



Telecommunications Technical Standard (Surge Protective Devices for Telecommunication Applications – AS/NZS 4117) 2015

Telecommunications Act 1997

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Technical Standard under subsection 376(1) of the *Telecommunications Act 1997*.

Dated 17th February 2015

Chris Chapman
[signed]
Member

Richard Bean
[signed]
Member /
~~General Manager~~

Australian Communications and Media Authority

Part 1 – Preliminary

1 Name of Technical Standard

- (1) This Technical Standard is the *Telecommunications Technical Standard (Surge Protective Devices for Telecommunication Applications – AS/NZS 4117) 2015*.
- (2) This Technical Standard may also be cited as AS/NZS 4117-2015.

2 Commencement

This Technical Standard commences on the day after it is registered.

Note All legislative instruments must be registered on the Federal Register of Legislative Instruments required to be maintained under the *Legislative Instruments Act 2003*.

3 Revocation

The *Telecommunications Technical Standard (Surge Protective Devices for Telecommunication Applications – AS/NZS 4117:1999) 2003* [F2005B00179] is revoked.

4 Objects of Technical Standard

The objects of this Technical Standard are to specify requirements that are necessary or convenient for:

- (a) protecting the integrity of a telecommunications network or a facility;
- (b) protecting the health or safety of persons who:
 - (i) operate;
 - (ii) work on;
 - (iii) use services supplied by means of; or
 - (iv) are otherwise reasonably likely to be affected by the operation of;
a telecommunications network or a facility;
- (c) ensuring that customer equipment can be used to give access to an emergency call service; and
- (d) ensuring, for the purposes of the supply of a standard telephone service, the interoperability of customer equipment with a telecommunications network to which the equipment is, or is proposed to be, connected.

Part 2 – Interpretation

5 Definitions

In this Technical Standard:

ACMA transition period has the meaning given by section 6.

Act means the *Telecommunications Act 1997*.

amendment instrument means an instrument that amends the AS/NZS Standard.

AS/NZS Standard means the Australian/New Zealand Standard AS/NZS 4117:1999 – *Surge protective devices for telecommunication applications* published by Standards Australia in November 1999.

AS/NZS transition period, for an amendment or the replacement of the AS/NZS Standard, has the meaning given by section 7.

Note The AS/NZS Standard can be found through Standards Australia’s website at <http://www.standards.org.au>.

included in a class of items has the meaning given by section 8.

item means a thing that is customer equipment to which this Technical Standard applies, as provided by section 10, and includes a modified item.

manufacturer, in relation to an item, includes (but is not limited to) a person who modifies the item.

modified item means an item that has been modified, by or on behalf of the manufacturer or importer of the item, after the item was manufactured or imported and, for the avoidance of doubt, is the item as modified.

original item has the meaning given by subsection 8(1).

original modified item has the meaning given by subsection 8(2).

protective earth system means the earthing system, installed in accordance with the requirements of the AS/NZS Standard.

replacement standard means a standard that replaces the AS/NZS Standard.

surge protective device means an item of customer equipment that is a multi-terminal device consisting of single or multiple components which, within its operating range, limits the voltage present on its output terminals when a preset voltage is exceeded on its input terminals.

Note In accordance with paragraph 13(1)(b) of the *Legislative Instruments Act 2003*, other expressions in this Technical Standard have the same meaning as in the Act, including:

- customer equipment (see sections 7 and 21)
- emergency call service (see section 7)
- facility (see section 7 and subsection 374(2))
- import (see section 7)
- manufacturer or importer of customer equipment or customer cabling (see section 406A)

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- standard telephone service (see section 7)
 - telecommunications network (see section 7 and subsection 374(1)).

6 ACMA transition period

In this Technical Standard, if the AS/NZS Standard is amended or replaced, there is an *ACMA transition period*, being:

- (a) in a case where there is an AS/NZS transition period for the amendment or replacement of the AS/NZS Standard – a period that is the same as the AS/NZS transition period; or
- (b) in any other case – a period of two years commencing on the day the AS/NZS Standard is amended or replaced.

Note 1 See subsections 12(3) and 13(4) in relation to an ACMA transition period.

Note 2 If the AS/NZS Standard is amended or replaced during an ACMA transition period, there is another ACMA transition period which overlaps with the first-mentioned transition period. See subsections 12(4) and 13(5) in relation to overlapping ACMA transition periods.

7 AS/NZS transition period

- (1) If:
 - (a) an amendment instrument or a replacement standard determines arrangements to deal with any issues of a transitional nature that may arise as a result of the amendment or replacement of the AS/NZS Standard;
 - (b) the arrangements are for a specified period commencing on the day the AS/NZS Standard is amended or replaced; and
 - (c) the arrangements have the effect of allowing a relevant item to comply with:
 - (i) the AS/NZS Standard as in force immediately before the commencement of the specified period; or
 - (ii) the AS/NZS Standard, or the replacement standard, as in force at the commencement of the specified period;

the specified period is an *AS/NZS transition period* for the amendment or replacement of the AS/NZS Standard, for the purposes of section 6.

- (2) For the purposes of subsection (1), each of the following is a *relevant item*:
 - (a) an item that is manufactured in Australia or imported during the specified period;
 - (b) a modified item that is made in Australia or imported during the specified period.

