Produce Traceability Initiative Guidance for Sharing Trace-Back Data

(Revision 1.1)

About this Guidance Document

Guidelines are generally accepted, informally standardized techniques, methods or processes that have proven themselves over time to accomplish given tasks. The idea is that with proper processes, checks and testing, a desired outcome can be delivered more effectively with fewer problems and unforeseen complications. In addition, guidelines can evolve to become better as improvements are discovered. The Produce Traceability Initiative (PTI) is a voluntary U.S. produce initiative. The guidelines are the recommendations created and agreed to by all facets of the produce industry supply chain and PTI Leadership Council.

Consent between trading partners may replace specific recommendations as long as the minimum traceability information requirements are met in good faith.

Key Data Elements (KDEs) and Critical Tracking Events (CTEs) are industry terms for organizations across the food industry looking to improve their track and trace processes. The use of KDEs and CTEs is not a mandatory PTI requirement, but are an important part of the data needed by the FDA in doing traceback investigations. This guidance is provided as an additional resource to support industry members in responding to requests for trace-back data in the event of a market withdrawal or recall.

Revision History

This section itemizes the changes from the last published Best Practice.

Revision No.	Date of Change	Changed By	Summary of Change
R1.0	September 8, 2015	Created by Implementation Working Group	Initial Publication
R1.1	July 7, 2020	United Fresh Produce Assn	Replace logo; added new section on responding to a regulatory traceback request and added link and reference to traceback template

Objectives

The goals of creating best practices for sharing trace-back data are to:

- provide guidance with respect to types and formats of data you will need to provide to regulators, investigators and/or trading partners during a trace-back investigation
- identify and document the Key Data Elements (KDEs) to be shared in a trace-back investigation
- identify and document the data format for each KDE to be shared during a trace-back investigation
- identify and document the Critical Tracking Events (CTEs) for which KDEs should be stored to support a trace-back investigation

Introduction

The Produce Traceability Initiative (PTI) focuses on standardized, electronic tracking at the lot/batch level, rather than item level. This is accomplished by communicating the lot number on the product case. The term "case" applies to the physical enclosure in which product is shipped, and can be in the form of a box, reusable plastic container (RPC), bin, bag, tote, etc. Such cases are normally shipped on pallets.

Any trading partner, as well as regulators, may initiate a trace or recall request. To promote efficient trace or recall requests, it is essential that suspect items are identified using their unique identification numbers (i.e., GS1 Global Trade Item Number® (GTIN®)). To ensure preparedness in the event of an incident, every company should have a traceability team and practice/simulate recalls to test the traceability system in place.

Critical Tracking Events (CTEs)

For purposes of tracking and tracing product per PTI guidelines, tracking begins when the product is packed into the case and the lot is assigned. This is the point of creation of a trading unit with a GTIN. To ensure effective traceback, this lot must link to grower information to enable identification of the origin (e.g., ranch, orchard, etc.) of the product prior to packing. From that point forward, there are various points in a supply chain at which data should be captured in order to document product movement. These points are referred to as Critical Tracking Events (CTEs).

There are three types of CTEs: transformation events, transportation events, and depletion events, as described in Table 1 below.

CRITICAL TRACKING EVENT DEFINITIONS		
TRANSFORMATION EVENTS *events where changes occur as produce is manufactured or transformed during processing*	TRANSFORMATION INPUT	An event where produce is packed at a shed or field.
	TRANSFORMATION OUTPUT	An event where produce is repacked and/or further processed (e.g., chopped).
TRANSPORTATION EVENTS *events that support traceability between supply chain companies*	SHIPPING EVENT	An event where produce is shipped from a facility/location.
	RECEIVING EVENT	An event where produce is received at a facility/location.
DEPLETION EVENTS *events that capture how produce is removed from the supply chain*	CONSUMPTION EVENT	An event where produce is sold at Point of Sale, or included in a meal service.
	DISPOSAL EVENT	An event where produce is disposed of or discarded at a facility (because traceability requires an accounting of all products).

Table 1: Critical Tracking Events (CTEs)

Key Data Elements (KDEs)

Key Data Elements (KDEs) are captured at each Critical Tracking Event. Capturing and sharing KDEs supports tracking and tracing products as they travel through the supply chain and between trading partners. KDEs encompass two types of data: Master Data and Physical Event Data.

Master Data

Master Data is "core data" that describes the trade item associated with a GTIN, and that remains constant across all instances of the product (i.e., does not change during transactions). (Note: Appendix A provides a *Basic PTI Sample Master Data Set showing PTI csv File information (GTIN).*) Master data elements are called "attributes." It is not necessary to share all Master Data elements for trace-back purposes. Table 2 identifies the attributes to be shared during a trace-back investigation, and Tables 3 identifies those that do not. When sharing trace-back data, master data attributes need only be shared once per case GTIN.

Table 2: Recommended Master Data Elements to be shared during a trace-back investigation

Master Data Common Name	GDSN Attribute Name
GTIN	GTIN
Description	tradeItemUnitDescriptor
Description	tradeItemDescription
Commodity	functionalName
Variety	varietyType
Country of Origin	tradeItemCountryOfOrigin
Quantity of Items in Case	quantityofNextLowerLevelTradeItem
Case Type	packagingTypeCode
Pack Size Unit of Measure	netContentUoM
Size Group	descriptiveSize
Brand Name	brandName
Growing Method	growingMethodCode

*** See Appendix 2 for a Basic PTI Sample Master Data Set showing PTI csv File information (GTIN).**

Table 3: Master Data Elements not necessary to be shared during a trace-back investigation

Master Data Common Name	GDSN Attribute Name
Effective Date of Change	effectiveDate
Height of Case	height & UoM
Height Unit of Measure	height & UoM
Width of Case	width & UoM
Width of Case Unit of Measure	width & UoM
Length of Case	depth & UoM
Length of Case Unit of Measure	depth & UoM
Gross Weight of Case	grossWeight & UoM
Gross Weight of Case Unit of Measure	grossWeight & UoM
Net Weight of Case	netWeight & UoM
Net Weight of Case Unit of Measure	netWeight & UoM
Pallet Tie (# of cases per layer)	quantityOfTradeItemsPerPalletLayer
Pallet High (# of layers per pallet)	quantityOfLayersPerPallet
Grade	gradeCode
Grade Agency	gradeCodeAgency

*** See Appendix 3 for a Basic PTI Sample Master Data Set showing PTI csv File information (GLN).**

Event Data

Event Data is comprised of the KDE's that describe Critical Tracking Events. Event data records the essentials of what happened during a step of a business process in which objects were handled, expressed via the four dimensions of *what*, *where*, *when*, and *why*. The following Event Data are recommended to be shared for each CTE:

Table 4: Physical Event Data recommended to be shared for each CTE

Attribute name	Explanation
Critical Tracking Event ID	Alpha numeric value used to group Critical Tracking Events together. For example: in the production of a seasoned fish fillet, there are multiple transformation inputs (fish, seasoning ingredient 1. seasoning ingredient 2, seasoning ingredient 3, packaging material 1, packaging material 2, etc.)
Critical Tracking Event Type	Critical Tracking Events are activities in the supply chain that must be recorded by the capture of key information about a business step for product movement in the supply chain. Typically, these events involve a product's transformation, transportation, or depletion.
Event Owner (GLN)	The Event Owner is the identification of the party that observed and is reporting the event, and the party that should be consulted if trading partners or government authorities need more information about the event. The preferred identification is the GS1 Global Location Number (GLN) for that party's corporate or regional office location.
Date/Time	The Event Date is the calendar day at the event location (formatted as an ISO standard YYYYMMDD), and Event Time is the time formatted in Greenwich Mean Time when an event is completed. When an event activity is performed over an extended period, the ending time should be reported for transformation type events, and the starting time should be reported for depletion type events. Transportation type events should be the approximate time the transportation unit departed or arrived. In the event of a product transformation, it is the date and time when the input product identified is last added to the transformation event or the date and time when the output product identified is last produced.
Event Location (GLN)	The Event Location is the facility, plant, warehouse, building, production line, or loading dock door where the event occurs. The preferred identification is the GS1 Global Location Number (GLN).
Trading Partner (GLN)	Identification of the trading partner or party recording a CTE. For instance, in a shipping CTE, it would be the location of the person that will receive the product being shipped. For a transformation input CTE, it would be the supplier identification of the Item ID. The preferred identification is the GS1 Global Location Number.
Item (GTIN)	The Product Item Identification is the reference value that identifies the traceable product's essential product and packaging characteristics (product specification, type of meat cut, level of processing, level of cooking, and packaging, etc.). The preferred identification is the GS1 Global Trade Item Number® (GTIN®), but the supplier stock-keeping unit (SKU) may also be used (as indicated by the Item ID Type). For all events, the use of GTIN is strongly encouraged, as it is globally unique and denotes both the supplier and product.
Lot/Batch Number or Serial Number	A unique coded identifier assigned by the product supplier that unites products that have undergone combination, transformation, packaging, or manipulation under a common set of circumstances such as time, production crew, or ingredient lot. If more than one batch, lot (the terms batch and lot are used interchangeably herein), or serial number is involved in the event, a separate event is reported for each

