

Evaluation Criteria and Requirements Ad Hoc – Status Report

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Conference Calls

- The Ad Hoc holds weekly conference calls
- Wednesday 7 AM Pacific Time (10 AM Eastern Time)
- Several conference calls between November and January
 - November 27
 - December 12
 - December 19
 - January 9
 - January 16
- Minutes of the meetings have been sent to the email reflector

Presentations

- Bill Powell, “EPoC System Level Synchronization Transport,” January 9, 2013
- Description of network synchronization for several use cases.
 - Mobile backhaul
 - Circuit Emulation Services
- Based on these network synchronization use cases provided recommendations on EPON + EPoC jitter error budget

Evaluation Criteria and Requirements

- Discussed evaluation criteria and requirements recommendations in a number of areas
 - Delay
 - Jitter
 - Throughput
 - Robustness
 - Support for various installations

Recommendations – Evaluation Criteria

| Recommendation | Comments |
|---|----------|
| <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> | |

Evaluation Criteria

Recommendations – Requirements

| Recommendation | Comments |
|--|--|
| <p>The standard shall support a downstream data rate of 1.6 Gb/s at the MAC/PLS service interface, in a 192-MHz OFDM channel, in baseline channel conditions</p> | <p>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</p> |
| <p>The MAC/PLS data rate shall scale linearly with the number of OFDM channels, in baseline channel conditions</p> | <p>Adopted by the Task Force Nov 2012</p> |
| <p>The PHY should provide protection against burst noise</p> | <p>The burst noise will be specified by the Channel Model Ad Hoc</p> |

Requirements

Recommendations – Requirements

| Recommendation | Comments |
|--|---|
| <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> |

Requirements

Presentation from Mr Yong Yao

- The WG chair and TF chair received a presentation from Mr Yong Yao
- *Proposal on several issues discussed by China EPOC Interest Group*
 - Recommended CNU support both 192 MHz and 64 MHz channel bandwidth for TDD
- We will review and discuss this week at the Ad Hoc meeting
- See if we have questions for Mr Yao
- Discuss any steps to take regarding this presentation

Next Steps

- Vote in the Task Force to adopt the recommendations of the Ad Hoc
- Agree on any additional evaluation criteria and requirements
 - The Ad Hoc has discussed a number of other potential evaluation criteria and requirements.
- Bring recommendations to the Task Force in March