Question(s):	**4/15**	**Meeting, date:**	**Millbrae, CA, March 8 – 12, 2004**
Study Group:	**15** **Working Party:**	**1/15**	
Source:	**G.hs Editor**		
Title:	**LS from Q.4/15 to IEEE P802.3ah Task Force**		

LIAISON STATEMENT

To:	**IEEE P802.3ah Task Force**
Approval:	**Q.4/15 meeting (Millbrae, CA, March 12, 2004)**
For:	**Action**
Deadline:	

Contact:	Les Brown Centillium Communications USA	Tel: +1 (905) 826-4248 Cell : +1 (416) 985-9891 Email: les@centillium.com
Contact:		Tel: Fax: Email:

Please don't change the structure of this table, just insert the necessary information.

1. Introduction

ITU-T Q4/15 met previously January 19 – 23, 2004 in Singapore, and generated a liaison statement to the IEEE P802.3ah EFM Task Force from that meeting (our document SS-091R1).

Q4/15 has met again on March 8-12, 2004 in Millbrae, California. We send you this further liaison for your consideration and action.

2. Technical Issues

2.1. Aggregation Codepoints

In our previous liaison sent to you from our January 2004 Singapore meeting, we noted that we have agreed to Level 1 codepoints for Ethernet Bonding, Aggregation Discovery, and Aggregation Register access. We requested that you consider removing G.994.1 parameter tables from your draft EFM standard pertaining to these parameters and to reference G.994.1, and keep the definition of and procedures for using these parameters in your EFM standard.

Please note that we are changing the term "PMI" in our document to "PME" to remain aligned with the EFM text.

You may have observed that, missing from the codepoints in the Singapore liaison, are two bits that are included in the latest EFM draft. These are "PAF_Enable", and "PAF-O_Available".

It is our understanding that PAF_Enable is used to turn on and off the aggregation function. When PAF_Enable is set in an MS message, it informs the –R device that the Aggregation header shall be used. The –R device also uses this to update a Read-Only bit in a configuration register.

In addition, it is our understanding that PAF-O_Available may be used in a CLR message, so that the –R device can update its "remote PAF supported" bit in one of its configuration registers. If the –O device is performing a capabilities exchange without attempting a modification of the Remote Discovery or Aggregation registers, in the current EFM codepoint tree the –R device has no other way of knowing that the –O device is capable of aggregation without this bit.

However, as the structure of the bits in the Singapore liaison are different than those in the current EFM draft, these bits are unnecessary. In the Singapore liaison, the "Ethernet bonding", "PMI (*sic*) Aggregation Discovery", and "PMI (*sic*) Aggregation" bits are all Level 2 bits. Thus, the Ethernet bonding bit is able to be set in an MS message to indicate "PAF_Enable", even though the other two bits (i.e., Discovery and Aggregation SPar(2)s)

are set to zero. Similarly, the in a CLR message, the Ethernet bonding bit itself would serve as an indication that the PAF capability is available in the –O device.

Therefore, we request that you update your Clause 61 text that discusses the PAF_Enable and PAF-O_Available bits to reflect this change.

2.2. G.994.1 tone set for 10PASS-TS

The Singapore liaison also noted that your draft 3.0 reproduced several G.994.1 parameter tables, including the table defining the "V43" tone set. We requested that you remove this table, and reference the tone set definition in G.994.1.

In this liaison, we further inform you that we have considered the issue of tone sets for VDSL standards, and have reached agreement on this issue. Included in this is a re-definition of V43, and the definition of additional tone sets for certain deployments. For your information, Attachment 1 contains the text of these agreements.

2.3. 2BASE-TL and 10PASS-TS codepoints

We note that, if you agree to remove the bonding and variable-silence codepoints from the 2BASE-TL and 10PASS-TS codepoint trees, there are few EFM-specific codepoints remaining in the 2BASE-TL and 10PASS-TS codepoint trees. In fact, the codepoints are largely duplicates of codepoints in the G.991.2 and G.993.1 codespaces.

Therefore, in order to reduce duplication and enhance efficiency, you may wish to consider relocating the 2BASE-TL and 10PASS-TS codepoints from their current Level 1 locations, to Level 2 locations within the G.991.2 and G.993.1 codepoints, respectively. Note that the IEEE EFM Task Force would still "own" these codepoints, and the specification of the behavior of the PHY when these bits are set would continue to be defined in your document.

For G.991.2, there are currently two Level 1 codepoints, for G.991.2 Annex A and G.991.2 AnnexB, respectively. If you wish to move the 2BASE-TL codepoint down to Level 2, it would need to be reproduced in both G.991.2 codepoint trees.

If you agree to do this, please inform us whether these bits should be NPar(2)s (i.e., with no subparameters), or SPar(2)s (accompanied by Level 3 subparameters).

3. Summary

We request your response to these proposals as soon as possible, so that these additional codepoint definitions may be incorporated into G.994.1.

Attachments:

1.) G.994.1 tone sets for VDSL (MC-128R3)
2.) TD-88/PLEN (October 2003), Proposed Amendment to G.994.1 (for Consent)
3.) G.993.1 White contribution (COM15-107R1 as revised during the Q4/15 meeting in Millbrae)

IEEE 802.3ah contacts:
Howard Frazier, Task Force Chair, millardo@diminetsystems.com
Hugh Barrass, Task Force Vice-Chair, hbarrass@cisco.com
Barry O'Mahony, Copper Sub-Task Force Chair, barry.omahony@intel.com
Michael.Beck, Copper Sub-Task Force Editor, Michael.Beck@alcatel.be