How to write Validation Rules/Warnings and submit a Validation work request.

List the rules and conventions to be used when developing or modifying GDSN Validation Rules/Warnings and how to write a quality Validation work request.

Release 1.7, Approved, March 2024
Document Summary

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Log of Changes

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<tr>
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<td>- New rule 43</td>
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<td>Update GDD links to GDSN Navigator</td>
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Document conventions

Like all GS1 standards and guidelines, the GDSN Validation Rules/Warnings are written in UK English.

The keywords, SHALL, SHALL NOT, and MAY, when they appear in this document, are to be interpreted as described in Annex G of the ISO/IEC Directives, Part 2, 2001, 4th edition, as defined here:

- **SHALL** means that all conforming implementations must do what the statement says, otherwise the implementation is not conforming. No deviation is permitted.
- **SHALL NOT** means that all conforming implementations must not do what the statement prohibits, otherwise the implementation is not conforming. No deviation is permitted.
- **MAY** (or CAN) means that a conformation implementation is allowed to do what the statement says, but it is not required to for conformance.
1 Introduction

GS1 Validation Rules/Warnings 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 Validation Rules/Warnings have been defined.

GS1 Validation Rules and GS1 Warnings perform a similar function in the GDSN network, but differ in some ways. The table summarizes these differences, and how each type of validation is handled by the GDSN network.

Note: That further in the document will reference the term “error message” for both an error and an alert.

<table>
<thead>
<tr>
<th>Type of validation</th>
<th>Purpose</th>
<th>Error/Alert result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation Rule</td>
<td>• Alert supplier to bad/missing data</td>
<td>• Errors stop transmission of data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Information does not reach recipient</td>
</tr>
<tr>
<td>Warning</td>
<td>• Alert supplier to potential data quality issue</td>
<td>• Alerts do not stop transmission of data</td>
</tr>
<tr>
<td></td>
<td>• Improve data accuracy</td>
<td>• Information reaches recipient</td>
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<tr>
<td></td>
<td>• Improve data population needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Test potential validation rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Give advance notice of deprecation or removal of attribute</td>
<td></td>
</tr>
</tbody>
</table>

Validation Rules/Warnings SHALL be developed and maintained following the GSMP process. This document provides rules on constructing Validation Rules/Warnings covering the following GS1 domains:

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

■ Global Data Model.

■ GEPIR (Global Electronic Party Information Registry).

■ GLN (Global Location Number) Registries.

When new sets of Validation Rules/Warnings are developed for other GS1 domains, they should follow rules provided in this document. As the GS1 standards evolve, this document may need to be revised.

Note that throughout this document, the terms “rule” and “validation” are sometimes used to refer collectively to both Validation Rules and Warnings. In cases where information cannot be applied interchangeably to both Validation Rules and Warnings, it SHALL be specified to which type of rule the information refers.
2 Rules for writing GS1 Validation Rules/Warnings

2.1 Validation Rule/Warning structure

[R01]
GS1 Validation Rules/Warnings SHALL use the following constraint expressions (see full definitions here):

- SHALL – is a required expression to succeed.
- SHALL NOT – is not a permitted expression to succeed.

**Example 1:** If isTradeItemADespatchUnit equals 'true' and isTradeItemNonPhysical equals 'false' or is not used, then grossWeight SHALL be greater than 0.

**Example 2:** If tradeItemLicenseTitle is used, then it SHALL NOT exceed one iteration per languageCode.

[R02]
GS1 Validations/Warnings SHALL be composed of the following components:

- Rule identifier number.
- Structured rule.
  - Affected attributes SHALL be listed in two separate categories:
    - prerequisite attributes.
    - impacted attributes.
- The Error message for Business Validations/Warnings (see [WR4])
- Business problem addressed by the rule SHALL be included.
- Both pass and fail example(s) SHALL be included for all Validation Rules/Warnings.
- Geographical applicability
- Trade Channel applicability
- Affected context categories SHALL be included for Catalogue Item Notification messages. The full list of contexts can be found in the TradeItemContextCode code list: https://navigator.gs1.org/gdsn/class-details?name=TradeItemContextCode
  - The Medical Device (DP007) and Pharmaceutical (DP008) Contexts SHALL be excluded from most Business Validations.
  - If there is a business need to include both the Medical Device and Pharmaceutical contexts, then a business case SHALL be submitted to the GS1 Healthcare Leadership team.
  - Most CIN messages do not contain the attribute tradeItemContextCode. Therefore, the network relies on the context category being determined using the GPC to Context Mapping document. How a solution provider implements context categories is outside of the scope of this document, but the process of validating a Rule or Warning must include or exclude the list of GPCs for a Context(s).

