

DESIGN OF ELEMENT MANAGEMENT SYSTEMS

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ABSTRACT

Element Management System (EMS) is a system to manage network element (NE) for Ethernet Passive Optical Network. This allows the user to manage all the features of each network element (NE) individually. Network element (NE) exposes one or more management interfaces that the EMS uses to communicate with and to manage them. EMS has been design to fulfill FCAPS criteria which consist of fault management, configuration management, accounting management, performance management and security management. EMS is an emerging access network technology that provides a low-cost method of deploying optical access lines between a carrier's central office and a customer site.

KEYWORDS - Element Management System, Network element, Ethernet Passive Optical Network, International Telecommunications Union (ITU) standard, full-services access network.