



GS1 Standards

Guideline for the Implementation of 1169/2011 on the Basis of GS1 Standards

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1 Preamble

This guideline is intended to aid manufacturers and traders with the implementation of the Food Information Regulation No 1169/2011 (FIR) based on GS1 standards. It covers areas such as product liability, data quality, master data management and article identification in particular detail (see Figure 1).

This guideline is based on the results of a number of GS1 national and European expert groups which are referred to within each chapter.

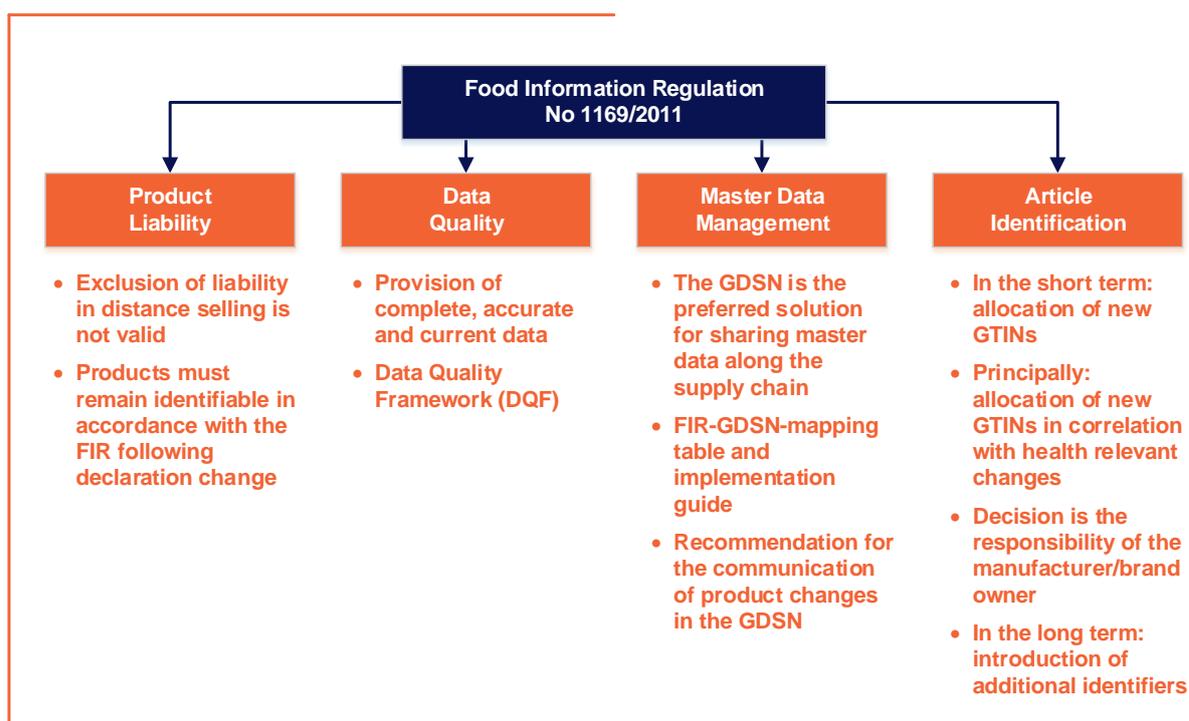


Figure 1: Fields of action in the context of the FIR

All texts compiled by GS1 Germany, which form the basis for this guideline, are available under the following link <http://www.gs1-germany.de/lebensmitteltransparenz/>.

In addition, GS1 Germany has published numerous brochures dealing with the FIR in the English language in cooperation with other European GS1 organizations as well as producer and retail associations (e.g. FoodDrinkEurope, EuroCommerce and EMOTA). These are available under the following link <http://www.gs1.eu/>.

2 Management Summary

The FIR obliges all food business operators to make information regarding foodstuffs FIR compliant by December 13, 2014. The regulator has taken into account the fact that the buying of food increasingly takes place in the digital world of the internet and – in order to protect the consumer – has therefore introduced comprehensive obligatory information for distance selling (e.g. sale via online shop, telephone or catalogue). In particular due to the changes in requirements for distance selling, meeting the information requirements for the FIR comprehensively by December 13, 2014 poses a challenge to many food producers and retailers.

