

# The New Zealand Gazette OF THURSDAY, 23 AUGUST 1990

**WELLINGTON: MONDAY, 27 AUGUST 1990** — ISSUE NO. 146

### RADIO FREQUENCY TENDER:

AMENDMENT TO CALL FOR TENDERS

#### MINISTRY OF COMMERCE

#### RADIO FREQUENCY TENDER

#### AMENDMENT TO CALL FOR TENDERS

I, Maurice John Belgrave, Secretary of Commerce, acting pursuant to paragraph 3 of the First Schedule to the Call for Tenders issued by me on Thursday 26 July 1990 and notified in the Gazette on 26 July 1990 at page 2589 ("the Call For Tenders") hereby AMEND the Call For Tenders as follows:

#### AMENDMENTS TO FIRST SCHEDULE

#### Closing of bids

2 Paragraph 28 of the First Schedule to the Call For Tenders is hereby amended by deleting the date 3 September 1990 and inserting the date 17 September 1990.

#### Invalid bids

3 Paragraph 30(a) of the First Schedule to the Call For Tenders is hereby amended by deleting the date 3 September 1990 and inserting the date 17 September 1990.

#### AMENDMENTS TO THIRD SCHEDULE

- 4 The Third Schedule to the Call For Tenders is hereby amended by WITHDRAWING Lot numbers 027JBG, 035JCE, 042JDB and 044JDD.
- 5 The Third Schedule to the Call For Tenders is hereby <u>further</u> amended by ADDING those lots specified in the First Schedule to this notice.

#### AMENDMENTS TO FOURTH SCHEDULE

- The Fourth Schedule to the Call For Tenders is hereby amended by WITHDRAWING lot numbers 079JGI, 080JHJ, 089JHI, 090JIJ, 141ADA, 142ADB, 143ADC, 144ADD, 145ADE, 167AFG, and 168AFH.
- 7 The Fourth Schedule to the Call For Tenders is hereby further amended by ADDING those lots specified in the Second Schedule to this notice.

#### FIRST SCHEDULE

LOTS ADDED TO THE

THIRD SCHEDULE

OF THE

CALL FOR TENDERS

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LOT 180AHJ

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: TITAHI BAY
Map: NZMS1/N160
Grid Reference: 399450

- (b) Frequency on which transmissions are permitted by this licence: .972 MHz
- (c) Maximum power of emissions permitted under this licence: 36.0 dBW (e.m.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 10 kHz above the frequency to which this licence relates.
  - Not more than 10 kHz below the frequency to which this licence relates.
- (e) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.m.r.p. (in dBW) of such emissions):
  - (i) Limits applying to frequencies below the frequency to which this licence relates:

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-50 dBW at .414 MHz to -43 dBW at .456 MHz.
-43 dBW at .456 MHz to -43 dBW at .897 MHz.
-43 dBW at .897 MHz to -26.0 dBW at .932 MHz.
-26.0 dBW at .932 MHz to -8.0 dBW at .958 MHz.
-8.0 dBW at .958 MHz to 36.0 dBW at .962 MHz.
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(ii) Limits applying to frequencies above the frequency to which this licence relates:

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36.0 dBW at .982 MHz to -8.0 dBW at .986 MHz.
-8.0 dBW at .986 MHz to -26.0 dBW at 1.012 MHz.
-26.0 dBW at 1.012 MHz to -43 dBW at 1.047 MHz.
-43 dBW at 1.047 MHz to -43 dBW at 1.677 MHz.
-43 dBW at 1.677 MHz to -50 dBW at 1.719 MHz.
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$$y = mx + C$$

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

(f) Class of emissions permitted under this licence:

20KOA3EGN

(g) Horizontal radiation pattern of transmitter:
 [maximum e.m.r.p. (in dBW) per sector (in degrees
 relative to True North)]

36.0 dBW  $TN - 180^{\circ} - TN$ 

- (h) Antenna polarisation of transmitter: Vertical
- (i) Antenna height: 77 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-8 669018, 663997

<u>\_</u>

(b) Maximum permitted interfering signals applying to receive coverage locations:

Co-channel: 50 dB $\mu$ V/m. Adjacent channel: 71 dB $\mu$ V/m.

