



Business Message Standard (BMS) Align Trade Item Extension for Food and Beverage

BMS Release: 2.7, BRG Name: GDSN

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Business Requirements Document (BRAD) Reference

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Business Requirements Analysis Document (BRAD) for IRT Foodservice/Food Retail (Master Data)	15-Jun-2006	0.1.0
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Document Change History

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01-Aug-2007	1.0.0	Eric Kauz	Document updated to fulfil requirements of MR2. See appendix for detailed information.	Changes corresponding to the GDSN Maintenance Release 2	
10-Sept-2008	1.1.0	Eric Kauz	MR3		
31-Aug-2009	2.0.0	Brian Bennett/Eric Kauz	MR4	See detailed change summary.	
24-Nov-2009	2.0.1	Eric Kauz	MR4 Comment Review	<ul style="list-style-type: none"> Added in Source Animal Code Referenced future removal of customerSupportCentre and productionFacility Fixed Typos Updated definition for ingredientPurpose Updated definition of rawMaterialUsedInPreparationWeight 	
11-Feb-2010	2.0.2	Eric Kauz	MR4 Public Review	<ul style="list-style-type: none"> Changed the name of the attribute maximumOptimumDrinkingTemperature to maximumOptimumConsumptionTemperature Changed the name of the attribute minimumOptimumDrinkingTemperature to minimumOptimumConsumptionTemperature Changed definition of convenienceLevelPercentage to better explain meaning of percentages. 	

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1. Business Domain View

1.1. Problem Statement / Business Need

- The inclusion of data requirements from food service manufacturers, distributors and operators will facilitate communication across the entire food service and food retail Supply Chain.
- Due to government requirements manufacturers, distributors and retailers must identify nutritional requirements.
- The current differences in the identification of ingredients, nutrients, allergens, additives etc. are mostly caused by simple languages translation issues. This forms a blockade for this information to be passed on through the GDSN network and amongst international active trading partners.
- The EU is in the process of allowing for pilots that facilitate an e-label as an addition to the physical label
- Product labels have reached their limitation in readability due to the vast amount of information that is to be printed on the label.
- The intolerance of people to allergic substances is rising fast and thus the importance of standardized information gathering to ensure availability to the public is evermore increasing.
- The relation between food and health (obesity, health claim) is attracting more and more attention and requires uniform and standardized information exchange between trading partners and public bodies.

1.2. Objective

This BMS contains the detailed design of the specific information that needs to be communicated for food & beverage products, in order to meet the requirements in the referenced BRAD.

1.3. Audience

- Food service and food retail manufacturers
- Food retailers
- Food service operators
- Datapools
- Trade bodies

1.4. References

Reference Name	Description
[Ref1]	Business Requirements Analysis Document (BRAD) for IRT Foodservice/Food Retail (Master Data)
[Ref2]	BRAD For GDSN Item Maintenance Release 1: Version: 0.0.2

1.5. Acknowledgements

The following is a list of individuals (and their companies) who participated in the creation, review and approval of this BMS.

1.5.1. BRG Work Group

Function	Name	Company / organisation
BRG Work Group Member	Jim Funk	S.C. JOHNSON & SON, INC.
BRG Work Group Member	Eduardo Tovar	PROCTER & GAMBLE COMPANY
BRG Work Group Member	Javier Arias	GS1 SPAIN
BRG Work Group Member	Neale Austen	EAN AUSTRALIA
BRG Work Group Member	Michael Bammer	CVS PHARMACY, INC.
BRG Work Group Member	Giovanni Biffi	IAC – EAN COLOMBIA
BRG Work Group Member	Loek Boortman	GS1 NEDERLAND
BRG Work Group Member	Benjamin Couty	GS1 FRANCE
BRG Work Group Member	MaryAnn Goodrich	UNILEVER HOME & PERSONAL CARE NA
BRG Work Group Member	Hideki Ichihara	EAN JAPAN
BRG Work Group Member	Nancy Laskero	SEARS, ROEBUCK AND CO
BRG Work Group Member	Hanjoerg Lerch	METRO GROUP BUYING GMBH
BRG Work Group Member	Markus Mathar	SINFOS GMBH
BRG Work Group Member	Roberto Matsubayashi	EAN BRASIL
BRG Work Group Member	Michael Moise	NESTLE AG
BRG Work Group Member	Olivier Mouton	CARREFOUR
BRG Work Group Member	Barbara Munro	KRAFT FOODS, INC
BRG Work Group Member	Anakaryna Palacios	EAN VENEZUELA
BRG Work Group Member	Hector German Piñeros	IBC SOLUTIONS COLOMBIA
BRG Work Group Member	Paul Povey	PROCTER & GAMBLE COMPANY
BRG Work Group Member	Rebecca Quigley	COCA-COLA BOTTLERS SALES AND SERVICES

Function	Name	Company / organisation
BRG Work Group Member	Julie Rodriguez	LEVI STRAUSS & CO
BRG Work Group Member	Joy Schneck	GENERAL MILLS, INC.
BRG Work Group Member	Peggy Spofford	3M COMPANY
BRG Work Group Member	Steve Vazzano	TRANSORA
BRG Work Group Member	Lionel Tussau	GEORGIA-PACIFIC CORPORATION
BRG Work Group Member	Patricia Vessey	BEST BUY COMPANY, INC.
BRG Work Group Member	Marcel Yska	AHOLD NV
BRG Work Group Member	Greg Zwanziger	SUPERVALU, INC.

1.5.2. Design Team Members

Function	Name	Organisation
Modeller	Coen Janssen, Esther Peelen, Eric Kauz, Brian Bennett	GS1 Netherlands, GS1 GO
XML Technical Designer	Dipan Anarkat	GS1 GO
EANCOM Technical Designer		
Peer Reviewer	Eric Kauz, Giovanni Biffi	GS1 GO

2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	Food, Beverage and Tobacco
Process	Align_Trade Item
System Capabilities	EAN.UCC
Official Constraints	None

3. Additional Technical Requirements Analysis

This section documents the analysis of additional technical requirements.

3.1. Technical Requirements (optional)

Number	Statement	Rationale
	Not Applicable	

4. Business Transaction View

4.1. Business Transaction Use Case Diagram

4.2. Use Case Description

Use Case ID	UC-1	
Use Case Name	Align Trade Item	
Use Case Description	Note this extension leverages the use case outlined in the BMS for Align Trade Item. Please note Business Rules listed within this document specifically for attributes within the Food and Beverage Extension.	
Actors (Goal)	See Use Case for Align Trade Item in Align Trade Item BMS	
Performance Goals	See Use Case for Align Trade Item in Align Trade Item BMS	
Preconditions	See Use Case for Align Trade Item in Align Trade Item BMS	
Post conditions	See Use Case for Align Trade Item in Align Trade Item BMS	
Scenario	See Use Case for Align Trade Item in Align Trade Item BMS	
Alternative Scenario	See Use Case for Align Trade Item in Align Trade Item BMS	
Related Requirements	See Use Case for Align Trade Item in Align Trade Item BMS	
Related Rules	Attribute Name	Business Rules
	fishCatchZone	<p>This attribute should be used both when the fish is the product itself and when fish is included in the product as an ingredient.</p> <p>The European Commission Regulation 2065/2001 lists a number of catch zones based on an Food and Agriculture Organisation of the United Nations (FAO) standard.</p>

4.3. Business Transaction Activity Diagram(s)

Not Applicable

4.4. Business Transaction Sequence Diagram(s) (optional)

Not Applicable

5. Information Model (Including GDD Report)

5.1. GDD Report

Food and Beverage Trade Item Extension

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
FishMeatPoultryContent				Fish Meat Poultry. Details	Fish, meat and poultry content of a food and beverage trade item.			
	fishMeatPoultryTypeCode			Fish Meat Poultry. Detail .Fish Meat Poultry Type.Text	The fish, meat, or poultry type for this food and beverage item.	1..1		Min 1 Max 35
		minimumFishMeatPoultryContent	Multi Measurement Value	Fish Meat Poultry. Detail . Minimum Fish Meat Poultry Content. Multi Measurement Value	The minimum amount of fish, meat or poultry contained in a food and beverage trade item expressed as a measurement.	1..1		
FishMeatPoultryContentInformation				Fish Meat Poultry Content. Details	Stated fish, meat and poultry content of a food and beverage trade item.			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	fishMeatPoultryTypeCodeListAgency			Fish Meat Poultry Content.Fish Meat Poultry Type Code List Agency.Text	The code list agency responsible for maintaining a fish, meat, poultry type code list for example USDA.	0..1		Min 1 Max 70
	fishMeatPoultryTypeCodeListIdentification			Fish Meat Poultry Content.Fish Meat Poultry Type Code List Identification.Text	The identification of a fish, meat, and poultry type code list for example the USDA Individual Intake Food Group List.	0..1		Min 1 Max 70
			FishMeatPoultryContent	Fish Meat Poultry Content.Associated.Fish Meat Poultry	Fish meat and Poultry information for fish meat and poultry content.	1..*		
FoodAndBeverageAdditiveInformation				Food And Beverage Additive. Details	Information on presence or absence of additives or genetic modifications contained in the trade item.			
	additiveName			Food And Beverage Additive.Additive Name.1..200_Text	The name of any additive or genetic modification contained or not contained in the trade item.	1..1		Min 1 Max 200

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	levelOfContainment			Food And Beverage Additive.Level Of Containment.Level of Containment_Code	Code indicating the level of presence of the additive.	1..1		
FoodAndBeverageAllergen				Food And Beverage Allergen.Details	Description of the presence or absence of allergens as governed by local rules and regulations, specified per allergen.			
	allergenSpecificationAgency			Food And Beverage Allergen.Allergen Specification Agency.Text	Agency that controls the allergen definition.	1..1		Unbounded
	allergenSpecificationName			Food And Beverage Allergen.Allergen Specification Name.Text	Free text field containing the name and version of the regulation or standard that contains the definition of the allergen.	1..1		Unbounded
	allergenTypeCode			Food And Beverage Allergen.Allergen Type Code.Code	Code indicating the type of allergen.	1..1		Facets constrained by code list values
	levelOfContainment			Food And Beverage Allergen.Level Of Containment.Level of Containment_Code	Code indicating the level of presence of the allergen.	1..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
FoodAndBeverageAllergyRelatedInformation				Food And Beverage Allergy Related Information. Details	Information about: - substances that might cause allergic reactions; and - substances subject to intolerance when consumed. The allergy information refers to specified regulations that apply to the target market to which the item information is published			
			Food And Beverage Allergen	Food And Beverage Allergy Related Information. Association. Food And Beverage Allergen	This information on FoodAndBeverageAllergen for FoodAndBeverageAllergyRelatedInformation	0..*		
		allergenStatement	MultiLongDescription	Food And Beverage Allergy Related Information. Allergen Statement. Multi Long Description	Textual description of the presence or absence of allergens as governed by local rules and regulations, specified as one string.	0..1		
FoodAndBeverageCheeseInformation				Food And Beverage Cheese Information. Details	Trade Item information related to Cheese			
	isRindEdible			Food And Beverage Cheese Information.Is Rind Edible.NonBinaryLogic_Code	An indicator whether or not the cheese rind is edible. Some cheeses are coated in plastic or their surface is treated with other traditional substances to increase their shelf life. This can result in the rind no longer being edible.	0..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	isRipenedInRind			Food And Beverage Cheese Information.Is Ripened In Rind.NonBinary Logic_Code	An indicator whether or not the cheese was ripened in the rind. Due to modern production techniques cheeses can be ripened in foil. With this method the cheese is ripened without a rind developing. Depending on the envisaged use of the cheese and personal taste, the end consumer will prefer either a cheese ripened in the rind the traditional way or in foil.	0..1		
	rennetTypeCode			Food And Beverage Cheese Information.Rennet Type Code.Rennet Type Code_Code	The type of rennet used for coagulation. The enzyme rennet is used for the coagulation of the cheese mass. Rennet and respectively similar enzymes can be gained through various processes.	0..1		Min 1 Max 35
	ripeningTimePeriod			Food And Beverage Cheese Information.Ripening Time Period.Measure	The period of time for ripening the cheese. During ripening the aroma and consistency of a cheese constantly changes. The character of a cheese is thus strongly determined by the period of ripening. Depending on personal preference, the end consumer prefers either a "young" or a "mature" cheese.	0..1		
FoodAndBeverageDietRelatedInformation				Food And Beverage Diet Related Information.Details	Information on whether the product meets the criteria to be classified as suitable for a specific targeted group. Certain groups of consumers are limited in consuming products, depending on the ingredients or preparation style. This can be i.e. due to religious reasons or restriction of diet reasons.			
	dietCertificationAgency			Food And Beverage Diet Related Information.Diet Certification Agency.Text	Name of organization defining the requirements for diet claims.	0..1		Unbounded

