



The Global Language of Business

GS1 Germany

Manual Data Quality Excellence (GS1 DQX) Report

Version 1.3.6, 03.06.2022

Document information

Document title	Manual Data Quality Excellence (GS1 DQX) Report
Last modification date	03.06.2022
Current document edition	Edition 1.3.6
Document description	The document describes the GS1 DQX Reporting

Change history

Version	Modification date	Summary of the change
1.0	02.09.2019	First publication
1.1	02.12.2019	Content adjustments: Update to GS1 DQX
1.2.1	25.02.2020	Content adjustments: Update of the key figure names
1.3	27.04.2020	Content adjustments: General information added
1.3.1	15.12.2020	Content adjustments: New chapter - Billing details
1.3.2	29.01.2021	Content adjustments: Update chapter 2.4 and info on correction deadline
1.3.3	03.02.2021	Minor adjustments
1.3.4	15.07.2021	Content adjustments: Note on articles with discontinued date added
1.3.5	21.10.2021	Minor adjustments
1.3.6	03.06.2022	Content adjustments: New chapter – Zusätzliche Information

Indemnification

GS1® strives to avoid uncertainties in its Intellectual Property Policy by requiring participants in working groups developing this standard, the general GS1 specifications, to grant a free license or a FRAND license to all GS1 participants. Furthermore, it is pointed out that the implementation of one or more features of a standard may affect a patent or other intellectual property right. Such patents or intellectual property rights are not part of GS1's licensing obligation. The agreement to grant a license subject to the GS1 IP Policy does not affect intellectual property rights and claims of third parties who have not participated in the working groups.

The greatest possible care was taken in the preparation of these documents and the GS1 standards contained therein. GS1, GS1 Germany and all third parties involved in the preparation of this document hereby state that they make no warranty in connection with this document and accept no liability for any third party damages, including direct and indirect damages as well as loss of profit in connection with the use of these standards.

This document may be amended or adapted to new developments at any time. The standards presented in this document can be adapted to new requirements - in particular legal requirements - at any time. This document may contain protected trademarks or logos that third parties are not permitted to reproduce without the permission of the copyright holder.

Table of contents

List of figures	4
1 GS1 DQX Reporting	5
1.1 Initial Load / Inventory report.....	5
1.2 Regular report / Delta report	5
1.2.1 Regular report.....	5
1.2.2 Delta report	5
2 Validation reports from GS1 DQX	6
2.1 Spreadsheet "Dashboard"	6
2.1.1 Display of the automatic validation results	7
2.1.2 Presentation of the results from the visual validation.....	8
2.2 Spreadsheet "Certificate overview"	9
2.3 Spreadsheet "Overview validations"	10
2.4 Spreadsheet "Performed validations"	10
2.5 Spreadsheet "Vertical overview"	10
2.6 Spreadsheet "Billing details"	10
2.7 Spreadsheet "Zusätzliche Informationen"	11
Contact	12
Imprint	12

List of figures

Figure 1: Spreadsheet "Dashboard"	6
Figure 2: Spreadsheet "Dashboard" Overview - Automatic validation	7
Figure 3: Spreadsheet "Dashboard" Overview - visual validation	8
Figure 4: Spreadsheet "Certificate overview"	9
Figure 5: Spreadsheet "Billing details"	10

1 GS1 DQX Reporting

By participating in GS1 DQX, participants receive a reporting on the data quality of the items validated. The new GS1 DQX Report builds on the existing DQG Report and extends it with a new dashboard and visual validation-related information.

The report is provided as Excel and sent to the participants in a compressed archive (ZIP file) via email. In addition to the new design and the new content, the frequency of the dispatch has also changed.

Below you will find all important information about the dispatch.

1.1 Initial Load / Inventory report

As soon as the Initial Load phase is completed, an initial report is sent for each GLN-participant.

The inventory report lists all GTINs¹ that were dispatched to the target market or directly to the DQX GLN during the Initial Load, i.e. all GTINs that were taken into account in GS1 DQX. In addition to the dispatched items, the report provides an overview of the data quality in relation to the automatic validation. The report is sent once and serves as an inventory for the participant GLN.

