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What are the mandatory standards applying to radio receivers?

Radio receivers must meet the requirements of the [Radiocommunications \(EMC Standards\) Notice \[32 kB PDF\]](#), in particular, local oscillator radiation limits must be met.

What reference bandwidth applies to the measurement of spurious emissions?

If a radio licence or a spectrum licence does not specify an unwanted emissions reference bandwidth (either directly, or indirectly by way of a standard referenced in such a licence) then, by virtue of the First Schedule to the [Radiocommunications Act 1989](#), the provisions of the [International Radio Regulations](#) (IRR) apply.

Article 3 (Technical Characteristics of Stations) of the IRR addresses maximum permitted power levels for unwanted emissions in both the out-of-band domain, and the spurious domain. Annex 1 (WRC-03) to Article 3, and ITU-R SM.1539, provides guidance on determining the frequency boundary between the two domains.

Specific guidance in regard to out-of-band emissions is also given by Recommendation ITU-R SM.328, 1540 and 1541. Specific guidance in regard to spurious emissions is also given by IRR Appendix 3, and Recommendation ITU-R SM.329. Except as may be provided to the contrary by the IRR and ITU-R, the following reference bandwidths specified in Appendix 3 apply to the measurement of spurious emissions:

1 kHz between 9 kHz and 150 kHz

10 kHz between 150 kHz and 30 MHz

100 kHz between 30 MHz and 1 GHz

1000 kHz (1 MHz) above 1 GHz

Radio equipment (RE) standards often contain alpha-numeric "emission designators". What do these mean?

The International Radio Regulations (IRR) classify radio transmission modulation mode, and bandwidth, in a standardised format.

What are the requirements for overhead powerline carrier systems (PLC's)?

Overhead powerlines are level 1 'interfering equipment', and any telecommunications on low-voltage lines, and associated terminal equipment, must comply with EN50065-1 or IEC 61000-3-8 as prescribed in the [Radiocommunications \(EMC Standards\) Notice \[32 kB PDF\]](#).

Presently, however, there are no specific standards applying to telecommunications over high-voltage lines, and associated PLC terminal equipment. The Ministry will monitor the development of international standards for both. When PLC standards are developed it is likely that the

equipment will be required to meet level of conformity 2 requirements.

In the meantime, under regulation 34 of the [Radiocommunications Regulations 2001](#), the Ministry can require PLC high-voltage network operators, and persons installing, supplying or using PLC terminal equipment, to take all reasonable steps necessary to minimise harmful interference to radiocommunications services.

Will New Zealand retract AS/NZS 3548 CISPR 22:2002, (mandatory on January 21, 2004), due to unresolved technical issues that are delaying implementing CISPR 22:2002 in Europe?

New Zealand recognises a number of international standards as being direct equivalents. In this case, EN 55022 is an acceptable alternative standard to CISPR 22. Because EN55022 has not been modified, however, a declaration of conformity to this standard will avoid the current uncertainty relating to CISPR 22:2002.

What is 'Standard Equivalence'?

The term has two meanings. First, standards organisations in a number of administration simply "re-badge" existing standards, often international standards. A good example is IEC-CISPR 22 which is re-badged as EN55022 and AS/NZS CISPR 22 (AN/NZS 3548).

Second, when making a Declaration of Conformity, the supplier is declaring that a product meets an applicable standard. This does not necessarily mean that the standard the product was tested to is the standard cited in a New Zealand Gazette Notice. For example, a product tested to Land Mobile standard AS 4295 may, provided power and frequency adjustments are made, otherwise meet the requirements of EN 300220 for Short Range Devices. This is a judgement call, however, that a supplier would be wise to seek professional advice on before signing a declaration of conformity.