Question(s): 12 Meeting, date: Ottawa, October 4 – 11, 2002

Study Group: 15 Working Party: 3

**Source:** Q12/15

**Title:** Notification Of G.etna Activity

## LIAISON STATEMENT

To: IEEE WG 802.1, WG 802.3, P802.3ah and MEF

Approval: Q12/15

For: Comment

Deadline: December, 2002

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

### . Introduction

ITU-T SG15 is working on a draft new Recommendation G.etna - Ethernet over Transport Network Architecture [1]. This Recommendation specifies the layer network architecture for:

- the connection of two physical Ethernet interfaces via the SDH or OTN transport networks
- an XYZ layer network optimised to support Ethernet MAC frames over SDH and OTN transport networks.

Work on this Recommendation began in May 2002 and is targeted for consent in October 2003. The purpose of this liaison is to inform WG 802.1, WG 802.3, P802.3ah and MEF of this activity.

#### 2. Discussion

G.etna addresses the architectural aspects involved in the transport of Ethernet MAC frames according to the following service classes:

- Ethernet Private Line
- Ethernet Private LAN
- Ethernet Virtual Private Line
- Ethernet Virtual Private LAN

At this stage of the G.etna work these service classes and corresponding transport network architectures are still being defined. The expectation is that Q.12/15 will have specific questions for WGs 802.1 and 802.3 as progress is made on this activity. The next meeting of Q.12/15 is January 20-31, 2003.

Current pictorial representations of these service classes are illustrated below.

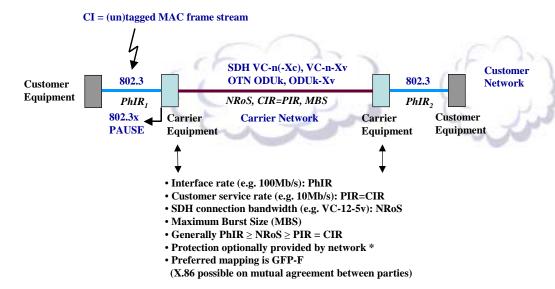


Figure 1: Ethernet Private Line - Type 1

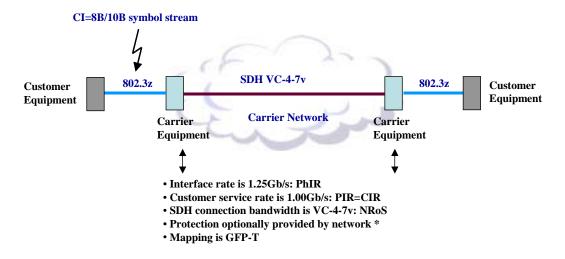
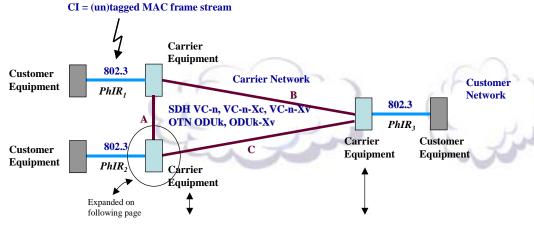


Figure 2: Ethernet Private Line - Type 2



- Interface rate (e.g. 100Mb/s): PhIR
- Customer service rate (e.g. 10Mb/s): PIR ? CIR
- Per SDH/oTN connection bandwidth (e.g. VC-12-5v): NRoS
- Generally PhIR  $\geq$  NRoS  $\geq$  PIR  $\geq$  CIR
- Protection optionally provided by network \*
- Preferred mapping is GFP-F (X.86 possible for SDH)

Figure 3: Ethernet Private LAN

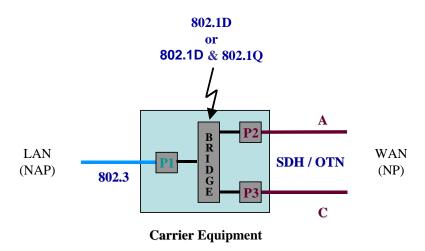


Figure 4: Ethernet Private LAN - Node Expansion

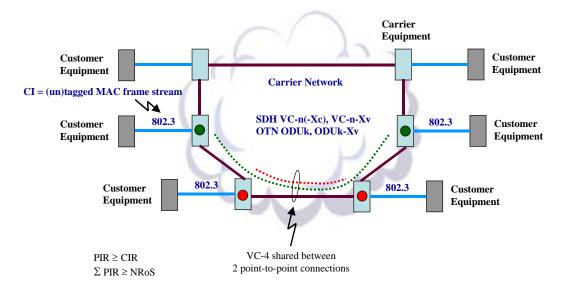


Figure 5: Ethernet Virtual Private Line (green, red EVPLs)

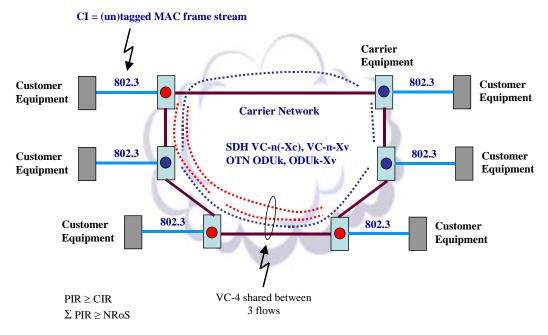


Figure 6: Ethernet Virtual Private LAN (red, blue EVPLANs)

## 3. Proposal

Any comments on the current draft of G.etna would be appreciated.

# 4. References

[1] G.etna version 0.1, WD64r6, ITU-T Q.12/SG15, October 7-11, 2002 [c.f. the following url] attention: some or all of the material attached to this liaison statement may be subject to itu copyright. In such a case this will be indicated in the individual document. Such a copyright does not prevent the use of the material for its intended purpose, but it prevents the reproduction of all or part of it in a publication without the authorization of itu.

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