[R03]
The Validation Rule/Warning identifier SHALL be a number assigned consecutively and SHALL NOT be reused (numbers of the deprecated rules SHALL remain unused). This number is assigned by GS1.

If a request is to update or delete an existing rule, you SHOULD have the Validation Rule/Warning identifier as part of the work request.

[R04]
The Structured rule MAY have a type of condition or statement.
The rules of condition type SHALL have the following structure:

- Conditional rule
  - If + [condition clause]
    - Example 1: If dataCarrierTypeCode equals 'EAN_8'
  - then + [constraint: SHALL or SHALL NOT] written in capital letters + [consequence clause]
    - Example 2: ... then the first six digits of the TradeItem/GTIN SHALL equal '000000'.
  - alternative clause MAY be provided, if needed; if present, it SHALL begin with “else” followed by the alternative consequence

- Statement – requirement specification on attribute(s) - unconditional
  - Example 3: There SHALL be at least one iteration of gtin, targetMarket, gpcCategoryCode or dataSource/gln.

[R05]

Every Validation Rule/Warning SHALL provide an explanatory error message to be displayed if the validation fails. The error message SHALL provide an easily understandable business-friendly error description and it MAY contain a placeholder between angle brackets ("<...>") where the incorrect value can be inserted.

Example 1: descriptiveSizeDimension is repeatable for language only.

Example 2: GTIN (Global Trade Item Number) (tradeItem/gtin) is <gtin value>. If the type of data carrier (dataCarrierTypeCode) equals 'EAN_8', then the first six digits of the GTIN (Global Trade Item Number) (tradeItem/gtin) SHALL equal '000000'.

[R06]

Every Validation Rule/Warning SHALL list all the impacted attributes from all the messages affected by this rule. For every affected attribute a full X-Path SHALL be provided by GS1.

Example 1: If isTradeItemADespatchUnit equals 'true' and isTradeItemNonPhysical equals 'false' or is not used, then grossWeight shall be greater than 0.

[R07]

If an attribute name has more than one instance possible and the rule applies only to one of them, then the distinguishing part of the X-Path SHALL be included in both rule and error message.

Example: tradeItem/gtin

[R08]

Each Validation Rule/Warning SHALL have a description of the business problem addressed by this rule, when needed.

Rationale: Structured rules tend to be written in technical language difficult for human readability and their business advantage may not be apparent. Business problem description can make the purpose of the rule clear.

Example: There are changes in the definition for the isTradeItemAConsumerUnit attribute as part of the GDSN Major Release. The attribute will no longer be used to determine a POS unit. It will only
refer to the unit of end consumption. As a result, this may cause a change in some of validations. Review all validations which reference or utilise the attribute isTradeItemAConsumerUnit to determine if they need to be reworked, changed, or deleted.

![Image](image)

Note: See [WR10] for template instructions and a general business rationale SHALL be in the work request submission.

[R09]
A Complex Validation Rule/Warning SHALL include an example of attribute values that will PASS and attribute values that will FAIL the validation.

Example:

Structured rule: If (isTradeItemPackedIrregularly equals 'FALSE' or is not used) and trade item is at top level and layerHeight is used and nestingIncrement is not used, then tradeItemMeasurements/height SHALL equal or be greater than ((layerHeight \times \text{quantityOfCompleteLayersContainedInATradeItem}) + \text{platform height})...

layerHeight = 5 CMT
quantityOfCompleteLayersContainedInATradeItem = 3 EA
platform height = 6 CMT

FAIL: tradeItemMeasurements/height = 20 CMT because (5x3)+6 = 21 CMT, so it is SMALLER

PASS: tradeItemMeasurements/height = 21 CMT because (5x3)+6 = 21 CMT, so it is EQUAL

Rationale: Some Validation Rules/Warnings related to Business Rules may require some level of interpretation. Clear examples showing attribute data which passes or fails will help consistent interpretation by Data Pools and Solution Providers when coding the rule.

