

Ethernet interfaces in the target data rate range defined by this project will maintain a favorable		802.3cz modified	802.3dh new
Managed Objects	Missing.	The definition of protocol independent managed objects, to be included in Clause 30 of IEEE Std 802.3, will be part of this project	The definition of protocol independent managed objects, to be included in Clause 30 of IEEE Std 802.3, will be part of this project
Coexistence	A CA document is not applicable because the proposed project is not a wireless project	As it is	As it is
Broad Market Potential	Broad sets of applicability. - Rapid growth of automotive Ethernet has placed high demand on the existing set of PHYs defined for the Automotive industry. Quantitative presentations have been made to the 802.3 OMEGA study group indicating significant market opportunity. - The increase of EMC issues due to the frequency increase of operation, and the galvanic isolation required in electrical vehicles is enabling the use of optical communications in the Automotive industry. The support of 40m distances makes optical an optimal solution for buses and trucks. - Several uses cases within the Automotive industry have been presented in the 802.3 OMEGA Study Group and CFI. - Other transport industries may benefit from these PHYs, for example trains, aircrafts, etc.	As it is	Broad sets of applicability. - Rapid growth of automotive Ethernet has placed high demand on the existing set of PHYs defined for the Automotive industry. Quantitative presentations have been made to the 802.3 OMEGA study group and 802.3cz task force indicating significant market opportunity. - The increase of EMC issues due to the frequency increase of operation, and the galvanic isolation required in electrical vehicles is enabling the use of optical communications in the Automotive industry. Reaches of at least 15 m makes optical fiber a viable solution for an Automotive Ethernet link. - Several uses cases within the Automotive industry have been presented in the 802.3 OMEGA Study Group and CFI. - Other transport industries may benefit from these PHYs, for example trains, aircrafts, etc.
	Multiple vendors and numerous users. In the CFI and the Study Group more than 40 individuals working for OEMs and TIER-1/2 suppliers have shown their support and interest. More than 90 Million cars are produced world wide annually. Many of them would benefit from Multi Gigabit Ethernet connectivity. More than 700 Million annual ports is the market size addressable by the PHYs expected to be defined by this project.	Multiple vendors and numerous users. There has been wide attendance and participation in the study group by subject matter experts familiar with the needs of end users, equipment manufacturers and component suppliers. It is anticipated that there will be sufficient participation to effectively complete the standardization process. More than 90 Million cars are produced world wide annually. Many of them would benefit from Multi Gigabit Ethernet connectivity. More than 700 Million annual ports is the market size addressable by the PHYs expected to be defined by this project.	Multiple vendors and numerous users. There has been wide attendance and participation in the study group by subject matter experts familiar with the needs of end users, equipment manufacturers and component suppliers. It is anticipated that there will be sufficient participation to effectively complete the standardization process. More than 90 Million cars are produced world wide annually. Many of them would benefit from Multi Gigabit Ethernet connectivity. More than 700 Million annual ports is the market size addressable by the PHYs expected to be defined by this project.
Compatibility	As a PHY amendment to IEEE Std 802.3, the proposed project will remain in conformance with IEEE Std 802, IEEE Std 802.1AC, and IEEE Std 802.1Q	As it is	As it is
	The proposed amendment will conform to the IEEE 802.3 MAC	As it is	As it is
	As with other IEEE 802.3 projects, a number of new PHY types will be defined	As it is	As it is
Distinct Identity	There is no IEEE 802.3 standard that supports optical Ethernet at rates greater than 1 Gb/s for the requirements of automotive applications	As it is	As it is
	The project may define multiple PHYs, but will define only a single PHY for each rate, media, and link reach combination	The project may define multiple PHYs, but will define only a single PHY for each rate and link reach using graded-index glass optical fiber	The project may define multiple PHYs, but will define only a single PHY for each rate and link reach using graded-index plastic optical fiber
Technical Feasibility	The proposed project will build on the array of Ethernet component and system design experience, and the broad knowledge base of Ethernet network operation	As it is	As it is
	Full-duplex operation over different optical fibers has been proven in deployments at multi gigabit rates	As it is	As it is
	Optical communications is already being successfully used in the automotive industry	As it is	As it is
	Reliability concerns have been covered by different analysis reported in the Study Group with a high degree of confidence	As it is	1 mm step-index plastic optical fiber has been used for data communications in automobiles for more than twenty years. It is expected that emerging graded-index plastic optical fiber will be similarly applicable to automotive networks. Reliability concerns have been covered by different analysis reported in the P802.3cz Task Force with a high degree of confidence
Economic Feasibility	Component vendors, including PHY vendors, fiber vendors and systems vendors have presented data on the feasibility of the necessary components for this project. Proposals which leverage existing technologies have been provided.	Component, including PHY, fiber and systems subject matter experts have presented data on the feasibility of the necessary components for this project. Proposals which leverage existing technologies have been provided.	Component, including PHY, fiber and systems subject matter experts have presented data on the feasibility of the necessary components for this project. Proposals which leverage existing technologies have been provided.
	Study group presentations support link budgets that fulfill automotive requirements at acceptable cost	As it is	As it is
	Ethernet interfaces in the target data rate range defined by this project will maintain a favorable cost-performance balance	As it is	As it is
	The balance of costs between infrastructure and attached stations is not applicable to the automotive environment	As it is	As it is
	The cost factors for Ethernet components and systems are well known. The proposed project may introduce new cost factors for automotive applications which can be quantified	As it is	As it is
	Prior experience in the development of other physical layer specifications for Ethernet indicates that the specifications developed by this project will result in a reasonable cost for the specified performance	As it is	As it is
	The reduction in the number of legacy networks requiring specialized components, expertise, and gateways in the targeted markets will result in a significant drop in both vehicle assembly (installation) and operational costs	As it is	As it is
Overall costs are minimized by introducing Ethernet network architecture, management, and software into the automotive environment	As it is	As it is	
Zonal (centralized) architecture, connected car, and autonomous car, will allow consolidation of processing resources similar to what has been seen in enterprise networks	As it is	As it is	
The study group presentations support the possibility of technology leveraging of existing optical components for the automotive industry	As it is	The 802.3cz task force presentations support the possibility of technology leveraging of existing optical components for the automotive industry	