EDI ENGAGEMENT
{VENDOR NAME}

Advanced Ship Notice
(856)

X12 4010 Implementation Guidelines

Author: Tony LeBlanc

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Last Saved by: Tony LeBlanc

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Change Log

Person	Date	Description
Tony LeBlanc	Feb 23, 2014	First Draft
Melody Bailey	Mar 6, 2014	Edits
Tony LeBlanc	March 13, 2014	Draft Complete
Tony LeBlanc	Nov 9, 2018	Added Notes to indicate that the SLN and corresponding DTM segments and elements are mandatory when the product has an expired date.
Daniel Venton	December 17, 2018	Rebranding
Tony LeBlanc	April 3, 2019	Changed the TD1 Segment to Optional
Tony LeBlanc	July 31, 2019	Added 91 and ZZ to acceptable code in the N103 segment
Daniel Venton	Nov 19, 2019	Added mandatory fields SN105/SN106
Daniel Venton	Jan 3, 2020	Formatting update, added confirmation fields for non-element criteria
Daniel Venton	Apr 28 2021	Adjusted segment criteria to match lot number requirements

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1. Purpose

This document will detail only those segments and elements that are specific to transactions with this vendor. This is not meant to be an exhaustive detail of every segment and element that will be used in the document type. It will only provide information on specific detail where exact definition is needed to trade with this vendor.

2 Segment ISA - Interchange Control Header

Element Position	Ele. ID	Element Name	Req	Type	Length	Value or Usage
ISA-05	I05	Sender ID Qualifier	M	ID	2/2	**ZZ**
ISA-06	I06	Interchange Sender ID	M	ID	15/15	Vendor ISA ID
ISA-07	I05	Interchange Receiver ID Qualifier	M	ID	2/2	**ZZ**
ISA-08	I07	Interchange Receiver ID	M	ID	15/15	Health Authority system specific ID
EXAMPLE	**ISA*00* *00* *ZZ*Vendor ISA ID*ZZ*HA System Specific ISA ID* 020201*1345*U*00401*000000789*0*P*>~**					

3 Segment GS - Functional Group Header

Element Position	Ele. ID	Element Name	Req	Type	Length	Value or Usage
GS-01	479	Functional ID	M	ID	2/2	**SH** – Ship Notice/Manifest 856
GS-02	142	Application Sender ID	M	AN	2/15	Vendor GS ID
GS-03	124	Application Receiver ID	M	AN	2/15	Health Authority system specific ID
EXAMPLE	**GS*SH*Vendor GS ID*HA System Specific ISA ID*20020201*1345*789*X*004010~**					

4 Segment GE - Functional Group Trailer

Element Position	Ele. ID	Element Name	Req	Type	Length	Value or Usage
GE01	97	Number of Included Transaction Sets	M	N0	01/06	Total number of ST segments
GE02	028	Data Interchange Control Number	M	N0	01/09	Will be the same as GS06
EXAMPLE		**GE*1*789~**				

5 Segment IEA - Interchange Control Trailer

Example: IEA*1*000000789~

Element Position	Ele. ID	Element Name	Req	Type	Length	Value or Usage
IEA01	I16	Number of Included Groups	M	N0	01/05	Total number of GS segments
IEA02	I12	Interchange Control Number	M	AN	01/60	Will be the same as ISA13
EXAMPLE		**IEA*1*000000789~**				

6 Summary Layout

Meaning of the codes:

Segment Usage (U):
M = Mandatory, O = Optional, C = Conditional

HEADER						
			Version 4010		PHSA	
Segment ID		Name	U Max Max		U Max Use	Max
ST	010	Transaction Set Header	M	1	M	1
BSN	020	Beginning Segment for Ship Notice	M	1	M	1
DTM	040	Date/Time Reference	O	10	O	1
DETAIL						
Loop ID – HL - S			200000		200000	
HL	010	Hierarchical Level	M	1	M	1
TD1	110	Carrier Details (Quantity and Weight)	O	20	O	1
TD5	120	Carrier Details (Routing Sequence/Transit)	O	12	C	1
REF	150	Reference Identification	O	>1	M	1
DTM	200	Date/Time Reference	O	10	M	1
Loop ID – N1 three loops			200		200	
N1	220	Name	O	1	M	3
N3	240	Address Information	O	2	M	3
N4	250	Geographic Information	O	1	M	3
Loop ID – HL - O			200000		200000	
HL	010	Hierarchical Level	M	1	M	1
PRF	050	Purchase Order Reference	O	1	M	1
REF	150	Reference Identification	O	>1	M	1
Loop ID – HL - I			200000		200000	
HL	010	Hierarchical Level	M	1	M	1
LIN	020	Item Identification	O	1	M	1
SN1	030	Item Detail (Shipment)	O	1	M	1
SLN	040	Sub Line Item Details	O	1000	C	2
PID	050	Product / Item Details	O	1	O	1
DTM	200	Date / Time Reference	O	10	C	1
Summary						
CTT	010	Transaction Totals	O	1	M	1
Trailer						
SE	020	Transaction Set Trailer	M	1	M	1

