

Each proposed IEEE 802 LMSC standard should be in conformance with IEEE Std 802, IEEE 802.1AC, and IEEE 802.1Q. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1 WG prior to submitting a PAR to the Sponsor.

- a) Will the proposed standard comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q?
 - b) If the answer to a) is “no”, supply the response from the IEEE 802.1 WG.
 - c) **Compatibility with IEEE Std 802.3**
 - d) **Conformance with the IEEE Std 802.3 MAC**
 - e) **Managed object definitions compatible with SNMP**
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- As an amendment to IEEE Std 802.3, the proposed project shall comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q.
 - The proposed amendment will conform to the IEEE Std 802.3 MAC.
 - The project will include a protocol independent specification of managed objects.

Distinct Identity

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Each proposed IEEE 802 LMSC standard shall provide evidence of a distinct identity. Identify standards and standards projects with similar scopes and for each one describe why the proposed project is substantially different.

Substantially different from other IEEE 802.3 specifications / solutions.

- The project intends to define the use of wavelength multiplexing techniques to carry multiple instances of PON over a single Optical Distribution Network (ODN).
- No existing IEEE 802 LMSC standards or approved projects have similar scope.

Technical Feasibility

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Each proposed IEEE 802 LMSC standard shall provide evidence that the project is technically feasible within the time frame of the project. At a minimum, address the following items to demonstrate technical feasibility:

- a) Demonstrated system feasibility.
 - b) Proven similar technology via testing, modeling, simulation, etc.
 - c) **Confidence in reliability.**
- System feasibility
 - The basic technology for 10 Gb/s PON systems is well established
 - Proven similar technology
 - Multiple vendors provide NG-PON2 equipment, which is a similar technology
 - Confidence in reliability
 - This technology has been extensively tested and there have been no issues reported

ec-18-0178-01-00EC Economic Feasibility

Each proposed IEEE 802 LMSC standard shall provide evidence of economic feasibility. Demonstrate, as far as can reasonably be estimated, the economic feasibility of the proposed project for its intended applications.

Among the areas that may be addressed in the cost for performance analysis are the following:

- a) **Balanced costs (infrastructure versus attached stations).**
 - b) **Known cost factors.**
 - c) **Consideration of installation costs.**
 - d) **Consideration of operational costs (e.g., energy consumption).**
 - e) **Other areas, as appropriate.**
- This project is intended to simplify the network topology by reducing the number of OLT locations and the associated costs.
 - Cooled/tunable lasers are a known cost factor that can be mitigated by larger volumes and innovative designs.
 - Construction and facilities operational costs are expected to be lower than current technologies.