Following this date, the publication of credible product information will not solely be concerned with winning consumer confidence by way of transparency. Rather, in distance selling, much information, which was once provided voluntarily, will become obligatory. Absent or incorrect information can lead to liability towards consumers, to written warnings from competitors or to official complaints. Here, the easy access to this information in the internet increases the visibility of data content and also the danger that incorrect information can be impugned.

In order to publish comprehensive information efficiently and in compliance with the regulation, GS1 Germany recommends the food business operators to rely on established GS1 standards. The provision of valid product information on the Global Data Synchronization Network (GDSN) as well as distinct identification by way of Global Trade Item Numbers (GTINs) make up the basis. In this way, product master data can be easily exchanged between different levels of the foodstuffs supply chain in a user friendly and legally controlled way.

Info box: Further Information regarding FIR

The [FIR legal text](#) can be downloaded from the European Commission's website. The commission has also published a variety of [questions and answers catalogues](#) as an added help to the FIR. Additionally, national authorities (e.g. [German Federal Ministry for Food and Agriculture](#)) and organizations (e. g. [FoodDrinkEurope](#)) offer their help with the implementation.

3 Basic Requirements of the Food Information Regulation (FIR)

Packaging should provide the consumer with much clearer information regarding its contents than is presently the case, thus making the decision to purchase a more informed one. This requirement is a political reaction to a crisis of confidence in the foodstuff industry (see Figure 2). The goal of the FIR is greater harmonization: it combines various legal requirements and stipulates in detail, which information is to be displayed on foodstuffs in the future and how this is to take place.

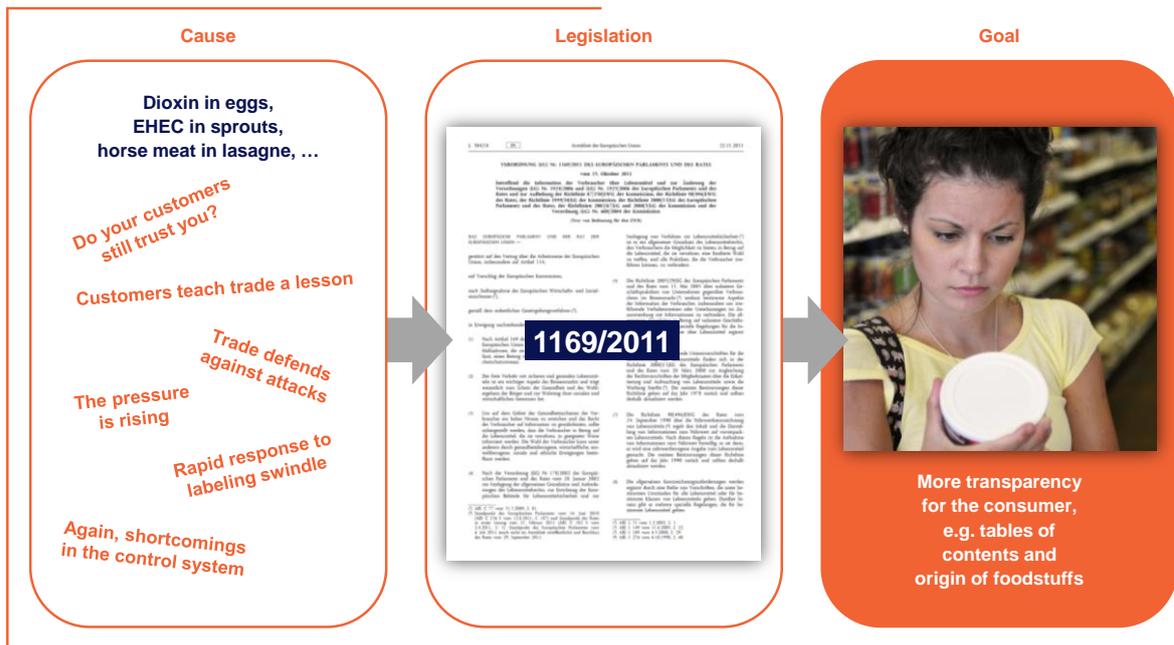


Figure 2: More transparency for the consumer with FIR

3.1 General Regulations and Definition of Terms

The regulation affects all food business operators at all levels of the foodstuff supply chain, in so far as their occupation concerns the publishing of information about foodstuffs for the consumer. In terms of the regulation, the term “food business operator“ refers to all those responsible for assuring the requirements of food law are met within the food production company under their control. All foodstuff producers and traders of foodstuffs are food business operators in terms of food law.

