

# **IEEE 802.3ab TASK FORCE INTERIM MEETING**

Airport Hyatt, San Jose, CA, February 12-13, 1998

## **MAIN RESULTS OF THIS MEETING**

- The issues with start-up protocol were resolved. The Task Force accepted the 3 Phase Fixed Timer approach with bypass as the start-up protocol.
- Comments to Draft 1.3 were discussed. The next draft (D2.0) will be issued promptly by Colin Mick, editor.

## **\*\*\*MINUTES (Approved 3/9/98)**

### **\*\*\*THURSDAY, FEBRUARY 12, 1998**

The meeting was called to order by George Eisler, Chairman, at 9:10 am. The list of attendees is part of these minutes. George discussed the agenda for the meeting, which is also enclosed as part of these minutes.

Juan Jover was appointed Secretary.

There was discussion among the members about the process to follow to solve the start-up issue. It was agreed to hear four presentations related to this topic.

PRESENTATION 1: "3-Phase Start-up Fixed-Timer State-Machine" by Jaime Kardontchik (paper copy is attached to these minutes). He pointed out a potential problem with the 3-phase protocol when the Master is in phase 3 and the slave is implementing a blind protocol. Questions and comments followed.

PRESENTATION 2: "A Closer Look at the Startup Issues" by Ramin Nobakht (paper copy is attached). He showed problems with the 3-phase protocol and proposed to go with a blind startup. Questions and comments followed.

PRESENTATION 3: "Startup Resolutions for 1000Base-T" by Sailesh Rao (paper copy is attached). He pointed out problems with the 3-phase approach and expressed agreement with the other three proposals (Reduced-phase approach, Blind startup approach, and Fixed-timer approach). Questions and comments followed.

PRESENTATION 4: "Evaluation of the Synchronized Three-Phase Approach" by Oscar Agazzi et al. (copies were distributed). He showed simulations to demonstrate that the signal detect and the state machine are robust. Questions and comments followed.

LUNCH BREAK from 12:45 pm until 2:15 pm.

Discussion continued regarding Presentation 4.

MOTION 1 (technical---failed): “To adopt the 3-Phase Fixed Timer Startup write-up of 2/12/98.” Friendly amended to “To adopt the 3-Phase Fixed Timer Startup write-up of 2/12/98 and remove link\_control = Enable, bypass = True transition in Figure 40-5 and associated text”

Moved by A. Castellano, seconded by M. Hatamian. Friendly amendment moved by Dineen, seconded by McConnell, accepted by the movers. Discussion on Motion 1 as amended started.

MOTION 2 (procedural---failed): “Postpone discussion of Motion 1 until 2/13/98.”

Moved by Nobakht, seconded by Heaton. Vote in favor: 2, Against: 18, Abstain = 9. This motion to postpone failed.

Discussion of Motion 1 continued. The question was called by Ray, seconded by Rao. In favor of calling the question: 21, Against: 3, Abstain = 3. The question was then called.

Motion 1 was voted: In favor: 6, Against: 15, Abstain = 11. Motion 1 failed.

STRAWPOLL: Vote for all the texts available for section 40.3. Vote for multiple items is allowed. Affirmative votes:

- Fixed Timer 3 Phase with bypass: 21
- Reduced Phase (HDSL): 19
- Blind: 15
- Signal Detect 3 Phase: 10

MOTION 3 (technical---approved): “To accept the 3-Phase Fixed Timer Startup of 2/12/98 as written.” (paper copy is attached to these minutes).

Moved by Gladstone, seconded by Creigh. The question was called by Creigh and seconded by Ray. Objected by Dineen. In favor of calling the question 26, opposed 1, abstain 20. The question was called. Motion 3 was voted. In Favor: 20, Against: 3, Abstain = 11. Motion 3 carries.

PRESENTATION 5: “1000Base-T Autonegotiation & Link Criteria” by Kishan Konda et al. (paper y is attached). Questions and comments followed. Kishan will present changes to draft 1.2 tomorrow.