8 Class of items

- (1) In this Technical Standard:

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- (a) an item (other than a modified item) is ***included in a class of items*** if the item:
 - (i) is identical to each other item of the class (irrespective of when the items were manufactured or imported); and
 - (ii) has the same manufacturer or importer as each other item; and
 - (b) the ***original item***, in relation to the class, is the item of the class that was the first to be manufactured in Australia or imported.
- (2) In this Technical Standard:
- (a) a modified item is ***included in a class of items*** if:
 - (i) the modification which resulted in that item is identical to the modification which resulted in each other item of the class (irrespective of when the items were so modified);
 - (ii) the modified item is, in all other respects, identical to each other item (irrespective of when the items were manufactured or imported); and
 - (iii) the modified item has the same manufacturer or importer as each other item; and
 - (b) the ***original modified item***, in relation to the class, is the item of the class that was the first to be so modified in Australia or imported.

9 Time a modified item is made

In this Technical Standard, a reference to ***the time a modified item is made*** is a reference to the time of making of the modification which results in that item.

Part 3 – Application and requirements

10 Application of this Technical Standard

This Technical Standard applies to an individual stand-alone surge protective device that is designed or intended to be:

- (a) used to suppress the effect of transient overvoltage, including overvoltage indirectly caused by lightning; and
- (b) connected:
 - (i) between telecommunication conductors; or
 - (ii) between a telecommunication conductor and the protective earth system.

11 Requirements

- (1) An item (other than a modified item) must meet the requirements of subsection 12(1), (2), (3) or (4).
- (2) A modified item must meet the requirements of subsection 13(1), (2), (3), (4) or (5).

12 Standard for items (other than modified items)

- (1) If an item complies with the AS/NZS Standard as in force at the time the item is manufactured in Australia or imported, the item meets the requirements of this subsection.
- (2) If an item:
 - (a) is included in a class of items; and
 - (b) complies with the AS/NZS Standard as in force at the time the original item of the class was manufactured in Australia or imported;the first-mentioned item meets the requirements of this subsection.
- (3) If an item:
 - (a) is manufactured in Australia or imported during an ACMA transition period; and
 - (b) complies with:
 - (i) the AS/NZS Standard as in force immediately before the commencement of the transition period; or
 - (ii) the AS/NZS Standard, or a replacement standard, as in force at the commencement of the transition period;the item meets the requirements of this subsection.
- (4) If:
 - (a) an ACMA transition period overlaps with another ACMA transition period;
 - (b) an item is manufactured in Australia or imported during the period of overlap; and
 - (c) the item complies with:
 - (i) the AS/NZS Standard as in force immediately before the commencement of the earliest of those transition periods; or
 - (ii) the AS/NZS Standard, or a replacement standard, as in force at the commencement of any one of those transition periods;the item meets the requirements of this subsection.

13 Standard for modified items

- (1) If a modified item complies with the AS/NZS Standard as in force at the time that the modified item is made in Australia or imported, the modified item meets the requirements of this subsection.
 - (2) If a modified item:
 - (a) is included in a class of items; and
 - (b) complies with the AS/NZS Standard as in force at the time the original modified item of the class was made in Australia or imported;the first-mentioned item meets the requirements of this subsection.
 - (3) If:
 - (a) a modified item would have been included in a class of items but for the making of the modification which resulted in that item; and
 - (b) the modification is not material and, in particular, the modified item complies with the AS/NZS Standard as in force at the time the original item of the class was made in Australia or imported;the first-mentioned item meets the requirements of this subsection.
- Note* The modification is **material** if the modification would or could reasonably be expected to affect whether the modified item complies with the AS/NZS Standard as in force at the time the original item of the class was made in Australia or imported.
- (4) If a modified item:
 - (a) is made in Australia or imported during an ACMA transition period; and
 - (b) complies with:
 - (i) the AS/NZS Standard as in force immediately before the commencement of the transition period; or
 - (ii) the AS/NZS Standard, or a replacement standard, as in force at the commencement of the transition period;the modified item meets the requirements of this subsection.
 - (5) If:
 - (a) an ACMA transition period overlaps with another ACMA transition period;
 - (b) a modified item is made in Australia or imported during the period of overlap; and
 - (c) the modified item complies with:
 - (i) the AS/NZS Standard as in force immediately before the commencement of the earliest of those transition periods; or

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- (ii) the AS/NZS Standard, or a replacement standard, as in force at the commencement of any one of those transition periods;

the modified item meets the requirements of this subsection.

Part 4 – Savings and transitional arrangements

14 Items manufactured, imported or modified before commencement

- (1) If an item (other than a modified item):
 - (a) was manufactured in Australia or imported before the commencement of this Technical Standard; and
 - (b) complies with the *Telecommunications Technical Standard (Surge Protective Devices for Telecommunication Applications – AS/NZS 4117:1999) 2003* as in force immediately before the commencement of this Technical Standard;

the item is taken to comply with this Technical Standard.

- (2) If a modified item:
 - (a) was made in Australia or imported before the commencement of this Technical Standard; and
 - (b) complies with the *Telecommunications Technical Standard (Surge Protective Devices for Telecommunication Applications – AS/NZS 4117:1999) 2003* as in force immediately before the commencement of this Technical Standard;

the modified item is taken to comply with this Technical Standard.