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	dietCertificationNumber			Food And Beverage Diet Related Information. Diet Certification Number. Text	Identification given to the trade item by the certification organization defining the requirements for diet claims.	0..1		Unbounded
			Food And Beverage Diet Type Information	Food And Beverage Diet Related Information. Association. Food And Beverage Diet Type Information	This information on FoodAndBeverageDietTypeInformation for FoodAndBeverageDietRelatedInformation	1..1		
		dietTypeDescription	Multi Description	Food And Beverage Diet Related Information. Diet Type Description. Multi Description	Free text for indication of diet not stated in the list of diets.	1..1		
FoodAndBeverageDietTypeInformation				Food And Beverage Diet Type Information. Details	Information on the type of diet.			
	dietTypeCode			Food And Beverage Diet Type Information. Diet Type Code. Code	Code indicating the diet the product is suitable for.	1..1		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	dietTypeSubcode			Food And Beverage Diet Type Information. Diet Type Subcode. Code	Indicates a set of agreements or a certificate name that guarantees the product is permitted in a particular diet.	0..1		Facets constrained by code list values
FoodAndBeverageInformation				Food And Beverage Information. Details	Information on ingredients, nutrients, preparation, etc. of food and beverage products. This information can vary depending on the production circumstances under which the product was produced.			
	productionVariantDescription			Food And Beverage Information. Production Variant Description. Language_ Text	Free text assigned by the manufacturer to describe the production variant. Examples are: package series X, package series Y.	0..1		Min 1 Max 70
	productionVariantEffectiveDate			Food And Beverage Information. Production Variant Effective Date. Date_ DateTime	The start date of a production variant. The variant applies to products having a date mark (a best before date or expiration date) on the package that comes on or after the effective date.	0..1		
			FoodAndBeverageAdditiveInformation	Food And Beverage Information. Association. Food And Beverage Additive. Details	Additive information for this food and beverage trade item.	0..*		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
			Food And Beverage Allergy Related Information	Food And Beverage Information. Association. Food And Beverage Allergy Related Information	This information on FoodAndBeverageAllergyRelatedInformation for FoodAndBeverageInformation	0..1		
			Food And Beverage Diet Related Information	Food And Beverage Information. Association. Food And Beverage Diet Related Information	This information on FoodAndBeverageDietRelatedInformation for FoodAndBeverageInformation	0..*		
			Food And Beverage Ingredient Information	Food And Beverage Information. Association. Food And Beverage Ingredient Information	This information on FoodAndBeverageIngredientInformation for FoodAndBeverageInformation	0..1		
			Food And Beverage Microbiological Information	Food And Beverage Information. Association. Food And Beverage Microbiological Information	This information on FoodAndBeverageMicrobiologicalInformation for FoodAndBeverageInformation	0..*		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
			Food And Beverage Nutrient Information	Food And Beverage Information. Association. Food And Beverage Nutrient Information	This information on FoodAndBeverageNutrientInformation for FoodAndBeverageInformation	0..*		
			Food And Beverage Physiochemical Characteristic	Food And Beverage Information. Association. Food And Beverage Physiochemical Characteristic	This information on FoodAndBeveragePhysiochemicalCharacteristic for FoodAndBeverageInformation	0..*		
			Food And Beverage Preparation Information	Food And Beverage Information. Association. Food And Beverage Preparation Information	This information on FoodAndBeveragePreparationInformation for FoodAndBeverageInformation	0..*		
			Food And Beverage Serving Information	Food And Beverage Information. Association. Food And Beverage Serving Information	This information on FoodAndBeverageServingInformation for FoodAndBeverageInformation	0..1		
FoodAndBeverageIngredient				Food And Beverage Ingredient. Details	Information on the constituent ingredient make up of the product split out per ingredient.			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	contentPercentage			Food And Beverage Ingredient. Content Percentage. Numeric	Indication of the percentage of the ingredient contained in the product.	0..1		No Restrictions
	countryOfOrigin			Food And Beverage Ingredient. Country Of Origin. Code	Code indicating the country of origin of the ingredient (ISO-3166).	0..*		Facets constrained by code list values
	fishCatchZone			Food And Beverage Ingredient. Fish Catch Zone. Text	The sea zone from which the seafood in the trade item was caught in.	0..*		Min Length: 1; Max Length: 70;
	ingredientSourceAnimalCode			Food And Beverage Ingredient.. Ingredient Source Animal. Text	The source of raw material used to produce the food product for example a goat for milk expressed as a code.	0..*		Min Length: 1; Max Length: 70;
	grapeVarietyCode			Food And Beverage Ingredient.. Grape Variety. Text	The vine variety used for the production of this wine for example Merlot expressed as a code.	0..1		Min Length: 1; Max Length: 70;
	growingMethodCode			Food And Beverage Ingredient.Growing Method. Text	The process through which fresh produce is grown and cultivated expressed as a code.	0..*		Min Length: 1; Max Length: 35;

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	ingredientPurpose			Food And Beverage Ingredient.. Ingredient Purpose. Text	A description of the primary purpose that an ingredient serves for example a colouring in the case of annatto in a cheese rind.	0..*		Min 1 Max 70
	ingredientSequence			Food And Beverage Ingredient. Ingredient Sequence. Integer_ Numeric	Integer (1, 2, 3...) indicating the ingredient order by content percentage of the product. (major ingredient = 1, second ingredient = 2) etc.	1..1		Unbounded
		ingredientName	Multi Description	Food And Beverage Ingredient. Ingredient Name. Multi Description	Text field indicating one ingredient or ingredient group (according to regulations of the target market). Ingredients include any additives (colourings, preservatives, e-numbers, etc) that are encompassed.	1..1		Min 1 Max 70
FoodAndBeverageIngredientInformation				Food And Beverage Ingredient Information. Details	Information on the constituent ingredient make up of the product.			
	geneticallyModifiedDeclarationCode			Food And Beverage Ingredient Information. Genetically Modified Declaration. Level of Containment_ Code	A statement of the presence or absence of genetically modified protein or DNA in the trade item.	0..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	isHomogenised			Food And Beverage Ingredient Information.Is Homogenised .Nonbinary_Logic_Code	The indication whether or not the milk used was actively homogenised. The homogenisation of milk is a technical process in the dairy. The milk fat is milled to such an extent that further creaming is prevented.	0..1		
	rawMaterialUsedInPreparationWeight			Food And Beverage Ingredient Information.Raw Material Used In Preparation Weight .Measure	The weight of the raw materials (meat) used to produce the finished food product. The weight of the raw materials (for example fat) can differ from the weight of the ingredient in the finished product. In some countries there are legal stipulations that the weight of the raw material used must be indicated if a product is produced using more than 100% of the finished product.	0..1		
			Food And Beverage Ingredient	Food And Beverage Ingredient Information. Association. Food And Beverage Ingredient	This information on FoodAndBeverageIngredient for FoodAndBeverageIngredientInformation	0..*		
		ingredientStatement	Multi Description 5000	Food And Beverage Ingredient Information. Ingredient Statement. Multi Description 5000	Information on the constituent ingredient make up of the product specified as one string.	0..1		Min 1 Max 5000

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
FoodAndBeverageMarketingInformationExtension				Food And Beverage Marketing Extension. Details	This extension contains marketing related data elements that are specific to food and beverage products.			
	nutritionalClaimCode			Food And Beverage Marketing Extension. Nutritional Claim Code. Code	Code list reflecting the values of permitted nutritional claims of the EC and US (and any other known) regulations.	0..*		Facets constrained by code list values
	nutritionalProgramCode			Food And Beverage Marketing Extension. Nutritional Program Code. Code	Programs designed to encourage people to eat a certain way in order to benefit their nutrition for example "5 a Day".	0..*		Min 1 Max 35
			FishMeatPoultryContentInformation	Food And Beverage Marketing Extension. Association. Fish Meat Poultry Content.	Fish meat and poultry content of this food and beverage trade item.	0..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
			Food And Beverage Cheese Information	Food And Beverage Marketing Extension. Association. Food and Beverage Cheese Information	Details on cheese for this food and beverage trade item.	0..1		
		health Claim	Multi Description	Food And Beverage Marketing Extension. Health Claim. Multi Description	Free text field for any health claims according to regulations of the target market.	0..*		Min 1 Max 70
		nutritional Claim	Multi Description	Food And Beverage Marketing Extension. Nutritional Claim. Multi Description	Free text field for any additional nutritional claims.	0..*		Min 1 Max 1000
		serving Suggestion	Multi Long Description	Food And Beverage Marketing Extension. Serving Suggestion. Multi Long Description	Free text field for serving suggestion.	0..1		Min 1 Max 1000

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
FoodAndBeverageMicrobiologicalInformation				Food And Beverage Microbiological Information. Details	Information on the maximum allowable presence of certain micro-organisms as guaranteed by the manufactures upon receipt of the goods			
	organismCode			Food And Beverage Microbiological Information. Organism Code. Code	Code indicating the type of microbiological organism.	1..1		Facets constrained by code list values
		organismMaximumValue	Multi Measurement Value	Food And Beverage Microbiological Information. Organism Maximum Value. Multi Measurement Value	Maximum allowable value of the microbiological organism.	1..1		
FoodAndBeverageNutrient				Food And Beverage Nutrient. Details	Information on the nutrients contained in the product. Examples are vitamins, minerals, different types of carbohydrates, different types of saturated fat, types of unsaturated fat, types of Polyunsaturated fat.			
	measurementPrecision			Food And Beverage Nutrient. Measurement Precision. Code	Code indicating whether the specified nutrient content is exact or approximate.	1..1		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	nutrientTypeCode			Food And Beverage Nutrient. Nutrient Type Code. Code	Code from the list of the INFOODS food component tagnames (http://www.fao.org/infoods/tagnames_en.stm) identifying nutrients contained in the product.	1..1		Facets constrained by code list values
	percentageOfDailyValueIntake			Food And Beverage Nutrient. Percentage Of Daily Value Intake. Numeric	The percentage of the recommended daily intake of a nutrient as recommended by authorities of the target market. Is expressed relative to the serving size and base daily value intake.	0..1		No Restrictions
		quantityContained	Multi Measurement Value	Food And Beverage Nutrient. Quantity Contained. Multi Measurement Value	Measurement value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	0..1		
FoodAndBeverageNutrientInformation				Food And Beverage Nutrient Information. Details	Information about content of nutrients. Multiple sets of nutrient information can be specified with varying state, serving size and daily value intake base.			
	fatInMilkContent			Food And Beverage Nutrient. Fat In Milk Content. Percent	The percentage of fat contained in milk content of the product.	0..1		
	preparationState			Food And Beverage Nutrient Information. Preparation State. Code	Code specifying whether the nutrient information applies to the prepared or unprepared state of the product.	1..1		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
			Food And Beverage Nutrient	Food And Beverage Nutrient. Detail	This information on FoodAndBeverageNutrient for FoodAndBeverageNutrientInformation	1..*		
		dailyValueIntakeReference	Multi Description	Food And Beverage Nutrient Information. Daily Value Intake Reference. Multi Description	Free text field specifying the daily value intake base for on which the daily value intake per nutrient has been based. Example: "Based on a 2000 calorie diet."	0..1		Min 1 Max 70
		householdServingSize	Multi Description	Food And Beverage Nutrient Information. Household Serving Size. Multi Description	Free text field specifying the household serving size in which the information per nutrient has been stated. Example: Per 1/3 cup (42 g).	0..1		Min 1 Max 70
		servingSize	Multi Measurement Value	Food And Beverage Nutrient Information. Serving Size. Multi Measurement Value	Measurement value specifying the serving size in which the information per nutrient has been stated. Example: Per 100 grams.	0..1		Min 1 Max 1000

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
FoodAndBeveragePhysiochemicalCharacteristic				Food And Beverage Physiochemical Characteristic. Details	Information on the product's physicochemical characteristics.			
	characteristicCode			Food And Beverage Physiochemical Characteristic. Characteristic Code. Code	Code indicating the type of physiochemical characteristic.	1..1		Facets constrained by code list values
		characteristicValue	Multi MeasurementValue	Food And Beverage Physiochemical Characteristic. Characteristic Value. Multi Measurement Value	Measurement value of the physicochemical characteristic.	1..1		
FoodAndBeveragePreparationInformation				Food And Beverage Preparation Information. Details	Information on way the product can be prepared. Used to show alternate ways to prepare, such as microwaving, boiling etc.			
	convenienceLevelPercentage			Food And Beverage Preparation Information. Convenience Level Percentage. Percent_ Numeric	An indication of the ease of preparation for semi-prepared products. The convenience level indicates the level of preparation in percentage required to prepare and helps the consumer to assess how long it will take to prepare the meal. The closer the range is to 100 percent the more prepared the food is.	0..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	preparationType			Food And Beverage Preparation Information. Preparation Type. Code	A code specifying the technique used to make the product ready for consumption. For example: baking, boiling.	1..1		Facets constrained by code list values
			Food And Beverage Product Yield Information	Food And Beverage Preparation Information. Association. Food And Beverage Product Yield Information	This information on FoodAndBeverageProductYieldInformation for FoodAndBeveragePreparationInformation	0..1		Min 1 Max 2500
		preparationInstructions	Multi Description 2500	Food And Beverage Preparation Information. Preparation Instructions. Multi Description 2500	Textual instruction on how to prepare the product before serving.	1..1		Min 1 Max 2500
		precautions	Multi Long Description	Food And Beverage Preparation Information. Precautions. Multi Long Description	Specifies additional precautions to be taken before preparation or consumption of the product.	0..1		Min 1 Max 1000