The regulation concerns foodstuffs intended for the final consumers on the one hand and on the other hand also products which are intended for or delivered by providers of institutional catering.

The FIR also stipulates that all obligatory information regarding foodstuffs, which is based on another European legal foundation, must be made available. This includes for example the information obligations of the food supplements regulation, of the diet regulation or the European marketing standards.

3.2 Mandatory Information

Under the motto "Information not Labelling" the FIR dictates how foodstuffs are to be identified and labelled in the future. The FIR dictates in article 9 the mandatory information and in article 10 the additional mandatory information for certain classes and types of foodstuff.

Info box: Mandatory Information according to Article 9 of the FIR

From December 2014 on, the following foodstuff information is mandatory:

- a) The name of the food,
- b) The list of its ingredients,
- c) Any ingredient or processing aid causing allergies or intolerances,
- d) The quantity of certain ingredients or categories of ingredients,
- e) The net quantity of the food,
- f) The date of minimum durability or the use by date,
- g) If applicable: special storage conditions and/or conditions of use,
- h) The name or business name and address of the food business operator,
- i) If applicable: country of origin or place of provenance,
- j) Instructions for use where it would be difficult to make appropriate use of food without such instructions,
- k) With respect to beverages containing more than 1.2 % by volume of alcohol: the actual alcoholic strength by volume,
- l) A nutrition declaration, in other words: energy value and information regarding six nutritional ingredients (fat, saturates, carbohydrate, sugars, protein, salt).

In the future it must be instantly recognizable if a product contains ingredients which may cause an allergic reaction or an intolerance. Such substances are to be clearly emphasized in the table of contents. Regarding non pre-packaged products which are sold loose – e.g. bread products and numerous foodstuffs which are offered at the deli counter (delicacy salads, cheese products etc.) – allergen labelling is also to be mandatory.

As well as the previous German food labelling regulation, the FIR also favours the display of minimum durability and use by dates. An innovative aspect of the FIR is the mandatory information concerning the date of freezing regarding meat, meat preparations or meat-based products.

In some cases in the future it will also be necessary to give information as to the origin of a foodstuff. This is not only the case if without such information the consumer would be clearly misled as to the actual origin of the foodstuff, e.g. in the case of a "customary" packaging using flags, national colours or pictures of typical buildings ("leaning tower of Pisa") or national dress.

A new obligation is the naming of the land of origin from meat products made of swine, sheep, goats or poultry. With these products it is consistently necessary to name both, the place of breeding and the place of slaughter of the animal. In the future, a filet of pork must show for example that the animal was reared in Belgium and slaughtered in Germany.

In addition, it will also be necessary to declare the origin of the primary ingredient if this differs from the stated origin of the product itself. If a Mozzarella cheese is sold as Italian, however the milk comes from France, the product must be called "Italian Mozzarella made of French milk". Alternatively it can also be stated that the primary ingredient has a different origin than the product, hereby assuring that the consumer is not misled. The commission's exact implementation guidelines regarding this point have not yet been finalized.

Info box: Proof of Origin for Fresh Meat

Whether swine, sheep, goats or poultry: In the future, whoever wishes to distribute fresh meat, will have to state its origin. How this should look is declared in [Commission Implementing Regulation \(EU\) No 1337/2013](#). Essentially, it stipulates three mandatory pieces of information: "reared in: [Name of member state or third country]", "slaughtered in: [Name of member state or third country]" as well as the lot number. In variance to the other provisions of the FIR this regulation is valid as from April 1, 2015.

Practically all pre-packed foodstuffs are required to display the energy value and nutritional information regarding six nutrients (fat, saturates, carbohydrate, sugars, protein, salt per 100 g/ml) in a comprehensible form, as a rule in a table diagram (the so called "Big Seven"). In this case, it is important to re-evaluate the nutritional values as, for example, the previous values for sodium content are to be replaced by those for salt.

