



in Europe

## Recommendation on how to handle product variants when selling online

V1.0 - March 2014



## Foreword

In this document GS1 explains the how regulation EU 1169/2011 relates to the identification of products with the GS1 System. An important aspect of the law is the way brand owners will manage variants of a product available simultaneously in the marketplace. Dealing with the identification of product variants is sole responsibility of the brand owner.

## Introduction to the Regulation

EU Regulation 1169/2011 on the provision of food information to consumers is designed to make food labelling easier to understand, so that consumer health is protected and the consumer's right to information that allows them to make informed decisions is guaranteed. It changes existing legislation on food labelling in several ways and most of the rules must be applied by December 2014. The regulation requires specified information, called "mandatory particulars", to appear on the labels of pre-packed food products.

### "Distance Selling"

Article 14 of the regulation states that when pre-packed foods are offered for sale by means of distance communication all the same mandatory particulars, except use by date, must be available in the material supporting the distance selling (usually on a website) and also be available at the moment of delivery.

The business whose name is used to market the food should provide the necessary data to the on-line retailer in advance (although this is not a legal requirement) so that web-pages including the information can be designed. Communication of GS1 standard data usually ensures the relevant data is available so that the requirements can be met.

## Managing Product Changes

A difficulty arises when a food is changed in a way that requires the mandatory data shown on the label to change. In these circumstances there will be a period of time when the old version of the product and the new version coexist in the supply chain. During this period it is not possible for the retailer to know if the version of the product ordered on a website will be available at the time and place the order is picked.

### **Purpose of the document**

This document wants to give guidance to companies across Europe on how to practically use the GS1 Standards and solutions such as GDSN to comply with EU Regulation 1169/2011. It's important to notice that the use of GS1 Standards will never be a guarantee for compliance. The procedures and examples provided focus on handling the challenges set by EU Regulation 1169/2011 (with a focus on the mandatory particulars) and are merely recommendations from GS1. EU Regulation 1169/2011 clearly addresses the Food Business Operators and Distant Food Sellers and identifies these companies as responsables. Should these companies have any practical questions or concerns about the procedures to comply with the regulation, they should contact their trading partners bilaterally, or they can seek guidance with their respective trade associations.

### **Types of changes**

Before describing how Food Business Operators can communicate the information about product changes to the retailers, it's important to notice that this proposal makes a distinction between **two types of product changes**. It's the clear **responsibility of the Food Business Operator to define the type of product change**. Should the Food

Business Operators have any doubt about the interpretation of a change, they should contact their trading partners bilaterally, or they can seek guidance with their respective trade associations.

- **Changes that result in the allocation of a new GTIN according to the GTIN allocation rules<sup>1</sup>:** A separate unique GTIN is required whenever any of the pre-defined characteristics of an item are different in any way that is relevant to the trading process. The guiding principle is that if it's important to distinguish a new trade item from an old trade item, a new GTIN should be assigned.

Some examples when a product should be allocated a new GTIN:

- Adding or removing an allergen (allergen traces declaration are not yet part of the mandatory particulars).
  - Changing the name of the food (regulated product name)  
→ if the name change reflects a change in the nature of the product.
  - A significant change to the list of ingredients which would change consumers' perception of the product.
  - Changing the declared net quantity on the package
- **Changes that don't result in the allocation of a new GTIN according to the GTIN allocation rules<sup>2</sup>:** Because the GTIN allocation rules were developed in a B2B context, supporting the logistical process, it's possible that in some cases a product change will not result in the allocation of a new GTIN. However, in light of EU Regulation 1169/2011, it might be important to inform the consumer about the product change.

## 1. Procedure for product changes that result in a new GTIN

If the Food Business Operator allocates a new GTIN to the changed product, this is the advised procedure to communicate the new product information to the retailers:

- a. As soon as the new specifications of the changed product are known, the supplier enters the new product sheet with the new GTIN in GDSN/GS1 Source.
- b. The supplier uses the attribute **replacedTradeItemIdentification** on the new product sheet in GDSN/GS1 Source to communicate to the retailer which old GTIN this new product sheet replaces.

urn:gs1:gdd:bie:TradeItem.replacedTradeItemIdentification.TradeItemIdentification	
Name :	<b>replacedTradeItemIdentification</b>
Subtype	<b>ASSOCIATION</b>
Type Name :	TradeItemIdentification
Definition :	Indicates the trade item identification of an item that is being permanently replaced by this trade item.
Facets	
Version :	
Cardinality :	0..1

- c. The supplier uses the attribute **effectiveDate** (on the new product sheet) to inform the retailer when the product information for the new GTIN will become valid.

