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AUSTRALIAN COMMUNICATIONS INDUSTRY FORUM

ACIF Working Committee Report

The superseding of ACA TS 001-1997 by AS/NZS 60950:2000

ACIF Working Committee Report ACIF G610:2003 ***The superseding of ACA TS 001-1997 by AS/NZS 60950:2000***

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FOREWORD

This Report was prepared by the ACIF Working Committee CECRP/WC11 on *Safety of Customer Equipment*. It is the output of a review of the Standards and regulatory arrangements for customer equipment safety in Australia. The Report has been prepared to provide the background to customer equipment safety standardisation, a summary of the review process, the impact on consumers and industry and the implementation timetable.

This Report is the result of a consensus among representatives on the ACIF Working Committee for ACA TS 001-1997 *Safety Requirements for Customer Equipment* to be superseded by AS/NZS 60950:2000 *Safety of information technology equipment*.

ACIF G610:2002 was originally published by ACIF as an attachment to a public comment submission, DR CE056, inviting comment on the proposal that ACA TS 001-1997 to be superseded by AS/NZS 60950:2000. It has been revised and republished (this report) containing the final Working Committee's recommendations.

The findings and recommendations contained in this Report are premised upon the Australian deviations to Clause 6.2 in AS/NZS 60950:2000.

Standards Australia Committee TE-001 has the responsibility for AS/NZS 60950 and all inquiries related to that Standard should be directed to that Committee in the first instance.

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This Working Committee was chaired by Merv Sewell. Mike Johns of ACIF provided project management support.

Australian Communications Industry Forum

Working Committee CECRP/WC11
Customer Equipment Safety

Report on the superseding of ACA TS 001-1997 by AS/NZS 60950:2000

1 Introduction

The safety Standard for telecommunications customer equipment, ACA TS 001-1997 *Safety Requirements for Customer Equipment,* has been the subject of a review by the Australian Communications Industry Forum *Customer Equipment and Cable Reference Panel* Working Committee ***CECRP/WC11 : Customer Equipment Safety***.

The review was necessary because the Standard needed revision in a number of areas, including:

(a) the updating of the references to replace out-of-date Standards,

(b) the withdrawal of AS/NZS 3260:1993 in 2003 (superseded by AS/NZS 60950:2000); and

(c) overcoming the confusion surrounding the need to demonstrate compliance against two Australian safety Standards, namely ACA TS 001-1997 and AS/NZS 3260:1993.

The Working Committee has completed its study and found that all of the requirements in ACA TS 001-1997 are now adequately addressed by other national standards. It recommends that the Australian Communications Authority (ACA):

(a) withdraw ACA TS 001-1997 ***Safety of Customer Equipment*** on 1 January 2004;

(b) make a standard under section 376 to replace ACA TS 001-1997 with AS/NZS 60950:2000 ***Safety of information technology equipment***.

(c) establish a new category in Schedule 1 Part 2 Category A of the Telecommunications Labelling Notice (TLN) for 'Discrete stand alone devices providing primary protection (including surge suppression devices – SSDs)'

(d) make a standard under section 376 to associate the new TLN category (c above) with AS/NZS 4117:1999 ***Surge protective devices for telecommunication applications***.

(e) adopt compliance level 3 for both AS/NZS 60950:2000 and AS/NZS 4117:1999 and be enforced from date of gazettal.

ACA representatives have confirmed that the TLN may directly reference other technical Standards and specifications other than ACA and AS/ACIF Standards. Therefore all the applicable customer equipment safety requirements can now be met by direct reference to AS/NZS 60950:2000 and AS/NZS 4117:1999.

Note: Further information on the ACA Compliance and Labelling regime, including the Telecommunication Labelling Notice (TLN) can be found at the ACA website at http://www.aca.gov.au/labelling/telecom/index.htm.

