



GSMP:

General Specifications Change Notification (GSCN)

WR #	GSCN Name	Effective Date
18-115	Identification of pieces a Trade Item shipped in multiple logistic units	13 Sept 2018

Associated Work Request (WR) Number:

18-115

Background:

There is an expressed need to separately identify pieces of a large trade item when the pieces are shipped separately in some quantity within different logistic units. This will also benefit large trade items that must be shipped separately in some quantity due to safety reasons. The piece identification is necessary when master data cannot be accessed. The benefits for this level of identification include: confirmation of all necessary pieces and information needed to support assembly of the trade item.

The solution approach shall be suitable for large furniture or military equipment, but could be used for other product categories/sectors.

The proposed changes here are for the GS1 General Specifications only. To fulfil the requirements of this Work Request, additional changes will be needed to the Tag Data Standards that will be covered in a separate document.

GS1 General Specification Change:

The recommended changes are highlighted below, relative to GS1 General Specifications version 18.

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2.2 Logistic units

A logistic unit is an item of any composition established for transport and/or storage that needs to be managed through the supply chain.

Tracking and tracing logistic units in the supply chain is a major application of the GS1 system. Scanning the standard identification number, marked on each logistic unit, allows the physical movement of units to be individually tracked and traced by providing a link between the physical movement of items and the associated information flow. It also opens up the opportunity to implement a wide range of applications, such as cross docking, shipment routing, and automated receiving.

Logistic units are identified with a GS1 identification number called the SSCC (Serial Shipping Container Code). The SSCC is the only GS1 key that SHALL be used as the identifier of a logistic unit. The SSCC ensures that logistic units are identified with a number that is unique worldwide.

If, in addition to being a logistic unit, the item is regarded as a trade item by the brand owner, it may additionally be identified with a GTIN. The combination of a GTIN and a serial number must not replace the SSCC as the identifier of a logistic unit.

If, in addition to being a logistic unit, the item is part of a consignment and or a shipment, it may also be associated with the GINC and or the GSIN.

Attribute information, such as a Global Identification Number for Consignment, AI (401), may be optionally encoded using internationally agreed data structures and a barcode symbology that allow unambiguous interpretation.

2.2.1 Individual logistic units

Application description

A logistic unit is an item of any composition established for transport and/or storage that needs to be managed through the supply chain. The identification and symbol marking of logistic units enables a large number of user applications. In particular, the SSCC (Serial Shipping Container Code) provides a link between the physical logistic unit and information pertaining to the logistic unit that is communicated between trading partners using Electronic Data Interchange (EDI).

The SSCC element string AI (00) is used for the identification of logistic units (see section 3). Each individual logistic unit is allocated a unique number, which remains the same for the life of the logistic unit. When assigning an SSCC, the rule is that an individual SSCC number must not be reallocated within one year of the shipment date from the SSCC assignor to a trading partner. However, prevailing regulatory or industry organisation specific requirements may extend this period.

In principle, the SSCC provides a unique reference number that can be used as the key to access information regarding the logistic unit in computer files. However, attributes relating to the logistic unit (e.g., ship to information, logistic weights) are also available as standardised element strings.

GS1 key

Definition

The SSCC is the GS1 identification key used to identify logistics units. The key is comprised of an extension digit, the GS1 Company Prefix, serial reference, and check digit. The GS1 Application Identifier for the SSCC is AI (00), see section 3.2 for details of the SSCC and associated data elements.

Rules

All SSCC rules described in section 4.2.2.

Attributes

Required

Fixed measure AI (02), or routing code AI (403), or trade item pieces AI (8026) are used when:

- A logistic unit is a grouping of trade items or trade item pieces, it is sometimes useful to indicate the Global Trade Item Number (GTIN) of the contained items in association with the SSCC. See

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section [3.2](#), *Identification of trade items contained in a logistic unit - fixed measure*, AI (02), [Identification of pieces of a trade item contained in a logistic unit](#), AI (8026), and *Count of trade items contained in a logistic unit*, AI (37).

