

Evaluation Criteria and Requirements Open Issues

Evaluation Criteria

Potential Evaluation Criteria	Evaluation Criteria Recommended to Task Force
<p>EPoC Delay using EPoC Delay Model [1]</p> <p>[1] Andrea Garavaglia, Ed Boyd, Rick Li, Bill Powell, Hesham ElBakoury, and David Barr, "EPoC Performance Model Delay and Efficiency," September 2012</p>	<p>EPoC Delay using EPoC Delay Model [1]</p> <p>[1] Andrea Garavaglia, Ed Boyd, Rick Li, Bill Powell, Hesham ElBakoury, and David Barr, "EPoC Performance Model Delay and Efficiency," September 2012</p>

Requirements

Potential Requirement	Requirement Recommended to Task Force
<p>The standard shall support a downstream data rate of at least 1.6 Gb/s at the MAC/PLS service interface, in a 192-MHz OFDM channel, in baseline channel conditions</p>	<p>The standard shall support a downstream data rate of at least 1.6 Gb/s at the MAC/PLS service interface, in a 192-MHz OFDM channel, in baseline channel conditions (Discussed by the Task Force Nov 2012, but not approved by the Task Force)</p> <p>Will bring this to the TF again after baseline channel conditions is specified</p>
<p>The MAC/PLS data rate shall scale linearly with the number of OFDM channels, in same baseline channel conditions</p>	<p>The MAC/PLS data rate shall scale linearly with the number of OFDM channels, in baseline channel conditions (Adopted by the Task Force Nov 2012)</p>
<p>The PHY should provide protection against burst noise The burst noise will be specified by the Channel Model Ad Hoc</p>	<p>The PHY should provide protection against burst noise The burst noise will be specified by the Channel Model Ad Hoc</p>
<p>Delay from the MAC/PLS interface to the Medium of less than TBD ms</p>	
<p>Delay from the Medium to MAC/PLS interface of less than TBD ms</p>	
<p>The jitter from TX MAC/PLS interface the medium shall be less than TBD ms Set TBD to the EPON jitter requirement (12 TQ?)</p>	

Check how it is specified in EPON.	
<p>The CNU device should be possible to be installed anywhere in the home (not only at the edge of the drop)</p> <p>Deeper in the home there may be lower SNR leading to lower throughput.</p> <p>Different operators may have different deployment scenarios.</p> <p>Some operators are trying to support the Home Gateway deployment while they still need to support a deployment model where the CNU is anywhere in the home.</p> <p>There is also the MDU deployment model which is different than the NA operator model.</p> <p>In business model deployment the SNR may be higher and lower variation.</p> <p>This is a system level requirement. To put a specific requirement on the PHY this would need to be turned into a Channel Model of SNR and SNR variation, which needs to be supported.</p>	<p>The CNU device should be possible to be installed anywhere in the home (not only at the edge of the drop)</p> <p>Deeper in the home there may be lower SNR leading to lower throughput.</p> <p>Different operators may have different deployment scenarios.</p> <p>Some operators are trying to support the Home Gateway deployment while they still need to support a deployment model where the CNU is anywhere in the home.</p> <p>There is also the MDU deployment model which is different than the NA operator model.</p> <p>In business model deployment the SNR may be higher and lower variation.</p> <p>This is a system level requirement. To put a specific requirement on the PHY this would need to be turned into a Channel Model of SNR and SNR variation, which needs to be supported.</p>
<p>It should be possible to implement in currently deployed types of devices, including set top boxes.</p> <p>There does not seem to be any impact on the PHY other than the previous requirement of being deployed “anywhere” in the home.</p>	
<p>Implementation of MEF 23 services should be supported.</p> <p>This is really a system level specification of delay and jitter (including the DBA and MPCP protocol), and should be address in a different group, like the CableLabs EPoC group</p> <p>Do we support all of these services?</p> <p>Suggest we just include delay and jitter requirements. We need to decide what portion of the delay and jitter can be budgeted for EPoC.</p>	
<p>The CLT to CNU frequency transfer error is less than 15 parts per billion (ppb), in order to support mobile backhaul applications</p>	

Comment: The low end CNU should not be required to meet this requirement	