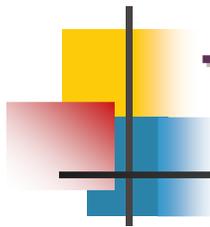


IEEE P802.3ap Task Force

Closing Plenary Meeting Report

Atlanta, GA

March 17, 2005



Task Force Organization

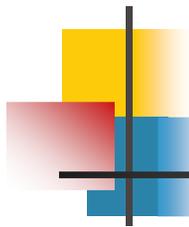
- Task Force Chair
 - Adam Healey (ahealey@agere.com)

- Task Force Secretary
 - John D'Ambrosia (john.dambrosia@tycoelectronics.com)

- Chief Editor
 - Schelto van Doorn (schelto.vandoorn@intel.com)

- Channel Model Ad Hoc Chair
 - Adam Healey (acting)

- Signaling Ad Hoc Chair
 - Mike Altmann (michael.w.altmann@intel.com)



Reflector and Web

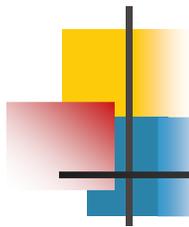
- To subscribe to the IEEE P802.3ap Backplane Ethernet Task Force reflector send an email to:
[*listserv@ieee.org*](mailto:listserv@ieee.org)

with the following in the body of the message (do not include “<>”):
subscribe stds-802-3-blade <yourfirstname> <yourlastname>

For complete instructions on reflector usage, subscription, and unsubscription:

<http://ieee802.org/3/ap/reflector.html>

- IEEE P802.3ap Task Force web page:
<http://www.ieee802.org/3/ap/>
- Channel Model Ad Hoc web page:
http://www.ieee802.org/3/ap/public/channel_adhoc
- Signaling Ad Hoc web page:
http://www.ieee802.org/3/ap/public/signal_adhoc



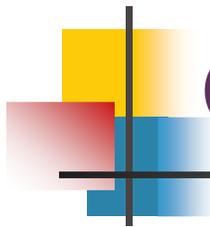
IEEE P802.3ap Draft Repository

- IEEE P802.3ap Private Area:

<http://ieee802.org/3/ap/private/index.html>

- Username: ● ● ● ● ● ●
- Password: ● ● ● ● ● ●

- Write it down...



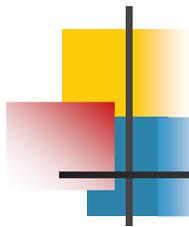
Goals for this Meeting

- Work toward a “technically complete” draft of IEEE P802.3ap.
 - Fill in TBD’s with specification values.
 - Fill in placeholders with specification text.
 - Still aiming for July 2005 Working Group ballot.

- “Big Ticket” Items
 - 10GBASE-KR signaling
 - Backplane channel specifications
 - Compliance test methodologies

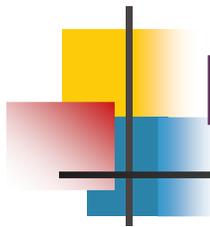
- Hear presentations.
 - 22 presentations on the agenda for this week.

- Resolve comments against Draft 0.8.



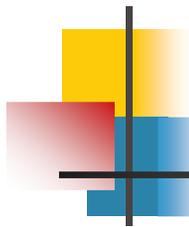
Meeting Snapshot (1/1)

- Resolved 162 comments against Draft 0.8
 - 86 Technical and Technical Required.
- NRZ selected as the basis for 10GBASE-KR signaling.
 - 10GBASE-KR transmit equalizer structure defined
- Analog signal_detect specifications for –KX and –KX4 adopted.
 - Digital signal detect proposal under consideration.



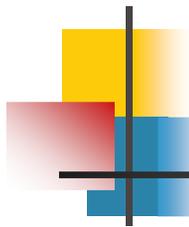
Meeting Snapshot (2/2)

- Refinements to electrical specifications for all port types.
- Annex 28E migrated to stand-alone clause 73
 - Multiple refinements and corrections to Auto-Negotiation.
- Forward Error Correction proposed
 - Interest in further investigation? Y: 26, N: 6
- Signaling Ad Hoc work complete.
 - Thanks to Mike Altmann and all those who participated.



