The Global Language of Business

GS1 US EDI Recommendations for FSMA 204 Critical Tracking Events

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Document Summary

Document Item	Current Value
Document Title	EDI Recommendations for FSMA 204 Critical Tracking Events
Date Last Modified	March 1, 2026
Document Description	This document supplements the Retail Grocery and Foodservice Application of GS1 System of Standards to Support FSMA 204 Guideline and provides guidance on the implementation of the X12 EDI 856 Ship Notice/Manifest (ASN) message to help meet the Shipping Critical Tracking Event (CTE) requirements of FSMA 204.

Log of Changes

Release Number - Date	Changes
Release 1.0 – March 2024	Release/Publication
Release 2.0 – March 2026	Updated GS1 Digital Link representations of GLNs to use AI 414 vs. AI 416 to comply with GS1 Digital Link Standard. Updated graphics and descriptions for additional clarity on shipping scenarios. Updated shipping scenarios to include an example of different TLC Source References. Corrected GS1 key formatting errors in EDI data examples.

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1 Introduction

In July 2020, the FDA announced its 10-year plan to improve food safety, *The New Era of Smarter Food Safety*. This is a framework to "respond more rapidly to outbreaks, address new business models, reduce contamination of food, and foster the development of food safety cultures." It encourages the use of technology, improved traceability, and establishes a food safety culture throughout all members of the supply chain. For more information go to: *https://www.fda.gov/food/new-era-smarter-food-safety*.

On November 21, 2022, the United States Food and Drug Administration (FDA) published a Final Rule titled, Requirements for Additional Traceability Records for Certain Foods, which is a key component of the FDA's New Era of Smarter Food Safety Blueprint and implements Section 204(d) of the FDA Food Safety Modernization Act (FSMA), which was signed into law in 2011. This rule is commonly referred to as "FSMA 204". Throughout the remainder of this document, 'Final Rule' and FSMA 204 will be used interchangeably as shorthand for referring to this regulation.

This document supplements the Retail Grocery and Foodservice Application of GS1 System of Standards to Support FSMA 204 Guideline and provides guidance on the implementation of the X12 EDI 856 Ship Notice/Manifest (ASN)* message to help meet the Shipping Critical Tracking Event (CTE) requirements of FSMA 204. It seeks to increase consistency and ease of implementation by explaining the data elements and codes and providing real-world examples.

Note: As with all GS1 Standards and solutions, this guideline is voluntary, not mandatory. It should be noted that the use of the words "must" and "require" throughout this document relate exclusively to technical recommendations for the proper application of the standards to support the integrity of your implementation.

Each company is individually responsible for meeting all statutory and/or regulatory requirements for their company and their products. Consult with your company's legal counsel or compliance team (regulatory or quality) for more specific information about current statutory and regulatory requirements applicable to your company and products. Nothing herein should be construed as constituting or implying an agreement among foodservice and/or retail grocery companies to adopt or implement GS1 Standards.

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1.1 Who Will Use This Document

Business users and EDI experts who are implementing EDI X12 856 ASN to support FSMA 204 or who need to update existing EDI 856 implementations to support the FSMA 204 requirements.

1.2 Scope

This document provides guidance on how to include the additional data required by FSMA 204 into existing EDI implementation. The document will not explain the ASN and its general use but instead focuses only on the additions needed to support FSMA 204. The additional data recommended for FSMA 204 is optional and no existing capabilities of GS1 US guidelines will be overwritten.

1.3 Prerequisites

This document discusses the ASN changes needed to support the FSMA 204. The GS1 US FSMA 204 Guideline and its requirements and implementation requirements are covered in other GS1 US and or U.S. FDA documents. EDI has been in use for over 25 years and the general functionality and requirements to exchange EDI documents are covered in other GS1 US and X12 documents. It is

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understood that the reader or user of this document is familiar with the content of these other guides. These additional resources are recommended to familiarize yourself before reading this document.

