APPENDIX 1:
Master data model for product information required by the Deforestation Regulation

Version 1.0, 30.8.2024

Contents

Introduction

In the development project *Flow of information in the food chain required by the Deforestation Regulation* compiled under the *Food Data Finland Growth Engine program*, a solution proposal was prepared, which examines the requirements of the EU Deforestation Regulation (EUDR) for the production, collection and transmission of information about products. This appendix describes the more detailed contents of the masterdata data model presented in the solution proposal.

The product master data is information that does not change per delivery batch. The basic information must be delivered to the business partner usually when the contract or offer is made, and they are part of the company's purchase or sales process. With the help of master data, trading partners can maintain their own product registers and use the data in various processes, such as transport, storage, sales and reporting.

In addition to the fact that master data must be passed on in the chain to meet the demands of the Deforestation Regulation, companies can use it as part of demonstrating the due diligence required by the regulation. The certificate information can also help here, and this is why certificates are included in the data model of the master data, even though the regulation does not directly require their transmission.

The data model of master data gives an overview of what information and in what format it can be transmitted in the food chain. The technical description necessary for the transmission of information is always given by the party providing the transmission of information. Irrespective of which information transmission method the information is transmitted in, the information model limits what information is reported and in what form.

How to interpret the appendix

The Deforestation Regulation information is presented by subject area. First, there is an overall picture of the subject area, and then the characteristics of each separate information are presented in their own table.

The following table explains what the information means:

Description	The description tells what the information means and general instructions for reporting the information.
Format	The format tells in which form the information is conveyed.
	Free-form text means that it is information in text format.
	Quantitative means that there is a defined set of values in the background, from which the information to be reported is selected.
	A number or decimal means that the value is given as a numerical value.
Need for information	The need for information tells whether the information must always be reported for the product, whether there are limitations on when the information is required, or whether reporting the information is the transmission of additional information.
Repeatability	Repreatibility indicates whether the reported information can be repeated. Text fields have two types of repreatibility: the information can be reproduced in different language versions or the information can be reproduced so that it has, for example, two versions of the same language.
Information source	The source of the information tells you at which stage in the product's life cycle the information is formed.
	After the source of the information, other subsequent actors can enrich the information or modify it to be shown to the consumer.
GS1 Synkka	This section contains the Id number of the attribute in the GS1 Synkka product information service.
BMS id	This section contains the BMS id number.
Example	This section contains an example of the information to be reported.

The data model of master data

The product information required by the Deforestation Regulation can be divided into four categories. Each category contains one or more information to be provided.

Identifying the product

In product identification, the product is given a unique identification and it is classified into its own product group.

GTIN

Description	The GTIN (Global Trade Item Number) gives the product a unique identifier. Each unit intended to be identified must have its own GTIN code.
	Identifiable units can be a single product, a raw material if it is coded, or a product's sales batch / transport package. In this appendix, a unit is a single product.
	The GTIN management standard defines uniform rules for managing GTIN codes, i.e. when a product must be given its own or a new GTIN code.
Format	Numeric, 14 characters
Need for information	The information is mandatory.
Repeatability	One product can have only one GTIN.
Information source	Information provider
GS1 Synkka	Id 3059
BMS id	67
Example	06400001000018

GPC grouping

Description	With the help of GPC grouping, products are classified into product groups, which are used to identify the type of product. The user of the product information can map the GPC grouping of the product to the product grouping they may be using.
	The GPC standard (Global Product Classification) is GS1's worldwide hierarchical product grouping system for use by manufacturers and retailers.
	The Brick level of grouping is used in the GS1 Synkka product information service.
Format	Numeric, 8 characters
Need for information	The information is mandatory for all products whose information is transmitted through the GS1 Synkka product information service.
Repeatability	A product can have one Brick code of the GPC grouping.
Information source	Information provider

GS1 Synkka	Id 3122
BMS id	161
Example	10000045 Chocolate and chocolate/sugar candy combinations – Confectionery

Trade item description

Description	The Trade Item Description is the product description, which consists of the following parts: brand name, sub-brand (if necessary), generic product name, variant and net content.
Format	Text field, 200 characters
Need for information	Information is provided for all products.
Repeatability	The product name is given once per language. In Finland, the product name is given in Finnish, Swedish and English, and other languages are also possible.
Information source	Information provider
GS1 Synkka	Id 3318
BMS id	3517
Example	GS1 Sweets milk chocolate bar hazelnut 200 g

Functional name

Description	The functional name is the general name of the product that describes the intended use of the product.
Format	Text field, 35 characters
Need for information	Information is provided for all products
Repeatability	The functional name is given once per language. In Finland, the product name is given in Finnish, Swedish and English, and other languages are also possible.
Information source	Information provider
GS1 Synkka	Id 3301
BMS id	3508
Example	Chocolate bar

Identifying whether the product falls within the scope of the Deforestation Regulation

Identifying whether the product falls within the scope of the Deforestation Regulation is done with the help of the customs title / CN code. The supplier of the product information provides the customs title of the product in the product information, and the recipient of the information maps the customs codes defined in the Deforestation Regulation against it.

