

802.3 Frame Expansion ad-hoc

Progress

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Outline

- **Progress related to work request**
- **Concerns raised during ad-hoc**
- **Questions for 802.1**
- **Plan for 802.3 closing**
- **Plan for September interim**

Progress related to work request

■ **Liaisons/work requests**

- **Directory:**

http://www.ieee802.org/3/frame_study

- **802.1 work request filename:**

“8021_Frame_Size_Revision_Request_to_8023.pdf”

- **ITU-T SG15 (COM15-LS28) liaison filename:**

“COM15-LS281.doc”

■ **Met as 802.3 ad-hoc yesterday**

■ **Reviewed background material, impacts to existing networks, proposed frame format, draft PAR**

■ **Lots of interest**

Concerns raised (1/2)

- **Is this absolutely necessary?**
- **Alternatives**
 - **Exclude .3 support from .1ad & .1AE standards**
 - **Handle on bootleg basis**
 - **Require .1 SAR function**
 - **Discover MTU size capability**
 - **Reduce client MTU to make room for added headers**
- **Or**
 - **Extend frame size**
 - **Possibly use discovery to enable larger frames on some links**

Concerns raised (2/2)

- **Backward compatibility**
 - QTag installed base
 - Location of QTag EType
 - CSMA/CD fairness
 - Is there a way to contain “larger frames” in certain parts of the network and not break other parts
- **Additional space used only for headers not for additional data payload**
- **QoS impact/overall efficiency**
 - Increased jitter

Questions for 802.1

- Do you expect larger frames would work “magically” or did you anticipate a discovery mechanism?
 - Is there a way to contain “larger frames” in certain parts of the network and not break other parts
- Do you expect end-stations to tx/rx frames with additional *envelope* information?
- If 802.3 needs a project to add additional fields, do other WG’s also need similar projects? (.11, .17, etc)

Plan for 802.3 closing

- **Request .3 form Frame Expansion SG**
 - Ad-hoc straw poll **22-0** (**29** in room)
 - **18** would participate, **12** separate companies
- **Notify .3 that SG might pre-submit for PAR submission to NESCOM for Dec standards board meeting**
- **Resolve plans for September interim**
 - Prefer co-location with:
 - 802.1 (10/4, Ottawa): **13**
 - 802.3 TF/SGs (week of 9/27, west PA?): **5**

Plan for September interim

■ **Research following topics:**

- **Frame size limitations of:**
 - Existing equipment – below MAC (elasticity buffers, block coding, delimiters)
 - Existing equipment – above MAC (FIFO, fabric)
 - Links with FEC (EPON)
 - Rate compensation (WAN PHY, EFM Copper)
- **Effect of increased overhead on performance, especially in aggregation**
- **Feasibility of reducing MTU of installed base of clients**
- **Tutorial on 802.1AB**
- **Straw man frame format modifications**

■ **Finalize PAR/5 criteria**

■ **Draft TF objectives**

September interim attendance

- **Would you attend the Frame Expansion SG:**
 - **With .3, in ~PA, week of 9/27: 20**
 - **With .1, in Ottawa, week of 10/4: 36**