

IEEE Extended EPON Power Budget Study Group

12 September 2011

Chicago, IL, USA

Minutes

Chair: Marek Hajduczenia

Recording Secretary: Duane Remein

All times local to Chicago, IL, USA

13:00: Call to order and introduction

David Law (802.3 Chair) held a confirmation vote for the Study Group Chair

Moved to confirm Marek Hajduczenia as Study Group Chair

Moved: Brad Booth
Seconded: Mark Laubach
For: 19
Against: 0
Abstain: 0
Motion Passes

Introductions / Affiliations

Agenda was approved by unanimous consent

Ground rules / Meeting Goals / Email reflector

Guidelines for IEEE-SA Meetings read by the Chair

P802.3 Process overview / Purpose & Function of a Study Group / Attendance

Future Meetings:

- 11/6-11 Atlanta
- 1/23 TBD

13:33: [Overview of IEEE, ITU-T and regional PON power budgets](#)

(D. Law, Chair of 802.3WG, took over chairing the meeting for the duration of the presentation)

Presenter: M. Hajduczenia (ZTE) (D. Law assumed the Chair)

Presented an overview of PON based system Optical Budgets. It was suggested that the Chair send an informal communication to CCSA regarding use of PRxx / PR yy terminology and the formation of the Study Group

(M. Hajduczenia assumed Chair at the conclusion of the presentation)

13:50: [10GEPON extended PMD](#)

Presenter: Phillip Chang (Comcast)

Presented a high level summary of Comcast network requirements for Extended EPON optical power budgets

14:12: [Extended EPON Power Budget Feasibility](#)

Presenter: Hirosh Hamano (Fujitsu)

Assessed the feasibility of relatively high optical budgets for 10G-EPON and 1G-EPON. Concluded that 10G enhancements may be difficult to achieve whereas 1G appear more reasonably attained. Market volume is a key issue, especially for 10G-EPON.

14:30: [Economic benefits of extended EPON link budget](#)

Presenter: David Piehler (NeoPhotonics)

Examined the economic feasibility of a 4x split improvement in PON split ratio. Asserted that a 4x split increase provided a >2.8 economic cost advantage due to “pay as you grow”.

14:57: [Extending EPON link budgets without new PMD definitions](#)

Presenter: David Piehler (NeoPhotonics)

Examined increasing PON split ratios via passive means (lossless wave couplers) or active means (reach extenders).

15:15: [Extending EPON link budgets through alternative new PMD definitions](#)

Presenter: David Piehler (NeoPhotonics)

Examined a means to achieve very high split ratios at relatively low cost using ‘low performance’ PMD’s (targeted toward PON fed DSLAM replacement to achieve an all fiber network).

15:25 – 15:45: Coffee Break

15:45: [Current Status of the 10G-EPON Power Budget and Improvement](#)

Presenter: David Li (Hisense-Ligent)

Provided statistics on existing components indicating that an increase in optical budget is feasible through component optimization.

16:15: [5 Criteria: Distinct Identity](#)

Presenter: Curtis Knittle

16:30: [5 Criteria: Market Potential \(post-deadline, version b\)](#)

Presenter: Ed Mallette.

It was noted that the new (presented) version of the presentation will be made available on the WEB site.

17:00: 5 Criteria: Technical Feasibility

Presenter: David Li

17:11: 5 Criteria: Economic Feasibility

Presenter: David Piehler

17:17: 5 Criteria: Compatibility

(D. Law, Chair of 802.3WG, took over chairing the meeting for the duration of the presentation)

Presenter: Marek Hajduczenia

17:25: Proposed objectives for the project

Presenter: Marek Hajduczenia

17:31: Proposed responses to PAR questions

Presenter: Marek Hajduczenia

(M. Hajduczenia assumed Chair at the conclusion of the presentation)

17:38: Discussion, closing report, motions

Straw poll on SG plenary attendance

Will you attend the meeting of the Extended EPON Study Group at the November 802 plenary?

Yes: 12

Maybe: 14

Not: 5

No new business was brought to the attention of the Chair.

Motion to Adjourn

Moved by: Hesham ElBakoury

Seconded by: Duane Remein

Approved by voice vote without the opposition.

Study Group meeting was adjourned.

List of attendees (alphabetically by name)

Name	Affiliation	12.09.2011
Adrian Amezcua	Prysmian Group	X
Alan Flatman	LAN Technologies	X
Andrew Timenez	Anixter	X
Brad Booth	Dell	X
Curtis Knittle	CableLabs	X
David Law	HP	X
David Piehler	NeoPhotonics	X
Duane Remein	Huawei	X
Edwin Mallette	Bright House Networks	X
Eran Regev	Marvell	X
Frank Chang	Vitesse	X
Ghani Abbas	Ericsson	X
Hesham ElBakoury	Huawei	X
Hiroshi Hamano	Fujitsu Labs	X
Kenichi Suzuki	NTT	X
Kerry Hu	Huawei	X
Liav Ben Artsi	Marvell	X
Marek Hajduczenia	ZTE Corp.	X
Mark Laubach	Broadcom	X
Masashi Kono	Hitachi	X
Naruto Tanaka	Sumitomo Electric	X
Navid Ghazisaidi	Ericsson	X
Pete Anslow	Ciena	X
Philip Chang	Comcast	X
Robert Lingle	OFS	X
Satoshi Kodama	NTT	X
Vipul Bhatt	Lightwire	X
Wael Diab	Broadcom	X