Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.2.1 **Standard**	**2.2 Ground and flight testing** 2.2.1 Radio navigation aids of the types covered by the specifications in Chapter 3 and available for use by aircraft engaged in international air navigation shall be the subject of periodic ground and flight tests. *Note.— Guidance on the ground and flight testing of ICAO standard facilities, including the periodicity of the testing, is contained in Attachment C and in the* Manual on Testing of Radio Navigation Aids *(Doc 8071).*	CAR 171.59.	Less protective or partially implemented or not implemented	Some NDBs are not subject to priodic flight testing.	Stand-alone NDBs are flight tested only as required for special or post-accident-incident inspection.

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.1.3.3.1 **Standard**	3.1.3.3 *Coverage* *Note.— Guidance material on localizer coverage is given in Attachment C, 2.1.10 and Figures C-7A, C-7B, C-8A and C-8B.* 3.1.3.3.1 The localizer shall provide signals sufficient to allow satisfactory operation of a typical aircraft installation within the localizer and glide path coverage sectors. The localizer coverage sector shall extend from the centre of the localizer antenna system to distances of: 46.3 km (25 NM) within plus or minus 10 degrees from the front course line; 31.5 km (17 NM) between 10 degrees and 35 degrees from the front course line; 18.5 km (10 NM) outside of plus or minus 35 degrees from the front course line if coverage is provided; except that, where topographical features dictate or operational requirements permit, the limits may be reduced down to 33.3 km (18 NM) within the plus or minus 10-degree sector and 18.5 km (10 NM) within the remainder of the coverage when alternative navigational means provide satisfactory coverage within the intermediate approach area. The localizer signals shall be receivable at the distances specified at and above a height of 600 m (2 000 ft) above the elevation of the threshold, or 300 m (1 000 ft) above the elevation of the highest point within the intermediate and final approach areas, whichever is the higher, except that, where needed to protect ILS performance and if operational requirements permit, the lower limit of coverage at angles beyond 15 degrees from the front course line shall be raised linearly from its height at 15 degrees to as high as 1 350 m (4	CAR Part 171.	Less protective or partially implemented or not implemented	Because of siting problems and terrain limitations some localizers do not meet Category I facility performance criteria for off course clearance.	Note: details of limitations are published in AIPNZ.

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
	500 ft) above the elevation of the threshold at 35 degrees from the front course line. Such signals shall be receivable, to the distances specified, up to a surface extending outward from the localizer antenna and inclined at 7 degrees above the horizontal. *Note.— Where intervening obstacles penetrate the lower surface, it is intended that guidance need not be provided at less than line-of-sight heights .*				

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.1.4.1 **Standard**	3.1.4 Interference immunity performance for ILS localizer receiving systems 3.1.4.1 The ILS localizer receiving system shall provide adequate immunity to interference from two-signal, third-order intermodulation products caused by VHF FM broadcast signals having levels in accordance with the following: $2N1 + N2 + 72 \leq 0$ for VHF FM sound broadcasting signals in the range 107.7 – 108.0 MHz and for VHF FM sound broadcasting signals below 107.7 MHz, where the frequencies of the two VHF FM sound broadcasting signals produce, within the receiver, a two-signal, third-order intermodulation product on the desired ILS localizer frequency. *N*1 and *N*2 are the levels (dBm) of the two VHF FM sound broadcasting signals at the ILS localizer receiver input. Neither level shall exceed the desensitization criteria set forth in 3.1.4.2. $\Delta f = 108.1 - f1$, where f1 is the frequency of N1, the VHF FM sound broadcasting signal closer to 108.1 MHz.	CAR Part 91 Appendix A, A.9.	Less protective or partially implemented or not implemented	Not a mandatory requirement for ILS localizer receiving systems fitted to NZ registered aircraft.	Rules project currently addressing this; estimated applicablity early 2011.

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.1.4.2 **Standard**	3.1.4.2 The ILS localizer receiving system shall not be desensitized in the presence of VHF FM broadcast signals having levels in accordance with the following table: *Note 1.— The relationship is linear between adjacent points designated by the above frequencies.* *Note 2.— Guidance material on immunity criteria to be used for the performance quoted in 3.1.4.1 and 3.1.4.2 is contained in Attachment C, 2.2.2.*	CAR Part 91 Appendix A, A.9.	Less protective or partially implemented or not implemented	Not a mandatory requirement for ILS localizer receiving systems fitted to NZ registered aircraft.	Rules project currently addressing this; estimated applicablity early 2011.
Chapter 3 Reference 3.1.5.3.1 **Standard**	3.1.5.3 *Coverage* 3.1.5.3.1 The glide path equipment shall provide signals sufficient to allow satisfactory operation of a typical aircraft installation in sectors of 8 degrees in azimuth on each side of the centre line of the ILS glide path, to a distance of at least 18.5 km (10 NM) up to 1.75 θ and down to 0.45 θ above the horizontal or to such lower angle, down to 0.30 θ, as required to safeguard the promulgated glide path intercept procedure.	CAR Part 171.	Less protective or partially implemented or not implemented	Because of siting problems and terrain limitations some glide paths do not meet Category I facility performance criteria up to 8 degrees in azimuth on each side of the centre line.	Note: details of limitations are published in AIPNZ.