- (c) Commencement date of licence: 1 November 1990
- (d) Expiry date of licence: 31 October 2010

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour of (66 Pt + Pa)  $dB\mu V/m$ , where Pt is the maximum power in e.m.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.m.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 181AHA

- Particulars of transmitter to which this licence relates. 1.
  - Location of transmitter: (a)

Site Name: WELLINGTON NZMS1/N160 Map: Grid Reference: 399450

- Frequency on which transmissions are permitted by this (b) licence: 1.233 MHz
- (C) Maximum power of emissions permitted under this licence: 36.0 dBW (e.m.r.p.)
- Maximum bandwidth of emissions permitted under this (d) licence:
  - Not more than 10 kHz above the frequency to which this licence relates.
  - Not more than 10 kHz below the frequency to which this licence relates.
- (e) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.m.r.p. (in dBW) of such emissions):
  - (i)Limits applying to frequencies below the frequency to which this licence relates:

-50 dBW at .414 MHz to -43 dBW at .456 MHz. -43 dBW at .456 MHz to -43 dBW at 1.158 MHz. -43 dBW at 1.158 MHz to -26.0 dBW at 1.193 MHz.

-26.0 dBW at 1.193 MHz to -8.0 dBW at 1.219 MHz.

-8.0 dBW at 1.219 MHz to 36.0 dBW at 1.223 MHz.

(ii) Limits applying to frequencies above the frequency to which this licence relates:

36.0 dBW at 1.243 MHz to -8.0 dBW at 1.247 MHz.

-8.0 dBW at 1.247 MHz to -26.0 dBW at 1.273 MHz.

-26.0 dBW at 1.273 MHz to -43 dBW at 1.308 MHz.

-43 dBW at 1.308 MHz to -43 dBW at 1.677 MHz. -43 dBW at 1.677 MHz to -50 dBW at 1.719 MHz.

$$y = mx + C$$

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

- (f) Class of emissions permitted under this licence: 20KOA3EGN
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.m.r.p. (in dBW) per sector (in degrees relative to True North)]

36.0 dBW TN - 287° 27.0 dBW 287° 36.0 dBW 287° - TN

- (h) Antenna polarisation of transmitter: Vertical
- (i) Antenna height: 61 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-8 669018, 663997

(b) Maximum permitted interfering signals applying to receive coverage locations:

Co-channel: 63  $dB\mu V/m$ . Adjacent channel: 84  $dB\mu V/m$ .

- (c) Commencement date of licence: 1 November 1990
- (d) Expiry date of licence: 31 October 2010

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.m.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.m.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 182AHB

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: AUCKLAND Map: NZMS1/N042 Grid Reference: 286473

- Frequency on which transmissions are permitted by this (b) licence: 1.476 MHz
- Maximum power of emissions permitted under this (C) licence: 43.0 dBW (e.m.r.p.)
- Maximum bandwidth of emissions permitted under this (d) licence:
  - Not more than 10 kHz above the frequency to which this licence relates.
  - Not more than 10 kHz below the frequency to which this licence relates.
- (e) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.m.r.p. (in dBW) of such emissions):
  - (i)Limits applying to frequencies below the frequency to which this licence relates:

-50 dBW at .414 MHz to -43 dBW at .456 MHz. -43 dBW at .456 MHz to -43 dBW at 1.401 MHz. -43 dBW at 1.401 MHz to -26.0 dBW at 1.436 MHz. -26.0 dBW at 1.436 MHz to -8.0 dBW at 1.462 MHz. -8.0 dBW at 1.462 MHz to 43.0 dBW at 1.466 MHz.

- (ii) Limits applying to frequencies above the frequency to which this licence relates:
  - 43.0 dBW at 1.486 MHz to -8.0 dBW at 1.490 MHz. -8.0 dBW at 1.490 MHz to -26.0 dBW at 1.516 MHz. -26.0 dBW at 1.516 MHz to -43 dBW at 1.551 MHz. -43 dBW at 1.551 MHz to -43 dBW at 1.677 MHz.
  - -43 dBW at 1.677 MHz to -50 dBW at 1.719 MHz.

$$y = mx + C$$

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

- (f) Class of emissions permitted under this licence: 20KOA3EGN
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.m.r.p. (in dBW) per sector (in degrees relative to True North)]

