

MINISTRY OF COMMERCE

RADIO FREQUENCY AUCTION

No. 4

AUCTION CATALOGUE

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MINISTRY OF COMMERCE

RADIO FREQUENCY AUCTION NUMBER 4

CALL FOR BIDS

On behalf of the Secretary of Commerce and with his authority, I give notice of intention to conduct an auction commencing at **10:00am Monday 16 November 1998** in accordance with the terms and conditions in Schedule 1 to this notice:

- i for licences to be granted pursuant to section 48 of the Radiocommunications Act 1989 in lots as specified in Schedule 2 to this notice;
- ii for licences to be granted pursuant to section 48 of the Radiocommunications Act 1989 in lots as specified in Schedule 3 to this notice;
- iii for licences to be granted pursuant to section 48 of the Radiocommunications Act 1989 in lots as specified in Schedule 4 to this notice;
- iv for licences to be granted pursuant to section 48 of the Radiocommunications Act 1989 in lots as specified in Schedule 5 to this notice.

The rights to be sold by auction are subject to the provisions of the Radiocommunications Act 1989, together with the Radiocommunications (Fees) Regulations 1993 and the Radiocommunications (Forms) Regulations 1990. Prospective bidders should familiarise themselves thoroughly with the Radiocommunications Act.

Dated at WELLINGTON this 26th day of October 1998.

K J Moody
Manager
Radio Spectrum Management Group
Ministry of Commerce

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FIRST SCHEDULE

CALL FOR BIDS FOR FREQUENCIES

TERMS AND CONDITIONS

- 1 The terms and conditions applicable to this auction are as follows:

AMENDMENTS TO THIS CALL FOR BIDS

- 2 This call, including these terms and conditions, may be amended or revoked by the Secretary of Commerce (“the Secretary”), in whole or in part, and at any time, by notice in the *New Zealand Gazette* or by notice in writing to registered bidders.

DEFINITIONS

- 3 In these terms and conditions, the following terms have the following meanings:

“Auction Information Page”	The Internet site at the following address : http://www.moc.govt.nz/rsm/auction/
“Auction message system”	The electronic exchange of messages between registered bidders and the Auction Manager by the internet auction site;
“Auction Manager”	Wim Zwart, whose address is: Auction 4 Manager Radio Spectrum Management Group Ministry of Commerce P.O. Box 2847 33 Bowen Street Wellington;
“Clause”	Clause of these terms and conditions;
“Internet auction site”	The internet site as given in the bidders pack provided under clause 10;
“Round”	A period of time during which the Auction Manager has signified that bids may be submitted;
“Technical difficulties”	Difficulties relating to the operation of any hardware or software associated with the

computer system or internet browser belonging to or operated by any bidder, the Ministry of Commerce, any contractor to the Ministry of Commerce involved in running the auction; and include any interruption in the operation of the internet as a medium of communication affecting the auction.

APPLICATION OF COMMERCE ACT 1986

- 4 Section 138 of the Radiocommunications Act 1989 provides for the application of the business acquisition provisions of the Commerce Act 1986 to the acquisition of management rights or licences under the Radiocommunications Act 1989.
- 5 The contract created between the Secretary and each provisionally successful bidder upon the completion of the auction (refer clause 34) is subject to the condition that none of its provisions relating to the acquisition of the relevant licences will come into force unless-
 - a. The proposed acquisition has been given a clearance, or an authorisation has been granted, in accordance with Part V of the Commerce Act 1986; or
 - b. The Secretary has agreed, within 10 working days of the completion of the auction, with the relevant bidder that it is not necessary to seek clearance or authorisation for the proposed acquisition.
- 6 Where no agreement has been reached between the Secretary and the provisionally successful bidder under clause 5(b), the bidder must, within 20 working days of the completion of the auction, apply for a clearance or authorisation from the Commerce Commission and give the Secretary notice that a clearance or authorisation has been sought. If an application for a clearance or authorisation is declined, or the bidder fails to give the Secretary notice that he or she has applied for a clearance or authorisation from the Commerce Commission, the Secretary may dispose of the lot as the Secretary sees fit. This may include re-auctioning the lot concerned, or offering it to the next highest bidder in accordance with clause 39.
- 7 These terms and conditions are subject to all legal requirements that apply to the acquisition of licences.

WHO MAY BID

- 8 Any individual or organisation may bid, provided that they are registered as a bidder in accordance with clauses 9 and 10.

REGISTRATION AS A BIDDER

- 9 Individuals or organisations wishing to register as a bidder in this auction must complete form RFA1, which may be downloaded from the following internet site <http://www.moc.govt.nz/rsm/auction/> or obtained in hard copy from The Applications Registrar, Ministry of Commerce, telephone (04) 474-2627.
- 10 To ensure registration before the auction commences, form RFA1, together with the deposit required by clause 13 and a RWT exemption certificate (refer clause 18), must be received by the Auction Manager no later than 4:00pm Monday 9 November 1998. The Auction Manager will accept registrations after this date but gives no guarantee that such registration will be completed by any particular date. The Auction Manager will advise applicants of their registration, and will also issue a Registered Bidder's Pack, including a registered bidder's number, passwords, bidder's manual and other documentation required for participation in this auction. The bidder's registration number and passwords will be used to authenticate bids made in this auction. It is the responsibility of each registered bidder to maintain the confidentiality of their bidder's registration number and passwords and the address of the internet auction site.

CREDIT LIMIT

- 11 Bidders must advise the maximum amount, in whole New Zealand dollars, they are prepared to pay for any combination of lots that they may be provisionally successful for in this auction. This amount will be declared the bidder's credit limit, and no bid that would cause this limit to be exceeded will be accepted. Each bidder must provide a deposit in accordance with clause 13 to validate the credit limit.
- 12 At any time during the auction, bidders may increase their credit limits by providing the Auction Manager with a further deposit, equal to 25% of the desired increase in their credit limit. However, the Auction Manager gives no guarantee that such an increase can be put in place before the auction is completed. Bidders should therefore endeavour to ensure that their original credit limit is adequate.

DEPOSITS

- 13 A deposit equal to 25% of the value of the credit limit is required to validate each bidder's credit limit and any increase to the credit limit. This deposit in whole New Zealand dollars, is to be made in the form of either a currently dated "Bank Cheque"¹ or a "Banker's Certificate of Undertaking"² ("Bankers

¹ A Bank Cheque is a cheque raised on the bank's own trading account by the bank. Personal or company cheques are not acceptable for deposits.

² 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

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 by the Ministry of Commerce (“the Ministry”).

- 14 Deposits received by way of Bank Cheque paid by provisionally successful bidders will be held in the trust account until the bidder has made payment in settlement in accordance with clauses 36 to 38. Upon payment in settlement in accordance with clauses 36 to 38 the deposit will be transferred to the Crown's own bank account. Any interest earned on the deposit will be paid to the bidder.
- 15 Deposits received in the form of a Banker's Certificate paid by provisionally successful bidders will be held secure until the bidder has made payment in settlement in accordance with clauses 36 to 38. Upon payment in settlement, the Banker's Certificate will be returned to the bidder, together with a letter of release to the bank.
- 16 Deposits paid by unsuccessful 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 provisional successful bidders have been published.
- 17 Deposits paid by Bank Cheque will accrue interest while held in trust accounts. Interest that is payable to unsuccessful bidders will be paid at the time that their deposits are repaid. The Secretary makes no representations as to the rate at which interest will accrue. Deposits paid by way of Bankers Certificate will not earn interest.
- 18 In respect of deposits paid by Bank Cheque, the Ministry’s bank will automatically deduct resident withholding tax (RWT) after calculating interest payable. Therefore a RWT exemption certificate 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 RWT will rest with the bidder.

BIDDING RULES

- 19 The auction will consist of a number of successive rounds which will continue until the auction is concluded in accordance with clause 31. Bidders may lodge

further reference to the bidder.

bids in any round with the Secretary at the auction internet site in accordance with the instructions in the Registered Bidder's Pack.

- 20 Bidding rounds will be held initially in accordance with the time schedule provided in the Registered Bidder's Pack, and later in accordance with the time schedule published by the Auction Manager by the auction message system or at the auction information page. The Auction Manager may vary the duration of bidding rounds and the time interval between rounds.
- 21 All lots will have a revealed reserve price of \$500.00 (excluding GST). The Auction Manager will set an initial minimum bid amount for each lot before the auction commences. A bid that is less than the initial minimum bid amount will not be accepted as a valid bid. The Auction Manager may reduce the initial minimum bid amount at any time.
- 22 After the close of each round of bidding, the Auction Manager will send to all registered bidders, by means of the auction message system, details of the dollar value of the highest valid bid received in that round for each lot and the registration number of the highest bidder. These results may also be published at the auction information page. Where two or more bidders have bid the same amount for a particular lot and those bids are the highest valid bids in the round for that lot, the registration numbers for each bidder will be notified.
- 23 At any stage of the auction, the Auction Manager may require the bids for any lot to be greater by a specific minimum increase than the highest bid or bids received for that lot in the previous round. The size of the required minimum increase is at the discretion of the Auction Manager. Notification of any required minimum increase will be given to registered bidders by the auction message system or at the auction information page by the Auction Manager specifying the required minimum bid for a round before the commencement of the round. A bid that is less than the required minimum bid will not be accepted as a valid bid.
- 24 The Secretary and the Auction Manager may refuse to accept any bid.