- 7050 UCS EDI Implementation Guidelines
  a. To access the full ASN for Foodservice Guideline, you need to be a GS1 US Member company (such as when you license a Company prefix). Please follow the below steps to access the guideline. If you have questions on how to log in you can contact our member support team at *info@gs1us.org*.
     i. Login to *myGS1 US*
     ii. Click on myGS1 US in the top menu
     iii. Go to Member-Only EDI Documents
     iv. Select Uniform Communication Standard (UCS) EDI
        - Navigate to UCS Implementation Guideline 007050
        - Go to 2.2 Transaction Sets
        - Go to 856FT UCS v7050 - 2024.pdf
- VICS EDI 856 Guideline
  b. These guides can be found on *http://www.gs1us.org* and/or *www.gs1.org*

** Source: All references to ASN or EDI 856 refer to X12's Supply Chain Transaction Standards. For more information refer to x12.org/products/transaction-sets*

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2 How to Use EDI Recommendations

This EDI implementation recommendation is to be used in conjunction with the EDI 7050 856 EDI implementation guideline and the GS1 US Retail Grocery Food Service Guideline for the Application of the GS1 Systems of Standards to Support FSMA 204.

Over the years the GS1 US supported industries have implemented a vast number of 856 ASN versions spanning from 4010 all the way to 8010. In order to enable swift and cost-effective implementation of the FSMA 204 requirements for shipping, GS1 US verified that all data elements and codes used in this implementation recommendation are available in EDI versions 4010 – 8010.

This guideline outlines how to enable EDI capabilities to support FSMA 204 in EDI X12 versions prior to version 7050. All previous versions do have the capabilities in the X12 standard, but the capabilities are not outlined in GS1 US implementation guidelines for those versions. Any user who utilizes a version lower than 7050 and follows the recommendations in this guideline is still considered to use the EDI as agreed by the industry.

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3 Shipping CTE and the Advance Ship Notice

3.1 Traceability Lot Code = GTIN+Batch/Lot

The Shipping CTE requires a handful of Key Data Elements (KDEs) to be linked to the Traceability Lot and for this lot to be recorded as the Traceability Lot Code (TLC). For the TLC KDE, this guidance recommends recording both the GTIN and the batch/lot number of the food.

The GTIN/Lot information is submitted on the Pack level.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code List Summary** **Code** **Name** UK GTIN-14 **Description:** *A 14-digit GS1 Identification Key composed of an Indicator Digit, GS1* Company Prefix, Item Reference, and Check Digit used to identify trade items.				
LIN03	234	**Product/Service ID**	M	AN	1/80	Must use
		Description: Identifying number for a product or service				
LIN04	235	Product/Service ID Qualifier	M	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code List Summary** **Code** **Name** LT Lot Number				
LIN05	234	Product/Service ID	M	AN	1/80	Must use
		Description: Identifying number for a product or service				

Example: LIN*01*UK*10614141000002*LT*ABCDE12345~
This pack is identified by a GTIN-14 (10614141000002) and lot # ABCDE12345

3.2 Quantity and Unit of Measure of the Food

For the Quantity and Unit of Measure KDEs, this guidance recommends utilizing an SN1 – Item Detail (Shipment) segment within the Pack Hierarchical Level.

The quantity is submitted on the pack level. For each different lot the quantity of packs associated with the lot number will need to be identified.

SN102	382	**Number of Units Shipped**	M	R	1/10	Must use

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Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or the manner in which a measurement has been taken

Code List Summary

Code	Name
CA	Case
PL	Pallet/Unit Load

Example: SN1*25*CA~ This pack has 25 cases.

3.3 Product Description of the Food

The product description is traditionally omitted or short in ASNs since the Global Trade Item Number (GTIN®) is used to identify the product. The complete product description can then be retrieved from Global Data Synchronization Network™ (GDSN®), GS1 US Data Hub® | Product, or any other master data system using the GTIN. The GS1 US FSMA 204 Guideline maps all the Product Description KDEs to GDSN or Global Data Model fields. For more information, please see section 3.4.3 Master Data of this document.

3.4 Location Description of Immediate Subsequent Recipient (Other Than Transporter)

For the Location Description of Immediate Subsequent Recipient KDE, this guidance recommends recording a GLN (Global Location Number) of the Ship-To location. This GLN can then link to the attributes exchanged following the GLN Data Model which fulfills the Location Description KDEs requirement.

