Guideline on how to fill out the Attributes Template

Lists the conventions to be used when developing or entering a GS1 Attribute request.

Release 1.1, December 2021
Document Summary

<table>
<thead>
<tr>
<th>Document Item</th>
<th>Current Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Guideline on how to fill out the Attribute Template</td>
</tr>
<tr>
<td>Document Date</td>
<td>Dec 2021</td>
</tr>
<tr>
<td>Document Version</td>
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</tr>
<tr>
<td>Document Issue</td>
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</tr>
<tr>
<td>Document Status</td>
<td>Draft</td>
</tr>
<tr>
<td>Document Description</td>
<td>Lists the conventions to be used when developing or entering a GS1 attribute request</td>
</tr>
</tbody>
</table>

Contributors

<table>
<thead>
<tr>
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<th>Organisation</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

Log of Changes

<table>
<thead>
<tr>
<th>Release</th>
<th>Date of Change</th>
<th>Changed By</th>
<th>Summary of Change</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

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Introduction

Attributes are a part of the GS1 system of standards and SHALL be followed by all the parties that intend to conform to the GS1 standards for which the attributes have been defined.

Attributes SHALL be developed and maintained following the GSMP process.

This document provides guidelines on constructing quality Attributes covering the following GS1 domains:

- GDSN (Global Data Synchronisation Network): all messages currently used within the GDS Network within the business domains of Catalogue Item Synchronisation, Price Synchronisation, Item Authorisation and Party Synchronisation.
- Global Data Model.

When attributes are developed for other GS1 domains, they should follow guidelines provided in this document. As the GS1 standards evolve, this document may need to be revised.

Guidance for creating a quality Work Request for a GS1 Attributes

The Attribute template is designed to provide minimal instruction.

Note: The template contains example rows and use information. EXAMPLE ROWS IN THE TEMPLATE MUST BE DELETED PRIOR TO SAVING YOUR REQUIREMENTS DOCUMENT AND UPDATING THE REQUIREMENTS DOCUMENT INTO YOUR WORK REQUEST. IMPORTANT: If this request is to change an attribute name or delete an attribute, then a CHANGE row SHALL also be submitted with a definition change stating the attribute is being deprecated with a migration statement, and a migration
Example: Changing attribute from oldAttribute to newAttribute

Change the definition of oldAttribute to state “NOTE: this attribute is being deprecated, please start using newAttribute. This is the old definition”

Add "newAttribute"

Delete the old attribute ”oldAttribute”

It is important for the community to have time to migrate, so the process is Add New, Change definition of Old, then Delete Old, once community migrates. GS1 will work with community on implementation timing.

**IMPORTANT:** If this request is to add a new attribute, be sure to complete the New attribute fields in the template.

The request for an attribute type of request SHALL follow the guidance for the following information:

General terms and examples of the data that is exchanged in the data types.

- **Amount** – is a currency of some sort $1.25, €3.75
- **Boolean** – is a yes or no attribute what is exchanged is True or False
- **DateTime** – 2021-01-21:13:05:23
- **Decimal** – has a decimal place and can be negative numbers
- **Description** –
  - This is a description.
  - Ceci est une description.
  - Tämä on kuvaus.
- **ExternalCodeList** – For code lists that exist outside of GS1
- **Float** – -3.78, 5.2786
- **Formatted Description** –
  - This is a description. Sequence 1
  - This is the second description. Sequence 2
- **Integer** – -2,-1,0,1,2,3…
- **ISO3166_1 Code** – Country codes 840, 046
- **Measurement** – 3.75 CMT, 5.28 KGM
- **NonBinaryLogicEnumeration** – TRUE, FALSE, UNSPECIFIED…
- **NonNegativeInteger** – 0,1,2,3…
- **Percentage** – 25%
- **String** – This is a string.
- **Time Measurement** – seconds, minutes, hours, days….