VALID BIDS

- 25 For a bid to be valid it must be:
 - a. Made in accordance with clause 19; and
 - b. Received by the Auction Manager while a round is continuing, which will be confirmed by the bidder receiving a message "Your bid has been received" on the screen for the auction internet site; and
 - c. At or above the minimum bid specified in accordance with clauses 21 or 23; and

- d. An amount that, when added to the other valid bids made by that bidder in that round and to any bids made by that bidder in previous rounds which are the highest bids made on the lot to which they relate, does not take the bidder beyond his or her credit limit; and
 - e. Made in whole New Zealand dollars (exclusive of GST); and
 - f. Otherwise be acceptable to the Secretary and the Auction Manager (see clause 24).
- 26 Any bid made by or on behalf of an employee of the Ministry of Commerce will be invalid unless the prior written consent of the Secretary is obtained to that employee participating in the auction. If the Secretary has consented to an employee participating in the auction this will be advertised at the internet auction site before the commencement of the auction.

WITHDRAWAL OF BIDS

- 27 A bidder may withdraw a bid at any time prior to the conclusion of the auction. Notification of withdrawal must be received by the Auction Manager by facsimile or the auction message system before the conclusion of the auction. Where a bid which has been notified in accordance with clause 22 as being the highest valid bid received for a lot is withdrawn, the bid which was previously the highest valid bid notified in accordance with clause 22 will be re-notified in accordance with clause 22. The bidder of the previously highest valid bid which was notified in accordance with clause 22 will be notified of this by means of the auction message system. If no bid has previously been notified in accordance with 22, the lot will revert to the revealed reserve price of \$500.00 (excluding GST).

TECHNICAL DIFFICULTIES

- 28 If any registered bidder is prevented from placing a bid in any round by technical difficulties, the registered bidder must advise the Auction Manager by facsimile, telephone or the auction message system that he or she is unable to place a bid.
- 29 Where the Auction Manager is aware, as a result of notice given under clause 28 or otherwise, that technical difficulties are preventing any bidder or bidders from placing bids the Auction Manager may temporarily halt the auction, as advised at the auction information page or the internet auction site, to allow the technical difficulty to be corrected.
- 30 Where technical difficulties have prevented any bidder or bidders from placing bids, the Secretary may decide not to conclude the auction so as to allow the bidder or bidders 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.

CONCLUSION OF THE AUCTION

31 Except where clauses 28 to 30 apply, the auction will conclude upon the completion of two consecutive rounds in which

- a. No valid bids are received for any or all of the lots in the auction; and
- b. No bids are withdrawn.

If a round has occurred in which no valid bids are received for any or all of the lots in the round, the Auction Manager will advise registered bidders by means of the auction message system and the auction information page that the auction will conclude at the completion of the next round if no valid bids are received for any or all of the lots in that following round, or no bids are withdrawn.

32 The Auction Manager will announce by the auction message system and at the auction information page that the auction is concluded.

33 The provisionally successful bidder for each lot is the bidder who has bid the highest valid bid for that lot at the conclusion of the auction. This clause is subject to the right of the Secretary or the Auction Manager to refuse to accept any bid under clause 24.

34 Upon the completion of the auction, a contractual obligation, subject to clause 5, exists between the Secretary and each provisionally successful bidder for the sale and purchase of the lot or lots for which provisionally successful bids have been received.

35 The Auction Manager will advise the provisionally successful bidders by the auction message system of their successful bids and will publish the provisional results at the internet auction site. The Auction Manager will also advise bidders by letter of their provisional success or otherwise, as appropriate.

PAYMENTS IN SETTLEMENT

36 For provisionally successful bidders, the amount required in settlement in respect of each lot is:

- a. In the case of bidders who have paid their deposit by way of bank cheque, the amount bid for the lot plus goods and services tax (GST), less the deposit paid by the bidder.
- b. In the case of bidders who have paid their deposit by way of banker's certificate, the amount bid for the lot plus goods and services tax (GST).

37 Each successful bidder will be invoiced for the amount payable in settlement as soon as possible after the requirements of clause 5 have been complied with.

- 38 Full payment in settlement is due within 10 (ten) working days of the receipt of the invoice. Payment must be made in New Zealand dollars. Cheques are to be made payable to the Ministry of Commerce and must be sent to the following address:

Manager - Finance
 Radio Spectrum Management Group
 Ministry of Commerce
 P.O. Box 2847
 33 Bowen Street
 Wellington

- 39 Where a provisionally successful bidder fails to pay the sum owing under clauses 36 to 38, liquidated damages will be payable in respect of each lot for which payment is not received as follows:
- a. A sum of money equal to the difference between the amount bid for the lot and the amount eventually paid for that lot, if that amount is lower than the value of the provisionally successful bid; and
 - b. A sum of money equal to the administrative expenses incurred by the Secretary in seeking payment from the bidder.

If the lot is subsequently sold for more than the amount of the provisionally successful bid, no damages will be payable.

- 40 If a provisionally successful bidder fails to pay the sum owing under clauses 36 to 38, the Secretary may, if he or she wishes, re-allocate the lot as he or she sees fit, which may include re-auctioning the lot concerned, or offering the lot to the next highest bidder for the same amount bid by the highest bidder plus GST. If a lot is re-allocated in accordance with this clause, the person to whom the lot is re-allocated will be treated as the provisionally successful bidder for the purposes of clauses 36 to 38.

SUITABILITY FOR PURPOSE

- 41 It is the responsibility of bidders to ensure that any lots for which they are bidding are suitable for their purpose. No representations in this respect are made by the Secretary or the Auction Manager.

GOODS AND SERVICES TAX ("GST")

- 42 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.

UPLIFTING OF MANAGEMENT RIGHTS

- 43 Notices of transfer of management rights, in registrable form, will be available to the successful bidder within 10 working days of the Secretary receiving payment in settlement for each lot. It is the responsibility of the successful bidders to ensure that these notices of transfer are registered in accordance with the provisions of the Radiocommunications Act 1989.

REGISTRATION OF LICENCES

- 44 Licences for the purpose of registration will be available to the successful bidder within 10 working days of the Secretary receiving payment in settlement for each lot. It is the responsibility of the successful bidders to ensure that these licences are registered in accordance with the provisions of the Radiocommunications Act 1989.
- 45 Licences will be granted on the condition that the licences will be registered by the successful bidder, or by his or her agent, in accordance with the provisions of the Radiocommunications Act 1989 within 20 working days of the date of issue of the instrument.
- 46 If the Registrar of Radio Frequencies has not received a licence for registration within 20 working days of the date of issue of the instrument, the Secretary may require the bidder to return the instrument.
- 47 Notwithstanding anything in clause 46, if the Secretary makes this requirement, the bidder has the option of registering the instrument with the Registrar of Radio Frequencies within 10 working days or returning the instrument to the Secretary, who will destroy the document. Any monies paid in settlement of the instrument will be returned, less any administrative costs incurred by the Secretary.
- 48 Bidders should be aware that licence instruments do not confer any rights to transmit until they are registered. Any delay in registering instruments during the 20 working day period provided for registration can result in loss of rights under a licence as a result of:
- a. Loss of priority of the licence in relation to other registered licences for the purposes of the provisions of the Radiocommunications Act 1989 relating to interference caused by lawful exercise of rights (Part XII); or,
 - b. Account not being taken of the unregistered licence in the engineering of future licences.
- 49 The Secretary accepts no responsibility for any loss that results from delay by a successful bidder in registering instruments.

ANNOUNCEMENT OF FINAL RESULTS

- 50 Final results will be published when all management rights have been uplifted in accordance with clause 43 and all licences have been registered in accordance with clauses 44 to 49.

PUBLICATION OF INFORMATION OF GENERAL INTEREST ON THE INTERNET

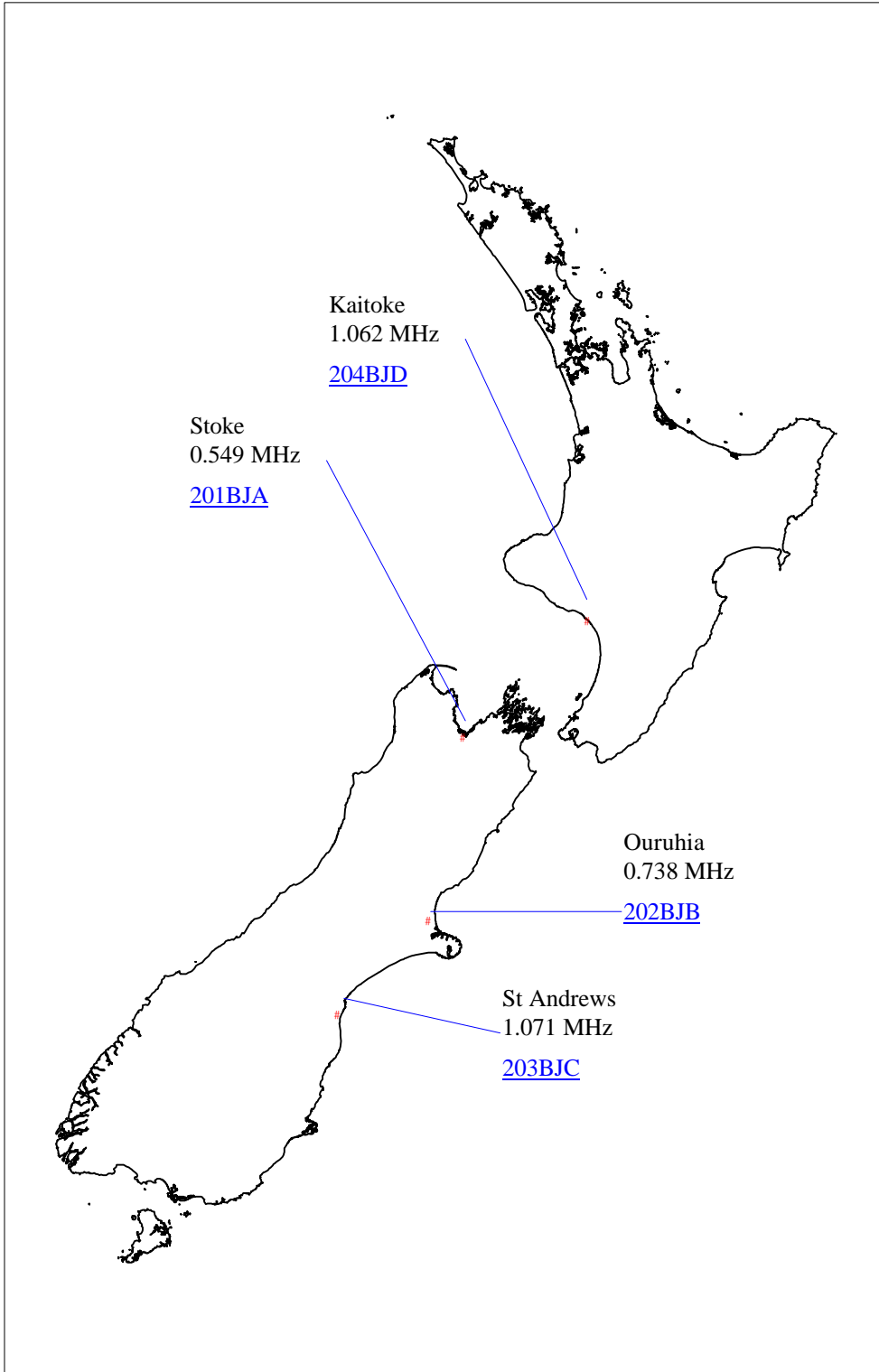
- 51 The results for each round and other information of general interest related to this auction will be published in the auction information page.

