

## IEEE 802.3 Ethernet Working Group

## Liaison Communication

Source: IEEE 802.3 Working Group

To: Marcos Tzannes

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From: Robert M. Grow - Chair, IEEE 802.3

Approval: Agreed to at IEEE 802.3 Plenary meeting, San Francisco, July 2007

Reference: ITU-T SG15 Liaison COM15-LS158

Dear Mr. Maeda and Members of ITU-T SG15,

IEEE 802.3 has considered your request for a slow protocols subtype for ITU-T specific applications and offer the following proposal that we believe meets your requirements.

- 1. We recommend the use of the IEEE Slow Protocols MAC address and Ethertype as defined in Clause 43B of IEEE 802.3-2005 (note this currently planned to move to Clause 57A).
- 2. Rather than allocate a specific subtype for the ITU, we suggest allocation of subtype 254 (0xFE) for Organization Specific extensions. The first 3 octets after this subtype are to contain an OUI, and the rest of the frame format is defined by the organization owning that OUI. The entire frame would thus look like:

$0\ 1\ 2\ 3\ 4\ 5\ 6\ 7\ 8\ 9\ 0\ 1\ 2\ 3\ 4\ 5\ 6\ 7\ 8\ 9\ 0\ 1\ 2\ 3\ 4\ 5\ 6\ 7\ 8\ 9\ 0\ 1$
Slow Protocols MAC Address
-+
Slow Protocol MAC Addr (cont)   Source MAC Addr
-+
Source MAC Address (continued)
-+
Slow Protocols Ethertype 0x8809  Subtype 254   OUI Octet 1
OUI Octets 2 & 3
+-+-+-+-+-+-+-+-+-+-+-+-
Rest of payload determined by organization in OUI
  -+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-

The bit/octet ordering of any Organizationally Unique Identifier (OUI) field within a slow protocols PDU is identical to the bit/octet ordering of the OUI portion of the DA/SA. Additional detail defining the format of OUIs can be found in IEEE Std 802-2001 Clause 9.

Note that IEEE 802.3 does not wish to create or manage registries. This proposal will allow the ITU-T, or any other organization, to create a Slow Protocols extension without creating any registration burden on IEEE 802.3. Further, it is similar to the EFM OAM extension mechanism as defined in clause 57 of IEEE 802.3 that we understand ITU-T SG15 is already using.

We would also stress that any protocol that utilizes this format MUST adhere to the protocol rules defined for Slow Protocols currently in Clause 43B (note this is currently planed to move to Clause 57A).

Note that this proposed change will be proposed (as a ballot comment) in the current 802.3ay project (P802.3) to revise the 802.3 standard. As a result, it is subject to change until approval of 802.3ay anticipated for March 2008.

Sincerely,

Robert M. Grow Chair, IEEE 802.3 Ethernet Working Group bob.grow@ieee.org