

WR #	GSCN Name	Effective Date		
21-000271	Definition and use of GS1-8 prefix	Nov-2021		

Associated Work Request (WR) Number:

N/A

Background:

At present, the GS1-8 Prefix is defined as a "unique string of three digits". Earlier this year, GS1 UK was allocated four-digit GS1-8 prefixes and as such references within the General Specifications are now inaccurate and require correction.

Disclaimer:

GS1[®], under its IP Policy, seeks to avoid uncertainty regarding intellectual property claims by requiring the participants in the Work Group that developed this **General Specifications Change Notification** to agree to grant to GS1 members a royalty-free licence or a RAND licence to Necessary Claims, as that term is defined in the GS1 IP Policy. Furthermore, attention is drawn to the possibility that an implementation of one or more features of this Specification may be the subject of a patent or other intellectual property right that does not involve a Necessary Claim. Any such patent or other intellectual property right is not subject to the licencing obligations of GS1. Moreover, the agreement to grant licences provided under the GS1 IP Policy does not include IP rights and any claims of third parties who were not participants in the Work Group.

Accordingly, GS1 recommends that any organisation developing an implementation designed to be in conformance with this Specification should determine whether there are any patents that may encompass a specific implementation that the organisation is developing in compliance with the Specification and whether a licence under a patent or other intellectual property right is needed. Such a determination of a need for licencing should be made in view of the details of the specific system designed by the organisation in consultation with their own patent counsel.

THIS DOCUMENT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, FITNESS FOR PARTICULAR PURPOSE, OR ANY WARRANTY OTHER WISE ARISING OUT OF THIS SPECIFICATION. GS1 disclaims all liability for any damages arising from use or misuse of this Standard, whether special, indirect, consequential, or compensatory damages, and including liability for infringement of any intellectual property rights, relating to use of information in or reliance upon this document.

GS1 retains the right to make changes to this document at any time, without notice. GS1 makes no warranty for the use of this document and assumes no responsibility for any errors which may appear in the document, nor does it make a commitment to update the information contained herein.GS1 and the GS1 logo are registered trademarks of GS1 AISBL.

GS1 General Specifications Change:



GS1 General Specifications

GS1 Prefix range	Significance
978 – 979	Allocated to International ISBN Agency for books, portion of 979 sub-allocated to International ISBN Agency for music
980	Used to issue GS1 identification of refund receipts
981 - 984	Used to issue GS1 coupon identification for common currency areas
985 - 989	Reserved for future GS1 coupon identification
99	Used to issue GS1 coupon identification

1.4.3 GS1-8 Prefix

The GS1-8 Prefix is a unique string of <u>two or morethree</u> digits issued by GS1 Global Office and allocated to GS1 Member Organisations to issue GTIN-8s or allocated to other specific areas. GS1-8 Prefixes are shown in figure 1.4.3-1.

Figure 1.4.3-1. Synopsis of GS1-8 Prefixes		
GS1-8 Prefixes	Significance	
000 - 099	Used to issue Restricted Circulation Numbers within a company	
100 - 199	Used to issue GTIN-8s	
200 - 299	Used to issue Restricted Circulation Numbers within a company	
300 - 976	Used to issue GTIN-8s	
977 – 999	Reserved for future use	

1.4.4 GS1 Company Prefix

A GS1 Company Prefix is a unique string of four to twelve digits used to issue GS1 identification keys. The first digits are a valid GS1 Prefix and the length must be at least one longer than the length of the GS1 Prefix. The GS1 Company Prefix is issued by a GS1 Member Organisation or by GS1 Global Office, is based on a GS1 Prefix allocated to the issuer, and is allocated either to a GS1 user company or to the issuer itself (e.g., for issuing individual identification keys).

A GS1 Company Prefix starting with a zero ('0') is used to generate GTIN-12s (as well as the other GS1 identification keys). A GS1 Company Prefix starting with a digit other than zero ('0') is used to generate GTIN-13s (as well as the other GS1 identification keys).

Note: As the GS1 Company Prefix varies in length, the issuance of a GS1 Company Prefix excludes all longer strings that start with the same digits from being issued as GS1 Company Prefixes.

1.4.5 U.P.C. Prefix

A U.P.C. Prefix is derived from a GS1 Prefix that starts with zero ('0') by removing that leading zero. A U.P.C. Prefix is:

- used to issue U.P.C. Company Prefixes;
- reserved for Restricted Circulation Numbers; or
- reserved for special functions.
- U.P.C. Prefix ranges are shown in figure 1.4.5-1.

