

# MINISTRY OF ECONOMIC DEVELOPMENT

## RADIO FREQUENCY AUCTION

No. 9

# **AUCTION CATALOGUE**

2 November 2007

ISBN: 978-0-478-31608-7 (Print) ISBN: 978-0-478-31610-0 (PDF)

MINISTRY OF ECONOMIC DEVELOPMENT
RADIO FREQUENCY AUCTION NUMBER 9

**CALL FOR BIDS** 

On behalf of the Chief Executive of the Ministry of Economic Development and with his authority, I give notice of intention to conduct an auction of management rights commencing at **10.00 am, Tuesday 11 December 2007** in accordance with the Terms And Conditions attached to this notice. Those rights are to be transferred under section 42 of the Radiocommunications Act 1989 ("the Act") in lots as specified in Schedules 1 and 2 to the Terms and Conditions (such transfer subject to the requirements of the management rights deed discussed below).

The management rights to be sold by auction are subject to the provisions of the Radiocommunications Act 1989, together with the Radiocommunications Regulations 2001. Before the auction commences, prospective bidders should familiarise themselves thoroughly with that Act and those Regulations, as well as the Terms and Conditions and management rights deed (into which successful bidders are required to enter and which contains acquisition limits, association rules and requirements for implementing services in any spectrum band the subject of the rights). Without limit, the management rights may be suitable for telecommunications services including broadband wireless access services and, depending on the rights purchased, are suitable for services requiring a 120 MHz frequency separation in accordance with Recommendation ITU-R M.1036. Prospective bidders are advised to seek specific legal advice from a qualified professional person before undertaking any action in reliance on the contents of this publication.

Dated at WELLINGTON this 2 day of November 2007.

Brian Miller Manager Radio Spectrum Policy and Planning Ministry of Economic Development

717733 Page ii

## **Table of Clauses**

	terpretation					
1.1	Defined Terms					
	Additional definitions relating to Associations					
1.3	Construction	4				
2. Aı	mendments to this Call for Bids	5				
3. Ad	equisition subject to the Act	5				
	egistration as a Bidder	5				
4.1	Who may bid					
4.2	Prospective bidders to complete the form					
4.3	Deadline to provide forms and other documents					
4.4	·					
4.5						
4.6						
4.7						
4.8	Auction Manager to publish details of associated bidders					
4.9	Bids not accepted if incorrect information provided					
	edit Limits and Deposits					
5.1	Bidders to specify initial credit limit in application					
5.2	Bidders may increase credit limit					
5.3	Credit limits confidential					
5.4	Bidders to provide deposit					
5.5	Bank Cheque deposits held in Ministry trust account.					
5.6	Banker's Certificate deposits held securely					
5.7	Return of deposits to unsuccessful bidders	3				
5.8	Interest to accrue on deposits					
5.9	Withholding tax to be deducted from interest on deposits					
6. Th	ne Lots	8				
6.1	Schedules 1 and 2 contain details of Lots					
6.2	The Lots have reserve prices					
6.3	Creation of Licences					
6.4	No representation regarding suitability					
7. Tł	ne Auction	g				
7.1	Internet-based simultaneous ascending round auction					
7.2	Auction to consist of successive rounds until conclusion	ç				
7.3	Rounds held according to time schedule	9				
7.4	The minimum bid is the reserve price					
7.5	Auction Manager may vary minimum bid					
7.6	Bidders may withdraw a bid					
7.7	Limited number of withdrawals per bidder					
7.8	Bidders must remain active	10				
7.9	Bids must meet requirements to be valid					
	Onscreen acceptance of bid is not determinative					
7.11	Bids by Ministry employees invalid	11				
	Round results are determined at end of round					
	Round results advised to bidders					
	Bidders to advise of Technical Difficulties					
7.15	Auction Manager may halt auction if Technical Difficulty	12				
7.16	Chief Executive may choose to not conclude auction if Technical Difficulty	12				
8. Ad	equisition Limit applies to bidding	13				
8.1	Bidders must not bid if success would exceed Acquisition Limit	13				
8.2	Crown has no obligation to notify about Acquisition Limit	13				
8.3	Auction may recommence if Acquisition Limit was exceeded					

9. Withdrawal of Lots	
9.1 Chief Executive may withdraw Lots	
9.2 Withdraws to be announced	
9.3 Deposits may be returned where Lots withdrawn	
9.4 No claims if Lots withdrawn	14
10. Conclusion of Auction	
10.1 Bidding closes where no new bids and no withdrawals	
10.2 Provisionally Successful Bidder is highest bidder	
10.3 Auction Manager to announce Provisionally Successful Bidders	
10.4 Auction Manager to advise of provisional results	14
11. Post Auction Processes	1/
11.1 Statutory Declaration to be provided confirming matters	
11.2 Statutory Declaration to be provided	
11.3 Changes to details in statutory declaration	
11.4 Commerce Commission clearance may be required	
11.5 Result of clearance application to be reported	
11.6 No warranty that acquisition complies with Commerce Act	
12. Settlement Requirements	16
12.1 Settlement amount	
12.2 Invoices to be provided	
12.3 GST is payable	
12.4 Payment by <mark>bank chequ</mark> e or electronic fund <mark>s transfer .</mark>	
12.5 Payment within 40 Working Days of invoice <mark></mark>	
12.6 Managem <mark>ent Righ</mark> ts Deed is a condition of s <mark>ettlement</mark>	
12.7 Deed im <mark>poses ac</mark> quisiti <mark>on limit an</mark> d implem <mark>entation o</mark> bligation	17
13. Cancellation and Liability	47
13.1 Cancellation events	17
13.2 Effect of cancellation event	
14. Early Management Right to be Transferred to Purchaser	18
15. Announcement of Final Results and Publishing Other Information	18
15.1 Results published in Gazette	18
15.2 Information of interest may be published on Internet	18
16. Crown Not Liable	
16. Crown Not Liable	18
17. Notices	10
17.1 Notices by bidders to be in writing	19
17.2 Notices to meet requirements to be effective	
17.3 Facsimile notices effective sometimes	
	19
17.3 Facsimile notices effective sometimes	
17.4 Timing of Notices and Working Days  Schedule 1 - Schedule of Lots	20
17.4 Timing of Notices and Working Days  Schedule 1 - Schedule of Lots	20
17.4 Timing of Notices and Working Days  Schedule 1 - Schedule of Lots  Schedule 2 - Record of Management Rights and Licence Information	20
17.4 Timing of Notices and Working Days  Schedule 1 - Schedule of Lots  Schedule 2 - Record of Management Rights and Licence Information	20
17.4 Timing of Notices and Working Days  Schedule 1 - Schedule of Lots  Schedule 2 - Record of Management Rights and Licence Information  Schedule 3 - Management Rights Deed	22
17.4 Timing of Notices and Working Days	20

## **TERMS AND CONDITIONS**

The Terms and Conditions applicable to this auction are as follows:

## 1. INTERPRETATION

## 1.1 Defined Terms

In these Terms and Conditions, the following terms have the following meanings.

"Acquisition Limit"	The holding of, or having a Controlling Interest in, management rights for not more than 40 MHz of spectrum in:			
	(a) the bands from 2300 MHz to 2396 MHz and from 2500MHz to 2690 MHz that are the subject of this auction; and			
	(b) the band from 2370 MHz to 2395 MHz;			
"Act"	The Radiocommunications Act 1989, as amended from time to time;			
"Agreement"	Includes an agreement, arrangement or understanding whether:			
	(a) formal or informal or partly formal and partly informal; or			
	(b) written or oral or p <mark>artly writte</mark> n and partly oral; or			
	(c) having legal or equitable force or not, and whether or not based on legal or equitable rights;			
"Asso <mark>ciate" and</mark> "Assoc <mark>iate</mark> Group"	have the meanings given in clause 1.2;			
( A	The interpret site of the fellowing and leader			
"Auction	The internet site at the following address:			
Information Page"	http://www.rsm.govt.nz/cms/policy-and-planning/spectrum-auctions/2-3-2-5-ghz-auction-1			
	http://www.rsm.govt.nz/cms/policy-and-planning/spectrum-			
Information Page" "Auction Message	http://www.rsm.govt.nz/cms/policy-and-planning/spectrum-auctions/2-3-2-5-ghz-auction-1  The electronic exchange of messages between Registered			
"Auction Message System"	http://www.rsm.govt.nz/cms/policy-and-planning/spectrum-auctions/2-3-2-5-ghz-auction-1  The electronic exchange of messages between Registered Bidders and the Auction Manager by the Internet Auction Site;  The person designated by the Ministry as the Auction Manager from time to time and whose contact details are set out in			
"Auction Message System" "Auction Manager"	http://www.rsm.govt.nz/cms/policy-and-planning/spectrum-auctions/2-3-2-5-ghz-auction-1  The electronic exchange of messages between Registered Bidders and the Auction Manager by the Internet Auction Site;  The person designated by the Ministry as the Auction Manager from time to time and whose contact details are set out in Schedule 5;  A Banker's Certificate of Undertaking is an absolute guarantee given by the issuing bank to make payment up to the face value of the certificate on demand by the Ministry without			

"Buy-out Management Right" The management rights in Schedule 1 that end on 31 December 2016, which will be transferred only if the buy-out right is exercised, or the implementation requirement is met, under the Management Rights Deed;

"Chief Executive"

The Chief Executive of the Ministry of Economic Development and his or her delegate;

"Clause"

A clause of these Terms and Conditions:

"Conditional Management Right"

The management rights in Schedule 1 that end on 31 December 2030, which will be transferred only if the implementation requirement is met under the Management Rights Deed;

"Controlling Interest"

In relation to any management right, an interest which results in the direct or indirect control of any radio frequency spectrum the subject of that management right, including (to avoid doubt) the non-exclusive right for any person to use that spectrum on arms length commercial terms where that frequency is controlled directly or indirectly by another person;

"Crown"

has the meaning given in the Public Finance Act 1989 and includes the Chief Executive (and the Crown acting by and through the Chief Executive) and any other officer of the Ministry of Economic Development;

"Early Management Right" The management rights in Schedule 1 that end on 31 December 2014, which will be transferred following settlement of Lots in accordance with clause 14;

"GST"

Goods and services tax within the meaning of the Goods and Services Act 1985:

"Lot"

A lot comprising management rights recorded under the Act over the range of frequencies described as part of that Lot in Schedule 1:

"Management Rights Deed"

The deed to be entered into between the Chief Executive and each Provisionally Successful Bidder for Lots, in the form attached as Schedule 3;

"Ministry"

The Ministry of Economic Development and any other government department given responsibility for the auction from time to time;

"Provisionally Successful Bidder"

The Registered Bidder with the highest valid bid for any Lot that is accepted by the Auction Manager;

"Registered Bidders"

Those persons whose registration as a bidder has been advised as accepted by the Auction Manager under clause 4.4;

"Registered Bidder's Pack"

The information provided by the Auction Manager to Registered Bidders on registration under clause 4.4;

"Related Body Corporate"

A body corporate is related to another body corporate if:

(a) the other body corporate is its holding company or subsidiary within the meaning of sections 5 and 6 of the Companies Act 1993; or

- (b) at least 20% of its issued shares, other than shares that carry no right to participate beyond a specified amount in a distribution of either profits or capital, is held by the other body corporate and bodies corporate related to that other body corporate (whether directly or indirectly, but other than in a fiduciary capacity); or
- (c) at least 20% of the issued shares of each of them, other than shares that carry no right to participate beyond a specified amount in a distribution of either profits or capital, is held by shareholders or members of the other (whether directly or indirectly, but other than solely in a fiduciary capacity); or
- (d) the businesses of the bodies corporate have been so carried on that the separate business of each body corporate, or a substantial part of it, is not readily identifiable; or
- (e) there is another body corporate to which both bodies corporate are related;

"Schedule"

A Schedule to these terms and conditions;

"Successful Bidder"

A Provisionally Successful Bidder that has fulfilled the requirements in clauses 11.1, 11.2, 11.3, 11.4, and 11.5 (if and as applicable), 12.5, and 12.6 (and an event in clause 13.1 has not occurred);

"Technical Difficulty"

A difficulty relating to the operation of any hardware or software associated with the computer system, or internet browser belonging to or operated by any Registered Bidder, the Ministry, or any contractor to the Ministry involved in running the auction, and includes any interruption in the operation of the internet as a medium of communication affecting the auction;

"Terms and Conditions"

These Terms and Conditions, including the Schedules attached to it; and

"Working Day"

Between the hours of 8.30am to 5.00pm on any day that is not a Saturday or a Sunday or a day that is the anniversary of any province or a public holiday within the meaning of section 7A(2) of the Holidays Act 1981.