<sup>1</sup> All GTIN allocation rules are available on: <http://www.gs1.org/1/gtinrules/> , Appendix A gives a (purely advisory) overview of what the current GTIN allocation rules say about the Mandatory Particulars of EU 1169/2011.

<sup>2</sup> All GTIN allocation rules are available on: <http://www.gs1.org/1/gtinrules/>

urn:gs1:gdd:bie:TradeItemDateInformation.effectiveDate

Name :	effectiveDate
Subtype	ATTRIBUTE
Type Name :	Date
Definition :	The date on which the information contents of the master data version are valid. Valid = correct or true. This effective date can be used for initial trade item offering, or to mark a change in the information related to an existing trade item. This date would mark when these changes take effect.

By providing the information for the new GTIN to the retailers, they are able to take the necessary actions on their web shop. For example, informing the consumers about the changed products and making it possible to cross-reference between the old and new product (by using the attribute **replacedTradeItemIdentification**). How the retailer will eventually handle the switch from one product to another is their responsibility.

## **2. Procedure for product changes that don't result in a new GTIN**

In some cases it's possible that the GTIN allocation rules will not recommend to allocate a new GTIN. However, to be compliant with EU regulation 1169/2011, the retailer might find it necessary to inform the consumer about the changes to the product. In this case the Food Business Operator should inform the retailer about the changes to the product. He can either decide to follow the first procedure described in this document, and allocate a new GTIN regardless of what the GTIN allocation rules might say. A company is always free to allocate a new GTIN whenever it sees fit.

Or the Food Business Operator can decide to apply the GTIN allocation rules (not allocating a new GTIN) and to apply one of the procedures described below. **In this case the Food Business Operator chooses a more pragmatic approach and accepts the fact that he might not be fully complying with the requirements of EU Regulation 1169/2011.**

There are **two possible procedures** for Food Business Operators that decide not to allocate a new GTIN to a changed product. The choice between these two procedures will depend on how important the Food Business Operator assesses the product change. If it seems important to explicitly indicate the product change to the consumer, the Food Business Operator should decide to communicate the changed product as a product variant (procedure 2.1). If the Food Business Operator decides that it has no added value to communicate the product changes as a separate product variant, he could communicate the product change via procedure 2.2.

### **2.1 Officially notify the retailer about the existence of a new product variant (with the same GTIN):**

Because in the current GS1 systems (GDSN/GS1 Source) it's not possible to have more than one active dataset for the same GTIN, the supplier should use the same dataset of the GTIN, and provide some additional information about the new product variant to the retailer:

- a. The supplier enters the product changes on the existing product sheet in GDSN/GS1 Source. These food label updates should not be communicated too far in advance to avoid that the retailer will show the updated information too early to the consumer.
- b. The supplier changes the date for the attribute effectiveDate to communicate to the retailer when the new information will be valid. In other words, the retailer will be informed in advance about a future product variant that will be available. Via the effectiveDate the retailer is made aware of the **start of the transition period** between two product variants. During this transition period it's possible that the consumer has access to multiple variants of the same product. As indicated in step a, the updates to the product should not be done too far in advance. As a consequence the effective date should also not be put to a date too far in the future. This is to avoid that during a certain period the supplier would

need to communicate other product changes (other than food label changes) to the retailer (e.g. changes in dimensions) that have an effective date that is earlier than the effective date for the food label changes.

Example:

- In January a supplier is aware of a future change to a food label (e.g. change in ingredients). The supplier updates the data in GDSN/GS1 Source and puts the effective date to July.
- In February there's a change to the dimensions of the product and this change will already become effective in March. Because the supplier will change the effective date to March, the retailer will interpret that all changes in GDSN/GS1 Source will become effective in March. As a consequence, also the food label changes will be sent to the web shop in March (which is 4 months too early).
- To avoid this, it's recommended that the supplier waits with the communication of the food label information and only communicates the updates when no other changes need to be communicated.

urn:gs1:gdd:bie:TradeItemDateInformation.effectiveDate	
Name :	effectiveDate
Subtype	ATTRIBUTE
Type Name :	Date
Definition :	The date on which the information contents of the master data version are valid. Valid = correct or true. This effective date can be used for initial trade item offering, or to mark a change in the information related to an existing trade item. This date would mark when these changes take effect.