The location of the recipient, usually called Ship To location in EDI is specified on the shipment level.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property, or an individual

Code List Summary

Code	Name
ST	Ship To

N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

N103	66	**Identification Code Qualifier**	X	ID	1/2	Used

Description: Code specifying the system/method of code structure used for Identification Code (67)

Code List Summary

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Code	Name
UL	Global Location Number (GLN)

Description: A globally unique 13-digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key.

N104	67	**Identification Code**	X	AN	2/80	Used

Description: Code identifying a party or other code

Example: N1*ST*Ewing DC*UL*0840002011112~
This was shipped to Ewing DC (GLN=0840002011112)

3.5 Location Description for the Location From Which You Shipped the Food

For the Location Description for the Location From Which You Shipped the Food KDE, this guidance recommends recording a GLN of the Ship-From location. Like with the previous KDE, this GLN can then link to the attributes exchanged following the GLN Data Model which fulfills the Location Description KDE requirement. In an ASN, this is expressed as an N1 – Party Identification segment. This segment can be expressed more than once within a hierarchical level which enables both a Ship-to and Ship-from to be expressed.

The location of the shipper, usually called Ship From location on EDI is specified on the shipment level.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property, or an individual

Code List Summary

Code	Name
SF	Ship From

N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

N103	66	**Identification Code Qualifier**	X	ID	1/2	Used

Description: Code specifying the system/method of code structure used for Identification Code (67)

Code List Summary

Code	Name
UL	Global Location Number (GLN)

Description: A globally unique 13-digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key.

N104	67	**Identification Code**	X	AN	2/80	Used

Description: Code identifying a party or other code

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Example: N1*SF*GS1 US*UL*0614141000005~
This was shipped from GS1 US (GLN=0614141000005)

3.6 Date the Food Was Shipped

For the Date the Food Was Shipped KDE, this guidance recommends recording a date in the Date/Time Reference (DTM) segment. The Final Rule only requires the date that food was shipped within this CTE, however, companies can express time within this segment if necessary.

This is identified by the shipped date on Shipment level in the DTM segment. The code 011 is used to qualify that the date provided is the ship date of the food.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		CodeList Summary (Total Codes: 1332, Included: 3)				
		Code List Summary				
		Code **Name**				
		011 Shipped				
DTM02	373	**Date**	X	DT	8/8	Used
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
DTM03	337	**Time**	X	TM	4/8	Used
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				

Example: DTM*011*20220818~
Shipment departed on August 18, 2022

3.7 Location Description for the TLC Source or the TLC Source Reference

When a company ships a food from the FTL, they are expected to not only record the places it ships from and is received but also the TLC Source. Here is the definition from the Final Rule:

TLC Source means the place where a food was assigned a traceability lot code.

For the TLC Source Reference KDE, this guide illustrates how a GLN can be recorded alongside each TLC expressed within an ASN. Like with the previous KDE, this GLN can then link to the attributes exchanged following the GLN Data Model which fulfills the Location Description KDEs requirement.

Like the Shipping Location and Immediate Subsequent Recipient location KDEs above, this KDE can utilize the N1 – Party Identification segment. Unlike those other KDEs, this "N1" segment is expressed within the Pack Hierarchical Level to distinguish that it only applies to the items in that instance of the hierarchical level instead of to the shipment, overall.

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Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property, or an individual **Code List Summary** **Code** **Name** MP Manufacturing Plant				
N102	93	**Name**	X	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code specifying the system/method of code structure used for Identification Code (67) **Code List Summary** **Code** **Name** UL Global Location Number (GLN) UR Uniform Resource Locator (URL)				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

Semantic Note: Only one instance of N103 is allowed.