SCHEDULE TWO

IMPORTANT INFORMATION

1. There are 4 lots (referenced 201BJA - 204BJD) offered for auction in this schedule. The lots are suitable for MF - AM sound broadcasting.
2. Terms and abbreviations used in lot descriptions have the following meanings:
 - The powers in this schedule are expressed in terms of eirp. The values in eirp are 5 dB higher than the value of the product of transmitter power and antenna gain when expressed in terms of effective monopole radiated power (emrp).
 - Location is specified in NZMS 260 1:50,000 series maps.
 - Receive coverage locations are specified in NZMS 260 1:50,000 series maps.
 - Class of emission is given in terms of emission designations in Article 4 of the International Radio Regulations and ITU-R Recommendations.
 - dBW means decibels with reference to 1 watt.
 - eirp means equivalent isotropically radiated power as defined in section 2 of the Radiocommunications Act 1989.
 - dB μ V/m means a field strength intensity in decibels with reference to 1 microvolt per metre. Field strengths are measured in accordance with the Recommendations and Reports of the ITU-R.
3. The successful bidder in relation to each lot will be granted, upon payment in accordance with the First Schedule above, a registrable instrument or instruments that upon registration will authorise the bidder to transmit in accordance with the specifications set out in relation to the relevant lot and the general provisions specified on the following pages. Prospective bidders should thoroughly familiarise themselves with the Radiocommunications Act 1989. This offer, and all rights granted hereunder are subject to that Act.

Approximate locations referred to in the Second Schedule.



Index to Second Schedule.

LOTNO	LOCATION	FREQ MHz
201BJA	STOKE	0.549
202BJB	OURUHIA	0.738
203BJC	ST ANDREWS	1.071
204BJD	KAITOKE	1.062

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 N27 280863	STOKE	12 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 35.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.01 MHz above the frequencies to which this licence relates.
- Not more than 0.01 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

20K0A3EGN

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 35.0 dBW.

(f) Antenna polarisation: Vertical

(g) Antenna height: 53 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
	NZMS 260 N26 105012	MOTUEKA SCHOOL RCL
	NZMS 260 N27 190813	BRIGHTWATER HALL RCL
	NZMS 260 O27 401002	GLEN ROAD WHAKAPUAKA RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 2m above ground level):

Co-channel: 58 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

This licence right is constrained by and subject to international agreements on medium frequency (MF) broadcasting, in particular the Final Acts of the Regional Agreement on LF/MF Broadcasting, Geneva 1975, including any revision, amendment or agreement in substitution for such Final Acts.

3. Frequency particulars:

- (a) Frequency 0.549 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 0.414 MHz to -43.0 dBW at 0.456 MHz
 -43.0 dBW at 0.456 MHz to -43.0 dBW at 0.474 MHz
 -43.0 dBW at 0.474 MHz to -28.0 dBW at 0.509 MHz
 -28.0 dBW at 0.509 MHz to -10.0 dBW at 0.535 MHz
 -10.0 dBW at 0.535 MHz to 35.0 dBW at 0.539 MHz

- (ii) Limits applying to frequencies above the frequency:

35.0 dBW at 0.559 MHz to -10.0 dBW at 0.563 MHz
 -10.0 dBW at 0.563 MHz to -28.0 dBW at 0.589 MHz
 -28.0 dBW at 0.589 MHz to -43.0 dBW at 0.624 MHz
 -43.0 dBW at 0.624 MHz to -43.0 dBW at 1.677 MHz
 -43.0 dBW at 1.677 MHz to -50.0 dBW at 1.719 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 M35 834512	OURUHIA	2 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 42.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.01 MHz above the frequencies to which this licence relates.
- Not more than 0.01 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

20K0A3EGN

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 42.0 dBW.

(f) Antenna polarisation: Vertical

(g) Antenna height: 137 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
	NZMS 260 M36 505103	SOUTHBRIDGE RESERVE RCL
	NZMS 260 M35 799506	CORNER SH1 & JOHNS ROAD RCL
	NZMS 260 M34 881836	AMBERLEY RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 2m above ground level):

Co-channel: 55 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

This licence right is constrained by and subject to international agreements on medium frequency (MF) broadcasting, in particular the Final Acts of the Regional Agreement on LF/MF Broadcasting, Geneva 1975, including any revision, amendment or agreement in substitution for such Final Acts.

3. Frequency particulars:

- (a) Frequency 0.738 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 0.414 MHz to -43.0 dBW at 0.456 MHz
 -43.0 dBW at 0.456 MHz to -43.0 dBW at 0.663 MHz
 -43.0 dBW at 0.663 MHz to -21.0 dBW at 0.698 MHz
 -21.0 dBW at 0.698 MHz to -3.0 dBW at 0.724 MHz
 -3.0 dBW at 0.724 MHz to 42.0 dBW at 0.728 MHz

- (ii) Limits applying to frequencies above the frequency:

42.0 dBW at 0.748 MHz to -3.0 dBW at 0.752 MHz
 -3.0 dBW at 0.752 MHz to -21.0 dBW at 0.778 MHz
 -21.0 dBW at 0.778 MHz to -43.0 dBW at 0.813 MHz
 -43.0 dBW at 0.813 MHz to -43.0 dBW at 1.677 MHz
 -43.0 dBW at 1.677 MHz to -50.0 dBW at 1.719 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 J39 666309	ST ANDREWS	10 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 38.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.01 MHz above the frequencies to which this licence relates.
- Not more than 0.01 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

20K0A3EGN

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 38.0 dBW.

(f) Antenna polarisation: Vertical

(g) Antenna height: 93 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
	NZMS 260 J40 617104	CORNER SH1 & SH82 RCL
	NZMS 260 K39 700418	SALTWATER CREEK RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 2m above ground level):

Co-channel: 41 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

(d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

This licence right is constrained by and subject to international agreements on medium frequency (MF) broadcasting, in particular the Final Acts of the Regional Agreement on LF/MF Broadcasting, Geneva 1975, including any revision, amendment or agreement in substitution for such Final Acts.

3. Frequency particulars:

(a) Frequency 1.071 MHz:

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 0.414 MHz to -43.0 dBW at 0.456 MHz
 -43.0 dBW at 0.456 MHz to -43.0 dBW at 0.996 MHz
 -43.0 dBW at 0.996 MHz to -25.0 dBW at 1.031 MHz
 -25.0 dBW at 1.031 MHz to -7.0 dBW at 1.057 MHz
 -7.0 dBW at 1.057 MHz to 38.0 dBW at 1.061 MHz

(ii) Limits applying to frequencies above the frequency:

38.0 dBW at 1.081 MHz to -7.0 dBW at 1.085 MHz
 -7.0 dBW at 1.085 MHz to -25.0 dBW at 1.111 MHz
 -25.0 dBW at 1.111 MHz to -43.0 dBW at 1.146 MHz
 -43.0 dBW at 1.146 MHz to -43.0 dBW at 1.677 MHz
 -43.0 dBW at 1.677 MHz to -50.0 dBW at 1.719 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

(c) Day on which right to transmit on frequency commences: 1 December 1998.

(d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 R22 881358	KAITOKE	40 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 38.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.01 MHz above the frequencies to which this licence relates.
- Not more than 0.01 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

20K0A3EGN

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 38.0 dBW.

(f) Antenna polarisation: Vertical

(g) Antenna height: 55 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
	NZMS 260 R22 750490	KAI IWI VILLAGE RCL
	NZMS 260 S24 000901	HIMATANGI BEACH RCL
	NZMS 260 S23 135235	RANGITIKEI COLLEGE RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 2m above ground level):

Co-channel: 66 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

This licence right is constrained by and subject to international agreements on medium frequency (MF) broadcasting, in particular the Final Acts of the Regional Agreement on LF/MF Broadcasting, Geneva 1975, including any revision, amendment or agreement in substitution for such Final Acts.