PRESENTATION 6: “1000Base-T Automatic Crossover Algorithm” by Dan Dove (copy is attached). He presented an algorithm for automatic determination of MDI or MDIX configuration. He will prepare a write up for tomorrow.

The meeting was adjourned at 5:25 pm.

**\*\*\*FRIDAY, FEBRUARY 13, 1998**

The meeting was called to order by George Eisler, Chairman, at 9:00 am.

PRESENTATION 7: "Clause 40 Cabling. FEXT Specifications" by Chris Di Minico (paper copy is attached; Chris will post the presentation on the reflector). There was discussion about noise budgets and other target values and the following motion was adopted.

MOTION 4 (technical---approved): "Remove noise specs in mV from 40.8.6.2.1"  
Moved by Rao, seconded by Dove. In favor: 15, Against:1, Abstain: 9. Motion 4 carries.

The logistics for the next 802.3ab meeting were discussed. It was agreed that:  
Sunday, March 8, 6:00 pm meeting to review tutorial.  
Monday, March 9, morning meeting for comment resolution.  
Tuesday, March 10, afternoon meeting to continue comment resolution.  
Wednesday, March 11, all day meeting to finalize comment resolution.

A discussion of the tutorial followed. Bruce Gladstone will coordinate the logistics of putting the tutorial together. Presenters:  
- Colin Mick - introduction and timeline  
- Bruce Gladstone or Sreen Raghavan - challenges  
- Juan Jover or Sailesh Rao - technical details  
- Mike McConnell or representative - size, power, and other characterizations  
The intention is that the presentations will be made by technical people and that the name and affiliation of the speakers will be on the first slide. McConnell agreed to produce copies of the presentation.

MINUTES of the January 12-13, 1998 Interim Meeting were approved. Moved by Mick, seconded by Gladstone, no objections.

Dan Dove presented his technical comments (#2 and #3).

DRAFT REVIEW: Geoff Thompson reminded the editor that all drafts need to include the front IEEE disclosure page as well as a list of all the changes. Colin Mick conducted a page-by-page review of Draft 1.2. Editorial comments were made by the members and noted by the editor.

ACTION: Dan Dove was asked, by acclamation, to fix section 40.5.1.1.6.2.

LUNCH BREAK from 12:30 pm until 1:30 pm.

The page-by-page review continued during all the afternoon.

Kishan Konda presented further details on autonegotiation.

Dan Dove followed through on his action item from the morning session and brought in a proposal to fix section 40.5.1.1.6.2.

MOTION 5 (technical---approved): “Authorize the editor to produce the next draft to include comment resolution as per the meeting of February 12 and 13, changes to the autonegotiation and MDI/MDX as per presentations in the meeting, and the line-by-line review of the draft.”

Moved by Deneen; seconded by Ray. Motion 5 carries unanimously.

NEXT MEETING: March 8 - 13, 1998, Irvine, California.

The meeting was adjourned at 5:10 pm.

Respectfully submitted,

Juan Jover  
Secretary

**\*\*\*ADDENDUM: AGENDA FOR THE MEETING (As presented by George Eisler)**

Thursday, Feb. 12

9:00 am - 9:30 am                      Opening  
9:30 AM - As Long As It Takes      Startup

Presentations:                      Jamie Kardontchick    15 min.  
   Ramin Nobakht        15 min.  
   Sailesh Rao            45 min.  
   Oscar Agazzi          30 min.

1:30 pm - 5:30 pm      Decision Making

Friday, Feb. 13

8:30 am - 9:30 am                      Colin Mick                      Status  
9:30 am - 10:30 am                      Kishan Korda                      Autonegotiation  
10:45 am - 12:15 pm                      Dan Dove                      Autocrossover  
11:15 am - Noon                      Bruce/Collin/Mike/Juan      Tutorial  
  
1:00 pm - 1:20 pm                      Crhis Di Minico                      Wiring Issues  
1:20 pm - 3:15 pm                         Review of draft  
3:30 pm - 5:00 pm                         Schedule and meeting plans

**\*\*\*ADDENDUM: ALPHABETICAL LIST OF ATTENDEES**

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