IEEE 802.3 Congestion Management Study Group May Interim Report

Portland, OR
11-14 July, 2004

May Interim
1½ days – 7 Presentations

- **The Structure for Congestion Management**
  - Bob Grow: Intel
  - Observations, definitions & structure suggestions
- **Congestion Management Problem Statement**
  - Gopal Hegde: Intel, Jeff Lynch: IBM
  - Problem statement, Traffic types
- **Congestion Management – Managing the Layer Stack**
  - Jonathan Thatcher: Independent
  - Location of work: 802.3 or 802.1
- **A Survey of Standards Efforts on Traffic and Congestion Management in Ethernet Networks**
  - David Martin: Nortel Networks
- **Congestion Management in a Bladed System**
  - Shashank Merchant: Nokia
- **Preemption Simulations**
  - Eric Lynskey: UNH-IOL
- **Proposal for 802.3 Enhancements for Congestion Management**
  - Manoj Wadekar: Intel, Gary McAlpine: Intel, Tanmay Gupta: Intel
  - Problem description and simulation results

Task Force Objectives
(Straw polls – non-binding)

- Provide a mechanism for rate limiting
  - 22 in favor / 3 against

- Support for full duplex
  - 23 in favor / 1 against

Study Group Objectives 1/2 (Straw polls – non-binding)

- Evaluate 802.3x with finer granularity
    - 19 in favor / 1 against

- Address latency, latency variation and frame loss
    - 21 in favor / 1 against

- Evaluate rate limiting
    - ☐ Feed forward/back
    - ☐ Static/dynamic
        - 21 in favor / 3 against

- Consider preemption
    - 5 in favor / 9 against

- No changes to PHYs
    - 19 in favor / 1 against

Study Group Objectives 2/2 (Straw polls – non-binding)

- This is not an end-to-end flow control
    - 21 in favor / 1 against

- No new methods for traffic classification
    - 16 in favor / 5 against

- No reordering of packets within a class
    - 21 in favor / 1 against

- Be consistent with IEEE 802.3 and IEEE 802.1 layer architecture
    - 21 in favor / 0 against

- Be consistent with slow protocols (e.g. OAM)
    - 15 in favor / 0 against

Question

- Do you feel the study group should extend until November?
    - Y:24
    - N:2
    - 30 in attendance

Plans for the Week

- Hear follow-on presentations
- Continue on objectives
- 5 Criteria & PAR (?)