Example: N1*MP*Plant 4 - Harvest Salad Co.*UL*0812345002119~
Pack made at Plant 4 of Harvest Salad Co. (GLN=0812345002119)

3.8 Shipment Reference Document Type

For the Shipment Reference Document Type KDE, this guidance recommends utilizing the ST – Transaction Set Header which is a mandatory component of the EDI document and identifies the document that follows as an ASN.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Mustuse
		Description: Code identifying a Transaction Set **Code List Summary** **Code** **Name** 856 Ship Notice/Manifest				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Example: ST*856*0001~

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This EDI document is an 856 and the first of the functional group

3.9 Shipment Reference Document Identifier

For the Shipment Reference Document Identifier KDE, this guidance recommends utilizing the Beginning Segment for Ship Notice (BSN) which is a mandatory component of the ASN. The "BSN" contains these elements in the following data format:

BSN02	396	**Shipment Identification**	M	AN	2/30	Must use

Description: A unique control number assigned by the original shipper to identify a specific shipment

Code List Summary

Code	Name
00	Original

BSN03	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

BSN04	337	**Time**	M	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D
= tenths (0-9) and DD = hundredths (00-99)

Code List Summary

Code	Name
0008	Shipment, Order, Tare, Pack

Example: BSN*00*SI39383092*20220818*0600*0008~
1st submission of shipment #SI39383092 on Aug 18, 2022, at 6 am, contains Shipment/Order/Tare/Pack hierarchical levels are used

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4 KDEs mapped to ASN Hierarchy

4.1 KDEs at Header Level

This section will look at the KDEs that need to be included on the header level of the ASN. Based on the regulation the shipment identification is the date of capture and the time of capture are transmitted in the header section of the ASN.

4.1.1 Shipment Reference Document Type

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use
		Description: Code identifying a Transaction Set **Code List Summary** **Code Name** 856 Ship Notice/Manifest				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

4.1.2 Activity Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN02	396	**Shipment Identification**	M	AN	2/30	Must use
		Description: A unique control number assigned by the original shipper to identify a specific shipment				

4.1.3 Date of Data Capture

Ref	Id	Element Name	Req	Type	Min/Max	Usage
Ref	Id	**Element Name**	Req	Type	Min/Max	Usage
BSN03	373	**Date**	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				

4.1.4 Time of Data Capture

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN04	337	**Time**	M	TM	4/8	Must use
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				

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4.1.5 Date the Food Was Shipped

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **CodeList Summary** (Total Codes: 1332, Included: 3) **Code List Summary** **Code** **Name** 011 Shipped	M	ID	3/3	Must use
DTM02	373	**Date** **Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	X	DT	8/8	Used
DTM03	337	**Time** **Description:** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	X	TM	4/8	Used

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4.2 KDEs at Shipment Level

This section looks at the KDEs that need to be included in the shipment level of the ASN. The number of pallets in the shipment will be shared in the TD1 segments. The quantity plus the unit of measure will need to be provided. PLT for pallet should be used.

4.2.1 Location Description for the Location From Which You Shipped the Food

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property, or an individual				
		Code List Summary				
		Code **Name**				
		SF Ship From				
N102	93	**Name**	X	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code specifying the system/method of code structure used for Identification Code (67)				
		Code List Summary				
		Code **Name**				
		UL Global Location Number (GLN)				
		Description: A globally unique 13-digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key.				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

4.2.2 Location Description of Immediate Subsequent Recipient

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property, or an individual				
		Code List Summary				
		Code **Name**				
		ST Ship To				
N102	93	**Name**	X	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code specifying the system/method of code structure used for Identification Code (67)				

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Code List Summary

Code	Name
UL	Global Location Number (GLN)

Description: A globally unique 13-digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key.

N104	67	**Identification Code**	X	AN	2/.80	Used

Description: Code identifying a party or other code

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4.3 KDEs at Pack Level

This section will look at the KDEs that need to be included on the pack level of the ASN.