	along with the quantity of product marked with each batch/lot or serial number. The Batch/Lot Number or Serial Number have value only when used in conjunction with the Item Identification element value.
Quantity	The Quantity is a numeric value that indicates the amount of product involved in the event.
Unit of Measure	The Unit of Measure is the designation that indicates the measurement unit (e.g., pallet, cases, inner packs, consumer unit) associated with the Quantity reported for the event.
Activity ID	The Activity ID is the number of the Activity Type document used to uniquely identify a segment of production for a transformation event or a set of products shipped for a transportation event. For example, in a transformation event, the Activity ID ties the identity of the input products with the corresponding output products. For transportation activities, the Activity ID may be a Purchase Order number or a Bill of Lading number that as a reference number identifies the set of products shipped and received.
Activity Type	Activity Type describes the document used to identify the CTE such as Bill of Lading, Purchase Order, Invoice, Production Order, etc.

*** See Appendix 4 for a Basic PTI Sample Master Data Set showing PTI csv File information (Events).**

Responding to a Regulatory Traceback Data Request

When regulators are investigating public health issues such as outbreaks, traceback data are often requested to help quickly identify the source of an item and if potentially implicated product originates from or was processed in a common location. Historically, agencies have asked for transactional data (e.g., invoices, bills of lading, purchase orders etc.), from which they attempt to tie together common elements to trace products with as much specificity as the documents allow. However, as previously mentioned, the Key Data Elements mentioned previously can more readily link products as they move through Critical Tracking Events.

As part of the spring 2019 Romaine Task Force, FDA shared examples of their records requests, from which the industry extracted the types of information requested. Based on industry feedback, a 3-tabbed spreadsheet was refined by a PTI workgroup. This worksheet should be used by all members of the produce industry, from retail and foodservice operations to distributors, processors, packers and growers, to summarize the data needed for an outbreak investigation. Data can be manually entered or auto populated.

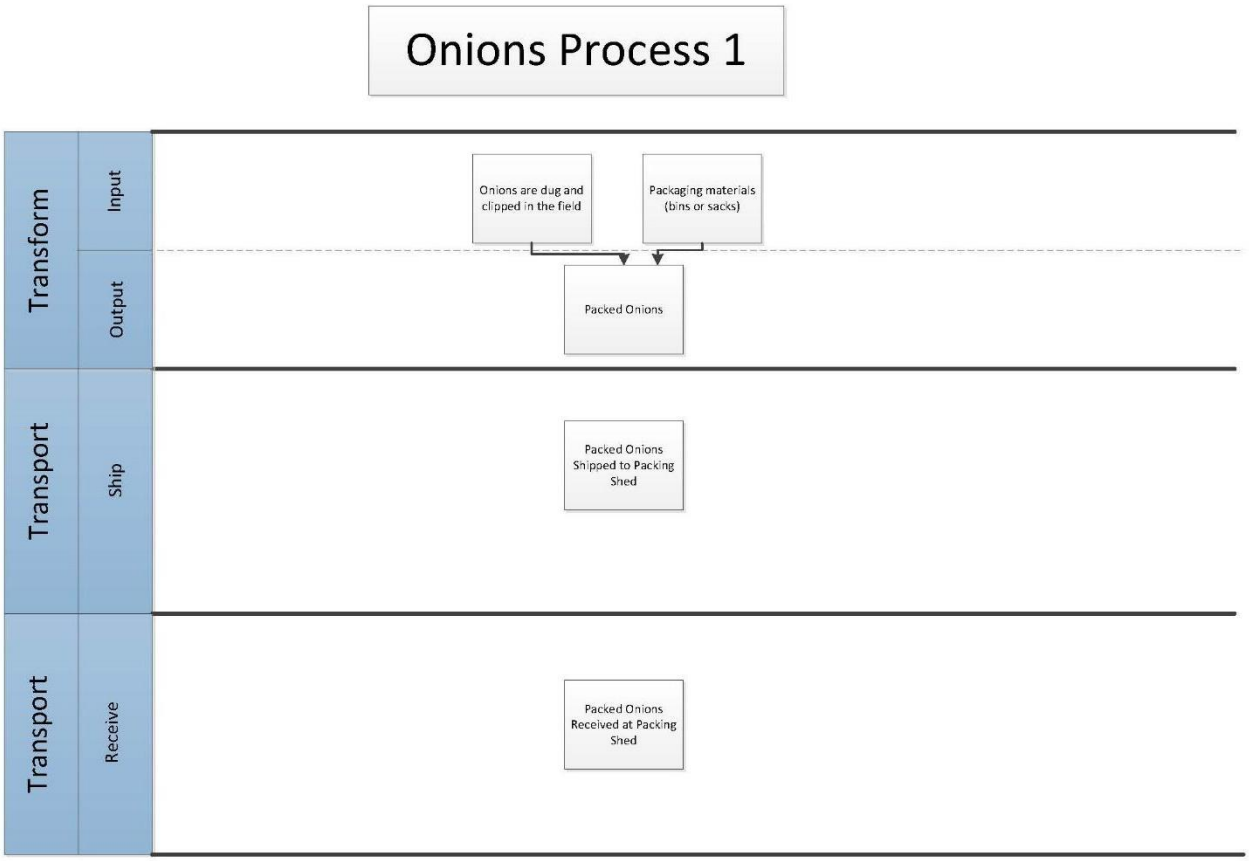
The spreadsheet, published in June 2020, is available at:

https://www.producetraceability.org/documents/Produce_Traceability_Template_20200624.xlsx

More data fields are present in the spreadsheet than are described elsewhere in the document. This is to allow industry members at varying degrees of traceability maturity to share pertinent data. As more industry members capture and supply the Key Data Elements chain-wide, some of the fields in the spreadsheet (e.g., invoice numbers etc.) will become superfluous.

Finished Goods Sweet Onion Process Scenario and Data Example

Figure 1: Onions Process 1



Onions Process 1 – Transformation Events

Onions (input) are harvested in the field, and then loaded into bins (input - "packaging materials"). Packed onions are the output. These onions are loose in the bin. They are not "packed" in the field in the form of finished goods. Sometimes they are "packed" in sacks instead of bins.

