PMD and PMA Proposed Specification Text and Open Issues

Joe Solomon – Comcast Saif Rahman – Comcast

Purpose of this Presentation

- Socialize proposals for specification text before Geneva meetings
- Point out issues that could be resolved before Geneva
- Identify and fix gaps, overreach, and inaccuracies
- Prepare for a motion in July to accept these as baseline proposals

OFDM Sampling Rate

- Decision 7:
 - An OFDM downstream channel shall have a bandwidth of 192 MHz with an OFDM sampling frequency of integer multiples of 10.24 MHz.
- Proposal:
 - Express the sampling frequency as 204.8 MHz for the specification purpose does not dictate implementation
 - Already implied in prior presentations we have seen
 - Consistent with the FFT sizes and subcarrier spacings (4K – 25 kHz; 8K – 50 kHz)
 - Consistent with other emerging standards

Cyclic Prefix Spec Text Proposal

• Propose the following spec text:



CNU Transmitter Open Issues

- US FFT Size?
- US Subcarrier Width?
- Use of 2048QAM and 4096QAM in US?
- Upstream information data rate?
 - Project Objectives had 1.6 Gbps; does this apply to the US?

Pilot Modulation

- Starting point stated:
 - Use PRBS with BPSK/QPSK constellation
- Should we use BPSK?
 - Consistent with DOCSIS
- May be part of proposal expected from Avi and Christian?

Straw Poll #1

• The standard shall express the OFDM sampling rate as 204.8 MHz.

Agree Disagree Other Abstain

Straw Poll #2

 The standard shall adopt the proposed specification text for description of the cyclic prefix.

Agree Disagree Abstain