From this point, the GLN will be removed from the DQG distribution list and consequently will only receive the DQX Reports.

1.2 Regular report / Delta report

1.2.1 Regular report

Once the Initial Load is completed and the inventory report has been sent, a regular report is sent per GLN. This report is sent on working days every week according to the GS1 DQX SLA.²

1.2.2 Delta report

In addition to the regular report, a report is sent on the **following day of a change**. This so-called delta report is only generated if a change has been made to items or certificates. If no such change has taken place, only the dispatch of the regular reports takes place. The delta report is sent on working days according to the SLA of GS1 DQX.³

The following shows the conditions under which a delta report dispatch takes place.

	Delta report
A new creation of an item takes place.	Yes
A change is made to an existing item. ⁴	Yes
The status of the GS1 DQX Certificate changes to "Failed".	Yes
The status of the GS1 DQX Certificate changes to "Passed".	Yes
A new release has taken place.	No

¹ Only applies to items where the discontinued date is not specified or is further than 7 days in the future.

² Available via the GS1 DQX Download Center, at: <https://www.gs1.de/dqx>

³ Ibid.

⁴ Due to the automatic validation also independent of whether the change was relevant for visual validation or not.

2 Validation reports from GS1 DQX

2.1 Spreadsheet "Dashboard"

In the **header line** of the spreadsheet, the date of report creation is shown and the GLN to whose data records the report refers.

The dashboard is preceded by a general overview of the current distribution of certificate statuses. The pie chart shows the certificate statuses of all GTINs. The bar chart on the right-hand side builds on this evaluation and shows the key figures "Absolute DQ" ("Absolute data quality") and the "Anteil besiegelter GTIN" ("Proportion of GTINs"). In order to make the short-term temporal development clear, the key figures of the previous report are also displayed in addition to the current key figures.

Please note that for the first report, after the Initial Load (the period after the first publication to GS1 DQX), the charts may still be empty, as inventory data does not receive a GS1 DQX Certificate.