43.0	d RW	350°	_	TN -	130 <sup>0</sup>
42.0		130°	_	140°	130
41.0		1400	_	150°	
		140	_	130	
40.0	abw	150°	_	160°	
38.0	dBW	160°	_	170°	
36.0	dBW	170 <sup>0</sup>	_	180°	
34.0	dBW	180°	-	190 <sup>0</sup>	
33.0		1900	_	200°	
32.0		2000	_	210 <sup>0</sup>	
30.0	dBW	210 <sup>0</sup>	_	270 <sup>0</sup>	
31.0	dBW	270 <sup>0</sup>	_	280 <sup>O</sup>	
33.0		280 <sup>O</sup>	_	290°	
35.0		290 <sup>0</sup>	_	300°	
36.0		300 <sup>0</sup>	_	310 <sup>0</sup>	
38.0		310 <sup>0</sup>	-	320 <sup>0</sup>	
40.0		320 <sup>O</sup>	_	330 <sup>0</sup>	
41.0		330 <sup>O</sup>	_	340 <sup>O</sup>	
42.0		340°	_	350°	

- (h) Antenna polarisation of transmitter: Vertical
- (i) Antenna height: 51 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

#### Map Grid References

NZMS 262-3 666494, 656476

(b) Maximum permitted interfering signals applying to receive coverage locations:

Co-channel: 42  $dB\mu V/m$ . Adjacent channel: 63  $dB\mu V/m$ .

- (c) Commencement date of licence: 1 November 1990
- (d) Expiry date of licence: 31 October 2010

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.m.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.m.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 183AHC

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: INVERCARGILL Map: NZMS1/S177 Grid Reference: 460010

- (b) Frequency on which transmissions are permitted by this licence: 1.494 MHz
- (c) Maximum power of emissions permitted under this licence: 30.0 dBW (e.m.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 10 kHz above the frequency to which this licence relates.
  - Not more than 10 kHz below the frequency to which this licence relates.
- (e) Unwanted emission limits applying to emissions from the transmitter (expressed as maximum e.m.r.p. (in dBW) of such emissions):
  - (i) Limits applying to frequencies below the frequency to which this licence relates:

-50 dBW at .414 MHz to -43 dBW at .456 MHz. -43 dBW at .456 MHz to -43 dBW at 1.419 MHz. -43 dBW at 1.419 MHz to -33.0 dBW at 1.454 MHz. -33.0 dBW at 1.454 MHz to -15.0 dBW at 1.480 MHz. -15.0 dBW at 1.480 MHz to 30.0 dBW at 1.484 MHz.

(ii) Limits applying to frequencies above the frequency to which this licence relates:

30.0 dBW at 1.504 MHz to -15.0 dBW at 1.508 MHz. -15.0 dBW at 1.508 MHz to -33.0 dBW at 1.534 MHz. -33.0 dBW at 1.534 MHz to -43 dBW at 1.569 MHz. -43 dBW at 1.569 MHz. -43 dBW at 1.677 MHz. -43 dBW at 1.677 MHz.

$$y = mx + C$$

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

(f) Class of emissions permitted under this licence:

20K0A3EGN

(g) Horizontal radiation pattern of transmitter:
 [maximum e.m.r.p. (in dBW) per sector (in degrees relative to True North)]

30.0 dBW TN - 295° 27.5 dBW 295° 30.0 dBW 295° - TN

- (h) Antenna polarisation of transmitter: Vertical
- (i) Antenna height: 50 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-16 155406, 152416

(b) Maximum permitted interfering signals applying to receive coverage locations:

Co-channel: 45  $dB\mu V/m$ . Adjacent channel: 66  $dB\mu V/m$ .

- (c) Commencement date of licence: 1 November 1990
- (d) Expiry date of licence: 31 October 2010

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.m.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.m.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

SECOND SCHEDULE

LOTS ADDED TO THE

FOURTH SCHEDULE

OF THE

CALL FOR TENDERS

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LOT 184AHD

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: MT EDGECUMBE Map: NZMS1/N077 Grid Reference: 186076

Altitude: 774 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 92.1 MHz
- (c) Maximum power of emissions permitted under this licence: 33.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

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-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 91.50 MHz

-2 dBW at 91.50 MHz to -2 dBW at 91.86 MHz

8 dBW at 91.86 MHz to 8 dBW at 91.98 MHz
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(ii) Limits applying to frequencies above the frequency to which this licence relates:

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8 dBW at 92.22 MHz to 8 dBW at 92.34 MHz

-2 dBW at 92.34 MHz to -2 dBW at 92.70 MHz

-43 dBW at 92.70 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
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$$y = mx + C$$

where - y = dBW, 
$$x = MHz$$
,  $m = \frac{dy}{dx}$ ,  $C = \text{the value of y where } x = 0 \text{ (the y intercept)}$ 

- (f) Class of emissions permitted under this licence: 256KF8EHF
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.i.r.p. (in dBW) per sector (in degrees relative to True North)]

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 61 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

## Map Grid References NZMS 262-5 863353, 841361, 835340 NZMS 262-4 803375

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

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Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
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- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 185AHE

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: MT EDGECUMBE NZMS1/N077

Grid Reference: 186076

Altitude: 774 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 97.7 MHz
- (c) Maximum power of emissions permitted under this licence: 33.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

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-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 97.10 MHz

-2 dBW at 97.10 MHz to -2 dBW at 97.46 MHz

8 dBW at 97.46 MHz to 8 dBW at 97.58 MHz
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(ii) Limits applying to frequencies above the frequency to which this licence relates:

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8 dBW at 97.82 MHz to 8 dBW at 97.94 MHz

-2 dBW at 97.94 MHz to -2 dBW at 98.30 MHz

-43 dBW at 98.30 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
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$$y = mx + C$$

where - y = dBW, 
$$x = MHz$$
,  $m = \frac{dy}{dx}$ ,  $C = \text{the value of y where } x = 0 \text{ (the y intercept)}$ 

(f) Class of emissions permitted under this licence:

#### 256KF8EHF

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

33.0	dBW	*			TN -	120 <sup>0</sup>
27.0	dBW		120°	-	235 <sup>0</sup>	
18.0	dBW		235 <sup>0</sup>		_	
27.0	dBW		235 <sup>O</sup>	-	350 <sup>0</sup>	

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 61 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-5 863353, 841361, 835340

NZMS 262-4 803375

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

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Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
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- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 186AHF

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: WHAKAPUNAKE
Map: NZMS1/N106
Grid Reference: 993178

Altitude: 914 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 96.2 MHz
- (c) Maximum power of emissions permitted under this licence: 37.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

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-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 95.60 MHz

2 dBW at 95.60 MHz to 2 dBW at 95.96 MHz

12 dBW at 95.96 MHz to 12 dBW at 96.08 MHz
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(ii) Limits applying to frequencies above the frequency to which this licence relates:

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12 dBW at 96.32 MHz to 12 dBW at 96.44 MHz 2 dBW at 96.44 MHz to 2 dBW at 96.80 MHz -43 dBW at 100.60 MHz to -43 dBW at 100.60 MHz -50 dBW at 101.00 MHz
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$$y = mx + C$$

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

(f) Class of emissions permitted under this licence:

**256KF8EHF** 

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

37.0 dBW  $TN - 180^{\circ} - TN$ 

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 55 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

#### Map Grid References

NZMS 262-5 940271, 950269, 939283 NZMS 262-7 893232, 892239

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

Co-channel: 21 dB $\mu$ V/m. Adjacent channel (+/- 100kHz): 31 dB $\mu$ V/m. Adjacent channel (+/- 200kHz): 58 dB $\mu$ V/m.

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 187AHG

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: WHAKAPUNAKE Map: NZMS1/N106 Grid Reference: 993178

Altitude: 914 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 94.8 MHz
- (c) Maximum power of emissions permitted under this licence: 37.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz -43 dBW at 88.40 MHz to -43 dBW at 94.20 MHz 2 dBW at 94.20 MHz to 2 dBW at 94.56 MHz 12 dBW at 94.56 MHz to 12 dBW at 94.68 MHz

(ii) Limits applying to frequencies above the frequency to which this licence relates:

12 dBW at 94.92 MHz to 12 dBW at 95.04 MHz 2 dBW at 95.04 MHz to 2 dBW at 95.40 MHz -43 dBW at 95.40 MHz to -43 dBW at 100.60 MHz -50 dBW at 101.00 MHz

$$y = mx + C$$

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

- (f) Class of emissions permitted under this licence: 256KF8EHF
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.i.r.p. (in dBW) per sector (in degrees relative to True North)]

37.0 dBW 
$$TN - 180^{\circ} - TN$$

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 55 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

## Map Grid References NZMS 262-5 940271, 950269, 939283 NZMS 262-7 893232, 892239

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

Co-channel: 21 dB $\mu$ V/m. Adjacent channel (+/- 100kHz): 31 dB $\mu$ V/m. Adjacent channel (+/- 200kHz): 58 dB $\mu$ V/m.