TF Motions

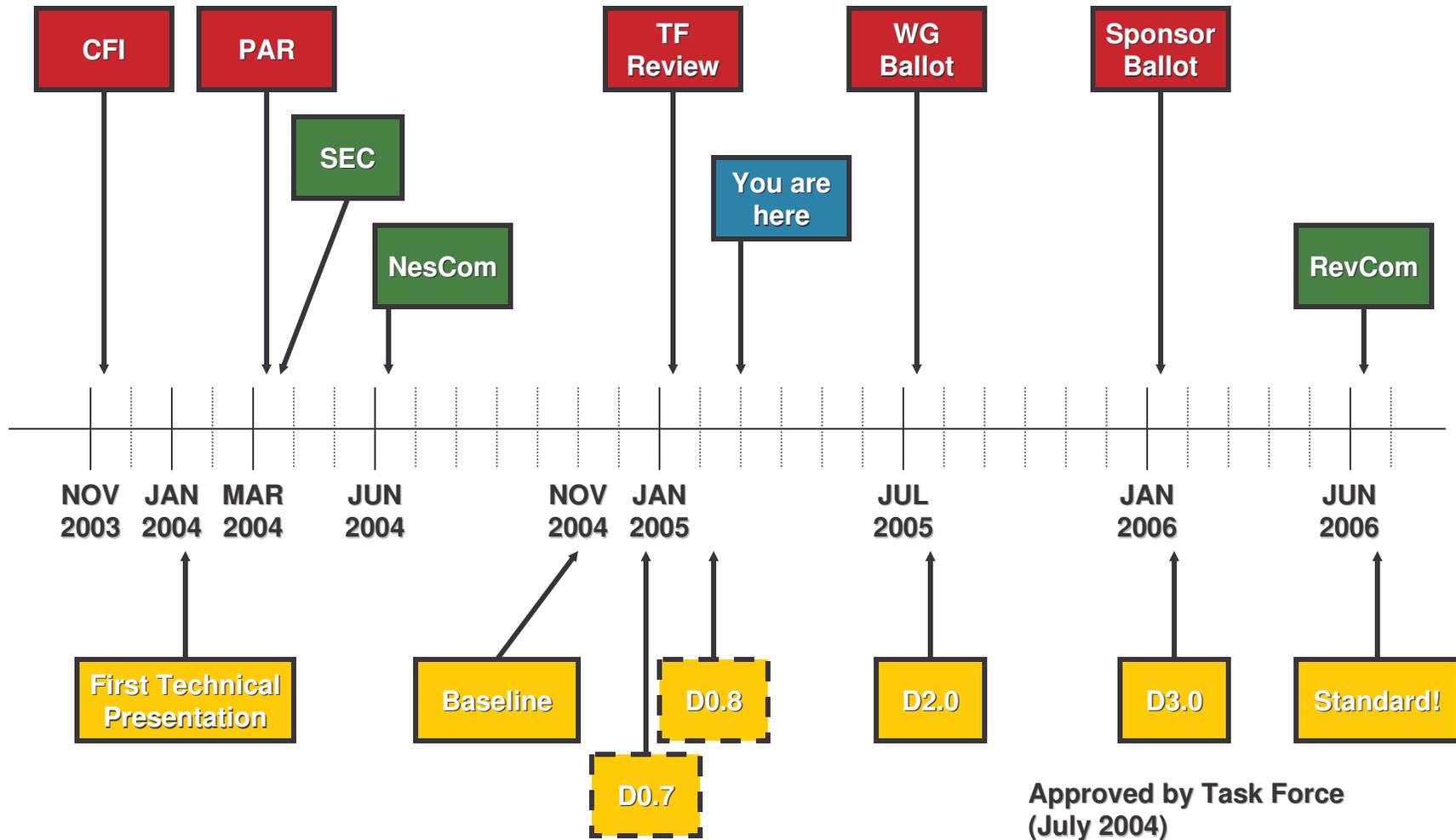
- Move to accept suggested remedy with the table of a range and resolutions of the taps being informative.
Passed (All: 24/1/15, 802.3: 18/1/11)
- Move to accept Signal Detect as part of the -KX Baseline (as written).
Passed (All: 19/4/16, 802.3: 11/4/12)
- Move to accept Signal Detect as part of the -KX4 Baseline (as written).
Passed (All: 19/4/14, 802.3: 15/5/9)
- Move that 802.3ap Task Force Adopt NRZ as the baseline signaling targeting the channel set consisting of Molex, Tyco, and updated Intel channels.
Passed (All: 36/6/4, 802.3: 27/3/3)
- Accept proposed comment resolutions and direct editor to create Draft 0.9 based on comment resolutions and adopted proposals and submit to the Task Force for review.
Passed (All: 40/0/0)

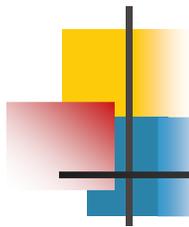


Future Work

- Generate Draft 0.9 and submit for review.
- “Big Ticket” Items
 - ~~10GBASE KR signaling~~
 - Backplane channel specifications
 - Compliance test methodologies
- Continue to prepare IEEE P802.3ap for Working Group ballot.

