DOCSIS Provisioning of EPON (DPoE™)

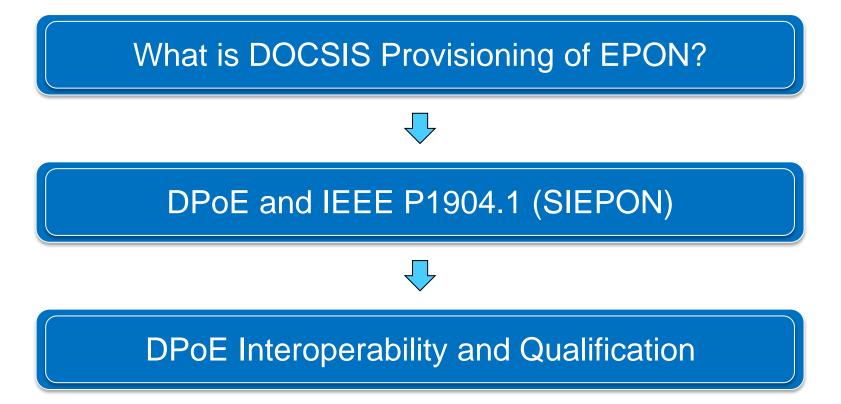
Architecture, Specifications, Qualification Curtis Knittle IEEE/ITU Joint Workshop, Geneva September 22, 2012







Agenda





DOCSIS Networks for Internet Access

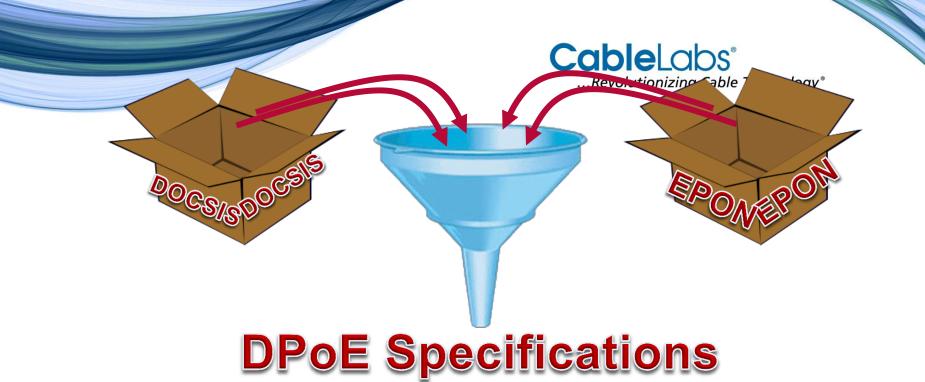


- More than 118 million DOCSIS cable modems (CMs) are deployed worldwide
- Every CM, regardless of manufacturer or cable operator, is provisioned according to DOCSIS specifications
- Cable operators want to use the same Operations and Support Systems (OSS) with other access network technologies (i.e., EPON)





What is DOCSIS Provisioning of EPON?



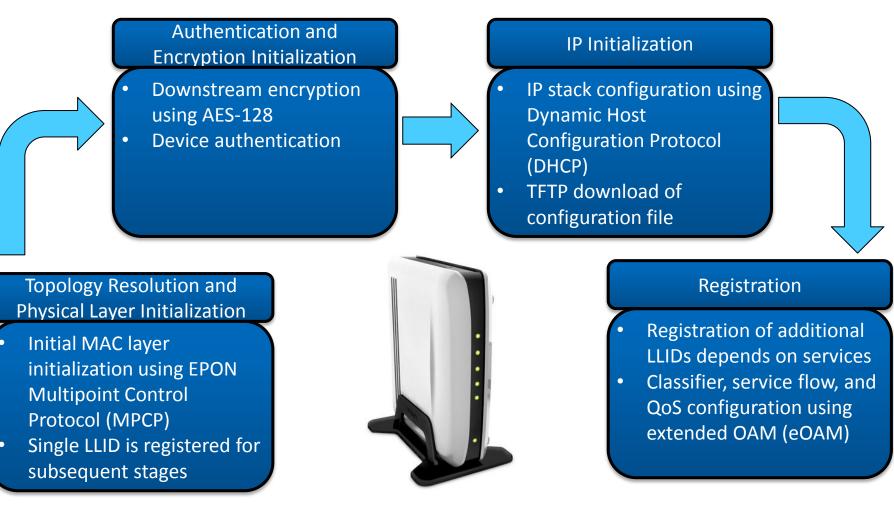
- Brings the mature systems and business processes of the DOCSIS OSS to EPON access networks
- Enables full vendor/equipment interoperability similar to CMTS and Cable Modems
- Leverages existing technical and customer care knowledge base, systems, and processes
- Developed by MSOs, CableLabs, and vendors