2 Background of the Customer Equipment Safety Standard

In 1990, the newly created Australian telecommunications regulator, AUSTEL, mandated a separate customer equipment safety Standard (AUSTEL TS 001-1990) to overcome apparent shortcomings in AS 3260:1988 *Approval and test specification—Safety of information technology equipment including electrical business equipment* (including Amendment 1). The evolution of customer equipment safety requirements in Australia has been summarised in Table 1.

This was not unexpected since prior to the formation of AUSTEL, Telecom Australia had been responsible for the customer equipment approval process and, even though AS/NZS 3260:1988 (based on its international equivalent, IEC 950:1986) had commenced addressing the implications of combining telecommunications equipment with IT, this work had not been finalised. There were still some unresolved telecommunications issues that were taking time to flow down through the various layers of the standardisation process. The most glaring was the exclusion of line-powered customer equipment, for example telephones, but there were also some national variations to suit Australian surge protection requirements for isolation, and for discrete protective devices connected to the telecommunications network.

The AUSTEL Technical Standard was raised to Issue 2 in 1991, with minor editorial changes to the clauses dealing with discrete protective devices and the use of supplementary line isolation barriers. Further revisions were made to the same clauses in 1993 and the international reference updated to IEC 950:1991.

In December 1996, the next revision of AUSTEL TS001 called up AS/NZS 3260:1993 including its first three amendments and replaced the requirements for surge suppression devices with a reference to AS/NZS 4117:1996 *Surge suppression devices for telecommunications equipment*. AUSTEL TS 001:1996 also introduced a warning labelling option for modems with supplementary voice ports to allow modems to be supplied without meeting all of the Australian requirements for isolation from the TNV line.

Under the *Telecommunications Act 1997*, powers to make customer equipment Standards were handed over to the new telecommunications regulator, the Australian Communications Authority (ACA). The customer equipment safety Standard was revised to pick up the fourth amendment to AS/NZS 3260:1993 and re-published as ACA TS 001-1997.

In Australia, the evolution of safety Standards for telecommunications customer equipment has been a slow process, drawn out over 20 years, with committee work spread across at least two national organisations and the international Standards organisation, IEC (International Electrotechnical Commission). There were upstream delays in escalating issues and getting changes to the international IEC Standards and downstream delays from local processes to approve and incorporate these international changes into both the Standards Australia and AUSTEL publications.

Development work on IEC 950, on which AS/NZS 3260 is based, commenced within the IEC in 1981 by the IEC Committee TC74. The

object of this work was to harmonise into a single Standard the requirements of the then IEC 380 *Safety of Office and Business Equipment* and IEC 435 *Safety of Data Processing Equipment*. In 1982, while the harmonisation work was progressing, IEC TC74 also commenced work on an additional project to address the safety requirements of equipment connected to telecommunications networks. The outcome of this second project was initially to be an independent Standard, however in 1984 it was decided that the requirements concerning the connection of equipment to telecommunications networks would also be part of the new single harmonised Standard.

These decisions and the work of IEC TC74 reflected the growing awareness of the progressive convergence of these three, previously separate, industries. Consequently, development work of the single Standard was often laboured due to the pioneering nature of the work involved. The harmonised Standard, IEC 950, was first published in 1986, however, understandably considering the pioneering nature of the work, there was still much work to be done. It was realised that, given the rapidly developing nature of what was now known as *Information Technology* equipment and *Telecommunications* equipment, IEC 950 would need to be a very 'living document' and constantly be reviewed and updated.

The integration of safety requirements from what were once three separate industries also meant the integration of three previously different equipment design philosophies:

(a) Telecommunications Network Voltage (TNV);

(b) Mains powered; and

(c) Safety Extra Low Voltage (SELV).

Australia has been heavily involved in the development of IEC 950 since 1981 and still is, to ensure wherever possible Australian concerns are addressed in the international Standard. Indeed, an Australian is even a member of the IEC TC74 Chairman's Advisory Panel, formed in 1987 to provide expert responses to interpretational questions concerning IEC 950 (now IEC 60950) put to IEC TC74 by National Standards Bodies (in our case Standards Australia).

