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OPEN TRANSPORT NETWORK “OTN”

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ABSTRACT

Fiber optic technology has led to a new generation of private and industrial networks providing much larger bandwidths, high reliability and increased maximum geographical coverage. OTN or “Open Transport Network”, is a transmission system specifically conceived for the needs encountered in industrial environments. OTN is based on the latest fiber optic technology to fulfill the requirements of the environments. An industrial network is characterized by heterogeneous communication requirements, such as voice, data and video. The industrial environmental conditions also dictate the equipment’s level of robustness. Finally, the industrial domain prefers systems that are easy to install and easy to use, while being able to operate and develop over 10-15-year life cycles. As such, OTN can fulfill all these requirements for such environments. This paper discusses the key technical characteristics of an Open Transport Network and its applications in critical industrial sectors. Also, the beneficial of implementing the ONT technique in Libya will be discussed in this study.

Keywords: transport networks, OTN, fiber optic.