SOURCE: ITU-T Question 4/15

TITLE: Communication to IEEE P802 concerning G.vdsl.f Foundation Recommendation

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APPROVAL: Agreed to at ITU-T SG15/4, 6-10 August, San Francisco, California, USA

FOR: Information and Action

TO: IEEE 802

  Jim Carlo, IEEE 802 Chair (j.carlo@ieee.org)

  Geoff Thompson, IEEE 802.3 Chair (gthompso@nortelnetworks.com)

  Howard Frazier, IEEE 802.3ah Chair (millardo@dominetsystems.com)

Mr. Carlo, Mr. Thompson, Mr. Frazier,

We understand the IEEE802.3ah Task Force is progressing work on the transport of 802.3 format frames in the Subscriber Access Network. ITU-T Q4/15 applauds this effort within the 802 Committee to enhance the utility of the Subscriber Access Network by endeavoring to enable the transport of Ethernet frames over it. Q4/15 would like to bring to the attention of IEEE802.3 that we have developed and are evolving work on several Recommendations (listed below) for transceivers for the copper loop plant. These Recommendations include TPS-TC (Transport Protocol Specific-Transmission Convergence) interfaces. The interfaces include provisions for the transparent transport of all kinds of packets such as 802.3-format frames, PPP frames, IP Frames, and others. Specifically, a Packet Transfer Mode (PTM) Transmission Convergence (TC) is defined. The PTM-TC Layer will use HDLC, facilitating packet encapsulation, rate decoupling and error monitoring. Note the specification of a Packet Entity (for layers higher than the TPS-TC) itself is out of the scope of our Recommendations and may be within your scope. (See Figure 1 and Figure 2)

DSL transceivers Recommendations we are developing with such facilities include G.vdsl.f. Our group's target is to complete the G.vdsl.f Foundation Recommendation by consent at the ITU SG15 meeting in October 2001. All of our transceiver Recommendations are designed to be compatible with the requirements that are imposed by various national and regional regulatory entities to ensure control of crosstalk and to limit harmful interference with the various services deployed on the copper loop plant.

Q4/15 suggests that 802.3ah give due consideration to employing our transceiver Recommendations for the transport of 802.3 frames over copper subscriber access. Specifically, we believe the PTM TC defined in our Recommendations would be useful in this regard. We would be happy to consult with you further on this matter in any manner you may see fit.
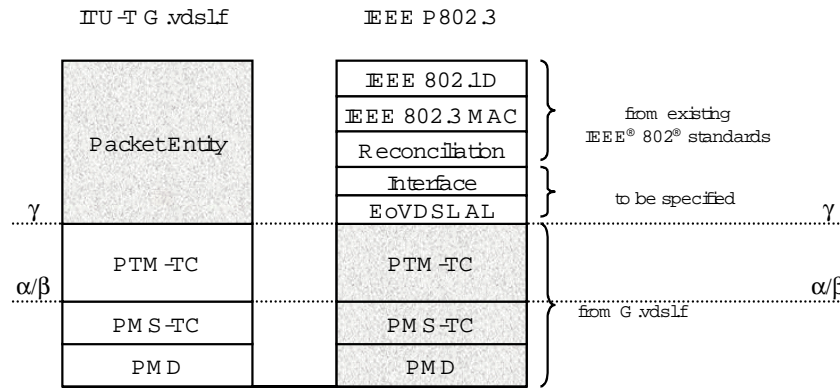
Kind regards,

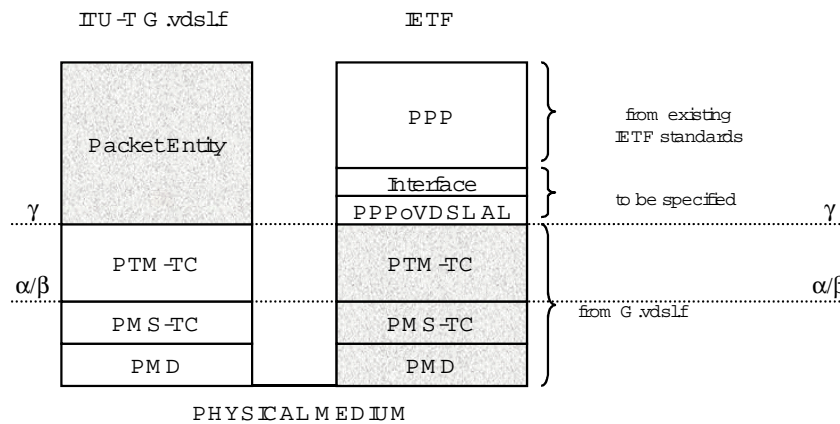Stephen Palm

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Figure 1: Possible IEEE 802.3 frame transport layer decomposition

PHYSICAL MEDIUM

Figure 2. Possible PPP transport layer decomposition

ITU-T Q4/15 Recommendations (available at: http://www.itu.int/itudoc/itu-t/rec/g/g800up/)

Rec. No.	Title or Proposed Title	Approval
G.995.1 (02/2001) (G.ref.bis)	Overview of Digital Subscriber Line (DSL) Recommendations	02/2001
G.991.1 (G.hdsl)	High bit Digital Subscriber Line (HDSL) Transceivers	10/1998
G.991.2 (02/2001) (G.shdsl)	Single pair High bit Digital Subscriber Line (SHDSL) Transceivers	02/2001
G.992.1 (G.dmt)	Asymmetrical Digital Subscriber Line (ADSL) Transceivers	10/1998
G.992.2 (G.lite)	Splitterless Asymmetrical Digital Subscriber Line (ADSL) Transceivers	06/1999
G.vdsl.f (G.993 series)	Very high bit rate Digital Subscriber Line (VDSL) Transceivers	10/2001
G.994.1 (02/2001) (G.hs)	Handshake procedures for Digital Subscriber Line (DSL) Transceivers	02/2001
G.996.1 (02/2001) (G.test)	Test procedures for Digital Subscriber Line (DSL) Transceivers	02/2001
G.997.1 (G.ploam)	Physical layer management for Digital Subscriber Line (DSL) Transceivers	06/1999
G.989.1 (G.pnt.f)	Phoneline Networking Transceivers - Foundation	02/2001
G.pnt.pml (G.989 series)	Phoneline Networking Transceivers - PML	10/2001