7 Detail Layout

ANSI Specification

Element Number (#):
Element identification number as assigned by standards committee (ANSI)

Element Usage (U):
M = Mandatory, **O** = Optional, **C** = Conditional, **X** = Dependency – please refer to above table as to usage, the usage identifiers below simply mean that if the segment is used, then the usage of element applies.

Element Type (TY):
ID Identifier, **AN** Alpha-numeric String, **DT** Date, **TM** Time, **Nn** Numeric (n decimals), **R** Decimal, **B** Binary

Minimum/Maximum (S):
n/n (fixed length of n), **n/p** (minimum length of n and maximum length of p)

System Requirement indicators

Meditech Usage (MT):
M Mandatory**, R** Requested, **O** Optional

PeopleSoft Usage (PS):
M Mandatory, **R** Requested, **O** Optional

Mandatory: Defines the minimum set of values required to load and process this document type in all five PHSA ERP systems.
Requested: Defines attributes that PHSA strongly requests from the supplier because of the extra value and use of the data that it provided. We would still accept these values even if you can't supply for all items. PHSA will implement an 856 without these values being supplied but request a timeline as to when the vendor will be able to supply them. Items are listed in order of preference, first in order being the most desired to the least desired.
Optional: Defines attributes that we would like to receive but if they are not part of the current 856 setup and/or would take any effort on your part to include them, we do not require them.

System Support Requirements

This document also includes ERP specific data in order to have a record of them, but the primary focus is on creating a specification that is compatible with every Supply Chain ERP. In our lists we've indicated these with a color and an indicator symbol. Please only use the qualifiers coded in **black**, as they're usable in our ordering systems province-wide.

Compliancy	Color indicator	Symbol Indicator
Meditech	RED	]
Peoplesoft	BLUE	>
All Systems	BLACK	

Vendor's ability to supply (VN):
Y Yes - Will supply, **M** Maybe – More investigation needed, **N** - Cannot supply

Comment/Values
The supplier may use any or all of the values listed in comment/values that are not system-specific. Values in blue and red are system specific. This document will be constrained to only those values that can be supported.

7.1 Segment – ST

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
ST01	143	Transaction Set Identifier Code	M	ID	3/3	M	M	Y	**856** – Advanced Ship Notice
ST02	329	Transaction set Control Number	M	AN	4/9	M	M	Y	Unique control number for each transaction
EXAMPLE		**ST*856*894351667**							

7.2 Segment – BSN

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
BSN01	353	Transaction Set Purpose Code	M	ID	2/2	M	M	Y	**00** - Original
BSN02	396	Shipment Identifier	M	AN	2/30	M	M	Y	Assigned by issuer (TP)
BSN03	373	Date	M	DT	8/8	M	M	Y	Date – ccyymmdd
BSN04	337	Time	M	TM	4/4	M	M	Y	Time – HHMM (24 hr clock)
EXAMPLE		**BSN*00*031229-100-001*20031229*0013~**							

7.3 Segment – DTM

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
DTM01	374	Date/Time Qualifier	M	ID	3/3	Y	Y		**011** – Shipped * (*preferred) **017** – Estimated Delivery
DTM02	373	Date	X	ID	8/8	Y	Y		CCYYMMDD
EXAMPLE		**DTM*011*20031231~**							

7.4 Segment – HL-S

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
HL01	628	Hierarchical Id. Number	M	AN	1/12	M	M		1 – counter starts at 1 for first HL segment
HL02	734	Hierarchical Parent Id. Number	O	AN	1/12	M	M		Left blank
HL03	735	Hierarchical Level Code	M	ID	½	M	M		**S** - Shipment
EXAMPLE		**HL*1**S~**							

