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# IEEE P802.3ap Task Force

## Opening Plenary Meeting Report

Portland, OR

July 12, 2004



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The Backplane Ethernet Study Group  
became the IEEE P802.3ap Task  
Force on May 13, 2004.

Thanks to all who help make this happen...



# Task Force Organization

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- Task Force Chair
  - Adam Healey ([ahealey@agere.com](mailto:ahealey@agere.com))
  
- Task Force Secretary
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- Chief Editor
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- Channel Model Ad Hoc Chair
  - Joel Goergen ([joel@force10networks.com](mailto:joel@force10networks.com))



# Reflector and Web

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- 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:

***`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](http://www.ieee802.org/3/ap/public/channel_adhoc)***



# IEEE P802.3ap Task Force Documents

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- Approved PAR

<http://standards.ieee.org/board/nes/projects/802-3ap.pdf>

- 5 Criteria

[http://ieee802.org/3/ap/802\\_3\\_ap\\_5criteria.pdf](http://ieee802.org/3/ap/802_3_ap_5criteria.pdf)

- Objectives

[http://ieee802.org/3/ap/802\\_3\\_ap\\_objectives.pdf](http://ieee802.org/3/ap/802_3_ap_objectives.pdf)



# IEEE P802.3ap Objectives

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- **Preserve the 802.3/Ethernet frame format at the MAC Client service interface.**
- **Preserve min. and max. frame size of current 802.3 Std.**
- **Support existing media independent interfaces.**
- **Support operation over a single lane across 2 connectors over copper traces on improved FR-4 for links consistent with lengths up to at least 1m.**
  - **Define a 1 Gb/s PHY**
  - **Define a 10 Gb/s PHY**
- **Consider auto-negotiation.**
- **Support BER of  $10^{-12}$  or better.**
- **Meet CISPR/FCC Class A.**



# Interim Meeting

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- May 24 & 25, 2004
- Long Beach, CA
  
- 16 technical presentations
  - System Requirements
  - Backplane Channel Model
  - Auto-Negotiation
  - 1 and 10Gb/s serial PHY
  
- Identified points of agreement on backplane channel and auto-negotiation.



# Important Result

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- New objective...
- Motion: Move to augment the existing 802.3ap objectives to include defining a 4-lane 10Gb/s PHY for operation over the 802.3ap channel model. Add the following bullet to the objectives:
  - Define a 4-lane 10Gb/s PHY for operation over the 802.3ap channel model.
- Technical (75%)
- Moved – Jeff Lynch
- Seconded – David Koenen
- All (Y/N/A): 32/10/3
- 802.3 (Y/N/A): 11/1/1
- MOTION PASSES





# Plan for the Week

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- Hear presentations
  - 27 technical presentations
  - Topics:
    - Backplane Channel Model
    - Auto-Negotiation
    - Test Methodology
    - 10Gb/s serial PHY
  
- Build confidence in proposed channel limits (and identify areas where corrections are required).
  
- Identify candidate architectures for 10Gb/s Serial PHY and Auto-Negotiation.



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Thank You!