#### 1.2 Additional definitions relating to Associations

For the purposes of these Terms and Conditions, person A is an Associate of person B (and vice versa) if:

- (a) person A is a body corporate, and person B is:
  - (i) a director of that body corporate; or
  - (ii) a Related Body Corporate of that body corporate; or
  - (iv) a director of a Related Body Corporate of that body corporate; or
- (b) person A is in the same immediate family as person B (including a spouse, civil union partner, de facto partner, child (including step-child), parent (including step-parent) or sibling (including step-siblings) of person B); or

- (c) person A is a nominee or trustee for person B; or
- (d) person A is a director of a body corporate, or person A holds any voting power in the body corporate, and person A and person B are parties to an agreement relating to:
  - (i) the control of that body corporate; or
  - (ii) at least 20% of the voting power in that body corporate; or
- (e) person A holds or controls directly or indirectly at least 20% of the voting power, or at least 20% of the issued shares, in person B; or
- (f) person B (or a director, employee or other Associate of person B) is the trustee of a trust acting in that capacity and person A is a settlor, beneficiary, or trustee, of that trust: or
- (g) person A is a person who, in making a decision or exercising a power materially affecting a Business, is accustomed, or under an obligation, or proposes or is likely (in the Chief Executive's sole opinion), to act in accordance with the directions or instructions or wishes of person B; or
- (h) person A and person B are acting, or propose or are likely to act (in the Chief Executive's sole opinion), jointly or in concert in relation to a Business; or
- (i) person A (being a person other than the parties to an Agreement that:
  - relates directly or indirectly to the bidding strategy to be adopted by either or both of persons at the auction; or
  - (ii) entitles one of the persons to a substantial degree of influence, or the right to obtain a substantial degree of influence, over radio frequency spectrum covered by the Lots and in respect of which the other person is or will be (subject to these Terms and Conditions) a manager or rightholder under the Act; or
- (j) person A is an Associate of another person that is an Associate of person B under these Terms and Conditions, including an Associate in a chain of Associates.

and Associate Group means a Registered Bidder for management rights under these Terms and Conditions together with any Associate of that bidder that is also a Registered Bidder for management rights under these Terms and Conditions. For the avoidance of doubt, a Registered Bidder for management rights is, by itself, considered to be an Associate Group under these Terms and Conditions if it has no Associate that is also a Registered Bidder.

#### 1.3 Construction

In these Terms and Conditions:

- (a) a reference to "including" or similar phrases does not imply any limitation;
- (b) a reference to a person includes an individual, body corporate or unincorporated body of persons;

- (c) the singular includes the plural, and vice versa;
- (d) a reference to \$ or dollars is a reference to New Zealand currency;
- (e) the headings and clause and subclause headings in these Terms and Conditions are for convenience only and have no legal effect; and
- (f) where any word or phrase has been given a defined meaning, any other part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning.

## 2. AMENDMENTS TO THIS CALL FOR BIDS

This call, including these Terms and Conditions, may be amended or revoked by the Chief Executive in whole or in part, and at any time, by notice in the *New Zealand Gazette* or by notice in writing to Registered Bidders.

#### 3. ACQUISITION SUBJECT TO THE ACT

These Terms and Conditions, and any management rights acquired under these Terms and Conditions, are subject to all legal requirements that apply to the acquisition and holding of management rights created under the Act, including section 138 of the Act which provides that section 47 of the Commerce Act 1986 (relating to acquisitions of assets of a business) applies to the acquisition of management rights in relation to the spectrum.

#### 4. REGISTRATION AS A BIDDER

## 4.1 Who may bid

Persons may bid only if they:

- (a) are Registered Bidders; and
- (b) have disclosed the information required to be disclosed to the Auction Manager under clauses 4.5, and 4.7; and
- (c) bid in a manner that meets the requirements of clause 7.9.

## 4.2 Prospective bidders to complete the form

Persons wishing to register as a bidder in this auction must complete form RFA1, which may be downloaded from the Auction Information Page or obtained in hard copy from the Auction Manager. By submitting form RFA1, the person agrees to be bound by these Terms and Conditions.

#### 4.3 Deadline to provide forms and other documents

Form RFA1, together with the deposit required by clause 5.4 and a resident withholding tax ("RWT") exemption certificate (if one is to be provided under clause 5.9), must be received by the Auction Manager no later than 4.00 pm on Thursday 15 November 2007 (time being of the essence). The Auction Manager will not accept registrations after this time or registrations that are incomplete or that do not attach the deposit.

## 4.4 Auction Manager to advise of successful registration

The Auction Manager will advise applicants of their successful registration, and will issue a Registered Bidder's Pack, including a Registered Bidder's number, bidder's manual and other documentation required for participation in this auction. The bidder's registration number will be used to confirm the identity of a Registered Bidder at the auction.

## 4.5 Bidders to provide details of principals

A Registered Bidder that is:

- (a) not a publicly listed company is required to disclose the following information to the Auction Manager no later than 4.00 pm on Thursday 15 November 2007:
  - (i) the identity or identities of its principals and ultimate beneficial owners; and
  - (ii) any other information that the Auction Manager requires to confirm that Registered Bidder's structure, ownership, or Associates.
- (b) a publicly listed company is required to disclose the identity of any person with a shareholding of 5% or more in that company no later than 4.00 pm on Thursday 15 November 2007.

## 4.6 Auction Manager to publish bidder principal details

The Auction Manager will publish the information received from all Registered Bidders under clause 4.5 on the Auction Information Page no later than 4.00 pm on Monday 19 November 2007.

## 4.7 Bidders to advise of associations with other bidders

Registered Bidders shall notify the Auction Manager before 4.00pm on Monday 26 November 2007 (time being of the essence) whether or not they are an Associate of any other Registered Bidder. If a Registered Bidder provides notification to the Auction Manager under this clause, the notification must include:

- (a) the identities of the Registered Bidder(s) that are their Associate(s); and
- (b) details of how any associations arise.

#### 4.8 Auction Manager to publish details of associated bidders

The Auction Manager will publish on the Auction Information Page no later than 4.00pm on Monday 3 December 2007 the composition of any Associate Groups and the identities of any disclosed principals or ultimate beneficial owners as advised to the Auction Manager. Registered Bidders must advise the Auction Manager of any changes in the composition of their Associate Groups as and when they arise up to, and including, the completion date of the auction. The Auction Manager will publish updates on the Auction Information Page if the Auction Manager becomes aware that the composition of any Associate Group changes or that any new Associate Group has been formed prior to completion of the auction.

## 4.9 Bids not accepted if incorrect information provided

If, in the opinion of the Auction Manager, any information given by a Registered Bidder to the Auction Manager under clause 4.5, 4.7, or 4.8 omits a material particular, or it becomes incorrect or misleading, or is not provided within the required timeframe then (without limitation to any other legal rights and remedies available to the Crown):

- (a) the Auction Manager may refuse to accept any bid from the Associate Group of the Registered Bidder (including, to avoid doubt, the Registered Bidder) at the auction; and
- (b) clause 13.2 applies (with all necessary modifications).

#### 5. CREDIT LIMITS AND DEPOSITS

#### 5.1 Bidders to specify initial credit limit in application

In their applications for registration, prospective bidders must state the maximum amount, in whole New Zealand dollars, they are prepared to pay for any combination of Lots in this auction. This amount will be deemed to be the Registered Bidder's credit limit. No bid that would cause this limit to be exceeded will be accepted by the Auction Manager. Each prospective bidder must provide a deposit in accordance with clause 5.4 to validate the credit limit.

## 5.2 Bidders may increase credit limit

At any time during the auction, Registered Bidders may increase their credit limits by notifying the Auction Manager of their wish to increase the limit and providing the Auction Manager with a further deposit, equal to 25% of the desired increase in their credit limit. The Auction Manager is and shall be under no obligation to put such an increase in place before the auction is completed and shall be under no liability for any failure to implement any increase. Registered Bidders should therefore ensure that their original credit limit is adequate.

#### 5.3 Credit limits confidential

Subject to any lawful requirements, the Auction Manager will use his or her best endeavours to keep the credit limit of each Registered Bidder, and the amounts of deposits provided, confidential at all times.

#### 5.4 Bidders to provide deposit

An initial deposit equal to the greater of \$50,000 or 25% of the value of the credit limit is required to validate each bidder's credit limit. This deposit, in whole New Zealand dollars, is to be made in the form of either a currently dated Bank Cheque or a Banker's Certificate provided by a bank registered in New Zealand, and must accompany each request for registration. No request for registration will be accepted unless such a deposit is provided. Deposits received in the form of a Bank Cheque will be banked in a trust account held by the Ministry. If deposit is made by Banker's Certificate, that certificate must not include an expiry date (or similar).

## 5.5 Bank Cheque deposits held in Ministry trust account

Deposits received by way of Bank Cheque paid by Provisionally Successful Bidders will be held in the Ministry's trust account until that bidder has made payment in settlement in accordance with clause 12.5. Upon such payment the deposit will be transferred to the Crown's own bank account. Any interest earned on the deposit will be paid to the bidder.

## 5.6 Banker's Certificate deposits held securely

Deposits received in the form of a Banker's Certificate paid by Provisionally Successful Bidders will be held secure until that bidder has made payment in settlement in accordance with clause 12.5. Upon such payment, the Banker's Certificate will be returned to the bidder, together with a letter of release to the bank.

## 5.7 Return of deposits to unsuccessful bidders

Deposits paid by unsuccessful Registered Bidders in the form of:

- (a) a Bank Cheque will be repaid to unsuccessful bidders together with any interest received on the deposit after the names of Provisionally Successful Bidders have been published; or
- (b) a Banker's Certificate will be returned to unsuccessful bidders, together with a letter of release to the bank, after the names of Provisionally Successful Bidders have been published.

## 5.8 Interest to accrue on deposits

Deposits paid by Bank Cheque will accrue interest while held in trust accounts. Interest that is payable to unsuccessful Registered Bidders will be paid at the time that their deposits are repaid. The Chief Executive makes no representations as to the rate at which interest will accrue. Deposits made in the form of Banker's Certificate will not earn interest.

#### 5.9 Withholding tax to be deducted from interest on deposits

In respect of deposits paid by Bank Cheque, the Ministry's bank will automatically deduct withholding tax after calculating interest payable. If a bidder wishes to provide a withholding tax exemption certificate, then it must be supplied at the time of registration so that the bank can be advised at the time of deposit if the bidder is to be exempt from this tax. Otherwise, responsibility for arranging a refund of withholding tax will rest with the bidder.

#### 6. THE LOTS

#### 6.1 Schedules 1 and 2 contain details of Lots

Lots are subject to any restriction specified in Schedules 1 and 2 as applying to that Lot. In particular, Registered Bidders should note the commencement and expiry dates for the management rights and the licences that are to be registered in relation to those management rights (including the licences' expiry dates). Each Lot comprises three management rights: an Early Management Right, a Buy-out Management Right and a Conditional Management Right. The Early Management Right expires at the time that

the implementation requirement must be met (the details of this requirement are set out in the Management Rights Deed).

## 6.2 The Lots have reserve prices

Subject to clause 7.5, the following reserve prices will apply in the auction (plus GST):

\$10,000 per MHz

#### 6.3 Creation of Licences

Use of the management rights requires Managers to register licences under the Radiocommunications Act. In creating licences Managers must comply with any specific restrictions identified in clause 6.1. These restrictions may not be sufficient to ensure that the licences can be certified under the Act and managers should therefore also coordinate with the existing and planned use by Managers or licensees in the adjacent management rights.

## 6.4 No representation regarding suitability

It is the responsibility of Registered Bidders to ensure that any Lots for which they are bidding are suitable for their purpose. Despite anything to the contrary in these Terms and Conditions, including the call for bids, the Chief Executive and the Auction Manager make no representations in this respect.