During night-time hours, the maximum e.i.r.p. will be restricted to 35.0 dBW. The hours defining daytime/night-time will be in accordance with figure 20, Chapter 3 (Annex 2) of the Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva 1975.

3. Frequency particulars:

- (a) Frequency 1.062 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 0.414 MHz to -43.0 dBW at 0.456 MHz
 -43.0 dBW at 0.456 MHz to -43.0 dBW at 0.987 MHz
 -43.0 dBW at 0.987 MHz to -25.0 dBW at 1.022 MHz
 -25.0 dBW at 1.022 MHz to -7.0 dBW at 1.048 MHz
 -7.0 dBW at 1.048 MHz to 38.0 dBW at 1.052 MHz

- (ii) Limits applying to frequencies above the frequency:

38.0 dBW at 1.072 MHz to -7.0 dBW at 1.076 MHz
 -7.0 dBW at 1.076 MHz to -25.0 dBW at 1.102 MHz
 -25.0 dBW at 1.102 MHz to -43.0 dBW at 1.137 MHz
 -43.0 dBW at 1.137 MHz to -43.0 dBW at 1.677 MHz
 -43.0 dBW at 1.677 MHz to -50.0 dBW at 1.719 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

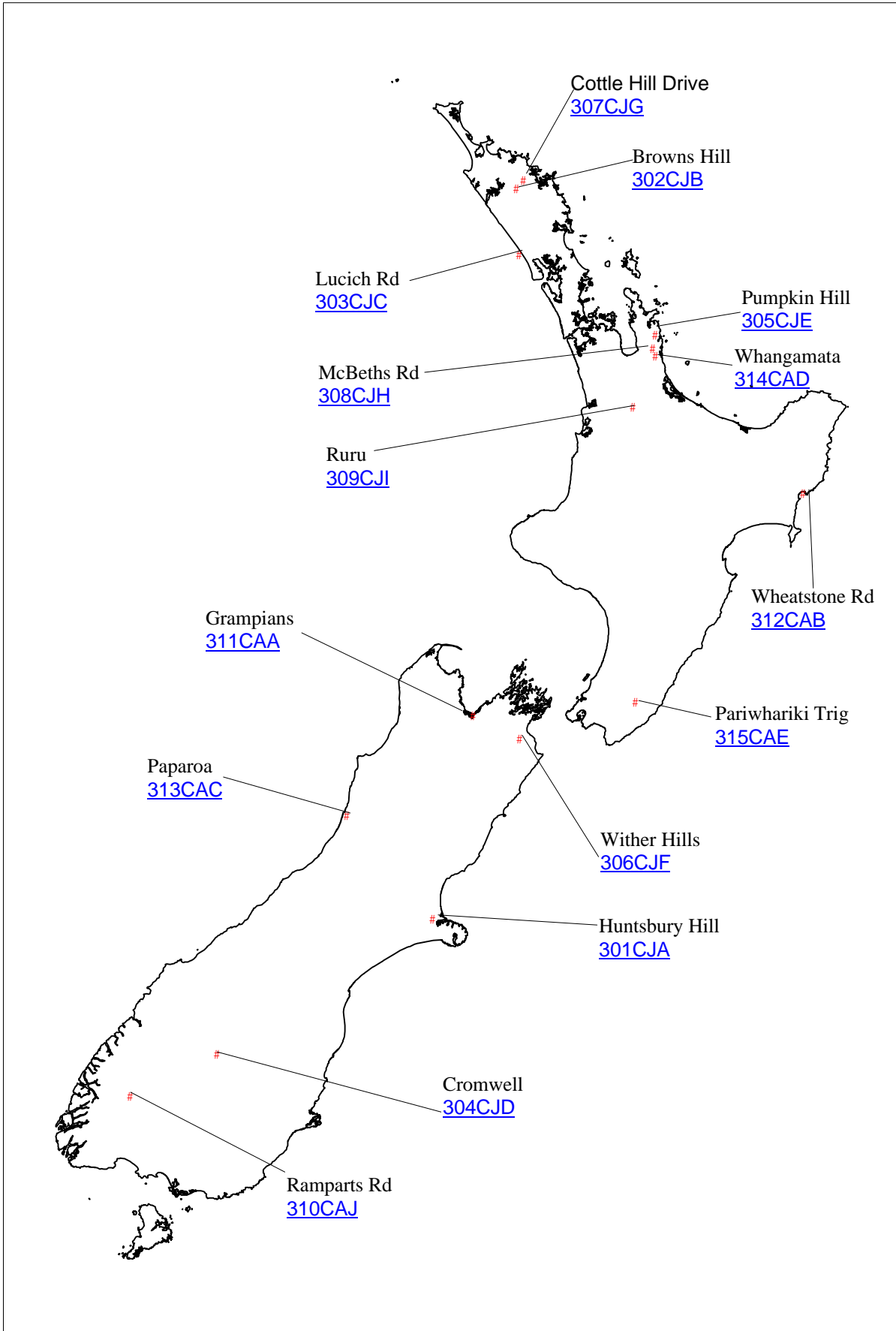
- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

THIRD SCHEDULE

IMPORTANT INFORMATION

- 1 There is a total of 15 lots (referenced 301CJA to 315CAE) offered for auction in this Third Schedule. Each lot is a single licence suitable for VHF - FM Sound broadcasting.
- 2 Terms and abbreviations used in lot descriptions have the following meanings:
 - Location is specified in NZMS 260 1:50,000 series
 - Receive coverage locations are specified in NZMS 260 1:50,000 series maps.
 - Class of emission is given in terms of emission designations in Article 4 of the International Radio Regulations and ITU-R Recommendations
 - dBW means decibels with reference to 1 watt.
 - eirp means equivalent isotropically radiated power as defined in section 2 of the Radiocommunications Act 1989.
 - dB μ V/m means a field strength intensity in decibels with reference to 1 microvolt per metre. Field strengths are measured in accordance with the Recommendations and Reports of the ITU-R.
- 3 The successful bidder in relation to each lot will be granted, upon payment in accordance with the First Schedule above, a single registrable instrument that upon registration will authorise the bidder to transmit in accordance with the specifications set out in relation to the relevant lot and the general provisions specified on the following pages. Prospective bidders should thoroughly familiarise themselves with the Radiocommunications Act 1989. This offer, and all rights granted hereunder are subject to that Act.

Approximate locations referred to in the Third Schedule



Index to Third Schedule

<u>LOTNO</u>	<u>FREQ</u>	<u>LOCATION</u>
301CJA	89.00 MHz	HUNTSBURY HILL
302CJB	90.40 MHz	BROWNS HILL
303CJC	90.60 MHz	LUCICH ROAD
304CJD	91.10 MHz	CROMWELL
305CJE	91.10 MHz	PUMPKIN HILL
306CJF	91.30 MHz	WITHER HILLS
307CJG	91.60 MHz	COTTLE HILL DRIVE
308CJH	91.90 MHz	McBETHS ROAD
309CJI	92.00 MHz	RURU
310CAJ	94.30 MHz	RAMPARTS ROAD
311CAA	94.60 MHz	GRAMPIANS
312CAB	98.90 MHz	WHEATSTONE RD
313CAC	99.10 MHz	PAPAROA
314CAD	90.30 MHz	WHANGAMATA
315CAE	95.70 MHz	PARIWHARIKI TRIG

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 M36 822364		HUNTSBURY HILL	220 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 27.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	050 degrees:	27.0 dBW.
Over 050 degrees up to	230 degrees:	17.0 dBW.
Over 230 degrees up to	360 degrees:	27.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 10 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 M35 759491		HAREWOOD RCL
NZMS 260 M35 702403		ISLINGTON RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dBµV/m.
Adjacent channel (± 100kHz):	43 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 89.00 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -8.0 dBW at 88.40 MHz to -8.0 dBW at 88.76 MHz
 2.0 dBW at 88.76 MHz to 2.0 dBW at 88.88 MHz

- (ii) Limits applying to frequencies above the frequency:

2.0 dBW at 89.12 MHz to 2.0 dBW at 89.24 MHz
 -8.0 dBW at 89.24 MHz to -8.0 dBW at 89.60 MHz
 -43.0 dBW at 89.60 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 P05 881484		BROWNS HILL	388 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 29.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 29.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 10 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 P05 978490		PAKARAKA SCHOOL RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dB μ V/m.
Adjacent channel (\pm 100kHz):	33 dB μ V/m.
Adjacent channel (\pm 200kHz):	59 dB μ V/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 90.40 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 89.80 MHz
 -6.0 dBW at 89.80 MHz to -6.0 dBW at 90.16 MHz
 4.0 dBW at 90.16 MHz to 4.0 dBW at 90.28 MHz

- (ii) Limits applying to frequencies above the frequency:

4.0 dBW at 90.52 MHz to 4.0 dBW at 90.64 MHz
 -6.0 dBW at 90.64 MHz to -6.0 dBW at 91.00 MHz
 -43.0 dBW at 91.00 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 P08 917663		LUCICH ROAD	130 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 27.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 27.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 15 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 P08 025621		RUAWAI JETTY RCL
NZMS 260 P08 947759		MITITAI HALL RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dB μ V/m.
Adjacent channel (\pm 100kHz):	33 dB μ V/m.
Adjacent channel (\pm 200kHz):	59 dB μ V/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 90.60 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 90.00 MHz
 -8.0 dBW at 90.00 MHz to -8.0 dBW at 90.36 MHz
 2.0 dBW at 90.36 MHz to 2.0 dBW at 90.48 MHz

- (ii) Limits applying to frequencies above the frequency:

2.0 dBW at 90.72 MHz to 2.0 dBW at 90.84 MHz
 -8.0 dBW at 90.84 MHz to -8.0 dBW at 91.20 MHz
 -43.0 dBW at 91.20 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 F41 096679		CROMWELL	294 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 9.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 9.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 10 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 G41 124675		CNR SH8 & SH88 RCL
NZMS 260 F41 083655		CNR SH6 & CEMETERY ROAD RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dBµV/m.
Adjacent channel (± 100kHz):	33 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 91.10 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 90.50 MHz
 -26.0 dBW at 90.50 MHz to -26.0 dBW at 90.86 MHz
 -16.0 dBW at 90.86 MHz to -16.0 dBW at 90.98 MHz

- (ii) Limits applying to frequencies above the frequency:

-16.0 dBW at 91.22 MHz to -16.0 dBW at 91.34 MHz
 -26.0 dBW at 91.34 MHz to -26.0 dBW at 91.70 MHz
 -43.0 dBW at 91.70 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 T11 634656		PUMPKIN HILL	200 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 22.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.

- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 22.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 10 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 T11 640619		TAIRUA WHARF RCL
NZMS 260 T12 660596		PAUANUI RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 21 dBµV/m.

Adjacent channel (± 100kHz): 47 dBµV/m.

Adjacent channel (± 200kHz): 59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 91.10 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 90.50 MHz
 -13.0 dBW at 90.50 MHz to -13.0 dBW at 90.86 MHz
 -3.0 dBW at 90.86 MHz to -3.0 dBW at 90.98 MHz

- (ii) Limits applying to frequencies above the frequency:

-3.0 dBW at 91.22 MHz to -3.0 dBW at 91.34 MHz
 -13.0 dBW at 91.34 MHz to -13.0 dBW at 91.70 MHz
 -43.0 dBW at 91.70 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 P28 921619		WITHER HILLS	225 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 29.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.

- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	060 degrees:	29.0 dBW.
Over 060 degrees up to	085 degrees:	28.0 dBW.
Over 085 degrees up to	130 degrees:	26.0 dBW.
Over 130 degrees up to	145 degrees:	24.0 dBW.
Over 145 degrees up to	195 degrees:	26.0 dBW.
Over 195 degrees up to	220 degrees:	28.0 dBW.
Over 220 degrees up to	360 degrees:	29.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 12 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 P28 892669		WATERLEA RACECOURSE RCL
NZMS 260 P28 895635		OLIVER PARK RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 30 dBµV/m.

Adjacent channel (± 100kHz): 62 dBµV/m.

Adjacent channel (± 200kHz): 59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 91.30 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 90.70 MHz
 -6.0 dBW at 90.70 MHz to -6.0 dBW at 91.06 MHz
 4.0 dBW at 91.06 MHz to 4.0 dBW at 91.18 MHz

- (ii) Limits applying to frequencies above the frequency:

4.0 dBW at 91.42 MHz to 4.0 dBW at 91.54 MHz
 -6.0 dBW at 91.54 MHz to -6.0 dBW at 91.90 MHz
 -43.0 dBW at 91.90 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 P05 971590		COTTLE HILL DRIVE	160 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 30.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.

- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 30.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 8 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 P05 978632		KERIKERI SCHOOL RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 21 dB μ V/m.

Adjacent channel (\pm 100kHz): 33 dB μ V/m.

Adjacent channel (\pm 200kHz): 59 dB μ V/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 91.60 MHz:
- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 91.00 MHz
 -5.0 dBW at 91.00 MHz to -5.0 dBW at 91.36 MHz
 5.0 dBW at 91.36 MHz to 5.0 dBW at 91.48 MHz

(ii) Limits applying to frequencies above the frequency:

5.0 dBW at 91.72 MHz to 5.0 dBW at 91.84 MHz
 -5.0 dBW at 91.84 MHz to -5.0 dBW at 92.20 MHz
 -43.0 dBW at 92.20 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 June 1999.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 T12 605495		McBETHS ROAD	300 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 20.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 20.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 20 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 T12 639441		FORESTRY HQ RCL
NZMS 260 T12 657379		RANGI AVE RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	28 dBµV/m.
Adjacent channel (± 100kHz):	33 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 91.90 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 91.30 MHz
 -15.0 dBW at 91.30 MHz to -15.0 dBW at 91.66 MHz
 -5.0 dBW at 91.66 MHz to -5.0 dBW at 91.78 MHz

- (ii) Limits applying to frequencies above the frequency:

-5.0 dBW at 92.02 MHz to -5.0 dBW at 92.14 MHz
 -15.0 dBW at 92.14 MHz to -15.0 dBW at 92.50 MHz
 -43.0 dBW at 92.50 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 T14	358759	RURU	480 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 36.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	010 degrees:	26.0 dBW.
Over 010 degrees up to	030 degrees:	24.0 dBW.
Over 030 degrees up to	040 degrees:	22.0 dBW.
Over 040 degrees up to	100 degrees:	20.0 dBW.
Over 100 degrees up to	110 degrees:	22.0 dBW.
Over 110 degrees up to	130 degrees:	24.0 dBW.
Over 130 degrees up to	140 degrees:	26.0 dBW.
Over 140 degrees up to	145 degrees:	27.0 dBW.
Over 145 degrees up to	150 degrees:	28.0 dBW.
Over 150 degrees up to	160 degrees:	29.0 dBW.
Over 160 degrees up to	165 degrees:	30.0 dBW.
Over 165 degrees up to	175 degrees:	31.0 dBW.
Over 175 degrees up to	185 degrees:	32.0 dBW.
Over 185 degrees up to	195 degrees:	33.0 dBW.
Over 195 degrees up to	200 degrees:	34.0 dBW.
Over 200 degrees up to	215 degrees:	35.0 dBW.
Over 215 degrees up to	285 degrees:	36.0 dBW.
Over 285 degrees up to	295 degrees:	35.0 dBW.
Over 295 degrees up to	305 degrees:	34.0 dBW.
Over 305 degrees up to	315 degrees:	33.0 dBW.
Over 315 degrees up to	325 degrees:	32.0 dBW.
Over 325 degrees up to	335 degrees:	31.0 dBW.
Over 335 degrees up to	340 degrees:	30.0 dBW.
Over 340 degrees up to	350 degrees:	29.0 dBW.
Over 350 degrees up to	355 degrees:	28.0 dBW.
Over 355 degrees up to	360 degrees:	27.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 20 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 S14	115783	WAIKATO SHOWGROUNDS RCL
NZMS 260 S15	277662	TAYLOR ST CAMBRIDGE RCL
NZMS 260 S15	149525	TE RAHU RD., TE AWAMUTU RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dBµV/m.
Adjacent channel (± 100kHz):	42 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 92.00 MHz:
- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 91.40 MHz
 1.0 dBW at 91.40 MHz to 1.0 dBW at 91.76 MHz
 11.0 dBW at 91.76 MHz to 11.0 dBW at 91.88 MHz

- (ii) Limits applying to frequencies above the frequency:

11.0 dBW at 92.12 MHz to 11.0 dBW at 92.24 MHz
 1.0 dBW at 92.24 MHz to 1.0 dBW at 92.60 MHz
 -43.0 dBW at 92.60 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 June 1999.
- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 D43 996152		RAMPARTS ROAD	400 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 25.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 25.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 12 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 D43 959201		TE ANAU SPORTSGROUND RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dB μ V/m.
Adjacent channel (\pm 100kHz):	33 dB μ V/m.
Adjacent channel (\pm 200kHz):	59 dB μ V/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 94.30 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 93.70 MHz
 -10.0 dBW at 93.70 MHz to -10.0 dBW at 94.06 MHz
 0.0 dBW at 94.06 MHz to 0.0 dBW at 94.18 MHz

- (ii) Limits applying to frequencies above the frequency:

0.0 dBW at 94.42 MHz to 0.0 dBW at 94.54 MHz
 -10.0 dBW at 94.54 MHz to -10.0 dBW at 94.90 MHz
 -43.0 dBW at 94.90 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 O27 334898		GRAMPIANS	392 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 32.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	060 degrees:	31.0 dBW.
Over 060 degrees up to	090 degrees:	28.0 dBW.
Over 090 degrees up to	185 degrees:	22.0 dBW.
Over 185 degrees up to	225 degrees:	28.0 dBW.
Over 225 degrees up to	290 degrees:	31.0 dBW.
Over 290 degrees up to	335 degrees:	32.0 dBW.
Over 335 degrees up to	360 degrees:	31.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 30 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 N27 201831		PUGHS RD, HOPE RCL
NZMS 260 N27 183940		MAPUA RCL
NZMS 260 O27 337920		NELSON GIRLS COLLEGE RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dB μ V/m.
Adjacent channel (\pm 100kHz):	33 dB μ V/m.
Adjacent channel (\pm 200kHz):	59 dB μ V/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 94.60 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 94.00 MHz
 -3.0 dBW at 94.00 MHz to -3.0 dBW at 94.36 MHz
 7.0 dBW at 94.36 MHz to 7.0 dBW at 94.48 MHz

- (ii) Limits applying to frequencies above the frequency:

7.0 dBW at 94.72 MHz to 7.0 dBW at 94.84 MHz
 -3.0 dBW at 94.84 MHz to -3.0 dBW at 95.20 MHz
 -43.0 dBW at 95.20 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.

- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 Y18 509682		WHEATSTONE RD	160 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 29.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.

- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 29.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 18 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 Y18 435704		GISBORNE AIRPORT RCL
NZMS 260 Y18 451723		LYTTON HIGH SCHOOL RCL
NZMS 260 Y18 487688		KAITI MEMORIAL PARK RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 21 dBµV/m.

Adjacent channel (± 100kHz): 33 dBµV/m.

Adjacent channel (± 200kHz): 59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 98.90 MHz:
- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 98.30 MHz
 -6.0 dBW at 98.30 MHz to -6.0 dBW at 98.66 MHz
 4.0 dBW at 98.66 MHz to 4.0 dBW at 98.78 MHz

(ii) Limits applying to frequencies above the frequency:

4.0 dBW at 99.02 MHz to 4.0 dBW at 99.14 MHz
 -6.0 dBW at 99.14 MHz to -6.0 dBW at 99.50 MHz
 -43.0 dBW at 99.50 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 K31 736657		PAPAROA	823 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 34.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	010 degrees:	26.0 dBW.
Over 010 degrees up to	090 degrees:	29.0 dBW.
Over 090 degrees up to	100 degrees:	28.0 dBW.
Over 100 degrees up to	105 degrees:	26.0 dBW.
Over 105 degrees up to	110 degrees:	25.0 dBW.
Over 110 degrees up to	120 degrees:	23.0 dBW.
Over 120 degrees up to	125 degrees:	27.0 dBW.
Over 125 degrees up to	135 degrees:	28.0 dBW.
Over 135 degrees up to	140 degrees:	27.0 dBW.
Over 140 degrees up to	150 degrees:	26.0 dBW.
Over 150 degrees up to	155 degrees:	29.0 dBW.
Over 155 degrees up to	175 degrees:	31.0 dBW.
Over 175 degrees up to	260 degrees:	34.0 dBW.
Over 260 degrees up to	290 degrees:	31.0 dBW.
Over 290 degrees up to	300 degrees:	25.0 dBW.
Over 300 degrees up to	320 degrees:	22.0 dBW.
Over 320 degrees up to	330 degrees:	18.0 dBW.
Over 330 degrees up to	350 degrees:	22.0 dBW.
Over 350 degrees up to	360 degrees:	25.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 30 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 K31 820670		NGAHERE HALL RCL
NZMS 260 K32 853467		MOANA SCHOOL RCL
NZMS 260 J32 616398		KUMARA RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dBµV/m.
Adjacent channel (± 100kHz):	33 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 99.10 MHz:
- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 98.50 MHz
 -1.0 dBW at 98.50 MHz to -1.0 dBW at 98.86 MHz
 9.0 dBW at 98.86 MHz to 9.0 dBW at 98.98 MHz

- (ii) Limits applying to frequencies above the frequency:

9.0 dBW at 99.22 MHz to 9.0 dBW at 99.34 MHz
 -1.0 dBW at 99.34 MHz to -1.0 dBW at 99.70 MHz
 -43.0 dBW at 99.70 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 June 1999.
- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 T12 641394		WHANGAMATA	70 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 20.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.

- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 20.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 20 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 T12 657405		WHANGAMATA WHARF RCL
NZMS 260 T12 657374		CNR PATUWAI DRIVE & POHTUKAWA CRESCENT RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 21 dBµV/m.

Adjacent channel (± 100kHz): 33 dBµV/m.

Adjacent channel (± 200kHz): 59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 90.30 MHz:
- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 89.70 MHz
 -15.0 dBW at 89.70 MHz to -15.0 dBW at 90.06 MHz
 -5.0 dBW at 90.06 MHz to -5.0 dBW at 90.18 MHz

(ii) Limits applying to frequencies above the frequency:

-5.0 dBW at 90.42 MHz to -5.0 dBW at 90.54 MHz
 -15.0 dBW at 90.54 MHz to -15.0 dBW at 90.90 MHz
 -43.0 dBW at 90.90 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

- (c) Day on which right to transmit on frequency commences: 1 December 1998.
- (d) Day on which right to transmit on frequency expires: 2 April 2011.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 T27	389077	PARIWHARIKI TRIG	525 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 25.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 0.12 MHz above the frequencies to which this licence relates.
- Not more than 0.12 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

256KF8EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to	250 degrees:	25.0 dBW.
Over 250 degrees up to	260 degrees:	22.0 dBW.
Over 260 degrees up to	360 degrees:	25.0 dBW.

(f) Antenna polarisation: Mixed or Linear

(g) Antenna height: 5 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 S26	220178	CNR LINCOLN & BEVEDERE RD RCL
NZMS 260 T26	345253	QUEEN ELIZABETH II PARK, RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel:	21 dBµV/m.
Adjacent channel (± 100kHz):	33 dBµV/m.
Adjacent channel (± 200kHz):	59 dBµV/m.

(c) Expiry date of this licence: 2 April 2011.

- (d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

3. Frequency particulars:

- (a) Frequency 95.70 MHz:

- (b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

- (i) Limits applying to frequencies below the frequency:

-50.0 dBW at 88.00 MHz to -43.0 dBW at 88.40 MHz
 -43.0 dBW at 88.40 MHz to -43.0 dBW at 95.10 MHz
 -10.0 dBW at 95.10 MHz to -10.0 dBW at 95.46 MHz
 0.0 dBW at 95.46 MHz to 0.0 dBW at 95.58 MHz

- (ii) Limits applying to frequencies above the frequency:

0.0 dBW at 95.82 MHz to 0.0 dBW at 95.94 MHz
 -10.0 dBW at 95.94 MHz to -10.0 dBW at 96.30 MHz
 -43.0 dBW at 96.30 MHz to -43.0 dBW at 100.60 MHz
 -50.0 dBW at 100.60 MHz to -50.0 dBW at 101.00 MHz

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

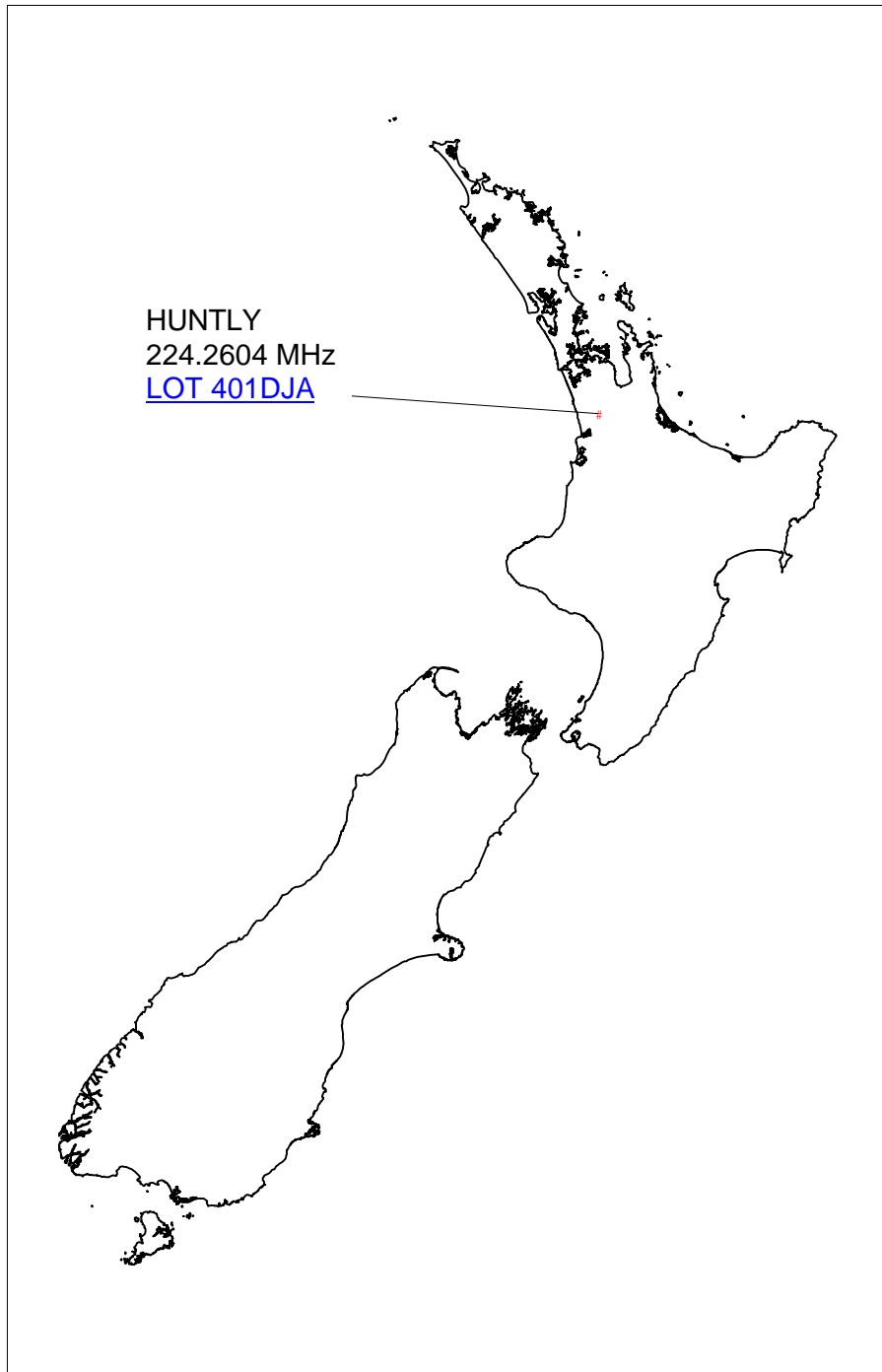
- (c) Day on which right to transmit on frequency commences: 1 December 1998.
 (d) Day on which right to transmit on frequency expires: 2 April 2011