4.3.1 GTIN

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code List Summary** **Code** **Name** UK GTIN-14 **Description:** *A 14-digit GS1 Identification Key composed of an Indicator Digit, GS1* Company Prefix, Item Reference, and Check Digit used to identify trade items				
LIN03	234	**Product/Service ID**	M	AN	1/80	Must use
		Description: Identifying number for a product or service				

4.3.2 Batch/Lot Number (TLC)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN04	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code List Summary** **Code** **Name** LT Lot Number				
LIN05	234	**Product/Service ID**	M	AN	1/80	Must use
		Description: Identifying number for a product or service				

4.3.3 Unit of Measure (UoM)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD101	103	**Packaging Code**	O	AN	3/5	Used
		Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required **Code List Summary** **Code** **Name** PLT Pallet				

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4.3.4 Traceability Lot Code Source Reference

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property, or an individual **Code List Summary** **Code** **Name** MP Manufacturing Plant	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name	X	AN	1/60	Used
N103	66	**Identification Code Qualifier** **Description:** Code specifying the system/method of code structure used for Identification Code (67) **Code List Summary** **Code** **Name** UL Global Location Number (GLN) UR Uniform Resource Locator (URL)	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code	X	AN	2/80	Used

Semantic Note: Only one instance of N103 is allowed.

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5 KDE to EDI Mapping Table

	FSMA 204 EDI Capability Check								Does Exist in Original Standard?		
KDE	**EDI Level**	**Hierarchical Level**	**Segment**	**Position**	**Value/Code**	**GS1 FSMA 204 Document Reference**	**User Note**	**GS1 US 7050**	**X12 EDI 5010**	**X12 EDI 4030**	**X12 EDI 4010**
Shipment Reference Document Type	Header 1/0100	Header	ST	ST01	856	4..8	For the Shipment Reference Document Type KDE, this guidance recommends utilizing the ST - Transaction Set Header which is a mandatory component of the EDI document and identifies the document that follows as an ASN.	**Y**	**Y**	**Y**	**Y**
Activity Number	Header 1/0200	Header	BSN	BSN02	*Shipment Identification of the ASN*	4.5.9	The BSN02 element contains the Shipment Identification of the ASN. The Shipment Identification is a unique control number, assigned by the original shipper/sender to identify the shipment.	Y	Y	Y	Y
Date/Time of data capture	Header 1/0200	Header	BSN	BSN03	*Date*	4.5.9	The BSN02 element contains the Shipment Identification of the ASN. The Shipment Identification is a unique control number, assigned by the original shipper/sender to identify the shipment.	Y	Y	Y	Y
Date/Time of data capture	Header 1/0200	Header	BSN	BSN04	*Time*	4.5.9	The BSN02 element contains the Shipment Identification of the ASN. The Shipment Identification is a unique control number, assigned by the original shipper/sender to identify the shipment.	Y	Y	Y	Y
Date the Food Was Shipped	Header 1/2000	Header	DTM	DTM01	11	4.5.6	For the Date the Food Was Shipped KDE, this guidance recommends recording a date in the DTM – Date/Time Reference segment. The Final Rule only requires the date that food was shipped within this CTE, however, companies can express time within this segment if necessary.	Y	Y	Y	Y
Location Description for the Location From Which You Shipped the Food	Detail 2/2200	Shipment	N1	N102	SF - *Ship From location name*	4.5.5	For the Location Description for the Location From Which You Shipped the Food KDE, this guidance recommends recording a GLN of the Ship-From location. Like with the previous KDE, this GLN can then link to the attributes exchanged following the GLN Data Model which fulfills the Location Description KDEs requirement. In an ASN, this is expressed as an N1 – Party Identification segment. This segment can be expressed more than once within a hierarchical level which enables both a Ship-to and Ship-from to be expressed.	Y	Y	Y	Y
Location Description of Immediate Subsequent Recipient	Detail 2/2200	Shipment	N1	N102	ST - *Ship To location name*	4.5.4	For the Location Description of Immediate Subsequent Recipient KDE, this guidance recommends recording a GLN of the Ship-To location. This GLN can then link to the attributes exchanged following the GLN Data Model which fulfills the Location Description KDEs requirement.	Y	Y	Y	Y

