

# 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 data-bbox="352 540 1136 589">EPoC Delay using EPoC Delay Model [1]</p> <p data-bbox="352 656 1518 813">[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

# 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