GDSN 3.X Trade Item Implementation Guide
Appendix 4: Fruit & Vegetables

A4. Fruit & Vegetables

A4.1. General Guidance

Companies whose item master lists or databases (commonly referred to in the industry as an "item master") use "free form" product descriptions are encouraged to replace those descriptions with standardized product descriptions based on established produce attribute definitions. This will make it easier to maintain an item master list.

There are hundreds of attributes defined by GS1 today. In the guide we have outlined attributes specific for the Fruit & Vegetables sector for GS1 members. This guide is designed to provide guidance for implementing New Item Listing of your product(s) and exchanging Master Data Attributes between trading partners.

The content of this guideline is fully aligned with the document published by GS1: "Fruit & Vegetables Master Data Attribute Implementation Guide". The content of this document has been expanded to better support the deployment of GDSN in the Fruit & Vegetables sector.

A4.2. Purpose and Scope

The purpose of the Fruit & Vegetables implementation guidance is to provide best practice guidelines for industry-wide adoption for New Item Listing and update of existing assortment.

This guide provides support to companies seeking to electronically exchange fruit & vegetable product information in accordance with GS1 Standards. The guidance applies to the full range of fruit & vegetable trade items. The guide outlines which attributes should be used for fruit & vegetable items and recommends best practices for the use of these standards to exchange static fruit & vegetable data between suppliers and retailers. Today, different platforms as well as different means to item identification exist when it comes to data sharing. The use of GS1 Standards, specifically for Identification, Master Data Alignment, Traceability, Track and Trace, Barcode labels and EDI transactions, provides a common platform to help supply chain partners share and understand the same information about products and locations.

Attributes are used as a means to describing specific information about an item when transacting business. They reflect a certain characteristic about the item such as identifiers, weights, dimensions, and manufacturer or supplier information.

The guide outlines Industry Core Specific, Industry Commodity Required and Target Market attributes to be used by the Fresh Fruit & Vegetables industry. This guide is platform neutral and can be used with or without third party service providers. Adoption of the guidance offered in this document is voluntary and will be determined by the trading partner relationship.

The data model proposed is independent of any means used to exchange this information, the usage of the GDSN Network to exchange this data brings additional benefits to the industry. The guideline also provides the link between the data attribute and how to use it in the GDSN Network.

✅ **Note:** The trading of fruits & vegetables is subject to regulation in some target markets. Examples in this guideline are intended to communicate best practices for the exchange of master product data and may not include other information required by local regulation or by trading partners.

A4.3. Master Data Attributes & Definitions

Master Data Attributes – The base for long term success in your business

Using the Global Trade Item Number (GTIN) is the key to a successful business. As a supplier of fruits and vegetables you need the GTIN to uniquely identify your product. The GTIN is the key to modern electronic business processes. Single components of the GS1 System fit to each other as tools in a tool box. They can be variously combined. Producers and suppliers are able to optimize their business processes step-by-step using this GS1 tool box.

The GTIN is linked to Attributes which provide specific details of the product. Synchronising complete and accurate data attributes at the beginning of the New Item Listing process will save time and money in the long run. From there, everything else falls into place such as transmitting orders, despatch advices/ASNs (Advance Shipping Notice) and electronic invoices. Mistakes can be avoided and communication to customers accelerated. All partners in the supply chain gain benefits.

There are hundreds of attributes to describe a product but this guide points out attributes necessary for identifying fruit & vegetable products. We have broken these attributes into 3 sections:

- **Industry Core Attributes** – these attributes apply to all Fruit & Vegetable commodities

- **Industry Commodity Required Attributes –** attributes specific to a certain products

- **Attributes not used in all Markets** – attributes which apply to certain local / regional requirement or regulations only (e.g. Target Market attributes)

Note: As a guide when filling out a New Item Listing form or updating existing assortment, fill in the Industry Core Specific attributes first. Second, fill in the Industry Commodity Required attributes and third the Target Market attributes.

The list of attributes and definitions in the following tables are taken from the GS1 Global Data Dictionary, with some additional guidance provided for implementation, the Business Message Standard and the class in the data model where the item is defined.

A4.3.1. Industry Core Attributes

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
M	M	Global Trade Item Number	globalTradeItemNumber TradeItemDocument TradeItemIdentification	A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (trade item or service) upon which there is a need to retrieve pre-defined information and that may be planned, priced, ordered, delivered and or invoiced at any point in any supply chain. GTIN is one of the keys of the GS1 System	Refer to Fresh Foods GTIN Allocation Rules

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation Notes
M	M	Brand Name	brandName TradeItemDocument TradeItemDescriptionInformation	The recognisable name used by a brand owner to uniquely identify a line of trade item or services. This is recognizable by the consumer.	Different Brand Name implies a different GTIN. We may have the need to manage different languages (Russian, Greek, …) for the brand, in addition to the brandName, the attribute to use will be: languageSpecificBrandName If there is no brand, then detail "UNBRANDED" as brandName
O	D	Produce Variety Type	produceVarietyType AttributeValuePairExtension produceVarietyType	Specifies the variety of produce, this may be a patent or trademark name of produce used as a specification or an alias for the botanical name. This name is usually recognizable by the end consumer for example: Golden Delicious for that variety of apples, Elsanta for strawberries, Pink Lady for Cripp's Pink apples, Dazzling Gold for Uta pears ('Madame Verte' x 'Bosc's Flaschenbirne') Various cultivars with different melons for example	It depends on the product. The main source of data will be the UN/ECE Standards: http://www.unece.org/trade/agr/standard/fresh/ffv-standardse.html In EU, the main source of data will be the UN/ECE Standards In North America, using the PLU name is an acceptable practice (i.e., commodity name, variety name and size). This field will have more than one value; e.g. Apple Red Delicious 2 ½ (with spaces in between the names, no commas). The current listing of PLU Codes can be found at http://www.plucodes.com.
O	N	Growing Method Code	growingMethodCode Food&BeverageExtension FoodAndBeverageIngredient	The process through which fresh produce is grown and cultivated.	The use of Growing Method Code in the F&B extension implies the mandatory use of the ingredientSequence attribute. The GPC also supports this attribute, so it will used to exchange this attribute We have to solve this question to keep Europe and US in sync.

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation Notes
O	M	Trade Item Country Of Origin	tradeItemCountryOfOrigin TradeItemDocument TradeItemPartnerNeutralInformation	The country code (codes) in which the goods have been produced or manufactured, according to criteria established for the purposes of application of the value may or may not be presented on the trade item label.	Mandatory for EU Regulations. ISO Code to be used. EU is allowed. 2 Additional codes are needed: - Non-EU - EU and non-EU (mixed packages) The GPC will be used to provide this information as well. For target market, the Country of Origin for EU is one country and in North America may be one or multiple countries. 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. Where countries have governing regulations compliance to regulations is mandatory. Example: For EU Regulations ISO Code is used for a country origin and additional codes identify countries as EU and non-EU
M	M	Functional Name	functionalName TradeItemDocument TradeItemDescriptionInformation	Describes use of the product or service by the consumer. Should help clarify the product classification associated with the GTIN.	
O	M	Packaging Type Code	packagingTypeCode packagingTypeDescription TradeItemDocument PackagingType	Identifying the type of package used as a container of the trade item.	The description of the packaging type (packagingTypeDescription) is optional and to be provided as accurate as possible by the supplier. For an example, see section A4.8