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GTIN	Detail 2/0200	Pack	LIN	LIN03	UK - *GTIN-14*	4.5.1	The Shipping CTE requires a handful of KDEs to be linked to the Traceability Lot and for this lot to be recorded as the TLC. For the TLC KDE, this guidance recommends recording both the GTIN and the batch/lot number of the food.	Y	Y	Y	Y
Batch/ Lot Number (TLC)	Detail 2/0200	Pack	LIN	LIN04	LT - *Lot Number*	4.5.1	Code LT may only be used if the Pack level is comprised of one (1) batch/lot. If there is more than one lot/batch, the Batch HL shall be used. Multiple Pack loops can be utilized if there are multiple Lot Codes on the Packaging when utilizing SOTP.	Y	Y	Y	Y
Unit of Measure (UOM}	Detail 2/0300	Pack	SN1	SN102	PL - *Pallet/Unit Load*	4.5.2	For the Quantity and Unit of Measure KDEs, this guidance recommends utilizing an SN1 - Item Detail (Shipment) segment within the Pack Hierarchical Level	Y	Y	Y	Y
	Detail 2/0300	Pack	SN1	SN102	CA - *Case*	4.5.2	For the Quantity and Unit of Measure KDEs, this guidance recommends utilizing an SN1 - Item Detail (Shipment) segment within the Pack Hierarchical Level	Y	Y	Y	Y
Traceability Lot Code Source	Detail 2/2200	Pack	N1	N101	MP	4.5.7	The TLC is to be used when a company ships a food from the FTL. Companies are expected to not only record the places it ships from and is received but also the TL Source.	Y	Y	Y	Y
	Detail 2/2200	Pack	N1	N102	*Name*	4.5.7	The TLC Source is to be used when a company ships a food from the FTL. Companies are expected to not only record the places it ships from and is received but also the TLC Source.	Y	Y	Y	Y
	Detail 2/2200	Pack	N1	N103	UL	4.5.7	The TLC Source is to be used when a company ships a food from the FTL. Companies are expected to not only record the places it ships from and is received but also the TLC Source.	Y	Y	Y	Y
	Detail 2/2200	Pack	N1	N104	*TLC Source*	4.5.7	The TLC Source is to be used when a company ships a food from the FTL. Companies are expected to not only record the places it ships from and is received but also the TLC Source.	Y	Y	Y	Y
Traceability Lot Code Source Reference	Detail 2/2200	Pack	N1	N101	MP	4.5.7.1	In response to the proposed rule, the FDA received comments expressing concern that passing forward a TLC Source would expose commercially sensitive information. In the Final Rule, the FDA proposed an alternative method for providing access to the FDA with the Location Description of the TLC Source. The definition also mentions utilizing a web address for enabling the look up of the Location Description for the TLC source. This could be enabled through the use of web URL..	Y	Y	Y	Y
	Detail 2/2200	Pack	N1	N102	*Name*	4.5.7.1	In response to the proposed rule, the FDA received comments expressing concern that passing forward a TLC Source would expose commercially sensitive information. In the Final Rule, the FDA proposed an alternative method for providing access to the FDA with the Location Description of the TLC Source. The definition also mentions utilizing a web address for enabling the look up of the Location Description for the TLC source. This could be enabled through the use of GS1 web URL.	Y	Y	Y	Y
	Detail 2/2200	Pack	N1	N103	UR	4.5.7.1	In response to the proposed rule, the FDA received comments expressing concern that	Y	Y	Y	Y

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							passing forward a TLC Source would expose commercially sensitive information. In the Final Rule, the FDA proposed an alternative method for providing access to the FDA with the Location Description of the TLC Source. The definition also mentions utilizing a web address for enabling the look up of the Location Description for the TLC source. This could be enabled through the use of Web URL.				
	Detail 2/2200	Pack	N1	N104	*TLC Source Reference*	4.5.7.1	In response to the proposed rule, the FDA received comments expressing concern that passing forward a TLC Source would expose commercially sensitive information. In the Final Rule, the FDA proposed an alternative method for providing access to the FDA with the Location Description of the TLC Source. The definition also mentions utilizing a web address for enabling the look up of the Location Description for the TLC source. This could be enabled through the use of web URL.	Y	Y	Y	Y

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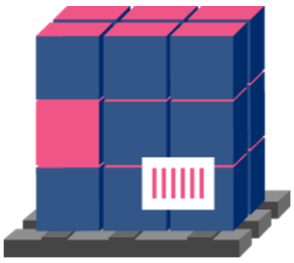
6 Example ASN

The examples provided here are for illustration purposes only for a detailed description of the ASN, its segments, data elements and codes please refer to the ASN message guideline.