FOURTH SCHEDULE

IMPORTANT INFORMATION

- 1 There is a total of one lot (reference 401DJA) offered for auction in this Fourth Schedule. It is a single licence suitable for VHF Television broadcasting.
- 2 Terms and abbreviations used in lot descriptions have the following meanings:
 - Location is specified in NZMS 260 1:50,000 series maps.
 - Receive coverage locations are specified in NZMS 260 1:50,000 series maps.
 - Class of emission is given in terms of emission designations in Article 4 of the International Radio Regulations and ITU-R Recommendations.
 - dBW means decibels with reference to 1 watt.
 - eirp means equivalent isotropically radiated power as defined in section 2 of the Radiocommunications Act 1989.
 - dB μ V/m means a field strength intensity in decibels with reference to 1 microvolt per metre. Field strengths are measured in accordance with the Recommendations and Reports of the ITU-R.
- 3 The successful bidder in relation to each lot will be granted, upon payment in accordance with the First Schedule above, a single registrable instrument that upon registration will authorise the bidder to transmit in accordance with the specifications set out in relation to the relevant lot and the general provisions specified on the following pages. Prospective bidders should thoroughly familiarise themselves with the Radiocommunications Act 1989. This offer, and all rights granted hereunder are subject to that Act.

Approximate locations referred to in the Fourth Schedule



Index to Fourth Schedule.

LOT	CHANNEL	LOCATION
401DJA	TV11	HUNTLY

SCHEDULE

1 Particulars of transmitter to which this licence relates:

(a) Location of transmitter:

Map	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
NZMS 260 S13	000045	HUNTLY	40 Metres

(b) Maximum power of emissions permitted under this licence: 19.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 5.75 MHz above the frequencies to which this licence relates
- Not more than 1.25 MHz below the frequencies to which this licence relates

(d) Designation of emissions permitted under this licence:

6M25C3F/750KF3EGN/500KG2EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 005 degrees:	15 dBW
Over 005 degrees up to 015 degrees:	14 dBW
Over 015 degrees up to 040 degrees:	13 dBW
Over 040 degrees up to 140 degrees:	14 dBW
Over 140 degrees up to 150 degrees:	15 dBW
Over 250 degrees up to 190 degrees:	16 dBW
Over 190 degrees up to 200 degrees:	15 dBW
Over 200 degrees up to 210 degrees:	14 dBW
Over 210 degrees up to 220 degrees:	15 dBW
Over 220 degrees up to 225 degrees:	16 dBW
Over 225 degrees up to 235 degrees:	17 dBW
Over 235 degrees up to 240 degrees:	18 dBW
Over 240 degrees up to 330 degrees:	19 dBW
Over 330 degrees up to 340 degrees:	18 dBW
Over 340 degrees up to 350 degrees:	17 dBW
Over 350 degrees up to 360 degrees:	16 dBW

(f) Antenna polarisation: Vertical

(g) Antenna height: 145 metres above ground level

2 Other particulars:

(a) Receive Coverage Locations and associated Maximum Permitted Interfering Signals

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Maximum Permitted Interfering Signal Level</u>
NZMS 260 S13	011059	HUNTLY PARK MILK DEPOT RCL	31 dB μ V/m
NZMS 260 S13	014030	HUNTLY PARK DOMAIN RCL	31 dB μ V/m
NZMS 260 S13	948054	ROTONGARO RCL	27 dB μ V/m

(b) Expiry date of this licence: 30 August 2015

(c) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

The maximum permitted interfering signals above shall be measured at a height of up to 10 metres above ground level.

The tolerance of the characteristic frequency shall be ± 500 Hz.

The rightholder shall transmit a video signal conforming to the Phase Alternating Line (PAL) System B standard as described in ITU-R Report 624-4.

The rightholder may transmit a signal conforming to the NICAM 728 standard (NICAM transmission).

3 Frequency particulars:

(a) Frequency: 224.2604 MHz

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50 dBW at 166.475000 MHz to -41 dBW at 170.975000 MHz.

-41 dBW at 170.975000 MHz to -41 dBW at 220.010400 MHz.

-41 dBW at 220.010400 MHz to -11 dBW at 223.010400 MHz

(ii) Limits applying to frequencies above the frequency:

-1 dBW at 230.010400 MHz to -1 dBW at 230.370400 MHz.

-11 dBW at 230.370400 MHz to -41 dBW at 233.025000 MHz.

-41 dBW at 233.025000 MHz to -50 dBW at 237.525000 MHz.

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$P = A + (B - A)(F - X)/(Y - X) \text{ for all frequency sectors,}$$

where:

P = power (dBW) at any frequency F between defined limits X and Y

A = power (dBW) at lower frequency limit X

B = power (dBW) at upper frequency limit Y

X = lower frequency limit (MHz)

Y = upper frequency limit (MHz)

F = frequency (MHz) at which power P is to be determined

X < F < Y]

(c) Day on which right to transmit on frequency commences: 1 December 1998

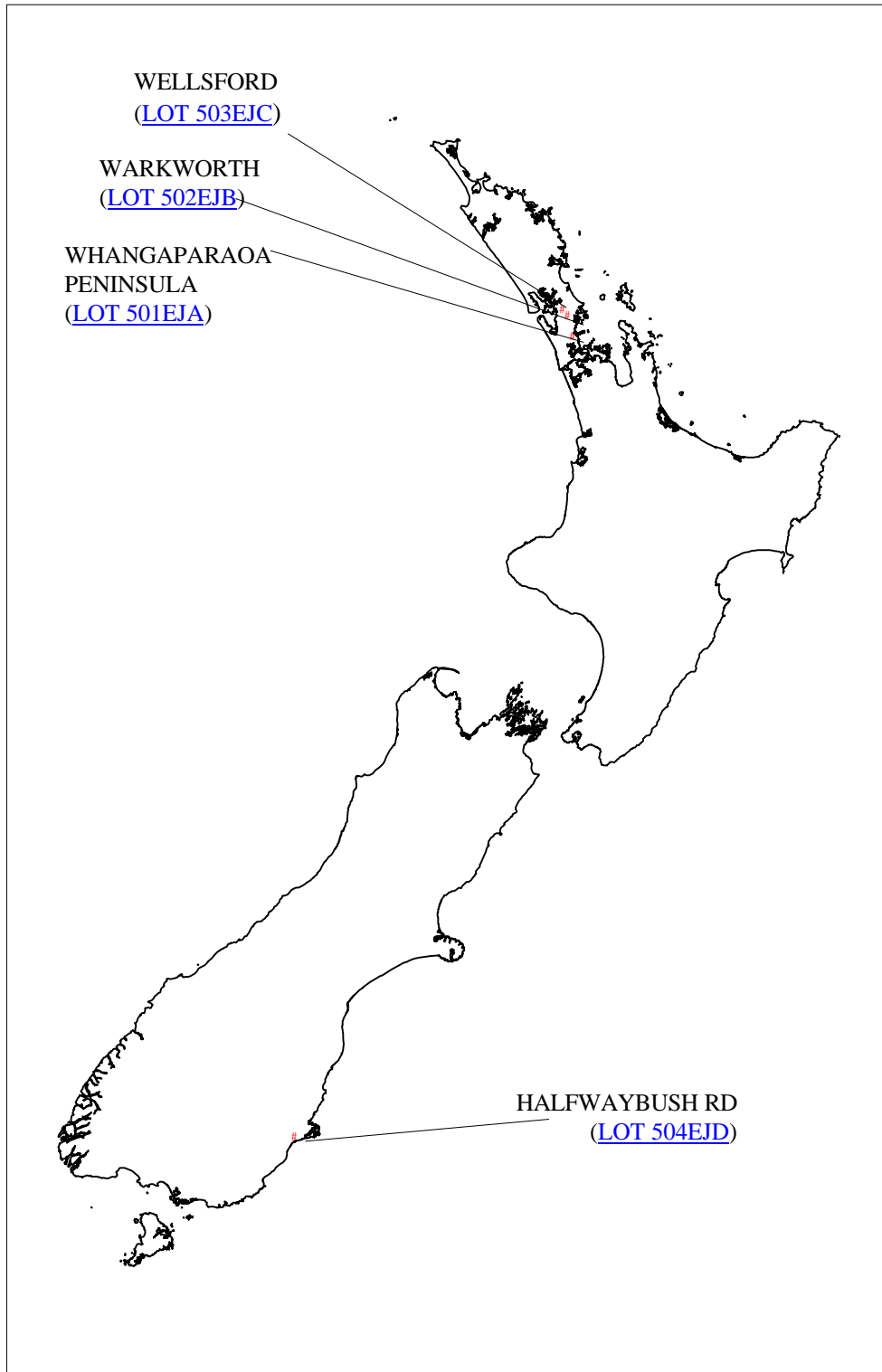
(d) Day on which right to transmit on frequency expires: 30 August 2015

FIFTH SCHEDULE

IMPORTANT INFORMATION

- 1 There is a total of 4 lots (referenced 501EJA to 504EJD) offered for auction in this Fifth Schedule. Each lot is a single licence suitable for UHF Television broadcasting
- 2 Terms and abbreviations used in lot descriptions have the following meanings:
 - Location is specified in NZMS 260 1:50,000 series maps.
 - Receive coverage locations are specified in NZMS 260 1:50,000 series maps.
 - Class of emission is given in terms of emission designations in Article 4 of the International Radio Regulations and ITU-R Recommendations
 - dBW means decibels with reference to 1 watt.
 - eirp means equivalent isotropically radiated power as defined in section 2 of the Radiocommunications Act 1989.
 - dB μ V/m means a field strength intensity in decibels with reference to 1 microvolt per metre. Field strengths are measured in accordance with the Recommendations and Reports of the ITU-R.
- 3 The successful bidder in relation to each lot will be granted, upon payment in accordance with the First Schedule above, a single registrable instrument that upon registration will authorise the bidder to transmit in accordance with the specifications set out in relation to the relevant lot and the general provisions specified on the following pages. Prospective bidders should thoroughly familiarise themselves with the Radiocommunications Act 1989. This offer, and all rights granted hereunder are subject to that Act.