Some products are exempt from the mandatory nutritional declaration: e.g. un-processed products which consist of only one ingredient or of one category of ingredients, or other foodstuffs such as herbs, salt, table-top sweetener or gelatine. A nutritional declaration is mandatory for pre-packed goods if a nutritional or health related declaration is made in the sense of regulation (EC) No 1924/2006 ("Health Claims Regulation").

From December 13, 2014 onward, all packaging must be FIR conform, only the nutritional declaration is not mandatory until December 13, 2016. If a nutritional declaration is made voluntarily before this date, it must conform to the requirements of the FIR after December 13, 2016 in terms of form and content.

3.3 Distance Selling

The regulations of the FIR are not confined to the physical world of foodstuffs. The same mandatory information is required for products which foodstuff manufacturers offer by way of distance selling as is for those who sell in a store, excluding: the best before date, the use by date (and also the lot number) as well as the date frozen (see Figure 3). As well as online shops also other forms of distance selling are affected by this obligation e.g. sales by telephone, catalogue or e-mail. The only foodstuffs exempt from this mandatory display of information are foodstuffs which are offered for sale in vending machines.



Figure 3: The product information from the online shop has to be identical with that of the label on the physical product

The date of minimum durability or the use by date can also be displayed voluntarily in distance selling. Instead of an exact date of minimum durability, it is also possible to make a statement such as “this product has a shelf life of at least three months after ordering” or “this product carries a regular three month date of minimum durability”. In this way, the

consumer is able to see the shelf life of the products he has ordered online without the seller having to publish an exact date of minimum durability.

In distance selling it is also necessary to publish all relevant information connected with any other voluntary statement. If a claim is made in the internet regarding the health aspect of a product in the sense of the Health Claims Regulation, e.g. "Vitamin C supports the normal function of the immune system", in future, it will also be necessary to present all mandatory warnings as stipulated by the Health Claims Regulation before the completion of sale.

Mandatory information has to be published in coherent language in the national language of the country in which the product is being sold. If a web page is designed to deliver to various countries within the EU, then the mandatory information is also to be provided in coherent language of the relevant member states. An online shop addresses a consumer of a country, if its website highlights the specific shipping costs to the relevant country.

Regarding distance selling of foodstuffs, the FIR requires that all relevant product information is made available to the consumer before purchase as an integral part of the order medium. In the case of online trade, the information must be available on the relevant web site of the online shop.

In so far as foodstuffs are only offered in a commercial sense and are destined for delivery to an end customer, it is to be distinguished if the customer is a provider of institutional catering or not. If the products are offered in a purely "business to business" area (excluding institutional catering) then the publication of mandatory information in the commercial papers is sufficient, although in this case the electronic provision of information is also enough. Correspondingly, online shops which are solely oriented towards business customers, who are not institutional caterers, are not obligated to display the mandatory information. The situation changes however, as soon as institutional caterers are able to procure products from the online shop. In terms of their information requirements, institutional caterers are regarded as end customers. It follows that online shops that sell to them must display all mandatory information.

Info box: General Terms and Conditions

In distance selling, all mandatory information regarding foodstuffs must be available before the closing of the sales contract or before the making of the sales declaration by the buyer in order that the buyer may make an informed decision about his purchase. The time of the closing of the contract differs depending on the online shop and is determined in the general terms and conditions of business.

3.4 Regulations for the Transition

An implementation of the FIR before December 13, 2014 is unproblematic, providing that the information requirements of the (still valid) old legislation and the new legislation FIR are both met simultaneously. The still valid German food labelling regulation states that the date of minimum durability, name of the food, net weight and alcohol content of a foodstuff are to be shown in the same field of vision. The FIR, on the other hand, no longer requires the best before date to appear in this field of vision. The requirements of both legal positions can be reconciled by keeping the date of minimum durability in the before mentioned field until December 13, 2014.

Companies would be well advised to prepare the implementation of the FIR as soon as possible and in close cooperation with public authorities and other experts. Here, it is important to keep an eye on the residual time on the packaging as well as potential printing dates, as packaging which is not FIR conform can not be used in production after December 13, 2014.