6.1 Same Trade Item



In this example, we have a single shipped pallet that contains a total of four cases of a single traceability lot code. The traceability lot code is comprised of a GTIN and Batch/Lot combination.

SSCC: 001234567890123452

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

ST*__856__*0001~	Shipment Reference Document Type
BSN*00*__SI39383092__*__20220818__*__0600__*0008~	Activity Number, Date/Time of data capture
HL*1**S~	
TD1*PLT*4****G*1200*LB*1000*CF~	
TD5**2*ACLU*U**CL~	
TD3*CN~	
REF*BM*BOM83492093~	
DTM*__011__*__20190813__*0530~	Date the Food Was Shipped
N1*__SF__*GS1 US*__UL__*__0012345900006__~	Location Description for the Location From Which You Shipped the Food
REF*IT*123467891234*	
N1*SU*Supplier/Manufacturer name*UL*__0012345900006__~	
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
REF*IT*ABC1234*	
N1*__ST__*Ewing DC*__UL__*__0012345900013~__	Location Description of Immediate Subsequent Recipient
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	

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N1*CA*FastTrucks~	
REF*IT*DEF5678*	
HL*2*1*O~	
SN1**100*CA~	
PRF*PO123456~	
TD1******G*2500*LB~	
REF*IL*N2994~	
HL*3*2*T*~	
SN1*1*PL~	
MAN*GM*00123456789012345 2~	
PAL*4~	
HL*4*3*P~	
LIN***01***UK****10012345000017***LT****ABCDE12345**~	Traceability Lot Code (GTIN + Batch/Lot)
SN1****4*****CA**~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1****MP***Plant 4 - Harvest Salad Co.*****UL***0012345900020~	Location Description for the Traceability Lot Code Source Reference
CTT*6~	
SE*35*0001~	

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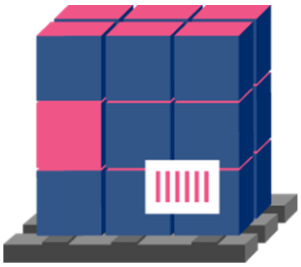
6.2 Mixed Trade Items



In this example, we have a single shipped pallet that contains a total of four cases of a combination of two traceability lot codes. The first two cases are of the same GTIN and batch/lot. The next two cases each share the same GTIN and batch/lot but are different than the previous two.

SSCC: 001234567890123452

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900020
GTIN: 10012345000031
Batch/Lot: XX44C5FEB345

GLN: 0012345900020
GTIN: 10012345000031
Batch/Lot: XX44C5FEB345

ST*856*0001~	Shipment Reference Document Type
BSN*00*SI39383092*20220818*0600*0008~	Activity Number, Date/Time of data capture
HL*1**S~	
TD1*PLT*4****G*1200*LB*1000*CF~	
TD5**2*ACLU*U**CL~	
TD3*CN~	
REF*BM*BOM83492093~	
DTM*011*20190813*0530~	Date the Food Was Shipped
N1*SF*GS1 US*UL*0012345900006~	Location Description for the Location From Which You Shipped the Food
REF*IT*123467891234*	
N1*SU*Supplier/Manufacturer name*UL*0012345900006~	
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
REF*IT*ABC1234*	
N1*ST*Ewing DC*UL*0012345900013~	Location Description of Immediate Subsequent Recipient
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
N1*CA*FastTrucks~	
REF*IT*DEF5678*	
HL*2*1*O~	
SN1**100*CA~	
PRF*PO123456~	

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TD1******G*2500*LB~	
REF*IL*N2994~	
HL*3*2*T*~	
SN1*1*PL~	
MAN*GM*00123456789012345**2**~	
PAL*4~	
HL*4*3*P~	
LIN*01*UK*10012345000017*LT*ABCDE12345~	Traceability Lot Code (GTIN + Batch/Lot) Item 1
SN1*2*CA~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1*MP*Plant 4 - Harvest Salad Co.*UL*0012345900020~	Location Description for the Traceability Lot Code Source Reference (GLN)
HL*5*3*P~	
LIN*01*UK*10012345000031*LT*XX44C5FEB345~	Traceability Lot Code (GTIN + Batch/Lot) Item 2
SN1*2*CA~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1*MP*Brand Name*UR* https://id.lucy.com/414/0012345900020~	Location Description for the Traceability Lot Code Source Reference (URL)
CTT*6~	
SE*40*0001~	