Table 5: Onions Process 1 – Transformation Events

Attribute Name	Value/Content		
	TRANSFORMATION EVENT 1	TRANSFORMATION EVENT 2	TRANSFORMATION EVENT 3
Critical Tracking Event ID	EX001	EX001	EX002
Critical Tracking Event Type	Transform-Input	Transform-Input	Transform-output
Event Owner (GLN)	1234560000005	1234560000005	1234560000005
Date/Time (yyyymmddhhmmss)	20150330:07:00:00	20150330:07:00:00	20150330:07:00:00
Event Location (GLN)	1234560001012	1234560001012	1234560001012
Trading Partner (GLN)	1234560002016	1234560002016	1234560002016
Item (GTIN)	Onions (Raw Materials)	Packaging materials	Packed Onions
Lot/Batch Number or Serial Number	20150330F101	XJ2356	20150330F10112
Quantity	100	50	50
Unit of Measure	Bushels	Bins	Bins
Activity ID	WO123	WO123	WO123
Activity Type	Work Order	Work Order	Work Order

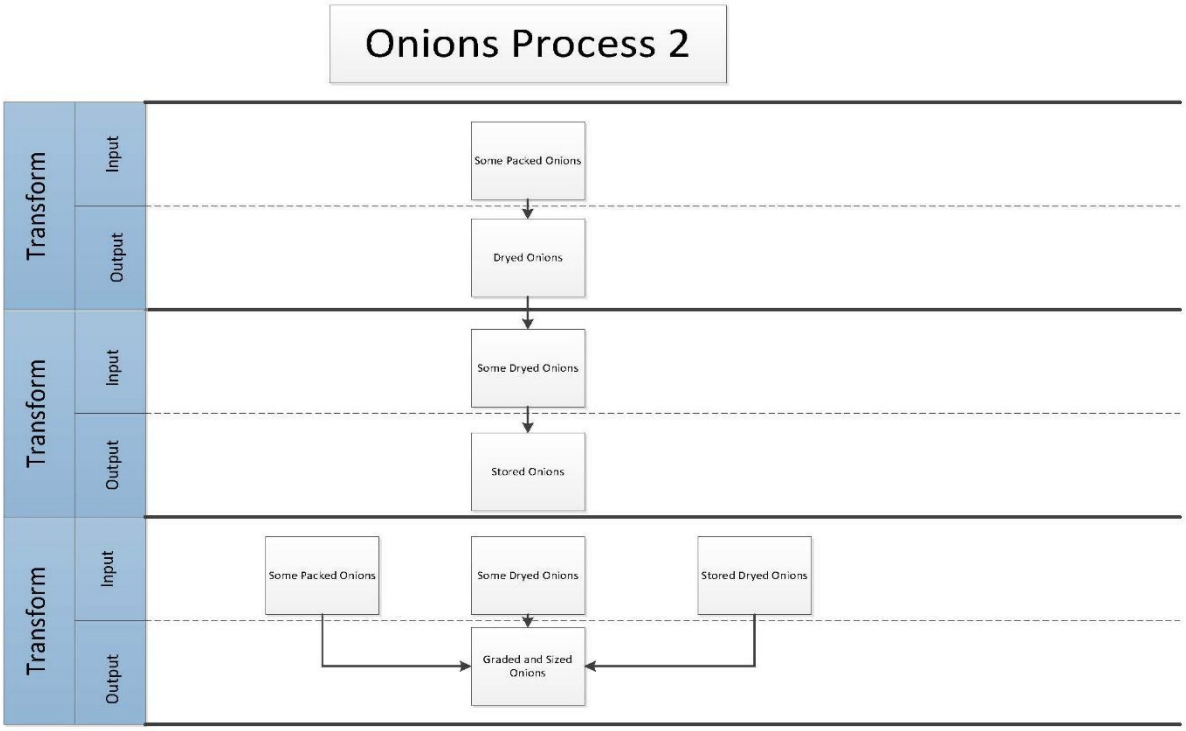
Onions Process 1 – Transportation Events

The bins/sacks packed with loose onions are shipped to the packing shed. The bins/sacks of loose onions are received at the packing shed. Note - these onions are loose in the bin, not "packed" or in bulk sacks.

Table 6: Onions Process 1 – Transportation Events

Attribute Name	Value/Content	
	TRANSPORTATION EVENT 1	TRANSPORTATION EVENT 2
Critical Tracking Event ID	EX003	EX004
Critical Tracking Event Type	Transport-ship	Receive
Event Owner (GLN)	1234560000005 (Sample Farm Company HQ)	1234560000005 (Sample Farm Company HQ)
Date/Time (yyyymmddhhmmss)	20150330:15:00:00	20150330:07:00:00
Event Location (GLN)	1234560001012 (Field 101)	1234560001016 (packing shed)
Trading Partner (GLN)	1234560002016 (packing shed)	1234560002012 (Field 101)
Item (GTIN)	Packed Onions	Packed Onions
Lot/Batch Number or Serial Number	20150330F10112	20150330F10112
Quantity	50	50
Unit of Measure	Bins	Bins
Activity ID	SD123	SD123
Activity Type	Shipping Document	Shipping Document

Figure 2: Onions Process 2



Onions Process 2 -- Transformation Events

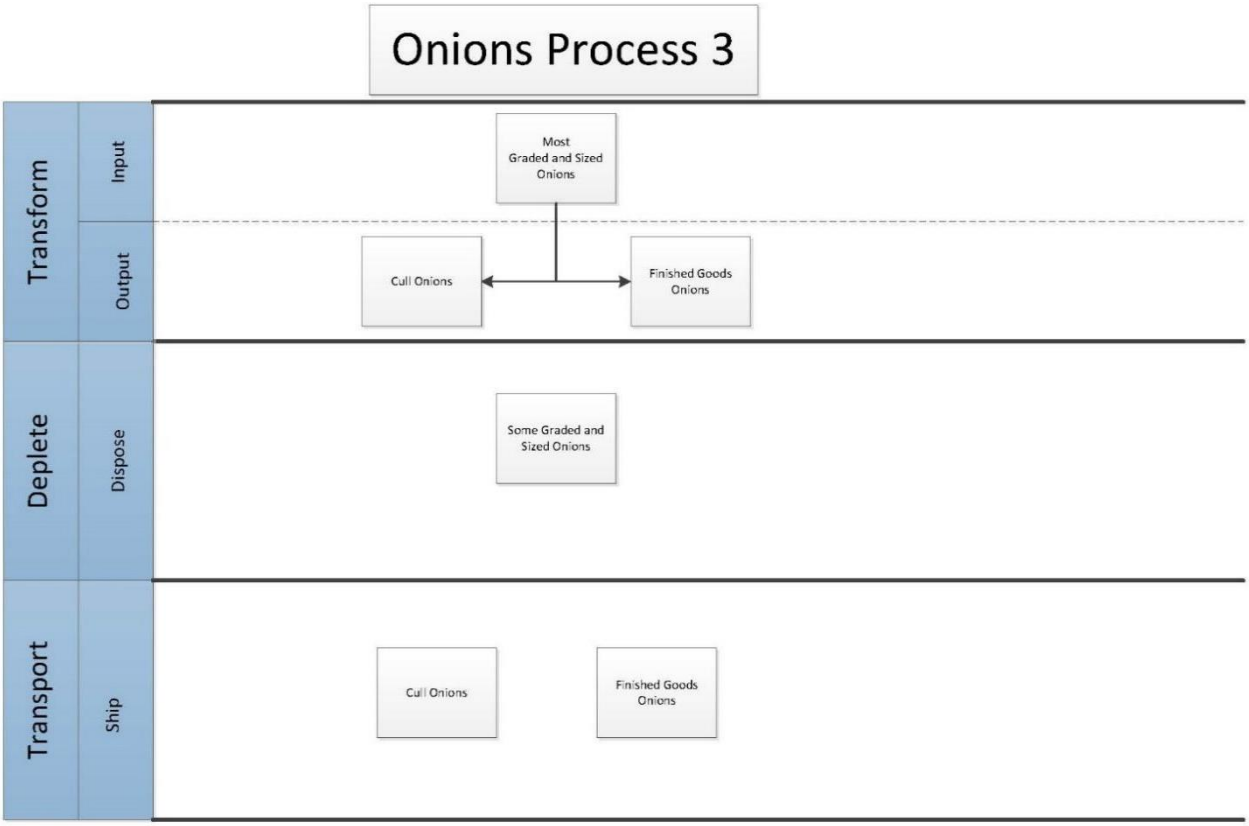
Some of the onions (input) are dried (output). Some of the dried onions (input) are stored (output). At times, they are graded and sized before storing. A portion of the harvested onions (input), dried onions (input) and stored dried onions (input) are graded and sized, and then bagged/binned or packed in cartons or RPCs (output).