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.3.8.1 **Standard**	3.3.8 Interference immunity performance for VOR receiving systems 3.3.8.1 The VOR receiving system shall provide adequate immunity to interference from two signal, third-order intermodulation products caused by VHF FM broadcast signals having levels in accordance with the following: $2N1 + N2 + 72 \leq 0$ for VHF FM sound broadcasting signals in the range 107.7 – 108.0 MHz and for VHF FM sound broadcasting signals below 107.7 MHz, where the frequencies of the two VHF FM sound broadcasting signals produce, within the receiver, a two-signal, third-order intermodulation product on the desired VOR frequency. N1 and N2 are the levels (dBm) of the two VHF FM sound broadcasting signals at the VOR receiver input. Neither level shall exceed the desensitization criteria set forth in 3.3.8.2. $\Delta f = 108.1 - f1$, where f1 is the frequency of N1, the VHF FM sound broadcasting signal closer to 108.1 MHz.	CAR Part 171.	Less protective or partially implemented or not implemented	Not a mandatory requirement for VOR receiving systems fitted to NZ registered aircraft.	Rules project currently addressing this; estimated applicablity early 2011.

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.3.8.2 **Standard**	3.3.8.2 The VOR receiving system shall not be desensitized in the presence of VHF FM broadcast signals having levels in accordance with the following table: *Note 1.— The relationship is linear between adjacent points designated by the above frequencies.* *Note 2.— Guidance material on immunity criteria to be used for the performance quoted in 3.3.8.1 and 3.3.8.2 is contained in Attachment C, 3.6.5.*	CAR Part 91, Appendix A, A.9.	Less protective or partially implemented or not implemented	Not a mandatory requirement for VOR receiving systems fitted to NZ registered aircraft.	Rules project currently addressing this; estimated applicablity early 2011.
Chapter 3 Reference 3.4.8.2 **Recommendation**	3.4.8.2 **Recommendation.—** *When an NDB is operated from a power source having a frequency which is close to airborne ADF equipment switching frequencies, and where the design of the NDB is such that the power supply frequency is likely to appear as a modulation product on the emission, the means of monitoring should be capable of detecting such power supply modulation on the carrier in excess of 5 per cent.*	CAR Part 171.	More Exacting or Exceeds	Mandatory Standard	
Chapter 3 Reference 3.4.8.4 **Recommendation**	3.4.8.4 **Recommendation.—** *During the hours of service of an NDB other than a locator, the means of monitoring should provide for a continuous check on the functioning of the NDB as prescribed in 3.4.8.1 a), b) and c).* *Note.— Guidance material on the testing of NDBs is contained in 6.6 of Attachment C.*	CAR Part 171.	More Exacting or Exceeds	Mandatory Standard	

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.5.3.6.3 **Standard**	3.5.3.6.3 The characteristics of the "independent" identification signal shall be as follows: a) the identity signal shall consist of the transmission of the beacon code in the form of dots and dashes (International Morse Code) of identity pulses at least once every 40 seconds, at a rate of at least 6 words per minute; and b) the identification code characteristic and letter rate for the DME transponder shall conform to the following to ensure that the maximum total key down time does not exceed 5 seconds per identification code group. The dots shall be a time duration of 0.1 second to 0.160 second. The dashes shall be typically 3 times the duration of the dots. The duration between dots and/or dashes shall be equal to that of one dot plus or minus 10 per cent. The time duration between letters or numerals shall not be less than three dots. The total period for transmission of an identification code group shall not exceed 10 seconds. *Note.— The tone identification signal is transmitted at a repetition rate of 1 350 pps. This frequency may be used directly in the airborne equipment as an aural output for the pilot, or other frequencies may be generated at the option of the interrogator designer (see 3.5.3.6.2).*	CAR 171.201(2).	More Exacting or Exceeds	The beacon identity code signal must be transmitted at least once but not more than twice every 40 seconds with code groups equally spaced.	

Annex Reference	AERONAUTICAL TELECOMMUNICATIONS Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.5.4.7.2.1 **Standard**	3.5.4.7.2 *DME/N monitoring action* 3.5.4.7.2.1 In the event that any of the conditions specified in 3.5.4.7.2.2 occur, the monitor shall cause the following action to take place: a) a suitable indication shall be given at a control point; b) the operating transponder shall be automatically switched off; and c) the standby transponder, if provided, shall be automatically placed in operation.	CAR Part 171.	Less protective or partially implemented or not implemented	Certain remotely-sited DME are not equipped with standby transponders.	
Chapter 3 Reference 3.5.4.7.2.3 **Recommendation**	3.5.4.7.2.3 **Recommendation.—** *The monitor should cause the actions specified in 3.5.4.7.2.1 if the spacing between the first and second pulse of the transponder pulse pair differs from the nominal value specified in the table following 3.5.4.4.1 by 1 microsecond or more.*	CAR Part 171.	More Exacting or Exceeds	Mandatory Standard	

- END -