7.5 Segment – TD1

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
TD101	103	Packaging Code	O	AN	3/5	M	M		
TD102	80	Lading Quantity	X	N0	1/7	M	M		
TD106	187	Weight Qualifier	O	ID	1/2	M	M		
TD107	81	Weight	X	R	1/10	M	M		
TD108	355	Unit or Basis of Measurement Code	X	ID	2/2	R	R		
EXAMPLE		**TD1*PAL*1*KG*35*CA~**							

7.6 Segment – TD5

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
TD502	66	Identification Code Qualifier	X	ID	1/2	R	R		2 - Standard Carrier Alpha Code (SCAC)
TD503	67	Identification code	X	AN	2/80	R	R		Courier Code
TD504	91	Transportation Method / Type Code	X	ID	1/2	O	O		**M** – Motor (Common Carrier)
TD505	387	Routing	X	ID	1/2	R	R		Courier Name
EXAMPLE		**TD5*2*DHLC* MAYNE LOGISTICS (DHL)~**							

7.7 Segment – REF

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
REF01	128	Reference Identification Qualifier	M	ID	2/3	C	O		**BM** – Bill of Lading Number **CN** – Carrier's Reference Number (PRO/Invoice)
REF02	127	Reference Identification	X	AN	1/80	C	O		Identification based on Qualifier
EXAMPLE		**REF*BM*123456~** **REF*CN*12345679-009~**							

7.8 Segment – DTM

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
DTM01	374	Date/Time Qualifier	M	ID	3/3	M	M	Y	**011** – Shipped * (*preferred) **017** – Estimated Delivery
DTM02	373	Date	X	ID	8/8	M	M	Y	CCYYMMDD
EXAMPLE		**DTM*002*20140101~**							

- **DTM** should correspond to the delivery data on the PO.

7.9 N1 Loop

7.9.1 Segment - N1

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
N101	98	Entity Identifier Code	M	ID	2/3	M	M	Y	**ST –** Ship To **SF –** Ship From **BT** – Bill To **VN** – Vendor
N102	93	Name	M	AN	1/60	M	M	Y	Corresponding name
N103	66	Identification Code Qualifier	C	ID	1/2	M	M	Y	**UL** – GLN
N104	67	Identification Code	C	ID	2/80	M	M	Y	GLN Number for Location
EXAMPLE		**N1*ST*Customer Name here*ZZ*Account Code~**							

7.9.2 Segment – N3

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
N301	166	Address Information	M	AN	1/55	R	R		Address – compliant with Canada Post of US Postal service
N302	166	Address Information	M	AN	1/55	R	R		Address – compliant with Canada Post of US Postal service
EXAMPLE		**N3*1795 Willingdon Ave~**							

7.9.3 Segment – N4

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
N401	19	City Name	O	AN	2/30	R	R		Address
N402	156	State Or Province Code	X	ID	2/2	R	R		Address
N403	116	Postal Code	X	ID	3/15	R	R		Postal Code
N404	26	Country Code	X	ID	2/3	R	R		Compliant with GS1 country code
EXAMPLE		**N4*Burnaby*BC*V5C 6E3*Canada~**							

- N1 segment should loop three times, one for each address type ST, BT and VN. See example below.

N4 Loop Example
N1*ST*Location Name here*UL*GLN~ N3*1234 First St.*Bld #101~ N4*City Name*Prov*Postal Code*Country Code~ N1*BT*Location Name here*UL*GLN~ N3*1234 First St.*Bld #101~ N4*City Name*Prov*Postal Code*Country Code~ N1*VN*Location Name here*UL*GLN~ N3*1234 First St.*Bld #101~ N4*City Name*Prov*Postal Code*Country Code~

7.10 Segment – HL-O

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
HL01	628	Hierarchical Id. Number	M	AN	1/12	M	M	Y	**2**
HL02	734	Hierarchical Parent Id. Number	O	AN	1/12	M	M	Y	**1**
HL03	735	Hierarchical Level Code	M	ID	1/2	M	M	Y	**O** = Order Level
EXAMPLE		**HL*2*1*O~**							

7.11 Segment – PRF

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
PRF01	324	Purchase Order Number	M	AN	1/22	M	M	Y	P.O. Number
PRF04	323	P.O. Date	O	DT	8/8	M	M		P.O. Date - ccyymmdd
EXAMPLE		**PRF*1234567*20140131~**							