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
O	O	Quantity Of Next Lower Level Trade Item	quantityOfNextLowerLevelTradeItem TradeItemDocument ChildTradeItem	The number of one child trade item contained by the parent trade item. The number of next lower level trade item that this trade item contains. This applies to a specific child GTIN and denotes how many of that child there are	Mandatory when describing the hierarchy of the product and the contained GTIN
O	M	Net Content & UoM (Unit of Measure)	netContent TradeItemDocument TradeItemMeasurements	The amount of the trade item contained by a package, usually as claimed on the label.	It can be pieces, weight… 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.
M	M	Height & UoM	Height TradeItemDocument TradeItemMeasurements	This is the height of both the unit load (content) and the platform upon which the goods are carried, if there is one. Height is the vertical dimension from the lowest extremity to the highest extremity. For the measurement please refer to the GDSN Package Measurement Rules	UN/ECE says that depending on the project, we have sizes, others do not. For some products we have sizes and for the others we have size codes provided by UN/ECE (size range) For all the consumer units unpacked and identified by a GTIN, the dimensions of the consumer unit are not relevant, since this information is defined by the calibre. The value of the calibre is transmitted in the field descriptive size. Since this data is mandatory in GDSN, a default value of 1 mm can be used as dummy data for this parameter. 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.

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation Notes
M	M	Width & UoM	Width TradeItemDocument TradeItemMeasurements	The measurement of the extent of something from side to side. Width is the measurement from left to right. For the measurement please refer to the GDSN Package Measurement Rules	For all the consumer units unpacked and identified by a GTIN, the dimensions of the consumer unit are not relevant, since this information is defined by the calibre. The value of the calibre is transmitted in the field descriptive size. Since this data is mandatory in GDSN, a default value of 1 mm can be used as dummy data for this parameter. The measurement from left to right of the trade item. Measurements are relative to how the customer normally views the trade item. Needs to be associated with a valid UoM.
M	M	Depth & UoM	Depth TradeItemDocument TradeItemMeasurements	The measurement from front to back of the trade item. Measurements are relative to how the customer normally views the trade item. Needs to be associated with a valid UoM. For the measurement please refer to the GDSN Package Measurement Rules	For all the consumer units unpacked and identified by a GTIN, the dimensions of the consumer unit are not relevant, since this information is defined by the calibre. The value of the calibre is transmitted in the field descriptive size. Since this data is mandatory in GDSN, a default value of 1 mm can be used as dummy data for this parameter.
O	O	Gross Weight & UoM	grossWeight TradeItemDocument TradeItemMeasurements	The weight of both the unit load (content) and the plat-form upon which the goods are carried, if there is one.	This would be the sum of the net weight of the product plus the tare weight of the packaging. Refer to the examples under the PMA Value List column for gross weight.
O	M	Trade Item Description	tradeItemDescription TradeItemDocument TradeItemDescriptionInformation	An understandable and useable description of a trade item using brand and other descriptors.	
M	M	Trade Item Unit Descriptor	tradeItemUnitDescriptor TradeItemDocument TradeItem	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.	Code list with the following available values: BASE_UNIT_OR_EACH CASE DISPLAY_SHIPPER MIXED_MODULE MULTIPACK PACK_OR_INNER_PACK PALLET

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M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
O	O	Net Weight & UoM	netWeight TradeItemDocument TradeItemMeasurements	Used to identify the net weight of the trade item. Net weight applies to all levels but consumer unit level. Net Weight excludes all packaging material, including the packaging material of all lower-level GTINs.	Does not include tare weight. In the case of a variable weight product, this would be the average weight. It is recommended that this be populated at all levels of the published hierarchy.
O	O	Quantity Of Layers Per Pallet	quantityOfLayersPerPallet TradeItemDocument TradeItemHierarchy	This would be the number of layers for a full pallet; for example the produce industry predominately uses the GMA 48x40 pallet for one 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.	Also refer to the Section 5, Populating TI/HI
O	O	Quantity Of Trade Items Per Pallet Layer	quantityOfTradeItemsPerPalletLayer TradeItemDocument TradeItemHierarchy	The number of trade items contained on a single layer of a pallet. Only used if the pallet has no GTIN. It indicates the number of trade items placed on a pallet layer according to supplier or retailer preferences.	Also refer to the Section 5, Populating TI/HI
M	M	Effective Date	effectiveDate TradeItemDocument TradeItemDateInformation	This field is the date the data becomes effective.	
O	M	Brand Owner (GLN)	brandOwner TradeItemDocument BrandOwnerOfTradeItem	Unique location number (Global Location Number or GLN) identifying the brand owner. May or may not be the same entity as the information provider.	Brand owner is the party responsible for assigning the GTIN.[1] Even if the item is unbranded, the party responsible for assigning the GTIN must be detailed.

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[1] Refer to GTIN Allocation rules

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
O	M	Name Of Brand Owner	nameOfBrandOwner BrandOwnerOfTradeItem	Name of the party who owns the brand of the trade item. This is the name of the company that owns the brand. For example, D'Arrigo Bros. owns Andy Boy brand so the value entered for Brand Owner is D'Arrigo Bros. where Andy Boy is the Brand name	
M	M	Information Provider Of Trade Item (GLN)	informationProviderOfTradeItem(GLN) TradeItemDocument InformationProvider	The GLN and additional identification(s) that identify the party providing the information about the trade item. This GLN may not be the same as the brand owner, specifically in the case of private label brands. It is the GLN for the provider of the product information which may or may not be the GTIN owner.	Party responsible that the data provided is correct. It will normally be the trader.
M	M	Name Of Information provider	nameOfInformationprovider TradeItemDocument InformationProvider	Name of the party who owns the data. Name of the information provider on the trade item.	
O	N	Name of Manufacturer	nameOfManufacturer TradeItemDocument ManufacturerOfTradeItem	Descriptive name of the manufacturer of the trade item. This is the name(s) of the company which is responsible for the manufacturing process. This field can be repeated as necessary in conjunction with the Manufacturer GLN.	
O	N	Manufacturer of Trade Item (GLN)	ManufacturerOfTradeItem (GLN) TradeItemDocument ManufacturerOfTradeItem	The identification of the manufacturer of the trade item. Unique location number (Global Location Number or GLN) identifying the manufacturer.	

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
M	M	Is Trade Item An Orderable Unit	IsTradeItemAnOrderableUnit	An indicator identifying that the information provider considers this trade item to be at a hierarchy level where they will accept orders from customers. This may be different from what the information provider identifies as a despatch unit. This may be a relationship dependent based on channel of trade or other point to point agreement.	
			TradeItemDocument		
			TradeItemUnitIndicator		
M	M	Is Trade Item A Variable Unit	IsTradeItemAVariableUnit	Indicates that an article is not a fixed quantity, but that the quantity is variable. Can be weight, length, volume. Trade item is used or traded in continuous rather than discrete quantities.	
			TradeItemDocument		
			TradeItemUnitIndicator		
M	M	Is Trade Item A Base Unit	IsTradeItemABaseUnit	An indicator identifying the trade item as the base unit level of the trade item hierarchy. This is y/n (Boolean) where y indicates the trade item is a base unit.	
			TradeItemDocument		
			TradeItemUnitIndicator		
M	M	Is Trade Item A Consumer Unit	IsTradeItemAConsumerUnit	Identifies whether the current hierarchy level of a trade item is intended for ultimate consumption. For retail, this trade item will be scanned at point of sale. At retail, this data is commonly used to select which GTINs should be used for shelf planning and for front end POS databases. This indicator is populated when this GTIN level is marked so as to be processed across a point of sale system for sale to an end user.	
			TradeItemDocument		
			TradeItemUnitIndicator		
M	M	Is Trade Item A Despatch Unit	IsTradeItemADespatchUnit	An indicator identifying that the information provider considers the trade item as a despatch (shipping) unit.	
			TradeItemDocument		
			TradeItemUnitIndicator		

