NG-EPON

Proposed Industry Connections Activity

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IEEE 802.3 Ethernet WG
Geneva, CH

18-July-2013

Why an ICCOM project?

▶ There is growing interest in the question:
What's next for Ethernet Passive Optical Networks?

  ▶ Several important events have recently occurred:

    ▶ IEEE Std 802.3-2012 1G/10G and 10G/10G EPON
      (nee IEEE Std 802.3av-2009) mass deployments are beginning

    ▶ IEEE Std 1904.1 Service Interoperability for EPON approved as an
      IEEE Standard on 14-June-2013

    ▶ IEEE P802.3bk Extended EPON nearly completed

    ▶ IEEE P802.3bn EPoC PHY well underway

▶ However, there is broad agreement that it is too early to
start a <u>study group</u> for an NG-EPON standards project

  ▶ There are too many important areas to be investigated first

▶ An ICCom project will allow us to perform these
investigations under the auspices of the IEEE

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NG-EPON ICCOM project goals

▶ Create a venue for interested individuals to discuss the requirements and technical options for the next generation of Ethernet Passive Optical Networks

▶ Operate under and report to the IEEE 802.3 Ethernet Working Group

▶ Explore operators' requirements

▶ Explore technological and economic tradeoffs.

▶ Explore the state of the art of optical technology for subscriber access networks

▶ Produce a report of the group's findings

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Current status

▸ Several of us have begun work on an "Industry Connections Activity Initiation Document" for NG-EPON

  ▸ The IEEE 802.3 Ethernet WG chair posted a draft to the WG reflector some weeks ago

  ▸ http://www.ieee802.org/3/private/email/msg01315.html

▸ We currently have 21 individuals from 13 entities who have asked to be named as "initial participants"

▸ We would like to hold a brief ad hoc meeting this week to review the contents of the ICAID with any interested parties

▸ We plan to seek approval of the ICAID from the IEEE 802.3 Ethernet WG and the IEEE 802 EC at the November plenary

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Activity this week

- Met for 45 minutes Tuesday afternoon
  - 25 individuals from 20 different entities
- Reviewed the NG-EPON ICAID (Industry Connections Activity Initiation Document)
  - Three small changes from the version posted before the meeting
    - "market potential" added to the set of areas to explore in 3.1
    - IEEE 1904.1 SIEPON standard status updated in 3.2
    - Simplified the last sentence of 8.1 describing stakeholders.
- The ICAID now lists 25 individuals from 15 different entities as initial participants in the activity

Plans for the future

▸ Would like the opportunity to hold another brief ad hoc meeting in York to finish work on the ICAID

▸ Will make sure that the finished ICAID is submitted to the IEEE 802.3 WG chair > 35 days before the November plenary session

▸ Plan to seek approval of the ICAID from 802.3 and the 802 EC at the November plenary session