# **EXPLANATORY STATEMENT**

Issued by the Australian Communications and Media Authority

### Radiocommunications Act 1992

Radiocommunications (Spectrum Access Charges – 1800 MHz Band) Determination 2013 (No. 2)

# Purpose

The purpose of the *Radiocommunications (Spectrum Access Charges – 1800 MHz Band) Determination 2013 (No. 2)* (the Determination) is to fix spectrum access charges payable by rail authority licensees for the re-issue of expiring spectrum licences in the 1800 MHz band.

### **Legislative Provisions**

Subsection 82(1) of the *Radiocommunications Act 1992* (the Act) provides for the Australian Communications and Media Authority (the ACMA) to re-issue a spectrum licence to the person to whom it was previously issued if the licence was used in the provision of a service included in a class of services specified in a determination under subsection 82(3) of the Act; or if the ACMA is satisfied that special circumstances exist as a result of which it is in the public interest for that person to continue to hold the licence.

Subsection 82(3) of the Act provides for the Minister to determine, by written instrument, a specified class of services for which re-issuing spectrum licences to the same licensees would be in the public interest.

Subsection 294(1) of the Act provides that the ACMA may make determinations to fix spectrum access charges payable by licensees for re-issuing spectrum licences and specify the times when spectrum access charges are payable.

Subsection 294(2) of the Act provides for the Minister to give written directions to the ACMA about the matters dealt with in determinations.

The Determination is a legislative instrument under the Legislative Instruments Act 2003.

### Background

Spectrum licences in the 1800 MHz band were auctioned from 1998 onwards and expire in two tranches. Tranche 1 licences expired in June 2013, and Tranche 2 licences will expire in May 2015.

Tranche 1 licences were offered for re-issue in January 2013. The majority of Tranche 2 licences were also offered for re-issue at this time. Spectrum access charges relating to all those licences were determined in December 2012.

The rail authority spectrum licences to which this Determination relates will expire on 3 May 2015.

Under subsection 82(1) of the Act, the ACMA may re-issue licence to the same licensees without undertaking a price-based allocation process, if:

- the licence was used in the provision of a service included in a class of services specified in a determination made under subsection 82(3) of the Act; or
- the ACMA is satisfied that special circumstances exist as a result of which it is in the public interest for the existing licensee to continue to hold the licence.

On 9 February 2012, the then Minister for Broadband, Communications and the Digital Economy made the *Radiocommunications (Class of Services) Determination 2012* under subsection 82(3) of the Act. In that determination, the then Minister specified several classes of services for which re-issuing spectrum licences to the same licensees would be in the public interest. The classes of services include:

- mobile voice and data communications services in the 800 MHz, 1800 MHz and 2 GHz bands;
- wireless broadband services in the 2.3 GHz and 3.4 GHz bands; and
- satellite services in the 27 GHz band.

In considering whether to reissue the relevant licences under paragraph 82(1)(a) of the Act, the ACMA has consulted with the existing rail authority licensees and relied upon information provided, including:

- the number of registered and deployed devices under each relevant licence;
- maps detailing the cumulative coverage area of the services offered by the licensees; and
- information on the types of equipment and technology deployed.

On 9 February 2012, the then Minister also made, under subsection 294(2) of the Act, the *Radiocommunications (Spectrum Access Charges) Direction 2012* (the Pricing Direction). The Pricing Direction specifies the amount that the then Minister considered to be the value of the spectrum in relation to the spectrum bands specified, and directs the ACMA to ensure that the spectrum access charges for re-issued licences reflect that amount.

The Pricing Direction defines a formula for fixing the spectrum access charge payable by a licensee in relation to a re-issued spectrum licence. The formula is based on a "\$/MHz/Pop" calculation where:

- \$ = Australian dollars;
- MHz = the bandwidth of spectrum authorised for use in the relevant licence area; and
- Pop = the population of the licence area, to be determined by the ACMA at the time the ACMA determines the spectrum access charges under subsection 294(1) of the Act, having regard to the available population data at that time.

The amount set by the Pricing Direction for licences in the 1800 MHz band is \$0.23/MHz/Pop, based on a 15-year licence period. However, the licences to which this Determination relates will be reissued for a shorter duration of 13 years and 45 days, in order to align their expiry date with that of the Tranche 1 re-issued spectrum licences (17 June 2028).