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
		maximumOptimumConsumptionTemperature	Multi Measurement Value	Food And Beverage Preparation Information. Maximum Optimum Consumption Temperature. Multi Measurement Value	The upper limit temperature of the optimum range consumption temperature. The optimum range of the consumption temperature is a recommendation and is based on the experience of the individual producer.	0..1		
		minimumOptimumConsumptionTemperature	Multi Measurement Value	Food And Beverage Preparation Information. Minimum Optimum Consumption Temperature. Multi Measurement Value	The lower limit temperature of the optimum range of the consumption temperature. The optimum range of the consumption temperature is a recommendation and is based on the experience of the individual producer.	0..1		
FoodAndBeverageProductYieldInformation				Food And Beverage Product Yield Information. Details	Information on the amount of product that is available for consumption after preparing / serving the product.			
	productYieldTypeCode			Food And Beverage Product Yield Information. Product Yield Type Code. Code	Code indicating the type of yield measurement. Examples: • After dilution • Drained weight • After cooking • Etc	1..1		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	productYieldVariation			Food And Beverage Product Yield Information. Product Yield Variation. Numeric	Indication of range in percent of the given cooking / roasting loss. Percentage that the actual weight of the trade item differs upward or downward from the average or estimated product yield.	0..1		No Restrictions
		productYield	Multi Measurement Value	Food And Beverage Product Yield Information. Product Yield. Multi Measurement Value	Product quantity after preparation.	1..1		
FoodAndBeverageServingInformation				Food And Beverage Serving Information. Details	Information on the number of servings and units contained in the package.			
		maximumNumberOfSmallestUnitsPerPackage		Food And Beverage Serving Information. Maximum Number Of Smallest Units Per Package. Integer_ Numeric	The maximum number of the smallest units contained in the package. This attribute is to be used in conjunction with numberOfSmallestUnitsPerPackage in order to enter a minimum and maximum value. For example for a package of meat balls where the smallest units per package could be from 56-60, the maximumNumberOfSmallestUnitsPerPackage would be 60.	0..1		

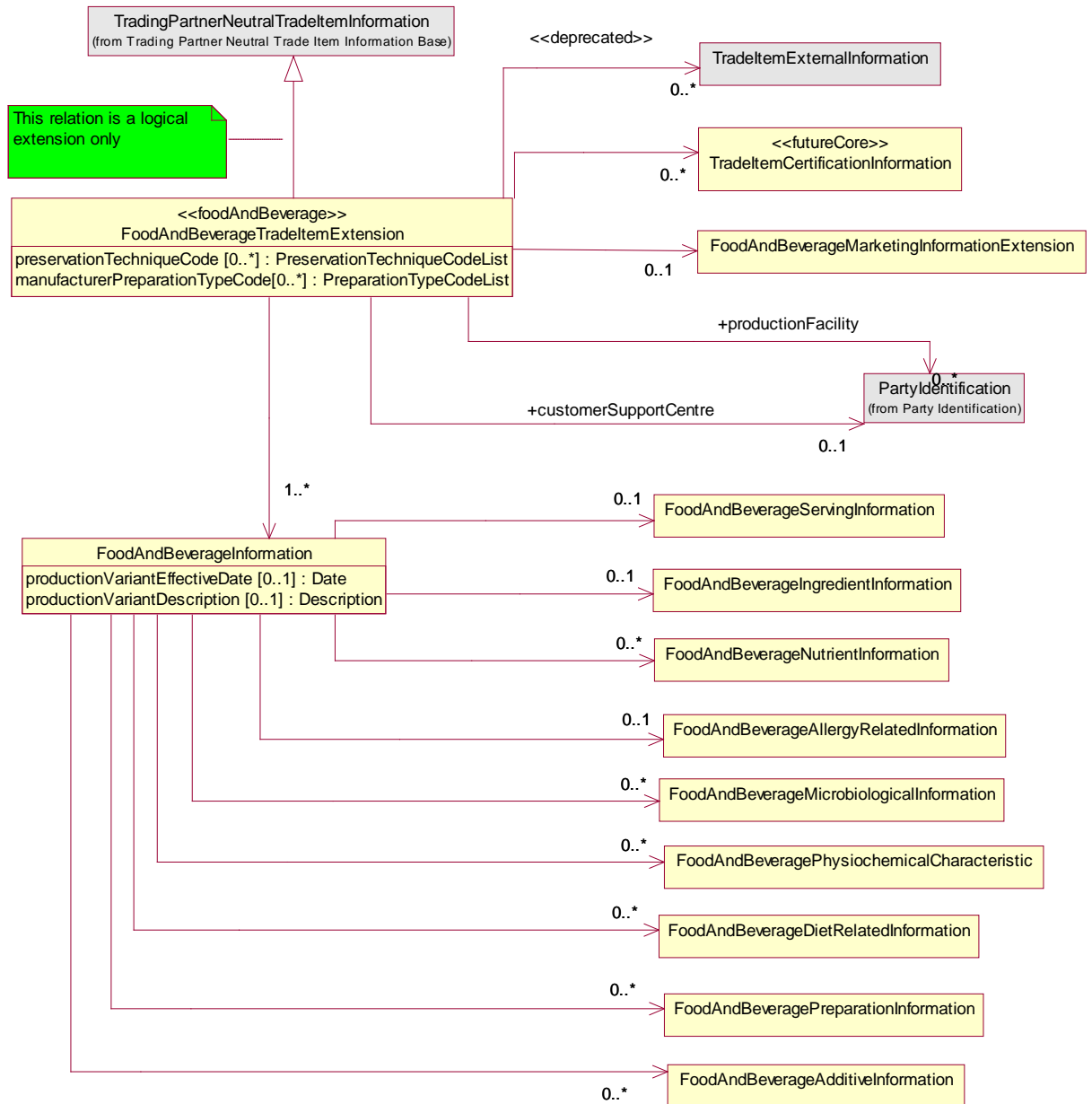
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	numberOfServingsPerPackage			Food And Beverage Serving Information. Number Of Servings Per Package. Numeric	The total number of servings contained in the package.	0..1		No Restrictions
	numberOfSmallestUnitsPerPackage			Food And Beverage Serving Information. Number Of Smallest Units Per Package. Numeric	The total number of smallest units contained in the package. The smallest unit cannot be further divided without breaking or slicing the product. Example: 10 pancakes.	0..1		No Restrictions
FoodAndBeverageTradeItemExtension				Food And Beverage Trade Item Extension. Details	This extension contains trading partner neutral data elements that are specific to food and beverage products.			
	manufacturerPreparationTypeCode			Food And Beverage Trade Item Extension. Manufacturer Preparation Type Code. Preparation Type_Code	An indication of the preparation methods that a manufacturer has used on a particular ingredient.	0..*		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
	preservationTechniqueCode			Food And Beverage Trade Item Extension. Preservation Technique Code. Code	Code value indicating the preservation technique used to preserve the product from deterioration.	0..*		Facets constrained by code list values
			Food And Beverage Information	Food And Beverage Trade Item Extension. Association. Food And Beverage Information	This information on FoodAndBeverageInformation for FoodAndBeverageTradeItemExtension	1..*		
			Food And Beverage Marketing Information Extension	Food And Beverage Trade Item Extension. Association. Food And Beverage Marketing Extension	This information on FoodAndBeverageMarketingInformationExtension for FoodAndBeverageTradeItemExtension	0..1		
		customerSupportCenter	Party Identification	Food And Beverage Trade Item Extension. Customer Support Center. Party Identification	Identifies the customer support centre for the trade item. The information recipient may use this GLN to look up the telephone number of the identified Support Centre.	0..1		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Related Requirement	Facets
		productionFacility	PartyIdentification	Food And Beverage Trade Item Extension. Production Facility. Party Identification	Identifies the facility where the product is being produced. Enables users to identify and look up the name of the facility where the product has been produced. E.g. Bowmanville or West Side etc.	0..*		
			TradeItemCertificationInformation	Food And Beverage Trade Item Extension. Association. Trade Item Certification Information	This information on TradeItemCertificationInformation for FoodAndBeverageTradeItemExtension	0..*		
TradeItemCertificationInformation				Trade Item Certification Information. Details	Information on certification standards to which the trade item complies.			
	certificationAgency			Trade Item Certification Information. Certification Agency. Text	Name of the organization issuing the certification standard or other requirement being met. Free text field. Example: European Union	1..1		Unbounded
	certificationStandard			Trade Item Certification Information. Certification Standard. Text	Name of the certification standard. Free text. Example: Egg classification.	1..1		Unbounded
		certificationValue	MultiDescription	Trade Item Certification Information. Certification Value. Multi Description	The product's certification standard value. Example: 4	1..1		



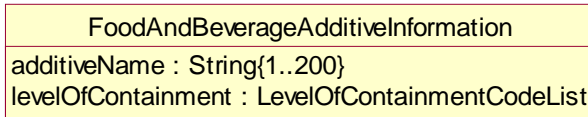
5.2. Class Diagrams



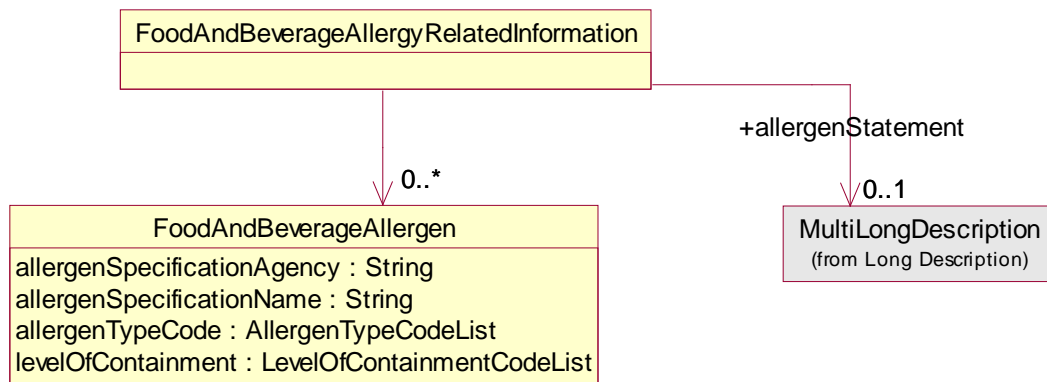
Note: The relationship between the extension and the Trading Partner Neutral Trade Item Information class is logical only and does not designate the physical location of the extension tag in the Schema. This relationship states that, logically, the information contained in the extension belongs with other Trading Partner Neutral Trade Item Information such as packaging marking and item dimensions. The physical placement of the extension tag is a technical decision as long as it allows the implementers to relate the extensions to a specific trade item.

Release Note: In the next major release customerSupportCentre and productionFacility will be deleted. These attributes are replaced by Trade Item Contact Information (for the contact type of customer support centre) and manufacturingPlantIdentification which have been added to the Core Trade Item for Release 2.7. It is recommended that these new core item attributes be used starting with Release 2.7.