IEEE P802.3ap Timeline



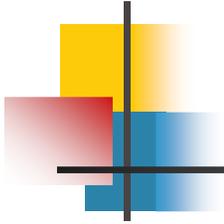


Future Meetings

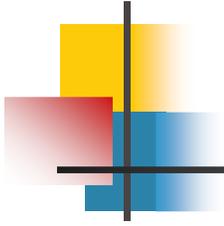
- May 2005 Interim
 - Date: TBD
 - Location: TBD

- June 2005 Interim
 - Date: TBD
 - Location: TBD

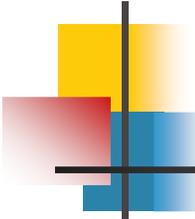
- July 2005 Plenary
 - Date: July 17-22, 2005
 - Location: San Francisco, CA



Thank You!



Back-up



Document Review

Draft 0.7: 81 pages

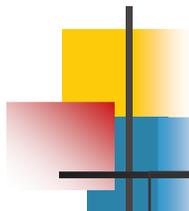
Comments from 5 individuals

Comment	TR	T	E	Total
Clause 01	0	0	0	0
Annex 28E	5	8	10	23
Clauses 30, 36, Annex 30B	0	0	0	0
Clause 45	2	2	0	4
Clause 69	0	1	1	2
Clause 70	1	8	4	13
Clause 71	0	2	0	2
Clause 72	0	4	1	5
Annex 72A	0	0	0	0
Total	8	25	16	49

Draft 0.8: 122 pages

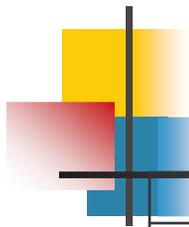
Comments from 15 individuals (9 companies)

Comment	TR	T	E	Total
Clause 01	1	0	0	1
Annex 28E	11	17	11	39
Clauses 30, 36, Annex 30B	3	0	0	3
Clause 45	2	7	25	34
Clause 69	0	8	10	18
Clause 70	1	10	1	12
Clause 71	1	9	6	16
Clause 72	5	11	16	32
Annex 72A	0	0	7	7
Total	24	62	76	162



Presentation Agenda (3/15)

8:30 AM		Agenda and General Information	0:30
9:00 AM	van Doorn	Editor's Report	0:15
9:15 AM	Altmann	Signaling ad hoc report-out	0:10
9:25 AM	Barazande-Pour	Simulation Results for 10 Gb/s Duobinary Signaling	0:30
9:55 AM		Break	0:20
10:15 AM	Moore	Simplified theory of NRZ, duo-binary, and PR-4	0:10
10:25 AM	Anderson	Signaling Method Performance Results	0:30
10:55 AM	Liu	Comparison of Signaling Schemes for 802.3ap	0:20
11:15 AM	Altmann	Simulation Results for 10Gb Serial BP Links	0:40
11:55 AM		Lunch	1:30
1:25 PM	Brink	Comparison of NRZ, PR-2, and PR-4 signaling	0:25
1:50 PM	Abler	NRZ/DFE simulation results over ad-hoc channels	0:20
2:10 PM	Bar-Niv	NRZ Simulation on pre-selected ad hoc channels	0:25
2:35 PM	Popescu	10 Gb/s NRZ Signalling on Ethernet Backplane	0:25
3:00 PM		Break	0:20
3:20 PM	Healey	Channel Model Ad Hoc Report	0:15
3:35 PM	Oganessyan	10 Gbps Data Transmission in FR-408 GbX Reference Backplane	0:20
3:55 PM	Peters	Improved HVM ATCA Models	0:40
4:35 PM	Hendrick	Enterprise Midplane Channel Definition	0:20
4:55 PM	Xiao-Ming Gao	Comparisons of different S parameter DC extrapolation methods and their impacts on equalization	0:30
5:25 PM		Break	



Presentation Agenda (3/16)

8:30 AM	Moore	Specifying Crosstalk	0:30
9:00 AM	Popescu	Crosstalk Penalty Analysis	0:20
9:20 AM	Thaler	Digital Signal Detect Function	0:30
9:50 AM		Break	0:20
10:10 AM	Fakterman	Codes comparison for 10G backplane system	0:40
10:50 AM	Szczepanek	CEI-P FEC and 802.3ap	0:30
11:20 AM		Comment Resolution	0:30
11:50 AM		Lunch	1:30
1:20 PM		Comment Resolution	1:40
3:00 PM		Break	0:20
3:20 PM		Comment Resolution	2:10
5:30 PM		Break	