Table 7: Onions Process 2 – Transformation Events

Attribute Name	Value/Content		
	TRANSFORMATION EVENT 1	TRANSFORMATION EVENT 2	TRANSFORMATION EVENT 3
Critical Tracking Event ID	EX005	EX006	EX007
Critical Tracking Event Type	Transform-Input	Transform-Output	Transform-Input
Event Owner (GLN)	1234560000005	1234560000005	1234560000005
Date/Time (yyyymmddhhmmss)	20150331:07:00:00	20150331:09:00:00	20150404:07:00:00
Event Location (GLN)	1234560001019	1234560001019	1234560001019
Trading Partner (GLN)	1234560002016	1234560002016	1234560002016
Item (GTIN)	Packed Onions	Dried Onions	Packed Onions
Lot/Batch Number or Serial Number	20150330F10112	20150330F10120	20150401F10112
Quantity	25	25	10
Unit of Measure	Bins	Bins	Bins
Activity ID	WO456	WO456	WO789
Activity Type	Work Order	Work Order	Work Order

Attribute Name	Value/Content		
	TRANSFORMATION EVENT 4	TRANSFORMATION EVENT 5	TRANSFORMATION EVENT 6
Critical Tracking Event ID	EX007	EX007	EX008
Critical Tracking Event Type	Transform-Input	Transform-Input	Transform-Output
Event Owner (GLN)	1234560000005	1234560000005	1234560000005
Date/Time (yyyymmddhhmmss)	20150401:07:00:00	20150401:07:00:00	20150401:09:00:00
Event Location (GLN)	1234560001019	1234560001019	1234560001019
Trading Partner (GLN)	1234560002016	1234560002016	1234560002016
Item (GTIN)	Dried Onions	Stored Dry Onions	Graded & Sized Onions
Lot/Batch Number or Serial Number	20150401F10120	20150401F10130	20150401F10150
Quantity	10	10	30
Unit of Measure	Bins	Bins	Bins
Activity ID	WO789	WO789	WO789
Activity Type	Work Order	Work Order	Work Order

Figure 3: Onions Process 3



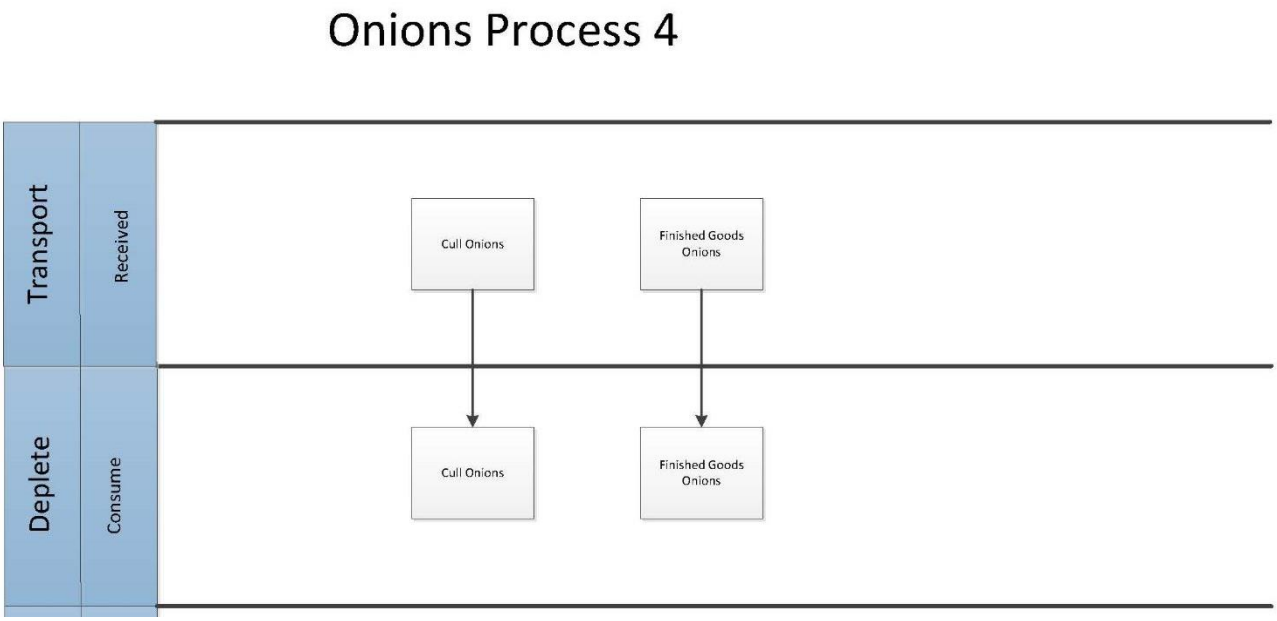
Onions Process 3 – Transformation Events

Bags/Bins/Cartons/RPCs of graded and sized onions (input) become finished goods onions (output) and cull onions (output). Some graded and sized onions are disposed. Not graded / not sized onions are only disposed if defective, and thus become "cull." These are removed from the line as part of the grading/sizing process.

Table 8: Onions Process 3 – Transformation Events

Attribute Name	Value/Content		
	TRANSFORMATION EVENT 1	TRANSFORMATION EVENT 2	TRANSFORMATION EVENT 3
Critical Tracking Event ID	EX009	EX010	EX010
Critical Tracking Event Type	Transform-Input	Transform-Output	Transform-Output
Event Owner (GLN)	1234560000005	1234560000005	1234560000005
Date/Time (yyyymmddhhmmss)	20150402:07:00:00	20150402:07:00:00	20150402:07:00:00
Event Location (GLN)	1234560001019	1234560001019	1234560001019
Trading Partner (GLN)	1234560002016	1234560002016	1234560002016
Item (GTIN)	Graded & Sized Onions	Cull Onions	Finished Goods Onions
Lot/Batch Number or Serial Number	20150401F10150	20150401F10140	20150401F10145
Quantity	25	15	15
Unit of Measure	Bins	Bags	Bags
Activity ID	WO135	WO135	WO135
Activity Type	Work Order	Work Order	Work Order

Figure 4: Onions Process 4



Bags/Bins/Cartons/RPCs of onions (finished goods) are shipped to Retail. Retail receives bags/bins/cartons/RPCs of onions. Bags or loose onions are sold to consumers at grocery retail or are included in a menu item. Cull onions are shipped to facilities for feed. Feed Facility receives cull onions. Cull onions are consumed as animal feed or disposed.

Table 9: Onions Process 4 – Depletion Events

Attribute Name	Value/Content
	DEPLETION EVENT 1
Critical Tracking Event ID	EX011
Critical Tracking Event Type	Deplete - Dispose
Event Owner (GLN)	1234560000005
Date/Time (yyyymmddhhmmss)	20150403:16:00:00
Event Location (GLN)	1234560001019
Trading Partner (GLN)	1234560002016
Item (GTIN)	Graded & Sized Onions
Lot/Batch Number or Serial Number	20150401F10140
Quantity	5
Unit of Measure	Bins
Activity ID	WO135
Activity Type	Work Order

Format of Data

The recommended format for all of the master data (in addition to transactional data) is based on the Global Data Synchronization Network (GDSN) and/or the Electronic Product Code Information Service (EPCIS) standard. While the storing and sharing of data can be accomplished via many different tools and methods, the format of the data needs to be standardized and consistent across the supply chain to support efficient trace-back processes.

* Code Lists are provided in Appendix 5.

Trace-Back at Retail Stores

It is important for retailers to provide a link between the product identification number of the selling unit and the case GTIN to support precise trace-back and recalls.

