IEEE 802.3as – Frame Expansion

January 2005 Interim

Meeting opened at 9am, Jan 12, 2005
Chair: Kevin Daines, World Wide Packets
Secretary: Glenn Parsons, Nortel Networks
Attendees: 6 people at opening, peaked at 15

Intro

- We are now a Task Force with an approved PAR.
- New website will be – www.ieee802.org/3/as
- The chair reads the IEEE-SA patent policy from the bylaws
- Chair overviews process and timeline
  - We should complete at least at the same time as 802.1ad Provider Bridging
- At the March closing plenary we intend to decide the frame size

Clause 3

- Do we need the padlock in the figure?
  - It is not clear, perhaps confusing with security
  - Describe in text and show
- maxValidFrame
  - Should this be in clause 3? Or should it be 1500.
  - Agree to change to 1500.
- Clause 3.2.7
  - Remove last sentence,
  - Remove last 3 words of new last sentence
  - The particular implementation -> this implementation
- Fig 3-3 changes
  - How do we deal with minimum size frames? When we added Qtag we reduced the minimum MAC client data + pad from 46 to 42.
  - This may complicate the untagged state machine.
  - Force the 42 case to only apply to Qtag? Yes, this allows a 64 octet Q tagged frame.
  - Choose the best engineering solution. 46 applies to all new prefix/suffix.
  - Straw poll with 4 options
    1. >=64 + envelope - 2
    2. #1 with Qtag exception - 10
    3. #1 with prefix exception - 3
    4. No minimum - 0
- Clause 3.5 title changes
- Should we go to the press or analysts with an educational campaign?
  - There is already a PAR PR in the works…

Clause 4

- Half or full duplex
  - Do both with cautionary text.
  - Where does that go? Put here, perhaps sprinkle it in repeater clause too.
- FCS?
  - Have confirmed 4bit manhcester to 9000 octets - Pat
  - Two 9 bit bursts up to 1625 bytes in GE??? – Hugh
  - 8 bit error goes farther – Pat
  - Bottom line, this is not a concern
- Frame size
  - Should grandfather 'Qtagged'
  - Caution – ensure that there are no restrictions
- Constants
  - Grandfather all Qtag references
  - Retain current data & DataValue definition to include prefix & suffix
  - Add new 'basic data' such that data = basic data + prefix + suffix
  - Will this be an issue for the MAC client interface in Clause 2? Likely not, but we should check.

Issues

- Layering – where does MACsec fit
  - This is not our job
  - Perhaps discuss in joint plenary with 802.1
- Tag ordering
  - Out of scope for 802.3
- Reserved space
  - No need to include this, we should ask for an Ethertype if we want to do this.
- Management attribute
  - Number value?
  - Enumerated list?
  - Straw poll
    - No attribute – 3
    - Enumerated list – 6
    - Bit string – 0
  - How do we get .3 to review this before WG ballot?

Joint meeting – 802.3as/802.1

- Review PAR & objectives
- Frame size options
  - Why don't we not specify a value? That is, tell the chip vendors to be flexible.
  - Agree that 2000 is the least offensive option.

- Minimum frame size
  - Do wrappers pad out to 64?
  - .1AE has a frame length tag to locate the suffix
  - In fig 3-3, pad should be below suffix
  - There should be no set maximum since we cannot enforce it – Norm
  - We cannot leave the lid off the box – Geoff
  - Cannot enforce prefix & suffix sizes so don't – Norm
  - We have to include some pointers – Hugh
- Will have another joint meeting in March

Closing

Motion #1

- Adopt 'proposed changes to clause 3' – daines_1_0501.pdf as the basis for 802.3as/D1.0 with the following changes:
  - Remove padlock icon
  - Move the pad field after suffix
- Move: Daines   Second: Thaler
- Discussion
  - Move grandfathered material to an annex?
  - Lets document and comment against it.
- Vote: Y–8 N-0 A-6

Motion #2

- Adopt 'proposed changes to clause 4' – parsons_2_0501.pdf as the basis for 802.3as/D1.0.
- Move: Parsons   Second: DVJ
- Discussion
  - Should we put a number here? 2000 is rationalized by having space in the 2048 buffer
  - What is MAC client data?   Does it include the PAD or not?
  - Discussion on Fig 3-1 and that we should not put all the prefix/suffix details in the Pascal
  - Agree that no changes to clause 2
  - One frame format with informational notes/figures on Qtag and envelope. New max dataValue is 1500/1504/1982
  - New reluctancy to motion anything at this stage. Prepare an unapproved draft.
- Withdrawn

Motion #3

- Reconsider motion #1
- Passed by acclamation

Motion #4

- Editor to create D0.1 for distribution and review prior to the March meeting. This will be an 'unapproved draft' with no official status.
- Move: Diab   Second: Grow
- Discussion
  - Drop dead is at least 1 week before
- Vote: Y–9 N-0 A-2

Editor

- Appoint Glenn Parsons as editor

Motion #5

- Send communication statement to ITU-T SG15
- Move: Barrass   Second: Thaler
- Vote: Y–5 N-0 A-1

Future meetings

- March 13-18 - Atlanta
- May 9-13 - Barcelona
- July 17-22 – San Francisco

Adjourn at 5:45pm