[R10]
All Validation Rules/Warnings MAY be translated to pseudo-code, using the X-Path for affected attributes, structured rule and the error message. See [R02].

[R11]
Validation Rules/Warnings SHALL specify the entity responsible to execute the validation (Constrained Party) that the rule applies to.

Example: Source Data Pool, Recipient Data Pool, Global Registry.

[R12]
GDSN - Validation Rules/Warnings SHALL specify the message name(s) the rule pertains to.

Example: Catalogue Item Notification, All optional GDSN compliant messages.

[R13]
If the Validation Rule/Warning applies to all target markets, the Target Market Scope SHALL equal 'Global'. If the rule applies to a specific Target Market or a specific Target Market is excluded, the form SHALL always be ISO country code 3166-1 (3-numeric) and ISO Country names in round brackets (parenthesis), and these SHALL appear in the structured rule. The associated error message should only show the relevant Target Market name.

Example: '528' (Netherlands), '056' (Belgium), Global, Global excluding '056' (Belgium).
[R14]
Each Validation Rule/Warning SHALL be classified as:

- 'Technical' – covering restrictions for repetition of language, measurement, or currency
- 'Business' – covering all rules other than 'Technical'

Note: All Warnings are considered ‘Business’, since the intention is to change a behaviour.

[R15]
Validation Rules/Warnings SHALL NOT be developed for conditions that are defined in XML schemas (by XML constrained data types, node cardinality, etc.).

Rationale: Compliance to XSD definitions is already validated when XML instance is checked against the standard GS1 XML Schema. Additional Validation Rules/Warnings checking the same conditions unnecessarily complicates the standard, without adding any value.

Example: The 13-digit GLN is defined in the GS1 schema as the xsd:string type with the following pattern facet: \d\{13\}. It means that any element where the GLN type is applied, can only have a value that equals 13 numeric characters, no more and no less than this. Any other value will cause the XML instance to be not valid and rejected. Therefore, there is no need to create a Validation Rule/Warning stating that GLN should be 13 digits long.

2.2 Conventions for writing Validation Rules/Warnings
Each Validation Rule/Warning SHALL respect the following conventions:

[R16]
Presence of a value in an attribute SHALL be referred to as 'used'. Attributes that SHALL NOT have a value, SHALL be referred to as 'not used'.

Example: If attribute A is used, then attribute B SHALL NOT be used

[R17]
All attributes in a structured rule SHALL be expressed in lower camel case, i.e., as GDSN attribute names.

Example:
Correct: tradeItem/gtin
Wrong: Trade Item GTIN

[R18]
When expressing that an attribute has a certain value, the verb ‘equal(s)’ SHALL be used.

Example 1: ...then the first six digits of tradeItem/gtin SHALL equal '000000'.
Example 2: If productCharacteristicCode equals 'cableLength'...

[R19]
All values in both a structured rule and error message SHALL be between single quotes, except numeric values:

Example 1: If dataCarrierTypeCode equals 'EAN_8'
Example 2: If quantityOfChildren equals 1
Example 3: drainedWeight SHALL be greater than 0

In error message '0' shall be followed by '(zero)'.
Example: drainedWeight shall be greater than 0 (zero)
[R20]
If multiple requirements on an attribute need to be included, these may be enclosed in round brackets (parenthesis) "()" for readability.

Example: If the datatype of an attribute equals (Description, Description35, Description70, Description80, Description200, Description250, Description500, Description1000, Description2500 or Description5000), then the value of the associated @languageCode SHALL be a code from the Code List ISO 639.

[R21]
If a choice between multiple values exists, they SHALL be separated with a comma ",," and before the last value 'or' SHALL be used.

Example: If the datatype of an attribute equals (Description, Description35, Description70, Description80, Description200, Description250, Description500, Description1000, Description2500 or Description5000), then the value of the associated @languageCode SHALL be a code from the Code List ISO 639.