Figure 1.4.5-1. Synopsis of U.P.C. Prefix ranges

GS1 Prefix range	U.P.C. Prefix range	Significance
0000000	000000	Used to issue Restricted Circulation Numbers within a company
0000001 - 0000099	N/A	Unused to avoid collision with GTIN-8
00001 - 01999	0001 - 1999	Used to issue U.P.C. Company Prefixes
02	2	Used to issue Restricted Circulation Numbers within a geographic region

Release 21.1, Draft, Jul 2021

© 2021 GS1 AISBL

Page 21 of 519



- EAN-13 barcode (carrying a GTIN-13).
- GS1 DataBar Retail POS family (carrying GTIN-12 or GTIN-13 represented in a fixed-length data string of 14 digits by adding leading zeroes).

Symbol X-dimensions, minimum symbol height, and minimum symbol quality

See section <u>5.12.3.1</u>, GS1 symbol specification table 1.

Symbol placement

All the symbol placement guidelines are defined in section $\underline{6}$.

Unique application processing requirements

For a description of processing requirements, see section \underline{Z} .

2.1.3.2 Fixed measure trade items scanned at retail POS using GTIN-12 carried by a UPC-E barcode

Application description

Some GTIN-12s beginning with the U.P.C. Prefix 0 may be represented in a small symbol called the UPC-E barcode. The GTIN-12 is condensed into a barcode consisting of six symbol character positions. For application processing, the GTIN-12 must be transformed into its full length by the barcode reader software or by the application software. There is no six-digit UPC-E barcode. See section 7.10 for UPC-E barcode options.

GS1 key

Required

GTIN-12

Rules

All the GTIN rules described in section 4.

Attributes

Not applicable

Data carrier specification

Carrier choices

UPC-E (carrying a GTIN-12 in six explicitly encoded digits using zero-suppression techniques).

Symbol X-dimensions, minimum symbol height, and minimum symbol quality

See section <u>5.12.3.1</u>, GS1 symbol specification table 1.

Symbol placement

All the symbol placement guidelines defined in section $\underline{6}$.

Unique application processing requirements

For a description of processing requirements, see section \underline{Z} .

2.1.3.3 Fixed measure trade items scanned at retail POS using GTIN-8

Application description

The GTIN-8 is available for items whose packaging does not include enough available space to permit the use of an EAN-13 symbol. GTIN-8s are individually assigned by GS1 Member Organisations on request. figure 2.1.3.3-1 shows the data structure of a GTIN-8.

Release 21.1, Draft, Jul 2021

© 2021 GS1 AISBL

Page 35 of 519



GS1 General Specifications

	Figure 2.1.3.3-1. GTIN-8 data structure						
G 	iS1-8 P	refix ;		Item	referen	ice	Check digit
N_1	N ₂	N3	N4	N5	N ₆	N7	N ₈

The GS1-8 Prefix is a unique string of two or more three digits issued by GS1 Global Office. See section $\underline{1.4.3}$ for the GS1-8 Prefixes used in this element string.

The item reference is assigned by the GS1 Member Organisation. The GS1 Member Organisations provide procedures for obtaining GTIN-8s.

The check digit is explained in section $\underline{7.9}$. Its verification, carried out automatically by the barcode reader, ensures that the number is correctly composed.

GS1 key

Required

GTIN-8

Rules

All the GTIN rules described in section $\underline{4}$.

Attributes

Required

Not applicable

Optional

For all the GS1 Application Identifiers (AI) that can be used with a GTIN, see section $\underline{3}$.

Rules

Not applicable

Data carrier specification

Carrier choices

- EAN-8 (carrying a GTIN-8).
- GS1 DataBar Retail POS family (carrying a GTIN-8).

Symbol X-dimensions, minimum symbol height, and minimum symbol quality

See section <u>5.12.3.1</u>, GS1 symbol specification table 1.

Symbol placement

All the symbol placement guidelines defined in section $\underline{6}$.

Unique application processing requirements

For a description of processing requirements, see section <u>Z</u>.

2.1.3.4 Hardcover books and paperbacks scanned at retail POS using ISBN, GTIN-13, or GTIN-12

Application description

When identifying books and paperbacks a company may identify them in the same manner as any other retail trade items (see section 2.1.3). However, the recommended option is to use the International Standard Book Number (ISBN numbering system). The GS1 Prefixes 978 and 979¹ have been allocated to ISBN (<u>http://www.isbn-international.org/</u>), which allocates numbers from these 'Bookland' prefixes.

