REQUEST:
Request for Interpretation of the PLA, LX, and ENE Segments in Transaction Set 838, Trading Partner Profile, Version 3 Release 7.

INTERPRETATION:
Conformance to X12 syntax unequivocally requires that the beginning segment of a loop shall be used in each instance of the loop.

In Transaction Set 838, the LX segment is required to be used in each loop instance in which either a PLA standalone segment, or ENE nested loop is present.

In developing this interpretation, X12 Subcommittee C reviewed the following documents.

- X12 Draft Standard for Trial Use (DSTU) X12.6 Version 3 Release7, which defines X12 syntax.
- X12 Design Rules and Guidelines, Version 3 Release7, in which the VAN cited section 2.3.5.

2. Subcommittee C found that each of these documents is explicit in requiring the presence of the LX segment in the given Request for Interpretation. Subcommittee C found nothing in these documents which contradict the above interpretation.

3. Subcommittee C observes that DSTU ASC XI 2.6, Version 3 Release 7 is the relevant document defining XI 2 syntax.

XI 2.6 Section 3.2 unequivocally states that the syntax is defined by the Backus-Naur Form (BNF) constructs in X 1 2.6. BNF notation is described in X 1 2.6 Section 3.2.1 through 3.2.8.

The BNF in X12.6 Section 3.8.3.2.1 Unbounded Loops unequivocally requires that the loop beginning segment shall precede any segments in the loop, for each instance of the loop. The accompanying text in 3.8.3.2.1 states:

"In order to establish the start of a loop, the first data segment in the loop shall appear once and only once in each occurrence. The beginning segment of a loop shall not appear elsewhere in the loop." ... "Loops themselves are optional or mandatory. The requirement designator of the beginning segment of a loop indicates whether at least one occurrence of the loop is required. Each appearance of the beginning segment defines an occurrence of the loop." ...
4. Subcommittee C observes that DSTU XI 2.17 is the relevant document defining the structure of Transaction Set 838, Trading Partner Profile.

- In X12.17, the segments and nested loops included within the Transaction Set are unequivocally indicated by the loop brackets 'n the Transaction Set D' are further identified in the diagram by Loop ID "LX" for the loop and segments referenced in the Request for Interpretation.

- The legend for the Transaction Sets (located between pages 88 and 89 of the publication, just prior to the Transaction Set Tables) unequivocally defines the loop bracket legend.

5. Subcommittee C observes that DSTU X12-59, Semantics in EDI Structures, referenced in your request for Interpretation is not relevant to this Request for Interpretation. X12.6 addresses syntax; X12.59 addresses Semantics. Notwithstanding, the cited reference section 5.7 is in agreement with the interpretation:

- “The beginning segment of a loop defines an instance of the loop. For any instance of a transaction set, for any loop within any area of a transaction set, the first occurrence of the beginning segment of the loop (which must be present if any other segments in the loop are present) will identify the first instance of the loop, the second will identify the second instance, etc.”

6. Subcommittee C observes that Design Rules, Version 3 Release 7 referenced in your letter through a citation by the VAN is not relevant to this Request for Interpretation, as syntax is governed by X12.6. Notwithstanding, this referenced document supports the interpretation:

- Section 2.3.5, cited as the VAN reference in the Design Rules, appears to have been to an earlier version/release, as it does not address this issue (it addresses loop repeat counts). In Version 3 Release 7, Section 2.3.6 unequivocally supports the interpretation:

"Since the first segment of a loop is always mandatory if the loop is used, the requirement designator of the first segment specifies the usage of the loop. If one or more than one iteration of the loop is required, the first segment of the loop shall be assigned a requirement designator of mandatory. If no iterations of a loop are required, the first segment of the loop shall be assigned a requirement designator of optional"

- Additionally, Section 2.2.11 states:

"...Since the use of any segment within the loop requires that the beginning segment also be used.”