[R22]
In the structured rule, if a choice exists between a number of values, where values either both apply or one or the other value applies, this SHALL be denoted by "and/or".

Example: If individualUnitMinimumSize and/or individualUnitMaximumSize are used, then isTradeItemABaseUnit SHALL equal 'true'.

[R23]
If the data type of an attribute contains @languageCode, @measurementUnitCode, or @currencyCode, then restricted repeatability for value, language, unit of measure or currency SHALL be indicated.

Example: If maximumWeightOfAnimalBeingFed is used, then maximumWeightOfAnimalBeingFed/@measurementUnitCode SHALL be unique.

[R24]
Attributes used in pair or groups:
- Attribute A and B SHALL be used together.
- Attribute A and B SHALL NOT be used.

Example: grossWeight and netWeight SHALL be used together.

[R25]
Boolean data type SHALL be expressed as 'true' or 'false'.

Example: If isTradeItemAnOrderableUnit equals 'true' and isTradeItemNonPhysical equals 'false' or is not used, then grossWeight SHALL be greater than 0.

[R26]
Calculations: if A equals 'X', then sum of B+C SHALL equal or be greater than 'Y':
- Multiplication SHALL be expressed using 'x'
- Division SHALL be expressed using '/'
- Addition SHALL be expressed using '+'
- Subtraction SHALL be expressed using '-'

Example: If (isTradeItemPackedIrregularly equals 'FALSE' or is not used) and trade item is at top level and layerHeight is used and nestingIncrement is not used, then
tradeItemMeasurements/height SHALL equal or be greater than (layerHeight \* quantityOfCompleteLayersContainedInATradeItem) + platform height.

[R27]
Date time comparison: SHALL be expressed using ‘before’ or ‘in the future’.
Example: If cancelDateTime is used, then value SHALL be in the future or equal to current date.

[R28]
Constraints on iteration of an attribute SHALL be expressed using ‘unique’.
Example: If totalScreenArea is used, then totalScreenArea/@measurementUnitCode SHALL be unique.
Example Error message: Invalid use of attributeName for <@languageCode Language>. One iteration of attributeName for language <@languageCode Language> is permitted.

[R29]
The logical sequence of Validation Rule/Warning should be:

- Target Market SHALL be written as follows ‘ISO 3166-1 numeric’ (Country Name)
- Product (GPC or list of GPCs)
- prerequisite attributes.
  then
- impacted attributes.
Example: If targetMarketCountryCode equals '528' (Netherlands), and gpcCategoryCode is in GPC Family '50202200' and isTradeItemABaseUnit equals 'true', then percentageOfAlcoholByVolume SHALL be used.

[R30]
When referencing attributes, the following conventions SHALL apply:

- References to attributes in structured rules SHALL be made using GDSN attribute names.
- References to attributes in error messages MAY be made using Attribute Definition for Business (ADB) attribute names, followed by the corresponding GDSN attribute name in round brackets (parenthesis).
- If an ADB attribute name does not exist, then create a business-friendly term for the attribute in the error message.
Example structured rule: If isTradeItemAConsumerUnit equals 'true', then functionalName SHALL be used.
Example error message: Product Type Description (functionalName) is mandatory when Consumer Unit Indicator (isTradeItemAConsumerUnit) equals 'true'.
Example error message with business-friendly name: For Country Of Sale Code <targetMarketCountryCodeCountry Name>, when a product contains restricted explosive precursor (regulationTypeCode equals 'EXPLOSIVES_PRECURSORS_REGISTRATION'), then you must populate regulatoryActComplianceLevelCode with 'ABOVE_REGULATED_LEVELS' or 'BELOW_REGULATED_LEVELS'.

[R31]
When referencing any attribute in a class, the following conventions SHALL apply:

- Reference the parent class only.
- Do not reference lower class(es). They are included, i.e., any attribute in a lower class is taken into consideration.
Example: If any attribute in class FoodAndBeverageIngredient is used ...
[R32]
In error message, when multiple values of a multi-occurring attribute shall be displayed, use #1, #2, #n to differentiate the occurrences.

Example: Multiple occurrences of referencedTradeItemTypeCode may exist as class ReferencedTradeItem can be repeated.