4 Product Liability

The legislature wants to achieve the greatest possible transparency using the new legislation. But who is responsible for assuring that the information regarding contents, nutrition etc. is correct, complete, up to date and therefore in compliance with the law? Who is liable if allergens are declared incorrectly and a consumer requires medical attention?

In May 2013, GS1 Germany – in cooperation with experts in general food law – published a catalogue describing the ramifications of the FIR and explaining the legal parameters and the question of liability, which the FIR raises. These recommendations are also there to help the data exchanged between trade and industry to fulfil the legal requirements of the act.

Basically, the following applies: The actor who publishes or changes the product data – irrespective of whether consciously or unconsciously – is liable. Furthermore, each piece of legally required information must be attributable to a product.

References such as "The consumer must check all information on the packaging", which are presently used in distance selling, are ineffectual as a disclaimer. This is understandable as online customers do not have the possibility to examine the declaration on the product before buying. It remains to be seen to what extent online traders can actively influence the reaction from customers and consumer protection organizations to incomplete or incorrect information by way of customer friendly and accommodating refund conditions.

The retailer or online retailer is often liable to the consumer in terms of civil law, particularly regarding the sales agreement and the associated legal regulations. If a product defect is caused by the manufacturer providing incorrect information regarding its manufacture, the affected online retailer can reclaim the ensuing damages (product recall, refund, complaints, administration costs) from the manufacturer, so long the false information proves to be the cause of the situation, although negligence on the part of the producer is sufficient.

In the event that information is evidently incorrect and it is reasonable to assume that the online-retailer would have been aware of this, then, according to the FIR, he is responsible for the information under public law. This means the retailer or online retailer can be punished for the mistake by the state (e.g. fined).

Info box: Catalogue of Liability Questions

Under the leadership of GS1 Germany a group of legal experts from trade and industry has produced a [catalogue of liability questions](#) which describes scenarios of legal liability in the supply chain (B2B and B2C).

5 Data Quality

The basis for compliance with information obligations described in the FIR is high quality master data, this also aids smooth cooperation between companies. Data quality is determined by comprehensiveness (all necessary values are recorded electronically), accuracy (values are correct), validity (an unambiguous range of validity/valid time stamp), standard compliance (based on standards) and consistency (data values are reconciled across systems).

The GS1 Data Quality Framework (DQF) is a best practice guideline which can be used by manufacturers and traders for the improvement of data quality. It should support the companies with the provision of high quality data and ensure a continuous improvement in the creation of master data. The DQF is a voluntary, sector neutral and standardized solution, which enables cooperating trade partners to benefit from the advantages of high quality data. The relevant documents are available in the English language for download under the following link <http://www.gs1.org/>.

Companies can get individual support from Smart Data One for example – a 100 % subsidiary of GS1 Germany. Its services range from quality assurance, gathering and completion of data, the creation of product shots, the complete outsourcing of product data maintenance and certification services. In this way, it is possible for a company to punctually install an efficient product master data management system, avoid problems with the law – and ultimately strengthen their image as a responsible partner to the consumer. Further information is available on the internet at <http://www.smartdataone.de/> and <http://produktdaten-info.de/>.

6 Management of Master Data

With the help of GS1 standards, business can exchange various data with partners electronically within the supply chain – including all FIR relevant data – and efficiently control processes beyond corporate boundaries.

Even today, the exchange of well-maintained master data poses a large problem for companies. The FIR, which prescribes the correct transmission of data along the various stages of the supply chain, poses an extra challenge for food business operators, as the data required is often not located in a central internal data set which could simply be passed on.

It is certainly not the case that all suppliers – in particular many online traders – are prepared for the requirements of the FIR. In the future, to be in compliance with the requirements, many (IT-)processes for preparation, optimization and provision of product master data in many food businesses will need to be adapted or even renewed. For this reason, online traders and those responsible for brand articles often ask the question: How can I meet these complex requirements? And how is it possible to master the resulting flood of data along the supply chain efficiently?

The preferred solution for the exchange of FIR relevant data is the Global Data Synchronization Network (GDSN). In order to use this network, producers of foodstuff deliver their product data to a certified master data pool (e.g. 1WorldSync) which is connected to the GDSN. They are likewise responsible for the validity of the entered data. This data is then used for the online sale of foodstuffs and is made available to the consumer at the required stage of the sales process. For example this takes place via the online trader or via the provider of mobile apps, by way of which the sale of foodstuffs takes place. The consumer can then read the relevant product information and rest assured that they are complete, correct and up to date as they all come from the same reliable source.