#### 7. THE AUCTION

## 7.1 Internet-based simultaneous ascending round auction

The auction will be an Internet-based simultaneous ascending round auction conducted by the Auction Manager in accordance with these Terms and Conditions. The Chief Executive or the Auction Manager may refuse to accept any bid that does not comply with these Terms and Conditions.

#### 7.2 Auction to consist of successive rounds until conclusion

The auction will consist of a number of successive rounds until the auction is concluded in accordance with clause 10.3. Subject to these Terms and Conditions, Registered Bidders may lodge bids in any round at the Internet Auction Site in accordance with the instructions in the Registered Bidder's Pack.

#### 7.3 Rounds held according to time schedule

Bidding rounds will be held in accordance with the time schedule provided in the Registered Bidder's Pack, subject to any amendments published by the Auction Manager, and later in accordance with the time schedule published by the Auction Manager on the Auction Message System or on the Auction Information Page. The Auction Manager may vary the duration of bidding rounds and the time interval between rounds.

#### 7.4 The minimum bid is the reserve price

The initial minimum bid for each Lot will be the reserve price as stated in clause 6.2. A bid that is less than the reserve price will not be accepted as a valid bid.

## 7.5 Auction Manager may vary minimum bid

At any stage of the auction, the Auction Manager may specify a required minimum bid greater than the highest bid at the conclusion of the previous round. The size of the required minimum bid is at the sole discretion of the Auction Manager. The Auction Manager will notify Registered Bidders of any changes to the required minimum bid through the Auction Message System or on the Auction Information Page before the commencement of the round to which the required minimum bid applies. A bid that is less than the required minimum bid for that round will not be accepted as a valid bid.

## 7.6 Bidders may withdraw a bid

Subject to clause 7.7, a Registered Bidder may withdraw a bid in any round in accordance with the instructions in the Registered Bidder's Pack. Any bid withdrawal will be processed at the end of the round in which that withdrawal was lodged. The bid withdrawal will be confirmed by the Registered Bidder receiving a message "Your bid has been withdrawn".

## 7.7 Limited number of withdrawals per bidder

These rules apply to withdrawals of bids:

- (a) Any Registered Bidder that exercises the right under clause 7.6 to withdraw a bid in any four (4) rounds (whether consecutive or not) will be automatically disqualified from lodging any further bids for Lots.
- (b) Any further bids for Lots lodged by a disqualified Registered Bidder will be void, irrespective of any automatic notification of the apparent acceptance of such bids by the auction system.
- (c) All valid bids made by a Registered Bidder before being disqualified under this clause remain valid unless the bidder withdraws them in accordance with the instructions in the Registered Bidder's Pack.
- (d) Where one member of an Associate Group is disqualified from lodging any further bids for Lots under this clause, all members of that Associate Group are also disqualified from lodging further bids for Lots.

## 7.8 Bidders must remain active

Any Registered Bidder that does not:

- (a) place a valid bid for any Lot in either of two (2) consecutive rounds; or
- (b) hold the highest bid for any Lot in either round,

is automatically disqualified from lodging any further bids on any Lot. Any further bids for Lots lodged by a disqualified bidder will be void, irrespective of any automatic notification of the apparent acceptance of such bids by the auction system. All valid bids made by that bidder before being disqualified under this clause remain valid unless the bidder withdraws them in accordance with the instructions in the Registered Bidder's Pack.

## 7.9 Bids must meet requirements to be valid

For a bid to be valid it must:

- (a) be made in accordance with instructions in the Registered Bidder's Pack; and
- (b) be received by the Auction Manager at the Internet Auction Site while a round is continuing, which will be confirmed by the Registered Bidder receiving a message "Your bid was received" on the bidder's screen for the Internet Auction Site; and
- (c) be at or above the required minimum bid specified in accordance with clauses 7.4 or 7.5 or, where no minimum bid has been specified, higher than the results for that Lot in the previous round as advised in accordance with clause 7.13; and
- (d) be an amount that, when added to the other valid bids made by that Registered Bidder in that round and to any bids made by that bidder in previous rounds which remain the highest bids made on the Lot to which they relate, does not take the bidder beyond his or her credit limit (determined in accordance with clauses 5.1 and 5.2). The order in which bids are received will be the basis for determining which bid takes a bidder beyond his or her credit limit. Where it is not possible to determine which bid takes the bidder beyond his or her credit limit, the Auction Manager will have sole discretion to determine which bid has caused this to occur, and accordingly which bid or bids will be treated as invalid; and
- (e) be made in whole New Zealand dollars (exclusive of GST);
- (f) not be void under clause 7.7 or clause 7.8 or refused by the Chief Executive or the Auction Manager under clause 7.1;
- (g) not be invalid under clause 8.1 (acquisition limit); and
- (h) comply with the provisions of this clause and these Terms and Conditions.

#### 7.10Onscreen acceptance of bid is not determinative

The onscreen apparent acceptance of a bid is not determinative of the validity of any bid which remains conditional upon and subject to compliance with these Terms and Conditions.

#### 7.11Bids by Ministry employees invalid

Any bid made by or on behalf of an employee of the Ministry will be invalid unless the prior written consent of the Chief Executive is obtained to that employee participating in the auction. If the Chief Executive has consented to an employee participating in the auction this will be advertised on the Internet Auction Site before the commencement of the auction.

#### 7.12Round results are determined at end of round

For each Lot, the results for each round will be determined at the end of that round as follows:

- (a) Except where the highest valid bid for a Lot in a round has been withdrawn, the results will show the dollar value of the highest valid bid or equal highest valid bids received for each Lot and the registration number of the highest Registered Bidder or Bidders, as the case may be.
- (b) Where the single highest valid bid or equal highest valid bids for a Lot in a round has been withdrawn, the results will show the dollar value of the next highest valid bid or equal highest valid bids received for each Lot in that round that have not been withdrawn, and the registration number of the bidder(s) who placed that bid/those bids. If there are no other valid bids in the round for that Lot, the results for the round will show the word "withdrawn" instead of the bidder registration number and such other dollar value as the Auction Manager may, in his or her discretion, set to attract further bidding on a Lot.

#### 7.13Round results advised to bidders

After the results of each round of bidding are determined in accordance with clause 7.12, the Auction Manager will advise all Registered Bidders, by means of the Internet Auction Site, of the results for each Lot. These results may also be published on the Auction Information Page.

#### 7.14Bidders to advise of Technical Difficulties

If any Registered Bidder is prevented from placing a bid in any round by Technical Difficulties, the Registered Bidder must promptly (and in any event no later than completion of the round in which the Technical Difficulties first arose) advise the Auction Manager by facsimile, telephone or the Auction Message System that he or she is unable to place a bid.

## 7.15 Auction Manager may halt auction if Technical Difficulty

Where the Auction Manager is advised under clause 7.14 that Technical Difficulties are preventing any Registered Bidder from placing bids, the Auction Manager may advise Registered Bidders through the Auction Information Page or the Internet Auction Site of a temporary halt to the auction to allow the Technical Difficulty to be corrected.

#### 7.16Chief Executive may choose to not conclude auction if Technical Difficulty

Where Technical Difficulties have prevented any Registered Bidder from placing bids, the Chief Executive may decide not to conclude the auction, so as to allow the bidder to place a bid, notwithstanding that one or more rounds may have occurred in which no bids were received for any Lots and the auction would otherwise be concluded.

#### 8. ACQUISITION LIMIT APPLIES TO BIDDING

#### 8.1 Bidders must not bid if success would exceed Acquisition Limit

Registered Bidders are not permitted to make bids for Lots which, if successful, would result in the bidder or its Associate Group exceeding the Acquisition Limit. All such bids are invalid. The order in which bids are received will be the basis for determining whether the Acquisition Limit has been exceeded. Where it is not possible to determine the order in which bids are received, the Auction Manager will have the sole discretion to determine which bid or bids cause a bidder to exceed the Acquisition Limit and accordingly which bid or bids will be treated as invalid.

## 8.2 Crown has no obligation to notify about Acquisition Limit

While they will monitor the bidding during the auction, the Auction Manager and the Chief Executive have no obligation to notify any member of an Associate Group on the close of any round (or otherwise) that it or its Associate Group is exceeding the Acquisition Limit.

## 8.3 Auction may recommence if Acquisition Limit was exceeded

If, after the close of bidding of a Lot, any Provisionally Successful Bidder fails to provide a statutory declaration as required by clause 11.1 (which confirms Acquisition Limit not exceeded):

- (a) the bids of that Provisionally Successful Bidder and its Associate Group in the last round for the Lots will be deemed to be withdrawn;
- (b) the auction will recommence with a new round for bids on all Lots, with a timetable to be determined by the Auction Manager; and
- (c) the Auction Manager may refuse to accept any further bid from the Associate Group of the Provisionally Successful Bidder.

## 9. WITHDRAWAL OF LOTS

## 9.1 Chief Executive may withdraw Lots

All or any of the Lots may be withdrawn from the auction at the discretion of the Chief Executive at any time prior to the close of the auction, notwithstanding that valid bids may have been made in excess of the reserve prices of any of the Lots.

#### 9.2 Withdraws to be announced

If the Chief Executive exercises his discretion to withdraw all or any of the Lots from the auction, the Auction Manager will announce that decision by the Auction Message System and on the Auction Information Page.

## 9.3 Deposits may be returned where Lots withdrawn

Any Registered Bidders for Lots that are withdrawn from the auction may call for all or part of their deposits to be returned by the Ministry on the same basis as if they were unsuccessful bidders.

#### 9.4 No claims if Lots withdrawn

No Registered Bidder or prospective bidder will have any claim against the Chief Executive or the Ministry for any expenses or other compensation as a direct or indirect consequence of such withdrawal.

#### 10. CONCLUSION OF AUCTION

## 10.1 Bidding closes where no new bids and no withdrawals

Bidding for the Lots will close upon the completion of one round in which:

- (a) no new valid bids are received for any of the Lots; and
- (b) no bids are withdrawn or deemed to be withdrawn for any of the Lots.

## 10.2Provisionally Successful Bidder is highest bidder

The Provisionally Successful Bidder for a Lot is the bidder with the highest valid bid for that Lot after there has been one (1) clear round in accordance with clause 10.1. Where there are two or more Provisionally Successful Bidders for the same Lot, the actual Provisionally Successful Bidder will be the first in time to have lodged the valid bid as recorded by the auction system history log.

## 10.3 Auction Manager to announce Provisionally Successful Bidders

When the Auction Manager is satisfied that there has been one (1) clear round in accordance with clause 10.1:

- (a) the Auction Manager will announce by the Auction Message System and on the Auction Information Page that the auction is concluded, including details of the Provisionally Successful Bidders for each Lot; and
- (b) the Provisionally Successful Bidder will be under a contractual obligation to purchase that Lot from the Chief Executive.

## 10.4 Auction Manager to advise of provisional results

The Auction Manager will advise all Registered Bidders by the Auction Message System of when the provisional results will be published on the Auction Information Page. The Auction Manager will also advise bidders by letter of their provisional success or otherwise, as appropriate.

#### 11. Post Auction Processes

## 11.1 Statutory Declaration to be provided confirming matters

A Provisionally Successful Bidder must, before 4.00 pm on a date within 5 Working Days of Provisionally Successful status being notified (time being of the essence), deliver to the Auction Manager a statutory declaration confirming that the Provisionally Successful Bidder's Associate Group has not exceeded the Acquisition Limit and:

(a) confirming that the bidder is not an Associate of any other Provisionally Successful Bidder; or

(b) identifying any Provisionally Successful Bidders that are Associates of that bidder.

## 11.2 Statutory Declaration to be provided

A Provisionally Successful Bidder must, before 4.00 pm on within 20 Working Days of Provisionally Successful status being notified (time being of the essence), deliver to the Auction Manager a statutory declaration confirming that either:

- (a) after reasonable investigation/legal advice, the Provisionally Successful Bidder believes that the acquisition of the relevant management rights will not breach section 47 of the Commerce Act 1986, including attaching sufficient evidence to satisfy the Chief Executive of this belief; or
- (b) a clearance or authorisation has been obtained or applied for from the Commerce Commission for the proposed acquisition under section 66 or 67 of the Commerce Act 1986. Where a clearance or authorisation has been obtained, a certified copy of that clearance or authorisation must be attached to the declaration.

