Minutes for the 802.3ah Working Group Interim Meeting

Raleigh, NC in January 14-16:

Copper Objectives

The following are the objectives from Austin:
a) PHY for single pair non-loaded voice grade copper, distance >= 4600m, 0.4mm >= 256kbps
b) PHY for single pair non-loaded voice grade copper, distance >= 3700m, 0.4mm >= 4mbps
c) Include an optional specification for combined operation on multiple copper pairs

The following objectives are to supplant the accepted objectives from Austin. The copper objectives are at the start of the discussion:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between 1Mbps and 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

Motion by Tom Starr to adopt these objectives, seconded by Pattrick Stanley

A friendly amendment was introduced by LD Weller and was accepted.

a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates >= 1Mbps per copper link per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

Amendment moved by Jonathan Thatcher and seconded by Pat Thaler

a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice
grade copper at all distances between 0 and 4500 meters.
b) Support n discrete data rates between 1Mbps and >= 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

The amendment by Jonathan and Pat was now accepted by the original movers. The copper objective motion now reads:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4500 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

A new amendment by Steve Jackson and Matt Squire is now on the table for vote. The amendment reads:
a) At least one PHY specification for operation over a single pair of non-loaded

0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

802.3ah: Y:13 N:59 A:
Amendment failed.

The copper objective motion now reads:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

An amendment was proposed by Vladimir Oksman and seconded by Steven Hass:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair .aggregate.
c) Include an optional specification for combined operation on multiple copper pairs.

802.3ah: Y:12 N:62 A:17
Amendment failed.

The objectives are now again:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair per direction..
c) Include an optional specification for combined operation on multiple copper pairs.

The following was added as a clarification:

Replace existing copper objectives, with the exception of the spectrum management objectives, with the following:
a) A PHY specification for operation over a single pair of non-loaded 0.4mm voice grade copper at all distances between 0 and 4600 meters.
b) Support n discrete data rates between >=1Mbps and at least one rate being >=10Mbps and one >= 50Mbps per copper pair per direction.
c) Include an optional specification for combined operation on multiple copper pairs.

The question was called.
Vote on main motion:
802.3ah: Y:38 N:40 A:31
Motion failed.

January 15th, 2002

Motion:
Include an optional PHY specification for combined operation on multiple copper pairs.

Motion: Scott Simon
Second: Klaus Fosmark

CuSTF:	Y:56	N:0	A:5
802.3ah:	Y:87	N:0	A:5
802.3 voting members:	Y:44	N:0	A:3

Motion passes.

Please note, that it was acknowledged by the group, that this motion will not adhere to the previous models set by 100BASE-T2 and 100BASE-T4 that has matching coding and speed on each pair.

Motion:
PHY for a single non-loaded voice grade copper pair, distance >=750m, with a bitrate >=10Mbps in each direction full duplex.

Motion: John Eagan
Second: Michael Beck

CuSTF:	Y:37	N:1	A:11
802.3ah:	Y:91	N:0	A:5
802.3 voting members:	Y:43	N:0	A:5

Motion passes.

The preceeding two motions supplant previously adopted objectives for EFM copper PHYs, with the exception of the spectrum management objective.

Optics Straw Poll Question:
Is it worthwhile to add an optical P2P 100Mbps PHY and PMD objective ?

802.3ah: Y:42 N:23 A:9
This was a straw poll, therefore non-binding. It appears the is significant interest.

Motion Madness on Wednesday afternoon:
Motion to approve the minutes of the previous meeting. Motioned by Hugh Barass seconded by Well Diab, motion passed unanimously by acclamation.
We need to make a note to work on initialization and discovery implementations in future meetings.

Optical PMD Sub Task Force Report:
Coordinators for March are:

P2P:	Thomas Murphy
P2MP:	Frank Effenberger
1000BASE-X temperature extended range:	Thomas Murphy

Motion #1:
The extended temperature range (PMD case) for the 1000BASE-X will be -40C to 85C.

Motion: Vipul Bhatt
Second: not needed as it was approved by OPMDSTF
OPMDSTF: Y:30 N:0 A:1
802.3ah: Y:98 N:0 A:7

Motion passes.

Motion #2:
The temperature ranges (PMD case) for the various PMDs will be:
P2MP ONU end: -40C to 85C
P2P ONU end: -40C to 85C
P2MP OLT end: TBD
P2P OLT end: TBD

Ammendment to remove the part in red due to the TBDs.
Motion: Richard Brand
Second: Hugh Barass
802.3ah: Y:97 N:0 A:11

Motion: Vipul Bhatt
Second: not needed as it was approved by OPMDSTF
802.3ah: Y:95 N:4 A:8
802.3 voting members: Y:55 N:3 A:1

Motion passes.

Motion #3:
The downstream wavelength band for point to multipoint operation shall be:
Downstream Band: 1480 to 1500nm

Motion: Vipul Bhatt
Second: not needed as it was approved by OPMDSTF
802.3ah: Y:85 N:1 A:13

Motion passes.

Motion #4:
Move, that for P2MP wavelengths in the region 1539 to 1565nm be reserved to facilitate other applications.

Motion: Vipul Bhatt
Second: not needed as it was approved by OPMDSTF
802.3ah: Y:68 N:3 A:22
802.3 voting members: Y:39 N:3 A:7

Motion passes.

Motion #5:
Move to change the current objective of defining a temperature extended 1000BASE-X PMD to:
1000BASE-LX extended temperature range optics

Motion to postpone consideration of this motion until:

Motion: John George
Second: Rick Townsend
requires > 50%
802.3ah: Y:20 N:28 A:36
Motion to postone defeated.

Motion: Vipul Bhatt
Second: Mark Sankey
802.3ah: Y:63 N:3 A:21
802.3 voting members: Y:45 N:3 A:11

Motion passes.

P2MP Sub Task Force Report:

Motion #6:
802.3ah P2MP will include a provision for a point to point emulation (P2PE).
Motion: Gerry Pesavento
Second: not needed as it was approved by P2MPSTF
802.3ah: Y:47 N:3 A:13
802.3 voting members: Y:28 N:3 A:8

Motion passes.

Motion #7:
802.3ah P2MP will include a provision for a single copy downstream broadcast service.
Motion: Dolores Sala
Second: Norm Finn
802.3ah: Y:52 N:2 A:10
802.3 voting members: Y:34 N:2 A:2

Motion passes.

Motion #8:
802.3ah P2MP will use access control protocol with functionality and layering as described in the attached two diagrams.
Motion: Gerry Presavento
Second: not needed as it was approved by P2MPSTF
802.3ah: Y:25 N:6 A:17
802.3 voting members: Y:13 N:5 A:16

Motion passes in 802.3ah Task Force, but fails to garner 75% amongst 802.3 voters present and voting, therefore this subject requires further work.

Liaison Letters:
A liaison letter to ITU-T T1E1.4 was presented, as an update on the progress of EFM.
Motion: Hugh Barrass
Second: Dick Stewart
Motion passed by acclamation.

Liaison to ITU-T SG15/Q4.
Motion: Hugh Barrass
Second: Michael Beck
Motion passed by acclamation.

Meeting adjourned.
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Chair: Howard Frazier 6 3/5/2002
Secretary: Stefan M. Wurster