# Call for collaboration between IEEE 802.3ca and ITU Q2 for PON convergence



























#### **Contributors**

🕨 China Telecom: Wang bo,Zhang Dezhi 🤇







- China Unicom: Zhou xiaoxia, Shen shikui, Guo lin, Shao Yan
- China Mobile: Zhang dechao, Wang Lei
- CAICT: Cheng qiang
- CTTL: liu Deqiang
- Nokia Shanghai bell: Chen xiao
- ZTE: Yuan liquan
- Fiberhome: Wang suyi, Huang Yuanbo
- Huawei: Liu dekun, Lin Huafeng
- Source Photonics: Jiang Xu, Shuai Xin, Guo Songtao
- Hisense: Zhang Hua
- Accelink: Chen Xuguang
- Inno Light: Song Yan





















# Consensus support on PON convergence

- PON convergence topic has been discussed in ad-hoc sessions several at the leading standardization developing organizations recently.
- It has been widely recognized that a converged PON ecosystem was a good idea and in everybody's interest.
- The associated SDOs are willing to maximize the chances for PON convergence by nurturing the "grass roots" effort and encouraging close coordination of the relevant parties.
- All the contributors and their affiliation in this contribution strongly support and call for PON convergence in next generation PONs, due to:
  - Cost and volume are very important for access network
  - PON convergence will provide a long term benefit to all operators and vendors

#### SDOs Team Up on PON Convergence



FREMONT, Calif. -- A group of standards development organization (SDO) representatives have jointly issued a statement on the topic of PON Convergence.

The representatives are:



· Junichi Kani, Chair, Full Service Access Network Group

· Curtis Knittle, Chair, IEEE P802.3ca 100G EPON Task Force Glen Kramer, Chair, IEEE P1904 Access Networks Working Group

· Wei Lin, Co-Director, Broadband Forum Fiber Access Networks Work Area

The statement runs as follows:

PON technology has been an integral part of operator networks for a long time, but there have been competing standards since the beginning and it is widely believed that that has been detrimental to the greater deployment of PON. The future evolution of optical access systems is therefore of high interest to all stakeholders in the broadband access

There are many industry groups involved in setting the technical

http://www.lightreading.com/gigabit/fttx/sdos-teamup-on-pon-convergence/d/d-id/731234



3/16/2017

Login

COMMENT (0)

## Benefits of PON convergence

- Operators that have deployed both EPON and GPON
  - Reduce network complexity
  - Cut down CAPEX and OPEX
  - Eliminate unnecessary dispute on technology selection
- Vendors (system, optical module, chip, etc.)
  - Reduce development work
  - Enhance volume, and reduce cost
- Operators that have deployed only GPON or EPON
  - Potential benefit of unified industry chain and reduced cost

## PON convergence discussion

Three possible ways to process PON convergence:

- Option 1: Don't consider PON convergence in 100G EPON TF
  - Result in PON industry chain split, low volume for each both EPON and GPON series, especially for EPON series.
- Option 2: Only consider PON convergence in 50G and 100G EPON but not in 25G EPON
  - TF define 25G EPON first, and review the objective and timeline again based on PON convergence consideration
- Option 3: Consider PON convergence for all 25G, 50G and 100G EPON
  - TF fully review the whole objective and time line again based on PON convergence

#### Suggestions to IEEE 802.3ca

- Suggestions to IEEE 802.3ca on PON convergence if option 2 or 3 is adopted
  - Review the objective and reconsider the technical direction based on PON convergence when necessary
  - Take the ITU operators requirements into account
  - Collaborate with ITU Q2 to choose a next generation PON with the same bit rate and wavelength plan

#### Straw poll

- Which way do you prefer to proceed PON convergence in 100G EPON TF
- 1) Option 1: Don't consider PON convergence in 100G EPON TF
- 2) Option 2: Only consider PON convergence in 50G and 100G EPON but not in 25G EPON
- 3) Option 3: Consider PON convergence for all 25G, 50G and 100G EPON

#### **Motions**

• IEEE 802.3ca send a liaison to ITU Q2 to call for collaboration on the bit rate and wavelength plan selection for next generation PON