

Chapter 5

Mapping Conventions

Insight on Mapping Conventions

The following conventions are provided to help clarify the mapping conventions in regard to the business practices of the user and their trading partner(s).

Functional Acknowledgements (997) — A Functional Acknowledgment is required by ANSI rules for data interchange. A Functional Acknowledgment is a transaction set (997) issued by the receiver to the original sender to indicate the status of a transmission with respect to standards adherence. This Functional Acknowledgment does not imply acceptance of the contents of the associated transaction set. The Functional Acknowledgment provides a positive indication that all transactions transmitted were received and if errors exist, to identify the segment and reject elements and state the reason for error. A Functional Acknowledgment is never transmitted to acknowledge receipt of a Functional Acknowledgment.

Errors reported in the Functional Acknowledgment include:

- Incorrect data type
- Incorrect field length
- Missing required information
- Unrecognized ID code
- Unrecognized segment identifier
- Incorrect segment order
- Incorrect control counts
- Mismatched control number

Note: The functional acknowledgment is not to be confused with TA1 acknowledgment which is indicated in the ISA segment.

Control Numbers — There are three levels of control numbers that correspond to each envelope that are provided by each ASC X12 transmission.

1. ISA/IEA Interchange Control Numbers (ISA12/IEA02)

The number is sequentially assigned by the sender, unique within each trading partner. The control number is incremented by one for each interchange envelope sent to the trading partner. When the control number reaches the 999999999, the maximum number, the next number restarts at 000000001.

2. GS/GE Data Interchange Control Number (GS06/GE01)

The number by the sender must be unique and consecutive within each trad-

ing partner. The uniqueness must be maintained until the group functional acknowledgment is received. A recommended feature of the GS Control Number is that the control number be incremented by one for each transaction type. For example, if you were sending your trading partner functional acknowledgments, and also invoices, the GS number would increment by one for the functional acknowledgments, and then a separate control number for the invoices is incremented by one. This allows the receiver to audit the control numbers by transaction type for missing groups.

3. Transaction Set Control Numbers (ST02/SE02)

The number is sequentially assigned by the sender and must be unique within each trading partner.

Element Separator and Segment Terminator — The first byte after the ISA is the data element separator. This separator must be used only as an element separator.

ISA *00*.....N/L

The Element Separator Recommended:

- First Choice “*”

(HEX “5C” in EBCDIC)

(HEX “2A” in ASCII)

- Second Choice Bell

(HEX “2F” in EBCDIC)

(HEX “07” in ASCII)

- Third Choice

(HEX “A1” in EBCDIC)

(HEX “7E” in ASCII)

The second choice is a non-printable character that only a computer can process. This prevents the character being used in a description or other “free form text”.

The segment terminator appears at the 106th byte of data in the ISA. It is found right after the ISA16.

Segment Terminator Recommended:

New Line (HEX “15” in EBCDIC)

(HEX “0D” in ASCII)