Appendix 1 – Cross-Referenced Terms/Definitions

Listed below are terms used by the produce industry and their cross-references with the GS1 Glossary of Terms:

Sector Term	GS1 Glossary Term	Definition
	Batch/Lot Number	The batch or lot number associates an item with information the manufacturer considers relevant for traceability of the trade item. The data may refer to the trade item itself or to items contained in it.
	Bill of Lading Number (BOL)	The actual number assigned to a Shipment Identification Number [AI (402)] under which the goods are shipped. It is used only for truckload and Less-Than-Truckload shipments. It may be matched to a 214 Transportation Carrier Shipment Status transaction set to enable the scheduling of receiving functions by the retailer. It also may be used for carrier claims.
Critical Tracking Event (CTE)		Any occurrence involving an item within the supply chain at a specific location and time that is associated with collection and storage of data useful for associating an item or related items to the specific occurrence at a later time and is determined to be necessary for identifying the actual path of an item through the supply chain.
Depletion		A Critical Tracking Event that involves the transfer of custody of a product to the final point in the supply chain. [This could be the sale of an item at retail, the consumption of an item for a finished plate in food service, the move of samples to the final party, or the donation of goods.]
Disposal		A Critical Tracking Event to denote the destruction of an item and removal from the supply chain in a manner making it unfit for consumption.
	Global Location Number (GLN)	The globally unique GS1 System identification number for legal entities, functional entities, and physical locations. The Global Location Number is 13 digits, which comprise a GS1 Company Prefix, Location Reference, and Check Digit. Supply side trading partner locations generally include corporate headquarters, regional offices, warehouses, plants, and distribution centers. Demand side trading partner locations generally include corporate headquarters, divisional offices, stores, and distribution centers.
	Global Trade Item Number (GTIN)	The globally unique GS1 System identification number for products and services. A Global Trade Item Number (GTIN) may be 8, 12, 13, or 14 digits in length. The GTIN-14 has been selected for use in the Produce Traceability Initiative (PTI).
	GS1	The not-for-profit, neutral organization dedicated to facilitating the adoption and implementation of global standards for the improvement of supply and demand chains. GS1, based in Brussels, Belgium, is comprised of global GS1 Member Organizations and manages the GS1 System and Global Standards Management Process.

Key Data Element (KDE)		The essential data values captured for a CTE to identify and maintain a chain of custody for an item as it is transformed through the supply chain.
Location		A place where a traceable item was, is, or could now be located [ISO/CD 22519]. A place of production, handling, storage and/or sale. (See also Premises)
Party		Business entity or specific shipping/receiving location at the discretion of the reporting business entity
Purchase Order Number		A reference number issued by the buyer to reference a transaction to purchase goods from a supplier.
Quantity		A precise number of articles, pieces or units. Used in conjunction with Unit of Measure.
Receiving		The act of accepting a shipment of a trading good from another trading partner.
Serial Number		A unique identifier used to identify an individual case of product.
Shipping		The act of releasing a shipment from one trade partner to go to another.
Trace-back		The act of monitoring the elements of CTEs to follow the chain of custody of a product from harvest to depletion.
	Trading Partner	A Party to transactions in the supply chain, such as a supplier (seller) or a customer (buyer).
Transformation		. The act or result of changing the item such as combining ingredients to make a finished product or repackaging a product such as producing a tray-packed product for consumer sale from cased ingredients. Transformation can be production, aggregation, grouping, splitting, mixing, packing and repacking traceable items.
Unit of Measure		The unit of measure relating to a specific quantity.

Appendix 2: Basic PTI Sample Master Data Set showing PTI csv File information (GTIN)

Basic PTI Sample Master Data Set showing PTI csv File information (GTIN)							
CSV Column Number	**PTI CSV Required Column Header or Field Name**	**GDSN Attribute Name**	**Data Type**	**Produce Industry Definition** *(from Implementation Guide for Fresh Produce Data Standards and Synchronization)*	**CSV - Produce Industry Definition Use**		**PTI CSV Example product: Case of Iceberg lettuce cello wrap 24 count**
1	GTIN	GTIN	Numeric (14 digits)	This is the 14-digit GTIN assigned by the Brand Owner, not necessarily the manufacturer, to the product level being described with the attributes (i.e. case, pack). GTINs may be assigned at all packaging levels where applicable. For example, a distributor or operator may assign the GTINs for their private label products.	Global Trade Identification Number. The 14 digit number that uniquely identifies this item from a specific supplier. Contains the GS1 Vendor supplier number, vendor assigned item number, and calculated check digit.		20614141333336
2	Description	tradeItemUnitDescriptor	**Code List 1.** Allows for a language qualifier of 1 – 178 characters.	Describes the hierarchical level of the trade item. If have more than one level of packaging hierarchy, would have a separate entry/record for each level of packaging hierarchy. The hierarchical level can be a bin, a case or a consumer unit etc.	General item description. Should Identify commodity and or variety of product. Can include count, size or weight, and packaging of consumer items contained in shipper.		LETTUCE ICEBERG 24 COUNT CELLO WRAP
	Description	tradeItemDescription	Free Text. Allows for a language qualifier of 1 - 178 characters.	A description of the product.			LETTUCE ICEBERG 24 COUNT CELLO WRAP
3	Commodity	functionalName	Allows for a language qualifier of 1 - 35 characters.	Describes use of the product or service by the consumer. Should help clarify the product classification associated with the GTIN. This should be the GPC Brick Description.	General produce category. Guidance is to provide GPC Brick Name (e.g. Grapefruits, Honeydew, Head/Iceberg Lettuce).		HEAD/ICEBERG LETTUCE
4	Variety	varietyType	Free Text. Allows for a language qualifier of 1 - 35 characters.	Field used to identify the variant of the product. Variants are the distinguishing characteristics that differentiate products with the same brand and size including such things as the particular flavor, fragrance, taste.	Variety of general produce category. Guidance is to provide the PLU Name (e.g. Grapefruit Pumelo Red, Melon Honeydew/White Honeydew, Lettuce Iceberg).		LETTUCE ICEBERG
5	Country of Origin	tradeItemCountryOfOrigin	**Code List 2.** (3 characters)	The Country of Origin is the list of all potential countries the item could be grown in. It is the actual Country of Origin for each transaction to be exchanged via transactional data. This entry should represent the actual country of origin where the item is grown. If a consumer unit contains a mix of produce from different countries, then all countries need to be listed.	The country code where produce was grown. Use ISO 3166 2 character codes.		USA

7	Case Type	packagingTypeCode	**Code List 3.**	Packstyle=CaseType Code identifying the type of package used as a container of the trade item. A further description of the trade item package. There is no hierarchy being built because it is a flat, one-line record headed by the case GTIN.	Ship case unit material (e.g.: Case, RPC, Crate, etc.).		CAS	
9	Quantity of items in Case (Pack Size)	Net Content	Positive Number	What is declared on the packaging (the number of units) Each GTIN will have a separate record, Pack Size=Quantity of items in case	The quantity of consumer items contained in this ship Case. (Will not always match Size Group, example: a half carton of size 88 navel oranges would have a pack size of 44).		24	
10	Pack Size UOM	netContentUoM	**Code List 4.** Numeric (2).	The total declared weight, volume or content on the package. This field can be repeated to accommodate several values as necessary. The net content is required when the GTIN is marked as being a consumer unit. It is the sellable unit to the consumer. This attribute may be required by some trading partners for their individual business practices.	Unit of Measure for the Pack Size. (e.g. Count, Size, Bunch, Pound).		COUNT	
11	Size Group	descriptiveSize	Free Text. Text (1 - 35 characters) **Code List 5 (suggested).**	An alphanumeric size factor the brand owner wishes to communicate to the consumer. For example: Jumbo, Medium, Size B, 88 count, etc.	Industry size identification for individual consumer items contained in this shipper. (e.g.: The terms Jumbo, Large, or Standard would be used when referring to Asparagus. The numbers 9, 12, and 14 would be used to identify cauliflower sizes.)		24	
12	Effective Date of Change	effectiveDate	Date (CCYY-MM-DDTHH:MM:SS)	This field is the date the data becomes effective.	Date this item is available for shipment.		20141107:00:00:00	
13	Height of Case	height & UoM	Numeric (round up to 3 decimals)	The measurement of the height of the trade item. The vertical dimension from the lowest extremity to the highest extremity, including packaging. At a pallet level the trade item height will include the height of the pallet itself. Measurements are relative to how the customer normally views the trade item. Needs to be associated with a valid UoM.	From the natural base of the Ship Case the vertical measurement from the bottom to the top.		15.25	
14	Height UOM	height & UoM	**Code List 6.** (2 characters)	**NOTE:** Height of Case and Height UOM are entered into one field in GDSN.	Unit of Measure for the Height (e.g. Inch, Millimeter, Foot).		IN	
15	Width of Case	width & UoM	Numeric (round up to 3 decimals)		From the natural base of the Ship Case - the horizontal measurement of the SHORTEST side.		23.25	
16	Width of Case UOM	width & UoM	**Code List 6.** (2 characters)	**NOTE:** Width of Case and Width UOM are entered into one field in GDSN.	Unit of Measure for the Width (e.g. Inch, Millimeter, Foot).		IN	
17	Length of Case	depth & UoM	Numeric (round up to 3 decimals)		From the natural base of the Ship Case - the horizontal measurement of the LONGEST side.		10.5	
18	Length of Case UOM	depth & UoM	**Code List 6.** (2 characters)	**NOTE:** Depth of Case and Depth UOM are entered into one field in GDSN.	Unit of Measure for the Length (e.g. Inch, Millimeter, Foot).		IN	