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
M	M	Is Trade Item An Invoice Unit	IsTradeItemAnInvoiceUnit TradeItemDocument TradeItemUnitIndicator	An indicator identifying that the information provider will include this trade item on their billing or invoice. This may be relationship dependent based on channel of trade or other point to point agreement.	
M	M	Is Packaging Marked Returnable	IsPackagingMarked Returnable TradeItemDocument PackagingMarking	Trade item has returnable packaging.	This refers to the packaging for this GTIN level, and not the product itself. This is the empty shipping container, primarily.
O	O	Is Non Sold Trade Item Returnable	IsNonSoldTradeItem Returnable TradeItemDocument TradeItemMarking	Indicates that the buyer can return the articles that are not sold. This is an indicator that any product which is not sold can be returned.	
O	O	Is Trade Item Marked As Recyclable	IsTradeItemMarkedAs Recyclable TradeItemDocument TradeItemMarking	Trade item has a recyclable indication marked on it. This may be a symbol from one of many regional agencies.	
O	O	Quantity Of Complete Layers Contained In Trade Item	quantityOfCompleteLayers ContainedInTradeItem TradeItemDocument TradeItemHierarchy	The number of layers of the base trade item found in a trade item. Does not apply to the base trade item unit.	Do not use this attribute unless you have assigned a GTIN to the pallet level of the hierarchy and the pallet is an orderable and invoice unit of measure. This is only populated on the Pallet GTIN. Also refer to the Section 5, Populating TI/HI

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation Notes
O	O	Quantity Of Trade Items Contained In A Complete Layer	quantityOfTradeItems ContainedInA CompleteLayer TradeItemDocument TradeItemHierarchy	The number of trade items contained in a complete layer of a higher packaging configuration. Used in hierarchical packaging structure of a trade item. Cannot be used for trade item base unit.	Do not use this attribute unless you have assigned a GTIN to the pallet level of the hierarchy and the pallet is an orderable and invoice unit of measure. This is only populated on the Pallet GTIN. Also refer to the Section 5, Populating TI/HI
O	O	Quantity Of Trade Items Per Pallet	quantityOfTradeItemsPerPallet TradeItemDocument TradeItemHierarchy	The number of trade items contained in a pallet. This is total number of units on a pallet (should be TI x HI)	Also refer to the Section 5, Populating TI/HI
M	M	Start Availability Date Time	startAvailabilityDateTime TradeItemDocument TradeItemDateInformation	The date from which the trade item becomes available from the manufacturer, including seasonal or temporary trade item and services. This is the date when orders can first be placed.	
M	M	Last Change Date Time	lastChangeDateTime TradeItemDocument TradeItemDateInformation	Indicates the point in time where the last modification on a Trade Item was made.	
O	O	Description Short	descriptionShort	A free form short length description of the trade item that can be used to identify the trade item at point of sale. The schema uses common library component as shown in the GDD Max Size field. For the business requirements for item, please use the specific definition of this data type and field.	

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation Notes
O	O	Additional Trade Item Description	additionalTradeItem Description TradeItemDocument TradeItemDescriptionInformation	Additional variants necessary to communicate to the industry to help define the product. Multiple variants can be established for each GTIN. This is a repeatable field, e.g., Style, Color, and Fragrance. The schema uses common library component as shown in the GDD (Global Data Dictionary) Max Size field. For the business requirements for item, please use the specific definition of this data type and field, 1-350.	
M	M	Classification Category Code	classificationCategoryCode eANUCCClassificationAttributeTypeCode eANUCCClassificationAttributeValueCode TradeItemDocument GDSNTradeItemClassificaton	The classification category associated with a specific condition.	This is the GPC Brick Code (classificationCategoryCode). It classifies the type of produce, the category of produce and the commodity itself. The Attributes of the Bricks(eANUCCClassificationAttributeTypeCode) and the Values for the attributes(eANUCCClassificationAttributeValueCode) of the bricks are mandatory.
O	D	Ingredient Sequence	IngredientSequence FoodAndBeverageExtension FoodAndBeverageIngredient	This is an Integer (1; 2; 3…) indicating the ingredient order by content percentage of the product. (major ingredient = 1; second ingredient = 2) etc.	For single fresh fruit & vegetable products, ingredients are not used. We could use it in variety packages to detail the ingredients of the package. If the "Ingredient Name" or "growingMethodCode" is detailed, then the "Ingredient Sequence" is mandatory.
O	O	Ingredient Name	IngredientName FoodAndBeverageExtension FoodAndBeverageIngredient	Text field indicating one ingredient or ingredient group (according to regulations of the target market). Ingredients include any additives (colorings; preservatives; e-numbers; etc.) that are encompassed.	If "Ingredient Name" is used then the "Ingredient sequence" is mandatory.

M/O GDSN	M/O GS1 in EU F&V	Industry Core Attribute	GDD Attribute Indication Class	GDD Definition	Implementation Notes
O	O	Ingredient Statement	IngredientStatement FoodAndBeverageExtension FoodAndBeverageIngredientInformation	Information on the constituent ingredient makeup of the product specified as one string. Can only occur one time per GTIN.	
O	D	Packaging Material Code	packagingMaterialCode TradeItemDocument PackagingMaterial	The code identifying the type of package used as a container of the trade item.	It is mandatory if the container is a returnable asset. See the code list on GDSN for " PackagingMaterialCodeList"
O	O	Display Type Code			Attribute not found in GDSN
O	D	Organic Claim Agency	organicClaimAgency TradeItemDocument OrganicTradeItemCharacteristics	A governing body that creates and maintains standards related to organic products.	It is mandatory for "ORGANIC" products. Recommended value: 6 - USDA - US Department of Agriculture Pending WR GSMP approval WR to include the "Authorised by European Union" EU 824/2007 will be submitted to GSMP.
O	D	Organic Trade Item Code	organicTradeItemCode TradeItemDocument OrganicTradeItemCharacteristics	Used to indicate the organic status of a trade item or of one or more of its components.	It is mandatory for "ORGANIC" products. Recommended values: 1 - Organic 5 - Not organic 6 - In conversion
O	M	Target Market Country Code	targetMarketCountryCode TradeItemDocument TargetMarketInformation	The name for the specific target market identified with the Target Market Country Code. The description will be generated from the ISO 3166-1 code list. The target market is at country level or higher geographical definition and is where a trade-item is intended to be sold.	ISO 3166-1 Code list.

