ranges.

There are 147 lots on offer in total.

There are 144 lots in Category 1 in the regional 1800 MHz band, with twelve lots in each of the twelve regions, each consisting of 5 MHz in the lower band paired with 5 MHz in the upper band.

There are two lots in Category 2, one in each of the two regions, each consisting of 2.5 MHz in the lower frequency range 1710 – 1712.5 MHz paired with 2.5 MHz in the upper frequency range 1805 – 1807.5 MHz.

There is a single lot in Category 3, covering one region and consisting of 5 MHz in the lower 1770 – 1775 MHz frequency range paired with 5 MHz in the upper 1865 – 1870 MHz frequency range.

Schedule 3 Regions

This Schedule specifies the geographic areas (regions) of spectrum lots on offer. It provides the name for each region and a precise geographic definition.

To precisely describe the region for each spectrum lot on offer, this Schedule lists a set of HCIS identifiers that correspond to an area on the ASMG.

It should be noted that the definition of the region 'Regional South Australia' in this Marketing Plan includes the HCIS identifier 'GV1'.²

A map of the regions is also provided (for illustrative purposes only).

Schedule 4 Emission limits outside of the area

This Schedule describes the limits placed on radiofrequency emissions outside the licence geographic area by radiocommunications devices operating under a spectrum licence. The limit is expressed as a radiated power limit that applies to all radiocommunications devices operated within the licence area.

Schedule 4 provides base emission limits that apply to parts of the spectrum that are not covered by an agreement made between adjacent licensees to exceed out-of-area core licence conditions. A written agreement between a licensee and all affected licensees of frequency-adjacent and area-

² As noted above, due to a typographical error, the description of the Regional South Australia area in designation notice for the residual lots did not contain this identifier but instead included an invalid identifier 'V1'. The ACMA considers that this reference was intended to be to 'GV1' and has interpreted the designation notice accordingly. This is because 'V1' is not a valid HCIS identifier and is in fact in the wrong format as all HCIS identifiers must begin with two letters. 'GV1' is sequential with the other HCIS identifiers in the definition and falls within the regional South Australia area. It is clear from this context that this is the HCIS identifier that was intended to be included.

adjacent spectrum licences can permit the out-of-area core condition to be exceeded up to a specified maximum level of radio emissions.

Schedule 5 Emission limits outside the band

This Schedule describes the limits placed on radiofrequency emissions outside the licence frequency band that are produced by radiocommunications devices operated under a spectrum licence.

Schedule 5 provides base emission limits for spurious and non-spurious emissions by radiocommunications devices operating in relevant parts of the 1800 MHz band under a spectrum licence. These limits apply to parts of the spectrum that are not covered by an agreement between licensees to exceed out-of-band core licence conditions.

Spurious emissions are emissions that are outside the licence bandwidth that are not deliberately generated or transmitted. This includes parasitic emissions, intermodulation products, harmonic emissions and frequency conversion products not associated with the transmission of information by the transmitter.

Non-spurious emissions are emissions that are outside the licence bandwidth that are generated in the process of generating the emission within the licence bandwidth. They include modulation products, wideband noise and switching transients produced as the transmitter is turned on and off.

Schedule 6 Specified fixed licences

This Schedule lists specified fixed licences for the purpose of paragraph 3.7(2)(a) of the Marketing Plan. Specified fixed licences are point-to-point fixed link services that are operated between two fixed points, where the points are defined as the A-end and B-end.

For each specified fixed licence, Schedule 6 lists the licence number, link ID, A-end site ID, A-end location, B-end site ID, B-end location and State/Territory.

As noted in the description of section 3.7, the ACMA has listed these specified fixed licences as it is aware that licensees have indicated that they may ask the ACMA to consider allowing continued operation of these fixed links for a short period of time—generally expected to be less than 12 months—after the end of the re-allocation period if the links cannot practicably be relocated during the re-allocation period. The ACMA will consider any such request on its merits under paragraph 153P(3)(d) of the Act. If the ACMA does issue apparatus licences under paragraph 153P(3)(d) in respect of these services after the end of the re-allocation period, any spectrum licences issued as a result of the allocation procedures set out in the allocation determination will be subject to the condition at section 3.7 of the Marketing Plan.

Schedule 7 Sample spectrum licence – 1800 MHz band

This Schedule sets out a sample spectrum licence for the 1800 MHz band spectrum that will be allocated under the allocation determination. 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 Schedule to the licence identifies the licensee, the licence issue and expiry dates and other technical details of the licence. The technical details include the frequency bands of the licence and the geographic area over which they apply.