Info box: FIR-GDSN-Mapping Table and GDSN-Implementation Guide

Together with legal and data experts from trade and industry, GS1 Germany has analysed the requirements of the FIR regarding the relevant master data and published the results in an [FIR-GDSN-mapping table](#). The group has also created a [GDSN-implementation guide](#) for the FIR, which is to help companies with complete and correct data collection and correlation. The mapping table and the implementation guide are available for download for all [GS1 Complete](#) customers.

7 Identification of Article Variants in Distance Selling

As already described in chapter 3.3 on distance selling, the requirements of the FIR are not merely confined to the physical world of foodstuffs, but rather also include all forms of distance selling. It is asked that the consumer be provided with all mandatory information before closing the sale contract. While in an actual shop the customer can read the 'physical' label, which includes all mandatory information before purchase, in an online shop he has to rely on the digitally presented information regarding the foodstuff.

Online customers have the basic entitlement that the product they order matches the delivered product 100 %. If this is not the case, then customer warranty rights come into being and related compensation costs can arise and it can be that sanctionable violations against the FIR exist.

Foodstuffs with a different or changed declaration under the terms of the FIR must be clearly identifiable from one another in data management, to make sure that the information communicated in distance selling and those on the product packaging are identical at all times.

In this context, grounds for action occur for food business operators above all when clearly identifying practically identical foodstuffs with differing declarations in distance selling. These can be caused by changes in recipe which result in changes in the ingredients list and the table of nutritional information on the product label.

As, in such cases nowadays, the manufacturer and trader (for own brands) normally do not allocate a new Global Trade Item Number (GTIN) besides the change in declaration on the label, the differently declared product is not clearly identifiable on the basis of its GTIN. This procedure would not be FIR conform (see Figure. 4).