As AS/NZS 3260 was based upon IEC 950, each successive revision of AS/NZS 3260 was largely dependent on the changes adopted by the international safety committee, as it worked to incorporate the historically mandatory requirements for telecommunications equipment, into what was fundamentally an open (self-regulating) Standard for information technology equipment.

3 Working Committee project

ACIF's responsibility for ongoing maintenance and revision of ACA Technical Standards was split across three Reference Panels. The issue of customer equipment safety Standards was initially given to the Radio and Environment Reference Panel (RERP). In the year 2000, responsibility for ACA TS 001 was transferred to the CECRP, which set up a Working Group to develop a proposal for the revision of ACA TS 001-1997. The ACIF Board approved the establishment of CECRP/WC11 in February 2001.

The Terms of Reference were defined as follows:

> 'To review the way Customer Equipment safety Standards are used in Australia and referenced under the telecommunications regulatory framework, concentrating on the following activities:

(a) the review and development of CE safety requirements to replace ACA TS 001-1997, specifically:

(i) to review ACA TS 001-1997 to determine applicable safety requirements;

(ii) to determine applicable safety Standards (e.g. AS/NZS 60950:2000, AS/NZS 4117:1999) and appropriate references;

(iii) to determine new safety requirements (e.g. from other existing ACA Technical Standards), if necessary;

(iv) to develop the recommendation for the ACA for the withdrawal of ACA TS 001-1997;

(v) to develop recommendations to be forwarded to other bodies such as the ACA and Standards Australia Committee TE/1 for the migration of safety requirements to appropriate documents, such as AS/NZS 60950 or the ACA Telecommunications Labelling Notice; and

(vi) to develop the appropriate publications (e.g. industry statements, guidelines) to address any safety requirements that cannot be addressed by existing documents.

(b) the development of an informative document which identifies network interface voltage levels.'

4 Committee review of ACA TS 001-1997

The Working Committee reviewed each requirement in ACA TS 001-1997 for amendment or deletion, taking into account the changes in the regulatory framework and the evolution of equipment supplied to the Australian market since the Standard was first introduced.

The Working Committee maintained close liaison with Standards Australia Committee TE-001 during the review process. As mentioned earlier, AS/NZS 3260:1993 has been superseded by AS/NZS 60950:2000. AS/NZS 3260:1993 is due to be withdrawn in June 2003.

The Working Committee has found that all the existing requirements in ACA Technical Standard TS 001-1997, can be adequately addressed by the combination of AS/NZS 60950:2000 and AS/NZS 4117:1999.

The Working Committee is aware that Standards Australia Committee TE-001 has recently agreed that both Amendment 1 to AS/NZS 60950:2000 and AS/NZS 60950-1 are to maintain the same Australian deviations presently incorporated in AS/NZS 60950:2000.

ACA TS 001 Clause 5.1 General

This clause in ACA TS 001-1997 specifies that all equipment designed to be connected on the customer-side of the boundary of a telecommunications network shall comply with the requirements of AS/NZS 3260:1993, including Amendments 1, 2, 3 and 4. It was originally required because common telephone devices would have been exempted from having to comply with any safety Standards because AS/NZS 3260:1988 was not applicable to line-powered equipment.

AS/NZS 3260:1993 resolved this problem and this has been carried through to the latest revision of AS/NZS 3260, namely AS/NZS 60950:2000.

The Working Committee is also aware that Amendment 1 to AS/NZS 60950:2000 and AS/NZS 60950-1 are intended to be published and that they will be considered for listing in Schedule 1 of a future amendment of the ACA TLN.

ACA TS 001 Clause 5.2 Surge suppression devices

Clause 5.2 only deals with discrete, stand-alone, surge suppression devices that are typically supplied for installation by service personnel as cabling components. It does not cover surge suppression devices that are supplied as part of customer equipment, because in those cases, testing would have been performed on the complete customer equipment system, rather than the individual component.

