Warning Messages in GDSN

March 2024

Status today vs what is new

- A GDSN Warning Message is a system generated Catalogue Item Confirmation (CIC) message created to inform the Data Source of the possible action needed
- Today we only have Validation Rules
- Warning Messages will be implemented with Large Release 3.1.27 in May 2024

Validation Rule

- PREVENTS missing/bad data from going to a trading partner

Warning Message

- DOES NOT STOP data from flowing to a recipient

- Improves data accuracy
- Improves data population needs
- Tests a potential validation rule
- Attribute deprecation can be communicated ahead of the deprecation date

NEW!

Goal / Business case

- Standardise Warnings that were already sent out in the network (as part of error messages). Today there is no possibility to sort Warnings out

- During Major Release it was decided to implement Warnings, but no technical solution was available

- Local validations could become Warning Messages (only for NEW local VRs)

- The implementation of Warning Messages is allowed to take place once the Work Request is approved through the GSMP Process (after passing ComRev and eBallot). This can be before a Release. Validation Rules continue to be implemented with Releases only (except if specifically agreed on in meetings like the OTAG).

Implementation

- The implementation of the Warning Messages and the new CIC message flow is planned for May 2024 with Large Release 3.1.27

- As today, all Data Pools need to be able to create and receive CIC messages

- All Data Pools need to implement the changes with the same release to ensure interoperability

- Data Sources (for M2M communication): It is recommended to implement the changes to receive Warning Messages and distinguish from a Validation Rule

- In general, it is recommended that Data Recipients implement the optional functionality of CIC messages to benefit from understanding the status of items from a recipient standpoint

- If you are a solution provider who receives data through GDSN:
  - Behave as the party you are representing, e.g. Data Source or Data Recipient

CIC Message flow - new

- During the work of defining the Warning Messages for GDSN it was decided that the general CIC message flow needs to be aligned

- The following slides shows the new CIC Message Overview based on the combination of the catalogueItemConfirmationStateCode and the correctiveActionCode

CIC message overview - new

catalogueItemConfirmationStateCode	correctiveActionCode	CIC If generated by Source Data Pool (SDP)	CIC If generated by Recipient Data Pool (RDP) A DP representing a recipient	CIC Generated by the Recipient Some recipients use RDP as source system	Comment	Blocking synch?	Data at recipient?	Integrated in Recipient system?	To do
RECEIVED	ERROR only				This should not happen				
RECEIVED	WARNING only	To generate a CIC RECEIVED with warnings only, the SDP checks all **GSMP approved warnings** as long as the SDP can verify it has been received by the recipient	To generate a CIC RECEIVED with warnings only, the RDP checks **local & recipient warnings**. As long as the SDP can verify it has been received by the recipient	Recipient should only send a REVIEW/WARNING or SYNCHRONISED/WARNING only as the data has not been checked at this point of time.	Should only be generated by a SDP or RDP	No	Yes	Not yet	Optional for data source: Correct warning & resend
RECEIVED	ERROR & WARNING				This should not happen				
RECEIVED	N/A						No	Yes	Not yet	
REVIEW	ERROR only	SDP checks all applicable GSMP approved validations	RDP checks local & recipient validations	Recipient checks recipient validations	Some DPs may use other messaging back to the supplier in addition.	Yes	Depends who generates the CIC	No	Mandatory for data source: Correct error & resend
REVIEW	WARNING only	SDP checks all GSMP approved warnings	RDP checks local & recipient warnings	Recipient checks recipient warnings	This is not recommended by the GS1 standard. Use SYNCHRONISED with WARNING instead. Some DPs may use other messaging back to the supplier in addition. If the data is integrated in the recipient's system, an additional CIC "SYNCHRONISED" needs to be sent.	No	Depends who generates the CIC	Maybe? Recipient could integrate the data as long as a CIC "SYNCHRONISED" is generated in addition	Optional for data source: Correct warning & resend
REVIEW	ERROR & WARNING	SDP checks all applicable GSMP approved validations + GSMP approved warnings	RDP checks local & recipient validations + warnings	Recipient checks recipient validations + warnings	Some DPs may use other messaging back to the supplier in addition.	Yes	Depends who generates the CIC	No	For data source: error = mandatory / warning = optional: Correct error and warning & resend
SYNCHRONISED	ERROR only				This should not happen				
SYNCHRONISED	WARNING only	N/A	N/A	After integrated	Sent for every record where only a WARNING, but no ERROR is detected	No	Yes	Yes	Optional for data source: Correct warning & resend
SYNCHRONISED	ERROR & WARNING				This should not happen				
SYNCHRONISED	N/A	N/A	N/A	After integrated	This should be the ultimate status	N/A	Yes	Yes	No further action
REJECT	N/A		Can be done on behalf of the recipient (should be an exception or value add)	Function performed by recipient		Yes	Yes	No	Optional for data source: Unpublish GTIN