## 11.3Changes to details in statutory declaration

A Provisionally Successful Bidder must notify the Auction Manager immediately in writing if any of the details provided in the statutory declaration under clause 11.1 and 11.2 change prior to settlement.

#### 11.4Commerce Commission clearance may be required

If a confirmation under clause 11.2(a) is received and the Chief Executive considers that the proposed acquisition may or would breach section 47 of the Commerce Act 1986, the Provisionally Successful Bidder must, within 15 Working Days of notification by the Chief Executive of that decision, apply for a clearance or authorisation from the Commerce Commission and give the Chief Executive notice that a clearance or authorisation has been sought (time being of the essence). If the bidder fails to give the Chief Executive that notice by the due date, clause 13 applies.

#### 11.5 Result of clearance application to be reported

Where a Provisionally Successful Bidder has applied for a clearance or authorisation from the Commerce Commission under clause 11.2(b) or 11.4, the Provisionally Successful Bidder must notify the Chief Executive of the result of that application as soon as it is known. If:

- (a) the Provisionally Successful Bidder appeals the decision of the Commerce Commission, the Provisionally Successful Bidder must inform the Chief Executive of its intention to appeal the decision at the time of such notification and must notify the Chief Executive of the result of the appeal as soon as it is known. This clause 11.5(a) applies to any further appeals or reconsiderations in respect of the application for a clearance or authorisation; and
- (b) the clearance or authorisation is obtained (whether as a result of the initial decision of the Commerce Commission or as a result of any appeal or reconsideration of the matter), the Provisionally Successful Bidder must provide the Chief Executive a certified copy of that clearance or authorisation at the time of notification.

## 11.6No warranty that acquisition complies with Commerce Act

The Ministry makes no warranty that:

- (a) an acquisition within the Acquisition Limit complies with section 47 of the Commerce Act 1986; or
- (b) where the Chief Executive does not consider that a proposed acquisition may or would breach section 47 of the Commerce Act 1986, the Commerce Commission considering a subsequent application for a clearance or authorisation will find no breach of that section.

#### 12. SETTLEMENT REQUIREMENTS

#### 12.1 Settlement amount

The amount required in settlement in respect of each Lot is:

- in the case of Provisionally Successful Bidders who have paid their deposit by way of Bank Cheque, the amount of the successful bid for the Lot or Lots plus GST less the deposit paid by the bidder; or
- (b) in the case of Provisionally Successful Bidders who have paid their deposit by way of Banker's Certificate, the amount of the successful bid for the Lot or Lots plus GST.

#### 12.2Invoices to be provided

Each Provisionally Successful Bidder will be invoiced for the amount payable in settlement as soon as possible after the conditions in clauses 11.1, 11.2 and 11.3 have been complied with and, in the case of a person who has applied for an authorisation or clearance under clause 11.2(b) or 11.4, that authorisation or clearance has been obtained.

## 12.3GST is payable

The Department of Inland Revenue has advised the Ministry that GST is payable in respect of successful bids. For the purposes of determining the results of this auction, all bids will be considered to exclude GST. GST will be recovered from Successful Bidders at the time that they are invoiced for payments in settlement. GST will be additional to the amount otherwise payable by the Successful Bidder.

## 12.4Payment by bank cheque or electronic funds transfer

Settlement must be made in New Zealand dollars by:

- (a) a currently dated Bank Cheque drawn on a bank registered in New Zealand; or
- (b) electronic funds transfer (in same day cleared funds). Account details will be provided to Provisionally Successful Bidders upon request.

## 12.5 Payment within 40 Working Days of invoice

Full payment in settlement is due within 40 Working Days of the invoice date. Bank Cheques are to be made payable to the Ministry of Economic Development and must be sent to the Auction Manager.

## 12.6 Management Rights Deed is a condition of settlement

As a further condition of settlement, each Provisionally Successful Bidder for a Lot, and such members of its Associate Group as the Provisionally Successful Bidder may nominate (if any), will be required to enter into the Management Rights Deed with the Chief Executive (and with the relevant Lot details included) on or before the date on which payment of the purchase price is due. A copy of the Management Rights Deed is provided in Schedule 3 to these Terms and Conditions.

## 12.7 Deed imposes acquisition limit and implementation obligation

The Management Rights Deed (among other things):

- (a) requires, by a set date, implementation of services within the spectrum covered by the Management Rights Deed;
- (b) sets out the consequences of implementation, which include the transfer of the Conditional Management Right; and
- (c) ensures, for a set period of time, the Acquisition Limit continues to apply to the Successful Bidder and to any party to which the Successful Bidder transfers or assigns the management rights in accordance with the Management Rights Deed.

## 13. CANCELLATION AND LIABILITY

#### 13.1 Cancellation events

The cancellation events are:

- (a) a Provisionally Successful Bidder fails to provide a statutory declaration under clauses 11.1 and 11.2, including failing to provide that declaration on time or being unable to declare those matters set out under clauses 11.1 and 11.2;
- (b) if a Provisionally Successful Bidder is required to give notice to the Chief Executive under clause 11.4 or 11.5, the Provisionally Successful Bidder fails to do so by the due date;
- (c) a Provisional Successful Bidder fails to obtain a clearance or authorisation that it applied for under clause 11.2(b) or 11.4:
- (d) a statutory declaration provided by a Provisionally Successful Bidder under clause 11.1 or 11.2, in the opinion of the Chief Executive, omits a material particular, is incorrect, misleading or incomplete and the Provisionally Successful Bidder has not provided notification to the Auction Manager in accordance with clause 11.3, or the Provisionally Successful Bidder can no longer declare those matters in clause 11.1 or 11.2; or
- (e) if a Provisionally Successful Bidder fails to pay the sum owing under clause 12.5 or fails to enter into a Management Rights Deed in terms of clause 12.6.

## 13.2 Effect of cancellation event

If an event set out in clause 13.1 occurs, then (without limit to any other legal rights and remedies available to the Crown and despite anything to the contrary in these Terms and Conditions):

- (a) the contract for the purchase of relevant Lot by the Provisionally Successful Bidder is deemed to be cancelled:
- (b) the Provisionally Successful Bidder will no longer be eligible to purchase the Lot nor will the bidder (or any member of its Associate Group) be eligible to participate in any re-allocation process for the Lot; and
- (c) the following liquidated damages will be payable to the Crown by the Provisionally Successful Bidder in respect of each Lot:
  - a sum of money equal to the difference between the final amount bid for the Lot by the Purchaser and the amount eventually paid to the Ministry for that Lot, if that amount is lower than the value of the successful bid; plus
  - (ii) a sum of money which fully recovers any expenses (including staff time) incurred by the Chief Executive in seeking payment from the bidder. A certificate from the Chief Executive of such losses, costs or expenses is prima facie evidence of such loss, cost or expense; plus
  - (iii) a sum of money which fully recovers any losses, costs or expenses suffered or incurred by the Crown as a result of processing the bidder's registration and any reallocation of the Lot. A certificate from the Chief Executive of such losses, costs or expenses is prima facie evidence of such loss, cost or expense.

#### 14. EARLY MANAGEMENT RIGHT TO BE TRANSFERRED TO PURCHASER

Subject to compliance with all conditions under these Terms and Conditions, the Early Management Right will be transferred to the Successful Bidder within 30 Working Days of the Chief Executive receiving payment in settlement for each Lot in accordance with clause 12.5.

#### 15. Announcement of Final Results and Publishing Other Information

#### 15.1 Results published in Gazette

Final results will be published by the Chief Executive in the *New Zealand Gazette* as and when settlement is completed for all of the management rights in accordance with clause 14.

## 15.2Information of interest may be published on Internet

Registered Bidders agree that the results of the auction (including the names and details of Provisionally Successful Bidders, Successful Bidders, and the Lot details) and any other information related to this auction that the Chief Executive believes to be of general interest, may be published on the Auction Information Page or anywhere else.

#### 16. Crown Not Liable

The Crown will not be liable in any way to a Registered Bidder (including a Provisionally Successful Bidder or Successful Bidder) for the exercise of any right or obligation set out in these Terms and Conditions, including (to avoid doubt) for any claim for direct or indirect losses, costs or expenses as a result of, or in connection with, that exercise of the right or obligation.

#### 17. Notices

## 17.1 Notices by bidders to be in writing

Any notice or other communication, e.g. provision of information (notice) required to be given under these Terms and Conditions by a Registered Bidder (including a Provisionally Successful Bidder or Successful Bidder) must be in writing and hand delivered or sent by registered post to the address set out in Schedule 5.

## 17.2Notices to meet requirements to be effective

A notice will only be effective:

- (a) if hand delivered, when delivered; or
- (b) if sent by registered post, two (2) Working Days after posting (in proving such posting, it is sufficient to show that the envelope was correctly addressed and posted).

#### 17.3 Facsimile notices effective sometimes

Despite clause 17.2, a Registered Bidder may also provide such notice by facsimile to the number set out in Schedule 5, provided that the Registered Bidder immediately forwards the original notice to the relevant person in accordance with clause 17.2. A facsimile notice is only effective upon production of a transmission report by the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the facsimile number of the recipient.

## 17.4Timing of Notices and Working Days

A notice received after 5.00 pm or on a day which is not a Working Day shall be deemed not to have been received until the next Working Day.

## SCHEDULE 1 - SCHEDULE OF LOTS

This auction, Radio Frequency Auction No. 9, comprises eight lots within the bands 2300-2395 MHz and 2500-2690 MHz.

Each lot comprises three Management Rights. The first Management Right listed is the **Early Management Right**, the second listed is the **Buy-out Management Right** and the third listed is the **Conditional Management Right** for the relevant frequency range.

Each lot is generally described as follows:

Lot No.	Management Right		Commencement Date	Expiry Date
	Lower Boundary	Upper Boundary		
1	2300.0 MHz	2335.0 MHz	26 Nov 2010	31 Dec 2014
	2300.0 MHz	2335.0 MHz	1 Jan 2015	31 Dec 2016
	2300.0 MHz	2335.0 MHz	1 Jan 2017	25 Nov 2030
2	2335.0 MHz	2370.0 MHz	26 Nov 2010	31 Dec 2014
	2335.0 MHz	2370.0 MHz	1 Jan 2015	31 Dec 2016
	2335.0 MHz	2370.0 MHz	1 Jan 2017	25 Nov 2030
CROWN	2370.0 MHz	2395.0 MHz	26 Nov 2010	31 Dec 2014
	2370.0 MHz	2395.0 MHz	1 Jan 2015	31 Dec 2016
	2370.0 MHz	2395.0 MHz	1 Jan 2017	25 Nov 2030
3	2500.0 MHz	2520.0 MHz	1 Jan 2009	31 Dec 2014
	2500.0 MHz	2520.0 MHz	1 Jan 2015	31 Dec 2016
	2500.0 MHz	2520.0 MHz	1 Jan 2017	31 Dec 2028
4	2520.0 MHz	2540.0 MHz	1 Jan 2009	31 Dec 2014
	2520.0 MHz	2540.0 MHz	1 Jan 2015	31 Dec 2016
	2520.0 MHz	2540.0 MHz	1 Jan 2017	31 Dec 2028
5	2540.0 MHz	2575.0 MHz	1 Jan 2009	31 Dec 2014
	2540.0 MHz	2575.0 MHz	1 Jan 2015	31 Dec 2016
	2540.0 MHz	2575.0 MHz	1 Jan 2017	31 Dec 2028
CROWN	2575.0 MHz	2620.0 MHz	1 Jan 2009	31 Dec 2028
6	2620.0 MHz	2640.0 MHz	1 Jan 2009	31 Dec 2014
	2620.0 MHz	2640.0 MHz	1 Jan 2015	31 Dec 2016
	2620.0 MHz	2640.0 MHz	1 Jan 2017	31 Dec 2028
7	2640.0 MHz	2660.0 MHz	1 Jan 2009	31 Dec 2014
	2640.0 MHz	2660.0 MHz	1 Jan 2015	31 Dec 2016
	2640.0 MHz	2660.0 MHz	1 Jan 2017	31 Dec 2028
8	2660.0 MHz	2690.0 MHz	1 Jan 2009	31 Dec 2014
	2660.0 MHz	2690.0 MHz	1 Jan 2015	31 Dec 2016
	2660.0 MHz	2690.0 MHz	1 Jan 2017	31 Dec 2028

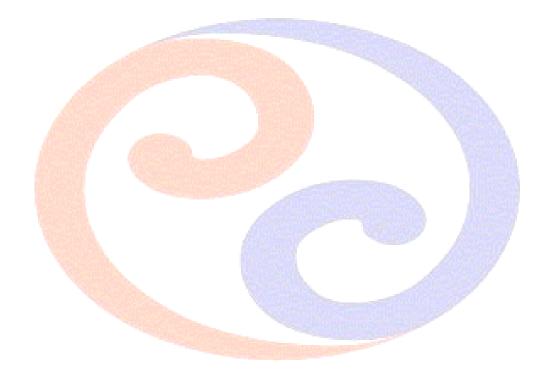
The lots labelled CROWN are not for sale in this auction. It is anticipated that they will be used to deliver broadband access or similar services, on a national basis (2.3 GHz right) and for local/regional use (2.5GHz right). The schedules of these management rights are provided for information purposes only.