- Use of AI (02) and AI (37) with SSCC AI (00) is not the preferred option for regulated healthcare trade items. For regulated healthcare trade items, AI (02) + AI (37) is limited to bilateral use between trading partners for exception handling during a migration period to EDI implementation or if the product is sold as a non-regulated trade item within a retail distribution channel for certain markets. SSCC is the approach selected by healthcare and provides the appropriate level of identification when associated with EDI messaging to provide traceability inclusive of count for trade items contained. SSCC when associated with EDI is required for identification purposes to reach our extended goals for traceability.
- The routing code, AI (403), is assigned by a parcel carrier. It is intended to provide a migration path to the adoption of a yet to be defined international, multi-modal solution. See section [3.2](#), *Routing code*, AI (403).

Optional

The use of attribute information on logistic units is optional. However, when used, attribute information SHOULD be processed with the SSCC that identifies the logistic unit.

- The element string *Ship to - Deliver to Global Location Number*, AI (410) has been designed to allow the automatic sortation of logistic units using the Global Location Number (GLN).
- The element string *Ship for - Deliver for - Forward to Global Location Number*, AI (413), has been designed to allow the cross docking of logistic units using the Global Location Number (GLN). It is used in conjunction with the element string AI (410) to indicate the cross docking station and the final destination of the logistic unit.
- The element string *Ship to - Deliver to Postal Code within a Single Postal Authority*, AI (420) has been designed to allow the automatic sortation of logistic units using the postal code in a single postal area.
- The element string *Ship to - Deliver to Postal Code with Three-Digit ISO Country Code*, AI (421) has been designed to allow the automatic sortation of logistic units using the postal code. As the postal code is prefixed by the ISO country code, it may be used internationally.

See section [3.2](#) for more details and the list of all GS1 Application Identifiers.

Rules

Refer to section [4.14](#) for the mandatory associations.

Data carrier specification

Carrier choices

The mandatory data carrier used to represent GS1 system individual logistic units is the GS1-128 barcode symbology.

For healthcare, see the recommendations at the end of section [2.1.6](#) in figure [2.1.6-2 Carrier choices](#).

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

See section [5.9.3.5](#), *GS1 symbol specification table 5*.

Symbol placement

All the symbol placement guidelines defined in section [6](#).

Unique application processing requirements

For a description of processing requirements, see section [Z](#).



3.1 Introduction

This section describes the meaning, structure, and function of the GS1 system element strings so they can be correctly processed in users' application programmes. An element string is the combination of a GS1 Application Identifier and a GS1 Application Identifier data field. The allowable character set to be used for GS1 Application Identifier element strings is defined in section [7.11](#). There are AIs that have additional syntax restrictions, e.g., numerical only; see below definition for each AI.

Automatic processing of element strings in business applications requires information about the type of transaction to which the transferred data refers. See section [7](#) for an explanation of this process. Element strings can be carried by GS1-128, GS1 DataBar symbology, GS1 Composite, GS1 DataMatrix and GS1 QR Code symbols. The rules for use and interrelationships between the GS1 Application Identifiers are contained in section 2 and 4.

When a predefined length GS1 key and attributes are encoded together, the GS1 key SHOULD appear before the attributes. In most cases predefined length element strings SHOULD be followed by non-predefined element strings. The sequence of predefined and non-predefined element strings should be at the discretion of the creator of the element strings.



3.2 GS1 Application Identifiers in numerical order

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Figure 3.2-1. GS1 Application Identifiers

