802.3 NGEABT
Enterprise Noise and
Use Case Analysis ad hoc

IEEE P802.3 NGEABT Study Group
German Feyh (Broadcom)
Enterprise Noise and Use Case Analysis ad hoc chair

January 28th, 2015

Proposed Agenda

10:30am MST meeting start

1.   Roll call

Record attendance, attendees' names and affiliations

- (Following previous meeting practice, ad hoc attendees are asked to please email Dave Chalupsky <david.chalupsky@intel.com> or German Feyh <feyh@broadcom.com> a note confirming their attendance)

2.   Reminder of IEEE patent policy

- www.ieee802.org/3/patent.html

3.   Housekeeping

Approve meeting agenda

Review the ad hoc charter/scope and deliverables

4.   Contributions

Test setup proposal and issues for measuring noise on cabling, Bryan Moffitt – CommScope

Enterprise Noise Measurement Test Setup, Ramin Shirani, Larry Cohen – Aquantia

5.   Brainstorming session

Review relevant content from prior standards/study group/task force work and/or new contributions

Discuss actions/next steps needed to begin moving forward with developing the ad hoc's deliverables

6.   Discussion and next steps

Noon: meeting end

Ad Hoc Communications

- The 802.3 NGEABT Enterprise Noise and Use Case Analysis ad hoc will use the P802.3 NGEABT study group reflector for ad hoc communications

- To subscribe to the P802.3 NGEABT reflector, send an email to: *ListServ@ieee.org* with the following in the body of the message (do not include "<>"):

  subscribe stds-802-3-NGBASET <yourfirstname> <yourlastname>

- Send P802.3 NGEABT reflector messages to:
  stds-802-3-NGBASET-request@listserv.ieee.org

- Task Force web page URL:
  http://www.ieee802.org/3/NGBASET/index.html

- Study Group material web page URL:
  http://www.ieee802.org/3/NGEBASET/public/entnoise/index.html

Ad Hoc Meetings

- Meeting frequency
  - Contribution driven
  - Regularly scheduled meeting may help maintain momentum

- Meeting venue
  - Teleconference (Webex)

Why Are We Here?

- Chartered by the P802.3 NGEABT Study Group Chair to investigate the
  - Enterprise Noise and
  - Use Case Analysis.

Enterprise Noise and Use Case Analysis ad hoc charter and scope/deliverables (proposed)

- Investigate Enterprise noise.

- Support Use Case ad hoc with analysis.

Existing documents
(in need of additional citations)

- Impulse Noise Impact on 2.5Gb/s , 5Gb/s Operation in Enterprise Environment (shirani_ngeabt_01a_0115.pdf)
  - Reviews mathematical foundations of impulse noise, generation and influence on cabling, proposes a measurement technique.

Areas for Review & Investigation

Review of existing test standards

- Pulse form
- Repetition rate

Investigations based on measurements of impulse noise

- CAT5E
- CAT6

Support of Use Case Analysis

- Adopt George Zimmerman's EXCEL spread sheet

Things Needed (Not Comprehensive)

- Impulse noise measurements
  - Noise sources
  - Test setup
  - Measurement technique
  - Measurement results
- Operational requirements for impulse noise
  - Recurrence
  - BER, fast retrain, link loss.

Ad hoc Next Steps

- To be discussed and determined

Thank You!