

ICT Authority 12th Floor, Teleposta Towers Kenyatta Avenue P.O. Box 27150 - 00100 NAIROBI

15 October 2021

Attn: Directorate of Programs and Standards

Dear Sir,

RE: SUBMISSION OF MEMORANDUM ON FIBRE-OPTIC STANDARD

We refer to the above matter and your public notice inviting the public to submit their comments on the fibre optic standard.

Please see annexed to this letter a schedule setting out our comments and proposals relating to the Standard.

Should you require any clarifications, please do not hesitate to contact myself (Maxwell@amcham.co.ke).

Yours faithfully,

to

Maxwell Okello Chief Executive Officer **American Chamber of Commerce, Kenya**

Clause	Paragraph/ Figure/Table	Type of comment (General/Technical /Editorial)	Comments	Proposed Change
8.1.1 OFC Duct Physical Requirements	OFC Duct Physical Requirements The physical requirement of the ducts shall meet the minimum specifications as defined on annex 1	General and Technical	The standard physical requirements set do not consider internationally approved methods such as air blown installation which have been approved by the International Telecommunication Union and are being used by countries such as the USA, UK and Germany	The air-blown installation technology allows the installation of fibre-optic cables with an outer diameter of 6.5 to 32mm. With a good technological procedure, it is possible to air-blow very long fibre-optic cables in ducts even exceeding 2000mm. A huge advantage of this method is a very careful installation of the cables without pulling any force
8.6 Fiber cables	Design considerations	General and Technical	The document should highlight a general standard for design consideration	The general standard single mode fiber is specified in ITU G. 652. This fiber has a Mode Field Diameter (MFD) in the range 8.6~9.5µm, a maximum cable cutoff wavelength of 1260nm and Zero Dispersion Window (ZDW) in the range of 1300~1324nm.
8.6.12 Fault Categorization	8.6.12 The client shall conduct an OTDR Pre- Test as per Annexure 6	General and Technical	The standard should consider new ways which fault can be categorized other than OTDR especially with rapid developments in the industry	With the rapid advancements in fiber optic technology and new fiber network deployments, OTDR testing methods have become indispensable for building, certifying, maintaining, and troubleshooting fiber optic systems. With the 5G networks carrying massive data loads, smart cities connected through communication networks, and the ongoing deployment of FTTH services will ratchet the industry

				demand for efficient, versatile, OTDR testing. With breakthrough OTDR innovations like Smart Link Mapper and Smart Acquisition making testing easier, more accurate, and more powerful, VIAVI is addressing the fiber installation and maintenance needs of the future.
8.8.4 Interoperability considerations	No one manufacturer shall have more than 50 % of the same technology equipment in the same network.	General and Technical	The interoperability requirement does not consider factors that may hinder manufacturers not adhering to the interoperability requirements. These factors are accepted by the ITU	Though interoperability is encouraged there needs to be certain factors should be taken into consideration: wavelength, speed, fiber type, and the connection to switches. This factors and exceptions should be clearly elucidated in the standard document.
				Under the factor of unmatched wavelength may cause loss and degradation in data transmission. For example, a 1310nm transceiver won't talk to an 850nm transceiver. In addition, the working mode of modules should also be matched at each end. A full-duplex transceiver should be paired with another full-duplex transceiver. The transmission will be unavailable if connecting a full-duplex module with a half-duplex one.
				Secondly, most fiber optic transceivers with different speeds can't cooperate with each other.