A4.3.2. Industry Commodity Required Attributes

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	D	Descriptive Size	descriptiveSize TradeItemDocument TradeItemSizeDescription	An alphanumeric size factor the brand owner wishes to communicate to the consumer. Example - Jumbo, Capri, Full Length, Maxi For the business requirements for item, please use the specific definition of this data type and field, 1-35, as defined in the Trade Item BRD.	If sizing is described for this product in any regulation, then it is mandatory. Priority assignment: EU Regulation 531/2011 has regulations on sizing: 10 major products to have sizing on certain products: apples … For the other products, we use the Agricultural Quality Standards: UNECE/FFV or UNECE/DDP. Depending on the product, other standard may be applicable. For each commodity, there is a section "provisions for sizing" http://www.unece.org/trade/agr/standard/fresh/ffv-standardse.htm Apples: Size, or for fruit packed in rows and layers, number of units. (Size is determined either by the maximum diameter of the equatorial section or by weight.) Examples: 70-80mm, 100-120g Oranges: Size expressed as: — Minimum and maximum sizes (in mm) or — Size code(s) followed, optionally, by a minimum or maximum size or Count. Since ranges are used to define the size, it is recommended to use the "descriptiveSizeDimension"
O	O	Maturity at Time of Sale	MaturityatTimeofSale AttributeValuePairExtension maturityAtTimeOfSale	The method of maturity for the item at the time of its sale	Code list: JET_FRESH READY_TO_EAT TREE_OR_VINE_RIPE (we will need clear definitions) check what it means: PRE_CONDITIONED

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation notes
O	D	Grade Code	gradeCode / TradeItemDocument / TradeItemGradeInformation	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	It is mandatory when the regulation establishes it. We recommend using the UNECE to identify the grade/class code. The "grade" code is used in the American market by USDA, in the European regulation, UNECE and Codex Aliment Arius make reference to the "Class"
O	D	Grade Code Agency	gradeCodeAgency / TradeItemDocument / TradeItemGradeInformation	An agency that manages a grade code list for example ISO.	Code list to be used: USDA UNECE CODEX_ALIMENTARIUS EU
O	D	Colour	colorDescription / TradeItemDocument / TradeItemColorDescription	Information specifying a colour in text and / or coded format.	If colour is described for this product in any regulation, then it is mandatory. The colorCodeValue: The code list is available in the IFPS website: http://www.ifpsglobal.com/ProductIdentification/IFPSColorCodeLIst.aspx The ColorCodeListAgencyCodeList is value "11 – IFPS" The description of the codes will be provided in different languages depending on the target market.
O	N	Commercial Type	commercialType / TradeItemDescriptionInformation / variant	Free text 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. (from PMA Data Sync guide)	

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	O	Rank Below Species	Rank Below Species	"This can be the Sub-Species, Variety, Sub-Variety, Form, and/or Sub-Form of an organism. All are taxonomic rank below that of species. For the EU this is representative of the OECD Commercial Type. A Sub-Species is a taxonomic rank subordinate to species. A Variety will have an appearance distinct from other varieties, but will hybridize freely with other varieties of the same species (if brought into contact). Usually varieties will be geographically separate from each other. A Sub-Variety is a subordinate variety, or a division of a variety. A Form usually designates a group with a noticeable but minor deviation. For instance, white-flowered forms of species that usually have coloured flowers can be named a """f. alba""". • subspecies • varietas (variety) • subvarietas (subvariety) • forma (form) • cultivar • subforma (subforma) "	Example for melons: Ananas, Baskavas, Galia, Canari, Rochet …
			AttributeValuePairExtension		
			rankBelowSpecies		
O	D	Inner Flesh Colour Code	InnerFleshColourCode	The colour of the inner flesh usually edible part of a fruit or vegetable. Examples are pink or yellow grapefruit, orange or green for a melon. Add code values: PINK, YELLOW, GREEN, GREEN_WHITE, RED, WHITE, ORANGE, BROWN, BLACK, VIOLET, PURPLE and then use GPC colour code list to broaden colour Code	If colour is described for this product in any regulation, then it is mandatory. It is commodity dependent. Use the code from the code list managed by IFPS. http://www.ifpsglobal.com/ProductIdentification/IFPSColorCodeLIst.aspx
			AttributeValuePairExtension		
			innerFleshColourCode		

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	O	Post Harvest Treatment Chemical Code	PostHarvestTreatment ChemicalCode AttributeValuePairExtension postHarvestTreatmentChemicalCode	Specifies if the fruit or vegetable has been treated or not post harvesting with a chemical or wax.	It the item is treated, then it is mandatory to provide this information for certain commodities. Use the following code list: CHEMICALLY_TREATED_AFTER_HARVESTING - fruit or vegetable has been treated chemically after harvesting e.g., Treated with a Chemical Preservative NOT_TREATED_AFTER_HARVESTING - fruit or vegetable has been not been treated chemically or waxed after harvesting WAXED - fruit or vegetable has had a layer of wax applied after harvesting
O	O	Post Process Trade Item Treatment Physical Code	PostProcessTradeItem TreatmentPhysicalCode AttributeValuePairExtension postProcessTradeItem TreatmentPhysicalCode	Produce has gone some physical process whether altered or other physical processes after harvesting.	It the item has undergone a physical treatment, it is mandatory to provide this information for certain commodities. Use the following code list: WASHED - produced has been cleaned by washing TRIMMED - produced has been cut or removal of parts of item, CROWN_REMOVED - product has had the plant part of itself removed e.g. the top of a pineapple PACKED_IN_ICE - produce has been packed in ice SPLIT - Produce has been cut/split into sections STEM_REMOVED - Stem of produced has been removed e.g. cherry or Broccoli LEAFLESS - produce all leaves removed e.g. celery, radish

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	O	Cooking Type of Potatoes - (available in GPC only)		GPC definition: Indicates, with reference to the product branding, labelling or packaging, the descriptive term that is used by the manufacturer that specifies the cooking characteristics of potatoes. For culinary purposes, varieties are often described in terms of their waxiness	The attribute is mandatory when describing potatoes. The attribute is part of the GPC. The Brick for the potatoes is: 10006104 Attributes for the potato brick(10006104): ▪ Cooking Type Of Potatoes(20002849) ▪ Country/Zone of Origin(20000743) ▪ Growing Method(20002739) ▪ Type Of Potato(20002770)

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation notes
O	O	Produce Seed Presence Type Code	produceSeedPresenceTypeCode AttributeValuePairExtension produceSeedPresenceTypeCode	Specifies the amount of seeds for fresh fruits and vegetables e.g. for water melons, citrus fruits.	It is recommended for some commodities like: watermelon, clementine, grape… Code values: SEEDLESS – Definition: Item contains No mature Seeds or potentially a few errant seeds. The determination of this is made by the supplier and is subject to target market regulations or trade organization guidelines. UNIDENTIFIED – Definition: Quantity or presence of seeds not determined SEEDS – Item contains the normal amount of mature seeds which are typical for this trade item. The determination of this is made by the supplier and is subject to target market regulations or trade organization guidelines. ALMOST_SEEDLESS – Item contains significantly less than normal mature seeds for this particular variety. Some mature seeds will exist in trade item. The determination of this is made by the supplier and is subject to target market regulations or trade organization guidelines.
O	M	Genus	Genus AttributeValuePairExtension genus	A taxonomic category ranking below a family and above a species and generally consisting of a group of species exhibiting similar characteristics. In taxonomic nomenclature the genus name is used, either alone or followed by a Latin adjective or epithet, to form the name of a species.	