Accordingly, in determining the spectrum access charge for the rail authority licences to which this Determination relates, the ACMA assessed the value of the spectrum based on a licence that is re-

issued for a period of 13 years and 45 days. The approach essentially first constructs annual cash flows that grow at a constant annual rate across the entire 15 year licence period and are consistent in net present value terms with the then Minister's valuation (\$0.23/MHz/Pop). These constructed cash flows are then re-valued over the shorter licence period.

The formula for the initial part-period valued at the beginning of the licence period is:

$$PPV_n = \frac{FPV}{\left[1 + \frac{1}{(1+r)^n} \times \left[(1+Z)^n \times \left(\frac{1 - \left\{\binom{(1+z)}{(1+r)}\right\}^m}{1 - \left\{\binom{(1+z)}{(1+r)}\right\}^n}\right\}\right]\right]}$$

Where:

- $PPV_n$  denotes the nominal spectrum value of the initial part-period of n years at the beginning of the initial part-period
- *FPV* denotes the spectrum value over a licence period of 15 years (\$0.23/MHz/Pop)
- *z* denotes the estimated compound growth rate over a 15 year licence period and is analogous to the degree of "tilt" in a tilted annuity (2.5%)
- *n* denotes the number of years in the initial part-period (13.12 years)
- *m* denotes the number of years in the subsequent part-period (1.88 years)
- *r* denotes the appropriate discount rate (8.4%).

On 24 July 2013, the then Minister made the *Radiocommunications (Spectrum Access Charges) Direction 2013* (the Public Interest Charges Direction) under subsection 294(2) of the Act. The Public Interest Charges Direction directs the ACMA that spectrum access charges payable for re-issued licences in the 1800Mz frequency ranges used for rail safety and control communications are to reflect a public interest price of 50 per cent of the spectrum access charges otherwise payable for reissued spectrum licences in accordance with the Pricing Direction. The Public Interest Charges Direction also directs the ACMA that the spectrum access charges fixed by it in any determination under subsection 294(1) of the Act that apply to re-issued rail authority licences must not be required to be paid in full before 1 July 2014.

The public interest price applies only to a maximum of 2x10 MHz of spectrum in the 1800 MHz band re-issued to each rail authority. If a rail authority seeks to have re-issued more than 2x10 MHz of spectrum, any spectrum re-issued in excess of this amount will be at the price specified in the Pricing Direction.

Therefore, for the first 20 MHz of spectrum the amount derived by the above formula is halved when calculating the spectrum access charge to be paid by rail authority licensees. For the amount of spectrum in excess of 20 MHz, the formula is applied in the usual way.

# Consultation

The ACMA sought comment from each affected licensee about matters pertaining to the calculation of the spectrum access charges, the amounts of the spectrum access charges for each of the licences and the payment date. The comments received by the ACMA were considered in the making of the Determination.

# **Regulation impact**

The ACMA has consulted with the Office of Best Practice Regulation (the OBPR) on the requirement for a Regulation Impact Statement (RIS). The OBPR advised that the Determination does not warrant the preparation of a RIS because it is likely to have only minor and machinery impacts. The reference for the OBPR's assessment is ID 14048.

# **Detailed description of the Determination**

Details of the provisions of the Determination are set out in Attachment A.

# 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 to consider the human rights implications of this Determination. The Statement, set out in Attachment B, concludes that the content of this Determination does not raise any human rights issues and is therefore regarded as being compatible with human rights.

# ATTACHMENT A

# DETAILS OF THE PROVISIONS OF THE RADIOCOMMUNICATIONS (SPECTRUM ACCESS CHARGES – 1800 MHz BAND) DETERMINATION 2013 (No. 2)

#### Section 1 – Name of Determination

This section names the Determination the *Radiocommunications* (Spectrum Access Charges – 1800 MHz Band) Determination 2013 (No. 2).

#### Section 2 - Commencement

This section provides that the Determination will commence on the day after it is registered.

#### Section 3 – Definitions

This section defines the terms used in the Determination.

#### Section 4 - Population of a licence area for a spectrum licence

This section provides that the population estimate for a spectrum licence mentioned in column 1 of the table in sections 6, 7, 8 or 9 is the corresponding number in column 2.

The ACMA is required to apply population estimates for each licence area at the time the Determination is made.