The transfer of Early Management Rights to the Successful Bidders will be in accordance with, and is subject to, the Terms and Conditions.

The transfer of the Buy-out Management Rights and the Conditional Management Rights to the Successful Bidders will be in accordance with, and is subject to, the Management Rights Deed, including, to avoid doubt, clause 5 (relating to implementation of services).

The details for each management right are outlined in Schedule 2.

For lot no. 1, the adjacent frequency emission limits below the lower boundary are constrained by the adjacent management right below 2300 MHz (management right no. 107).



#### SCHEDULE 2 - RECORD OF MANAGEMENT RIGHTS AND LICENCE INFORMATION

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2300.000 MHz Upper boundary: 2335.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2300.000 MHz

Above upper boundary frequency:

```
35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz 12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz 12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz -10.0 dBW at 2345.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

```
y = mx + C

where -
y = dBW

x = MHz

m = \frac{dy}{dx}

C = the value of y where x = 0 (the y intercept).
```

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2300.000 MHz to 12.0 dBW at 2301.5.000 MHz 12.0 dBW at 2301.500 MHz to 12.0 dBW at 2302.800 MHz 12.0 dBW at 2307.500 MHz 12.0 dBW at 2307.500 MHz 10.0 dBW at 2307.500 MHz 10.0 dBW at 2327.500 MHz 10.0 dBW at 2327.500 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2335.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$
  
where  $-$   
 $y = dBW$   
 $x = MHz$ 

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2335.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

```
y = mx + C

where –

y = dBW

x = MHz

m = \frac{dy}{dx}

C = the value of y where <math>x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

26 November 2010

7 The expiry date of the record of management rights is

31 December 2014

#### SCHEDULE

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2300.000 MHz Upper boundary: 2335.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2300.000 MHz

Above upper boundary frequency:

35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz 12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz 12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz -10.0 dBW at 2342.500 MHz to -10.0 dBW at 2345.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2300.000 MHz to 12.0 dBW at 2301.5.000 MHz 12.0 dBW at 2301.500 MHz to 12.0 dBW at 2302.800 MHz 12.0 dBW at 2302.800 MHz to -10.0 dBW at 2307.500 MHz -10.0 dBW at 2307.500 MHz to -10.0 dBW at 2327.500 MHz -10.0 dBW at 2327.500 MHz to 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2335.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

8 The commencement date of the record of management rights is

1 January 2015

9 The expiry date of the record of management rights is

31 December 2016

#### SCHEDULE

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2300.000 MHz Upper boundary: 2335.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2300.000 MHz

Above upper boundary frequency:

35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz 12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz 12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz -10.0 dBW at 2342.500 MHz to -10.0 dBW at 2345.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2300.000 MHz to 12.0 dBW at 2301.5.000 MHz 12.0 dBW at 2301.500 MHz to 12.0 dBW at 2302.800 MHz 12.0 dBW at 2302.800 MHz to -10.0 dBW at 2307.500 MHz -10.0 dBW at 2307.500 MHz to -10.0 dBW at 2327.500 MHz -10.0 dBW at 2327.500 MHz to 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):

-50.0 dBW at 2300.000 MHz to -50.0 dBW at 2335.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

25 November 2030

#### **SCHEDULE**

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2335.000 MHz Upper boundary: 2370.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2325.000 MHz to -10.0 dBW at 2327.500 MHz -10.0 dBW at 2327.500 MHz to 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2335.000 MHz
- Above upper boundary frequency:

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz 12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz 12.0 dBW at 2372.800 MHz to -10.0 dBW at 2377.500 MHz -10.0 dBW at 2377.500 MHz to -10.0 dBW at 2380.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz

12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz

12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz

-10.0 dBW at 2342.500 MHz to -10.0 dBW at 2362.500 MHz

-10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz

12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{\alpha y}{d}$ 

C =the value of y where x = 0 (the y intercept).

4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):

-50.0 dBW at 2335.000 MHz to -50.0 dBW at 2370.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

26 November 2010

7 The expiry date of the record of management rights is

31 December 2014

#### **SCHEDULE**

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2335.000 MHz Upper boundary: 2370.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2325.000 MHz to -10.0 dBW at 2327.500 MHz -10.0 dBW at 2327.500 MHz to 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2335.000 MHz

Above upper boundary frequency:

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz 12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz 12.0 dBW at 2372.800 MHz to -10.0 dBW at 2377.500 MHz -10.0 dBW at 2377.500 MHz to -10.0 dBW at 2380.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where - y = dBW

x = MHz $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz

12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz

12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz

-10.0 dBW at 2342.500 MHz to -10.0 dBW at 2362.500 MHz

-10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz

12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{\alpha y}{d}$ 

C =the value of y where x = 0 (the y intercept).

4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):

-50.0 dBW at 2335.000 MHz to -50.0 dBW at 2370.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

#### **SCHEDULE**

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2335.000 MHz Upper boundary: 2370.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2325.000 MHz to -10.0 dBW at 2327.500 MHz -10.0 dBW at 2327.500 MHz to 12.0 dBW at 2332.200 MHz 12.0 dBW at 2332.200 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2333.500 MHz 12.0 dBW at 2335.000 MHz
- Above upper boundary frequency:

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz 12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz 12.0 dBW at 2372.800 MHz to -10.0 dBW at 2377.500 MHz -10.0 dBW at 2377.500 MHz to -10.0 dBW at 2380.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2335.000 MHz to 12.0 dBW at 2336.500 MHz

12.0 dBW at 2336.500 MHz to 12.0 dBW at 2337.800 MHz

12.0 dBW at 2337.800 MHz to -10.0 dBW at 2342.500 MHz

-10.0 dBW at 2342.500 MHz to -10.0 dBW at 2362.500 MHz

-10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz

12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz 12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

12.0 db vv at 2500.500 lvii i2 to 55.0 db vv at 257 0.000 lvii i2

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

 $\dot{x} = MHz$ 

 $m = \frac{dy}{dt}$ 

C =the value of y where x = 0 (the y intercept).

-50.0 dBW at 2335.000 MHz to -50.0 dBW at 2370.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

25 November 2030

# Record of Management Rights [This Right is shown for information and is not being sold at Auction]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2370.000 MHz Upper boundary: 2395.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2360.000 MHz to -10.0 dBW at 2362.500 MHz
- -10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz
- 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz
- 12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

Above upper boundary frequency:

35.0 dBW at 2395.000 MHz to 12.0 dBW at 2396.500 MHz

12.0 dBW at 2396.500 MHz to 12.0 dBW at 2397.800 MHz

12.0 dBW at 2397.800 MHz to -10.0 dBW at 2402.500 MHz

-10.0 dBW at 2402.500 MHz to -10.0 dBW at 2405.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz

12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz

12.0 dBW at 2372.800 MHz to -10.0 dBW at 2377.500 MHz

-10.0 dBW at 2377.500 MHz to -10.0 dBW at 2387.500 MHz

-10.0 dBW at 2387.500 MHz to 12.0 dBW at 2392.200 MHz

12.0 dBW at 2392.200 MHz to 12.0 dBW at 2393.500 MHz

12.0 dBW at 2393.500 MHz to 35.0 dBW at 2395.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {ay/dy}$ 

C =the value of y where x = 0 (the y intercept).

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2370.000 MHz to -50.0 dBW at 2395.000 MHz

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

- 6 The commencement date of the record of management rights is
- 26 November 2010

7 The expiry date of the record of management rights is

31 December 2014

# Record of Management Rights [This Right is shown for information and is not being sold at Auction]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2370.000 MHz Upper boundary: 2395.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2360.000 MHz to -10.0 dBW at 2362.500 MHz
- -10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz
- 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz
- 12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

Above upper boundary frequency:

35.0 dBW at 2395.000 MHz to 12.0 dBW at 2396.500 MHz

12.0 dBW at 2396.500 MHz to 12.0 dBW at 2397.800 MHz

12.0 dBW at 2397.800 MHz to -10.0 dBW at 2402.500 MHz

-10.0 dBW at 2402.500 MHz to -10.0 dBW at 2405.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz

12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz

12.0 dBW at 2372.800 MHz to -10.0 dBW at 2377.500 MHz

-10.0 dBW at 2377.500 MHz to -10.0 dBW at 2387.500 MHz

-10.0 dBW at 2387.500 MHz to 12.0 dBW at 2392.200 MHz

12.0 dBW at 2392.200 MHz to 12.0 dBW at 2393.500 MHz

12.0 dBW at 2393.500 MHz to 35.0 dBW at 2395.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {ay/dy}$ 

C =the value of y where x = 0 (the y intercept).

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2370.000 MHz to -50.0 dBW at 2395.000 MHz

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

- 6 The commencement date of the record of management rights is
- 1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

# Record of Management Rights [This Right is shown for information and is not being sold at Auction]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2370.000 MHz Upper boundary: 2395.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2360.000 MHz to -10.0 dBW at 2362.500 MHz -10.0 dBW at 2362.500 MHz to 12.0 dBW at 2367.200 MHz 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz
- 12.0 dBW at 2367.200 MHz to 12.0 dBW at 2368.500 MHz 12.0 dBW at 2368.500 MHz to 35.0 dBW at 2370.000 MHz

Above upper boundary frequency:

35.0 dBW at 2395.000 MHz to 12.0 dBW at 2396.500 MHz 12.0 dBW at 2396.500 MHz to 12.0 dBW at 2397.800 MHz 12.0 dBW at 2397.800 MHz to -10.0 dBW at 2402.500 MHz -10.0 dBW at 2402.500 MHz to -10.0 dBW at 2405.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2370.000 MHz to 12.0 dBW at 2371.500 MHz 12.0 dBW at 2371.500 MHz to 12.0 dBW at 2372.800 MHz 12.0 dBW at 2372.800 MHz 12.0 dBW at 2377.500 MHz 10.0 dBW at 2377.500 MHz 10.0 dBW at 2387.500 MHz 10.0 dBW at 2387.500 MHz 12.0 dBW at 2387.500 MHz 12.0 dBW at 2392.200 MHz 12.0 dBW at 2393.500 MHz 12.0 dBW at 2393.500 MHz

12.0 dBW at 2393.500 MHz to 35.0 dBW at 2395.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {ay/d}$ 

C =the value of y where x = 0 (the y intercept).

