Maintenance Task Force Closing Report

July 2008 Denver Plenary Wael William Diab – Broadcom

Agenda

- Maintenance Request Status
 - 1 New Request Considered
- 802.3ax and 802.3ay Update
- Review TF Meeting
 - Agenda of meeting
 - ISOing 802.3
 - Request from 802.1 for timestamp / sync
 - 802.3's Use of LLDP
 - Moving Annex F from 802.1ABREV to 802.3
 - Guidance on the use of a protocol / state machine over LLDP
- Maintenance Website Information

Maintenance Request Status

- 36 Open Maintenance requests
- 1 new request since March
 - Related to Multipoint MAC Control (EPON)
- Current status of open requests:

Balloting 20
Ready for ballot 10
Awaiting clarification 0
To be categorised 6

Notes:

All 'Balloting' requests included in IEEE 802.3ax draft All 'Ready for Ballot' assigned to IEEE P802.3at

New request

| Request | Standard | Subclause | Subject |
|---------|----------|-----------|---------|
|---------|----------|-----------|---------|

1196 IEEE Std 802.3-2005 Figs 64-12 & 64-13 OTL, ONU MUX States

New Maintenance Request 1196

- REQUESTED REVISION:
 - STANDARD: 802.3as-2006 / CLAUSE: 64 Multipoint MAC Control
- PROPOSED REVISION TEXT:
 - Revise text in figures 64-12 and 64-13 in accordance with the attached figures.
- RATIONALE FOR REVISION:
 - The state diagrams relied on the particular behaviour of the TransmitFrame() primitive ie. that it completes after the final bit has been transferred to the PHY. 802.3as-2006 replaced the invocations of TransmitFrame() with MA_DATA.Request() Which completes without delay. But 802.3as-2006 did not correspondingly update the transmission backoff timer, which must now compensate for the fact that the primitive returns immediately. Consequently, in each of the 4 places where "packet_initiate_delay" is calculated, the term "round_up((length+tailGuard) / 2)" must be added. This value corresponds to the duration Of the TransmitFrame() primitive.
- IMPACT ON EXISTING NETWORKS:
 - This change restores the text to conform to the behaviour of 802.3-2005 which is the behaviour followed by all deployed EPON devices.

New Request Summary

- Debate on whether the interface or the use of the interface needs to be fixed
- Debate on urgency and scope of fix
 - Would impact method of solution
- Debate on impact to 802.3
- Chartered ad-hoc. Appointed Jeff Mandin to Chair it
 - Ad-hoc to address the above issues
 - Ad-hoc to conduct telecons / mtgs as needed
 - Ad-hoc to report to Maint TF on Monday in Sept
 - Discussion on maint reflector
 - Will request TF Chairs to pass info on their reflectors

802.3ax and 802.3ay Update

Motion to submit to RevCom for the SASB consideration in September

TF Motion

- Request that the IEEE 802.3 Working Group Chair request IEEE 802 EC approval to submit IEEE P802.3 (802.3ay) D2.3 and IEEE P802.1AX (802.3ax) D2.1 for September consideration by RevCom and the SASB.
- M: Frazier
- S: Zimmerman
- ALL: Y:9 N:0 A:0
- Motion Passes 2.14pm

WG Motion

- Request that the IEEE 802.3 Working Group Chair request IEEE 802 EC approval to submit IEEE P802.3 (802.3ay) D2.3 and IEEE P802.1AX (802.3ax) D2.1 for September consideration by RevCom and the SASB.
- M: W. Diab on behalf of the TF
- Y:92

N:0

A:1

- Tech (75%)
- Motion Passes 2.06pm

Wednesday's Mtg. Agenda

- Review patent slides
- Review and approve agenda
- Approve May 2008 Minutes
- Review feedback from 802.1 regarding LLDP and 802.3at
- Review new maintenance request
 - Categorize request
- Update on 802.3ax and 802.3ay
- ISOing 802.3
- Request from 802.1 for timestamp / sync
- Other business