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	D	Species	Species	A fundamental category of taxonomic classification, ranking below a genus and consisting of related organisms capable of interbreeding. An organism belonging to such a category, represented in binomial nomenclature by an uncapitalized Latin adjective or noun following a capitalized genus name, as in Ananas comosus, the pineapple, and Equus caballus, the horse.	If the specie exists for a specific Genus, then the specie is mandatory.
			AttributeValuePairExtension		
			Species		
O	D	Trade Item Form Description	TradeItemFormDescription	The physical form or shape of the product. Defines the form the trade item takes and is distinct from the form of the packaging.	If the EU Standards mandate that this information is marked on the label, it is mandatory to exchange this data. Recommended values: OBLONG – a cylinder shape with rounded ends ELLIPSOID - rounded sides shape with more pointed ends ROUND – a completely circular shape with no flat sides or pointed ends RIBBED – Trade Item has ridges going from end to end ELONGATED – Trade Item is longer than normal similar type of product. SQUARE – shape with most sides being flat. Also referred to as blunt or block FLAT – closer to two sided Trade Item with flattened sides POINTED - long Trade Item that comes to a point at one end PEG_TOP – Shaped to be like a peg. Fat and wide at one end, short and coming to a smaller point on other end FLAT_ROUND – flat-like on two sides with rounded edges LONG – Trade Item is naturally and usually long IRREGULAR – bulk code to fill in shapes that are not a common type shape e.g. shallots can be round or elongated.
			TradeItemDocument		
			TradeItemDescriptionInformation		

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	O	Additional Trade Item Identification Type	AdditionalInformationproviderOfTradeItemIdentificationType TradeItemDocument TradeItemIdentification	Code used to identify additional information provider of trade item.	Code value for IPS PLU: PLU - A number used to indicate a price look up for an existing random weight item. This is only used for items that have been assigned an industry PLU or proprietary PLU and that are utilized through a weighing system through the scales at the back or the front registers.
O	O	Additional Trade Item Identification Value	AdditionalInformationproviderOfTradeItemIdentificationValue TradeItemDocument TradeItemIdentification	Code used to identify additional information provider of trade item.	Only IFPS PLU is recommended as additional identification.
O	N	Brand Owner Additional Identification Type	BrandOwnerAdditionalIdentificationType (Part of brandOwner) TradeItemDocument BrandOwnerOfTradeItem	Code used to identify additional brand owner identification value.	
O	N	Brand Owner Additional Identification Value	BrandOwnerAdditionalIdentificationValue TradeItemDocument BrandOwnerOfTradeItem	Number used to identify the brand owner when not using GLN. May or may not be the same entity as the information provider.	
O	N	Information Provider of Trade Item Additional Identification Type	InformationProviderOftradeItemAdditionalIdentificationType (Part of informationProviderOfTradeItem) TradeItemDocument InformationProviderOfTradeItem	Type of the identification system that is being used as an alternative to the Global Trade Item Number. This is the source of the additional item identification (SKU, Product ID, etc.)	

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute Indication Class	GDD Definition	Implementation notes
O	N	Information Provider of Trade Item Additional Identification Value	InformationProviderOftradeItemAdditionalIdentificationValue TradeItemDocument InformationProviderOfTradeItem	Alternative means to the Global Trade Item Number to identify a trade item. This field can be repeated as necessary in conjunction with the Additional Trade Item Identification Type.	
O	D	Returnable Package Deposit Code	returnablePackageDepositCode TradeItemDocument PackagingMaterial	In some markets the deposit information is specified by a GTIN giving the type of returnable package on which a deposit is charged. Each deposit code is associated with an amount specified elsewhere. The enumeration list is maintained externally.	It is mandatory if the item is delivered in a returnable package. GRAI[2] of the returnable item. (explain what the GRAI is)
O	O	Returnable Package Deposit Amount	returnablePackageDepositAmount TradeItemDocument PackagingMaterial	The monetary amount for the individual returnable package.	
O	O	Returnable Package Deposit Currency	returnablePackageDepositCurrency (Part of returnablePackageDepositAmount) TradeItemDocument PackagingMaterial	The monetary amount for the individual returnable package.	It is mandatory if the Returnable Package Amount is detailed.

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[2] For additional information on the GRAI, check the following link:
http://www.gs1.org/sites/default/files/docs/idkeys/GS1_GRAI_Executive_Summary.pdf

M/O GDSN	M/O F&V GS1 in Eu	Industry Commodity Required Attribute	GDD Attribute / Indication / Class	GDD Definition	Implementation notes
O	O	Trade Item Marketing Message	TradeItemMarketingMessage	Marketing message associated to the Trade item.	To detail premium attributes of the item. Examples: with leaves in citrus fruits, laid in layers in apples/mangos …
			TradeItemDocument		
			MarketingInformation		

A4.4. Global Product Classification

The GS1 Global Product Classification (GPC) is a system that gives both sides of trading partner relationship a common language for grouping products in the same way. It ensures that products are classified correctly and uniformly, everywhere in the world. The term "product" as used throughout this guide refers mainly to physical products; however GPC is expanding into services as well.

The business objectives of GPC are to:

■ Support buying programs by allowing buyers to pre-select groups of applicable products

■ Provide a common language for category management, thus speeding up reaction to consumer needs

■ Be a key enabler of the Global Data Synchronisation Network

■ To be a Pivotal classification system between the information exchange parties

The foundation of GPC is called a "Brick"; GPC bricks define categories of similar products. Using the GPC brick as part of GDSN ensures the correct recognition of the product category across the extended supply chain, from seller to buyer. Bricks can be further characterised by Brick Attributes.

Example (See Use Case #2):

Picture	Industry Attribute Name	Value
	globalTradeItemNumber	614141234561
	growingMethodCode	Conventional
	tradeItemCountryOfOrigin	ES
	functionalName	Watermelon
	gradeCode	II
	gradeCodeAgency	UNECE
	InnerFleshColourCode	Yellow

The equivalent in the GPC of the trade item is the following one:

Segment	Food/Beverage/Tobacco (50000000)			
Family	Vegetables (Non Leaf) - Unprepared/Unprocessed (Fresh) (50260000)			
Class	Cucurbits — Inedible Peel (50260900)			
Brick	Watermelons (10006037)			
Attributes and Values of the Attributes				
Colour of Flesh of Watermelon (20002802)	Country/Zone of Origin (20000743)	Growing Method (20002739)	Quality (UNECE Standard) (20002737)	
Yellow (30002652)	Spain (30006788)	Conventional (30014685)	Class II (30014609)	

The GPC Browser is available clicking here.

A4.5. How to Manage Organic Items

A4.6. Use Case Scenarios

Use Case examples below are meant to provide guidance when completing the attribute sheet. Not all attributes will need to be filled in for each trade item. Organisations need to determine which best fits their product(s).

✅ **Note:** Use Case #1 and Use Case #2, show all attributes. For these examples, only information pertaining to the product example has been filled in the rest are blank. In Use Case Example #3, 4, and 5, attributes that do not pertain to the product example were removed. For these examples, only attributes which are different from Use Case #1 and Use Case #2 are shown. Some of the attributes are in **Red** with a number next to it. This indicates further information pertaining to this attribute is below the chart.

✅ **Note:** The field length for UOM is a minimum of 1, maximum of 3. Currently, most values for UOM are a length of 2 (mm, cm, lb., etc.); however, the code value table "UN_Recommendation_20" has been modified to increase the value to a length of 3. As standards are updated with the newly revised table, the length of the UOM value will increase to 3. The update is scheduled for 2016.