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2370.000 MHz to -50.0 dBW at 2395.000 MHz

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

- 6 The commencement date of the record of management rights is
- 1 January 2017

7 The expiry date of the record of management rights is

25 November 2030

Page 40

#### **SCHEDULE**

# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2500.000 MHz Upper boundary: 2520.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2490.000 MHz to -10.0 dBW at 2492.500 MHz

-10.0 dBW at 2492.500 MHz to 12.0 dBW at 2497.200 MHz

12.0 dBW at 2497.200 MHz to 12.0 dBW at 2498.500 MHz

12.0 dBW at 2498.500 MHz to 35.0 dBW at 2500.000 MHz

Above upper boundary frequency:

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz 12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz 12.0 dBW at 2522.800 MHz to -10.0 dBW at 2527.500 MHz -10.0 dBW at 2527.500 MHz to -10.0 dBW at 2530.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2500.000 MHz to 12.0 dBW at 2501.500 MHz

12.0 dBW at 2501.500 MHz to 12.0 dBW at 2502.800 MHz

12.0 dBW at 2502.800 MHz to -10.0 dBW at 2507.500 MHz

-10.0 dBW at 2507.500 MHz to -10.0 dBW at 2512.500 MHz

-10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz

12.0 dBW at 2517.200 MHz to 12.0 dBW at 2518.500 MHz

12.0 dBW at 2518.500 MHz to 35.0 dBW at 2520.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

717733

-50.0 dBW at 2500.000 MHz to -50.0 dBW at 2520.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2500.000 MHz Upper boundary: 2520.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2490.000 MHz to -10.0 dBW at 2492.500 MHz -10.0 dBW at 2492.500 MHz to 12.0 dBW at 2497.200 MHz 12.0 dBW at 2497.200 MHz 12.0 dBW at 2498.500 MHz 12.0 dBW at 2498.500 MHz 12.0 dBW at 2500.000 MHz
- Above upper boundary frequency:

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz 12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz 12.0 dBW at 2522.800 MHz to -10.0 dBW at 2527.500 MHz -10.0 dBW at 2527.500 MHz to -10.0 dBW at 2530.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2500.000 MHz to 12.0 dBW at 2501.500 MHz

12.0 dBW at 2501.500 MHz to 12.0 dBW at 2502.800 MHz

12.0 dBW at 2502.800 MHz to -10.0 dBW at 2507.500 MHz

-10.0 dBW at 2507.500 MHz to -10.0 dBW at 2512.500 MHz

-10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz

12.0 dBW at 2517.200 MHz to 12.0 dBW at 2518.500 MHz

12.0 dBW at 2518.500 MHz to 35.0 dBW at 2520.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{\alpha y}{d}$ 

C =the value of y where x = 0 (the y intercept).

-50.0 dBW at 2500.000 MHz to -50.0 dBW at 2520.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2500.000 MHz Upper boundary: 2520.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2490.000 MHz to -10.0 dBW at 2492.500 MHz -10.0 dBW at 2492.500 MHz to 12.0 dBW at 2497.200 MHz 12.0 dBW at 2497.200 MHz 12.0 dBW at 2498.500 MHz 12.0 dBW at 2498.500 MHz 12.0 dBW at 2500.000 MHz
- Above upper boundary frequency:

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz 12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz 12.0 dBW at 2522.800 MHz to -10.0 dBW at 2527.500 MHz -10.0 dBW at 2527.500 MHz to -10.0 dBW at 2530.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2500.000 MHz to 12.0 dBW at 2501.500 MHz

12.0 dBW at 2501.500 MHz to 12.0 dBW at 2502.800 MHz

12.0 dBW at 2502.800 MHz to -10.0 dBW at 2507.500 MHz

-10.0 dBW at 2507.500 MHz to -10.0 dBW at 2512.500 MHz

-10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz

12.0 dBW at 2517.200 MHz to 12.0 dBW at 2518.500 MHz

12.0 dBW at 2518.500 MHz to 35.0 dBW at 2520.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{\alpha y}{d}$ 

C =the value of y where x = 0 (the y intercept).

-50.0 dBW at 2500.000 MHz to -50.0 dBW at 2520.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

Page 46

#### SCHEDULE

# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2520.000 MHz Upper boundary: 2540.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2510.000 MHz to -10.0 dBW at 2512.500 MHz
- -10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz
- 12.0 dBW at 2517.200 MHz to 12.0 dBW at 2518.500 MHz
- 12.0 dBW at 2518.500 MHz to 35.0 dBW at 2520.000 MHz

Above upper boundary frequency:

35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz 12.0 dBW at 2541.500 MHz to 12.0 dBW at 2542.800 MHz 12.0 dBW at 2542.800 MHz to -10.0 dBW at 2547.500 MHz -10.0 dBW at 2547.500 MHz to -10.0 dBW at 2550.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz

12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz

12.0 dBW at 2522.800 MHz to -10.0 dBW at 2527.500 MHz

-10.0 dBW at 2527.500 MHz to -10.0 dBW at 2532.500 MHz

-10.0 dBW at 2532.500 MHz to 12.0 dBW at 2537.200 MHz

12.0 dBW at 2537.200 MHz to 12.0 dBW at 2538.500 MHz

12.0 dBW at 2538.500 MHz to 35.0 dBW at 2540.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

717733

-50.0 dBW at 2520.000 MHz to -50.0 dBW at 2540.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2520.000 MHz Upper boundary: 2540.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2510.000 MHz to -10.0 dBW at 2512.500 MHz -10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz 12.0 dBW at 2517.200 MHz 12.0 dBW at 2518.500 MHz 12.0 dBW at 2518.500 MHz 12.0 dBW at 2518.500 MHz 12.0 dBW at 2520.000 MHz
- Above upper boundary frequency:

```
35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz 12.0 dBW at 2541.500 MHz to 12.0 dBW at 2542.800 MHz 12.0 dBW at 2542.800 MHz to -10.0 dBW at 2547.500 MHz -10.0 dBW at 2547.500 MHz to -10.0 dBW at 2550.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz 12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz 12.0 dBW at 2522.800 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2532.500 MHz 12.0 dBW at 2537.200 MHz 12.0 dBW at 2537.200 MHz 12.0 dBW at 2538.500 MHz 12.0 dBW at 2540.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz  $m = \frac{dy}{dx}$ C = the value of y where <math>x = 0 (the y intercept).

-50.0 dBW at 2520.000 MHz to -50.0 dBW at 2540.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2520.000 MHz Upper boundary: 2540.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2510.000 MHz to -10.0 dBW at 2512.500 MHz -10.0 dBW at 2512.500 MHz to 12.0 dBW at 2517.200 MHz 12.0 dBW at 2517.200 MHz 12.0 dBW at 2518.500 MHz 12.0 dBW at 2518.500 MHz 12.0 dBW at 2520.000 MHz
- Above upper boundary frequency:

35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz 12.0 dBW at 2541.500 MHz to 12.0 dBW at 2542.800 MHz 12.0 dBW at 2542.800 MHz to -10.0 dBW at 2547.500 MHz -10.0 dBW at 2547.500 MHz to -10.0 dBW at 2550.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz

 $m = \frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2520.000 MHz to 12.0 dBW at 2521.500 MHz 12.0 dBW at 2521.500 MHz to 12.0 dBW at 2522.800 MHz 12.0 dBW at 2522.800 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2527.500 MHz 12.0 dBW at 2532.500 MHz 12.0 dBW at 2537.200 MHz 12.0 dBW at 2537.200 MHz 12.0 dBW at 2538.500 MHz 12.0 dBW at 2540.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz

 $m = {}^{uy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

-50.0 dBW at 2520.000 MHz to -50.0 dBW at 2540.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where y = dBW x = MHz $m = \frac{dy}{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

Page 52

#### SCHEDULE

# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2540.000 MHz Upper boundary: 2575.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

- -10.0 dBW at 2530.000 MHz to -10.0 dBW at 2532.500 MHz
- -10.0 dBW at 2532.500 MHz to 12.0 dBW at 2537.200 MHz
- 12.0 dBW at 2537.200 MHz to 12.0 dBW at 2538.500 MHz
- 12.0 dBW at 2538.500 MHz to 35.0 dBW at 2540.000 MHz

Above upper boundary frequency:

35.0 dBW at 2575.000 MHz to 12.0 dBW at 2576.500 MHz 12.0 dBW at 2576.500 MHz to 12.0 dBW at 2577.800 MHz 12.0 dBW at 2577.800 MHz to -10.0 dBW at 2582.500 MHz -10.0 dBW at 2582.500 MHz to -10.0 dBW at 2585.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = \frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz

12.0 dBW at 2541,500 MHz to 12.0 dBW at 2542,800 MHz

12.0 dBW at 2542.800 MHz to -10.0 dBW at 2547.500 MHz

-10.0 dBW at 2547.500 MHz to -10.0 dBW at 2567.500 MHz

-10.0 dBW at 2567.500 MHz to 12.0 dBW at 2572.200 MHz

12.0 dBW at 2572.200 MHz to 12.0 dBW at 2573.500 MHz 12.0 dBW at 2573.500 MHz to 35.0 dBW at 2575.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

717733

-50.0 dBW at 2540.000 MHz to -50.0 dBW at 2575.000 MHz

**Note:** The power floor level applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where -

y = dBW

x = MHz

 $m = {}^{dy}/_{dx}$ 

C =the value of y where x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2540.000 MHz Upper boundary: 2575.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

```
-10.0 dBW at 2530.000 MHz to -10.0 dBW at 2532.500 MHz -10.0 dBW at 2532.500 MHz to 12.0 dBW at 2537.200 MHz dBW at 2537.200 MHz to 12.0 dBW at 2538.500 MHz dBW at 2538.500 MHz to 35.0 dBW at 2540.000 MHz
```

Above upper boundary frequency:

```
35.0 dBW at 2575.000 MHz to 12.0 dBW at 2576.500 MHz dBW at 2576.500 MHz to 12.0 dBW at 2577.800 MHz dBW at 2577.800 MHz to -10.0 dBW at 2582.500 MHz -10.0 dBW at 2582.500 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

```
y = mx + C

where -

y = dBW

x = MHz

m = dy/dx

C = the value of y where x = 0 (the y intercept).
```

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz 12.0 dBW at 2541.500 MHz to 12.0 dBW at 2542.800 MHz 12.0 dBW at 2542.800 MHz 12.0 dBW at 2547.500 MHz 12.0 dBW at 2547.500 MHz 12.0 dBW at 2547.500 MHz 12.0 dBW at 2567.500 MHz 12.0 dBW at 2572.200 MHz 12.0 dBW at 2572.200 MHz 12.0 dBW at 2573.500 MHz 12.0 dBW at 2575.000 MHz 12.0 dBW at 2573.500 MHz 12.0 dBW at 2575.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2540.000 MHz to -50.0 dBW at 2575.000 MHz

$$y = mx + C$$

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2540.000 MHz Upper boundary: 2575.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2530.000 MHz to -10.0 dBW at 2532.500 MHz -10.0 dBW at 2532.500 MHz to 12.0 dBW at 2537.200 MHz 12.0 dBW at 2537.200 MHz to 12.0 dBW at 2538.500 MHz 12.0 dBW at 2538.500 MHz to 35.0 dBW at 2540.000 MHz

Above upper boundary frequency:

35.0 dBW at 2575.000 MHz to 12.0 dBW at 2576.500 MHz 12.0 dBW at 2576.500 MHz to 12.0 dBW at 2577.800 MHz

12.0 dBW at 2577.800 MHz to -10.0 dBW at 2582.500 MHz

-10.0 dBW at 2582,500 MHz to -10.0 dBW at 2585,000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz m = dy/dx

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2540.000 MHz to 12.0 dBW at 2541.500 MHz