ISOing 802.3 Discussion

- Discussion on the topic
- Consensus not to forward any further standards to ISO

802.1 Timestamp / Sync

- Request from 802.1 to look at ways for timestamp and sync for AVB and other apps
 - Related materials from 802.1 will be posted to the 802.3 Maintenance area for
- Propose a joint ad-hoc meeting between 802.1 and 802.3 to address the topic on Monday of the collocated meeting in September in S. Korea 2008
- Would like to request that the WG Chair or his designee to coordinate meeting announcement with 802.1

802.3's Use of LLDP

- 802.3at, 802.3az looking to use LLDP in their projects
 - Assignment of Sub-types (code points)
 - Related MIB work
 - 802.3 related Sub-types, TLVs and MIB module in Annex F
- At the joint meeting we looked at several options
 - Everything in Dot1, tied to AB-REV
 - 2. Move everything into 802.3
 - 3. New OUI for 802.3
 - 4. 802.1 assigns a block of subtypes under the existing OUI to 802.3 to establish an RA within 802.3
- Consensus on Option 2
 - Identified steps to move Annex F from
- Identified a high level plan to deal with the move in .3

802.3 Code-points (Subtypes)

Table F-1—IEEE 802.3 Organizationally Specific TLVs

| IEEE 802.3 subtype | TLV name | Subclause reference |
|--------------------|--------------------------------------------|---------------------|
| 1 | MAC/PHY Configuration/Status | F.2 |
| 2 | Power Via Medium Dependent Interface (MDI) | E3 |
| 3 | Link Aggregation (deprecated) | F.4 |
| 4 | Maximum Frame Size | F.5 |
| 5–255 | reserved | _ |

Table F-1, IEEE P802.1AB-REV/D3.0 (Previously Table G-1, IEEE P802.1AB-2005)

Steps to Move Annex F to .3

- Steps discussed in the joint meeting
 - Scope modification of 802.3at
 - Make Patcom aware and explain to PatCom why the situation differs from .3ax/.1AX
 - Steps in 802.3
 - Discuss scope modification and work in .3at
 - Discuss maintaining once in .3 in maintenance
 - Consider steps in 802.1AB-REV
- Proposal being discussed in 802.3
 Maintenance TF / .1 may change above

Proposed Plan to Move Annex F

- Create a new project in .3 to do the move
 - Amendment project
 - Scope limited to moving the Annex
 - Alleviates complications with making
 .1ABREV and this project co-contingent
- Proposed 802.3 Structure
 - New Clause for TLVs and Sub-types
 - Restore Clause 30C for SNMP MIBs
 - Protocol agnostic work in Clause 30
- .3at, .3az, other projects modify above

Guidance for use of a State Machine/Protocol over LLDP

- No fundamental problem to do State Machine
- Preferably don't do ACK/NACKs, if you do, you need serial numbers
 - Look at DCB proposal as an example of serial numbers. Has not been examined in .1 yet
- Don't make it too chatty
 - LLDP may be running other protocols
 - Minimize the number of frames transmitted
- 802.1 expertise may be available to help
- Opportunity for 802.1 members to ballot in WG on 802.3at
 - Request based system
 - Same for 802.3az

Maintenance Web Information

IEEE 802.3 Maintenance web site:

http://www.ieee802.org/3/maint/index.html

IEEE 802.3 Maintenance request form is available at:

http://www.ieee802.org/3 /private/maint/revision_request.html

Username: *******

Password: *******

Password **is** case sensitive

- IEEE 802.3 Maintenance reflector stds-802-3-maint@ieee.org
- IEEE 802.3ax (IEEE P802.1AX) Link Aggregation
- IEEE 802.3ay (IEEE P802.3) Maintenance #9 (Revision) http://www.ieee802.org/3/axay/index.html