7.12 Segment – REF

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
REF01	128	Reference Identification Qualifier	M	ID	2/3	M	M	Y	**PK** – Packing List Number **OQ** – Order Number **CN** – Carriers Reference Num.
REF02	127	Reference identification	X	AN	1/80	M	M	Y	Applicable number per reference qualifier
EXAMPLE		**REF*PK*456987456~** **REF*CN*12345679-009~**							

7.13 Segment – HL-I

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
HL01	628	Hierarchical Id. Number	M	AN	1/12	M	M	Y	**3** (increment with each loop)
HL02	734	Hierarchical Parent Id. Number	O	AN	1/12	M	M	Y	**2**
HL03	735	Hierarchical Level Code	M	ID	1/2	M	M	Y	**I** = Item level
EXAMPLE		**HL*2*1*I~**							

7.14 Segment – LIN

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
LIN01	350	Assigned Identifier	O	AN	1/6	M	M	Y	Line counter
LIN02	235	Prod/Service Id. Qual.	M	ID	2/2	M	M	Y	**VC** – Vendor's Catalogue number
LIN03	234	Prod/Service Id.	M	AN	1/80	M	M	Y	Vendor's Catalogue number
LIN04	235	Prod/Service Id. Qual.	O	ID	2/2	M	M	Y	**IN** – customer's item number
LIN05	234	Prod/Service Id.	C	AN	1/80	M	M	Y	Customer's item number
LIN06	235	Prod/Service ID Qual.	X	ID	2/2	R	R		**UK** – 14 digit GS1 Identification
LIN07	234	Prod/Service ID	X	AN	1/80	R	R		GTIN
LIN08	235	Prod/Service ID Qual.	X	ID	2/2	R	R		**UX** - Universal Product Number
LIN09	234	Prod/Service ID	X	AN	1/80	R	R		Number
LIN10	235	Prod/Service ID Qual.	O	ID	2/2	R	R		**MG** – Manufacturer
LIN11	234	Prod/Service ID	X	AN	1/80	R	R		Manufacturer Name
LIN12	235	Prod/Service ID Qual.	O	ID	2/2	R	R		**MF** – Manufacturers Number
LIN13	234	Prod/Service ID	X	AN	1/80	R	R		Manufacturers Item Number
EXAMPLE		**LIN*1*VC*1235145*CR*654321*MF*Cardinal Heath Care*MG*1235145*UK*12345678901231~**							

- Please provide an IN - "Customer's Item Number" - when indicated on the original PO
- PO1 segment must correspond with line segments and quantities on the original PO

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Segment	Condition	Vendor Can Provide
PO1	Can distribute cost at a line level	

7.15 Segment – SN1

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
SN101	350	Assigned Identification	O/Z	AN	1/20	M	M	Y	Line counter - should match PO line number
SN102	382	Number of Units Shipped	M	R	1/10	M	M	Y	Quantity shipped
SN103	355	Unit or Basis of Measurement Code	M	ID	2/2	M	M	Y	UoM of quantity shipped See (Appendix table 1 – Acceptable UOM Values)
SN104	646	Quantity Shipped to Date	O	R	1/15	R	R		Quantity Shipped to Date
SN105	330	Quantity Ordered	X/Z	R	1/15	M	M		Quantity Ordered
SN106	355	Unit of Measure Code	X	R	2/2	M	M		UoM of quantity ordered See (Appendix table 1 – Acceptable UOM Values)
EXAMPLE		**SN1*S*2*PK**2*PK~**							

7.16 Segment – SLN

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
SLN01	350	Assigned Identification	M/Z	AN	1/20	M	M	Y	Line counter - should match PO line number
SLN02	350	Assigned Identification	O/Z	AN	1/20	M	M	Y	Loop Number
SLN03	662	Relationship code	M/Z	ID	1/1	M	M	Y	**I** – Included
SLN04	308	Quantity	X	R	1/15	M	M	Y	Quantity for this sub line
SLN09	235	Product/Service ID Qual.	X	ID	2/2	R	R		**SN** – Serial Number
SLN10	234	Product/Service ID	X	AN	1/48	R	R		Serial Number
SLN11	235	Product/Service ID Qual.	O	ID	2/2	M*	M*		**LT** – Lot Number
SLN12	234	Product/Service ID	X	AN	1/80	M*	M*		Lot Number
EXAMPLE		**SLN*1*1*I*1*****SN*12345*LT*123465*~** **SLN*1*2*I*1*****SN*12346*LT*123465*~**							

- *SLN should only be supplied when serial number or lot number is applicable to the item. If the product has an expiry date then you must send both the SLN with a lot number LT Code and a DTM segment shown below.