The technical requirements of surge suppression devices are not detailed in ACA TS 001-1997, but are called up by reference to another Standard, AS/NZS 4117:1996 *Surge suppression devices for telecommunications equipment* (now superseded by AS/NZS 4117:1999).

Since most surge suppression devices are supplied for use by cablers, there appears to be an anomaly in that the cabling component category of TLN (i.e. Schedule 1 Category A22), does not call up ACA TS 001 but lists AS/ACIF S008: 2001, at Compliance Level 2. Although both Standards have the same the technical requirements (i.e. AS/NZS 4117), the TLN does not mandate ACA TS 001 for surge suppression devices and so there is no need to show compliance with Clause 5.2 or any of the other aspects of the basic safety Standard, AS/NZS 3260.

Since Clause 5.2 seems to be redundant, the Working Committee proposes that a new category be added to Schedule 1 of the TLN, to cover all stand-alone surge suppression devices. They would be required to show compliance against both AS/NZS 60950:2000, and AS/NZS 4117:1999 *Surge protective devices for telecommunication applications*, at Compliance Level 3. It could also cover general-purpose protection devices (e.g. plug boards) that are supplied for use by non-service persons.

This change would also make Clause 5.4.1.5 of AS/ACIF S008:2001 redundant and the Working Committee proposes that the removal of this clause be considered with the next revision of that Standard.

ACA TS 001 Clause 5.3 Use of Line Isolation Units (LIUs)

This clause only dealt with systems that combined a separate line isolation unit (LIU) with the customer equipment in order to meet the requirements of AS/NZS 3260. It contains a set of interlocking arrangements to prevent hazardous line cord connections and LIU bypass. The requirements in ACA TS 001 supplemented other arrangements that AUSTEL had published in a Technical Approval Guide.

The need for these requirements has diminished considerably and in any event the Working Committee concluded that these requirements for LIUs are now adequately addressed by AS/NZS 60950, Clause 4.3.5 *Connection of plugs and sockets*.

ACA TS 001 Clause 5.4 Particular requirements for modems with voice capability

These special arrangements were introduced in 1996 to address concerns that customers may be at risk from lightning induced surge voltages, when common home audio products were used in combination with supplementary ports on data modems. The popularity of voice/data

modems and notebook computers with miniature audio connectors and voice capability had revealed a problem where there could be insufficient isolation between SELV or user-touchable parts and the TNV line. The Regulator, AUSTEL, introduced the labelling option as an alternative to complying with the tougher Australian TNV isolation requirements, in Clause 6.4 of AS/NZS 3260. Modem suppliers did not have to nominate or supply voice attachments for testing but were allowed to attach warning labels instructing users only to connect voice equipment marked with a Telecommunications Compliance label.

Most audio devices (e.g. headsets, handsets and microphones) are designed for portable or battery operated equipment where the miniature connectors are considered to be SELV. Consequently, the warning label option has been rendered ineffective by the limited availability of compliant audio devices. Also, it could be considered discriminatory because it did not extend to suppliers of other types of customer equipment that had auxiliary or supplementary apparatus ports.

The Working Committee has received advice from the National IT Equipment Safety Committee TE-001, that the equipment labelling issue should be addressed by AS/NZS 60950 in Clause 1.3.2 *Equipment design and construction* and Clause 1.7.2 *Safety instructions*. Since Clause 5.4 in ACA TS 001-1997 does not provide any additional safeguards for users, members proposed that this requirement is no longer appropriate.

5 Consumer and industry impact

The following points highlight the perceived impact that the proposed changes to the requirements of Customer Equipment safety may have on specific areas of the market.

End user Safety

Having a direct reference to AS/NZS 60950 in the ACA TLN and associated regulatory instruments does not compromise the safety of end-users, since ACA TS 001-1997 no longer provides any additional safeguards that are not comprehensively covered by the national Standard. The removal of the confusing warning label from modems re-applies requirements for the isolation barrier within modems, thereby reducing the risk to end-users.