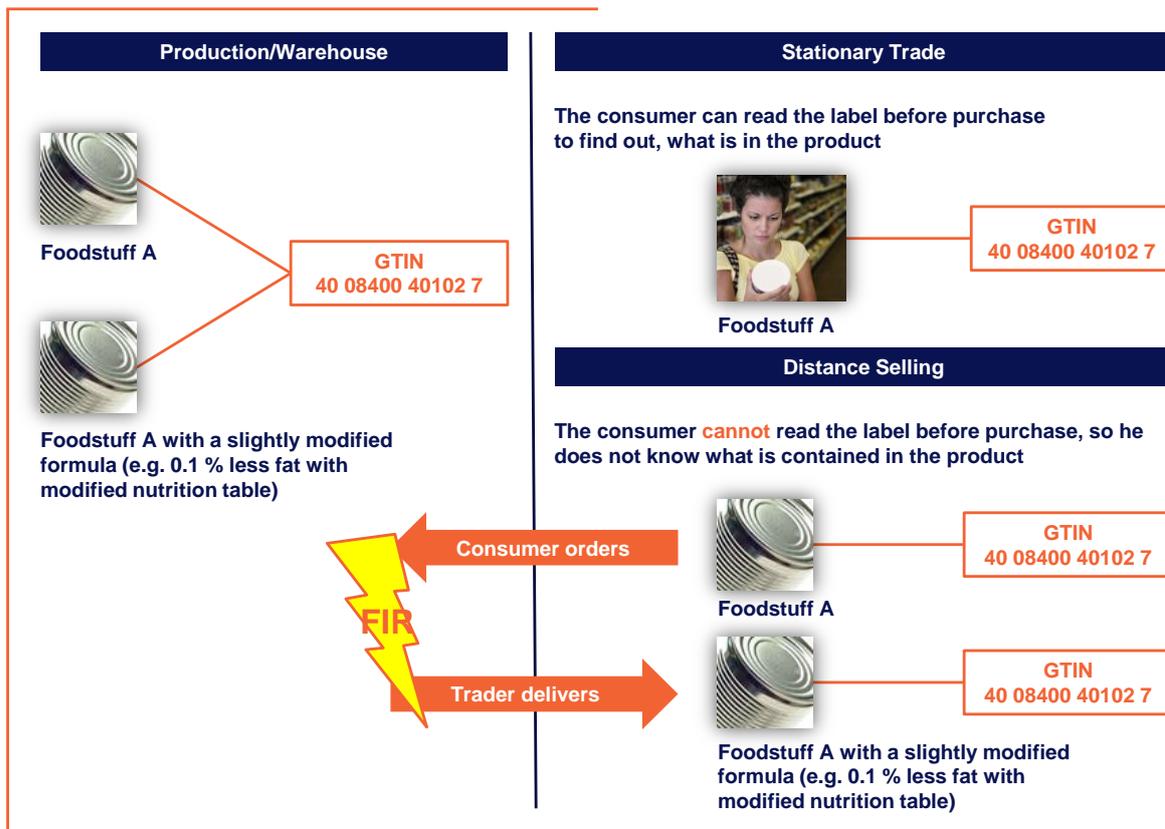


Figure 4: The problem of clear identification of slightly different products in distance selling

In particular in the transition period, in which two or more foodstuff products with differing declarations can find themselves next to each other in the supply chain, the foodstuff online trader is not able to ensure – solely on the basis of GTIN – that the exact same variation of the product will be delivered as was ordered online.

A position paper written and approved by members of trade and industry together with GS1 Germany describes two alternatives for future article identification (see Figure 5):

1. The product receives a new GTIN with each different declaration according to the FIR.
2. The product receives a new GTIN and an additional identifier, e.g. in the form of a variant number.

Company processes and IT systems need to be modified for both solutions.

Info box: Position Paper

The [position paper](#) written and approved by trade and industry on the identification of products with different labelling in distance selling is available for download in the German and English language.

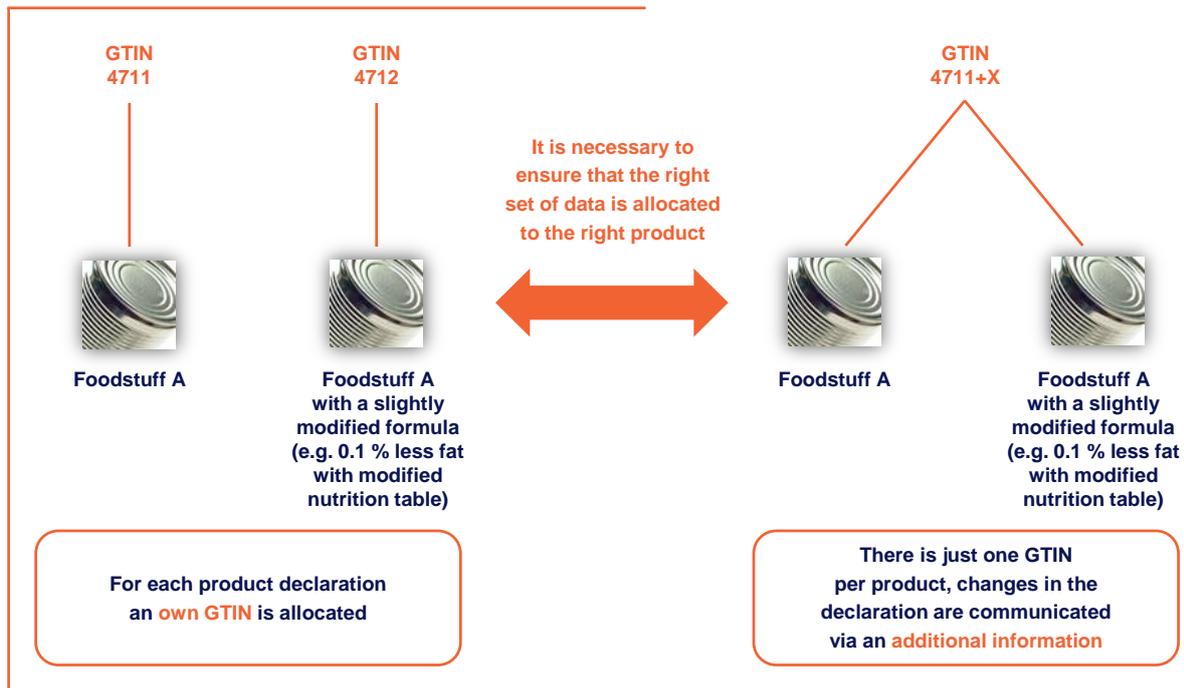


Figure 5: Two basic alternatives for article differentiation

For the short term application of the FIR in distance selling from December 2014, the allocation of new GTINs is presently the safest solution to ensure clear identification of differently declared products. Depending on the product category, the FIR could cause a rise, if not a considerable rise in the number of GTINs.