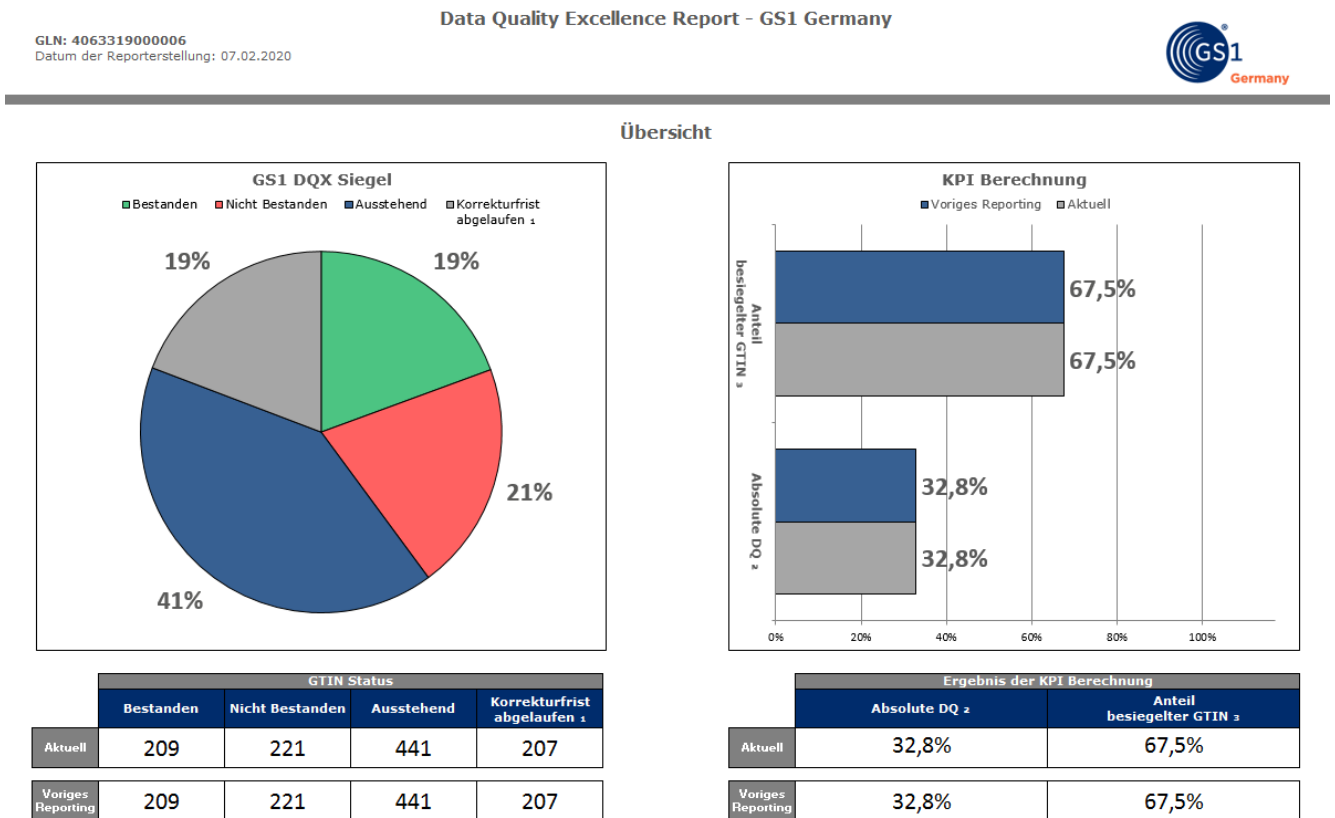


Figure 1: Spreadsheet "Dashboard"

Below the diagrams are two tables. The right table shows the percentage values shown in the diagram above in tabular form. The left table shows details of the certificates that form the basis of the report:

- "Bestanden" ("PASSED") means the sum of all items validated without errors, i.e. only item data that has been imported into GS1 DQX under a GLN at the time of report creation.
- "Nicht bestanden" ("FAILED") represents, contrary to the "Bestanden" ("PASSED") indicator, the sum of all validated items with errors.
- "Ausstehend" ("PENDING") indicates the number of items that have not yet been visually validated, therefore the certificate is still pending.
- "Korrekturfrist abgelaufen" ("REVOKED") is the indicator for items that have already received a certificate, but which has been withdrawn due to the expired correction period.⁵

Example based on Fig. 1:

The example above shows that out of 1,078 items, a total of 209 items have received a certificate with the status "Bestanden" ("PASSED"). 221 GTINs have errors, resulting in a certificate with the status "Nicht bestanden" ("FAILED"). The "Absolute DQ" ("Absolute data quality") value for the current week is 32.8 percent. The percentage of GTINs with a GS1 DQX Certificate is 67.5 percent.

2.1.1 Display of the automatic validation results

This presentation focuses on the results of the automatic validations. The key figures are to be understood analogously to the key figures of the certificate status. The color green stands for error-free "Bestanden" ("PASSED") and red for items with at least one failed validation "Nicht bestanden" ("FAILED").

The "Error"⁶ indicator refers to GTINs that have errors that prevent synchronization. These items are excluded from all further validations.