**[WR1] Action** - to be performed on the requested Attribute SHALL always be provided. One of the following values SHALL be used:

- **ADD** – for new Attributes
- **DELETE** – for existing Attributes that need to be removed
- **CHANGE** – for existing attributes that need to be modified
[WR2] **Requirements Description** – This SHALL contain what you are requesting in text. This is not the business rationale. See [WR16]

Example: Add a new description attribute for additives.

[WR3] **Module** – from the drop-down list a selection SHALL be provided.

A Module is a group of attributes that make up a logical set of information.

**Note:** If you do not see the module in the drop-down list or if do not know the name of the module, select "- Modeler Suggested –". GS1 will determine the proper module or create a new one.

**Note:** The module names do not have the word "Module" at the end of each name in the drop down

Example:
- New – if this is a new grouping of attributes.
- Common – this is a group of attributes shared with EDI (Not a common selection).
- Modeler Suggested – if you are looking for a recommendation from GS1.
- NutritionalInformation

[WR4] **Class** – the class field is optional. If you know where you would like an attribute to be placed within a module, specify which class. The format for a class is always Upper case for each word in the class.

Example:
- Modeler Suggested – if you do not know or if you would like GS1 to recommend a class.
- AllergenRelatedInformation

[WR5] **Technical Attribute Name/Role** – The attribute being requested, changed, or deleted SHALL be provided, except if this is a request for a new class. All attributes SHALL begin with a lower case first letter and each word following will be upper case proper.

**Note:** A change to an Attribute name SHALL NOT use font colours nor strikethroughs to represent changes.

An attribute name change requires a migration template to be filled out and accompany the work request

Example:
- allergenStatement
- packagingMarkedLabelAcceditationCode
- height
- dVDRregionCode – note attributes beginning with an acronym start the same way.

[WR6] **Business Attribute Name**

[WR7] **Data Type** – from the drop-down list a selection SHALL be provided with an add or if the data type is changing.
Note: Do not use: Description/Free Text, Description1000, Description200, Float-UOM, MeasurementUnitCode, NonBinaryLogicEnumeration-ISO3166_2, Numeric

Example:
- Amount – this is currency enabled
- Boolean – True or False
- Codelist – Valid value code list, drop=down
- DateTime – date time enabled
- Decimal – has a decimal place and can be negative numbers
- Description – this is for multiple language enabled
- ExternalCodeList – For code lists that exist outside of GS1
- Float – has a decimal place and can be negative numbers
- Formatted Description – if there is a need for a language enablement for a sequence to order the descriptions.
- Integer – numbers ...-2,-1,0,1,2,3...
- ISO3166_1 Code – Country codes
- Measurement – a decimal with a unit of measure
- NonBinaryLogicEnumeration – TRUE, FALSE, UNSPECIFIED...
- NonNegativeInteger – 0,1,2,3...
- Percentage – %
- String – free text field with no language enablement
- Time Measurement – seconds, minutes, hours, days....

[WR8] **Data Type Length** – To describe the length of the field needed.
Only use this for the following data types as all other are pre-defined data types.
- Description – this is for multiple language enabled
- Formatted Description – if there is a need for a language enablement for a sequence to order the descriptions.
- String – free text field with no language enablement

[WR9] **Secondary Class** – On changes and deletes of attributes, use this as a temporary field for BMS ID

Example
The BMS ID for attribute allergenStatement is 370

[WR10] **Multiplicity** – from the drop-down list a selection SHALL be provided with an add or if the data type is changing. A data type is how the XML is structured.

Example:
- 0..1 Optional attribute, only 1 value allowed
- 1..1 Mandatory attribute, only 1 value allowed
- 0..* Optional attribute, repeating values
- 0..* Optional attribute, repeat different language, measurement, currency, ONLY 1 value per type - Validation needed to stop multiple of the same type
- 0..* Optional attribute, repeating language, measurement, currency, multiple value per type
1..* Mandatory attribute, same as above

**[WR11] Enable Language / Measurement / Currency** – from the drop-down list a selection SHALL be provided with an add or if the data type is changing.