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

# Note

			:

LOT 188AHH

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: SUGARLOAF RES Map: NZMS1/S084 Grid Reference: 015473

Altitude: 494 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 96.1 MHz
- (c) Maximum power of emissions permitted under this licence: 32.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

```
-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 95.50 MHz

-3 dBW at 95.86 MHz to -3 dBW at 95.86 MHz

7 dBW at 95.86 MHz to 7 dBW at 95.98 MHz
```

(ii) Limits applying to frequencies above the frequency to which this licence relates:

```
7 dBW at 96.22 MHz to 7 dBW at 96.34 MHz

-3 dBW at 96.34 MHz to -3 dBW at 96.70 MHz

-43 dBW at 96.70 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
```

$$y = mx + C$$

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

 $C = \text{the value of } y \text{ where } x = 0 \text{ (the } y \text{ intercept)}$ 

- (f) Class of emissions permitted under this licence: 256KF8EHF
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.i.r.p. (in dBW) per sector (in degrees
   relative to True North)]

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 121 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

# Map Grid References

NZMS 262-13 381660, 382709, 399742, 444768, 478768

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

```
Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
```

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note



LOT 189AHI

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: SUGARLOAF RES
Map: NZMS1/S084
Grid Reference: 015473

Altitude: 494 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 97.7 MHz
- (c) Maximum power of emissions permitted under this licence: 32.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

```
-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 97.10 MHz

-3 dBW at 97.10 MHz to -3 dBW at 97.46 MHz

7 dBW at 97.46 MHz to 7 dBW at 97.58 MHz
```

(ii) Limits applying to frequencies above the frequency to which this licence relates:

```
7 dBW at 97.82 MHz to 7 dBW at 97.94 MHz

-3 dBW at 97.94 MHz to -3 dBW at 98.30 MHz

-43 dBW at 98.30 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
```

$$y = mx + C$$

where - y = dBW, x = MHz,  $m = \underline{dy}$ ,  $\underline{dx}$ C = the value of y where x = 0 (the y intercept)

(f) Class of emissions permitted under this licence:

#### 256KF8EHF

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

32.0	dBW	$338^{\circ} - TN - 47^{\circ}$
26.0	dBW	47 <sup>0</sup> - 130 <sup>0</sup>
13.0	dBW	130 <sup>0</sup>
26.0	dBW	130° - 212°
32.0	dBW	212 <sup>0</sup> - 282 <sup>0</sup>
25.0	dBW	282° - 338°

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 121 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-13 381660, 382709, 399742, 444768, 478768

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

```
Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
```

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

•

LOT 190AIJ

- Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: SUGARLOAF RES Map: NZMS1/S084 O15473

Altitude: 494 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 99.3 MHz
- (c) Maximum power of emissions permitted under this licence: 32.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

```
-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 98.70 MHz

-3 dBW at 98.70 MHz to -3 dBW at 99.06 MHz

7 dBW at 99.06 MHz to 7 dBW at 99.18 MHz
```

(ii) Limits applying to frequencies above the frequency to which this licence relates:

```
7 dBW at 99.42 MHz to 7 dBW at 99.54 MHz

-3 dBW at 99.54 MHz to -3 dBW at 99.90 MHz

-43 dBW at 99.90 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
```

$$y = mx + C$$

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

(f) Class of emissions permitted under this licence:

#### **256KF8EHF**

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

32.0	dBW	$338^{\circ} - TN - 47^{\circ}$
26.0	dBW	47 <sup>0</sup> - 130 <sup>0</sup>
13.0	dBW	130°
26.0	dBW	$130^{\circ} - 212^{\circ}$
32.0	dBW	212° - 282°
25.0	dBW	282 <sup>0</sup> - 338 <sup>0</sup>

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 121 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