12.0 dBW at 2541.500 MHz to 12.0 dBW at 2542.800 MHz

12.0 dBW at 2542.800 MHz to -10.0 dBW at 2547.500 MHz

-10.0 dBW at 2547.500 MHz to -10.0 dBW at 2567.500 MHz

-10.0 dBW at 2567.500 MHz to 12.0 dBW at 2572.200 MHz

12.0 dBW at 2572.200 MHz to 12.0 dBW at 2573.500 MHz

12.0 dBW at 2573.500 MHz to 35.0 dBW at 2575.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2540.000 MHz to -50.0 dBW at 2575.000 MHz

```
y = mx + C

where -

y = dBW

x = MHz

m = \frac{dy}{dx}

C = the value of y where x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

- 6 The commencement date of the record of management rights is
- 1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

# Record of Management Rights [This Right is shown for information and is not being sold at Auction]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2575.000 MHz Upper boundary: 2620.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2565.000 MHz to -10.0 dBW at 2567.500 MHz -10.0 dBW at 2567.500 MHz to 12.0 dBW at 2572.200 MHz 12.0 dBW at 2572.200 MHz to 12.0 dBW at 2573.500 MHz 12.0 dBW at 2573.500 MHz to 35.0 dBW at 2575.000 MHz

Above upper boundary frequency:

35.0 dBW at 2620.000 MHz to 12.0 dBW at 2621.500 MHz
12.0 dBW at 2621.500 MHz to 12.0 dBW at 2622.800 MHz
12.0 dBW at 2622.800 MHz to -10.0 dBW at 2627.500 MHz
12.0 dBW at 2627.500 MHz to -10.0 dBW at 2630.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – 
$$y = dBW$$
  $x = MHz$   $m = dy/dx$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2575.000 MHz to 12.0 dBW at 2576.500 MHz
12.0 dBW at 2576.500 MHz to 12.0 dBW at 2577.800 MHz
12.0 dBW at 2577.800 MHz to -10.0 dBW at 2582.500 MHz
-10.0 dBW at 2582.500 MHz to -10.0 dBW at 2612.500 MHz
-10.0 dBW at 2612.500 MHz to 12.0 dBW at 2617.200 MHz
12.0 dBW at 2617.200 MHz to 12.0 dBW at 2618.500 MHz
12.0 dBW at 2618.500 MHz to 35.0 dBW at 2620.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2575.000 MHz to -50.0 dBW at 2620.000 MHz

$$y = mx + C$$

where – y = dBW x = MHz  $m = \frac{dy}{dx}$  C = the value of y where <math>x = 0 (the y intercept).

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2028



# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2620.000 MHz Upper boundary: 2640.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0	dBW at 2610.000 MHz to -10.0 dBW at 2612.500 MHz
-10.0	dBW at 2612.500 MHz to 12.0 dBW at 2617.200 MHz
12.0	dBW at 2617.200 MHz to 12.0 dBW at 2618.500 MHz
12.0	dBW at 2618.500 MHz to 35.0 dBW at 2620.000 MHz

Above upper boundary frequency:

35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
-10.0 dBW at 2647.500 MHz to -10.0 dBW at 2650.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where 
$$-$$
  
y = dBW  
x = MHz  
m =  $^{dy}/_{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2620.000 MHz to 12.0 dBW at 2621.500 MHz
12.0 dBW at 2621.500 MHz to 12.0 dBW at 2622.800 MHz
12.0 dBW at 2622.800 MHz to -10.0 dBW at 2627.500 MHz
-10.0 dBW at 2627.500 MHz to -10.0 dBW at 2632.500 MHz
-10.0 dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz
12.0 dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz
12.0 dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz  $m = \frac{dy}{dx}$  C = the value of y where <math>x = 0 (the y intercept).

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2620.000 MHz to -50.0 dBW at 2640.000 MHz

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx} the value of y where x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2620.000 MHz Upper boundary: 2640.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

```
-10.0 dBW at 2610.000 MHz to -10.0 dBW at 2612.500 MHz
-10.0 dBW at 2612.500 MHz to 12.0 dBW at 2617.200 MHz
12.0 dBW at 2617.200 MHz to 12.0 dBW at 2618.500 MHz
12.0 dBW at 2618.500 MHz to 35.0 dBW at 2620.000 MHz
```

Above upper boundary frequency:

```
35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
12.0 dBW at 2647.500 MHz to -10.0 dBW at 2650.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

```
y = mx + C

where -

y = dBW

x = MHz

m = \frac{dy}{dx}

C = the value of y where <math>x = 0 (the y intercept).
```

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2620.000 MHz to 12.0 dBW at 2621.500 MHz
12.0 dBW at 2621.500 MHz to 12.0 dBW at 2622.800 MHz
12.0 dBW at 2622.800 MHz to -10.0 dBW at 2627.500 MHz
-10.0 dBW at 2627.500 MHz to -10.0 dBW at 2632.500 MHz
-10.0 dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz
12.0 dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz
12.0 dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

```
y = mx + C

where -

y = dBW

x = MHz

m = \frac{dy}{dx}

C = the value of y where x = 0 (the y intercept).
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2620.000 MHz to -50.0 dBW at 2640.000 MHz

```
y = mx + C
```

```
where – y = dBW x = MHz m = \frac{dy}{dx} the value of y where x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2620.000 MHz Upper boundary: 2640.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2610.000 MHz to -10.0 dBW at 2612.500 MHz -10.0 dBW at 2612.500 MHz to 12.0 dBW at 2617.200 MHz 12.0 dBW at 2617.200 MHz to 12.0 dBW at 2618.500 MHz 12.0 dBW at 2618.500 MHz to 35.0 dBW at 2620.000 MHz

Above upper boundary frequency:

35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
12.0 dBW at 2647.500 MHz to -10.0 dBW at 2650.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx}
```

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2620.000 MHz to 12.0 dBW at 2621.500 MHz
12.0 dBW at 2621.500 MHz to 12.0 dBW at 2622.800 MHz
12.0 dBW at 2622.800 MHz to -10.0 dBW at 2627.500 MHz
-10.0 dBW at 2627.500 MHz to -10.0 dBW at 2632.500 MHz
-10.0 dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz
12.0 dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz
12.0 dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2620.000 MHz to -50.0 dBW at 2640.000 MHz

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx} C = the value of y where <math>x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2640.000 MHz Upper boundary: 2660.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0	dBW at 2630.000 MHz to -10.0 dBW at 2632.500 MHz
-10.0	dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz
12.0	dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz
12.0	dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz

Above upper boundary frequency:

```
35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz
12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz
12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz
-10.0 dBW at 2667.500 MHz to -10.0 dBW at 2670.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz m =  $\frac{dy}{dx}$  the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
10.0 dBW at 2647.500 MHz to -10.0 dBW at 2652.500 MHz
10.0 dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz
12.0 dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz
12.0 dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

 $\begin{array}{lll} where - \\ y & = & dBW \\ x & = & MHz \\ m & = & {}^{dy}\!/_{dx} \\ C & = & the \ value \ of \ y \ where \ x = 0 \ (the \ y \ intercept). \end{array}$ 

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2640.000 MHz to -50.0 dBW at 2660.000 MHz

$$y = mx + C$$

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

## **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2640.000 MHz Upper boundary: 2660.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2630.000 MHz to -10.0 dBW at 2632.500 MHz -10.0 dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz 12.0 dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz 12.0 dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz

Above upper boundary frequency:

- 35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz 12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz
- 12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz
- -10.0 dBW at 2667,500 MHz to -10.0 dBW at 2670,000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx}
```

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
-10.0 dBW at 2647.500 MHz to -10.0 dBW at 2652.500 MHz
-10.0 dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz
12.0 dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz
12.0 dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2640.000 MHz to -50.0 dBW at 2660.000 MHz

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx} the value of y where <math>x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

# **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2640.000 MHz Upper boundary: 2660.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0	dBW at 2630.000 MHz to -10.0 dBW at 2632.500 MHz
-10.0	dBW at 2632.500 MHz to 12.0 dBW at 2637.200 MHz
12.0	dBW at 2637.200 MHz to 12.0 dBW at 2638.500 MHz
12.0	dBW at 2638.500 MHz to 35.0 dBW at 2640.000 MHz

Above upper boundary frequency:

```
35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz
12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz
12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz
12.0 dBW at 2667.500 MHz to -10.0 dBW at 2670.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
where – y = dBW x = MHz dy/dx = the value of y where x = 0 (the y intercept).
```

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2640.000 MHz to 12.0 dBW at 2641.500 MHz
12.0 dBW at 2641.500 MHz to 12.0 dBW at 2642.800 MHz
12.0 dBW at 2642.800 MHz to -10.0 dBW at 2647.500 MHz
-10.0 dBW at 2647.500 MHz to -10.0 dBW at 2652.500 MHz
-10.0 dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz
12.0 dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz
12.0 dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2640.000 MHz to -50.0 dBW at 2660.000 MHz

$$y = mx + C$$

```
\begin{array}{llll} where - & & & \\ y & = & dBW \\ x & = & MHz \\ m & = & {}^{dy}\!/_{dx} \\ C & = & the \ value \ of \ y \ where \ x = 0 \ (the \ y \ intercept). \end{array}
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

Page 72

#### **SCHEDULE**

# Record of Management Rights [Bidders should note that licences are to be recorded on this Right as identified later in this Schedule]

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2660.000 MHz Upper boundary: 2690.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0	dBW at 2650.000 MHz to -10.0 dBW at 2652.500 MHz
-10.0	dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz
12.0	dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz
12.0	dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz

Above upper boundary frequency:

35.0 dBW at 2690.000 MHz to 12.0 dBW at 2691.500 MHz
12.0 dBW at 2691.500 MHz to 12.0 dBW at 2692.800 MHz
12.0 dBW at 2692.800 MHz to -10.0 dBW at 2697.500 MHz
-10.0 dBW at 2697.500 MHz to -10.0 dBW at 2700.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz m =  $\frac{dy}{dx}$ 

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz
12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz
12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz
10.0 dBW at 2667.500 MHz to -10.0 dBW at 2682.500 MHz
10.0 dBW at 2682.500 MHz to 12.0 dBW at 2687.200 MHz
12.0 dBW at 2687.200 MHz to 12.0 dBW at 2688.500 MHz
12.0 dBW at 2688.500 MHz to 35.0 dBW at 2690.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

where – y = dBW x = MHz  $m = \frac{dy}{dx}$ C = the value of y where <math>x = 0 (the y intercept).

717733

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2660.000 MHz to -50.0 dBW at 2690.000 MHz

$$y = mx + C$$

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the upper boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.).

6 The commencement date of the record of management rights is

1 January 2009

7 The expiry date of the record of management rights is

31 December 2014

# **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2660.000 MHz Upper boundary: 2690.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

```
-10.0 dBW at 2650.000 MHz to -10.0 dBW at 2652.500 MHz
-10.0 dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz
12.0 dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz
12.0 dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz
```

Above upper boundary frequency:

```
35.0 dBW at 2690.000 MHz to 12.0 dBW at 2691.500 MHz
12.0 dBW at 2691.500 MHz to 12.0 dBW at 2692.800 MHz
12.0 dBW at 2692.800 MHz to -10.0 dBW at 2697.500 MHz
12.0 dBW at 2697.500 MHz to -10.0 dBW at 2700.000 MHz
```

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
where – y = dBW x = MHz dy/dx = dy/dx the value of y where x = 0 (the y intercept).
```

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

```
35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz
12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz
12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz
-10.0 dBW at 2667.500 MHz to -10.0 dBW at 2682.500 MHz
12.0 dBW at 2682.500 MHz to 12.0 dBW at 2687.200 MHz
12.0 dBW at 2687.200 MHz to 12.0 dBW at 2688.500 MHz
12.0 dBW at 2688.500 MHz to 35.0 dBW at 2690.000 MHz
```

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2660.000 MHz to -50.0 dBW at 2690.000 MHz

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx} C = the value of y where <math>x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the upper boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.).

6 The commencement date of the record of management rights is

1 January 2015

7 The expiry date of the record of management rights is

31 December 2016

# **Record of Management Rights**

1 Range of frequencies to be recorded in the Register:

Lower boundary: 2660.000 MHz Upper boundary: 2690.000 MHz

2 Adjacent frequencies emission limits (expressed as the maximum e.i.r.p. (in dBW) of those emissions):

Below lower boundary frequency:

-10.0 dBW at 2650.000 MHz to -10.0 dBW at 2652.500 MHz -10.0 dBW at 2652.500 MHz to 12.0 dBW at 2657.200 MHz 12.0 dBW at 2657.200 MHz to 12.0 dBW at 2658.500 MHz 12.0 dBW at 2658.500 MHz to 35.0 dBW at 2660.000 MHz

Above upper boundary frequency:

35.0 dBW at 2690.000 MHz to 12.0 dBW at 2691.500 MHz

12.0 dBW at 2691.500 MHz to 12.0 dBW at 2692.800 MHz

12.0 dBW at 2692.800 MHz to -10.0 dBW at 2697.500 MHz

-10.0 dBW at 2697.500 MHz to -10.0 dBW at 2700.000 MHz

**Note:** The adjacent frequencies emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
where – y = dBW x = MHz m = dy/dx
```

C = the value of y where x = 0 (the y intercept).

