

Proposal for Objectives – Long Term long-reach P2P SPE

Matthias Fritsche / HARTING Technology Group

Supporter:

Harald Müller / Endress + Hauser

Peter Fischer / BKS Kabel-Service AG

Dieter Schicketanz / Reutlingen University

6/23/2021

Long-reach P2P SPE

- Based on Discussion notes on next-gen long reach: [zimmerman_3SPEP2P_01_06092021](#)
- And that we should not leave out the IT and IoT market
- And the 40m 1000BASE-T1 were specified with a lot of margin.

Long-reach P2P SPE

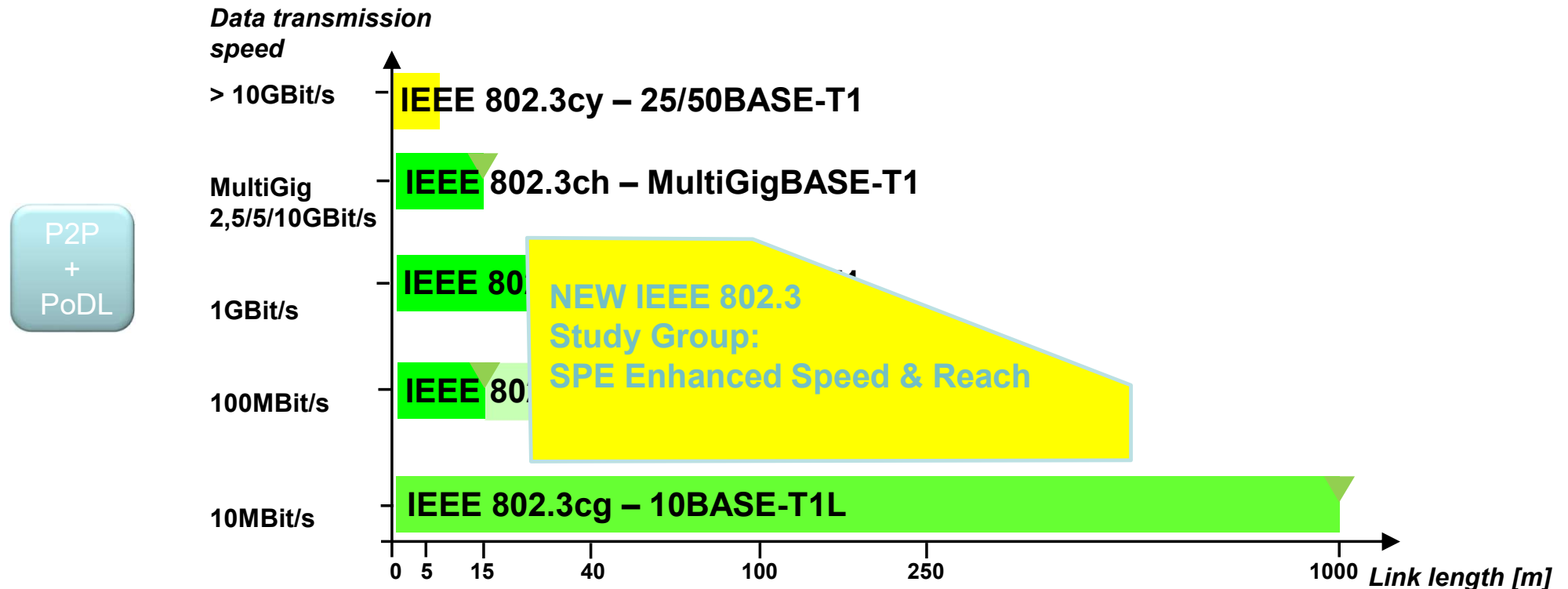
- Define a link segment and Phy to support 100 MBit/s
 - At least 400m
 - Support auto negotiation with (at least) 10BASE-T1L
 - Support remote powering IEEE 802.3bu/cg
 - Do not preclude working within an Intrinsically Safe device and system as defined in IEC 60079

Long or medium - P2P SPE

- Define a link segment and Phy to support 10 / 100 and 1000 Mbit/s:
 - At least 100m link segment
 - Support auto negotiation with (at least) 100BASE-T1L
 - Support auto negotiation optional with 10BASE-T1L
 - Support remote powering IEEE 802.3bu/cg
 - Do not preclude working within an Intrinsically Safe device and system as defined in IEC 60079
- Do not preclude future higher bit rate developments

Long-reach P2P SPE

- Idea behind this proposal: Close the gap for 100MBit/s and 1GBit/s SPE and create a complete SPE ecosystem



Discussion?