Disclaimer: This is within the network. What a Data Pool does outside the network is not governed by GS1

CIC message overview

- It is mandatory for SDPs (Source Data Pools) to run <u>ALL</u> GSMP approved validations and warnings (based on the validations document)

- CIC is always generated either by the recipient or by the Data Pool on behalf of the recipient. We need to be able to identify who created the CIC (Data Pool vs recipient).

- This will be done by using the following two new attributes in the CIC message:
  - "messageCreatorGLN": The Global Location Number (GLN) of the party responsible for creating the content contained in the message
  - "messageCreatorName": The name of the party responsible for creating the content contained in the message

- WR 23-068 was raised for this and is implemented in Release 3.1.27

Receiving and interpreting CICs

Receiving and Interpreting CICs

- Sending of CIC messages is optional for data recipients.

- Therefore, we need to assume: No news = good news.

- The order of the interpretation of CIC messages is not defined by the order of receiving the messages, but by the creationDateTime of the CIC.

- This is important to notice as it cannot be guaranteed that the order of the message transmission is always the same.

- The(CatalogueItemConfirmation/creationDateTime) <u>created last</u> defines the actual status of synchronisation.

- All older CICs have informative value, e.g. Warning Messages.

- The status that has been <u>created last</u> is the valid status.

Receiving and Interpreting CICs

Entry sequence	GTIN	Status sent by DP or DR	CreationDateTime	Receiving DateTime	Current status
2	1234567890123	SYNCHRONISED	**2022-07-01T11:02:00-5:00**	2022-07-01T11:06:00	X
1	1234567890123	RECEIVED	**2022-07-01T10:50:00-5:00**	2022-07-01T11:05:00	

Entry sequence	GTIN	Status sent by DP or DR	CreationDateTime	Receiving DateTime	Current status
3	1234567890123	REVIEW	**2022-07-01T11:02:00-5:00**	2022-07-01T11:11:00	
2	1234567890123	SYNCHRONISED	**2022-07-01T11:03:00-5:00**	2022-07-01T11:10:00	X
1	1234567890123	RECEIVED	**2022-07-01T10:50:00-5:00**	2022-07-01T10:55:00	

Documentation of GDSN Warning messages

Documentation of GDSN Warning Messages

- The GDSN Warning Messages will be documented in the GDSN Validation Rules file

- The number "10" will be added to the numeric rule ID for the Warning Messages, followed by an <u>autonomous</u> 4-digit number

  - Example: 109999

    - 9999 = Validation Rule

    - 109999 = Warning Message

- A Warning Message can be changed to a Validation Rule by removing the "10" following the GSMP process

- In the VR file the field "Type of VR (Business/Technical)" will contain "WARNING" or "WARNING TO VR" (in case a Warning Message has been transformed into a Validation Rule)

Documentation updated to reflect the CIC and Warning Message changes

Documentation updates

- The following documentation has been updated to reflect the changes in the CIC message flow and Warning Message implementation:

  - Trade Item Implementation Guide (TIIG)
  - Operations Manual (published in the Data Pool support area only)
  - BMS for Catalogue Item Synch

Current Work Requests (WRs) for Warning Messages (Status August 2023)

WR 21-368 (GDM Warnings)

- if targetMarketCountryCode equals ('840 (United States), 484 (Mexico), 124 (Canada), 056 (Belgium), 203 (Czech Republic), 208 (Denmark), 246 (Finland), 250 (France), 276 (Germany), 380 (Italy), 442 (Luxembourg), 528 (Netherlands), 620 (Portugal), 705 (Slovenia), 752 (Sweden), 756 (Switzerland), 792 (Turkey), 826 (UK)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_NearFood', Sub-Category 'Beauty & Personal Care') and areBatteriesBuiltIn equals 'TRUE' then quantityOfBatteriesBuiltIn SHALL be used.