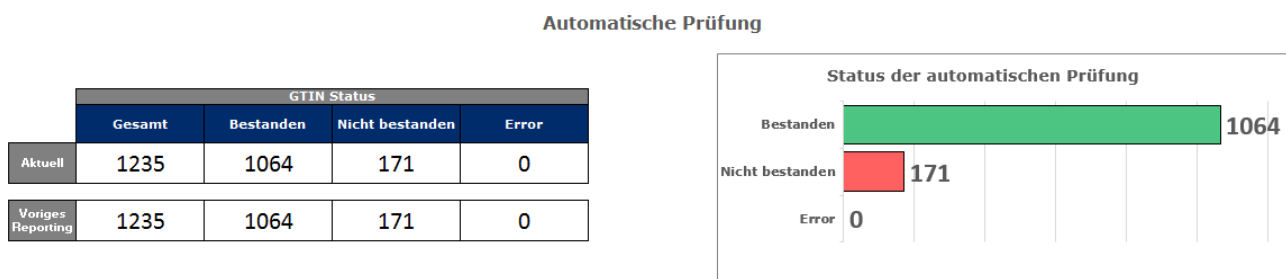


Figure 2: Spreadsheet "Dashboard" Overview - Automatic validation

The results of the automatic validation are based on the FMCG, DQ and GDSN validation rules. All information about the validation rules can be found in the GS1 DQX Download Center⁷ and in the Profiles Overview of atrify GmbH.⁸

GDSN and FMCG error messages are shown in reporting with the note "Bitte prüfen Sie diesen Fehler im Web-UI oder in Ihrer CIC-Meldung" ("Please check this error in the Web UI or in your CIC message"). To identify the exact error, please check your CIC message or the message in the Web UI. For technical reasons, a detailed description of the error cannot be provided in the report. You can also find more details about these error messages in the Profiles Overview of atrify.

⁵ The correction period is suspended until further notice.

⁶ For technical reasons, the code "Error" can only be shown for data providers who use M2M transmission. For WebUI/Publishing users of atrify, these GTINs cannot be published and thus cannot be received by GS1 DQX.

⁷ Available via the GS1 DQX Download Center: <https://www.gs1.de/dqx>

⁸ Available via the atrify GmbH Download Center: <https://www.atrify.com/kundenbereich/download-center/>

2.1.2 Presentation of the results from the visual validation

The "Status der Sichtprüfung" ("Visual validation status") is displayed in the left graphic. The key figures and the associated table are analogous to the display of the automatic validation results.

The "Ausstehend" ("PENDING") indicator here refers to visual validations that have not yet been performed, i.e. are pending.

Another diagram will be displayed on the right hand side at a later time. All further information will be added to the manual in due course.