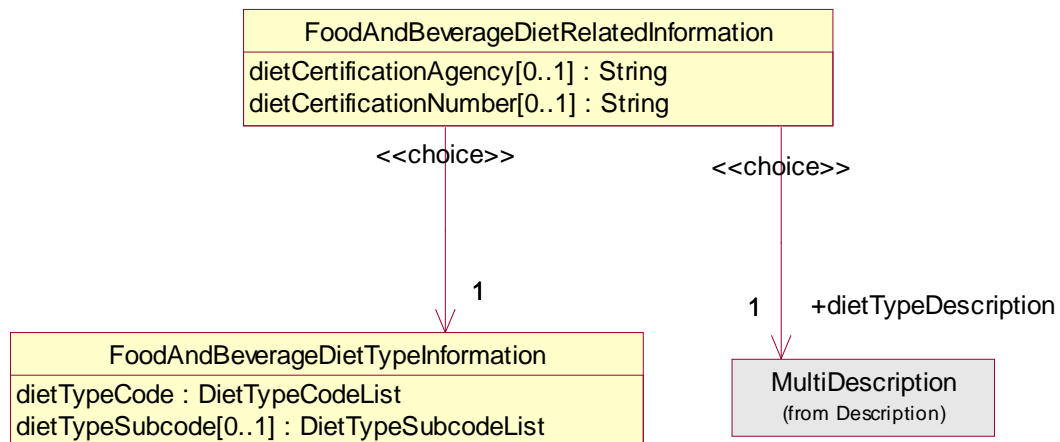
5.2.1. Food And Beverage Additive Information



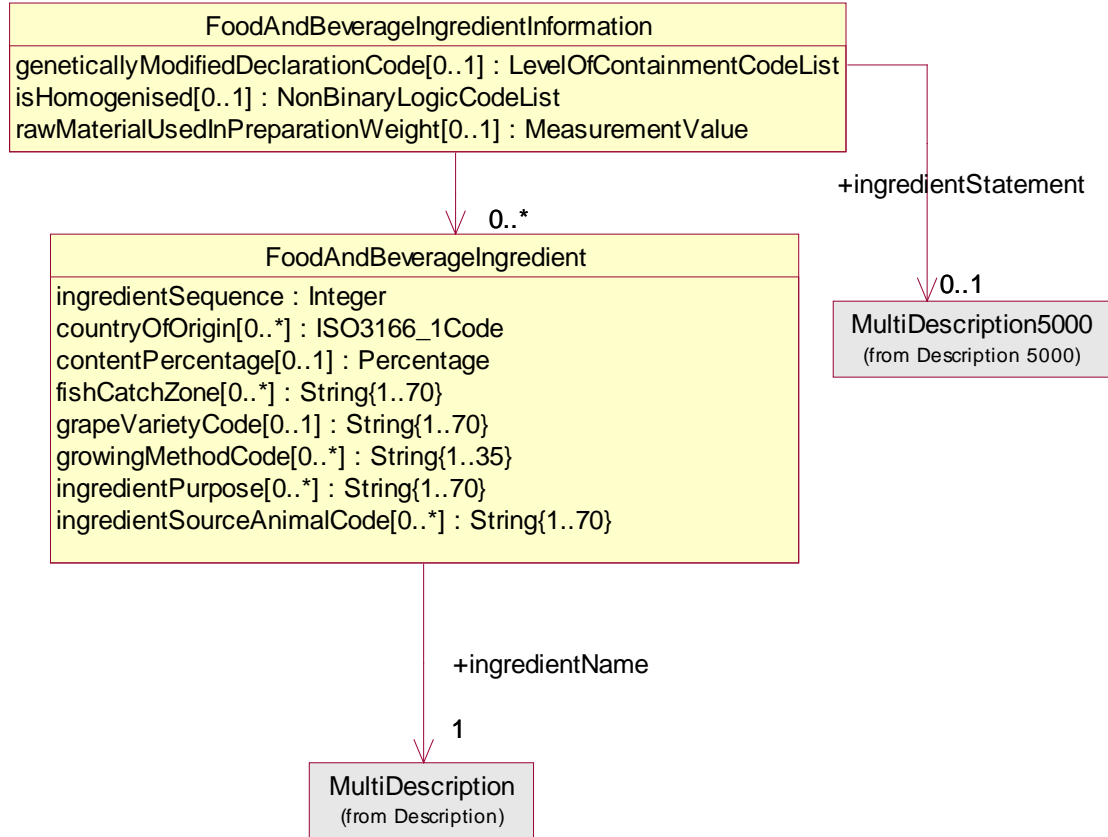
5.2.2. Food And Beverage Allergy Related Information



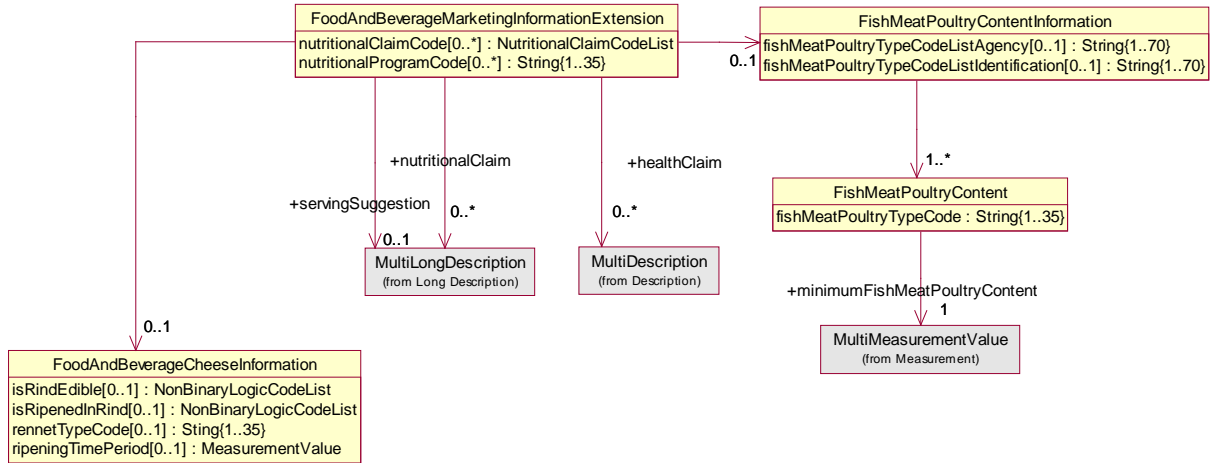
5.2.3. Food And Beverage Diet Related Information



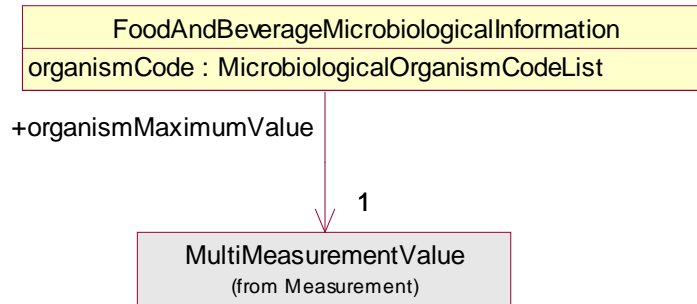
5.2.4. Food And Beverage Ingredient Information



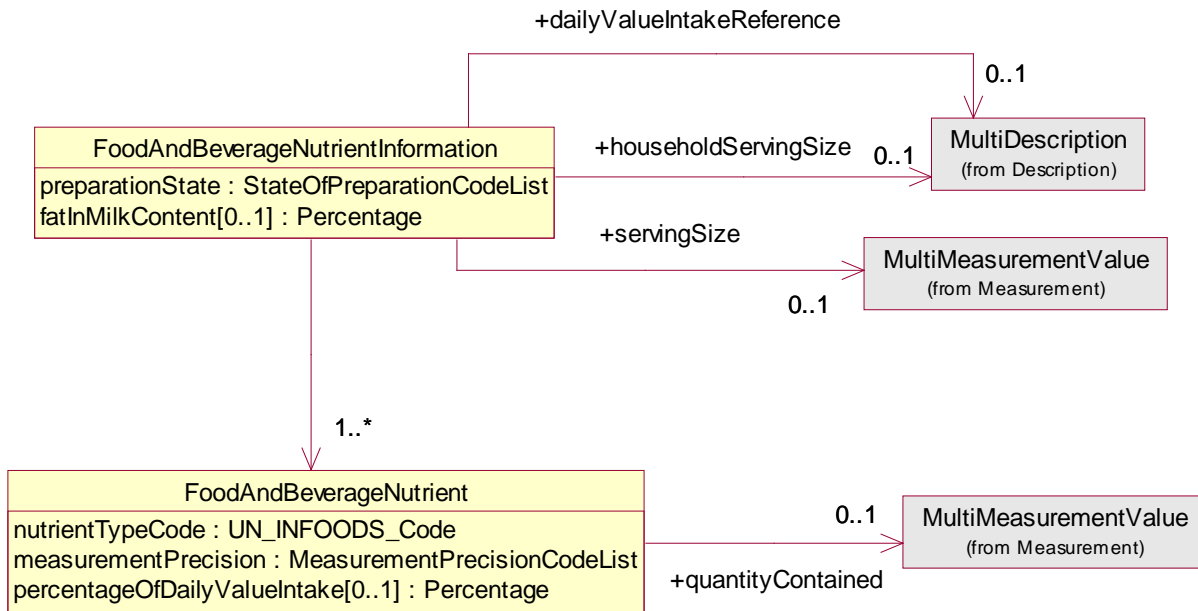
5.2.5. Food And Beverage Marketing Information Extension



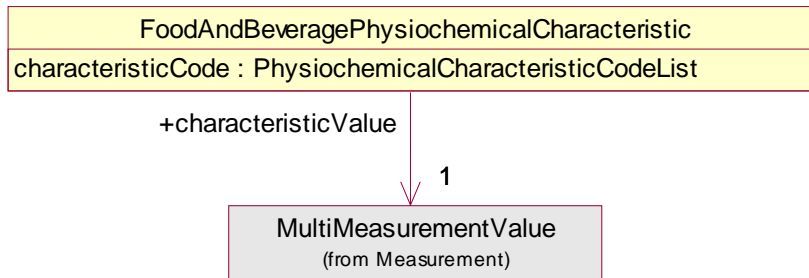
5.2.6. Food And Beverage Microbiological Information



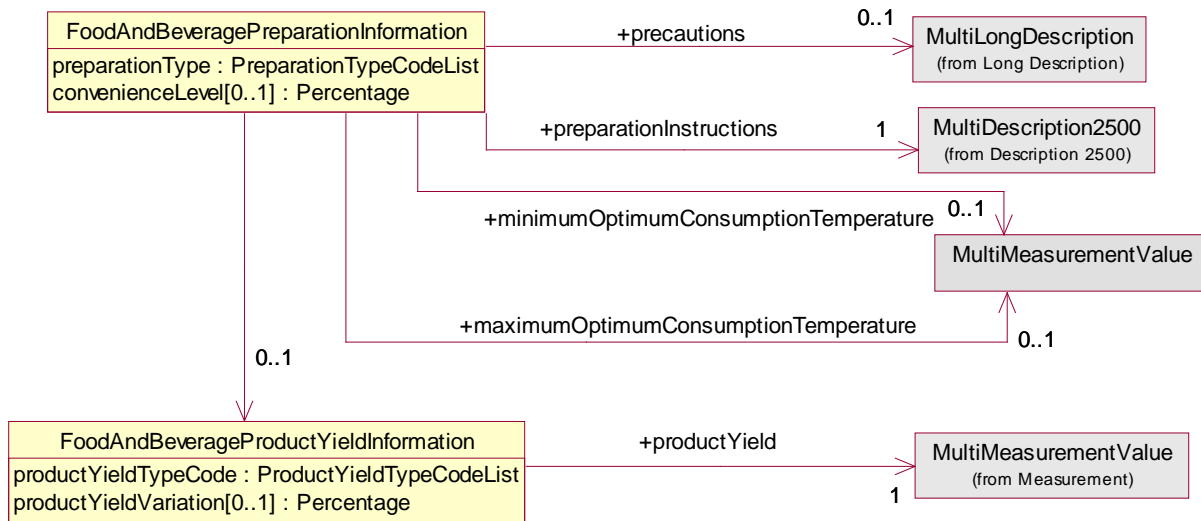
5.2.7. Food And Beverage Nutrient Information



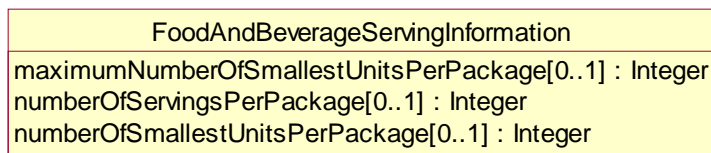
5.2.8. Food And Beverage Physiochemical Characteristic



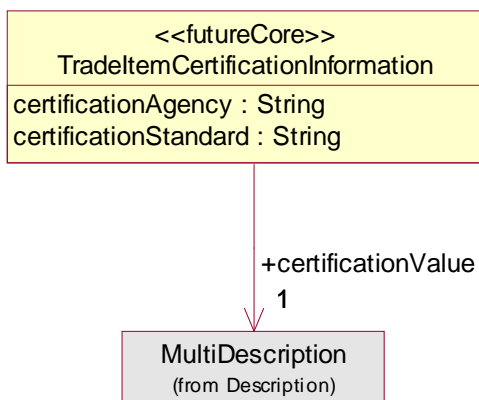
5.2.9. Food And Beverage Preparation Information



5.2.10. Food And Beverage Serving Information



5.2.11. Trade Item Certification Information



5.3. Code Lists

5.3.1. Internal Code Lists

Code List Name	Code List Description
AllergenTypeCodeList	Code indicating the allergen.
Code Name	Code Description
AC	Refers to the presence of Crustaceans and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AE	Refers to the presence of eggs and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AF	Refers to the presence of Fish and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AM	Refers to the presence of milk and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AN	Refers to the presence of nuts and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AP	Refers to the presence of peanuts and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AS	Refers to the presence of sesame seeds or their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AU	Refers to the presence of Sulphur Dioxide and Sulphites in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AW	Refers to the presence of Cereals containing gluten and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
AY	Refers to the presence of soybeans and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
BC	Refers to the presence of celery or their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
BM	Refers to the presence of mustard or their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NC	Refers to the presence of cocoa and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName

NK	Refers to the presence of coriander and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NL	Refers to the presence of Lupine and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NM	Refers to the presence of corn and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NP	Refers to the presence of pod fruits and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NR	Refers to the presence of rye and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
NW	Refers to the presence of carrot and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
UM	Refers to the presence of molluscs and their derivatives in the product, as listed in as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName
UW	Refers to the presence of wheat and their derivatives in the product, as listed in the regulations specified in AllergenSpecificationAgency and AllergenSpecificationName

Code List Name	Code List Description
DietTypeCodeList	Code list or enumerated list of values indicating the target group the product is suitable for.
Code Name	Code Description
DIETETIC	Denotes a product that is specially prepared or processed for people on restrictive diets.
HALAL	Denotes selling or serving food ritually fit according to Islamic dietary laws.
KOSHER	Denotes selling or serving food ritually fit according to Jewish dietary laws.
ORGANIC	Denotes a food product that was produced with the use of feed or fertilizer of plant or animal origin, without employment of chemically formulated fertilizers, growth stimulants, antibiotics or pesticides.
VEGAN	Denotes a product that contains no dairy or animal ingredients.
VEGETARIAN	Denotes a product that contains no meat, fish or other animal products.
WITHOUT_BEEF	Denotes a product that contains no beef or beef-products. Beef is considered to be a taboo food product by some religions most notable Hinduism, Buddhism and Jainism
WITHOUT_PORK	Denotes a product that contains no pork meat

Code List Name	Code List Description
DietTypeSubCodeList	Code list or enumerated list of values indicating type of diet product is suitable for.
Code Name	Code Description
CIRCLE_U	Kosher food product that is certified by the Union of Orthodox Jewish Congregations (www.ou.org)
CRC	Kosher food product certified by the Chicago rabbinical council (www.crcweb.org)
K	Kosher food product that is certified by the OK Kosher Certification (www.ok.org)
K_DAIRY	Kosher food product certified by the Chicago rabbinical council (www.crcweb.org)
K_PAREVE	Kosher food product certified by the Chicago rabbinical council (www.crcweb.org)
KOF_K	Kosher food product that is certified by the KOF-K Kosher Supervision (www.kof-k.org)□
KOF_K,DAIRY	Kosher food product that is certified by the KOF-K Kosher Supervision (www.kof-k.org)□
KSR_OVRSR	Kosher food product that is certified by the Grand rabbinat du Quebec (www.rabbinat.qc.ca)
KVHD	Kosher food product certified by the Massachusetts Vaad
OK_PAREVE	Kosher food product that is certified by the OK Kosher Certification (www.ok.org)
OU	Kosher food product certified by the orthodox union (www.ou.org)
OU_DAIRY	Kosher food product certified by the orthodox union (www.ou.org)
OU_KOF_K	Kosher food product certified by the orthodox union (www.ou.org)
OU_KOF_K_DAIRY	Kosher food product certified by the orthodox union (www.ou.org)
OU_PAREVE	Kosher food product certified by the orthodox union (www.ou.org)
STAR_K	Kosher food product that is certified by STAR-K Kosher Certification (www.star-k.com)

Code List Name	Code List Description
LevelOfContainmentCodeList	Code indicating the level of presence.
Code List Name	Code List Description
CONTAINS	Intentionally included in the product
FREE_FROM	The product is free from the indicated substance
MAY_CONTAIN	The substance is not intentionally included, but due to shared production facilities or other reasons, the product may contain the substance

Code List Name	Code List Description
MeasurementPrecisionCodeList	Codes indicating the exactness of the method used to analyze the nutritional value.
Code Name	Code Description
APPROXIMATELY	The method used to analyse the products resulted in approximate value of the nutritional content
EXACT	The method used to analyse the products resulted in exact value of the nutritional content
LESS_THAN	To indicate presence when the measurement value is too small to be measured precisely (rule states less than 0.5)

Code List Name	Code List Description
MicrobiologicalOrganismCodeList	Codes identifying microbiological organisms.
Code Name	Code Description
BACILLUS_CEREUS	To indicate the value of bacillus cereus
CAMPYLOBACTER	To indicate the value of campylobacter
CLOSTRIDIUM_PERFRINGENS	To indicate the value of clostridium perfringens
COLIFORMS_AT_30_DEGREES_C	To indicate the value of coliforms at 30°c
COLIFORMS_AT_44_DEGREES_C	To indicate the value of coliforms at 44°c or faecal coliforms
ENTEROBACTERIA	To indicate the value of enterobacteria
ESCHERICHIA_COLI	To indicate the value of escherichia coli
ESCHERICHIA_COLI_O157_H7	To indicate the value of escherichia coli o157:h7
FAECAL_STREPTOCOCCI	To indicate the value of faecal_streptococci
FUNGI	To indicate the value of FUNGI

HAEMOLYTIC_STREPTOCOCCI	To indicate the value of haemolyticstreptococci
HAFNIA_ALVEI	To indicate the value of hafnia alvei
LISTERIA_MONOCYTOGENES	To indicate the value of listeria monocytogenes
MESOPHILIC_AEROBES	To indicate the value of mesophilic aerobes
MESOPHILIC_ANAEROBES	To indicate the value of mesophilic anaerobes
MILK-ACID	To indicate the value of milk-acid
MOULDS	To indicate the value of moulds
PATHOGENEN	To indicate the value of Pathogenen
POSITIVE_COAGULASE_STAPHYLOCOCCI	To indicate the value of positive coagulase staphylococci
PSEUDOMONAS	To indicate the value of pseudomonas
SALMONELLA	To indicate the value of Salmonella mesophilic aerobes
STAPHYLOCOCCUS_AUREUS	To indicate the value of staphylococcus aureus
STAPHYLOCOCCUS_ENTEROTOXIN	To indicate the value of staphylococcus enterotoxin
SULPHITE_REDUCER_ANAEROBES_AT_46_DEGREES_C	To indicate the value of sulphite-reducer anaerobes 46°C
SULPHITE_REDUCER_CLOSTRIDIUM_AT_46_DEGREES_C	To indicate the value of sulphite-reducer clostridium 46°C
THERMOPHILIC_AEROBES	To indicate the value of thermophilic aerobes
THERMOPHILIC_ANAEROBES	To indicate the value of thermophilic anaerobes
VIBRIO_CHOLERAEE	To indicate the value of vibriocholerae
VIBRIO_PARAHAEMOLYTICUS	To indicate the value of vibrio parahaemolyticus
YEASTS	To indicate the value of yeasts

Code List Name	Code List Description
PhysiochemicalCharacteristicCodeList	Codes identifying physiochemical characteristics.
Code Name	Code Description
AFLATOXIN_B1_LESS_THAN	To indicate the value of aflatoxin B1 (stated in less than X microgram per kilogram)
AFLATOXIN_B2_LESS_THAN	To indicate the value of aflatoxin B2 (stated in less than X microgram per kilogram)
AFLATOXIN_G1_LESS_THAN	To indicate the value of aflatoxin G1 (stated in less than X microgram per kilogram)
AFLATOXIN_G2_LESS_THAN	To indicate the value of aflatoxin G2 (stated in less than X microgram per kilogram)

AFLATOXIN_M1_LESS_THAN	To indicate the value of aflatoxin M1 (stated in less than X microgram per kilogram)
CADMIUM_LESS_THAN	To indicate the value of mercury (stated in less than X microgram per kilogram)
LEAD_LESS_THAN	To indicate the value of mercury (stated in less than X microgram per kilogram)
MERCURY_LESS_THAN	To indicate the value of mercury (stated in less than X microgram per kilogram)
MYCOTOXINS	To indicate the value of mycotoxins
OCHRATOXIN_A	To indicate the value of ochratoxin A (stated in less than X microgram per kilogram)
PENETROMY	To indicate the firmness (density) of the pulp in fruits and vegetables
TARGET_ACIDITY	To indicate the target acidity of the product
TARGET_DEGREE_BRX	Brix degree is the weight (in grams) of dry material contained in 100 grams of a distilled water solution
TARGET_DENSITY	To indicate the target density of the product
TARGET_DRY_MATERIAL	Target material quantity after total dehydration of the product (constant weight)
TARGET_FAT	To indicate the target value of fat
TARGET_FAT_ON_DRY_BASIS	Target fat material proportion on dry material of the product
TARGET_HUMIDITY	Target quantity of the water vapour contained in the product
TARGET_INHIBITOR	Substance target quantity which jams or delays a chemical reaction
TARGET_NEUTRALISING_AGENT	Substance target quantity which avoids the realisation of a chemical reaction
TARGET_NON-FAT_DRY_SOLIDS	Target dry material quantity of the product minus fat material
TARGET_PH	Measure of the target acidity or alkalinity of a solution
TARGET_PH_OLEIC_ACIDITY	To indicate the target value of PH oleic acidity of the product
TARGET_PROTEIN_RATE	To indicate the target value of protein rate
TARGET_SPECIFIC_GRAVITY	To indicate the target specific gravity of the product
TARGET_VISCOSITY	Target resistance property to the flow
TARGET_WATER_ACTIVITY	Target chemical's potential of the water in the substance: it defines the foods shelf life
WEIGHT_DENSITY	The volume of 1 measurement (e.g. LB) of water divided by the volume of 1 measurement (e.g.) of the product.

Code List Name	Code List Description
PreparationTypeCodeList	Codes indicating the type of preparation of a product.
Code Name	Code Description
BAKING	Cooking food in an oven by dry heat applied evenly throughout the oven

BARBECUING	Method of cooking meat with the heat and hot gasses of a fire
BLANCHING	Food preparation wherein the food substance is rapidly plunged into boiling water and then removed after a brief, timed interval and then plunged into iced water or placed under cold running water
BLIND_BAKING	Baking a pie crust or other pastry without the filling
BOILING	Cooking food in boiling water, or other water-based liquid such as stock or milk
BRAISING	Cooking with "moist heat", typically in a covered pot with a small amount of liquid
BROILING	Cooking food with high heat with the heat applied directly to the food, most commonly from above. Heat transfer to the food is primarily via radiant heat
DEEP_FRYING	Cooking method whereby food is submerged in hot oil or fat.
DOUBLE_STEAMING	Cooking technique to prepare delicate food such as bird nests, shark fins etc. The food is covered with water and put in a covered ceramic jar
FRYING	Cooking of food in fat.
GRIDDLE_FRYING	Form of cooking where the food is fried with its own fat.
GRILLING	Form of cooking that involves direct heat. The definition varies widely by region and culture
MICROWAVING	Cooking food by employing microwave radiation
PAN_FRYING	Form of frying characterized by the use of less cooking oil than deep frying
POACHING	Cooking food by gently simmering food in liquid, generally water, stock or wine
PRESSURE_COOKING	Method of cooking in a sealed vessel that does not permit air or liquids to escape below a preset pressure
PRESSURE_FRYING	Meat and cooking oil are brought to high temperatures while pressure is held high enough that the water within is prevented from boiling off
READY_TO_EAT	Besides unpacking no additional preparation required.
RECONSTITUTING	Restore a dry or concentrated food to its original strength or consistency by adding water.
ROASTING	Cooking method that utilizes dry heat, whether an open flame, oven, or other heat source.
ROTISSERIE	Style of roasting where meat is skewered on a spit and revolves over a flame
SAUTÉING	Cooking food using a small amount of fat in a shallow pan over relatively high heat
SEARING	Technique used in grilling, roasting, braising, sautéing, etc. That cooks the surface of the food (usually meat, poultry or fish) at high temperature so that a caramelized crust forms
SIMMERING	Cook food by heating it in water kept just below the boiling point (same as coddling)

SMOKING	Process of curing, cooking, or seasoning food by exposing it for long periods of time to the smoke from a wood fire
STEAMING	Cooking by first boiling the water so it will evaporate into steam, then the steam will carry heat to the food, thus achieving heating the food
STEWING	Preparing meat cut into smaller pieces or cubes by simmering it in liquid, usually together with vegetables
STIR_FRYING	Chinese cooking technique used because of its fast cooking speed