- c. The supplier uses the attribute **productionVariantEffectiveDate** to give the retailers an indication **when the transition period between two product variants should end**, the retailers could use this information to decide which information to provide on their website. It's recommended that the suppliers enter the Expiry Date (or Best Before Date) of the first production run of the new production variant. If the supplier can't provide an Expiry Date (or Best Before Date), they should provide their best estimation when the data set of the old product variant should be retired. The lifespan of the product could be used as a guideline to calculate a fitting **productionVariantEffectiveDate**. This information could be sent as an update of the product data especially if the supplier doesn't know this information when he sends the initial data set.

Every time the supplier makes a change to the attribute **productionVariantEffectiveDate**, this is a trigger for the retailer to be aware that there's a new product variant for this GTIN.

In the case where the supplier would use a month as best before date, it's recommended to use the first day of that month as **productionVariantEffectiveDate**. For example, March 2014 would become 2014/03/01

In the case where the supplier would use a year as best before date, it's recommended to use the first day of that year as **productionVariantEffectiveDate**. For example, 2014 would become 2014/01/01.

urn:gs1:gdd:bie:FoodAndBeverageInformation.productionVariantEffectiveDate	
Name :	<b>productionVariantEffectiveDate</b>
Subtype	<b>ATTRIBUTE</b>
Type Name :	Date
Definition :	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.

- d. The supplier should enter an identification for the product variant via the attribute **productionVariantDescription** to enhance efficiency of variant management. This is a free text field that allows the manufacturer to describe the product variant. This attribute is mainly intended to allow the supplier to distinguish between different product variants with the same GTIN, by using an internal unique identification key. Since this is a free text field and there's currently no possibility to have a common identification of product variants in Europe (for example via product variant numbers), the retailer should mainly focus on the use of the attribute **productionVariantEffectiveDate** to identify different product variants.

urn:gs1:gdd:bie:FoodAndBeverageInformation.productionVariantdescription	
Name :	<b>productionVariantdescription</b>
Subtype	<b>ATTRIBUTE</b>
Type Name :	Description
Definition :	Free text assigned by the manufacturer to describe the production variant. Examples are: package serie X, package serie Y.
Facets	{1..70}

By following this procedure, the retailers are informed about the existence of the two different product variants, and about the transition period between both of them. As a consequence, retailers are able to take some additional measures on their web shop. E.g. highlighting to the consumer that some product information has changed and that this information might be different from the information on the physical product that will be delivered. The final decision on how to handle the different product variants is up to the retailer. The purpose of this document is to inform the Food Business Operators how they can help the retailers comply with EU Regulation 1169/2011.

## 2.2 Inform the retailer about the product changes without creating a new product variant.

Food Business Operators might find certain product changes less relevant for consumers and can decide to inform the retailer about these changes without creating a new product variant. In this case the Food Business Operator will make the necessary changes to the dataset in GDSN/GS1 Source, but will not communicate the fact there are two product variants that will coexist as described in Procedure 2.1. In other words, the Food Business Operator accepts the responsibility that the retail will not be able to inform the consumer that two product variants could be delivered. The consumer will immediately have access to the new product information, without any warning. Of course, since the retailers are the end responsible according to the regulation, they might find the product change relevant and ask the supplier to provide a description as described in Procedure 2.1 to be able to highlight the product change to the consumer.

## Appendix A: Mapping of 1169/2011 Attributes to GTIN Allocation Rules (purely advisory)

Changing the GTIN provides the opportunity for a variant to be easily differentiated from the previous version. This increases the possibility that the correct variant can be made available for picking and, if it is not available at the pick point, the variant can be presented to the consumer who has ordered it on-line as something different from what they ordered so that they can accept or reject it as they choose. Manufacturers should always change the GTIN if in their opinion there is any risk to consumer health arising from confusing variants during the transition from one variant to another. Manufacturers should also allocate a new GTIN if they believe the change in the product would affect the buying decisions of consumers of that product.

This table is purely advisory.