3 Protection limit (expressed as the e.i.r.p. (in dBW) of that limit):

35.0 dBW at 2660.000 MHz to 12.0 dBW at 2661.500 MHz

12.0 dBW at 2661.500 MHz to 12.0 dBW at 2662.800 MHz

12.0 dBW at 2662.800 MHz to -10.0 dBW at 2667.500 MHz

-10.0 dBW at 2667.500 MHz to -10.0 dBW at 2682.500 MHz

-10.0 dBW at 2682.500 MHz to 12.0 dBW at 2687.200 MHz

12.0 dBW at 2687.200 MHz to 12.0 dBW at 2688.500 MHz

12.0 dBW at 2688.500 MHz to 35.0 dBW at 2690.000 MHz

**Note:** The protection limit applicable to frequencies within each specified range must be determined in accordance with the following formula:

$$y = mx + C$$

```
\begin{array}{lll} \text{where} - & & \\ y & = & \text{dBW} \\ x & = & \text{MHz} \\ m & = & \frac{\text{dy}}{\text{dx}} \\ C & = & \text{the value of y where } x = 0 \text{ (the y intercept)}. \end{array}
```

- 4 Power floor levels (expressed as the e.i.r.p. (in dBW) of that level):
  - -50.0 dBW at 2660.000 MHz to -50.0 dBW at 2690.000 MHz

$$y = mx + C$$

```
where – y = dBW x = MHz m = \frac{dy}{dx} C = the value of y where <math>x = 0 (the y intercept).
```

If no power level is specified, the power floor level is -50 dBW at all frequencies.

5 The conditions that apply to licences created in relation to the record of management rights are:

The manager shall not transfer the manager's interest in this management right, or issue any licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Chief Executive of the Ministry of Economic Development.

Adjacent frequency emission limits and protection limits are based on limits for equipment specified in European Technical Institute (ETSI) specification ETSI EN 302 326-2.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the lower boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.) unless an agreement has been reached with the manager immediately adjacent to that lower boundary. Where an agreement has been reached with the manager immediately adjacent to that lower boundary, there is no limit on the maximum power of emissions permitted in accordance with that licence unless specifically limited by that agreement.

For licences created where any part of the frequency band of that licence is less than 5 MHz from the upper boundary of this management right, the maximum power of emissions permitted in accordance with that licence are not to exceed 5 dBW (e.i.r.p.).

6 The commencement date of the record of management rights is

1 January 2017

7 The expiry date of the record of management rights is

31 December 2028

# **Licence Information**

The Management Rights described above will also include a number of registered licences (to avoid doubt, these licences are not yet registered but, by registering as a bidder, each bidder acknowledges and agrees to the registration of these licences). The licences on the management rights to be transferred will allow continued use of specific existing services in the 2.5 GHz frequency range for periods as described on the licences.

The existing services operate within ranges of frequencies that may affect more than one Management Right and therefore an appropriate licence will be registered on each affected Management Right. All licences will be registered in the name of the Crown (as the Rightholder) and actual use by other parties will be authorised by separate agreements as outlined in the conditions of licence.

The existing services are listed below along with a licence description (on which the registered licences will be based). Intending bidders should evaluate how each licence below will apply to the management rights they seek to acquire.

#### **SCHEDULE**

#### **Details of Spectrum Licence 1**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31 December 2010
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2512.500000 MHz
  - (b) the frequency band is: 2500.000000 MHz to 2526.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
-50.0	2290.500000	-27.0	2498.500000
-27.0	2498.500000	5.0	2500.000000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
5.0	2526.500000	-27.0	2531.700000
-27.0	2531.700000	-27.0	2540.500000
-27.0	2540.500000	-50.0	2552.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- 5 The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 5.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	5.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude

(metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area; and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder & Manager
- 9 The conditions applying to the exercise of the Rightholder's rights under this licence

The Crown will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010.
- The Crown (as the Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.

# **Details of Spectrum Licence 2**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31December 2010
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2540.500000 MHz
  - (b) the frequency band is: 2526.500000 MHz to 2554.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
-50.0	2500.500000	-27.0	2512.500000
-27.0	2512.500000	-27.0	2521.300000
-27.0	2521.300000	5.0	2526.500000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
5.0	2554.500000	-27.0	2559.700000
-27.0	2559.700000	-27.0	2568.500000
-27.0	2568.500000	-50.0	2580.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 5.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	5.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude

(metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area; and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder and Manager
- The conditions applying to the exercise of the Rightholder's rights under this licence

The Crown will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010.
- The Crown (as the Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.

#### SCHEDULE

#### **Details of Spectrum Licence 3**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31 December 2010
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2568.500000 MHz
  - (b) the frequency band is: 2554.500000 MHz to 2582.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
-50.0	2528.500000	-27.0	2540.500000
-27.0	2540.500000	-27.0	2549.300000
-27.0	2549.300000	5.0	2554.500000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
5.0	2582.500000	-27.0	2587.700000
-27.0	2587.700000	-27.0	2596.500000
-27.0	2596.500000	-50.0	2608.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- 5 The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 5.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	5.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude (metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area; and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder and Manager
- 9 The conditions applying to the exercise of the Rightholder's rights under this licence

The Crown will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010.
- The Crown (as the Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.

#### **Details of Spectrum Licence 4**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31 December 2012
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2603.500000 MHz
  - (b) the frequency band is: 2589.500000 MHz to 2617.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
-50.0	2533.500000	-18.0	2555.500000
-18.0	2555.500000	5.0	2575.500000
5.0	2575.500000	5.0	2584.300000
5.0	2584.300000	37.0	2589.500000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
37.0	2617.500000	5.0	2622.700000
5.0	2622.700000	5.0	2631.500000
5.0	2631.500000	-18.0	2651.500000
-18.0	2651.500000	-50.0	2673.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- 5 The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 37.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	37.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude

(metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area; and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder and Manager
- 9 The conditions applying to the exercise of the Rightholder's rights under this licence

The Crown (as Rightholder) will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable or fixed cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010;
- Specific usage of analogue transmission at sporting events and/or in limited geographic areas until 31 December 2012;
- Specific usage of analogue transmissions from a helicopter platform until 31 December 2012.
- The Crown (as Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.
- Use of any eirp value greater than 10 dBW (40 dBm) must be achieved using a parabolic reflector antenna with a diameter of 1.2 meters or greater, or a similar type of antenna with equivalent high directivity.
- The frequency band for this licence is within the managed spectrum park part of the range of frequencies converted to the management rights regime.

#### SCHEDULE

#### **Details of Spectrum Licence 5**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31 December 2010
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2631.500000 MHz
  - (b) the frequency band is: 2617.500000 MHz to 2645.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
-50.0	2591.500000	-27.0	2603.500000
-27.0	2603.500000	-27.0	2612.500000
-27.0	2612.500000	5.0	2617.500000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	to Power (dBW eirp)	Frequency (MHz)
5.0	2645.500000	-27.0	2650.700000
-27.0	2650.700000	-27.0	2659.500000
-27.0	2659.500000	-50.0	2671.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- 5 The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 5.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	5.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude (metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area; and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder and Manager
- 9 The conditions applying to the exercise of the Rightholder's rights under this licence:

The Crown will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010.
- The Crown (as the Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.

#### **Details of Spectrum Licence 6**

- 1 The commencement date of this licence is: 1 January 2009
- 2 The expiry date of this licence is: 31 December 2010
- 3 The frequencies that apply to this licence are as follows:
  - (a) the characteristic frequency is: 2659.500000 MHz
  - (b) the frequency band is: 2645.500000 MHz to 2673.500000 MHz
- 4 Unwanted emission limits applying to emissions from the transmitter (expressed as the maximum e.i.r.p (in dBW) of those emissions):

Limits applying to frequencies below the lower boundary frequency

Power (dBW eirp)	Frequency (MHz)	TO Power (dBW eirp)	Frequency (MHz)
-50.0	2619.500000	-27.0	2631.500000
-27.0	2631.500000	-27.0	2640.300000
-27.0	2640.300000	5.0	2645.500000

Limits applying to frequencies above the upper boundary frequency

Power (dBW eirp)	Frequency (MHz)	TO Power (dBW eirp)	Frequency (MHz)
5.0	2673.500000	-27.0	2678.300000
-27.0	2678.300000	-27.0	2687.500000
-27.0	2687.500000	-50.0	2699.500000

The unwanted emission limits applicable to frequencies within each specified range must be determined in accordance with the following formula: y = mx + C

where y = dBW, x = MHz, m = dy/dx, C = the value of y where <math>x = 0 (the y intercept)

- The maximum power, designation of emissions, and horizontal radiation pattern permitted under this licence are as follows:
  - (a) maximum power of emissions: 5.0 dBW eirp
  - (b) designation of emissions: 28M0F8WWX 28M0G9WWX
  - (c) horizontal radiation pattern of antenna: [maximum e.i.r.p (in dBW) per sector in degrees relative to true North]:

Bearing (From)	Bearing (To)	Power (dBW eirp)
0.0	360.0	5.0

6 The location of the transmitter, the antenna polarisation, and the antenna height are as follows:

Map Easting Northing Site Name Altitude

(metres above sea level)

ALL NEW ZEALAND 0 m

Polarisation: Other

Height (above ground level): 2 metres

- 7 The protection location or locations or protection area that apply under this licence are as follows:
  - (a) the protection location or locations or protection area and
  - (b) the maximum permitted interferring signal that apply to those location(s) are:

No receive location(s)/area

- 8 The authorities that apply to this licence are as follows:
  - (a) The authority to transfer this licence is held by the Rightholder acting alone
  - (b) The authority to cancel this licence is held by the Rightholder acting alone
  - (c) The authority to modify this licence is held by the agreement between the Rightholder and Manager
- 9 The conditions applying to the exercise of the Rightholder's rights under this licence

The Crown will enter into agreements authorising specific parties to operate:

- General usage of analogue or digital transmission until 30 June 2009;
- Digital transmissions from equipment mounted directly on portable cameras at power levels not exceeding -5 dBW (25 dBm) eirp until 31 December 2010.

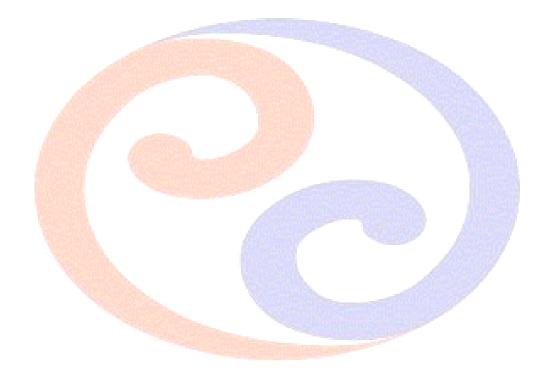
 The Crown (as the Rightholder) will enter into agreements with each user of itinerant video links and each agreement will define specific terms and conditions for each user to access this licence.



# SCHEDULE 3 - MANAGEMENT RIGHTS DEED

Please refer to the following URL to access the Management Rights Deed.

http://data.rsm.govt.nz/auctions/auction23-25-ghz/auction-catalogue-schedule-3.pdf



# SCHEDULE 4 - EXAMPLE STATUTORY DECLARATION

# [SAMPLE FORM] STATUTORY DECLARATION

I, [NAME] of [Place, Occupation], solemnly and sincerely declare that:

- 1. I am employed by [Company] (the 'Company') and am authorised by the Company to make this declaration on its behalf [if applicable].
- 2. On behalf of the Company, [Insert the requirements (both the statements and additional information) of clauses 11.1 and/or 11.2 of the Auction Catalogue as appropriate].

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1957.

[Signed]

Declared at [Place] this [ ] day of [ ].

[Signed by a Justice of the Peace or other person authorised to take a statutory declaration in terms of section 9 of the Oaths and Declarations Act 1957]

**Examples of people able to take Declarations - a person enrolled** as a barrister and solicitor of the High Court; a Justice of the Peace; a notary public; the Registrar or a Deputy Registrar of the Supreme Court; Court of Appeal; High Court or a District Court; a member of Parliament; or an employee of Public Trust authorised for that purpose.

# **SCHEDULE 5 - CONTACT DETAILS**

Chris Perera
Auction 9 Manager
Radio Spectrum Policy and Planning
Ministry of Economic Development
PO Box 1473 (33 Bowen Street)
WELLINGTON

DDI: +64-4-462 4279 Fax: +64-4-499 0969

email: radiospectrum@med.govt.nz

