

## **Bi-Lateral Comparison between NIS-Egypt and NMISA-South Africa for the Calibration of an Optical Time Domain Reflectometer**

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**Abstract :** Calibration of Optical Time Domain Reflectometer (OTDR) has a crucial role for the accurate determination of fault locations and the accurate calculation of loss budget of long-haul optical fibre links during installation and repair. A comparison has been made between the Egyptian National Institute for Standards (NIS-Egypt) and the National Metrology institute of South Africa (NMISA-South Africa) for the calibration of an OTDR. The distance and the attenuation scales of a transfer OTDR have been calibrated by both institutes using their standards according to the standard IEC 61746-1 (2009). The results of this comparison have been compiled in this report.

**Keywords :** OTDR calibration, recirculating loop, concatenated method, standard fiber

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