Code List Name	Code List Description
***PreservationTechniqueCodeList	Codes indicating types of preservation techniques.
Code Name	Code Description
ACIDIFICATION	Dropping pH of food
ALCOHOL_CURING	Treatment of food by adding alcohol in order to preserve the product
ATTESTED_MILK	Raw milk (without heat treatment)
BOILING	Trade Item or Ingredient has been raised to or above the boiling temperature. (used in heat treatment of milk)
BRINING	Water saturating or strongly impregnating with salt
CANNING	Preserved in a sealed airtight container, usually made of tin-coated iron
COLD_SMOKE_CURING	To smoke the food at between 70 degrees to 90 degrees F.
CONSERVE	Keep from harm or damage
DEHYDRATION	To remove water from food
DRYING	Making with moisture having evaporated, drained away
FERMENTATION	Any of a group of chemical reactions induced by living or nonliving ferments that split complex organic compounds into relatively simple substance
FREEZE_DRYING	Preserving food by freezing and then drying in a vacuum
FREEZING	Turning into ice or another solid by cold
HIGH_TEMPERATURE_TREATED_MILK	Legally also pasteurisation, MHD for longer (about 2 to 3 weeks), ESL-milk
HOT_SMOKE_CURING	Hot-smoking partially or totally cooks the food by treating it at temperatures ranging from 100 degrees to 190 degrees F
IONISATION	To convert into an ion or ions
IRRADIATION	Food irradiation is the process of exposing food to ionizing radiation in order to disinfest, sterilize, or preserve food.
PASTEURISATION	Partially sterilisation by heating
QUICK_FREEZING	Freezing (food) rapidly so as to preserve its qualities
SALT_CURING	Preserving by using a salt brine

SOUS_VIDE	Low temperature long time cooking under vacuum
STERILISATION	A process that effectively kills or eliminates transmissible agents (such as fungi, bacteria, viruses, spore forms, etc.).
SUGAR_CURING	Treatment of food by adding sugar in order to preserve the product
ULTRA_HIGH_TEMPERATURE	Ultra heat treated (especially for milk)
UNDER_MODIFIED_ATMOSPHERE	Packed with a gas with protective properties
VACUUM_PACKED	Sealed after the partial removal of air

Code List Name	Code List Description
ProductYieldTypeCode List	Codes identifying the type of product yield measurement.
Code Name	Code Description
AFTER_COOKING	Weight or volume of food product after it has been prepared
AFTER_DILUTION	Volume of food product after a fluid has been added
DRAINED_WEIGHT	Weight of food product after the fluid in which the food product was preserved has been removed

Code List Name	Code List Description
NutritionalClaimCodeList	Codes indicating types of Nutritional Claims. Code definitions are based on EC regulation 2003/0165
Code Name	Code Description
ENERGY_FREE	A claim that a food is energy-free, and any claim likely to have the same meaning for the consumer, may only be made where the product contains less than 4kcal (17kj)/100ml. In the case of energy-free foods, the term "naturally" may be used as a prefix to this claim.
ENERGY_REDUCED	A claim that a food is energy-reduced, and any claim likely to have the same meaning for the consumer, may only be made where the energy value is reduced by at least 30%, with an indication of the characteristic(s), which make(s) the food reduced in its total energy value.
ENRICHED_OR_FORTIFIED_IN_VITAMIN_S_AND_OR_MINERALS	A claim that a food is enriched or fortified in vitamins and/or minerals, and any claim likely to have the same meaning for the consumer, may only be made where the product contains the vitamins and/or minerals in at least a significant amount as defined in the Annex of Directive 90/496/EEC.
FAT_FREE	A claim that a food is fat-free, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.5g of fat per 100g or 100ml. However, claims expressed as "X% fat-free" shall be prohibited. In the case of foods naturally fat-free, the term "naturally" may be used as a prefix to this claim.

HIGH_FIBRE	A claim that a food is high in fibre, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least 6g of fibre per 100g or at least 3g of fibre per 100kcal. In the case of foods naturally high in fibre, the term "naturally" may be used as a prefix to this claim.
HIGH_PROTEIN	A claim that a food is high in protein, and any claim likely to have the same meaning for the consumer, may only be made where at least 20% of the energy value of the food is provided by protein. In the case of foods naturally high in protein, the term "naturally" may be used as a prefix to this claim.
HIGH_VITAMINS_AND_OR_MINERALS	A claim that a food is high in vitamins and/or minerals, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least twice the value of "source of vitamins and minerals". In case of foods naturally high in vitamins and/or minerals, the term "naturally" may be used as a prefix to this claim.
LIGHT_LITE	A claim stating that a product is "light" or "lite", and any claim likely to have the same meaning for the consumer, shall follow the same conditions as those set for the term "reduced"; the claim shall also be accompanied by an indication of the characteristic(s) which make the food "light" or "lite".
LOW_ENERGY	A claim that a food is low in energy, and any claim likely to have the same meaning for the consumer, may only be made where the product contains less than 40 kcal (170 kj)/100g and less than 20kcal (80kj)/100ml. In the case of foods naturally low in energy, the term "naturally" may be used as a prefix to this claim.
LOW_FAT	A claim that a food is low in fat, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 3g of fat per 100g or 1.5g of fat per 100ml. In the case of foods naturally low in fat, the term "naturally" may be used as a prefix to this claim.
LOW_SATURATED_FAT	A claim that a food is low in saturated fat, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 1.5g of saturates per 100g for solids or, 0.75g of saturates per 100ml for liquids and in either case saturated fat must not provide more than 10% of energy. In the case of foods naturally low in saturated fat, the term "naturally" may be used as a prefix to this claim.
LOW_SODIUM_SALT	A claim that a food is low in sodium, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.12g of sodium, or the equivalent value for salt, per 100g or per 100ml. In the case of foods naturally low in sodium, the term "naturally" may be used as a prefix to this claim.
LOW_SUGARS	A claim that a food is low in sugars, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 5g of sugars per 100g or 100ml. In the case of foods naturally low in sugars, the term "naturally" may be used as a prefix to this claim.
NATURAL_SOURCE_OF_VITAMINS_AND_OR_MINERALS	A claim that a food is a natural source of vitamins and/or minerals, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least 15% of the recommended daily allowance specified in the Annex of Council Directive 90/496/EEC per 100 g or 100 ml.

SATURATED_FAT_FREE	A claim that a food does not contain saturated fat, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.1g of saturated fat per 100g or 100ml. In the case of foods naturally saturated fat-free, the term "naturally" may be used as a prefix to this claim.
SODIUM_FREE_OR_SALT_FREE	A claim that a food is sodium-free, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.005g of sodium, or the equivalent value for salt, per 100g. In the case of foods naturally sodium-free, the term "naturally" may be used as a prefix to this claim.
SOURCE_OF_FIBRE	A claim that a food is a source of fibre, and any claim likely to have the same meaning for the consumer, may only be made where the product contains at least 3g of fibre per 100g or at least 1.5g of fibre per 100kcal. In the case of foods that are naturally sources of fibre, the term "naturally" may be used as a prefix to this claim.
SOURCE_OF_PROTEIN	A claim that a food is a source of protein, and any claim likely to have the same meaning for the consumer, may only be made where at least 12% of the energy value of the food is provided by protein. In the case of foods that are naturally sources of protein, the term "naturally" may be used as a prefix to this claim.
SUGARS_FREE	A claim that a food is sugars-free, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.5g of sugars per 100g or 100ml. In the case of foods naturally sugars-free, the term "naturally" may be used as a prefix to this claim.
VERY_LOW_SODIUM_SALT	A claim that a food is very low in sodium, and any claim likely to have the same meaning for the consumer, may only be made where the product contains no more than 0.04g of sodium, or the equivalent value for salt, per 100g or per 100 ml. In the case of foods naturally very low in sodium, the term "naturally" may be used as a prefix to this claim.
WITH_NO_ADDED_SUGARS	A claim stating that sugar has not been added to a food, and any claim likely to have the same meaning for the consumer, may only be made where the product does not contain any added mono- or disaccharides or any other food used for its sweetening properties.

Code List Name	Code List Description
StateOfPreparationCodeList	Codes indicating the state of preparation of a product.
Code Name	Code Description
PREPARED	The state of the product after preparation (e.g. after adding milk or water)
UNPREPARED	The initial state of a product

5.3.2. External Code Lists

Class Name	Attribute Name	Code List
FoodAndBeverageCheeseInformation	rennetTypeCode	RennetTypeCodeList
FoodAndBeverageMarketingInformationExtension	nutritionalProgramCode	nutritionalProgramCode
FoodAndBeverageIngredient	grapeVarietyCode	GPC Attribute Descriptions for Grape Variety (e.g. MERLOT).
FoodAndBeverageIngredient	growingMethodCode	Growing Method Code List
FoodAndBeverageIngredient	IngredientSourceAnimalCode	Source Animal Code

Code List Name	Code List Description
Growing Method Code List	The process through which fresh produce is grown and cultivated.
Code List Name	Code List Description
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, observation, and intervention. It is an ecological approach with a main goal of significantly reducing or eliminating the use of pesticides.

Code List Name	Code List Description
Nutritional Program Code	Programs designed to encourage people to eat a certain way in order to benefit their nutrition for example "5 a Day".
Code List Name	Code List Description
1	5 a day. A program designed to encourage the consumption of at least five portions of fruit and vegetables per day,

Code List Name	Code List Description
Rennet Type Code List	The type of Rennet used for coagulation. The enzyme rennet is use for the coagulation of the cheese mass. Rennet and respectively similar enzymes can be gained through various processes.
Code List Name	Code List Description
ANIMAL_RENNET	Rennet derived from animals.
MICROBIAL_RENNET	Rennet derived from mold and able to produce proteolytic enzymes.
VEGETABLE_RENNET	Rennet derived from vegetable
NO_RENNET	No Rennet

Code List Name	Code List Description
Source Animal Code	The source of raw material used to produce the food product for example a goat for milk expressed as a code.
Code List Name	Code List Description
ALLIGATOR	A crocodylian in the genus Alligator of the family Alligatoridae.
ASS	A domesticated member of the horse family.
BEAR	Mammals of the family Ursidae.
BOAR	A wild relative of the domestic pig.
BUFFALO	A large bovine animal, frequently used as livestock.
CAMEL	Even-toed ungulates within the genus Camelus.
CHICKEN	A domesticated fowl.
COCKEREL	A male chicken.
COW	A domesticated member of the subfamily Bovinae.
CROCODILE	Any species belonging to the family Crocodylidae.
DEER	Ruminant mammals forming the family Cervidae.
DOG	A domesticated form of the Wolf, a member of the Canidae family of the order Carnivora.
DUCK	Aquatic birds, mostly smaller than the swans and geese, and may be found in both fresh water and sea water.
DUCKLING	A young duck.
FROG	Amphibians in the order Anura.
GOAT	A member of the Bovidae family and is closely related to the sheep
GOOSE	A bird belonging to the family Anatidae
GROUSE	A group of birds from the order Galliformes.
GUINEAFOWL	A family of birds in the Galliformes order
HARE	Leporidaes belonging to the genus Lepus.
HORSE	a hoofed (ungulate) mammal, a subspecies of one of seven extant species of the family Equidae.

LAMB	A young domestic sheep.
LAND_SNAIL	A member of the molluscan class Gastropoda that have coiled shells in the adult stage and live on land.
MOOSE	The largest extant species in the deer family.
OSTRICH	Large flightless bird native to Africa.
PARTRIDGE	Medium-sized birds, intermediate between the larger pheasants and the smaller quails.
PHEASANT	A bird in the subfamily of Phasianidae in the order Galliformes.
PIGEON	A bird in the family Columbidae.
PORK	Meat from the domestic pig
POUSSIN	A young chicken, less than 28 days old at slaughter
QUAIL	Several genus of mid-sized birds in the pheasant family.
RABBIT	Small mammals in the family Leporidae of the order Lagomorpha.
RAT	Rats are various medium-sized, long-tailed rodents of the superfamily Muroidea.
REINDEER	An Arctic and Subarctic-dwelling deer, widespread and numerous across the Arctic and Subarctic.
ROE_DEER	A deer species of Europe, Asia Minor, and Caspian coastal regions.
SHEEP	Small ruminants, usually with a crimped hair called wool and often with horns forming a lateral spiral.
SNAKE	Elongate legless carnivorous reptiles of the suborder Serpentes.
SNIPE	Any of nearly 20 wading bird species in three genera in the family Scolopacidae.
SPARROW	Small passerine birds in the family Passeridae.
THRUSH	Plump, soft-plumaged, small to medium-sized passerine birds.
TURKEY	A large bird in the genus Meleagris.
TURTLE	Reptiles characterised by a special bony or cartilaginous shell developed from their ribs that acts as a shield.
WOODCOCK	The woodcocks are a group of seven or eight very similar living species of wading birds in the genus Scolopax.
YAK	A long-haired bovine found throughout the Himalayan region of south Central Asia, the Tibetan Plateau and as far north as Mongolia.

