Evaluation Criteria and Requirements Open Issues

Evaluation Criteria

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

Requirements

Potential Requirement	Requirement Recommended to Task Force
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	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) Will bring this to the TF again after baseline
	channel conditions is specified
The MAC/PLS data rate shall scale linearly with the number of OFDM channels, in same baseline channel conditions	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)
The PHY should provide protection against burst noise	The PHY should provide protection against burst noise
The burst noise will be specified by the Channel Model Ad Hoc	The burst noise will be specified by the Channel Model Ad Hoc
Delay from the MAC/PLS interface to the Medium of less than TBD ms	
Delay from the Medium to MAC/PLS interface of less than TBD ms	
The jitter from TX MAC/PLS interface the medium shall be less than TBD ms	
Set TBD to the EPON jitter requirement (12 TQ?)	

Check how it is specified in EPON.	
The CNU device should be possible to be installed anywhere in the home (not only at the edge of the drop)	The CNU device should be possible to be installed anywhere in the home (not only at the edge of the drop)
Deeper in the home there may be lower SNR leading to lower throughput. Different operators may have different deployment scenarios. 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. There is also the MDU deployment model which is different than the NA operator model. In business model deployment the SNR may be higher and lower variation. 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	Deeper in the home there may be lower SNR leading to lower throughput. Different operators may have different deployment scenarios. 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. There is also the MDU deployment model which is different than the NA operator model. In business model deployment the SNR may be higher and lower variation. 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.
supported. It should be possible to implement in currently deployed types of devices, including set top boxes.	
There does not seem to be any impact on the PHY other than the previous requirement of being deployed "anywhere" in the home.	
Implementation of MEF 23 services should be supported.	
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 Do we support all of these services? Suggest we just include delay and jitter requirements. We need to decide what portion of the delay and jitter can be budgeted for EPoC.	