A4.6.1. Use Case #1

Pre-packed Fixed Weight Consumer Trade Package with GTIN encoded in the bar code (EAN/UPC)

Industry Attribute Name	Example for Consumer Unit	Example for Case
globalTradeItemNumber	3535689284566	13535689284563
brandName	Tommy	Tommy
produceVarietyType	Campari	Campari
growingMethodCode	Conventional	Conventional
tradeItemCountryOfOrigin	Netherlands	Netherlands
functionalName	Tomatoes	Tomatoes
gradeCode	Extra	Extra
packagingTypeCode	Clam Shell	KTB (Knockdown Tote Bin/RPC)
quantityOfNextLowerLevelTradeItem	Consumer units are blank	10
netContent & UoM		5kilos
descriptiveSize	0	0
commercialType	Mini Roma	Mini Roma
height & UoM	5cm	400mm
width & UoM	6cm	300mm
depth & UoM	25cm	150mm
grossWeight & UoM		3.35kilos
Colour	Red	Red
InnerFleshColourCode		
PostHarvestTreatmentChemicalCode		
PostProcessTradeItemTreatmentPhysicalCode		
cookingType		
produceSeedPresencesTypeCode		
TradeItemMarketingMessage	Burgundy Type	Burgundy Type
Genus	Solanum	Solanum
Species	Lycopersicum	Lycopersicum
gradeCodeAgency	Check code list for UNECE or FAO or EU	Check code list for UNECE or FAO or EU
gradeCodeListIdentification		
tradeItemFormDescription	Round	Round

tradeItemDescription	Tommy Cherry Tomatoes on trusses 200gm in clam shell	Tommy Cherry Tomatoes on trusses 10 x 200gm in clam shell - EPS 156
tradeItemUnitDescriptor	Base Unit or Each	Case
netWeight & UoM	200gm	2 kilos
quantityOfLayerPerPallet		14
quantityOfTradeItemsPerPalletLayer		10
effectiveDate	2-Dec-12	2-Dec-12
additionalTradeItemIdentificationType		
additionalTradeItemIdentificationValue		
brandOwner (GLN)	3535689290000	3535689290000
AdditionalBrandOwnerIdentificationType		
AdditionalBrandOwnerIdentificationValue		
nameOfBrandOwner	National Fruit	National Fruit
informationProviderOfTradeItem (GLN)	3535689290000	3535689290000
AdditionalInformationproviderOfTradeItemIdentificationType		
AdditionalInformationproviderOfTradeItemIdentificationValue		
nameOfInformationprovider		
nameOfManufacturer	Gardener Tommy	Gardener Tommy
manufacturer(GLN)	3535689290000	3535689290000
IsTradeItemAnOrderableUnit	No	Yes
IsTradeItemAVariableUnit	No	No
IsTradeItemABaseUnit	Yes	No
IsTradeItemAConsumerUnit	Yes	No
IsTradeItemADispatchUnit	No	Yes
IsTradeItemAnInvoiceUnit	No	Yes
IsPackagingMarkedReturnable	No	Yes
IsNonSoldTradeItemReturnable	No	No
IsTradeItemMarkedAsRecyclable	Yes	Yes
quantityOfCompleteLayersContainedInTradeItem		
quantityOfTradeItemsContainedInAComplete Layer		
quantityOfTradeItemsPerPallet	1400	140
startAvailabilityDateTime	2-Dec-12	2-Dec-12
lastChangeDateTime	10-Oct-12	10-Oct-12
descriptionShort	Tommy Roma 200gm	Tommy Roma 10 x 200gm
additionalTradeItemDescription		
classificationCategoryCode	Cherry Tomato 10006162	Cherry Tomato 10006162
We need add the attributes		
IngredientSequence		
IngredientName		
IngredientStatement		

packagingMaterialCode	Plastic	Plastic
Returnable Package Deposit Code		8714548154003
Returnable Package Deposit Amount		3,86
Returnable Package Deposit Currency		Euro
displayTypeCode		
MaturityMethodAtTimeofSale		
organicTradeItemCode		
organicClaimAgency		
Target Market Country Code	372	372

Other examples could include: bagged apples, or bagged oranges:

Consumer Unit	Consumer Unit

A4.6.2. Use Case #2

Loose / Bulk Unpacked, No Branded displayed on label of the Trade Item, Packed and Traded by Weight with a GS1 EAN/UPC or GS1 DataBar bar code (GTIN)

Industry Attribute Name	**Example for Consumer Unit**	**Example for Bin**
globalTradeItemNumber①	614141234561	10614141234568
brandName	Unbranded	Unbranded
produceVarietyType	Watermelon	Watermelon
growingMethodCode	Conventional	Conventional
tradeItemCountryOfOrigin	Spain	Spain
functionalName	Watermelon	Watermelon

gradeCode	II	II
gradeCodeAgency	UNECE	UNECE
packagingTypeCode	UNP (Unpacked)	Bin
quantityOfNextLowerLevelTradeItem ②		48
netContent & UoM		240 kilos
descriptiveSize ③	Medium	Medium
commercialType		
height & UoM ④	12cm	1.05 meters
width & UoM ④	12cm	1.0 meters
depth & UoM ④	12cm	1.2 meters
grossWeight & UoM ⑤	5 kilos	290 kilos
Colour	Green	Green (colour is not related to the Bin but to the product)
InnerFleshColourCode	Yellow	Yellow
PostHarvestTreatmentChemicalCode		
PostProcessTradeItemTreatmentPhysicalCode		
cookingType		
produceSeedPresencesTypeCode	Seedless	Seedless
TradeItemMarketingMessage		
Genus	Citrullus	Citrullus
Species	Lanatus	Lanatus
tradeItemFormDescription		
tradeItemDescription	Round Green Watermelon	Round Green Watermelon
tradeItemUnitDescriptor	Ea (Base unit or each)	Bin
netWeight & UoM	5 kilo	240 kilos
quantityOfLayerPerPallet		1
quantityOfTradeItemsPerPalletLayer		1
effectiveDate	15-Dec-12	15-Dec-12
additionalTradeItemIdentificationType	PLU	
additionalTradeItemIdentificationValue	4341	
brandOwner (GLN)	0614141100002	0614141100002
AdditionalBrandOwnerIdentificationType ⑥	DUNS	DUNS
AdditionalBrandOwnerIdentificationValue ⑦	1234567	1234568
nameOfBrandOwner		
informationProviderOfTradeItem(GLN)	0614141100002	0614141100002
AdditionalInformationproviderOfTradeItemIdentificationType ⑧	DUNS	DUNS
AdditionalInformationproviderOfTradeItemIdentificationValue ⑨	1234567	1234568
nameOfInformationprovider	Bill's Watermelon's	Bill's Watermelon's
nameOfManufacturer	Bill's Watermelon's	Bill's Watermelon's

manufacturer(GLN)	Insert Bill's GLN from 44	Insert Bill's GLN from 44
IsTradeItemAnOrderableUnit	No	Yes
IsTradeItemAVariableUnit	Yes	No
IsTradeItemABaseUnit	Yes	No
IsTradeItemAConsumerUnit	Yes	No
IsTradeItemADispatchUnit	No	Yes
IsTradeItemAnInvoiceUnit	No	Yes
IsPackagingMarkedReturnable	No	Yes
IsNonSoldTradeItemReturnable	No	No
IsTradeItemMarkedAsRecyclable	No	No
quantityOfCompleteLayersContainedInTradeItem		1
quantityOfTradeItemsContainedInACompleteLayer		1
quantityOfTradeItemsPerPallet		1
startAvailabilityDateTime	15-Dec-12	15-Dec-12
lastChangeDateTime	10-Oct-12	10-Oct-12
descriptionShort	Bill's Seedless Watermelons	Bill's Seedless Watermelons
additionalTradeItemDescription		
classificationCategoryCode	10006037 - watermelons	10006037 - watermelons
We need add the attributes		
IngredientSequence		
IngredientName		
IngredientStatement ⑩		
packagingMaterialCode		97 (Triple Wall Corrugated Board)
Returnable Package Deposit Code		
Returnable Package Deposit Amount		
Returnable Package Deposit Currency		
displayTypeCode		
MaturityMethodAtTimeofSale		
organicTradeItemCode		
organicClaimAgency		
Target Market Country Code	372	372