It should be noted that customs codes change every year. The supplier of the product information is responsible for ensuring that the customs codes are up-to-date. The recipient of the product information is responsible for ensuring that the mapping list used at reception is up-to-date.

Customs classification type

Description	The customs classification type indicates which customs code is used. In Finland, either Intrastat (8-character customs title) or Taric (10-character customs title) is used.
Format	Code list
Need for information	The product must be given one of the defined customs classification types.
Repeatability	A product can be assigned more than one customs code.
Information source	Product manufacturer
GS1 Synkka	Id 2286
BMS id	2776
Example	Intrastat / Taric

Customs code

Description	Customs title in the length as it is defined in the customs classification type
Format	Numeric, the customs classification type defines the length
Need for information	The information must be provided for each defined customs classification type
Repeatability	One customs classification type can have only one customs code
Information source	Product manufacturer
GS1 Synkka	Id 2287
BMS id	2777
Example	18063210 Chocolate and other food preparations containing cocoa, Other preparations in blocks, slabs or bars weighing more than 2 kg or in liquid, paste, powder, granular or other bulk form in containers or immediate packings, of a content exceeding 2 kg, With added cereal, fruit or nuts, Not filled

Origin information

The origin information is divided into the information provided for the product and the product's raw materials. The information that applies to the product as a whole is given for the product, and the information that applies to the ingredient in question is given for the ingredient.

Origin information for the product

Trade item country of origin

Description	The trade item country of origin indicates the country or countries in which the product was manufactured.
	The exact country of origin of the product is indicated in the batch-specific information.
Format	The country of origin is stated as the country, unless there are requirements in legislation for another notification method for the product group of the product in question.
Need for information	The country of origin must always be indicated, even if it is not mentioned on the product packaging. If the product is manufactured in several different countries, all countries are stated in the product's basic information.
	The exact country of origin of the product is indicated in the batch-specific information.
Repeatability	If the product is manufactured in several different countries, all countries are indicated in the product's basic information.
Information source	Product manufacturer
GS1 Synkka	Id 2300
BMS id	2794
Example	Finland

Production phase/ Product Activity Type Code

Description	The production phase tells what action has been taken on the product. This indicates the actions taken on the product, not the ingredient.
Format	The information is quantitative, i.e. all production phases used are defined.
Need for information	The information must be provided if the product has been affected by the production phase in question.
Repeatability	One product can have several production phases.
Information source	Product manufacturer
GS1 Synkka	Id 2303

BMS id	2799
Example	Last country of activity, Bottling

Country of activity

Description	The country of activity of the production phase indicates in which country the process phase defined in the Product Activity Type Code data field was carried out.
Format	The country of activity of the production phase is stated as the country.
Need for information	The information must always be provided if the product has been assigned a production phase.
Repeatability	One production phase can have several different countries. Each country is reported.
Information source	Numeric
GS1 Synkka	Id 2308
BMS id	2800
Example	Finland

Production phases used for the product

Production phase	Description
Assembly	The country or countries where the product is assembled into one product
Bottling	The country or countries where the product is bottled. This is used, for example, with wines.
Importation	The country from which the product has been imported to the target market. For example, wine made in Austria is imported to Finland from Germany.
Last processing	Country where minor manufacturing has been done after the product was manufactured. For example, cheese made in Germany and grated in Estonia.

Origin information of ingredient

The origin information of the ingredient is given separately for each ingredient, i.e. the raw material of the product.

Ingredient Name

Description	Tells the name of the ingredient.
Format	Free-form text
Need for information	The information must be provided when providing information on the ingredient.
Repeatability	The name of the ingredient is stated at least in Finnish and Swedish. An English name is recommended and other languages are also possible.
Information source	Product manufacturer
GS1 Synkka	Id 827
BMS id	1285
Example	Soy

Ingredient Sequence

Description	The sequence number of the ingredient indicates the place of the ingredient in the ingredient list. The first ingredient in the ingredient list gets the value 1, the second 2, etc.
Format	Numeric
Need for information	The information must be provided when providing information on the ingredient.
Repeatability	One ingredient can only have one sequence number.
Information source	Product manufacturer
GS1 Synkka	Id 824
BMS id	1288

Country Of Activity

Description	The production phase of the ingredient tells you what action has been taken on the raw material or ingredient. For example, meat can be given the country of birth, rearing and slaughtering.
Format	The information is quantitative, i.e. all production steps used are defined.
Need for information	It is recommended that all foods be given at least one ingredient production phase and country. All production phases related to the ingredient are reported, even if the country is the same as the country of manufacture. The production phase of the ingredient is indicated at least for the product's main raw material, significant raw material or risk raw material.
Repeatability	One ingredient can have several different production phases.
Information source	Primary production, Product manufacturer
GS1 Synkka	Id 863
BMS id	256
Example	Farming

Country of origin of the ingredient / Product Activity Details Country Of Origin

Description	The country of origin of the ingredient tells you in which country the production step defined for the ingredient was made.
Format	The origin of the ingredient is stated as the country.
Need for information	The information must always be provided if the ingredient is assigned a production stage.
Repeatability	One production phase can have several different countries. Each country is reported.
Information source	Primary production, Product manufacturer
GS1 Synkka	Id 868
BMS id	1340
Example	Finland