Example Error Message: Referenced GTIN (referencedTradeItem/gtin) <referencedTradeItem/gtin> shall not be repeated for <referencedTradeItemTypeCode #1> and <referencedTradeItemTypeCode #n>.
3 Guidance for submitting a Work Request for a GDSN Validation Rule

The Validation Rule/Warning template is designed to provide minimal instruction.

Note: The template contains 2 rows of examples and information. You SHALL delete rows 2-5 in the template.

You SHALL start with row 6 for your entry.

The request for a new Validation Rule/Warning SHALL contain the following information:

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

■ ADD – for new rules
■ DELETE – for existing rules that need to be removed
■ CHANGE – for existing rules that need to be modified

[WR2] Validation Rule/Warning - Rule number SHALL be provided for the requested modification (CHANGE) or deletion (DELETE) of existing rules. For new rules this field SHALL be left empty.

Example: 1410

[WR3] Structured Rule - Proposed structured rule SHALL be provided for requested new and modified rules. For deleted rules this field SHALL be left empty. The new structured rule SHALL be consistent with [R04].

Note: When writing a modification for a rule, you SHALL write the rule as requested. You SHALL NOT use strikethrough or colour fonts. These do not import into the work request system.

[WR4] Proposed Error Message – The error message should be “business friendly”. Ensure the user has the ability to understand the issue.

Use Attribute Definition for Business (ADB) attribute name, if available. If used, put the GDSN attribute name in round brackets (parenthesis).

Use placeholders (“<…>”) to specify when a value the user entered should be dynamically returned to them in the error message.

Example 1: The Nutrient Quantity is mandatory when specifying a Nutrient Code.

Example 2: The Product Marketing Message (tradeItemMarketingMessage) must contain at least one statement in the <languageCode> language.

Note: When writing a modification for an error message, you SHALL write the error message as requested. You SHALL NOT use strikethrough or colour fonts. These do not import into the work request system.

[WR5] Example of data that will pass - Requests for new rules and modification of existing rules SHOULD have example data that will pass the validation. See also [R09].

Example:

■ dangerousGoodsRegulationCode = ‘ADR’
Validation Rules/Warnings

- dangerousGoodsPackingGroup = 'I'

[WR6] Example of data that will fail - Requests for new rules and modification of existing rules SHOULD have example data that will fail the validation. See also [R09].

Example:
- dangerousGoodsRegulationCode = 'ADR'
- dangerousGoodsPackingGroup is not used

[WR7] Geographic – Requests for new rules and modification of existing rules SHALL have a geographical scope provided. See also [R13].

- Rules that are not target market specific SHALL have value ‘Global’.
- Rules that are target market specific SHALL have value populated according to ISO country code 3166-1 (3-numeric) and ISO Country names in round brackets (parenthesis), or GS1 extended codes for target market.
- Rules that are target market specific shall include the applicable target market(s) in the structured rule.

Example 1: ‘528’ (Netherlands)
Example 2: Global

[WR8] Context – Used in all or exclusions

Requests for new rules and modification of existing rules related to Catalogue Item Notification message SHALL have a context scope provided, if the rule includes or excludes specific contexts. See also [R02].

Rules that affect all contexts SHALL have value ‘ALL’

Rules that affect specific contexts SHALL:
- List any individual context that SHALL be excluded from the drop-down list
- When multiple contexts are included or excluded, select ‘MULTIPLE’ and the detail SHALL be included as part of Comments [WR9] in the template.
- List all the affected context values from the tradeItemContextCode code list: https://navigator.gs1.org/gdsn/class-details?name=TradeItemContextCode

Example 1: DP006
Example 2: ALL

[WR9] Comments – This SHOULD contain if applicable:

- Modification – CHANGE include the text being remove or changed.
- Contexts should specify the contexts excluded or included [WR8].
- Trade Channel should specify the trade channel(s) excluded or included [WR11].

[WR10] Business Rational for the request – Business Rational SHALL always be provided. It SHALL clearly explain the business problem to be addressed by the requested new rule or by the change in an existing rule. This business rationale will be included in the published rule, when the Work Requested is accepted (See: [R02] and [R08]).