# Map Grid References

NZMS 262-13 381660, 382709, 399742, 444768, 478768

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

```
Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
```

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

### Note



LOT 191AIA

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: SOUTHSHORE NZMS1/S084 Grid Reference: 093552

Altitude: 1 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 89.2 MHz
- (c) Maximum power of emissions permitted under this licence: 29.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

```
-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 88.60 MHz

-6 dBW at 88.60 MHz to -6 dBW at 88.96 MHz

4 dBW at 88.96 MHz to 4 dBW at 89.08 MHz
```

(ii) Limits applying to frequencies above the frequency to which this licence relates:

```
4 dBW at 89.32 MHz to 4 dBW at 89.44 MHz

-6 dBW at 89.44 MHz to -6 dBW at 89.80 MHz

-43 dBW at 89.80 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
```

$$y = mx + C$$

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

- (f) Class of emissions permitted under this licence: 256KF8EHF
- (g) Horizontal radiation pattern of transmitter:
   [maximum e.i.r.p. (in dBW) per sector (in degrees relative to True North)]

29.0 dBW 150° - 240° 23.0 dBW 240° - TN - 5° 9.0 dBW 5° 23.0 dBW 5° - 150°

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 10 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-13 424713, 449742, 489779

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

Co-channel: 21 dB $\mu$ V/m. Adjacent channel (+/- 100kHz): 31 dB $\mu$ V/m. Adjacent channel (+/- 200kHz): 58 dB $\mu$ V/m.

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 192AIB

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: SOUTHSHORE Map: NZMS1/S084 Grid Reference: 093552

Altitude: 1 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 95.3 MHz
- (c) Maximum power of emissions permitted under this licence: 29.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

```
-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz

-43 dBW at 88.40 MHz to -43 dBW at 94.70 MHz

-6 dBW at 94.70 MHz to -6 dBW at 95.06 MHz

4 dBW at 95.06 MHz to 4 dBW at 95.18 MHz
```

(ii) Limits applying to frequencies above the frequency to which this licence relates:

```
4 dBW at 95.42 MHz to 4 dBW at 95.54 MHz

-6 dBW at 95.54 MHz to -6 dBW at 95.90 MHz

-43 dBW at 95.90 MHz to -43 dBW at 100.60 MHz

-50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz
```

$$y = mx + C$$

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

(f) Class of emissions permitted under this licence: 256KF8EHF

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

29.0 dBW 150° - 240° 23.0 dBW 240° - TN - 5° 9.0 dBW 5° 23.0 dBW 5° - 150°

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 10 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-13 424713, 449742, 489779

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

Co-channel: 21 dB $\mu$ V/m. Adjacent channel (+/- 100kHz): 31 dB $\mu$ V/m. Adjacent channel (+/- 200kHz): 58 dB $\mu$ V/m.

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of (66 Pt + Pa) dB $\mu$ V/m, where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

#### Note

LOT 193AIC

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: PENINSULA HILL Map: NZMS1/S132 Grid Reference: 608692

Altitude: 564 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 92.8 MHz
- (c) Maximum power of emissions permitted under this licence: 33.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz -43 dBW at 88.40 MHz to -43 dBW at 92.20 MHz -2 dBW at 92.20 MHz to -2 dBW at 92.56 MHz 8 dBW at 92.56 MHz to 8 dBW at 92.68 MHz

(ii) Limits applying to frequencies above the frequency to which this licence relates:

8 dBW at 92.92 MHz to 8 dBW at 93.04 MHz -2 dBW at 93.04 MHz to -2 dBW at 93.40 MHz -43 dBW at 93.40 MHz to -43 dBW at 100.60 MHz -50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz

$$y = mx + C$$
  
where -  $y = dBW$ ,  $x = MHz$ ,  $m = \frac{dy}{dx}$ ,  
 $C = the value of y where  $x = 0$  (the y intercept)]$ 

(f) Class of emissions permitted under this licence:

**256KF8EHF** 

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

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 13 metres above ground level
- Other particulars.
  - (a) Receive coverage locations:

Map Grid References

NZMS 262-14 169566, 174568

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

```
Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
```

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

## Note

LOT 194AID

- 1. Particulars of transmitter to which this licence relates.
  - (a) Location of transmitter:

Site Name: PENINSULA HILL Map: NZMS1/S132 Grid Reference: 608692

Altitude: 564 m Above Sea Level

- (b) Frequency on which transmissions are permitted by this licence: 96.8 MHz
- (c) Maximum power of emissions permitted under this licence: 33.0 dBW (e.i.r.p.)
- (d) Maximum bandwidth of emissions permitted under this licence:
  - Not more than 120 kHz above the frequency to which this licence relates.
  - Not more than 120 kHz below the frequency to which this licence relates.
- (e) 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 to which this licence relates:

-50 dBW at 88.00 MHz to -43 dBW at 88.40 MHz -43 dBW at 88.40 MHz to -43 dBW at 96.20 MHz -2 dBW at 96.20 MHz to -2 dBW at 96.56 MHz 8 dBW at 96.56 MHz to 8 dBW at 96.68 MHz

(ii) Limits applying to frequencies above the frequency to which this licence relates:

8 dBW at 96.92 MHz to 8 dBW at 97.04 MHz -2 dBW at 97.04 MHz to -2 dBW at 97.40 MHz -43 dBW at 97.40 MHz to -43 dBW at 100.60 MHz -50 dBW at 100.60 MHz to -50 dBW at 101.00 MHz

$$y = mx + C$$

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

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

(f) Class of emissions permitted under this licence:

# 256KF8EHF

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

33.0 dBW	210 <sup>0</sup> -288 <sup>0</sup>
32.0 dBW	288° - TN - 6°
33.0 dBW	6 <sup>0</sup> - 86 <sup>0</sup> _
29.0 dBW	86 <sup>0</sup> - 150 <sup>0</sup>
21.0 dBW	150 <sup>0</sup>
29.0 dBW	150 <sup>0</sup> - 210 <sup>0</sup>

- (h) Antenna polarisation of transmitter: SLANT
- (i) Antenna height: 13 metres above ground level
- 2. Other particulars.
  - (a) Receive coverage locations:

# Map Grid References

NZMS 262-14 169566, 174568

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

```
Co-channel: 21 dB\muV/m. Adjacent channel (+/- 100kHz): 31 dB\muV/m. Adjacent channel (+/- 200kHz): 58 dB\muV/m.
```

- (c) Commencement date of licence: 1 November 1990.
- (d) Expiry date of licence: 31 October 2010.

(e) 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.

Upon establishment of the service, a verification of the transmitter's technical parameters shall be made with the following information supplied to the manager:

- (i) A map showing the service coverage area with a median field strength contour (measured at a height of 10 metres) of  $(66 Pt + Pa) dB\mu V/m$ , where Pt is the maximum power in e.i.r.p. specified for the direction under measurement in clause 1 (g) and Pa is the actual power in e.i.r.p. in the same direction at the time of measurement.
- (ii) A polar plot of the horizontal radiation pattern of the installed transmitter obtained by field strength measurements.

## Note

Before this licence may be registered, the Registrar must receive certificates from an approved radio engineer in accordance with sections 25(2) and 53(2) of the Radiocommunications Act 1989.

Dated at WELLINGTON this 24th day of August 1990

M J BELGRAVE, Secretary of Commerce

### EXPLANATORY NOTE

This note is not part of the Notice, but is intended to indicate its general effect.

- The Notice amends the Call For Tenders issued by the Secretary of Commerce on Thursday 26 July 1990.
- The closing date (the date by which tenders must be received at the Reserve Bank of New Zealand) is extended from 12 noon on Monday 3 September to 12 noon on Monday, 17 September 1990.
- A number of lots are withdrawn and new lots added, following amendment to certain technical parameters.

Lot 027JBG is withdrawn. Lot 180AHJ is added to the tender. Lot 180AHJ differs from Lot 027JBG only in that Lot 180AHJ specifies the maximum power of emissions permitted under the licence (clause 1(c)) as 36.0 dBW (e.m.r.p).

Lot 035JCE is withdrawn. Lot 181AHA is added to the tender. Lot 181AHA differs from Lot 035JCE only in that (a) Lot 181AHA specifies the maximum power of emissions permitted under the licence (clause 1(c)) as 36.0 dBW (e.m.r.p); and

Lot 181AHA specifies the horizontal radiation pattern of the transmitter (clause 1(g)) as:

36.0 dBW TN - 287 27.0 dBW 287

36.0 dBW 287° - TN

Lot 042JDB is withdrawn. Lot 182AHB is added to the tender. Lot 182AHB differs from Lot 042JDB only in that Lot 182AHB specifies the maximum power of emissions permitted under the licence (clause 1(c)) as 43.0 dBW (e.m.r.p.).

