

EMPTY TRAILING SEPARATORS

RFI 2010-15, JULY 2011

REQUEST

Do the trailing empty elements in a Segment need to include their element separators?

As an example the B4 04 Date and B4 03 Status Code are both optional elements in B4 -315 Beginning segment.

Data provided example: B4***CT*20100920~

So are all of the following valid:

B4***CT~

B4**~

Or must it be:

B4****~

REFERENCED ASC X12 STANDARDS

An RFI applies to a specific version of the ASC X12 Standards. The author failed to provide a specific version of the standard in the request. We have chosen to base this response on Version 6 Release 1 of the ASC X12 Standard. As the areas of the ASC X12 Standards applicable to this interpretation have been relatively stable over time, it is likely that the same interpretation would be provided for earlier versions of the ASC X12 Standards.

X12.6 Application Control Structure – Section 3.7

Data Segment

The data segment is an intermediate unit of information in a transaction set. A data segment consists of a segment identifier; one or more composite data structures or simple data elements, each of which may be permitted to repeat, when so indicated in the segment specification. Adjacent non-repeating simple data elements and composite data structures shall be separated by a data element separator. Adjacent occurrences of the same repeating simple data element or composite data structure in a segment shall be separated by a repetition separator. The data segment shall end with a segment terminator. Trailing data element separators <gs> and trailing repetition separators <rs> shall be suppressed. Data segments are defined in a data segment directory. The directory defines each segment including the segment's name, purpose, and identifier. The directory also defines composite data structures and data elements that a segment contains in their specified order. A data segment is constructed in the following manner:

definition:

```
<data_segment> ::= <seg_id> <gs> <data_segment_unit> {<gs>
    <data_segment_unit>} <tr>

<data_segment_unit> ::= <repeating_simple_data_element> |
    <repeating_composite_data_structure>
<repeating_simple_data_element> ::= <simple_data_element> {<rs>
    <simple_data_element>}

<repeating_composite_data_structure> ::=
<composite_data_structure> {<rs>    <composite_data_structure>}
```

use:

```

<data_segment> ::= <seg_id> {<gs> [<data_segment_unit>]} <gs>
    <data_segment_unit> <tr>

<repeating_simple_data_element> ::= { [<simple_data_element>] <rs>}
    <simple_data_element>

<repeating_composite_data_structure> ::=
    { [<composite_data_structure>] <rs>}    <composite_data_structure>
  
```

X12.1 Transactions Sets - Segment B4

REF	ELE ID	NAME	RPT	ATTRIBUTES		
01	<u>152</u>	<u>Special Handling Code</u>		O	ID	2/3
02	<u>71</u>	<u>Inquiry Request Number</u>		O	NO	1/3
03	<u>157</u>	<u>Shipment Status Code</u>		O	ID	1/2
04	<u>373</u>	<u>Date</u>		O/Z	DT	8/8
05	<u>337</u>	<u>Time</u>		O/Z	TM	4/8
06	<u>159</u>	<u>Status Location</u>		O	AN	3/5
07	<u>206</u>	<u>Equipment Initial</u>		X	AN	1/4
08	<u>207</u>	<u>Equipment Number</u>		X	AN	1/15
09	<u>578</u>	<u>Equipment Status Code</u>		O	ID	1/2
10	<u>24</u>	<u>Equipment Type</u>		O	ID	4/4
11	<u>310</u>	<u>Location Identifier</u>		X	AN	1/30
12	<u>309</u>	<u>Location Qualifier</u>		X	ID	1/2
13	<u>761</u>	<u>Equipment Number Check Digit</u>		O	NO	1/1

Syntax Notes

07 P0708 - If either B407 or B408 is present, then the other is required.

11 P1112 - If either B411 or B412 is present, then the other is required.

Semantic Notes

04 B404 is the date of last reported status of cargo.

05 B405 is the time (HHMM) of the last reported status of the cargo.

FORMAL INTERPRETATION

In response to the question, *Do the trailing empty elements in a Segment need to include their element separators?* The standard is very clear with regard to trailing data element separators. Per section 3.7 the trailing data element separators shall be suppressed. Applying this to your examples result in the following:

Example B4***CT~ is correct.

Example B4**~ is not correct, based on the standard B4 segment definition.

Example B4****~ is not correct, based on the standard B4 segment definition.

FURTHER DISCUSSION

In preparing this Request for Interpretation, the ASC X12C (Communication & Controls) Subcommittee made the following observation:

In your RFI you mention searching the publically available specs. The documents which define the X12 control standards are located in the following documents which are available from the X12 secretariat.

- X12.6 – Application Control Structure
- X12.5 – Interchange Control Structures

These documents may prove helpful in your EDI implementation.

While this RFI is referencing Version 6 Release 1, from inception of the standard X12.6 has always included the section referenced above, so this interpretation would apply to all versions of X12 standards.