

MAC Services in Support of Frame Preemption Call For Interest (CFI)

IEEE 802.3 Working Group Plenary, March 12, 2012
CFI Requestor: Michael Grimwood

Precision Time Synchronization Background

- ▶ Precision time synchronization for Ethernet has been standardized by the combination of "IEEE 802.3bf Ethernet Support for the IEEE P802.1AS Time Synchronization Protocol" and "IEEE 802.1 AVB". These standards have already helped to converge several dozen proprietary A/V protocols to mainstream Ethernet LANs and have been adopted by major A/V streaming and time-sensitive networking systems. These standards have also expanded the overall Ethernet market to include automotive multi-media and industrial automation systems.

Call for Interest

- ▶ There is a need for lower end-to-end latency for scheduled traffic in time-sensitive LANs (i.e. industrial automation and automotive backbone) in order to address remaining requirements and further expand their markets. Link-by-link, packet preemption provides much lower latency for selected Class of Service (CoS) traffic and would help to meet these controlled and lower-latency requirements in time-sensitive LANs.
- ▶ IEEE Std 802.1 submitted 802.1Qbu PAR and 5 Criteria to the 802 EC for consideration in March 2012 in order to address the 802.1 aspect of this need. This PAR refers to coordination with an 802.3 project in order to provide optimized and coordinated standards. This Call For Interest will assess the interest within 802.3 to form a study group to explore the companion 802.3 PAR and 5 Criteria.

Consensus Building Meeting Logistics

- ▶ **Date**
 - Tuesday, March 13th
- ▶ **Time**
 - 8:30 pm to 10:00 pm
- ▶ **Location**
 - Kona 5
- ▶ **Moderator**
 - Michael Johas Teener, 802.1 AVB TG Chair