19	Gross Weight of Case	grossWeight & UoM	Numeric (round up to 3 decimals)		Gross Weight of the Case.		43	
20	Gross Weight of Case UOM	grossWeight & UoM	**Code List 7**. (2 characters)	**NOTE:** Gross Weight of Case and Gross Weight UOM are entered into one field in GDSN.	Unit of Measurement for Gross Weight (e.g. ounce, pound, liter, gram, kilo).		LB	
21	Net Weight of Case	netWeight & UoM	Numeric (round up to 3 decimals)		Net Weight of all consumer items contained in the case.		41	
22	Net Weight of Case UOM	netWeight & UoM	**Code List 7**. (2 characters)	**NOTE:** Net Weight of Case and Net Weight UOM are entered into one field in GDSN.	Unit of Measurement for Net Weight (e.g. ounce, pound, liter, gram, kilo).		LB	
23	Pallet Tie (# of cases per layer)	quantityOfTradeItemsPerPalletLayer	Integer	This is the number of shipping containers (highest level GTIN) per layer on the pallet. The produce industry predominately uses the GMA 48x40 pallet. The attribute would be the total number of products per layer of the pallet or the "TI". These are populated on the highest non-Pallet GTIN in the hierarchy.	Number of cases per layer on the pallet.		5	
24	Pallet High (# of layers per pallet)	quantityOfLayersPerPallet	Integer	The number of layers for a full pallet. For example: the produce industry predominately uses GMA 48x40 pallet for 1 product. The attribute would be the total number of layers for a pallet or the "HI". These are populated on the highest non-Pallet GTIN in the hierarchy.	Number of layers per pallet.		8	
25	Brand Name	brandName	Free Text. Text of 1 - 70 characters.	The recognizable name used by a brand owner to uniquely identify a line of trade item or services. This is recognizable by the consumer or by the trade (buyer). The Brand Name and the Brand Owner's Name can be different (e.g., Andy Boy and D'Arrigo Brothers of NY).	The most recognizable brand name on the packaging or labeling.		Farmer's Select	
26	Growing Method	growingMethodCode	**Code List 8.**	The process through which fresh produce is grown and cultivated.	A code value specifying how the item was grown.		CONVENTIONAL	
27	Grade	gradeCode	**Code List 9.**	A code indicating the degree of refinement, features and capabilities for a trade item. An accepted level or standard to determine the quality of fresh produce. Quality grades provide a common language among buyers and sellers, which in turn assures consistent quality for consumers.	While acceptable to populate for any produce item, if present on the packaging or labeling, this should be populated. It is recommended to use the codes as provided by PMA.		US No. 1	
28	Grade Code Agency	gradeCodeAgency	**Code List 10.**	An agency that manages a grade code list (e.g. USDA).	Refer to standard produce industry grade code agency values		USDA	

Appendix 3: Basic PTI Sample Master Data Set showing PTI csv File information (GLN)

Basic PTI Sample Master Data Set showing PTI csv File information (GLN)			
CSV Column Number	**PTI Master Data Common Name**	**Attribute Name**	**Data Type**
1	GLN	locationIdentification	Numeric (14 Digits)
2	GLN Extension	locationExtension	AlphaNumeric (1 to 20 Characters)
3	Description	locationDescription	Allows for a language qualifier (1 to 178 characters) Free Text
4	Address Line 1	addressLine1	(1 to 55 characters) Free Text
5	Address Line 2	addressLine2	(1 to 55 characters) Free Text
6	City	city	(1 to 30 characters) Free Text
7	Region	region	Free Text (2 characters)
8	Country	country	Code List (3 characters)
9	Latitude	latitude	Free Text (17 characters)
10	Longitude	longitude	Free Text (17 characters)
11	Contact Name	contactName	Free Text (1 to 60 characters)
12	Contact Email	contactEmail	Free Text (1 to 256 characters)
13	Contact Phone	contactPhone	Free Text (1 to 256 characters)
	Create Date	createDate	ISO standard (YYYYMMDD:HHSS) (13 characters)
	Inactivation Date	inactivationDate	ISO standard (YYYYMMDD:HHSS) (13 characters)
14	Parent GLN	parentLocation	Numeric (14 Digits)
	Industry Sector	industrySector	Free Text (1 to 256 characters)
	Role	role	Free Text (1 to 256 characters)
	Information Provider GLN	informationProviderGLN	Numeric (14 Digits)

Appendix 4: Basic PTI Sample Master Data Set showing PTI csv File information (Events)

Basic PTI Sample Master Data Set showing PTI csv File information (Events)								
CSV Column Number	**PTI CSV Required Column Header or Field Name**	**Data Type & Length**	**Harvest Produce is Packed in Shed**	**Produce is Shipped to Repacker**	**Repacker Receives Produce from Packer**	**Repacker Repacks Produce (input)**	**Repacker Repacks Produce (output)**	**Repacker Disposes of Waste from Repacking**
1	**Critical Tracking Event ID**	Alphanumeric (1-20)	101	102	103	104	104	105
2	**Critical Tracking Event**	Code List (1-35)	Transformation - Output	Shipping	Receiving	Transformation - Input	Transformation - Output	Disposal
3	**Event Owner (GLN)**	Numeric (13)				1234567890123	1234567890123	
	Event Owner (GLN Extension)	AlphaNumeric (1 to 20 Characters)						
4	**Date/Time**	Date (17) (YYYYMMDD: HH:MM:SS)				20141107:13:52:27	20141107:13:52:27	
5	**Event Location (GLN)**	Numeric (13)				1234567890456.BLDG01	1234567890456.BLDG01	
	Event Location (GLN Extension)	AlphaNumeric (1 to 20 Characters)						
6	**Trading Partner (GLN)**	Numeric (13)				1234567890789	1234567890789	
	Trading Partner (GLN Extension)	AlphaNumeric (1 to 20 Characters)						
7	**Item (GTIN)**	Numeric (14)				11234567890111	11234567890133	
8	**Lot/Batch/ Serial #**	Alphanumeric (20)				12122100CCF	1245903ADE	

9	**Quantity**	Positive Number				100	75	
10	**Unit of Measure**	Code List (3)				CA	CA	
11	**Pallet ID (SSCC) if available**	Numeric (18)				123456789012345678		
12	**Activity ID**	Alphanumeric (1-35)				1001	1001	
13	**Activity Type**	Code List (1-35)				Work Order	Work Order	

Appendix 5: Code Lists

1. tradeItemUnitDescriptor		
Code Value	**Value Name**	**Definition**
EA	BASE_UNIT_OR_EACH	The lowest level of the item hierarchy intended or labeled for individual retail sale.
PK	PACK_OR_INNER_PACK	A logistical unit between case and each. This may be a consumable innerpack (i.e. Carton of Cigarettes) or it may be simply a logistical pack (i.e. Dozens of toothbrushes).
CS	CASE	The standard shipping unit level.
PL	PALLET	A pallet is a flat transport structure designed to support a variety of goods in a stable fashion while being lifted by any mobile forklift or other jacking device.
TL	TRANSPORT_LOAD	A logistical unit which, when ordered, can provide a standard quantity of trade items from any other hierarchy level. This level can be used to define truckloads, shipping containers, rail cars, ships, and etc. This level can contain a single GTIN or multiple GTINs.