Approximate locations referred to in the Fifth Schedule



Index to Fifth Schedule

<u>LOTNO</u>	<u>CHANNEL</u>	<u>LOCATION</u>
501EJA	TV46	WHANGAPARAOA PENINSULA
502EJB	TV47	WARKWORTH
503EJC	TV49	WELLSFORD
504EJD	TV62	HALFWAY BUSH ROAD

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 R10 659053	WHANGAPARAOA PENINSULA	100 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 28.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 6.75 MHz above the frequencies to which this licence relates.
- Not more than 1.25 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

6M25C3F/750KF3EGN/500KG2EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

	000 degrees up to	165 degrees:	25.0 dBW.
Over	165 degrees up to	175 degrees:	12.0 dBW.
Over	175 degrees up to	350 degrees:	28.0 dBW.
Over	350 degrees up to	360 degrees:	25.0 dBW.

(f) Antenna polarisation: Horizontal

(g) Antenna height: 12 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 R10 657997		LONG BAY COLLEGE RCL
NZMS 260 R10 620119		KINLOCH RESERVE RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 35 dB μ V/m.

(c) Expiry date of this licence: 11 March 2010.

(d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

Vision and sound frequencies shall be maintained within ± 500 Hz of the nominal carrier frequency.

The maximum permitted interfering signals in clause 2(b) when measured with a horizontally polarized antenna are:

Co-channel: 35 dB μ V/m.

3. Frequency particulars:

(a) Frequency 671.255200 MHz:

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 510.000000 MHz to -43.0 dBW at 513.000000 MHz.
 -43.0 dBW at 513.000000 MHz to -43.0 dBW at 665.005200 MHz.
 -43.0 dBW at 665.005200 MHz to -2.0 dBW at 670.005200 MHz.

(ii) Limits applying to frequencies above the frequency:

-2.0 dBW at 678.005200 MHz to -43.0 dBW at 681.005200 MHz.
 -43.0 dBW at 681.005200 MHz to -43.0 dBW at 809.000000 MHz.

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

(c) Day on which right to transmit on frequency commences: 1 December 1998.

(d) Day on which right to transmit on frequency expires: 11 March 2010.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

Map	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 R09 588318	WARKWORTH	80 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 27.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 6.75 MHz above the frequencies to which this licence relates.

- Not more than 1.25 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

6M25C3F/750KF3EGN/500KG2EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

000 degrees up to 360 degrees: 27.0 dBW.

(f) Antenna polarisation: Vertical

(g) Antenna height: 15 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 R09 600324		BOAT RAMP WARKWORTH RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 48 dB μ V/m.

(c) Expiry date of this licence: 11 March 2010.

(d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

Vision and sound frequencies shall be maintained within ± 500 Hz of the nominal carrier frequency.

The maximum permitted interfering signals in clause 2(b) when measured with a vertically polarized antenna are:

Co-channel: 48 dB μ V/m.

3. Frequency particulars:

(a) Frequency 679.255200 MHz:

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 510.000000 MHz to -43.0 dBW at 513.000000 MHz.
 -43.0 dBW at 513.000000 MHz to -43.0 dBW at 673.005200 MHz.
 -43.0 dBW at 673.005200 MHz to -3.0 dBW at 678.005200 MHz.

(ii) Limits applying to frequencies above the frequency:

-3.0 dBW at 686.005200 MHz to -43.0 dBW at 689.005200 MHz.
 -43.0 dBW at 689.005200 MHz to -43.0 dBW at 809.000000 MHz.

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

(c) Day on which right to transmit on frequency commences: 1 December 1998.

(d) Day on which right to transmit on frequency expires: 11 March 2010.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

Map	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 R09 520395	WELLSFORD	160 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 28.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 6.75 MHz above the frequencies to which this licence relates.

- Not more than 1.25 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

6M25C3F/750KF3EGN/500KG2EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

	000 degrees up to	020 degrees:	28.0 dBW.
Over	020 degrees up to	280 degrees:	25.0 dBW.
Over	280 degrees up to	360 degrees:	28.0 dBW.

(f) Antenna polarisation: Horizontal

(g) Antenna height: 23 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 Q09 471448		RODNEY COLLEGE RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 34 dB μ V/m.

(c) Expiry date of this licence: 11 March 2010.

(d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

Vision and sound frequencies shall be maintained within ± 500 Hz of the nominal carrier frequency.

The maximum permitted interfering signals in clause 2(b) when measured with a horizontally polarized antenna are:

Co-channel: 34 dB μ V/m.

3. Frequency particulars:

(a) Frequency 695.257800 MHz:

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 510.000000 MHz to -43.0 dBW at 513.000000 MHz.
 -43.0 dBW at 513.000000 MHz to -43.0 dBW at 689.007800 MHz.
 -43.0 dBW at 689.007800 MHz to -2.0 dBW at 694.007800 MHz.

(ii) Limits applying to frequencies above the frequency:

-2.0 dBW at 702.007800 MHz to -43.0 dBW at 705.007800 MHz.
 -43.0 dBW at 705.007800 MHz to -43.0 dBW at 809.000000 MHz.

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

(c) Day on which right to transmit on frequency commences: 1 December 1998.

(d) Day on which right to transmit on frequency expires: 11 March 2010.

SCHEDULE

1. Particulars of transmitters to which this licence relates:

(a) Location of transmitter or transmitters:

Map	<u>Grid Reference</u>	<u>Site Name</u>	<u>Altitude</u>
	NZMS 260 I44 086788	HALFWAY BUSH ROAD	190 m Above Sea Level

(b) Maximum power of emissions permitted under this licence: 25.0 dBW (e.i.r.p.)

(c) Maximum bandwidth of emissions permitted under this licence:

- Not more than 6.75 MHz above the frequencies to which this licence relates.
- Not more than 1.25 MHz below the frequencies to which this licence relates.

(d) Designation of emissions permitted under this licence:

6M25C3F/750KF3EGN/500KG2EHF

(e) Horizontal radiation pattern of antenna: [maximum e.i.r.p. (in dBW) per sector (in degrees relative to true North)]

	000 degrees up to	015 degrees:	17.0 dBW.
Over	015 degrees up to	135 degrees:	5.0 dBW.
Over	135 degrees up to	150 degrees:	17.0 dBW.
Over	150 degrees up to	165 degrees:	20.0 dBW.
Over	165 degrees up to	195 degrees:	23.0 dBW.
Over	195 degrees up to	305 degrees:	25.0 dBW.
Over	305 degrees up to	315 degrees:	23.0 dBW.
Over	315 degrees up to	330 degrees:	22.0 dBW.
Over	330 degrees up to	345 degrees:	20.0 dBW.
Over	345 degrees up to	360 degrees:	18.0 dBW.

(f) Antenna polarisation: Horizontal

(g) Antenna height: 6 metres above ground level

2. Other particulars:

(a) Receive coverage location or locations:

<u>Map</u>	<u>Grid Reference</u>	<u>Site Name</u>
NZMS 260 I44 040789		MEMORIAL PARK, MOSGIEL RCL

(b) Maximum permitted interfering signals applying to receive coverage location or locations (measured at a height of 10 metres above ground level):

Co-channel: 35 dB μ V/m.

(c) Expiry date of this licence: 11 March 2010.

(d) Conditions applying to the exercise of the rightholder's rights under this licence:

The rightholder shall not transfer the rightholder's interest in this licence, to any foreign government, or to any party on behalf of any foreign government, without first obtaining the written approval of the Secretary of Commerce.

Vision and sound frequencies shall be maintained within ± 500 Hz of the nominal carrier frequency.

The maximum permitted interfering signals in clause 2(b) when measured with a horizontally polarized antenna are:

Co-channel: 35 dB μ V/m.

3. Frequency particulars:

(a) Frequency 799.255200 MHz:

(b) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.i.r.p. (in dBW) of such emissions):

(i) Limits applying to frequencies below the frequency:

-50.0 dBW at 510.000000 MHz to -43.0 dBW at 513.000000 MHz.
 -43.0 dBW at 513.000000 MHz to -43.0 dBW at 793.005200 MHz.
 -43.0 dBW at 793.005200 MHz to -5.0 dBW at 798.005200 MHz.

(ii) Limits applying to frequencies above the frequency:

-5.0 dBW at 806.000000 MHz to -43.0 dBW at 809.000000 MHz.

[Note: The unwanted emission limits applicable to frequencies within each specified range shall be determined in accordance with the following formula:

$$y = mx + C \quad \text{where -} \quad y = \text{dBW} \quad x = \text{MHz} \quad m = \frac{dy}{dx}$$

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

(c) Day on which right to transmit on frequency commences: 1 December 1998.

(d) Day on which right to transmit on frequency expires: 11 March 2010.