Example 1: The rule is blocking business process.
Example 2: There are changes in the definition for the isTradeItemAConsumerUnit attribute as part of the GDSN Major Release. The attribute will no longer be used to determine a POS unit. It will only
refer to the unit of end consumption. As a result, this may cause a change in some of validations. Review all validations which reference or utilise the attribute isTradeItemAConsumerUnit to determine if they need to be reworked, changed, or deleted.

[WR11] Trade Channel

Rules that all Trade Channels SHALL have value ‘ALL’.

Rules that affect specific Trade Channels SHALL:

■ List any individual Trade Channel from the drop-down list.
■ When multiple Trade Channels are included or excluded, select ‘MULTIPLE’ and the detail SHALL be included as part of Comments [WR9] in the template.
## Template to submit a Work Request for a GDSN Validation Rule

<table>
<thead>
<tr>
<th>Action</th>
<th>Validation Rule</th>
<th>Structured Rule</th>
<th>Proposed Error Message</th>
<th>Example of data that will pass</th>
<th>Example of data that will fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD</td>
<td>This is the existing validation/warning number. For ADD do not populate. For CHANGE or DELETE please put the validation rule/warning number only. OPTIONAL.</td>
<td>This is the structure validation/warning (technical implementation). On a change please put exactly what you want for the change. Do not use strikethrough text or colour fonts. In the comments put what you are changing. ADD-MANDATORY, CHANGE-CONDITIONAL, DELETE-OPTIONAL.</td>
<td>This is a business friendly error message. When an attribute has an Attribute definition for Business put that name and in parenthesis put technical attribute. Instead of repeating countries or you want to show the business person the value they entered, use the dynamic format attribute=value?if=youWantDisplay=ADD-MANDATORY, CHANGE-CONDITIONAL, DELETE-OPTIONAL.</td>
<td>Make sure you populate technical attributes and values that will pass: ADD-MANDATORY, CHANGE-CONDITIONAL, DELETE-OPTIONAL.</td>
<td>Make sure you populate technical attributes and values that will fail: ADD-MANDATORY, CHANGE-CONDITIONAL, DELETE-OPTIONAL.</td>
</tr>
</tbody>
</table>

- **ADO**
  - If exampleAttribute is used and targetMarketCountryCode equals '001' (Global) then conditionalAttribute SHALL not be empty.
  - When exampleAttribute is used, then you must enter conditionalAttribute.
  - exampleAttributeABC
targetMarketCountryCode='001'
conditionalAttribute='Yes There'
- exampleAttributeABC
targetMarketCountryCode='001'
conditionalAttribute not used

- **CHANGE**
  - If exampleAttribute is used and targetMarketCountryCode equals '250' (France) then conditionalAttribute SHALL not be empty.
  - No change.
  - exampleAttributeABC
targetMarketCountryCode='250'
conditionalAttribute='Yes There'
- exampleAttributeABC
targetMarketCountryCode='250'
conditionalAttribute not used

### Geographic

<table>
<thead>
<tr>
<th>Context used in all or exclusions</th>
<th>Comments</th>
<th>Business Rational for request</th>
<th>Trade Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please list the geographic country or global that are excluded or are only valid for the validation/warning. When excluding use word &quot;Exclude&quot; and then country values. ADD-MANDATORY, CHANGE-CONDITIONAL, DELETE-OPTIONAL.</td>
<td>Any comments pertaining to the validation/warning. IF APPLICABLE. Please enter the business rationale for this particular validation/warning. What business issue are you trying to correct. MANDATORY.</td>
<td>Use this field if the rule applies to only certain trade channels. If you have multiple please enter in comments. OPTIONAL.</td>
<td></td>
</tr>
</tbody>
</table>

- **'001' Global**
  - MULTIPLE - if you use multiple please put in comments the excluded contexts.
  - Exclude Medical Device and Pharma contexts.
  - Need for data quality as the data is related and needed for supply chain shipping.
  - CASH_AND_CARRY

- **'250' France (Enter here any market restrictions needed in the rule)**
  - ALL
  - Changed the target market and also changed contexts to ALL (Use this to help determine the exact changes needed)
  - Only France uses the process, so that to reduce over head five companies we are changing the validation to France only.
  - ALL