Mandatory Information	1169/2011 ref.	GTIN Allocation Rule	Consumer health implication	Interpretation	Examples
The name of the food	9.1 a, 17, Annex 6	Same GTIN (Rule 2.4)	Low	If the name change reflects a change in the nature of the product a new GTIN should be allocated. Otherwise the GTIN should remain the same	“Lemon Tart” becomes “Lemon and Lime Tart”: same GTIN “Spicy noodles” becomes “Hot and Spicy Noodles”: same GTIN
A list of the ingredients and the quantity of certain ingredients or categories of ingredients	9.1 b 9.1 d	New GTIN (Rule 4.2.2) or same GTIN (Rule 4.2.1)	Low	Any significant change to ingredients which would change consumers’ perception of the product must have a new GTIN. A change to an insignificant ingredient or a change in the order of ingredients would not require a new GTIN	A recipe changes so that the weight of red pepper is greater than that of onion (so that their order in the ingredients list switches): same GTIN. Potassium sorbate is substituted for sodium benzoate: same GTIN.
Allergens (as ingredients or process aids)	9.1.c	New GTIN (Rule 4.2.2)	High	A new GTIN must be allocated when any allergen in Annex II is present when it previously wasn’t, or is absent when it was previously present.	“Tofu ( <b>soya</b> )” is added to the ingredients list: New GTIN
The net quantity of the food	9.1.e	New GTIN (Rule 4.1.3)	None	A new GTIN is needed when a declared net quantity is changed. Almost all foods must declare their net content. Changes to undeclared quantities do not require a new GTIN.	Weight of a yogurt changes from 113gms to 100gms: New GTIN Size changes but declared net quantity does not: Same GTIN.

## Leadership in implementation

Any special storage conditions and/or conditions of use	9.1.g	Same GTIN (No specific rule) unless fresh and frozen foods need to be differentiated (Rule 4.2.4)	Low: Consumers usually look at the label on the item (which is the definitive version), not the website, to decide how to store it.	If the change in storage conditions is minor the GTIN should not be changed. However rule 4.2.4 requires different GTINs for fresh and frozen versions of a food. If storage conditions or instructions are changed <i>significantly</i> the GTIN could change.	“Eat within 3 days of opening” changes to “Eat within 5 days of opening”: Same GTIN. A requirement for refrigeration where there was no such previous requirement (or vice versa): New GTIN. Freezing is required when it wasn't previously (or vice versa): New GTIN.
The name or business name and address of the food business operator referred to in Article 8.1	9.1.h	Same GTIN (Rule 6.2)	None	A change in the name or address of the “Food Business Operator” perhaps following an acquisition or moving the manufacturers head office to a new location should not trigger a new GTIN unless the primary brand name changes.	The name of the food business operator changes from Kraft to Mondelez: same GTIN. The address of the food business operator changes from York YO30 6HQ to York YO31 8TA
The country of origin or place of issuance where provided for in Article 26	9.1.i	Same GTIN (Rule 6.1 or Rule 6.2)	Low	The country of origin should not trigger a change of GTIN	The declaration changes from “Made in England” to “Made in Ireland”: same GTIN
Instructions for use where it would be difficult to make appropriate use of the food without such instructions	9.1.j	Same GTIN (No rule)	Low	Changes in usage instructions should not lead to a new GTIN.	“Remove foil and heat under a grill at 200° for 20 minutes” changes to “Remove foil and heat under a grill at 180° for 25 minutes”: same GTIN
For beverages containing more than 1,2 % of alcohol by volume , the actual alcoholic strength by volume	9.1.k	New GTIN (Rule 4.2.2) or same GTIN (Rule 4.2.1)	Low. The alcohol content will not vary significantly for a given product	A new GTIN is not necessary if the alcoholic content changes because of seasonal conditions and the product remains the same for the consumer and for the purposes of EU regulation (110/2008).	A wine changes from 11% alcohol to 12% alcohol as a result of vintage variations: Same GTIN



**Leadership in implementation**

A nutritional declaration	9.1.l	Same GTIN (Rule 4.2.1 )	Low. Nutritional declarations might have health implications in the long term, but during a transition from one version to another the risk is low	A new GTIN is not necessary for a change in the nutrition declaration.	Salt declaration changes from (per 100g) “0.55g of which sodium 0.22g” to “0.50g of which sodium 0.20g”: Same GTIN
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GS1 in Europe has developed this guideline on the basis of the consultation with GS1 in Europe members and a joint working group including members of FoodDrink Europe, AIM, Eurocommerce, the European Retail Round Table, Independent Retail Europe and EMOTA.



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