

UNIVERSITI TEKNOLOGI MARA

**NETWORK PERFORMANCE OF INTEGRATED UPE
WITH MULTI-QOS USING ETHERNET SERVICE
ACTIVATION TEST METHODOLOGY (ETHERSAM)
ITU-T Y.1564 METHOD FOR LTE BACKHAUL**

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ABSTRACT

ITU-T Y.1564 is the new standard to replace with obsolete IETF RFC2544 for network performance monitoring. Based on the studies and discussion by Telecommunication Committee in RFC 6815 (2012), *Applicability Statement for RFC 2544: Use on Production Networks Considered Harmful*. RFC 2544 are not relevant to monitor for LTE network because these RFC is not support for multi-COS monitoring. This paper will evaluate the comparison and performance monitoring for Layer 2 network using Ethernet Service Activation Methodology (EtherSAM) with multi-COS by referring ITU-T Y.1564 method. The measurement tools using Integrated UPE with supported on Layer 2 and Layer 3. The performances were measured base on the Throughput, Jitter, Latency and Frame Loss Measurement. At the end of this paper, prove that by using ITU-T Y.1564 standard is more reliable compared to IETF RFC2544 for LTE backhaul network.

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