Code List Name		Code List Description
UN INFOODSCode		Codes identifying food components (=nutrients).
	Code Name	Code Description
This is an external code list. For allowed code values see: http://www.fao.org/infoods/tagnames_en.stm		
The following are additional values (controlled by GS1 pending change requests to UN/FAO) are as follows:		
G_CMO	Carbon Monoxide	
G_NICT	Nicotine	
G_NMES	Non-milk Extrinsic Sugars	
G_TAR	Tar	

6. Business Document Example

Class in core item model
Class in common library
Root class in core item model
Class in extension
Attribute

Example 1

TradeltemDocument	
- creationDateTime	2005-06-27T11:00:00
- documentStatus	ORIGINAL
EntityIdentification (+tradeltemDocumentIdentification)	
- uniqueCreatorIdentification	2005B09
PartyIdentification (+contentOwner)	
- gLN	8712345678913
Tradeltem	
- tradeltemUnitDescriptor	BASE_UNIT_OR_EACH
TradeltemIdentification	
- gTIN	10063211038689
TradeltemInformation	
InformationProvider (+informationProviderOfTradeltem)	
- nameOfInformationProvider	Foodservice distributor
PartyIdentification (+informationProvider)	
- gLN	8712345678944
TargetMarketInformation *1	
- targetMarketCountryCode	US
- targetMarketDescription (language, shortText)	EN,United States
TargetMarketInformation *2	
- targetMarketCountryCode	CA
- targetMarketDescription (language, shortText)	EN,Canada
TradeltemDescriptionInformation	
- brandName	Camp's Frozen
MultiShortDescription (+functionalName)	
- description (language, shortText)	EN, Soup
MultiShortDescription (+variant)	

- description (language, shortText)	EN, Homestyle Minestrone
TradeItemDescription	
- language, text	EN, Camp's Frozen Soup Homestyle Minestrone
AdditionalTradeItemDescription	
- language, text	EN, An Italian tradition full of diced carrots, kidney beans, peas and penne pasta.
TradingPartnerNeutralTradeItemInformation	
ManufacturerOfTradeItem	
- nameOfManufacturer	Camp
PartyIdentification (+manufacturer)	
- gLN	8712345678913
MarketingInformation	
- tradeItemFeatureBenefit	Consistent fresh-frozen quality featuring traditional and on-trend varieties. Easy to prepare-simply add water. Less waste-use as little as half a tray. More than forty varieties to meet customer taste preferences. Industry leading merchandising support available.
PackagingMarking	
- isPackagingMarkedReturnable	FALSE
TradeItemUnitIndicator	
- isTradeItemABaseUnit	TRUE
- isTradeItemAConsumerUnit	TRUE
- isTradeItemADespatchUnit	FALSE
- isTradeItemAnInvoiceUnit	FALSE
- isTradeItemAnOrderableUnit	FALSE
- isTradeItemAVariableUnit	FALSE
FoodAndBeverageTradeItemExtension	
- preservationTechniqueCode	FREEZING
PartyIdentification (+customerSupportCentre) *1	
- gLN	8712345678913
PartyIdentification (+productionFacility)	
- gLN	8712345678913
FoodAndBeverageMarketingInformationExtension	
MultiLongDescription (+servingSuggestion)	
- description (language, longText)	As a soup, or ingredient in many of your favourite recipes. Add simple garnishes to create signature soups.
FoodAndBeverageInformation	

- productionVariantEffectiveDate	2005-12-01
FoodAndBeverageIngredientInformation	
MultiDescription5000 (+ingredientStatement)	
- description (language, text)	EN, Water, tomato paste, tomatoes (citric acid, calcium chloride), carrots, red kidney beans, celery, ...
FoodAndBeverageIngredient *	
- ingredientSequence	1
MultiDescription (+ingredientName)	
- description (language, text)	EN, Water
FoodAndBeverageIngredient *	
- ingredientSequence	2
MultiDescription (+ingredientName)	
- description (language, text)	EN, Tomato paste
FoodAndBeverageIngredient *	
- ingredientSequence	3
MultiDescription (+ingredientName)	
- description (language, text)	EN, Tomatoes (citric acid, calcium chloride)
FoodAndBeverageIngredient *	
- ingredientSequence	4
MultiDescription (+ingredientName)	
- description (language, text)	EN, Carrots
FoodAndBeverageIngredient *	
- ingredientSequence	5
MultiDescription (+ingredientName)	
- description (language, text)	EN, Red kidney beans
FoodAndBeverageIngredient *	
- ingredientSequence	6
MultiDescription (+ingredientName)	
- description (language, text)	EN, Celery
FoodAndBeverageIngredient *	
- ingredientSequence	7
MultiDescription (+ingredientName)	
- description (language, text)	EN, Rehydrated potatoes (sodium phosphate)
FoodAndBeverageIngredient *	
- ingredientSequence	8
MultiDescription (+ingredientName)	

- description (language, text)	EN, Italian green beans
FoodAndBeverageIngredient *	
- ingredientSequence	9
MultiDescription (+ingredientName)	
- description (language, text)	EN, Penne pasta (enriched wheat flour, egg white)
FoodAndBeverageIngredient *	
- ingredientSequence	10
MultiDescription (+ingredientName)	
- description (language, text)	EN, Zucchini
FoodAndBeverageIngredient *	
- ingredientSequence	11
MultiDescription (+ingredientName)	
- description (language, text)	EN, Peas
FoodAndBeverageIngredient *	
- ingredientSequence	12
MultiDescription (+ingredientName)	
- description (language, text)	EN, Spinach
FoodAndBeverageIngredient *	
- ingredientSequence	13
MultiDescription (+ingredientName)	
- description (language, text)	EN, Salt
FoodAndBeverageIngredient *	
- ingredientSequence	14
MultiDescription (+ingredientName)	
- description (language, text)	EN, Modified corn starch
FoodAndBeverageIngredient *	
- ingredientSequence	15
MultiDescription (+ingredientName)	
- description (language, text)	EN, Parmesan cheese
FoodAndBeverageIngredient *	
- ingredientSequence	16
MultiDescription (+ingredientName)	
- description (language, text)	EN, Spice
FoodAndBeverageIngredient *	
- ingredientSequence	17
MultiDescription (+ingredientName)	
- description (language, text)	EN, Canola oil

FoodAndBeverageIngredient *	
- ingredientSequence	18
MultiDescription (+ingredientName)	
- description (language, text)	EN, Enriched wheat flour
FoodAndBeverageIngredient *	
- ingredientSequence	19
MultiDescription (+ingredientName)	
- description (language, text)	EN, Garlic powder
FoodAndBeverageIngredient *	
- ingredientSequence	20
MultiDescription (+ingredientName)	
- description (language, text)	EN, Disodium guanylate
FoodAndBeverageIngredient *	
- ingredientSequence	21
MultiDescription (+ingredientName)	
- description (language, text)	EN, Disodium inosinate
FoodAndBeverageIngredient *	
- ingredientSequence	22
MultiDescription (+ingredientName)	
- description (language, text)	EN, Parsley
FoodAndBeverageNutrientInformation	
- preparationState	UNPREPARED
MultiMeasurementValue (+servingSize)	
-measurementValue (unitOfMeasure, value)	GRM, 125
FoodAndBeverageNutrient *1	
- NutrientTypeCode	ENERC
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	kcal, 96
FoodAndBeverageNutrient *2	
- NutrientTypeCode	CHOCDF
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 19.3
FoodAndBeverageNutrient *3	
- NutrientTypeCode	PRO-
- measurementPrecision	APPROXIMATELY

MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 4.1
FoodAndBeverageNutrient *4	
- NutrientTypeCode	FAT
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 0.3
FoodAndBeverageNutrient *5	
- NutrientTypeCode	FASAT
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 0.2
FoodAndBeverageNutrient *6	
- NutrientTypeCode	CHOLC
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	MGM, 1.1
FoodAndBeverageNutrient *7	
- NutrientTypeCode	NA
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	MGM, 1029.6
FoodAndBeverageNutrient *8	
- NutrientTypeCode	FIB-
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 4.5
FoodAndBeveragePreparationInformation	
- preparationType	COOKING
MultiLongDescription (+precautions)	
- description (language, longText)	Do not re-freeze. Do not use if film is torn or missing.
MultiDescription2500 (+preparationInstructions)	
- description (language, text)	Cooking Directions: Remove plastic film. 1)Place 1 tray (2 blocks) of soup in pot. 2)Add one full tray (1.9 L or 8 cups) water and cover. 3)Heat to boiling (min 80C\180F), stirring occasionally. Reduce heat (70C\160F) and cover. Stir periodically.

Example 2

TradeItemDocument	
- creationDateTime	2006-01-12T12:00:00
- documentStatus	ORIGINAL
EntityIdentification (+tradeItemDocumentIdentification)	
- uniqueCreatorIdentification	TRIGIINTERFACE23
PartyIdentification (+contentOwner)	
- gLN	05000118052255
TradeItem	
- tradeItemUnitDescriptor	BASE_UNIT_OR_EACH
TradeItemIdentification	
- gTIN	05000118017354
TradeItemInformation	
InformationProvider (+informationProviderOfTradeItem)	
- nameOfInformationProvider	UNI UK FOODS
PartyIdentification (+informationProvider)	
- gLN	05000118052255
TargetMarketInformation	
- targetMarketCountryCode	UK
- targetMarketDescription (language, shortText)	EN, UNITED KINGDOM
TradeItemDescriptionInformation	
- brandName	NORR
- subBrand	TONIGHTS CHICKEN
MultiShortDescription (+functionalName)	
- description (language, shortText)	SAUCE
AdditionalTradeItemDescription	
- language, text	
MultiShortDescription (+variant)	
- description (language, shortText)	EN, FOR CHICKEN SWEET AND SOUR
TradeItemDescription	
- language, text	EN, NORR TONIGHTS CHICKEN SAUCE FOR CHICKEN SWEET AND SOUR
TradingPartnerNeutralTradeItemInformation	
ManufacturerOfTradeItem	
- nameOfManufacturer	UNI UK FOODS
PartyIdentification (+manufacturer)	
- gLN	05000118052255
PackagingMarking	

- isPackagingMarkedReturnable	FALSE
TradeItemMeasurements	
MultiMeasurementValue (+depth)	
-measurementValue	
MultiMeasurementValue (+height)	
-measurementValue	
TradeItemUnitIndicator	
- isTradeItemABaseUnit	TRUE
- isTradeItemAConsumerUnit	TRUE
- isTradeItemADespatchUnit	FALSE
- isTradeItemAnInvoiceUnit	FALSE
- isTradeItemAnOrderableUnit	FALSE
- isTradeItemAVariableUnit	FALSE
FoodAndBeverageTradeItemExtension	
- preservationTechniqueCode	PASTEURISATION
- preservationTechniqueCode	ACIDIFICATION
PartyIdentification (+productionFacility)	
- gLN	05000118052255
PartyIdentification (+customerSupportCentre) *1	
- gLN	05000118052255
FoodAndBeverageMarketingInformationExtension	
MultiLongDescription (+servingSuggestion)	
- description (language, longText)	EN,SWEET AND SOUR SAUCE FOR CHICKEN CONTAINING PEPPERS AND PINEAPPLE. SERVES 4 HUNGRY PEOPLE
FoodAndBeverageInformation	
- productionVariantEffectiveDate	2006-01-12
- productionVariantDescription	
FoodAndBeverageServingInformation	
- numberOfServingsPerPackage	4
- numberOfSmallestUnitsPerPackage	4
- maximumNumberOfSmallestUnitsPerPackage	6
FoodAndBeverageIngredientInformation	
FoodAndBeverageIngredient *	
- ingredientSequence	1
MultiDescription (+ingredientName)	
- description (language, text)	EN,WATER
FoodAndBeverageIngredient *	
- ingredientSequence	2

MultiDescription (+ingredientName)	
- description (language, text)	EN , SUGAR
FoodAndBeverageIngredient *	
- ingredientSequence	3
MultiDescription (+ingredientName)	
- description (language, text)	EN , ONION
FoodAndBeverageIngredient *	
- ingredientSequence	4
MultiDescription (+ingredientName)	
- description (language, text)	EN , TOMATO PUREE
FoodAndBeverageIngredient *	
- ingredientSequence	5
MultiDescription (+ingredientName)	
- description (language, text)	EN , SPIRIT VINEGAR
FoodAndBeverageIngredient *	
- ingredientSequence	6
MultiDescription (+ingredientName)	
- description (language, text)	EN , TOMATO
FoodAndBeverageIngredient *	
- ingredientSequence	7
- contentPercentage	4%
MultiDescription (+ingredientName)	
- description (language, text)	EN , PINEAPPLE IN JUICE
FoodAndBeverageIngredient *	
- ingredientSequence	8
- contentPercentage	3%
MultiDescription (+ingredientName)	
- description (language, text)	EN , GREEN PEPPERS
FoodAndBeverageIngredient *	
- ingredientSequence	9
MultiDescription (+ingredientName)	
- description (language, text)	EN , CELERY
FishMeatPoultryContentInformation*	
-fishMeatPoultryTypeCodeListAgency	USDA
-fishMeatPoultryTypeCodeListIdentification	Manual Of Food Codes For Individual Intake
FishMeatPoultryContent	
-fishMeatPoultryTypeCode	263

