IEEE 802.3
Higher Speed Study Group
Opening Plenary Report

San Francisco, Ca
July 16, 2007

John D'Ambrosia, Chair
jdambrosia@ieee.org

IEEE 802.3 HSSG Organization

- **Study Group Chair:**
  - John D'Ambrosia (jdambrosia@ieee.org)
- **Web Master**
  - Frank Chang (ychang@vitesse.com)

- **"Reach" Ad Hoc Chair**

  - Andy Moorwood (amoorwood@extremenetworks.com)
- **"Fiber Optic" Ad Hoc Chair**
  - Dan Dove (dan.dove@hp.com)

Reflector and Web

- To subscribe to the HSSG reflector, send an email to:
    ListServ@ieee.org

    with the following in the body of the message (do not include "<>"):
    subscribe stds-802-3-hssg <yourfirstname> <yourlastname>
    end

- Send HSSG reflector messages to:
    STDS-802-3-HSSG@listserv.ieee.org

- HSSG web page URL:
    http://www.ieee802.org/3/hssg/

Interim Meetings

- ## April 17 – 19, Ottawa, ON, Canada
  - ❑ Hosted by Nortel Networks (Thanks!)
- ## May 28 – 31, Geneva Switzerland
  - ❑ Hosted by ITU
- ## July 16, San Francisco, CA
  - ❑ Adjacent to and co-located with this week's Plenary

April Interim Meeting

- April 17 – 19, 2007
- Ottawa, ON, Canada
  - Hosted by Nortel Networks
- 94 attendees
- 20 Presentations
  - Strawmans –
    - 40G MAC Rate Objective
    - 40km Objective
    - Cu Objective

April Interim – 40G MAC Rate

- Straw Poll #1 - Does the HSSG believe that there is broad market potential for 40 GbE (in addition to 100GbE)? (All: 24 / 24 / 26)

- Straw Poll #2 - Should the HSSG adopt the following objective - "Support a speed of 40 Gb/s at the MAC/PLS service interface." (All: 22 / 24 / 24)

- Straw Poll #11 - A standard for higher speed Ethernet should specify: A. 100 Gbps operation only; B. 40 Gbps operation & 100 Gbps operation; C. No Opinion (All: 27 / 26 / 14)

- Straw Poll #13 - If a 40G objective is to happen, should it be included in: A. PAR A; B. Separate HSSG PAR; C. A separate SG effort (All: 28 / 16 / 16)

- Straw Poll 14 - Should the 100G PAR A (including objectives approved at this meeting) be delayed due to lack of consensus on an additional 40G MAC Rate Option? (All (Y/N): 0 / 39)

Results from April Interim

- **Adopted 1 New Objective**
  - ❑ Move that the HSSG adopt an objective: to support at least 10m over a copper cable assembly (A: 51/0/15, 802.3: 23/0/7)

- **Moved 2 Objectives into PAR A**
  - ❑ Move the HSSG add the 40km reach objective to PAR A: Support at least 40km on SMF. (A: 49/1/11, 802.3: 22/1/7)
  - ❑ Move that the HSSG include the copper objective, "to support at least 10m over a copper cable assembly," into PAR A. (A: 47/0/22, 802.3: 20/0/11)

- **PAR / 5 Criteria Response: Updated and confirmed**

May Interim Meeting

- May 28 - 31, 2007
- Geneva, Switzerland
  - Hosted by ITU
- 89 attendees
- 27 Presentations
  - Objectives
  - Critters
    - 40G MAC Rate Objective
    - 40km Objective
    - Cu Objective
  - Strawmans – Objectives / PAR / Critters

May Interim: 40G MAC Rate Straw Polls

- Do you believe that the HSSG has proven broad market potential for a 40G objective? (All: 46 / 4 / 19)

- Which of the following would you support:
  - A: Forward PAR A as is (100G only) for July consideration
  - B: Forward modified PAR A with 40G added for July consideration
  - C: Forward dambrosia_01_0507 proposal (2 separate PARs) for July consideration
  - D: Forward PAR A as is (100G only) for July consideration and find a mechanism to study 40G

  - Results
    - By Chicago Rules: A: 36   B: 28   C: 28   D: 36
    - Select 1:   A: 2   B: 26   C: 6   D: 35
    - By Affiliation: A: 3   B: 13   C: 3   D: 22

May Interim Meeting Motions

- **Failed Motions:**
  - ❑ Adopt the objectives for 40 Gb/s operation shown below:
    - ▪ Support a speed of ~40 Gb/s at the MAC/PLS service interface while ensuring compatibility with OTN infrastructure
    - ▪ Define a family of physical layers for 40 Gb/s operation
      - ❑ Support at least 100m on OM3 MMF
      - ❑ Support at least 10m over a copper cable assembly
      - ❑ Support at least 1m over a backplane
    - ▪ All: 41 / 17 / 10, 802.3: 28 / 8 / 4

  - ❑ Move the HSSG request 802.3 working group approval of the PAR A objectives contained in agenda_01_0507 slide 21. All: 34 / 20 / 5, 802.3: 18 / 11 / 6

- **Passed (Procedural) Motion:**
  - ❑ The Higher Speed Study Group recommends the IEEE 802.3 WG form a 40G Study Group to evaluate definition of approximately 40Gb/s MAC data rate and related PHY capability to IEEE Std 802.3. All: 33 / 22 / 7, 802.3: 16 / 15 / 5

July Interim

- July 16, San Francisco, CA
- Adjacent to and co-located with this week's Plenary
- ≈90 Attendees
- Reviewed HSSG status and goals for week

Plans For the Week

- Hear 17 Presentations

- Finalize Objectives

- Finalize and approve PAR (or PARs)

- Finalize and approve 5C

- Pending this week's meeting, a PAR or PARs may be brought forward for consideration by the WG on Thursday

Straw Poll (802.3 Voters only)

- **I am planning on attending the IEEE 802.3 September Interim in Seoul Korea**

- **Results**
  - ❑ Yes - 46
  - ❑ No - 21
  - ❑ Don't know - 15
    - Likely to attend if it is a WG Interim Meeting - 3

Thank You!