X3S3.3/91-47R

February 1991

Title: Additional Comments on ISO/IEC 8073:DAM4

Source: USA

The US has reviewed the current text of protocol enhancements to the Connection Oriented Transport Protocol. We have found some problems in the "exchange of inactivity timers" enhancement. This enhancement simply exchanges timer values on the CR and CC TPDUs. It also makes a suggestion on the setting of other timers based on a received value.

The addendum currently adds the following text to ISO 8073:

section 4.4: add two new times (IL and IR),

section 5: add a new item mentioning the enhancement,

section 6.5.3: add a new item under a) and b), "Inactivity time,"

section 6.5.4: add a new item, "Inactivity time,"

section 6.5.5: add a new item, "inactivity time: Only in class 4",

section 12.2.1.1.7: add a description of two new times (IL and IR).

table 7: add the two new times

sections 12.2.3.1.1 and 12.2.3.1.2: add a note under each section giving a recommendation on how to use IR and IL.

section 13.3.4: add a new section r) describing the encoding of the "Inactivity time" parameter on CR and CC TPDUs.

Two problems are in the added notes in sections 12.2.3.1.1 and 12.2.3.1.2. These notes start, "A suitable upper band value" instead of "A suitable upper bound value."

The new item added to section 6.5.5 is redundant. Section 6.5.5 is the "Procedure for operating over CLNS." This section only allows for class 4 operation. The new item should be, "inactivity time" without the text, ": Only in class 4."

The text is not consistent in its use of inactivity vs. Inactivity. There are places where inactivity is spelled with a lower case ’i’ and other places where an upper case ’I’ is used. We recommend that a lower case ’i’ be used.

Another problem is that the new text it is not entirely backward compatible with older version of ISO 8073. The current text does not restrict the use of the "inactivity time" parameter on the CC or CR TPDUs. According to section 13.2.3 of ISO 8073, any parameter not currently defined shall be treated as a protocol error in any received TPDU except a CR TPDU. Existing implementations (without the enhancements) will treat the new parameter on the CC TPDU as a protocol error. The new text for the enhancements shall prohibit the use of the "inactivity time" parameter on the CC TPDU when the initiator may not understand it.

We propose that the following text be added immediately after 6.5.4 h.):

> If the initiator specifies class 4 in the preferred or an alternate class fields, the inactivity time parameter may be used in the CR TPDU. If the inactivity time parameter is present in a CR TPDU and the responder selects class 4, the inactivity time parameter may be used in the CC TPDU. If the inactivity time parameter is not present in a CR TPDU or the selected class is not class 4, the responder shall not send the inactivity time parameter in the CC TPDU. See the note in section 12.2.3.1.1.

The following text should be added immediately after 6.5.5 h.)

> The initiator may send the inactivity time parameter in the CR TPDU. If the inactivity time parameter is present in a CR TPDU, the responder may send the inactivity time parameter in the CC TPDU. If the inactivity time parameter is not present in a CR TPDU, the responder shall not send the inactivity time parameter in the CC TPDU. See the note in section 12.2.3.1.2.