



## Update on activity of the CCPR-WG-SP TG9 OTDR (length) comparison

The main objective of TG9 is to address relevant topics related to OTDR calibration. It was agreed to concentrate on following tasks:

### Discussion of CMC entries

Improved service categories for fibre optics have been prepared within the CCPR-WG-CMC-TG 4 and were discussed at the last CCPR-WG-CMC Meeting 2021, Part1) A final version of the improved list of service categories for fibre optics was presented for approval by the CCPR-CMC. First feedback is very positive.

- Following entries were defined for OTDR distance scale calibration
  - 7.10.2 Location offset, OTDR: *wavelength, pulse width, distance range, index of refraction, specification standard used*
  - 7.10.3 Distance scale deviation, OTDR: *wavelength, pulse width, distance range, index of refraction, specification standard used*
- The calibration of the attenuation scale of OTDR is currently defined under
  - 7.5.2 Loss, measuring instrument: *wavelengths or wavelength range*

### Realization of a series of Inter-comparisons to support the new entries

APMP.PR-S8 supplementary inter-comparison of optical fibre length calibration is still ongoing. All measurements were performed but first draft report is still pending.

An inter-comparison on OTDR calibration within AFRIMETS is under preparation. The comparison will be piloted by NIS with technical support from NMISA and METAS.

A first draft of the technical document was prepared, jointly between NIS, NMISA and METAS.

- It was agreed to realize a very short preliminary test prior to the inter-comparison, especially to evaluate the opportunity of adding the calibration of the OTDR attenuation scale in the same inter-comparison. This test will be performed using an OTDR provided by NIS.
- First measurements for the preliminary tests are ongoing.
- Next steps: to finalize the technical document and to define the definitive list of participants. METAS is currently discussing with an OTDR manufacturer to arrange a possible test instrument for the inter-comparison.
- Objective: to start the formal supplementary inter-comparison in 2022.