Lot 044JDD is withdrawn. Lot 183AHC is added to the tender. Lot 183AHC differs from Lot 044JDD only in that Lot 183AHC specifies the horizontal radiation pattern of the transmitter (clause 1(q)) as:

30.0 dBW TN - 295° 27.5 dBW 295°

30.0 dBW 295° - TN

Lot 079JGI is withdrawn. Lot 184AHD is added to the tender. Lot 184AHD differs from Lot 079JGI only in that Lot 184AHD specifies the map on which the transmitter location is shown (clause 1(a)) as NZMS1/N077.

Lot 080JHJ is withdrawn. Lot 185AHE is added to the tender. Lot 185AHE differs from Lot 080JHJ only in that Lot 185AHE specifies the map on which the transmitter location is shown (clause 1(a)) as NZMS1/N077.

Lot 089JHI is withdrawn. Lot 186AHF is added to the tender. Lot 186AHF differs from Lot 089JHI only in that Lot 186AHF specifies the receive coverage locations (clauses 2(a)) as:

Map NZMS 262-5 940271, 950269, 939283 NZMS 262-7 893232, 892239

Lot 090JIJ is withdrawn. Lot 187AHG is added to the tender. Lot 187AHG differs from Lot 090JIJ only in that Lot 187AHG specifies the receive coverage locations (clause 2(a)) as:

MapGrid ReferenceNZMS 262-5940271, 950269, 939283NZMS 262-7893232, 892239

Lot 141ADA is withdrawn. Lot 188AHH is added to the tender. Lot 188AHH differs from Lot 141ADA only in that lot 188AHH specifies the horizontal radiation pattern (clause 1(g)) for the sector 282°-338° as 25.0 dBW.

Lot 142ADB is withdrawn. Lot 189AHI is added to the tender. Lot 189AHI differs from Lot 142ADB only in that Lot 189AHI specifies the horizontal radiation pattern (clause 1(g)) for the sector 282°-338° as 25.0 dBW.

Lot 143ADC is withdrawn. Lot 190AIJ is added to the tender. Lot 190AIJ differs from Lot 143ADC only in that Lot 190AIJ specifies the horizontal radiation pattern shown (clause 1(g)) for the sector 282°-338° as 25.0 dBW.

Lot 144ADD is withdrawn. Lot 191AIA is added to the tender. Lot 191AIA differs from Lot 144ADD only in that Lot 191AIA specifies the map on which the transmitter is shown (clause 1(a)) as NZMS1/S084.

Lot 145ADE is withdrawn. Lot 192AIB is added to the tender. Lot 192AIB differs from Lot 145ADE only in that Lot 192AIB specifies the map on which the transmitter is shown (clause 1(a)) as NZMS1/S084.

Lot 167AFG is withdrawn. Lot 193AIC is added to the tender. Lot 193AIC differs from Lot 167AFG only in that Lot 193AIC specifies the horizontal radiation pattern of the transmitter (clause 1(g)):

- a) For sector 210°-288° as 33.0 dBW
- b) For sector 6°-86° as 33.0 dBW

Lot 168AFH is withdrawn. Lot 194AID is added to the tender. Lot 194AID differs from lot 168AFH only in that Lot 194AID specifies the horizontal radiation pattern of the transmitter (clause 1(q)):

- For sector 210°-288° as 33.0 dBW For sector 6°-86° as 33.0 dBW a)
- b)
- Tenderers who have already lodged a bid form under the Call For Tenders that includes withdrawn lots should consider withdrawing all of the bids on that bid form and submitting a new bid form that does not include withdrawn lots. Tenderers who wish to withdraw bids should write to the Tender Manager, Ministry of Commerce, Communications Division, PO Box 1473, Wellington, as soon as possible.
- Cheques included with bids that are withdrawn will be returned as soon as practicable after 17 September 1990.
- Every replacement bid must comply in all respects with the Call For Tenders, including the requirement for a deposit.