CableLabs[®] ...Revolutionizing Cable Technology® **DPoE Architecture IP** Management **DOCSIS Network** CMTS CM DNS HFC DOCSIS OSS Servers DHCP **SNMP IP/Transport** TFTP Network CMTS **DPoE Network** SYSLOG **Cable Modem** Time Srvr vCM ONU PON OLT **Cable Modem** vCM ONU **DPoE System** IP Management eOAM 6 /19/2012



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Provisioning DPoE ONUs







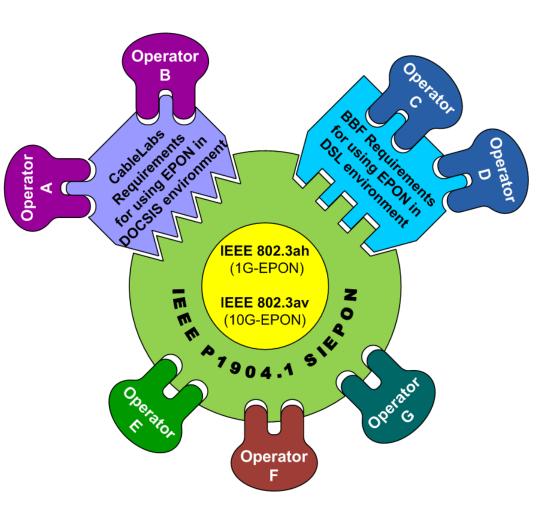
DPoE and IEEE P1904.1 (SIEPON)





SIEPON "Packages"

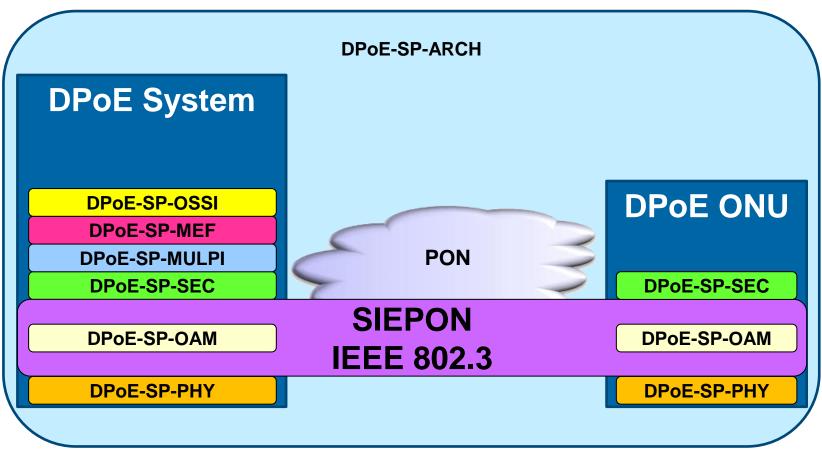
- SIEPON is standardizing three "packages":
 - North America (Package A)
 - Japan (Package B)
 - China (Package C)
- External specifications provide additional requirements for operating EPON in specific environments:
 - DPoE specs for DOCSIS environments
 - Broadband Forum for DSL environments