-minimumFishMeatPoultryContent	GRM, 131.25
FoodAndBeverageAdditiveInformation*	
-additiveName	ALUMINUM POTASSIUM SULFATE
- levelOfContainment	MAY_CONTAIN
FoodAndBeverageNutrientInformation	
- preparationState	UNPREPARED
MultiMeasurementValue (+servingSize)	
-measurementValue (unitOfMeasure, value)	GRM, 131.25
FoodAndBeverageNutrient *	
- NutrientTypeCode	ENER-
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	KCAL, 96
FoodAndBeverageNutrient *	
- NutrientTypeCode	PRO
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 0.4
FoodAndBeverageNutrient *	
- NutrientTypeCode	CHOAVL
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 20.8
FoodAndBeverageNutrient *	
- NutrientTypeCode	SUGAR
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 18.7
FoodAndBeverageNutrient *	
- NutrientTypeCode	FAT
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM, 0.1
FoodAndBeverageNutrient *	
- NutrientTypeCode	FASAT
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	MGM, 0.001

FoodAndBeverageNutrient *	
- NutrientTypeCode	FIB
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM,0.5
FoodAndBeverageNutrient *	
- NutrientTypeCode	NA
- measurementPrecision	APPROXIMATELY
MultiMeasurementValue (+quantityContained)	
-measurementValue (unitOfMeasure, value)	GRM,0.19
FoodAndBeverageAllergyRelatedInformation	
- allergenSpecificationAgency	European Union
- allergenSpecificationName	2005/26/EC
- levelOfContainment	CONTAINS
MultiDescription (+allergenTypeName)	
- description (language, text)	CELERY
FoodAndBeverageAllergyRelatedInformation	
- allergenSpecificationAgency	European Union
- allergenSpecificationName	2003/89/EC
- allergenTypeCode	AP
- levelOfContainment	MAY_CONTAIN
FoodAndBeverageDietRelatedInformation	
- dietCertificationAgency	UNI UK FOODS
Food AndBeverageDietTypeInformation	
- dietTypeCode	VEGETARIAN
FoodAndBeveragePreparationInformation *	
- preparationType	BAKING
MultiLongDescription (+precautions)	
- description (language, longText)	EN,Once cooked, the finished dish can be frozen in a suitable container.
MultiDescription2500 (+preparationInstructions)	
- description (language, text)	EN, To Oven cook 1. Preheat oven to 180'c (Gas Mark 4). 2. Pan-Fry 450g boneless chicken* until golden. 3. Place chicken in a casserole dish, stir in the sauce and cover. 4. Cook in the oven for 1 hour (or

	until chicken is fully cooked) * If you prefer chicken pieces, use 900g and allow 10 minutes extra cooking time.
FoodAndBeveragePreparationInformation *	
- preparationType	FRYING
MultiLongDescription (+precautions)	
- description (language, longText)	EN, Once cooked, the finished dish can be frozen in a suitable container.
MultiDescription2500 (+preparationInstructions)	
- description (language, text)	EN, 1. Pan-fry the chicken until golden. 2. Stir in the sauce, cover and simmer for 20 minutes until the chicken is fully cooked.

7. Implementation Considerations

Breaking down ingredient information and allergy statements

Not all suppliers are currently able to break down the ingredient declaration or the allergy statement. That is why ingredients can also be specified in the 'ingredientStatement' attribute and allergen statement in the 'allergenStatement' attribute.

The ingredient (and allergen) split however is needed:

1. To enable structured searches
2. To enable specification of related information per ingredient, such as the content percentage and country of origin.

Production variant, GTIN allocation rules and minor ingredient changes

The GTIN Allocation rules state (<http://www.gs1.org/gtinrules/>) that:

The following changes warrant the allocation of a new GTIN:

1. Formulation change where the consumer is expected to distinguish the new from the old product and order accordingly.
2. Where regulations or other requirements dictate the ability to distinguish the old formulation from the new, e.g. healthcare
3. Where the changes alter the fundamental consumer benefit, e.g. new flavour, aroma, etc
4. Changes that result in a different description (declaration to the consumer)

The following changes do not warrant the allocation of a new GTIN:

1. Minor formulation or characteristic changes that will replace the existing trade item and does not involve any change in the declaration to the consumer (e.g. is not covered by legislation). Examples include: changes for cost reduction reasons without changing the trade item characteristics (e.g. taste, viscosity, minor ingredients change, etc.); changes to the button colour used on fashion items, etc

2. Changes to ingredients as a result of seasonal variations, e.g. yoghurt with seasonal fruit, where the actual fruits within are dependent on the season

The theory of changing a GTIN for every change in product formulation is sound and logical. However it must be remembered that changing a GTIN also requires a change to packaging with subsequent design/packaging and write off consequences. Many formulation changes might not actually require a change to packaging design other than to change the barcode. For instance one might change the technical specification of an ingredient such that the product might now exceed or fail a current allergen claim. This would require a change to a products declaration through GDS but not to packaging. A manufacturer will need to decide whether such a change warrants a change to GTIN with its subsequent costs.

The buyer of a particular product will also need to be able to manage changes of GTINs through their systems carefully. Buyers (in a GDS sense) rightly or wrongly do not like changes to GTINS and tend to treat them all as new listings with subsequent costs and the hassles of introducing the product and changing many systems to accommodate.

The best practice is to use the best before date of a product to distinguish between different variants of the same product. If manufacturers get calls from consumers about allergens etc and manufacturers know that they have multiple variants then they have to ask the consumer to tell the best before date on the consumer unit as well as the GTIN.

8. Testing

This section describes the testing criteria for business solutions.

8.1. Pass / Fail Criteria

No.	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	Not Applicable				

8.2. Test Data

Attribute	Value
See business document example	

9. Appendices

Not Applicable

10. Summary of Changes

Change	BSD Version	Associated CR Number																																				
Class FoodAndBeverageInformation: <ul style="list-style-type: none"> changed cardinality of attribute productionVariantEffectiveDate from 1..1 into 0..1 	0.1.6																																					
Allergen Type Code List: <ul style="list-style-type: none"> added code UW for Wheat 	0.1.6																																					
Added code value to the Physiochemical Characteristic Code List : PENETROMY	0.1.8	06-000198																																				
<ul style="list-style-type: none"> Added code value to Preparation Type Code List: GRIDDLE_FRYING Added code value to Preparation Type Code List: RECONSTITUTING Added FishMeatPoultryContent and sub-classes to FoodAndBeverageMarketingExtension Created class FoodAndBeverageAdditiveInformation added to FoodAndBeverageInformation Changed Code List Name from AllergenLevelOfContainmentCodeList to LevelOfContainmentCodeList in order to enable re-use. Added Genetically Modified Declaration Code to Food And Beverage Ingredients Information Deprecated association to TradeItemExternalInformation as this has been moved to core trade item. 	1.0.0	07-000187																																				
<ul style="list-style-type: none"> Added fishCatchZone to FoodAndBeverageIngredient Added maximumNumberOfSmallestUnitsPerPackage to FoodAndBeverageServingInformation 	1.1.0																																					
<ul style="list-style-type: none"> Added the following for the GDSN MR: <table border="1" data-bbox="284 1249 1263 1877"> <tbody> <tr><td>isRindEdible</td><td>FoodAndBeverageCheeseInformation</td></tr> <tr><td>isRipenedInRind</td><td>FoodAndBeverageCheeseInformation</td></tr> <tr><td>ripeningTimePeriod</td><td>FoodAndBeverageCheeseInformation</td></tr> <tr><td>rennetTypeCode</td><td>FoodAndBeverageCheeseInformation</td></tr> <tr><td>ingredientSourceAnimalCode</td><td>FoodAndBeverageIngredient</td></tr> <tr><td>ingredientPurpose</td><td>FoodAndBeverageIngredient</td></tr> <tr><td>grapeVarietyCode</td><td>FoodAndBeverageIngredient</td></tr> <tr><td>growingMethodCode</td><td>FoodAndBeverageIngredient</td></tr> <tr><td>rawMaterialUsedInProcessingWeight</td><td>FoodAndBeverageIngredientInformation</td></tr> <tr><td>isHomogenised</td><td>FoodAndBeverageIngredientInformation</td></tr> <tr><td>nutritionalProgramCode</td><td>FoodAndBeverageMarketingExtension</td></tr> <tr><td>fatInMilkContent</td><td>FoodAndBeverageNutrientInformation</td></tr> <tr><td>convenienceLevelPercentage</td><td>FoodAndBeveragePreparationInformation</td></tr> <tr><td>maximumOptimumConsumptionTemperature</td><td>FoodAndBeveragePreparationInformation</td></tr> <tr><td>minimumOptimumConsumptionTemperature</td><td>FoodAndBeveragePreparationInformation</td></tr> <tr><td>manufacturerPreparationTypeCode</td><td>FoodAndBeverageTradeItemExtension</td></tr> <tr><td>WEIGHT_DENSITY</td><td>Physiochemical Characteristics Code List</td></tr> <tr><td>ATTESTED_MILK</td><td>PreservationTechniqueCodeList</td></tr> </tbody> </table> 	isRindEdible	FoodAndBeverageCheeseInformation	isRipenedInRind	FoodAndBeverageCheeseInformation	ripeningTimePeriod	FoodAndBeverageCheeseInformation	rennetTypeCode	FoodAndBeverageCheeseInformation	ingredientSourceAnimalCode	FoodAndBeverageIngredient	ingredientPurpose	FoodAndBeverageIngredient	grapeVarietyCode	FoodAndBeverageIngredient	growingMethodCode	FoodAndBeverageIngredient	rawMaterialUsedInProcessingWeight	FoodAndBeverageIngredientInformation	isHomogenised	FoodAndBeverageIngredientInformation	nutritionalProgramCode	FoodAndBeverageMarketingExtension	fatInMilkContent	FoodAndBeverageNutrientInformation	convenienceLevelPercentage	FoodAndBeveragePreparationInformation	maximumOptimumConsumptionTemperature	FoodAndBeveragePreparationInformation	minimumOptimumConsumptionTemperature	FoodAndBeveragePreparationInformation	manufacturerPreparationTypeCode	FoodAndBeverageTradeItemExtension	WEIGHT_DENSITY	Physiochemical Characteristics Code List	ATTESTED_MILK	PreservationTechniqueCodeList	2.0.0	Multiple for MR
isRindEdible	FoodAndBeverageCheeseInformation																																					
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Change		BSD Version	Associated CR Number
HIGH_TEMPERATURE_TREATED_MILK	PreservationTechniqueCodeList		
BOILING	PreservationTechniqueCodeList		
G_CMO	UN_INFODDS		
G_NICT	UN_INFODDS		
G_TAR	UN_INFODDS		
G_NMES	UN_INFODDS		
CONVENTIONAL	growingMethodCodeList		
FIELD_GROWN	growingMethodCodeList		
FLY-FREE	growingMethodCodeList		
GREENHOUSE	growingMethodCodeList		
HYDROPONIC	growingMethodCodeList		
INTEGRATED_PEST_MANAGEMENT	growingMethodCodeList		
ALLIGATOR	Source Animal Code		
ASS	Source Animal Code		
BEAR	Source Animal Code		
BOAR	Source Animal Code		
BUFFALO	Source Animal Code		
CAMEL	Source Animal Code		
CHICKEN	Source Animal Code		
COCKEREL	Source Animal Code		
COW	Source Animal Code		
CROCODILE	Source Animal Code		
DEER	Source Animal Code		
DOG	Source Animal Code		
DUCK	Source Animal Code		
DUCKLING	Source Animal Code		
FROG	Source Animal Code		
GOAT	Source Animal Code		
GOOSE	Source Animal Code		
GROUSE	Source Animal Code		
GUINEAFOWL	Source Animal Code		
HARE	Source Animal Code		
HORSE	Source Animal Code		
LAMB	Source Animal Code		
LAND_SNAIL	Source Animal Code		
MOOSE	Source Animal Code		
OSTRICH	Source Animal Code		
PARTRIDGE	Source Animal Code		
PHEASANT	Source Animal Code		
PIGEON	Source Animal Code		
PORK	Source Animal Code		
POUSSIN	Source Animal Code		
QUAIL	Source Animal Code		
RABBIT	Source Animal Code		
RAT	Source Animal Code		

Change		BSD Version	Associated CR Number
REINDEER	Source Animal Code		
ROE_DEER	Source Animal Code		
SHEEP	Source Animal Code		
SNAKE	Source Animal Code		
SNIFE	Source Animal Code		
SPARROW	Source Animal Code		
THRUSH	Source Animal Code		
TURKEY	Source Animal Code		
TURTLE	Source Animal Code		
WOODCOCK	Source Animal Code		
YAK	Source Animal Code		
Updated Definition for STERILISATION			