2. tradeItemCountryOfOrigin					
Numeric Code	Country name	Numeric Code	Country name	Numeric Code	Country name
004	Afghanistan	108	Burundi	234	Faroe Islands
248	Åland Islands	116	Cambodia	242	Fiji
008	Albania	120	Cameroon	246	Finland
012	Algeria	124	Canada	250	France
016	American Samoa	132	Cape Verde	254	French Guiana
020	Andorra	136	Cayman Islands	258	French Polynesia
024	Angola	140	Central African Republic	260	French Southern Territories
660	Anguilla	148	Chad	266	Gabon
010	Antarctica	152	Chile	270	Gambia
028	Antigua and Barbuda	156	China	268	Georgia
032	Argentina	162	Christmas Island	276	Germany
051	Armenia	166	Cocos (Keeling) Islands	288	Ghana
533	Aruba	170	Colombia	292	Gibraltar
036	Australia	174	Comoros	300	Greece
040	Austria	178	Congo	304	Greenland
031	Azerbaijan	180	Congo, the Democratic Republic of the	308	Grenada
044	Bahamas	184	Cook Islands	312	Guadeloupe
048	Bahrain	188	Costa Rica	316	Guam
050	Bangladesh	384	Côte d'Ivoire	320	Guatemala
052	Barbados	191	Croatia	831	Guernsey
112	Belarus	192	Cuba	324	Guinea
056	Belgium	531	Curaçao	624	Guinea-Bissau
084	Belize	196	Cyprus	328	Guyana
204	Benin	203	Czech Republic	332	Haiti
060	Bermuda	208	Denmark	334	Heard Island and McDonald Islands
064	Bhutan	262	Djibouti	336	Holy See (Vatican City State)
068	Bolivia, Plurinational State of	212	Dominica	340	Honduras
535	Bonaire, Sint Eustatius and Saba	214	Dominican Republic	344	Hong Kong
070	Bosnia and Herzegovina	218	Ecuador	348	Hungary
072	Botswana	818	Egypt	352	Iceland
074	Bouvet Island	222	El Salvador	356	India
076	Brazil	226	Equatorial Guinea	360	Indonesia
086	British Indian Ocean Territory	232	Eritrea	364	Iran, Islamic Republic of
096	Brunei Darussalam	233	Estonia	368	Iraq
100	Bulgaria	231	Ethiopia	372	Ireland
854	Burkina Faso	238	Falkland Islands (Malvinas)	833	Isle of Man

2. tradeItemCountryOfOrigin *(continued)*					
Numeric Code	**Country name**	**Numeric Code**	**Country name**	**Numeric Code**	**Country name**
376	Israel	583	Micronesia, Federated States of	638	Réunion
380	Italy	498	Moldova, Republic of	642	Romania
388	Jamaica	492	Monaco	643	Russian Federation
392	Japan	496	Mongolia	646	Rwanda
832	Jersey	499	Montenegro	652	Saint Barthélemy
400	Jordan	500	Montserrat	654	Saint Helena, Ascension and Tristan da Cunha
398	Kazakhstan	504	Morocco	659	Saint Kitts and Nevis
404	Kenya	508	Mozambique	662	Saint Lucia
296	Kiribati	104	Myanmar	663	Saint Martin (French part)
408	Korea, Democratic People's Republic of	516	Namibia	666	Saint Pierre and Miquelon
410	Korea, Republic of	520	Nauru	670	Saint Vincent and the Grenadines
414	Kuwait	524	Nepal	882	Samoa
417	Kyrgyzstan	528	Netherlands	674	San Marino
418	Lao People's Democratic Republic	540	New Caledonia	678	Sao Tome and Principe
428	Latvia	554	New Zealand	682	Saudi Arabia
422	Lebanon	558	Nicaragua	686	Senegal
426	Lesotho	562	Niger	688	Serbia
430	Liberia	566	Nigeria	690	Seychelles
434	Libya	570	Niue	694	Sierra Leone
438	Liechtenstein	574	Norfolk Island	702	Singapore
440	Lithuania	580	Northern Mariana Islands	534	Sint Maarten (Dutch part)
442	Luxembourg	578	Norway	703	Slovakia
446	Macao	512	Oman	705	Slovenia
807	Macedonia, the former Yugoslav Republic of	586	Pakistan	090	Solomon Islands
450	Madagascar	585	Palau	706	Somalia
454	Malawi	275	Palestinian Territory, Occupied	710	South Africa
458	Malaysia	591	Panama	239	South Georgia and the South Sandwich Islands
462	Maldives	598	Papua New Guinea	728	South Sudan
466	Mali	600	Paraguay	724	Spain
470	Malta	604	Peru	144	Sri Lanka
584	Marshall Islands	608	Philippines	729	Sudan
474	Martinique	612	Pitcairn	740	Suriname
478	Mauritania	616	Poland	744	Svalbard and Jan Mayen
480	Mauritius	620	Portugal	748	Swaziland
175	Mayotte	630	Puerto Rico	752	Sweden
484	Mexico	634	Qatar	756	Switzerland

2. tradeItemCountryOfOrigin *(continued)*					
Numeric Code	**Country name**	**Numeric Code**	**Country name**	**Numeric Code**	**Country name**
760	Syrian Arab Republic	792	Turkey	860	Uzbekistan
158	Taiwan, Province of China	795	Turkmenistan	548	Vanuatu
762	Tajikistan	796	Turks and Caicos Islands	862	Venezuela, Bolivarian Republic of
834	Tanzania, United Republic of	798	Tuvalu	704	Viet Nam
764	Thailand	800	Uganda	092	Virgin Islands, British
626	Timor-Leste	804	Ukraine	850	Virgin Islands, U.S.
768	Togo	784	United Arab Emirates	876	Wallis and Futuna
772	Tokelau	826	United Kingdom	732	Western Sahara
776	Tonga	840	United States	887	Yemen
780	Trinidad and Tobago	581	United States Minor Outlying Islands	894	Zambia
788	Tunisia	858	Uruguay	716	Zimbabwe

3. packagingTypeCode			
Value	**Definition**	**Value**	**Definition**
AAA	Pallet: Returnable	CNT	Container
BAG	Bag: A preformed, flexible container, generally enclosed on all but one side, which forms an opening that may or may not be sealed after filling.	CRF	Corner Reinforcement: Usually in boxes or crates, additional material or components attached to adjacent panels to add support or prevent crushing or separation
BAL	Bale	CRT	Crate: A non-specific term usually referring to a rigid three-dimensional container with semi-closed faces that enclose its contents for shipment or storage. Crates could have an open or closed top and may have internal divers. Even though some crates might be reused or become resealed they could also be disposable depending on the product hierarchy.
BIN	Bin	CTN	Carton: A non-specific term for a re-closable container used mostly for perishable foods (e.g. eggs, fruit).
BLK	Bulk	CU	Cup: Small bowl shaped container for beverages, often with handle.
BOX	Box: A non-specific term used to refer to a rigid, three-dimensional container with closed faces that completely enclose its contents and may be made out of any material. Even though some boxes might be reused or become resealed they could also be disposable depending on the product hierarchy.	GNT	Net: A container of meshwork material made from threads or strips twisted or woven to form a regular pattern with spaces between the threads that is used for holding, carrying, trapping, or confining something.
BSK	Basket or hamper: A semi rigid container usually open at the top traditionally used for gathering, shipping and marketing agricultural products.	GPB	Pallet Box: A three-dimensional container which has a pallet platform permanently attached at its base or requires a platform for its handling and storage as due to its constitution it cannot be handled without it. The characteristics of the platform should be specified using the pallet type code list.
BXI	Box, with inner container (e.g. tri-wall)	GPU	Packed, Unspecified: Packaging of the product (or products) is currently not on the list. Use this code when no suitable options are available and only while a Change Request is approved for the proper packaging type.
CAS	Case: A non-specific term for a container designed to hold, house, and sheath or encase its content while protecting it during distribution, storage and/or exhibition. Cases are mostly intended to store and preserve its contents during the product's entire lifetime.	JAR	Jar: A rigid container made of glass, stone, earthenware, plastic or other appropriate material with a large opening, which is used to store products, (e.g., jams, cosmetics).
CMS	Clamshell	KTB	Knockdown Tote Bin (RPC)
CNF	Container, Multi-walled, Secured to Warehouse Pallet; e.g. watermelon bin	LSE	Loose