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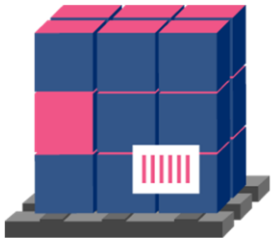
6.3 Mixed Trade Items and Lots



SSCC: 001234567890123452

In this example, we have a single shipped pallet that contains a total of four cases of a combination of three traceability lot codes. The first case is of a specific GTIN and batch/lot. The next two cases are of a different GTIN and batch/lot than the first. The fourth case is of the same GTIN as the previous two but is from a different batch/lot. This example also demonstrates the listing in the ASN of the TLC source with full address details in addition to the GLN method.

GLN: 0012345900020
GTIN: 10012345000017
Batch/Lot: ABCDE12345

GLN: 0012345900457
GTIN: 10012345000031
Batch/Lot: XX44C5FEB345

GLN: 0012345900457
GTIN: 10012345000031
Batch/Lot: XX44C5FEB345

GLN: Address Used
GTIN: 10012345000031
Batch/Lot: XX44C5JAN300

ST*__856__*0001~	Shipment Reference Document Type
BSN*00*__SI39383092__*__20220818__*__0600__*0008~	Activity Number, Date/Time of data capture
HL*1**S~	
TD1*PLT*4****G*1200*LB*1000*CF~	
TD5**2*ACLU*U**CL~	
TD3*CN~	
REF*BM*BOM83492093~	
DTM*__011__*__20190813__*0530~	Date the Food Was Shipped
N1*__SF__*GS1 US*__UL__*__0012345900006__~	Location Description for the Location From Which You Shipped the Food
REF*IT*123467891234*	
N1*SU*Supplier/Manufacturer name*UL*__0012345900006__~	
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
REF*IT*ABC1234*	
N1*__ST__*Ewing DC*__UL__*__0012345900013__~	Location Description of Immediate Subsequent Recipient
N3*300 Charles Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
N1*CA*FastTrucks~	
REF*IT*DEF5678*	
HL*2*1*O~	
SN1**100*CA~	
PRF*PO123456~	
TD1******G*2500*LB~	
REF*IL*N2994~	
HL*3*2*T*~	
SN1*1*PL~	

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MAN*GM*00123456789012345**2**~	
PAL*4~	
HL*4*3*P~	
LIN***01***UK****10012345000017***LT****ABCDE12345**~	Traceability Lot Code (GTIN + Batch/Lot) Item 1
SN1****1*CA**~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1****MP***Brand Name*UL****0012345900020**~	Location Description for the Traceability Lot Code Source Reference (GLN)
HL*5*3*P~	
LIN***01***UK****10012345000031***LT****XX44C5FEB345**~	Traceability Lot Code (GTIN + Batch/Lot) Item 2
SN1****2*CA**~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1****MP***Plant 4 - Harvest Salad Co.*UL****0012345900457**~	Location Description for the Traceability Lot Code Source
HL*6*3*P~	
LIN***01***UK****10012345000031***LT****XX44C5JAN300**~	Traceability Lot Code (GTIN + Batch/Lot) Item 3
SN1****1*CA**~	Quantity and Unit of Measure of the Food
PO4*N*25*LB~	
N1****MP***Plant 5 - Harvest Salad Co.~	Location Description for the Traceability Lot Code Source Reference (Full Address)
N3*600 Robert Ewing Blvd~	
N4*Ewing*NJ*08628*US~	
CTT*6~	
SE*56*0001~	

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7 Additional Resources

The following documents provide additional background and relevant information:

- Application of GS1 System of Standards to Support FSMA 204 Guideline
- 856 Ship Notice/Manifest - Foodservice - Uniform Communication Standard EDI

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