

**Required versus "Mandatory" in Code Value Descriptions**  
**RFI 2009-02, June 2010**

REQUEST

Request for Standards Interpretation -- "Required" versus "Mandatory" in Code Value Descriptions  
The following data element (DE) and code value (CV) descriptions contain the word "required", but not the phrase "conditional required":

| DE  | CV | Description                   |
|-----|----|-------------------------------|
| 620 | 3  | Required segment missing      |
| 621 | 1  | Required data element missing |
| 720 | 3  | Required segment missing      |
| 723 | 1  | Required data element missing |

Given the about-to-be widespread use of TR3s which have a different context and meaning for the word "required" [but not a different intent for the phrase "conditional required"], should the use of the word "required" in these instances noted above actually be considered to mean "mandatory" to be consistent with the term used in X12 standards? Or is the word "required" correct when used with 999 transaction data elements, but not with 997 transaction data elements?

This RFI is based on X12 version 005010, Data Element 620 - value of 3 - and Data Element 621 - value of 1 - as used in the 999 transaction. The question is what do these values mean when the 999 is used in a 997 mode -- i.e., acknowledging X12 standards editing only -- versus when the 999 is used to also acknowledge TR3 specifications.

REFERENCED STANDARDS

ASC X12.1 999  
Compliance in X12  
Acknowledgement Reference Model

FORMAL INTERPRETATION

Compliance guide defines R, S, A, N, D, X as:

**5.2 Requirement Designators**

*Four 'Requirement Designator' values are used to define standard transactions. These are detailed with their meanings below:*

- M Mandatory*                      *This item must be present in all data transactions -used for critical data which is not Mandatory in the standard, but in the opinion of the implementation guide designers is essential for correct operation of the transaction set.*
  
- O Optional*                        *This item may or may not be present in a data transaction-- used for data which may or may not be needed by any given implementation of the transaction set.*
  
- C Conditional*                    *This item is the subject of a syntax rule (a relational condition) which links its usage with that of other items.*
  
- F Floating*                        *This item may appear at any point within a transaction set - now disallowed for insertion into any existing or new transaction sets, and discouraged for use or implementation in older transaction sets.*

*Note: Mandatory and Optional are applicable to segments and elements within a segment. Conditional is applicable only to elements within a segment. Floating is applicable only to segments within a transaction set. Floating segments were withdrawn from the standards in version 3070.*

*Additional values have been defined to describe data usage in implementation guides. Implementation guide designers may, but are not required to, use any or all of these additional values to supplement the requirements designators defined in the transaction set. These additional values are detailed with their meanings below:*

|                      |  |
|----------------------|--|
| <i>R Required</i>    | <i>This item must be present in all data transactions. In the opinion of the implementation guide designers it is essential for this business use of the transaction set. Required may be used to identify Mandatory data when the implementation guide designers want to use a consistent designator for all data which must be present in all data transactions.</i> |
| <i>S Situational</i> | <i>This item's usage depends on an associated business rule which is specified in the implementation guide and which clearly and unambiguously states the requirement designation under each anticipated condition.</i>  |
| <i>A Advised</i>     | <i>This item should, but may not, be present in a data transaction - used to indicate data which, in the opinion of the implementation guide designer, is likely to be important in most uses of the transaction set.</i>  |
| <i>N Not Advised</i> | <i>This item might, but should not, be present in a data transaction used to indicate data which, in the opinion of the implementation guide designer, is likely not to be needed in most uses of the transaction set.</i>   |
| <i>D Dependent</i>   | <i>This item's usage depends on the usage of some other item, or upon particular values or combination of values elsewhere in a data transaction - used to indicate data whose usage is semantically linked to other items.</i>  |
| <i>X Not Used</i>    | <i>This item is not used in a data transaction - used to indicate data which must not be present in a data transaction.</i>  |

*The following rules apply for converting between the former and latter set of values when designing an implementation guide:*

- 1. A Mandatory item must be Mandatory or Required; it must not be converted to any other requirement designator value.*
- 2. An Optional item may be converted to Required, Situational, Advised, Not Advised, Dependent or Not Used.*
- 3. An Optional item may be converted to Conditional if an additional syntax rule is provided to describe the conditional use within the implementation guide.*
- 4. A Conditional item may be converted to Required, Situational, Advised, Not Advised, Dependent or Not Used, provided that the original syntax rule is not violated; for example, two conditional elements, linked by an exclusive syntax rule (i.e. E0304) may be converted into Required and Not Used respectively (or vice versa).*

5. *An Optional or Conditional item may only be converted to Dependent if some linkage is provided by means of a constraint to one or more other items in the implementation guide.*
6. *A Floating item may only be converted to Not Used or Not Advised.*
7. *If a segment is Mandatory or Required, then at least one of the elements within the segment must also be Mandatory, Required, the subject of an 'R' Required syntax rule, or the subject of a situational rule that has the effect of requiring at least one of the elements to be present.*
8. *If a composite is Mandatory or Required, then at least one of the elements within the composite must also be Mandatory, Required, the subject of an 'R' Required syntax rule, or the subject of a situational rule that has the effect of requiring at least one of the elements to be present.*

In addition the scope of the 999 states:

*X999 - Implementation Acknowledgment*

*FUNCTIONAL GROUP=FA*

*This X12 Transaction Set contains the format and establishes the data contents of the Implementation Acknowledgment Transaction Set (999) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical and relational analysis of the electronically encoded documents, based upon a full or implemented subset of X12 transaction sets. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.*

In addition your citation for the items noted below is incorrect:

| DE  | CV | Description                   |
|-----|----|-------------------------------|
| 720 | 3  | Required segment missing      |
| 723 | 1  | Required data element missing |

The standard actually states:

| DE  | CV | Description                    |
|-----|----|--------------------------------|
| 720 | 3  | Mandatory segment missing      |
| 723 | 1  | Mandatory data element missing |

On the basis of the Compliance in X12 Guide and on the scope of the 999 concerning relational analysis, the term "required" is always appropriate for 999 code lists.