1. Even though the product is Unbranded, it has an EAN or UPC bar code with a GTIN encoded. The GTIN is assigned by the brand owner, in this example Bill's Watermelon's

2. This is an average quantity which will vary when picked. Although quantity may vary, a number is needed. (**Note:** A new attribute may be added to indicate whether a) net quantity or b) count of next lower level of the trade item is primarily used)

3. Dependent on the market this may be a number size code

4. In this example, even though watermelons are round, estimated numbers need to be filled in

5. This is an average weight

6. This should be a GLN. If not a GLN, choose the value that best describes the identification type you're using for brand owner, in this example DUNS. This value should correlate with the number entered in AdditionalBrandOwnerIdentificationValue, e.g. DUNS

7. This is the actual number or value to the AdditionalBrandOwnerIdentificationValue, e.g. DUNS.

8. Choose the value that best describes the identification type you're using for the information provider; this value should correlate with the number entered in AdditionalInformationproviderOfTradeItemIdentificationValue, e.g. DUNS

9. This is the actual number relating to the information provider of the trade item, e.g. DUNS #

10. This attribute provides additional information such as a warning: may contain peanuts

Other examples could include: Cantaloupes or Pumpkins

Cantaloupe Each	Case of Cantaloupe	Bin of Pumpkins

A4.6.3. Use Case #3

Pre-packed Fixed Weight Mixed Consumer Trade Package with GS1 EAN/UPC bar code (GTIN)

This is Use Case example is similar to Use Case #1 except this example is for <u>mixed consumer</u> products. All attributes that were similar to Use Case #1 have been removed; attributes that are different remain. The <u>key difference</u> is the Ingredient Sequence and Ingredient Name, since it is a mixed product this needs to be identified using these attributes. The GTIN is different since it is a different product.

Industry Attribute Name	**Example for Consumer**	**Example for Case**
globalTradeItemNumber	3535689298006	13535689298003
brandName	Klaus	Klaus
growingMethodCode	Organic	Organic
produceVarietyType	Thompson seedless / Palieri	Thompson seedless / Palieri
IngredientSequence	1,2	1,2
IngredientName	Red, Green Table Grapes	Red,Green Table Grapes

Other examples: mixed peppers, bagged mixed greens/salads, bagged oranges & apples:

Consumer package of mixed peppers

A4.6.4. Use Case #4

Private Label Trade Item Sold by Weight with a GS1 EAN/UPC bar code (GTIN)

This example is similar to Use Case #2 except in this example the Watermelons are Private Label. Again, all attributes were removed that were similar to Use Case #2 and those that are different remain.

The Key differences are:

■ The Brand Name is Jim's Tasty Watermelons

■ The watermelons are farmed by Bill's Watermelons

■ John's Cooperative is the provider of the information for the New Item Listing.

This is shown through the following attributes: Brand Name, Name of Manufacturer and Name of Information Provider.

Basically, this scenario is of a Cooperative (John's) where the farmer Bill's) sells his product to John's Cooperative and John's Cooperative sells the product to multiple trading partners. In this case, they are labelling the product for a retailer (the brand owner) with the retailers' GTIN.

Industry Attribute Name	Example for Consumer Unit	Example for Bin
globalTrade Item Number	3536789378926	13536789378923
informationProviderOfTradeItem(GLN)	3534437200001	3534437200001
nameOfInformationprovider	John's Cooperative	John's Cooperative
AdditionalInformationproviderOfTradeItemIdentificationType	DUNS	DUNS
AdditionalInformationproviderOfTradeItemIdentificationValue	45678901	45678901
descriptionShort	Jim's Tasty Watermelon's (Private Label)	Jim's Tasty Watermelon's (Private Label)
manufacturer(GLN)	3538653100008	3538653100008
nameOfManufacturer	Bill's Watermelon's	Bill's Watermelon's
brandName	Jim's Tasty Watermelons (Private Label)	Jim's Tasty Watermelons (Private Label)

brandOwner (GLN)	3536789100008	3536789100008
nameOfBrandOwner	Jim's Supermarket	Jim's Supermarket
AdditionalBrandOwnerIdentificationType	DUNS	DUNS
AdditionalBrandOwnerIdentificationValue	2345678	2345678

A4.6.5. Use Case #5

Loose Branded Trade Item, Packed and Traded by Weight with a GS1 DataBar bar code (GTIN)

This example is similar to Use Case #2 except in this example the Watermelons are branded with Bill's Watermelons. In this example, Bill's provides all information since Bill's farm's, sells and provides all information to the trading partner for the New Item Listing. (Only the attributes which are different from Use Case #2 are shown.)

For illustration, below is an apple with a GS1 DataBar Stacked Omnidirectional bar code. Along with the GS1 DataBar bar code on the sticker, there is a human readable PLU (Price Look Up) Number. These PLU's are assigned and administered by the IFPS (International Federation of Produce Standards).

Industry Attribute Name	Example for Consumer Unit	Example for Bin
globalTrade Item Number	614141234561	10614141234568
informationProviderOfTradeItem(GLN)	0614141100002	0614141100002
nameOfInformationprovider	Bill's Watermelon's	Bill's Watermelon's
AdditionalInformationproviderOfTradeItemIdentificationType	DUNS	DUNS
AdditionalInformationproviderOfTradeItemIdentificationValue	1234567	1234568
manufacturer(GLN)	0614141100002	0614141100002
nameOfManufacturer	Bill's Watermelon's	Bill's Watermelon's
brandName	Bill's Watermelons	Bill's Watermelons
brandOwner (GLN)	0614141100002	0614141100002
nameOfBrandOwner	Bill's Watermelon's	Bill's Watermelon's
AdditionalBrandOwnerIdentificationType	DUNS	DUNS
AdditionalBrandOwnerIdentificationValue	1234567	1234567
additionalTradeItemIdentificationType ①	PLU	
additionalTradeItemIdentificationValue ②	4341	

A4.6.6. Use Case #6

Loose / Bulk Unpacked Trade Item Traded by Trade Item with minimum weight No Label on the Produce

Industry Attribute Name	No Consumer Unit	Example for Case
globalTrade Item Number		4311527003099
IsTradeItemABaseUnit		Yes
effectiveDate		21-Nov-12
informationProviderOfTradeItem(GLN)		4000000100003
nameOfInformationprovider		Vegi Cooperative
AdditionalInformationproviderOfTradeItemIdentificationType		
AdditionalInformationproviderOfTradeItemIdentificationValue		
Target Market Country Code		276
lastChangeDateTime		21-Nov-12
startAvailabilityDateTime		1-Jan-13
quantityOfNextLowerLevelTradeItem		
descriptionShort		Yellow Cherry Tomatoes
IsTradeItemADispatchUnit		Yes
IsTradeItemAnInvoiceUnit		Yes
IsTradeItemAnOrderableUnit		Yes
IsTradeItemAConsumerUnit		No
manufacturer(GLN)		4000000100003
nameOfManufacturer		Vegi Cooperative
netContent & UoM		
netWeight & UoM		3 kg
brandName		Unbranded
brandOwner (GLN)		
nameOfBrandOwner		
AdditionalBrandOwnerIdentificationType		
AdditionalBrandOwnerIdentificationValue		
TradeItemMarketingMessage		
additionalTradeItemDescription		
functionalName		Cherry tomato
classificationCategoryCode		10006162 - Cherry tomato round
IsNonSoldTradeItemReturnable		No