Licence Schedule 2 – Core conditions

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

Licence Schedule 2 defines and applies the core conditions, including spurious, non-spurious and out-of-area base emission limits that must be observed by the licensee when operating radiocommunications devices under the spectrum licence.

This Schedule also makes provision for the licensee to exceed the emission limit core conditions in circumstances where there is a written agreement between the licensee and all affected licensees of frequency-adjacent and area-adjacent spectrum licences. 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 Schedule contains other statutory conditions that apply to the licence relating to liability for charges, third party operation of radiocommunications transmitters and transmitter registration requirements. It also includes conditions exempting certain radiocommunications transmitters from the requirement to be registered, and stipulating residency requirements for licensees.

Licence Schedule 4 – Other conditions

This Schedule contains other licence conditions included by the ACMA in accordance with section 71 of the Act. It places the responsibility to manage interference on licensees. It also explains the term, 'managing interference'. Licensees have the responsibility to ensure that the causes of interference are investigated and that steps are taken to reduce the interference to acceptable levels.

Other conditions applied to the licence under this Schedule are:

- > the need to manage interference between radiocommunications devices operated under the licence, and between radiocommunications devices operated under the licence and other spectrum licences held by the licensee;
- > an interference management requirement for radiocommunications devices that are co-sited (located within 200 metres of each other);
- > a requirement to provide the ACMA with information to be included in the Register of Radiocommunications Licences;
- > an obligation to prevent harmful interference to a receiver operating in another country and in accordance with the International Telecommunication Union Radio Regulations;
- > an obligation to comply with relevant electromagnetic energy (EME) requirements; and
- > record keeping requirements for radiocommunications transmitters located at communal sites.

This Schedule also contains a licence condition that prohibits interference by radiocommunications transmitters authorised under the spectrum licence to specified fixed services operated under an apparatus licence after the end of the re-allocation period. The licence condition also specifies that a spectrum licensee cannot claim protection from interference caused by such specified fixed services. Specified fixed services are services that are provided using the same parameters for fixed link services listed in table 1 in Schedule 6 to the Marketing Plan.

Licence Schedule 5 – Licence notes

The licence notes are provided in the sample licence document for the purposes of clarification and guidance on the use of the spectrum licence.

STATEMENT OF COMPATIBILITY WITH HUMAN RIGHTS

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

This legislative instrument is made under sections 39 and 39A of the *Radiocommunications Act 1992* (the **Act**).

On 29 January 2014 the Minister for Communications made the *Radiocommunications (Spectrum Designation) Notice No. 1 of 2014* (**designation notice**) under subsection 36(1) of the Act.

The designation notice designates parts of the spectrum in the frequency ranges and areas specified in the designation notice to be allocated by the issue of spectrum licences.

On 26 May 2015, the Minister for Communications made the *Radiocommunications (Spectrum Re-allocation – Regional 1800 MHz Band) Declaration 2015* (**re-allocation declaration**) under subsection 153B(1) of the Act.

The re-allocation declaration makes specified parts of the spectrum in specified regional areas set out in the re-allocation declaration subject to re-allocation by issuing spectrum licences. Under section 60 of the Act, the Australian Communications and Media Authority (the **ACMA**) must determine the procedures for allocating spectrum licences in this spectrum. These procedures are set out in the *Radiocommunications (Spectrum Licence Allocation – 1800 MHz Band) Determination 2015* (**allocation determination**).

Under sections 39 and 39A of the Act, the ACMA must also prepare a marketing plan for issuing spectrum licences that authorise the operation of radiocommunications devices at frequencies within the parts of the spectrum and within the areas specified in the designation notice and the re-allocation declaration. This legislative instrument is the marketing plan required by those sections.

The marketing plan sets out:

- (a) the spectrum lots that are subject to the procedures for allocating spectrum licences in the frequency ranges and areas set out in the re-allocation declaration and the designation notice;
- (b) the timetable for issuing spectrum licences;
- (c) how the spectrum licences are to be allocated and issued; and
- (d) the types of conditions that may be included in the spectrum licences to be issued.

Other than making reference to the allocation procedures, this legislative instrument does not set out the actual procedures for allocating spectrum licences as required by the re-allocation declaration and the designation notice; these are set out in the allocation determination.

Human Rights Implications

The marketing plan does not engage any of the applicable rights or freedoms.

Conclusion

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

Australian Communications and Media Authority