A recording OTDR shall be utilised to test for end-to-end continuity and attenuation of each optical fiber link. The OTDR shall be equipped with an 850 nm and 1330 nm light source for multi mode optical fibers. The OTDR shall have an X-Y plotter to provide a hard copy record of each test measurement. The OTDR shall be calibrated with sufficient internal masking to allow the entire cable section to be tested. This shall be accomplished by using an OTDR with sufficient normalisation to display the required cable section.

An insertion loss test shall be performed using an 850 nm and a 1300 nm stabilised light source, with an 850 nm and 1300 nm optical power meter. This transmission testing shall be conducted end to end on each optical fiber.

Attenuation tests shall be performed through the fiber interface equipment, connectors, and pigtails, and shall demonstrate that the fiber links are in compliance with the optical link performance as indicated herein and on the drawings.

Optical fibers connectors and jumpers shall be measured at the fiber optic termination panel, in accordance with the tests defined in FOTP-34.

The test results of each measurement shall be recorded on the "Fiber Optic Link Attenuation Record." The record shall show test date, OTDR model no. and serial number, OTDR distance, wavelength, splice location (point), sheath distance and name of technician who perform the test. All test documentation shall be assembled into loose leaf binder(s). One (1) original set and two (2) copies of said test documentation shall be submitted:

a. End-to-End Attenuation Data sheet. This form shall record OTDR traces of each optical fiber.

b. Optical Link Attenuation Data sheet. This form shall document the results of the bi-directional insertion loss test.

c. Connector Loss Data Sheet. This form shall record each connector dB loss, fiber number, unit I.D. and fiber colour.

d. Splice Loss Data Sheet. This form shall record each splice loss.

Submittal and approval of the test documentation is required prior to acceptance of the Work.

6.3.7 Site Installation & Testing

The Supplier shall carry out all required cable fiber splicing, performance testing and further services to achieve a properly documented and operational cable network.