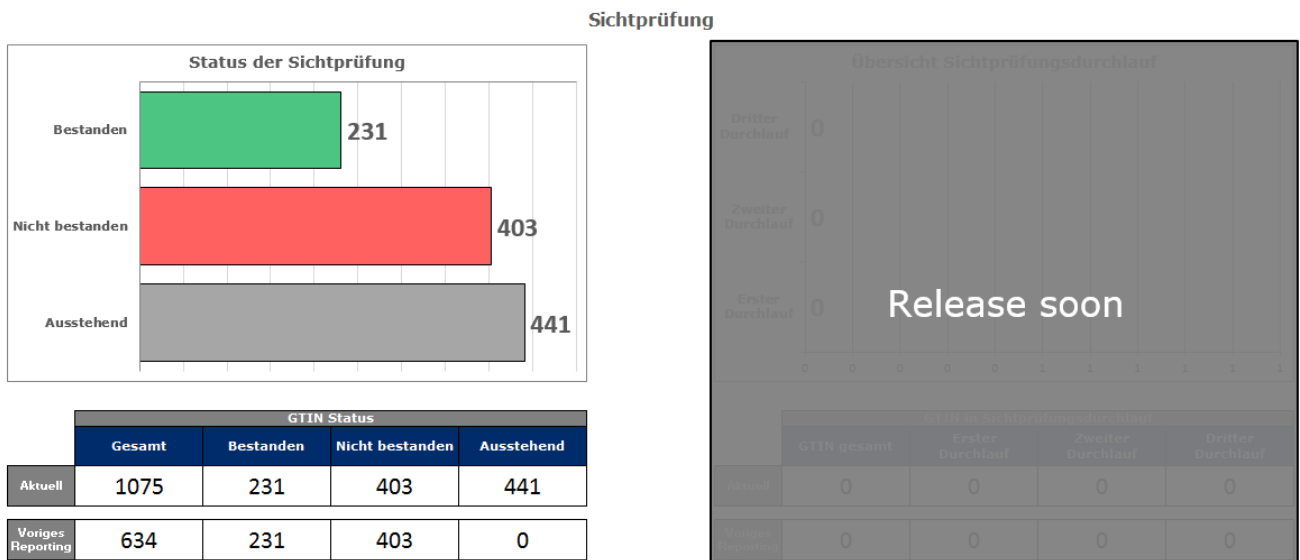


Figure 3: Spreadsheet "Dashboard" Overview - visual validation

2.2 Spreadsheet "Certificate overview"

This spreadsheet serves as an overview of all GTINs⁹ that have already been certificated or for which certification is still pending. The core elements are on the one hand the column L "Korrekturfrist" ("Correction period") and on the other hand the assigned certificates or certificate components (column M, N and O).

The entries for the certificate information are as follows:

Certificate components (automatic/visual validation)	
Passed	The automatic validation and/or visual validation did not reveal any failed validations.
Failed	The validation by the automatic and/or visual validation has resulted in at least one failed validation.
Pending	Visual validation is still pending for this item.
Not relevant	This GTIN is "not relevant" for the visual validation process.
Error	Items with errors that prevent synchronization are listed with this indicator at M2M data provider, cf. 1.1.1.

GS1 DQX Certificate	
Passed	None of the certificate components has a failed validation. The GS1 DQX Certificate allocation process has been "passed".
Failed	At least one of the certificate components has an error. The GS1 DQX Certification allocation process was "failed".
Pending	Visual validation is still pending for this item.
Not relevant	This GTIN is "not relevant" for the visual validation process.
Correction deadline expired	After the correction period has expired ¹⁰ , the item is still not free of errors. Therefore, the item does not receive a certificate.
Error	Items with errors that prevent synchronization are listed with this indicator at M2M data provider, cf. 1.1.1.

GTIN	Letzte Änderung	Fehleranzahl	Anzahl ausgeführter Validierungen	Ende Korrekturfrist	Automatische Prüfung	Sichtprüfung	GS1 DQX Siegel
XXX	27.08.2019 12:43:39	30	944	-	Bestanden	Nicht bestanden	Nicht bestanden
XXX	15.12.2019 00:00:10	27	1018	14.12.2019	Nicht bestanden	Nicht bestanden	Entzogen
XXX	04.02.2020 13:16:35	9	834	-	Nicht bestanden	Nicht relevant	Nicht relevant
XXX	09.01.2020 09:13:31	12	995	-	Bestanden	Ausstehend	Ausstehend
XXX	16.01.2020 12:50:51	0	941	-	Bestanden	Bestanden	Bestanden

Figure 4: Spreadsheet "Certificate overview"

⁹ Only applies to items where the discontinued date is not specified or is further than 7 days in the future.

¹⁰ The correction period is suspended until further notice.

2.3 Spreadsheet "Overview validations"

The "Overview validations" spreadsheet contains all validation rules that were activated in GS1 DQX at the time the report was created, were executed on the data, and resulted in at least one failed validation.

"Column A" of the table shows the type of validation performed. "Column B" shows the ID of the validation rule under which the rule is listed in the Profiles Overview.¹¹ Then a short description of the respective rule follows in the next column.

Furthermore, the number of failed validations is given for each rule. This indicates in how many items the executed validations found an error.

Please note: If the validated GTINs are completely free from errors, the table remains empty.

2.4 Spreadsheet "Performed validations"

This spreadsheet lists the deviations found line by line. It is the central tool for identifying and correcting incorrect data records. Each line contains basic information on the GTIN concerned, the name and the type of validation. The type distinguishes between an automatic check and a visual validation. The column "Fehlermeldung" ("Error message") enables the delimitation of attributes that have been marked as erroneous or not erroneous. In the "Kommentar" ("Comment") column, further information are displayed for visual inspections, if applicable. The comments are a non-mandatory service and do not claim to be complete. Every GS1 DQX customer is required to fully check attributes and correct them on his own responsibility if at least one certificate-relevant discrepancy has been identified by the visual validation.