 $^{\rm 1}$ Within GS1 Prefix 979 a subset 9790 has been allocated to the International ISMN Agency for notated music.

Release 21.1, Draft, Jul 2021

© 2021 GS1 AISBL

Page 36 of 519



I

|

I

GS1 General Specifications

Term	Definition			
GS1 DotCode	A subset of AIM DotCode which uses the function that allows the encoding of element strings.			
GS1 EANCOM®	The GS1 standard for Electronic Data Interchange (EDI) that is a detailed implementation guideline of the UN/EDIFACT standard messages using the GS1 identification keys.			
GS1 element string	A syntax for expressing GS1 identifier keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields.			
GS1 Global Office (GS1 GO)	GS1 is a neutral, not-for-profit organisation that provides global standards for efficient business communication. The Global Office, located in Brussels (Belgium) and Ewing, NJ (USA) is the guardian, and provides an open, user-driven, forum for ongoing maintenance and development, of the GS1 standards, guidelines and statues.			
GS1 Global Standards Management Process (GSMP)	GS1 created the Global Standards Management Process (GSMP) to support standards development activity for the GS1 system. The GSMP uses a global consensus process to develop supply chain standards that are based on business needs and user-input			
GS1 identification key	A unique identifier for a class of objects (e.g., a trade item) or an instance of an object (e.g., a logistic unit).			
GS1 Member Organisation (GS1 MO)	A member of GS1 that is responsible for administering the GS1 system in its country (or assigned area). This task includes, but is not restricted to, ensuring user companies make correct use of the GS1 system, have access to education, training, promotion and implementation support and have access to play an active role in GSMP.			
GS1 Prefix	A unique string of two or more digits issued by GS1 Global Office and allocated to GS1 Member Organisations to issue GS1 Company Prefixes or allocated to other specific areas.			
GS1 QR Code	A subset of QR Code which uses the function that allows the encoding of element strings.			
GS1 symbologies using GS1 Application Identifiers	All GS1 endorsed barcode symbologies that can encode more than a GTIN namely GS1-128, GS1 DataMatrix, GS1 DataBar, GS1 QR Code, GS1 DotCode and GS1Composite.			
GS1 system	The specifications, standards, and guidelines administered by GS1.			
GS1 UIC Extension 1	Character that follows and extends the EU 2018/574 UIC to identify a country of ID Issuer's appointment and operation.			
GS1 UIC Extension 2	Character that follows GS1 UIC Extension 1 and extends the EU 2018/574 UIC to identify whether a GS1 or non-GS1 based algorithm is used.			
GS1 XML	The GS1 standard for extensible markup language (XML) schemas providing users with a global business messaging language of e-business to conduct efficient internet-based commerce.			
GS1®	Based in Brussels, Belgium, and Princeton, USA, it is the organisation that manages the GS1 system. Its members are GS1 Member Organisations.			
GS1-128 symbology	A subset of Code 128 which uses the function that allows the encoding of element strings.			
GS1-8 Prefix	A unique string of <u>two or more three</u> digits issued by GS1 Global Office and allocated to GS1 Member Organisations to issue GTIN-8s or allocated to issue RCN-8s (see RCN-8).			
GTIN plus attribute(s) flag	A trigger in systems to determine if additional processing is required by a barcode user for a given GTIN.			
GTIN-12	The 12-digit GS1 identification key composed of a U.P.C. Company Prefix, item reference, and check digit used to identify trade items.			
GTIN-13	The 13-digit GS1 identification key composed of a GS1 Company Prefix, item reference ₇ and check digit used to identify trade items.			
GTIN-14	The 14-digit GS1 identification key composed of an indicator digit (1-9), GS1 Company Prefix item reference, and check digit used to identify trade items.			
GTIN-8	The 8-digit GS1 identification key composed of a GS1-8 Prefix, item reference, and check digit used to identify trade items.			
guard bar pattern	An auxiliary pattern of bars and spaces corresponding to start or stop patterns in barcode symbologies, and serving to separate the two halves of EAN-8, EAN-137 and UPC-A symbols.			
healthcare primary packaging	The first level of packaging for the product marked with an AIDC data carrier either on the packaging or on a label affixed to the packaging. For non-sterile packaging, the first level of packaging can be the packaging in direct contact with the product. For sterile packaging, the first level of packaging can be any combination of the sterile packaging system, May consist of a single item or group of items for a single therapy such as a kit. For packaging level below the retail consumer trade item.			

Release 21.1, Draft, Jul 2021

© 2021 GS1 AISBL

Page 512 of 519