3. packagingTypeCode			
Value	**Definition**	**Value**	**Definition**
LUG	Lug	SRW	Shrink Wrap: In packaging, a plastic film around an item or group of items which is heated causing the film to shrink, securing the unit integrity. The use of shrunken film to tightly wrap a package or a unit load in order to bind, protect and immobilize it for further handling or shipping.
MPE	Multipack	TBN	Tote Bin
PCS	Pieces	TRY	Tray: A shallow container, which may or may not have a cover, used for displaying or carrying items; e.g. flat.
PWT	Plastic-Wrapped Tray	TUB	Tub: Generally, a round flat-bottomed container closed with a large lid, typically used to contain ice cream, margarine, sour cream, confections, and other products.
SAK	Sack	UNP	Unpacked: The item is provided without packaging.
SCS	Suitcase	UVQ	Wrapped in Plastic
SLV	Sleeve: A non-rigid container usually made of paper, cardboard or plastic, that is open-ended and is slid over the contents for protection or presentation.	WRP	Wrapped: The process of enclosing all or part of an item with layers of flexible wrapping material (e.g., for an individually packed ice cream). Does not include items which are shrink-wrapped or vacuum-packed.

4. netContent & UoM			
Value	**Definition**	**Value**	**Definition**
26	Actual Ton	LT	Litre
AS	Assortment	ML	Millilitre
BG	Bag	MM	Millimetre
BA	Bale	58	Net Kilograms
BX	Box	OZ	Ounces
BN	Bulk	PH	Pack
BU	Bushel	PK	Package
CT	Carton	PL	Pallet
CA	Case	PC	Piece
CM	Centimetre	PT	Pint
1N	Count	PG	Pound Gross
DZ	Dozen	LB	Pounds
EA	Each	PE	Pounds Equivalent
GR	Gram	PN	Pounds Net
GT	Gross Kilogram	QT	Quart
HD	Half Dozen	TE	Tote
IN	Inches	NT	Trailer
KG	Kilogram	TY	Tray
LR	Layer(s)	UN	Unit

5. descriptiveSize (suggested)					
Size Group	Size UOM		Size Group	Size UOM	
	Value	Definition		Value	Definition
A			Mini		
AA	IN	Inches	Minimum		
AAA	CM	Centimetre	Mix		
And larger	1N	Count	Non A		
And smaller	DZ	Dozen	Other		
And up	GR	Gram	Peel		
B	KG	Kilogram	Regular		
Baby	LT	Litre	Round		
C	ML	Millilitre	Row		
Choice	OZ	Ounces	Select		
Chop	PT	Pint	Senior		
Cin & Core	LB	Pounds	Shred		
Cin & Trim	QT	Quart	Shuck		
Colossal	UN	Unit	Size B		
Diameter			Size C		
Dice			Slice		
Extra			Slice Dice Shred Stick		
Extra Fancy			Slice Dice Skin Shred		
Extra Jumbo			Slice Dice Sliver		
Extra Large			Slice Dice Wholepeel		
Fancy			Small		
Giant			Small Fancy		
Head			Standard		
Jumbo			Stick		
Junior			Super		
Large			Super Colassal		
Long			Super Jumbo		
Loose			Undersize		
Mammoth			Various		
Medium			Whole		

6. height/width/depth UoM	
Code Value	Code Name
CM	Centimetre
IN	Inches
MM	Millimetre
FT	Feet
DK	Kilometre
LF	Linear Foot
LM	Linear Meter
YD	Yard

7. grossWeight/netWeight UoM	
Code Value	**Code Name**
26	Actual Ton
BU	Bushel
GR	Gram
GT	Gross Kilogram
KG	Kilogram
LT	Litre
58	Net Kilograms
OZ	Ounces
PT	Pint
PG	Pound Gross
LB	Pounds
PE	Pounds Equivalent
PN	Pounds Net
QT	Quart

8. growingMethodCode	
Code Value	**Definition**
CONVENTIONAL	Foods grown non-organically, either indoors or outdoors without any special processes.
FIELD_GROWN	Plants Grown Outdoors
FLY_FREE	Citrus Grown in an area certified to be free of all Caribbean Fruit Flies based on trappings
GREENHOUSE	Plants that are grown and cultivated in an indoor covered place.
HYDROPONIC	Plants grown using mineral nutrient solutions instead of soil.
INTEGRATED_PEST_MANAGEMENT	(IPM) Plants grown using a pest control strategy that uses an array of complimentary methods: mechanical devices, physical devices, genetic, biological, legal, cultural management and chemical management. These methods are done in three stages: prevention
CLONED_FOODS	The product was created through the process of making a genetically identical copy of another instance of this product. To clone an organism, a DNA sequence, such as a gene, is transferred from one organism to another thereby the offspring is an identical copy of the original.
SUSTAINABLE	A method of growing a food using processes that are non-polluting and conserve energy and natural resources. This claim should be used in accordance with any regulation of the target market.
SHADE_GROWN	Produce which has been grown under shade or grown under cloth.
ORGANIC	ORGANIC Produce which has been grown organically.

10. gradeCode	
Code Value	**Code Value**
California Extra Fancy	US Fancy Table
California Fancy	US Good Delivery Standards
Canada Commercial	US Jumbo Hand Picked
Canada Domestic	US Medium Virginia
Canada Hailed	US No Grade Contract
Canada No. 1	US No. 1
Canada No. 1 Chef	US No. 1 Golden
Canada No. 1 Extra Large	US No. 1 Husked
Canada No. 1 Heart	US No. 1 Institutional
Canada No. 1 Large	US No. 1 Large
Canada No. 1 Picklers	US No. 1 Mixed
Canada No. 1 Pickling	US No. 1 Pieces
Canada No. 1 Slender	US No. 1 Runner
Canada No. 2	US No. 1 Small
Canada No. 2 Picklers	US No. 1 Spanish
Canada Orchard Run	US No. 1 Table
Choice	US No. 1 Virginia
Class 1	US No. 1 Whole and Broken
Combination	US No. 2
Extra Fancy	US No. 2 Mixed
Fancy	US No. 2 Runner
Premium	US No. 2 Spanish
Standard	US No. 2 Virginia
Unclassified	US No. 3
US Combination	US Runner Splits
US Commercial	US Select
US Export No. 1	US Select Sheller Run
US Extra Fancy	US Spanish Splits
US Extra Fancy Table	US Standard Sheller Run
US Extra Large Virginia	US Super Fancy
US Extra No. 1	US Virginia Splits
US Extra No. 1 Jumbo	Utility
US Fancy	Washington Extra Fancy
US Fancy Hand Picked	Washington Extra Fancy Premium
US Fancy Husked	Washington Fancy

10. gradeCodeAgency	
Code Value	**Definition**
USDA	US Department of Agriculture
CFIA	Canadian Food Inspection Agency
Codex	Codex Alimentarius Commission