2.5 Spreadsheet "Vertical overview"

This spreadsheet shows the data quality per attribute. The attributes are listed in descending order according to the number of incorrect GTINs. In addition to the number of failed validations, the number of GTINs validated is also displayed.

2.6 Spreadsheet "Billing details"

In this spreadsheet, you will find an overview of all GTINs relevant to billing for the current month and previous months. In addition to the GTIN, the result of the visual validation, the date of certification, and the associated billing period are also displayed.

If a GTIN goes through the certification process more often, it will be listed more often as a result.

GTIN	Sichtprüfung	Datum Siegelvergabe	Abrechnungszeitraum
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Nicht bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020
xxx	Nicht bestanden	04.05.2020	Mai 2020
xxx	Bestanden	04.05.2020	Mai 2020


Figure 5: Spreadsheet "Billing details"

¹¹ Cf. FMCG_DIY_AGRO_HC_ProfilesOverview, table tab "DE_AT_CH Community Validations" and "GDSN Validation Rules"; available via the atrify GmbH Download Center: <https://www.atrify.com/kundenbereich/download-center/>

2.7 Spreadsheet "Zusätzliche Informationen"

The spreadsheet shows explanations of the structure of the comments and the meaning of the comment prefixes.

The new spreadsheet is positioned at the end of the GS1 DQX Reports (with the tab highlighted in dark blue).



Zusätzliche Informationen zu GS1 DQX

Kommentierung für die GS1 DQX Sichtprüfung

Aufbau der Kommentare
 Präfix + Beschreibung der Art der Unstimmigkeit + *Fallabhängig**: Spezifizierung(en) der identifizierten Unstimmigkeit(en)

*abhängig von der Art der Unstimmigkeit(en)

Aufbau des Präfixes
 Das Präfix ist eine 5-stellige Zeichen- und Ziffernfolge:
 Sonderzeichen "»" + Buchstabe + Zahl + Sonderzeichen "|" + Buchstabe

1. Stelle: Das Sonderzeichen "»" leitet das Präfix ein.
2. Stelle: Der Buchstabe gibt Auskunft über die Art der identifizierten Unstimmigkeit:

Kürzel	Kurzbeschreibung
P	Nicht ausreichende P roduktbilder/-artworks
A	A bweichungen von Werten/Angaben und Satzzeichen/Sonderzeichen
M	M ehrangaben
F	Angaben im f alschen Attribut
S	Abweichungen vom GS1- S tandard

3. Stelle: Die Zahl gibt die Subkategorie der Unstimmigkeit an.
4. Stelle: Das Sonderzeichen "|" dient als Trennzeichen.
5. Stelle: Der Buchstabe gibt Auskunft über die Siegelrelevanz der Unstimmigkeit:

Kürzel	Kurzbeschreibung
P	Kein Fehler (P assed/Bestanden)
F	Fehler (F ailed/Nicht bestanden)

Beispiel
 Attribut: Rechtlich vorgeschriebene Produktbezeichnung / Sprache [M261]

Datensatz: Schokoladentafel mit minze Produktbild: Schokolade mit Minze

Kommentar:
 »A1|F Abweichende Angabe vom Produktbild: "Schokoladentafel" und "minze".

Aktuelle Informationen
Dashboard
Siegel Übersicht
Übersicht Validierungen
Durchgeführte Validierungen
Vertikale Übersicht
Abrechnungsdetails
Zusätzliche Informationen

Contact

GS1 DQX Support

T +49 (0) 221 94714-690

E dqx-support@gs1.de

W www.gs1.de/dqx

Imprint

Publisher:
GS1 Germany GmbH

Managing Director:
Thomas Fell

GS1 Germany GmbH
Maarweg 133, D-50825 Cologne

PO Box 30 02 51
D-50772 Cologne

T +49 (0)221 94714-0
F +49 (0)221 94714-990

E info@gs1.de
www.gs1-germany.de

© 2021 GS1 Germany GmbH, Cologne