









to estimate this parameter because he/she does not know the real distance between OLT and ONU. That is one of the most important aims of our work. The second main aim was to design the unique parameter without any modification in the transmission convergence layer of the PON. This was bounded by PLOAM messages but we also considered a simple model request/response. We proposed solution with 126 m accuracy which means time stamp unit in ( $\mu$ s).

The future research will continue with implementation of our model into a real optical network and improvement of time resolution into the (ns) range.

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