- if targetMarketCountryCode equals (036 (Australia) or 554 (New Zealand)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood' or 'GPCBricks_GDMTobacco') then firstOrderDateTime SHALL be used.

- If targetMarketCountryCode equals (036 (Australia) or 554 (New Zealand)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood' or 'GPCBricks_GDMAlcohol') and isTradeItemAConsumerUnit equals 'true' then netWeight SHALL be used.

WR 21-368 (GDM Warnings)

- if targetMarketCountryCode equals (840 (United States), 484 (Mexico), 124 (Canada), 036 (Australia), 554 (New Zealand), 056 (Belgium), 203 (Czech Republic), 208 (Denmark), 246 (Finland), 250 (France), 276 (Germany), 380 (Italy), 442 (Luxembourg), 528 (Netherlands), 620 (Portugal), 705 (Slovenia), 752 (Sweden), 756 (Switzerland), 792 (Turkey) or 826 (UK)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood','GPCBricks_GDMAlcohol' or 'GPCBricks_GDMTobacco') then packagingTypeCode SHALL be used.

- If targetMarketCountryCode equals (056 (Belgium), 203 (Czech Republic), 208 (Denmark), 246 (Finland), 250 (France), 276 (Germany), 380 (Italy), 442 (Luxembourg), 528 (Netherlands), 620 (Portugal), 705 (Slovenia), 752 (Sweden), 756 (Switzerland), 792 (Turkey) or 826 (UK)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood','GPCBricks_GDMAlcohol' or 'GPCBricks_GDMTobacco') and isTradeItemAConsumerUnit equals 'true' then descriptionShort SHALL be used.

WR 21-368 (GDM Warnings)

- If targetMarketCountryCode equals (840 (United States), 484 (Mexico), 124 (Canada), 036 (Australia), 554 (New Zealand), 056 (Belgium), 203 (Czech Republic), 208 (Denmark), 246 (Finland), 250 (France), 276 (Germany), 380 (Italy), 442 (Luxembourg), 528 (Netherlands), 620 (Portugal), 705 (Slovenia), 752 (Sweden), 756 (Switzerland), 792 (Turkey) or 826 (UK)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood','GPCBricks_GDMAlcohol' or 'GPCBricks_GDMTobacco') then tradeItemDescription SHALL be used.

- If targetMarketCountryCode equals (484 (Mexico), 056 (Belgium), 203 (Czech Republic), 276 (Germany), 442 (Luxembourg), 528 (Netherlands), 620 (Portugal), 705 (Slovenia), 752 (Sweden), 756 (Switzerland), 792 (Turkey) or 826 (UK)) and gdsnTradeItemClassification/gpcCategoryCode equals a value from tab ('GPCBricks_GDMFood', 'GPCBricks_GDMNearFood','GPCBricks_GDMPetFood','GPCBricks_GDMAlcohol' or 'GPCBricks_GDMTobacco') and isTradeItemAConsumerUnit equals 'true' then netContent SHALL be used.

WR 21-175

- If referencedFileTypeCode equals 'PRODUCT_IMAGE' for more than one instance of referencedFileTypeCode then at least one instance of isPrimaryFile SHALL be equal to 'TRUE' for referencedFileTypeCode equal to 'PRODUCT_IMAGE'.

WR 23-162

targetMarketCountryCode = '250' (France)

- (Warning) If targetMarketCountryCode equals <Geographic> and additionalTradeItemIdentification/@additionalTradeItemIdentificationTypeCode equals 'SUPPLIER_ASSIGNED', then additionalTradeItemIdentification SHALL be less than or equal to 35 characters.

In case of question get in touch!

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