7.17 Segment – PID

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
PID01	349	Item Description Type	M	ID	1/1	R	R		'F' – free-form
PID05	352	Description	X	AN	1/80	R	R		Item description
EXAMPLE		**PID*F****WIDGET DESCRIPTION ONE~** **PID*F****WIDGET DESCRIPTION TWO~**							

- **PID** Should loop two times with each loop containing a description limited to 30 Characters

7.18 Segment – DTM

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
DTM01	374	Date/Time Qualifier	M	ID	3/3	M*	M*	Y	**208** – Lot Number Expiration
DTM02	373	Date	X	DT	8/8	M*	M*	Y	Date expressed as CCYYMMDD
EXAMPLE		**DTM*007*20100331~**							

- *If a LT code is supplied in the SLN segment, then this becomes mandatory.

7.19 Segment – CTT

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
CTT01	354	Number of Line Items	M	N0	1/6	M	M	Y	Total number of HL segments in transaction
EXAMPLE		**CTT*786~**							

7.20 Segment – SE

SEQ	#	Element Name	U	TY	S	MT	PS	VN	Comment/Values
SE01	96	Number of Included Segments	M	N0	1/10	M	M		Total number of segments in transaction (inc. ST & SE segments)
SE02	329	Transaction Set Control Number	M	AN	4/9	M	M		Same value as ST02
EXAMPLE		**SE*35*789000001~**							

8 Sample Message

```
ISA*00*          *00*          *ZZ*255047102*ZZ*CUSTOMER ISA ID*20140131*1345*U*00200*000007556*0*P*>~
GS*SH*255047102*CUSTOMER GS ID*20020201*1345*7556*X*004010~
ST*856*75560001~
BSN*00*031229-100-001*20140131*0813~
HL*1**S~
TD1*PAL*1*KG*35*CA~
TD5**2*DHLC**MAYNE LOGISTICS (DHL)~
DTM*011*20111206~
N1*ST*Location Name here*UL*GLN~
N3*1234 First St.*Bld #101~
N4*City Name*Prov*Postal Code*Country Code~
N1*BT*Location Name here*UL*GLN~
N3*1234 First St.*Bld #101~
N4*City Name*Prov*Postal Code*Country Code~
N1*VN*Location Name here*UL*GLN~
N3*1234 First St.*Bld #101~
N4*City Name*Prov*Postal Code*Country Code~
HL*2*1*O~
PRF*1083480~
REF*OQ*400045581727~
REF*CN*A38V279048~
PRF*FGX031229-37-001***20031229~
HL*3*2*I~
LIN*1*VC*1235145*CR*654321*MF*Cardinal Heath Care*MG*1235145*UK*123456849101231~
SN1*S*2*PK**2*P~
PID*F*This is an Item~
HL*4*2*I~
LIN*1*VC*1235145*CR*654321*MF*Cardinal Heath Care*MG*1235145*UK*69855678901231~
SN1*S*1*BX**1*BX~
SLN*1*1*A*1*****SN*15912345*LT*15349565~
SLN*1*2*A*1*****AN*956812346*LT*12349565~
PID*F*This is a round Item~
HL*5*2*I~
LIN*1*VC*1235145*CR*654321*MF*Cardinal Heath Care*MG*1235145*UK*12369878901231~
SN1*S*200*EA**200*EA~
SLN*1*1*A*1*****SN*2512345*LT*11523465~
SLN*1*2*A*1*****AN*1238746*LT*12368465~
PID*F*This is a white Item~
. . .

HL*85*2*I~
LIN*1*VC*1235145*CR*654321*MF*Cardinal Heath Care*MG*1235145*UK*92349684635431~
SN1*S*6*BX**6*BX~
SLN*1*1*A*1*****SN*1234155*LT*125465~
SLN*1*2*A*1*****AN*1234846*LT*198465~
PID*F*This is a blue Item~
DTM*011*20120703~
CTT*85~
SE*471*75560001~
GE*1*7556~
IEA*1*000007556~
```