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Industry Attribute Name	No Consumer Unit	Example for Case
IsTradeItemAVariableUnit		No
tradeItemCountryOfOrigin		Spain
organicTradeItemCode		5
growingMethodCode		Conventional
organicClaimAgency		
Colour		Yellow
descriptiveSize		
additionalTradeItemIdentificationType		
additionalTradeItemIdentificationValue		
gradeCode		
gradeCodeAgency		
tradeItemFormDescription		
tradeItemDescription		
produceVarietyType		
genus		Solanum
species		lycopersicum
commercialType		Cherrytomatoes
MaturityMethodAtTimeofSale		
InnerFleshColourCode		
tradeItemUnitDescriptor		Case
PostHarvestTreatmentChemicalCode		
produceSeedPresencesTypeCode		
cookingType		
PostProcessTradeItemTreatmentPhysicalCode		
packagingTypeCode		Box
height & UoM		16cm
depth & UoM		30cm
width & UoM		40cm
grossWeight & UoM		3.5 kilo
IsPackagingMarkedReturnable		No
displayTypeCode		
IsTradeItemMarkedAsRecyclable		No
packagingMaterialCode		95
Returnable Package Deposit Code		
Returnable Package Deposit Amount		
Returnable Package Deposit Currency		
quantityOfTradeItemsPerPalletLayer		8
quantityOfTradeItemsPerPallet		128
quantityOfLayerPerPallet		16
quantityOfCompleteLayersContainedInTradeItem		
quantityOfTradeItemsContainedInACompleteLayer		
IngredientSequence		
IngredientName		
IngredientStatement		

Other example: Radishes

A4.7. Packaging Type Codes

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
Bundle		BDL		Bundle	Bundle
Cup		CU	CU	Cup	A small bowl shaped container for beverages, often with a handle.
Bucket		BXT	BJ	Bucket	A container, usually cylindrical, can be equipped with a lid and a handle. (e.g., a pail made of metal, plastic, or other appropriate material).
Wrapped in Plastic		UVQ		Wrapped in Plastic	Wrapped in Plastic
Flowpack		WRP	WRP	Flowpack	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.

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
Hamper		HPR		Hamper	Hamper
Net		GNT	NT	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.
Bag		BAG	BG	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.
Net with banderole		BAG	BG	Net with banderole	A preformed, flexible container, generally enclosed on all but one side, which forms an opening that may or may not be sealed after filling.
Big Box		BAG	BG	Big Box	A preformed, flexible container, generally enclosed on all but one side, which forms an opening that may or may not be sealed after filling.
Carrying bag		BAG	BG	Carrying 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.
Carrying package		BAG	BG	Carrying package	A preformed, flexible container, generally enclosed on all but one side, which forms an opening that may or may not be sealed after filling.

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
Punnet		PUN	CT	Punnet	Punnet
Clamshell		CMS		Clamshell	Clamshell
Plastic-wrapped Tray		PWT	SW	Plastic-wrapped Tray	Plastic-Wrapped Tray
Tray with flowpack		TRY	PV	Tray with flowpack	A shallow container, which may or may not have a cover, used for displaying or carrying items.
Basket with net		BSK	BK	Basket with net	A semi rigid container usually opened at the top traditionally used for gathering, shipping and marketing agricultural products.
Sack		SAK		Sack	Sack

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
Pot		JAR	PT	Pot	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).
Open sleeve with product inside		SY	SY	Open sleeve with product inside	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).
Unpacked		UNP	NE	Unpacked	The item is provided without packaging.
Reusable Crate		CRT	CR	Reusable 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.
Crate		CRT	CR	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.

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
Crate (wood, plastic)		CRT	CR	Crate (wood, plastic)	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.
Crate (cardboard)		CTN	CT	Crate (cardboard)	A non-specific term for a re-closable container used mostly for perishable foods (e.g. eggs, fruit).
Carton		CTN	CT	Carton	A non-specific term for a re-closable container used mostly for perishable foods (e.g. eggs, fruit).
Large Crate		GPB	PB	Large Crate	A three-dimensional container which either has a pallet platform permanently attached at its base or alternatively 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.
Dinamic Shipper		GPB	PB	Dinamic Shipper	A three-dimensional container which either has a pallet platform permanently attached at its base or alternatively 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.

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packagin gTypeDes cription	GDSN Description
Big Maxi Crate		GPB	PB	Big Maxi Crate	A three-dimensional container which either has a pallet platform permanently attached at its base or alternatively 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.
Cardboard Box		GPB	PB	Cardboard Box	A three-dimensional container which either has a pallet platform permanently attached at its base or alternatively 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.
Green Box		GPB	PB	Green Box	A three-dimensional container which either has a pallet platform permanently attached at its base or alternatively 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.
Pallet ISO 1		PLT	PX	Pallet ISO 1	Pallet ISO 1: Flat pallet with dimensions of 1200 x 800 mm as defined in ISO 6780.
					PalletTypeCode=11
Pallet ISO 2		PLT	PX	Pallet ISO 2	Pallet ISO 2: Flat pallet with dimensions of 1200 x 1000 mm as defined in ISO 6780.
					PalletTypeCode=12
Pallet ISO 0		PLT	PX	Pallet ISO 0	Pallet ISO 0 - 1/2 EURO Pallet: Half size flat pallet with dimensions of 800 x 600
					PalletTypeCode=10
CHEP Pallet 80 X 120 cm		PLT	PX	CHEP Pallet 80 X 120 cm	CHEP Pallet 80 X 120 cm
					PalletTypeCode=23

Packaging	Picture	packaging TypeCode v 2.8	packaging TypeCode v 3.X (implemented in 2016)	packaging TypeDescription	GDSN Description
CHEP Pallet 80 X 60 cm		PLT	PX	CHEP Pallet 80 X 60 cm	
					PalletTypeCode= There is no code
CHEP Pallet 40 X 60 cm		PLT	PX	CHEP Pallet 40 X 60 cm	CHEP Pallet 40 X 60 cm

A4.8. IFPS Colour Code List

Example of the IFPS code list per March 2014.

Colour Code	Colour Description
BLACK	Black
BLUE	Blue
BLUE_BLACK	Blue/Black
BROWN	Brown
CREAMY_YELLOW	Creamy yellow
DARK_GREEN	Dark-green
GINGER_GOLD	Ginger Gold
GOLDEN	Golden
GREEN	Green
GREEN_WHITE	Green-white
GREY	Grey
GREY_WHITE	Grey-white
MULTI-COLOURED	Multi-coloured
ORANGE	Orange
ORANGE_YELLOW	Orange-yellow
PEARL	Pearl
PINK	Pink
PURPLE	Purple
PURPLE_WHITE	Purple-white
RED	Red

Colour Code	Colour Description
RED_BLACK	Red/Black
RED_WHITE	Red-white
ROUGE_SALAMBO	Rouge Salambo (Red)
RUBY_RED_PINK	Ruby Red/Pink
VIOLET	Violet
WHITE	White
WHITE_GREEN	White/Green
YELLOW	Yellow
YELLOW_BROWN	Yellow/Brown
YELLOWISH	Yellowish