Manufacturers and importers of Customer Equipment

Declarations of conformity will be simplified to a single test report for safety (i.e. AS/NZS 60950) instead of the old procedure of having both ACA TS 001 and AS/NZS 3260. The realignment of national and international safety Standards means that the common text should remove a potential source of confusion for overseas manufacturers. Testing is still required for the Australian variations in IEC 60950 but the alignment could help promote trade opportunities.

The transitional costs for industry to comply with a new Standard (e.g. R&D, testing, compliance, documentation) will not be increased by this change and there should be reductions in the future because the revision of multiple Standards is no longer necessary. The savings from not duplicating committee work and the imminent withdrawal of AS/NZS 3260 on 5 June 2003, is welcomed by industry.

ACA TS 001-1997 allowed the use a warning label instead of providing any electrical separation between *circuitry which is provided for*

connection of other equipment and a Telecommunications Network Voltage (TNV) circuit *on which overvoltages from telecommunication networks are possible* (i.e. TNV-1 circuit or TNV-3 circuit). The removal of the modem warning label option will have some impact on manufacturers manufacturing product for the Australian market because it will mean electrical separation between these types of circuits will always be required.

These electrical separation requirements for Australia differ from present international practice as follows:

(a) The present international requirement (IEC 60950-1:2001) is compliance with either the *Impulse Test* of Clause 6.2.2.1 (1.5 kV) or the *Steady-state Test* (electric strength test) of Clause 6.2.2.2 (1.0 kV). Australia requires compliance with both tests.

(b) Australia requires 1.5 kV for the *Steady-state Test* (electric strength test) of Clause 6.2.2.2 instead of the IEC value of 1.0 kV.

It should be noted that future amendments and editions of AS/NZS 60950 are expected to include the change that was made to Clause 6.2.1(c) in IEC 60950-1:2001. This change means that all *circuitry which is provided for connection of other equipment* be electrically separated from a Telecommunications Network Voltage (TNV) circuit *on which overvoltages from telecommunication networks are possible* (i.e. TNV-1 circuit or TNV-3 circuit). Prior to this version of IEC 60950 there was no such requirement if the equipment connected via that circuitry in itself complied with IEC 60950.

Telecommunication carriers

Network equipment and the safety of carrier staff working on the network is not affected by the withdrawal of ACA TS 001-1997 because it is replaced by a direct reference to AS/NZS 60950. There are still some concerns about the use of SELV headsets with modems and personal computers, but this matter must be addressed in the appropriate Standards Australia Committee TE-001.

Industry sectors related to testing and compliance

The accreditation of test laboratories and the mutual recognition of overseas test report and compliance statements will be simplified by the removal of dual Standards and the alignment of Standard amendment dates. These test laboratories are very familiar with the newer editions of the safety Standards that have superseded AS/NZS 3260.

Telecommunication regulator (ACA)

In addition to the withdrawal of ACA TS 001, changes will need to be made to the TLN and other regulatory instruments. There will also need to be a new category in Schedule 1 of the TLN for surge suppression devices.

The alignment with international Standards should assist in communication with suppliers, and it may be beneficial when dealing with test houses and regulators in other countries. The removal of duplication in customer equipment safety Standards should reduce the complexity of compliance auditing processes and be less demanding of ACA resources.

Ensuring Australian telecommunications regulatory arrangements are up-to-date with safety requirements for CE will be greatly simplified as there will be no need for continually and lengthy revision processes associated with an ACA or AS/ACIF standard.

Standardisation bodies

The peak national standards organisation, Standards Australia Committee TE-001, is responsible for all requirements for safety of equipment and these will now be located in a single publication. Any impact on the safety of converging consumer electronics, IT and telecommunications equipment arising from the merging of IEC 60950 and IEC 60065 can now be addressed by Standards Australia Committee TE-001 in a coordinated fashion. The cross-referencing of Standards in ACA and Standards Australia publications should also be simplified.

