

ACCREDITATION OF TESTING AUTHORITIES BY TELECOM NEW ZEALAND LTD

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REFERENCE

ISO/IEC 17025 :2005

1. INTRODUCTION

1.1 New Zealand telecommunications law gives each network operator the right to set interface and performance requirements for customer premises equipment (telecommunications terminal equipment) intended for connection to its network. Telecom New Zealand Limited (Telecom) exercises this right with its Telepermit system, which is essentially a carrier-specific form of Type Approval. Telecom has published various specifications (TNA and PTC Specifications), which define its network interfaces and customer premises equipment requirements. In general, independent testing authorities accredited by Telecom are used to test for compliance with these requirements.

1.2 This document details Telecom's requirements and procedures for accrediting telecommunication testing authorities. These testing authorities deal directly with equipment suppliers on a confidential basis without reference to Telecom. The test reports produced by these authorities are submitted to Telecom by equipment suppliers wishing to obtain Telepermits for their products.

1.3 This document outlines the procedures currently used and the conditions that apply. However, Telecom has latitude to deal in a reasonable manner with any special cases or circumstances that arise.

1.4 Following successful assessment under the following procedures, Telecom's accreditation applies only as long as these requirements are complied with. No changes are to be made within the testing authority which would lead to non-compliance with these requirements or affect the accuracy and reliability of the test results supplied.

1.5 This document covers only accreditation for testing against Telecom's PTC and TNA specifications. It does not cover accreditation for testing against other national and international standards for Electrical Safety, Electromagnetic Compatibility, and various Radio frequency interfaces such as DECT, Bluetooth, WiFi etc. Accreditation for testing against these standards is performed by national accreditation bodies such as IANZ (New Zealand) or NATA (Australia).

2. REQUIREMENTS FOR ACCREDITING TESTING AUTHORITIES

2.1 Any organisation wishing to become recognised as a testing authority for PTC (Telepermit) testing purposes shall make a formal application to Access Standards:

richard.brent@telecom.co.nz or bill.dawid@telecom.co.nz

- *All documentation shall be soft copy. Please note that if sent by email, attachments must be limited to not more than 10 Mbytes, so submissions will probably need to be split across several emails. If any single file is larger than 10 Mbytes, it can be forwarded via one of the commercial file forwarding sites or burnt onto a CD ROM and mailed.*

2.2 The Applicant shall state:-

(a) The PTC Specifications to which testing is intended to be carried out.

(b) Whether Telecom has already granted accreditation for testing against other PTC Specifications

(c) Whether there are any other telecommunications administrations or organisations which accept test results from the testing authority concerned.

2.3 The Applicant shall prepare a comprehensive test manual for submission to Telecom Access Standards including:-

(a) Name and Address of testing authority.

(b) The organisational structure of the testing authority, showing the qualifications and related experience of the staff and management.

(c) The instrumentation and related facilities used for the testing to be undertaken.

(d) Details are to be given of the calibration procedures and traceability arrangements for the instruments used.

(e) Details of the arrangements for training and qualifying new staff members.

(f) Arrangements for supervising the testing, the confirmation of test results by technically qualified senior staff, and for the formal signing off of all test reports on behalf of the testing authority.

(g) The arrangements proposed for holding records of the tests carried out in case there is need for future reference.

The above information is typically that which has already been prepared for an accreditation body. In addition, Telecom requires details of the arrangements being put in place to carry out testing for Telepermit purposes, as follows:-

(h) For each PTC Specification to which it is proposed that testing will be carried out, a clause by clause statement outlining the test method and stating the instrumentation that will be used for the particular test. This should show how the instrument(s) are to be set up for each test.

(i) The proposed format and scope of the test results as they will be supplied to a client for later submission to Telecom in support of a 'Telepermit' application.

(j) Photographs of the general testing authority layout and close-ups of the test jigs, test equipment, etc, to clearly show the facilities available for Telepermit testing at the time the application is made.

(k) Any other matters considered relevant by the Applicant which will support the application.

2.4 Telecom Access Standards will examine the manual, and may require further information or request for some testing to be undertaken, on either equipment samples or artefacts designed to test the ability of the laboratory to test a particular parameter.

2.5 The exact procedure for accreditation will be the subject of negotiation between Telecom and the Applicant. In general, the aim is that comparative tests be made on equipment of the types most likely to be covered in the proposed scope of testing.

2.6 The Applicant shall bear the cost of testing by Telecom or other testing authority, for the time spent in considering the application and for Telecom staff's time and costs incurred in visiting the testing authority.

2.7 In some cases, and where resources permit, Telecom may be willing to provide a consultancy service to assist the Applicant with particular tests or techniques or provide advice on the arrangements proposed. .

2.8 The Applicant shall agree to pay all charges set by Telecom for the above services at the commercial rates applying at the times the particular work is carried out.

3. CERTIFICATE OF ACCREDITATION

3.1 On recognition of a testing authority in accordance with the above arrangements, the Manager, Access Standards will issue a Certificate of Accreditation.

3.2 This will certify that the testing authority concerned is recognised by Telecom to be capable of carrying out the appropriate tests to one or more PTC Specifications. Each of the PTC Specifications or classes of testing concerned will be specified in one or more such certificates, which can be used as evidence of recognition by Telecom when dealing with prospective clients.

4. ONGOING CHANGES AND PERIODIC AUDITS

4.1 Accredited testing authorities shall maintain one or more reference samples of product for periodic checking and confirmation purposes. Where requested, these or other samples shall be exchanged with Telecom from time to time as part of a system to allow confirmation of calibration between all Telecom-recognised testing authorities. Such exchanges directly between testing authorities are also encouraged. Recognised

overseas testing authorities shall, in addition, comply with any requirements of the local accreditation and compliance assessment bodies.

4.2 Any proposed changes in instrumentation or test procedures shall be advised to Telecom before they are introduced. Once they have been formally approved by Telecom, all such changes shall be incorporated into the manual and a copy of each such amendment shall be submitted to Telecom for updating its reference copy of the manual.

4.3 It is expected that testing authorities will be automatically audited at appropriate intervals by the national Designating Authority or its equivalent. For those New Zealand testing authorities NOT formally accredited by IANZ, audits will usually take place every two years, or as otherwise determined by Telecom in consultation with the testing authority concerned. In such cases, this process will consist of an exchange of reference samples and measurements in order to confirm the accuracy and reliability of the testing equipment used. More extensive audits of testing procedures, continuing compliance with the approved testing manual, etc, may also be called for from time to time.

4.4 Where changes in test report signatories are necessary, Telecom shall be advised of the name and qualifications of the proposed new signatories.

4.5 Telecom's standard charges will apply for any work carried out in investigating or approving changes and in conducting audits.