8802-3/802.3 REVISION REQUEST 1121

DATE: 17th Dec, 2003
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REQUESTED REVISION:
- STANDARD: IEEE Std. 802.3-2002
- CLAUSE NUMBER: 28C.6
- CLAUSE TITLE: Message Code #5--Organizationally Unique Identifier (OUI) tag code

PROPOSED REVISION TEXT:

See attached draft.

RATIONALE FOR REVISION:

The current wording is insufficient to unambiguously implement this feature. Specific problems include:

1) Bit-specification wording is very hard to follow; a figure is needed.
2) The bits within-byte ordering is unclear, given the conflicting meanings applied to "MSB" by the IEEE/RAC and following 28C.8.
3) The meaning of the remaining (not specified) bits is unclear.

IMPACT ON EXISTING NETWORKS:

Unknown. If networks have been implemented based on different assumptions of this text, incompatibilities could possible exist. However, given minimal use of this feature, problems are expected to be rare if this is fixed now.

Please attach supporting material, if any
Submit to:- Bob Grow, Chair IEEE 802.3
E-Mail: Bob.Grow@intel.com

For official 802.3 use
- REV REQ NUMBER: 1121
- DATE RECEIVED: 17th Dec, 2003
- ~~EDITORIAL~~/TECHNICAL
- ACCEPTED/~~DENIED~~
- BALLOT REQ'D YES/~~NO~~
- COMMENTS: 08-Mar-06 Ver: D3.0 Status: P

For information about this Revision Request see -
http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1121

Editors' Notes: To be removed prior to final publication.

Problems:
1) Bit-specification wording is very hard to follow; a figure is needed.
2) The bit ordering within-byte ordering is unclear, given the conflicting meanings applied to "MSB" by the IEEE/RAC and following 28C.8.

Proposed solution (follows).
Notes: If another bit ordering was intended, then change the figure accordingly.

28C.6 Message code #5—Organizationally Unique Identifier (OUI) tag code

Change subclause 28C.6 as follows:

The OUI Tagged Message shall consist of a single message code of 0000 0000 0101 followed by four user codes defined as follows. The first user code shall contain the most significant 11 bits of the OUI (bits 23:13) with the most significant bit in bit 10 of the user code. The second user code shall contain the next most significant 11 bits of the OUI (bits 12:2) with the most significant bit in bit 10 of the user code. The third user code shall contain the remaining least significant 2 bits of the OUI (bits 1:0) with the most significant bit in bit 10 of the user code. Bits 8:0 of the third~~fourth~~ user contain a user-defined user code value that is specific to the OUI transmitted. The fourth and final user code shall contain a user-defined user code value that is specific to the OUI transmitted.

Insert the following text at the end of subclause 28C.6:

For example, assume that a manufacturer's IEEE-assigned OUI value is AC-DE-48 and the manufacturer-selected user-defined user code associated with the OUI is $1100\,1110\,0001\,1111\,1100_2$. The message code values generated from these two numbers is encoded into four message codes, as specified in Figure 28C–1. For clarity, the position of the global broadcast *g* is illustrated.

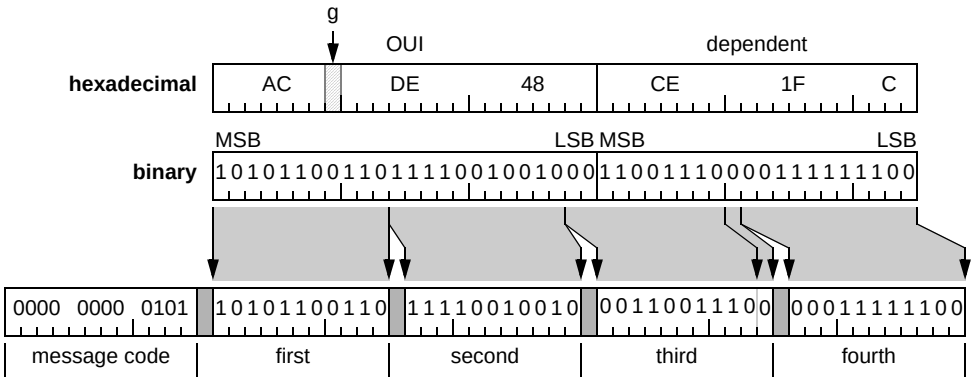

Figure 28C–1—Message code #5 sequence