

1st January 2015

A guide to Queensland Health's additional requirements
for the testing of Twisted Pair and Fibre installation.

Background

This document has been prepared by VTI Services and approved by Queensland Health to provide guidelines to the additional requirements for the testing of Queensland Health sites.

Document Limitation

This document is provided for guidance only. All care has been taken in the creation of the document; however no claim that any or all issues have been identified and no responsibility will be accepted for its use. This document reflects VTI Services understanding of Queensland Health's requirements at the time of publication; however should there be conflict between this document and the Queensland Health's requirements, Queensland Health's requirements takes precedence. The testing requirements of Queensland Health may change at any time without notice. Specifications should be read to determine testing requirements before testing is undertaken.

General Requirements

Independent test result analysis

Queensland Health require on nominated projects that the fibre and twisted pair test results be submitted to an approved NATA accredited inspection body for evaluation. The associated "Statement of Compliance" and report form part of the acceptance requirements of the project.

Queensland Health's approved NATA Inspection body

VTI Services

16 Banbury Crescent
Chipping Norton.NSW.2170
Telephone: 61-2-98242412
Email: office@vti.net.au
Contact: Murray Teale

Test Equipment

All test equipment must be in calibration at time of test

Twisted Pair Requirements

Test Requirements

- Permanent link testing shall be carried out to the compliance requirements of AS/NZS3080 at the appropriate class
 - Until the publication of Class EA Permanent Links with Australian Standards or amendments
 - Testing shall be carried out to the latest Class Ea Permanent link ISO Standard.
- Correct adaptors must be used for all testing (Channel adaptors are unacceptable for permanent link testing)
- Marginal/Conditional Passes (Pass*) are not acceptable
- Full Plot Data must be present
- Test results must be provided electronically

Approved Testers

- Twisted pair testers utilised for testing of Queensland Health's installations must meet defined requirements.
- Testers meeting these requirements which have been approved by Queensland Health include
 - Fluke DTX1200
 - Fluke DTX1800
 - Fluke DSX-5000

Fibre Requirements

- Permanent link testing shall be carried out to the compliance requirements of AS/NZS3080 for all fibre cores.
- LSPM testing shall be carried out in two directions and at two wavelengths on all installed links
- LSPM Test results will be provided electronically in the testers' native format along with VTI Services fibre reporting sheet completed (www.vti.net.au)

- All fibre cores over 100 metres shall **additionally** be tested with an OTDR utilising a launch and a tail cable in one directions and at both wavelengths
- All OTDR testing shall be presented in a Bellcore format
- No mated connectors are to have an optical attenuation loss exceeding 0.75dB-Analysis by two point LSA method on the OTDR trace
- No event other than a mated connector shall have a loss greater than 0.2dB. - Analysis by two point LSA method on an OTDR trace
- The pass fail criteria will be that specified within AS/NZS ISO/IEC 14763.3.
- Launch and tail cable associated with OTDR testing shall be of sufficient length to determine the optical return loss of the interface connectors of the link under test.
- There is no Encircled Flux requirement for OTDR Signature Traces for Multi-mode.
 - Please Note: To establish conformance to the published standards does require Encircled Flux requirements be met.

Note: QLD Health requirements include a copy of all reports generated associated with their projects be sent to QLD Health on the creation of a report.