Production phases used for the ingredient

Production phase	Description
Last processing	The last country where the raw material has been processed before it enters the production of the product. For example, the salad dressing in a ready-made salad
Farming	The country where the plant is grown
Birth	The country where the animal was born
Milking	The country where the milk is milked
Rearing	The country where the animal grew up
Slaughter	The country where the animal was slaughtered
Cutter	The country where the meat is cut
Hunted/Gathered	The country, where game has been hunted or wild berries or plants have been gathered

Certificate information

A certificate is an official document that confirms the conformity, quality and safety of a company, process, product or ingredient. The certification is always externally inspected, evaluated or audited.

Certificates can be used as an aid in evaluating the product's responsibility in relation to the Deforestation Regulation. The model below is in use from November 2024.

Packaging Marked Label Accreditation Code

Description	The packaging label printed on the product's packaging informs the consumer about the product's origin, responsibility, the product's suitability for the diet or other properties. In the Finnish information model, only labels confirmed or certified by an external party are used. Companies' own brands are not used as packaging brands. The brand must be printed on the product's packaging so that it can be mentioned in the product's basic information. The issuers of the label are responsible for the conditions of its issuance and use. The manufacturer of the product is responsible for ensuring that the product has been officially granted the label in question. In the products of the Deforestation Regulation, the packaging label can be used as an aid in evaluating the product's responsibility information. The packaging label is one of the product's identifying information. If a packaging label is added to the product or removed, it will affect the product's GTIN. The same GTIN cannot have a product that has, for example, the Hyvää Suomesta label and a product that does not have the label.
Format	Code list. The values to be used are defined.
Need for information	The packaging label must be stated if it is printed on the product packaging. The packaging label may not be indicated if it is not on the product packaging.
Repeatability	One product can have several packaging labels.
Information source	Product manufacturer
GS1 Synkka	Id 1837
BMS id	2312
Example	Fair Trade, Round table on Responsible Soy (RTRS)

Certification Identification

Description	The certification identifier tells which certificate it is.
Format	Code list
Need for information	The information must be provided if certificate information is provided for the product and the certificate is on the code list.
Repeatability	One certificate can have only one certification identifier
Information source	Information about the name of the certificate can be obtained from the certifier.
GS1 Synkka	Id 253
BMS id	684
Example	Fair Trade, Round table on Responsible Soy (RTRS)

Certification Agency

Description	Tells which body has issued the certificate and which certificate it is in question.
Format	Free-form text
Need for information	The information is reported if the product has a certificate and the certificate in question does not have a Certification identifier in the code list.
Repeatability	Yhdellä sertifikaatilla voi olla vain yksi myöntäjä / nimi.
Information source	Information about the issuer/name of the certificate can be obtained from the certifier.
GS1 Synkka	Id 243
BMS id	665
Example	SGS Netherlands, Bureau Veritas

Certification Standard

Description	Sertifikaatin nimi kertoo, kohdistuuko sertifikaatti tuotteeseen, raaka-aineeseen vai pakkaukseen. The certification standard indicates whether the certificate applies to the product, raw material or packaging.
Format	Code list
Need for information	The information must be provided if certificate information is provided for the product.
Repeatability	One certificate can have only one object
Information source	Information about the object of the certificate can be obtained from the certifier.

GS1 Synkka	Id 245
BMS id	667
Example	Product, raw material, packaging

Certification Value

Description	The certification value indicates the value / ID number of the certificate recorded in the certificate document.
Format	Free-form text
Need for information	The information must be provided if certificate information is provided for the product.
Repeatability	One certificate can only have one certification value.
Information source	Information about the certification value is obtained from the certifier.
GS1 Synkka	Id 246
BMS id	685
Example	ASC-C-03476

Certification Effective Start Date Time

Description	The certificate's effective start date indicates with date information when the certificate was issued.
Format	Date
Need for information	The information is recommended to be provided if certificate information has been provided for the product.
Repeatability	One certificate can only have one certificate effective start date.
Information source	Information about the certificate's effective start date is obtained from the certifier.
GS1 Synkka	Id 252
BMS id	683
Example	5.12.2022

Certification Effective End Date Time

Description	The certificate's effective end date tells you until when the certificate is valid.
Format	Date

Need for infor-mation	The information is recommended to be provided if certificate information has been provided for the product.
Repeatability	One certificate can only have one certificate end date at a time. If the certificate is evaluated or audited again, the previously given date will be modified.
Information source	Information about the certificate's end date is obtained from the certifier.
GS1 Synkka	Id 251
BMS id	682
Example	31.12.2025

Forwarding the certificate file in the chain

In the product master data, the identification information and validity period of the certificate are indicated. In addition, if necessary, the certificate must be delivered as a file or as a link to a file. If a link is forwarded, it must not be in a password-protected environment.

In the GS1 Synkka product information service, when transmitting certificate information, the file type used is CERTIFICATION. The file is forwarded in pdf format and is given the information in which language the certificate was drawn up.