

Unconfirmed Minutes - Multiple MCS IEEE 802.3bn EPoC Ad Hoc – 021913

Attendance

Attendee	Present
Alan Brown – Aurora	
Andrea Garavaglia – Qualcomm	
Avi Kliger – Broadcom	x (after poll)
Bill Keasler – Ikanos	x
Bill Powell – ALU	x
Charaf Hanna – ST Micro	x
Christian Pietsch – Qualcomm	x
Curtis Knittle – CableLabs	
Dave Barr – Entropic	
Dave Urban – Comcast	
David Law – HP	x
Duane Remein – Huawei	x
Dylan Ko – Qualcomm	
Ed Boyd – Broadcom	
Ed Mallette – Brighthouse	
Eugene Dai – Cox	
George Hart – Rogers	x
Guansheng Lu – Huawei	
Hesham ElBakoury – Huawei	
Jim Farmer – Aurora	x
Joe Solomon – Comcast	x
John Dickinson – Brighthouse	
John Ulm – Motorola	x
Jorge Salinger – Comcast	x
Juergen Seidenberg – BK Tel	
Juan Montojo – Qualcomm	x
Leo Montreuil – Broadcom	x
Liuming Lu – B-Star	
Lup Ng – Cortina	
Marc Werner - Qualcomm	x
Marek Hajduczenia – ZTE	x
Mark Laubach – Broadcom	
Matt Schmitt – CableLabs	
Michael Peters – Sumitomo	
Michel Allard – Cogeco	x
Mike Darling – Shaw	
Mike Emmendorfer – Arris	
Nicola Varanese – Qualcomm	x
Ony Anglade – Cox	x

Patrick Stupar – Qualcomm	
Peter Wolff – Titan Photonics	
Raanan Ivry – Wide Pass	x
Ramdane Krikeb – Videotron	
Ron Wolfe – Aurora	
Saif Rahman – Comcast	x
Sanjay Kasturia – Qualcomm	
Satish Mudugere – Intel	x
Steve Shellhammer – Qualcomm	
Thushara Hewavithana – Intel	
Tim Brophy – Cisco	x
Tom Staniec – Cohere	x
Tom Williams –Cablelabs	
Venkat Arunarthi – Cortina	
Victor Hou – Broadcom	
Volker Leisse - CEL	
Yitshak Ohana - Broadcom	x

Patents Policy

- Everyone familiar with the policy; no response to call for patents

Ad Hoc Objectives

Reviewed the objectives of the MMP Ad Hoc and the logistics

- No questions or comments

Review Past Straw Polls

Should MMP be required for TDD.

- Had some consensus here.

Downstream FDD – Not a lot of consensus to include

Upstream FDD – Leaning toward including as a requirement

New Straw Poll

MMP shall be used in bursting DS and US transmissions in the EPOC standard.

- “supported” means it is a mandatory feature; edited the poll to clarify (changes tracked)
- If the presentation that we will see later deals with this issue, should we review the presentation first?
 - Because of time constraints, we decided to have the straw poll first
 - No objections
- This statement excludes the FDD DS, because it is not a bursting interface

Solomon, Joe 2/19/13 8:13 AM

Deleted: must

Solomon, Joe 2/19/13 8:13 AM

Deleted: supported

Yes: 14

No: 0

Undecided: 10

Undecided Reasons

- Not sure yet of the FDD US
- Hasn't yet been a persuasive argument for FDD US

Modulation Profiles in EPOC US – Marc Werner

Reviewed the slides from Marc Werner

Modulation Profile Considerations slide

- If we only designed to the worst-case user, we impact the better users

Presentation only addresses upstream

Frequency dependent profile: Follows general downslope and upslope, will have an equivalent bit loading?

- Yes. Could shift to a different MP in the roll off, for example
- Different bitloading doesn't have to be applied in each profile

Don't just have amplitude problems, but sometimes echo and other things as well.

- Bandwidth can vary from tap to tap as well, since return loss increases; how is that addressed?
 - Not addressed in this presentation; this presentation looks at end-to-end and assumes the frequency band is the same. If it is not the same for all users, then the scheduler may need to know these differences so it can adapt
 - Spectrum to 5 to 1.1 GHz is consistent, but above that, bandwidth available is not always known.

What is the expected US spectrum for EPoC?

- For FDD, would use a smaller part of the spectrum, but for TDD you would use the entire bandwidth
- For TDD, then, you might have more impact since you are using the entire bandwidth, while FDD would use lower frequencies where impacts are not as bad?
 - Assuming that the US FDD will be in lower bands
 - Would be helpful to see more details on the analysis in the SNR distribution
 - See the referenced presentations for some of that detail
- This assumes only transmit power control