6 Process and timetable

It is expected that the ACA will require ACIF to make a recommendation to the ACA on the adoption up of future amendments/editions of AS/NZS 60950. This will be achieved by the ACIF CECRP keeping a watching brief on the work of Standards Australia Committee TE-001 to stay abreast of any proposed changes.

Public comment on the proposal to withdraw ACA TS 001-1997 was sought during the period commencing 3 December 2002 and ended 21 February 2003. The ACIF Working Committee CECRP/WC11 reviewed the public comment during March and April 2003. It is proposed that when AS/NZS 60950:2000 is listed in Schedule 1 of the ACA TLN, the existing ACA TS 001-1997 will remain as an alternative applicable Standard until its expiry date of 1 Jan 2004. Maintaining ACA TS 001-1997 as an applicable Standard in parallel and as an alternative to AS/NZS 60950 during this phase-in/phase-out period would facilitate any equipment then in the design phase, modem equipment in particular, to be introduced to the Australian market based upon the alternative to label as per Clause 5.4 of ACA TS 001-1997.

In this review, the Working Committee has evaluated the impact of the proposed publication of Amendment 1 to AS/NZS 60950:2000 and AS/NZS 60950-1 based on discussions by Standards Australia Committee TE-001 and the draft versions available at the time. On the basis that the final publications have no significant differences to the draft versions, it is proposed that the CECRP should recommend to the ACA that these two publications to be listed as alternatives to AS/NZS 60950, once they are published ,so that compliance with any one of the three standards below will be acceptable:

- AS/NZS 60950:2000;
- AS/NZS 60950:2000 (including Amdt No 1) (publication target 2003); and
- AS/NZS 60950-1 (publication target 2003)

It is believed at this time that the ACA *Review of Telecommunications Customer Equipment Technical Regulation* will not have any impact on this process.

7 Acronyms

The following lists the acronyms used in this report:

ACA	Australian Communications Authority
ACIF	Australian Communications Industry Forum
AS/NZS	Australian Standard/New Zealand Standard

CECRP	Customer Equipment and Cable Reference Panel
IEC	International Electrotechnology Commission
LIU	Line Isolation Unit
RERP	Radio and Environment Reference Panel
SELV	Safety Extra Low Voltage
SSD	Surge Suppression Device
TLN	Telecommunications Labelling Notice
TNV	Telecommunications Network Voltage
TS	Technical Standard
WC	Working Committee

8 References

The following Standards referenced in this report, including their superseded editions, are listed below:

AS/ACIF Standards

AS/ACIF S008:2001 *Requirements for authorised cabling products*

AS and AS/NZS Standards

AS 3260:1988 *Approval and test specification—Safety of information technology equipment including electrical business equipment with Amendment 1*.

AS/NZS 3260:1993 *Approval and test specification—Safety of information technology equipment including electrical business equipment, including Amendments 1, 2, 3 & 4*.

AS/NZS 60950:2000 *Safety of information technology equipment, including Amendment 1* (Amendment 1 to be published)

AS/NZS 60950-1:200x *Information technology equipment —Safety—Part 1: General requirements* (yet to be published)

AS/NZS 60065:2000 *Audio, video and similar electronic apparatus—Safety requirements including Amendments 1 & 2* (Amendment 2 yet to be published)

AS/NZS 4117:1996 *Surge suppression devices for telecommunications equipment*

AS/NZS 4117:1999 *Surge protective devices for telecommunication applications*

IEC Standards

IEC 380 *Safety of Office and Business Equipment*

IEC 435 *Safety of Data Processing Equipment*.