SIEPON / DPoE v1.0 Relationship

• DPoE specs essentially build on SIEPON standard





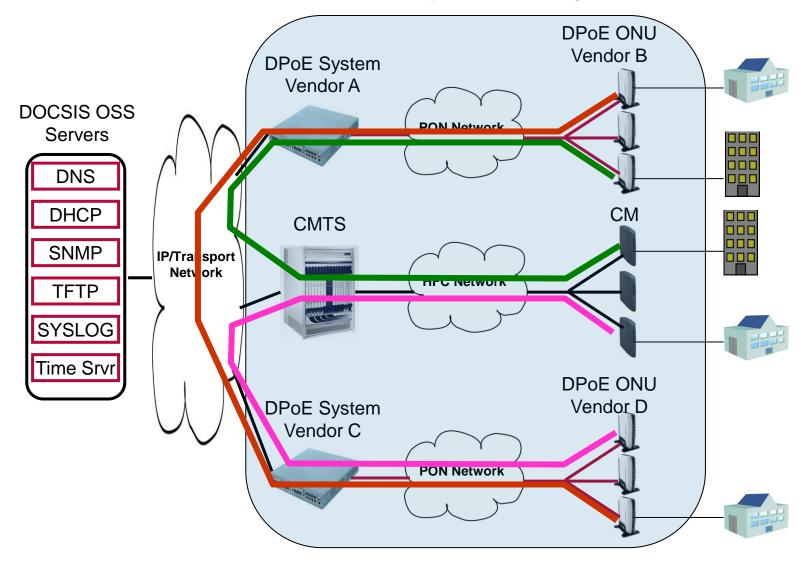


DPoE Interoperability and Qualification

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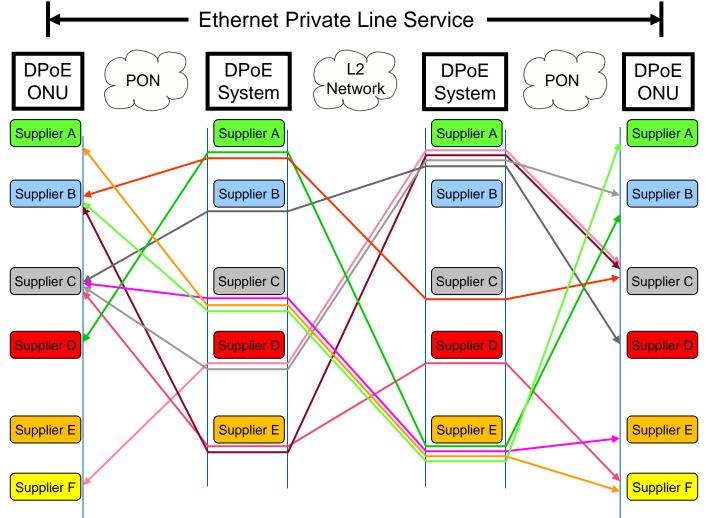
DPoE Interoperability





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Service Interoperability

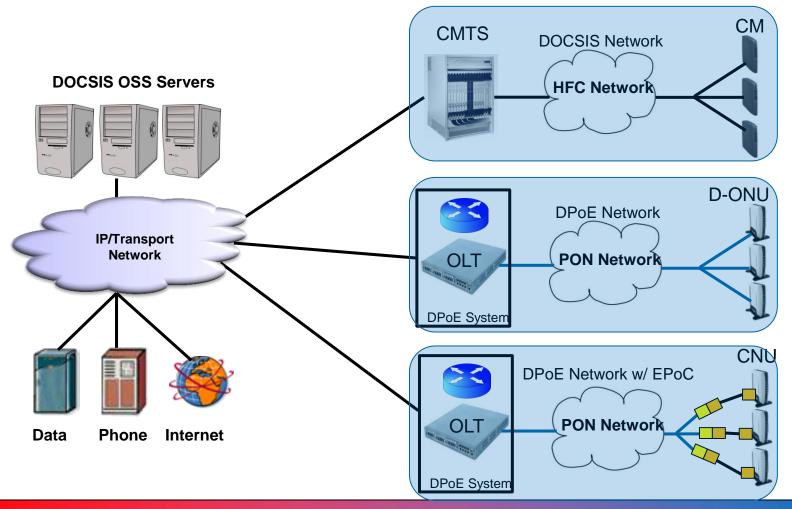


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9/19/2012



DPoE, EPoC and DOCSIS



DPoE + EPoC + DOCSIS = Converged Access Network Solution





Thank you!

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DPoE Specifications

