

# Carrier Ethernet: Identifying and Avoiding Remaining Stumbling Blocks

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The CELTIC TIGER (Together IP, GMPLS, and Ethernet Reconsidered) project has investigated the evolution of Ethernet and PW/MPLS technologies for carrier metro-access/metro-aggregation networks during the last two years of intensive development in this area. Architectural and functional issues of two major alternatives for metro networks (Ethernet-centric, such as, (G)ELS, and PBB-TE, and MPLS-centric, such as, PW/MPLS, and MPLS-TP) were clearly defined based on advanced carrier needs. The project also provided performance and cost benchmarking of these two main alternatives using broad range of simulation and emulation experiments.

The talk outlines the main results of the CELTIC TIGER project in the form of a state-of-the-art on Carrier Ethernet technologies functional assessment and performance evaluation. It provides an overview of the identified open issues as the subject for further study and experimentation. To conclude, the talk summarizes the main research directions to overcome the remaining stumbling blocks in the deployment of Carrier Ethernet technologies based on several representative deployment scenarios.