Chorus
A Telecom New Zealand Business

SPECIFICATION C279:2008

TECHNICAL REQUIREMENTS FOR CONNECTION OF DEPLOYMENT CLASS SYSTEMS TO CHORUS COPPER LOCAL LOOP

Draft

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Referenced documents

New Zealand Copper Local Loop Interference Management Plan Parts 1 to 3
Interference Management Plan - Part 1 (830 kb .pdf)
Interference Management Plan - Part 2 (1262 kb .pdf)
Interference Management Plan - Part 3 (1382 kb .pdf)
Interference Management Plan (PTC 200) (651 kb .pdf)

http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/StandardTermsDeterminations/UnbundledLocalLoopService/DecisionsList1.aspx#846

CHORUS DISCLAIMER

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It must be stressed that there is no guarantee of full or continued inter-operability between Service Provider's network equipment and customer equipment which has been approved against the requirements of this Specification.

1. INTRODUCTION

Purpose of this document

This document presents the minimum conditions to be met by Deployment Class Systems for connection to copper cable pairs owned by Chorus under the New Zealand Copper Local Loop Interference Management Plan.

Compliance to this specification will not guarantee interoperability between CPE and DSLAM equipment. However, because of the testing methodology employed, both the network and customer equipment have to be able to synchronise with each other and establish a data link. Interoperability of the higher layers is left up to the Service Provider to arrange.

2. GENERAL REQUIREMENTS

2.1 Supplier Information

The following information shall be provided as part of an application for a ChorusPermit:

1. Equipment Manufacturer:

2. Equipment model no. or product name:

3. Category
   3(a) Deployment Class:

   - *Ref: IMP Part 3*

   3(b) Network /Customer equipment:

4. Hardware Version:

5. Firmware Version:

6. Configurations Details:

   - *Configuration details are limited to those parameters which, if altered would affect compliance against this Specification*

   - *Such parameters shall not be able to be changed under user control in customer equipment*

7. Is DC applied for wetting current or line powering:

3. SPECIFIC REQUIREMENTS AND TESTS

3.1 Total Aggregate Power

The total aggregate transmit power measured across the entire pass band shall comply with the limits set in the New Zealand Copper Local Loop Interference Management Plan Part 3 for the appropriate Deployment class. The terminating impedance is specified for each deployment class.

- *Ref: IMP Part 1 Appendix B.3.1*

3.2 PSD compliance

The PSDs of both the ATU-C and ATU-R shall comply with the limits set in the New Zealand Copper Local Loop Interference Management Plan Part 3 for the appropriate Deployment class

- *Ref: IMP Part 1 Appendix B.3.2*

3.3 Longitudinal Balance

The Longitudinal Balance of both the network and customer equipment shall comply with the limits set in the New Zealand Copper Local Loop Interference Management Plan Part 3 for the appropriate Deployment class.

- *Ref: IMP Part 1 Appendix B.3.3*

3.4 Longitudinal output voltage

The Longitudinal Output Voltage of both the network and customer equipment shall comply with the limits set in the New Zealand Copper Local Loop Interference Management Plan Part 3 for the appropriate Deployment class.

- *Ref: IMP Part 1 Appendix B.3.4*
- *The detailed measurement techniques used may vary for different deployment classes, but shall follow the general methodology documented in the New Zealand Copper Local Loop Interference Management Plan Part 1 Appendix B.*
- *Where the equipment uses DC power feed or wetting current, the test set-up shall include these components and suitably sized blocking capacitors shall be included in the test circuit.*

3.3 Electrical safety

(1) The electrical safety requirements of AS/NZ 60950 shall be complied with by all CPE items covered by this Specification.

(2) Test reports to AS/NZ 60950 or its equivalent shall be supplied by a testing laboratory which is either recognised by Office of the Chief Electrical Engineer of the Ministry of Consumer Affairs (a division of the Ministry of Economic Development), or which is accredited by IANZ or one of its affiliated overseas laboratory registration authorities for electrical safety testing.

- *A considerable proportion of telecommunications equipment now available was originally manufactured for the North American and Japanese markets, where the mains voltage is only 100-110 V. Such overseas equipment is often designed with inadequate internal clearances between its*

components to meet New Zealand electrical safety requirements, which are based on 230 V operation.

(3) Any separate external power supply used shall also comply with the requirements of AS/NZ 60950 or its equivalent.

(4) Any separate external power supply used shall be suitably labelled so that it is easily and positively identifiable as being associated with the modem.

- *The power supply is critical to the performance of the modem, and it cannot be substituted for generic power supplies of similar rating.*

3.4 EMC compliance

(1) The requirements of AS/NZ 55022 (CISPR 22 or its direct overseas equivalent) shall be complied with by all CPE items covered by this Specification.

• The New Zealand requirements for general EMC compliance by items of equipment intended to be installed in customer's premises are the same as those applicable in most overseas countries, including Australia, which most suppliers seem to regard as a single market with New Zealand. As such, test reports acceptable in New Zealand will generally already be available as the result of testing carried out for other markets.

(2) It is a regulatory requirement that test reports to AS/NZS 55022 or its equivalent shall be held by suppliers of this class of equipment and that a formal Declaration of Conformity shall be submitted to the Ministry of Economic Development before such products are offered for sale or put into use in this country.