Select Yes for the data type below:
- Amount – this is currency enabled
- Description – this is for multiple language enabled
- Formatted Description – if there is a need for a language enablement for a sequence to order the descriptions.
- Measurement – a decimal with a unit of measure
- Time Measurement – seconds, minutes, hours, days....

Else select No for all other data types.

**[WR12] Multiple Values** – from the drop-down list a selection SHALL be provided with an add or if the data multiplicity is changing.

Select Yes for the data type below:
- The attribute can have multiple values.
- The attribute can have multiple values for the same language, unit of measure or currency.

Select No for the data type below:
- The attribute can only have 1 value
- The attribute can only have 1 value for the same language, unit of measure or currency.

**[WR13] Associated Attribute** – If the attribute is dependent on another attribute to make business sense of the data, populate the other attribute needed.

**[WR14] Associated Code List** – If the attribute is a codelist populate the codelist that the attribute is using for valid value. This used for new codelist attributes. There should be a code work request submitted with this.

**[WR15] Attribute Definition** – All new attribute requests SHALL have a business friendly and succinct definition. A change to a definition SHALL NOT use font colours nor strikethroughs to represent changes.

**TIPS:**
All definitions SHALL have proper punctuation. Make sure you end sentences with a period ".".

All acronyms SHALL be in parenthesis after the full text of the acronym has been stated.

All acronyms SHALL be extended to the full text in a definition.

A definition SHOULD be able to give a visual representation of the attribute being requested.

Definitions SHALL NOT just repeat the attribute name. Be descriptive and explain what you are requesting the user to populate.

A definition SHALL be able to be understood globally. Avoid using colloquial or local sayings.
Example:

- The code representing the country where the physical or non-physical product is intended to be sold.
- The statement to the consumer on the presence of allergens, based on local rules or regulations, as stated on the product packaging.

**[WR16] Rationale** – Please provide the business rationale for the attribute.

Try to answer the questions:

“Why does the community want/need this?”

“What business benefits can be achieved?”

“What purpose or how does the recipient use this information?”

Example

This attribute is needed to support a local regulation for additives. regulation 1234

This SHALL NOT be simply that the "community needs this”.

**[WR17] Business Usage Statement**

**[WR18] ADB Business Example**

**[WR19] Applicable Validation Rule** – If you are submitting an additional business validation work request, please state the validation rule here.

**[WR20] Guidance** -

Provide any business process notes that would help the users to supply/make use of this information provided in this attribute.

Example:

- This attribute provides the ability to define the level of my additives contained in the trade item. Without this information, the recipient is left to speculate. Population of this attribute comes from the Level of Containment code list.

**[WR21] Trading Partner Neutral Status** - states if the data for recipients can vary by values for trading partners **within a market** or they must remain the same.

⚠️ **Note:** Do not use: T.P.Neutral

Example:

- TPN – Values remain neutral/the same for all trading partners.
- TPD – Values can change for trading partners (ex. Price attributes)
- TPN/TPD – Values can be neutral but there are instances when they need to vary by partner.
How to write GDSN Validation Rules

[WR22] **Hierarchy Levels Affected** - state which level of the trade item hierarchy a value should be populated on as data is not always applicable to all levels. Examples: Pallet, Case, Base Unit, Consumer Unit, and All.

[WR23] **Comments** – For CHANGE include the text being remove or changed.

[WR24] **Global/Local** -
- Global means for this GTIN across all markets the attribute must have the same value. Example Computer memory cannot vary by market.
- Global/Local means the values can vary by market but can be the same too. Example descriptions. (Majority of items)
- Local means that the value varies by every market (Very rare)

[WR25] **AVP Requested** – temporary attribute requested (Check with GS1)

✅ **Note:** The community who implements this temporary attribute will need to migrate to the standard attribute once adopted in the standard release.

[WR26] **BMS ID (if known)**

A. **Template to submit a Work Request for GS1 Attributes**
   https://www.gs1.org/standards/wr