IEC 950:1986 *Safety of information technology equipment including electrical business equipment*

IEC 950:1991 *Safety of information technology equipment including electrical business equipment, including Amendments 1, 2 & 3*

IEC 60065:2001 *Audio, video and similar electronic apparatus—Safety requirements*

IEC 60950:1999 *Safety of information technology equipment*

IEC 60950-1:2001 *Information technology equipment—Safety—Part 1: General requirements*

AUSTEL & ACA Technical Standards

AUSTEL TS 001-1990 *Safety Requirements for Customer Equipment*

AUSTEL TS 001-1991 *Safety Requirements for Customer Equipment*

AUSTEL TS 001-1993 *Safety Requirements for Customer Equipment*

AUSTEL TS 001-1996 *Safety Requirements for Customer Equipment*

ACA TS 001-1997 *Safety Requirements for Customer Equipment*

TABLE 1

Evolution of customer equipment safety requirements in Australia since 1990

Year	**1990**	**1991**	**1993**	**1996**	**1997**	**2003**	—	—
Regulatory Standard or instrument	AUSTEL TS 001-1990	AUSTEL TS 001-1991	AUSTEL TS 001-1993	AUSTEL TS 001-1996	ACA TS 001-1997	AS/NZS 60950:2000 (1)	TBA	TBA
Referenced Australian safety Standard	AS 3260-1988 + Amdt 1	AS 3260:1988 + Amdt 1	AS/NZS 3260:1993	AS/NZS 3260:1993 + Amdt 1, 2, 3	AS/NZS 3260:1993 + Amdt 1, 2, 3, 4	AS/NZS 60950:2000	AS/NZS 60950:2000 + Amdt 1	AS/NZS 60950-1:2003
Referenced AS/NZS surge suppression device Standard	—	—	—	AS/NZS 4117:1996	AS/NZS 4117:1996	AS/NZS 4117:1999		
International safety Standard	IEC 950:1986	IEC 950:1986	IEC 950:1991 + Amdt 1	IEC 950:1991 + Amdt 1, 2, 3	IEC 950:1991 + Amdt 1, 2, 3, 4	IEC 60950:1999		IEC 60950-1:2001
TS 001 Clauses	5.1 General 5.2 Protective devices 5.3 User protection	5.1 General 5.2 Protective devices 5.3 User protection	5.1 General 5.2 Surge suppression devices 5.3 Line isolation units	5.1 General 5.2 Surge suppression devices 5.3 Line isolation units 5.4 warning label option	5.1 General 5.2 Surge suppression devices 5.3 Line isolation units 5.4 warning label option	Not applicable		
National variations in Aust. Standard (telecomm-related)			(2), (3), (4)					

(1) The ACA TLN calls up the regulatory instrument *Telecommunications (Safety of information technology equipment AS/NZS 60950:2000) Technical Standard 2003*, which can also cited as *AS/NZS 60950:2000.*

(2) Compliance with both Impulse Test and Steady-State Test mandatory (instead of a choice of one or the other).

(3) Impulse Test: 7.0 kV (instead of 2.5 kV in the IEC Standard).

(4) Steady-State Test: 3 kV/1.5 kV (instead of 1.5 kV/1.0 kV in the IEC Standard).

ACIF is an industry owned, resourced and operated company established by the telecommunications industry in 1997 to implement and manage communication self-regulation within Australia.

ACIF's role is to develop and administer technical and operating arrangements to foster a thriving, effective communications industry serving the Australian community through

- the timely delivery of Standards, Codes and other documents to support competition and protect consumers;
- driving widespread compliance; and
- the provision of facilitation, coordination and implementation services to enable the cooperative resolution of strategic and operational industry issues.

ACIF comprises a Board, an Advisory Assembly, standing Reference Panels, various task specific Working Committees, a number of Industry Facilitation/Coordination Groups and a small Executive.

The ACIF Standards and Codes development process involves the ACIF Board, Reference Panels, Working Committees and the ACIF Executive. The roles and responsibilities of all these parties and the required operating processes and procedures are specified in the ACIF Operating Manual.

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