Accredited Standards Committee
X3, INFORMATION PROCESSING SYSTEMS*

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To: ANSC T1M1.5

From: ANSC X3S3.3

Subject: NSAP Address Administration

X3S3.3 wishes to thank T1M1.5 for its liaison contribution on NSAP addressing (T1M1.5/91-096, X3S3.3/91-115). The points raised by this contribution, including the T1M1.5 proposed NSAP format and allocation method, were discussed at length during our April, 1991 meeting. Two T1M1.5 members were present at that meeting and participated in the discussion.

X3S3.3 endorses the T1M1.5 view that operating its NSAP address administration under the general guidelines of the proposed ANSI standard for NSAP DSP format, and the use of the ANSI registration authority would be highly desirable. We further confirm that, to the best of our knowledge, the proposed scheme will work correctly in conjunction with current ISO network layer standards (e.g. ISO 8473, 9542, 10030, and 10589). While work on Interdomain routeing is less advanced in ISO and ANSI, at this point it appears that the T1M1.5 guidelines will work in conjunction with that protocol as well.

X3S3.3 also agrees that the full DSP format proposed in our draft ANSI DSP format standard may not satisfy all potential structure requirements within the USA, such as those described in your liaison. to this end, X3S3.3 has proposed the following modifications to our working draft:

a) We have allocated a second DSP format indicator (DFI) value which defers definition of the DSP structure below the organization identifier field to the address administration authority of that organization.

b) We have clarified the text to remove any confusion about what portion of the DSP is administered directly by ANSI and which portions are the responsibility of the network operator to administer.

We attach our current draft to this liaison for your information and comment.

Notwithstanding the above, X3S3.3 would like to encourage T1M1.5 to reconsider whether defining a customized DSP format for SONET network elements is a good idea. X3S3.3 feels that the ANSI proposed full DSP format is adequate for the needs of the SONET maintenance environment and that the benefits of using a single format for allocation within the USA outweigh the benefits of using a customized format. To illustrate this, we offer the following observations:

a) The proposed ANSI standard and GOSIP V2 are in complete alignment. This was a conscious choice driven by the fact that few suppliers operate solely in the government or commercial markets. X3S3.3 members feel strongly that GOSIP alignment remains an important goal.

b) X3S3.3 members speculate that the control computers within the SONET network elements and operations support systems are likely to be general purpose computers designed and manufactured to operate in a multiplicity of environments. In this case, it is possible that using the IEEE-administered 6-octet system IDs is quite feasible given that many general purpose computers already have such ID

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ROM chips present, or could easily be upgraded to include them by plugging in an IEEE compliant LAN interface.

c) The use of 8 octet rather than 6-octet system ids in a large level 1 routeing environment does place an additional memory burden on the ISs. this is probably a minor efficiency concern, but is worth pointing out in case T1M1.5 is unaware of the storage requirements in ISs.

d) Since your liaison mentions “early deployment” of SONET NEs, it may be important for T1M1.5 members to know that all extant implementations of DIS 10589 we are aware of support 6 octet IDs and not 8 octet IDs. It may be some time before implementations are available which effectively support ID field lengths other than 6 octets.