The presently existing IT systems are principally capable of processing the possibly more frequent change in GTINs. However, the relevant processes are not yet set up to accommodate the expected number of extra GTINs. Technical adjustments are needed particularly in the processes, in which the previous- and follow-up-GTINs need to be linked.

Info box: Recommendation for the Communication of Product Changes in the GDSN

GS1 Germany has published a recommendation together with trade and industry for the technical communication of changes in existing products via the GDSN. The use of the GDSN enables an electronic and accurate processing of changed data sets on the basis of the same GTIN, or rather the linking of new and previously existing data sets in the case of a GTIN change. The [recommendation for the technical communication of product changes in the GDSN](#) is available for download for all [GS1 Complete](#) customers.

New GTINs should always be allocated in particular regarding all potentially health relevant product changes (e.g. the use of an ingredient classified as an allergen) to assure that also in distance selling there is a clear discernibility between the products. Furthermore, if one assumes there is to be a change in a product, which would influence the consumer's decision to buy, a new GTIN is also to be allocated. As well as health factors, under FIR the consumer's decision to buy can be influenced by economic, environmental, social and ethnic considerations. Food businesses should pay particular attention to such areas of information which are politically high profile, for example the origin of a foodstuff or fraud protection.

The final decision as to whether a new GTIN is to be allocated for a declarable product modification is the responsibility of the individual producer or owner of the brand. Aside from the legal aspects of the decision, business arguments can play a role as well. In practice, companies have to weigh up the extent to which they meet the legal requirements and the level of administrative and organizational upheaval connected.

Info box: GTIN Allocation Rules

The decision in which cases a new GTIN should be allocated is the individual responsibility of each producer or brand owner. The GS1 GTIN allocation rules offer support to companies. The currently, globally valid GTIN allocation rules are available for download in the internet at <http://www.gs1.org/gtinrules/>.

In the event that a company does not choose to issue new GTINs for what it considers minimal product changes to avoid a flood of GTINs, they are to adopt other effective measures (e.g. changing current master data, manual checks), which assure the exact delivery of the product ordered (e.g. online). Otherwise, they accept the risk that the ordered and delivered articles carry differing product declarations in particular during the transition phase.

The GTIN changes caused by slight changes in the product declaration described in this document are not to be compared to a classic product launch.

Info box: Caution Note

The use of a caution note which draws to attention that products offered in an online shop can differ slightly from those delivered over a short transition period has no legal relevance in terms of liability. However, such a warning statement could serve to raise transparency for the consumer. The use of a cautionary note is not valid in terms of potentially health relevant product changes as in this case new GTINs are used for clear product differentiation.

The identification on the basis of an additional attribute is favoured. However, it is only achievable in the mid to long-term and does not play a role in the application of the FIR by December 2014. Further cost estimates and process analysis are needed before such a solution can be applied.

8 Outlook

The results of "The Consumer Goods Forum (TCGF)" – a global network of the leading trade and industry businesses in the foodstuff industry – on "Next Generation Product Identification" were handed over to the GS1 standardization process in January 2014. As part of the work of standardization, an identification solution based on GTIN and an extra identifications feature are to be researched to enable correlative data on the physical product for minor packaging variations in distance selling.

As an additional identifier for the GTIN, trade and industry are currently discussing five alternatives at final consumer unit level: Package variant number (PVN), batch number, serial number, URL and/or expiry date. For the long term, a GS1 2D-Code (QR or DataMatrix) on the consumer unit is favoured as data carrier for this extra identification. The first results of the NGPI-standardization are expected at the beginning of 2015.

Can we do anything for you?

Have we aroused your interest? Do you have any specific needs which require immediate action, or would you just like to find out more about the range of topics in our portfolio without any further obligation? Get in touch with us. We look forward to talking to you personally.

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