The ACMA first derives an estimated population count for each licence area consistent with the population count and dispersion enumerated in Census 2011.<sup>1</sup> To comply with the Pricing Direction the ACMA has considered how population numbers have grown across the intervening period (i.e. between the most recent available Census and a time proximate to the making of the Determination).

The ratio of the projected national resident population at September 2013 to the Census 2011 national population count provides an indicator of how population has grown across this intervening period.<sup>2</sup> This ratio is then applied to the estimate of population in each licence area at August 2011 to derive an estimate of population in the area as at September 2013 (being the end of the most recent complete quarter before the Determination is made).

<sup>&</sup>lt;sup>1</sup> Australian Bureau of Statistics, *Census 2011, Basic Community, Aboriginal and Torres Strait Islander Peoples* (Indigenous) and Time Series Profiles (catalogue number 2069.0.30.008).

<sup>&</sup>lt;sup>2</sup> This is based on information from the Australian Bureau of Statistics, *Census 2011, Basic Community, Aboriginal and Torres Strait Islander Peoples (Indigenous) and Time Series Profiles* (catalogue number 2069.0.30.008), the Australian Bureau of Statistics, *Australian Demographic Statistics, March 2013*, catalogue 3101.0, released 26 September 2013 and the Budget Paper No 3, Australia's Federal Relations 2013-14; 14 May 2013, page 141.

The source of data and an example of the population calculation for a licence area is provided in the following table:

Population metric	National		Licence Area	
Census 2011 population count in Licence Area Source: ABS Census 2011 and ACMA GIS analysis			4,238,151	А
Census 2011 national population count Source: ABS Census 2011	21,507,713	В		
ABS estimate of national population (March 2012) Source: ABS, Australian Demographic Statistics, 3101.0	23,032,746	С		
Annual population growth rate applied in short-term Source: Commonwealth Treasury, Budget Paper No 3, 2013-14	1.68854%	D		
Extrapolated estimate of national population at September 2013 <i>Source: ACMA analysis</i>	23,226,390	E = C * (1 + D) ^ 0.5		
Ratio of estimated national population at September 2013 to Census 2011 national count <i>Source: ACMA analysis</i>	1.0799098x	F = E / B	1.0799098x	
Estimated population in Licence Area at September 2013 Source: ACMA analysis			4,576,821	G = A * F

# Section 5 – Unit amounts applied

This section provides that the unit amounts applied by the ACMA in calculating the spectrum access charges payable by a rail authority licensee mentioned in sections 6, 7, 8 or 9 are \$0.1053/MHz/Pop and \$0.2106/MHz/Pop, where \$0.1053 is the public interest price (being 50% of the value of the spectrum) and \$0.2106 is the value of the 1800 MHz spectrum for re-issue of a licence for a period of 13 years and 45 days.

### Section 6- Spectrum access charge payable by Queensland Rail Limited

This section provides the amount of spectrum access charge payable by Queensland Rail Limited for the re-issue of its spectrum licence.

# Section 7 - Spectrum access charge payable by the Public Transport Authority of Western Australia

This section provides the amount of spectrum access charge payable by the Public Transport Authority of Western Australia for the re-issue of its spectrum licence.

## Section 8 - Spectrum access charge payable by Victorian Rail Track

This section provides the amount of spectrum access charge payable by Victorian Rail Track for the re-issue of its spectrum licence.

### Section 9 - Spectrum access charge payable by Rail Corporation New South Wales

This section provides the amount of spectrum access charge payable by Rail Corporation New South Wales for the re-issue of its spectrum licence.

#### Section 10 – When a spectrum access charge is payable

This section provides that the spectrum access charge fixed by the Determination for the re-issue of a licence is payable on or before 30 July 2014.

#### Section 11 – Expiry

This section provides that the Determination ceases to have effect at the end of 3 May 2015, which is the date on which the current spectrum licences expire.

# ATTACHMENT B

# Statement of Compatibility with Human Rights

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

# Radiocommunications (Spectrum Access Charges – 1800 MHz Band) Determination 2013 (No.2)

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**

The *Radiocommunications* (Spectrum Access Charges – 1800 MHz Band) Determination 2013 (No 2) (the Determination) fixes spectrum access charges payable by rail authority licensees for the re-issue of expiring spectrum licences in the 1800 MHz band.

### **Human Rights Implications**

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

### Conclusion

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