AI	Data Content	Format (*)	FNC1 required (***)	Data title
00	Serial Shipping Container Code (SSCC)	N2+N18		SSCC
01	Global Trade Item Number (GTIN)	N2+N14		GTIN
02	GTIN of contained trade items	N2+N14		CONTENT
10	Batch or lot number	N2+X..20	(FNC1)	BATCH/LOT
11 (**)	Production date (YYMMDD)	N2+N6		PROD DATE
12 (**)	Due date (YYMMDD)	N2+N6		DUE DATE
13 (**)	Packaging date (YYMMDD)	N2+N6		PACK DATE
15 (**)	Best before date (YYMMDD)	N2+N6		BEST BEFORE or BEST BY
16 (**)	Sell by date (YYMMDD)	N2+N6		SELL BY
17 (**)	Expiration date (YYMMDD)	N2+N6		USE BY OR EXPIRY
20	Internal product variant	N2+N2		VARIANT
21	Serial number	N2+X..20	(FNC1)	SERIAL
22	Consumer product variant	N2+X..20	(FNC1)	CPV
240	Additional product identification assigned by the manufacturer	N3+X..30	(FNC1)	ADDITIONAL ID
241	Customer part number	N3+X..30	(FNC1)	CUST. PART NO.
242	Made-to-Order variation number	N3+N..6	(FNC1)	MTO VARIANT
243	Packaging component number	N3+X..20	(FNC1)	PCN
250	Secondary serial number	N3+X..30	(FNC1)	SECONDARY SERIAL
251	Reference to source entity	N3+X..30	(FNC1)	REF. TO SOURCE
253	Global Document Type Identifier (GDTI)	N3+N13+X..17	(FNC1)	GDTI
254	GLN extension component	N3+X..20	(FNC1)	GLN EXTENSION COMPONENT
255	Global Coupon Number (GCN)	N3+N13+N..12	(FNC1)	GCN
30	Variable count of items (variable measure trade item)	N2+N..8	(FNC1)	VAR. COUNT
310n (***)	Net weight, kilograms (variable measure trade item)	N4+N6		NET WEIGHT (kg)
311n (***)	Length or first dimension, metres (variable measure trade item)	N4+N6		LENGTH (m)
312n (***)	Width, diameter, or second dimension, metres (variable measure trade item)	N4+N6		WIDTH (m)
313n (***)	Depth, thickness, height, or third dimension, metres (variable measure trade item)	N4+N6		HEIGHT (m)
314n (***)	Area, square metres (variable measure trade item)	N4+N6		AREA (m ²)
315n (***)	Net volume, litres (variable measure trade item)	N4+N6		NET VOLUME (l)
316n (***)	Net volume, cubic metres (variable measure trade item)	N4+N6		NET VOLUME (m ³)
320n (***)	Net weight, pounds (variable measure trade item)	N4+N6		NET WEIGHT (lb)
321n (***)	Length or first dimension, inches (variable measure trade item)	N4+N6		LENGTH (i)
322n (***)	Length or first dimension, feet (variable measure trade item)	N4+N6		LENGTH (f)



AI	Data Content	Format (*)	FNC1 required (****)	Data title
323n (***)	Length or first dimension, yards (variable measure trade item)	N4+N6		LENGTH (y)
324n (***)	Width, diameter, or second dimension, inches (variable measure trade item)	N4+N6		WIDTH (i)
325n (***)	Width, diameter, or second dimension, feet (variable measure trade item)	N4+N6		WIDTH (f)
326n (***)	Width, diameter, or second dimension, yards (variable measure trade item)	N4+N6		WIDTH (y)
327n (***)	Depth, thickness, height, or third dimension, inches (variable measure trade item)	N4+N6		HEIGHT (i)
328n (***)	Depth, thickness, height, or third dimension, feet (variable measure trade item)	N4+N6		HEIGHT (f)
329n (***)	Depth, thickness, height, or third dimension, yards (variable measure trade item)	N4+N6		HEIGHT (y)
330n (***)	Logistic weight, kilograms	N4+N6		GROSS WEIGHT (kg)
331n (***)	Length or first dimension, metres	N4+N6		LENGTH (m), log
332n (***)	Width, diameter, or second dimension, metres	N4+N6		WIDTH (m), log
333n (***)	Depth, thickness, height, or third dimension, metres	N4+N6		HEIGHT (m), log
334n (***)	Area, square metres	N4+N6		AREA (m ²), log
335n (***)	Logistic volume, litres	N4+N6		VOLUME (l), log
336n (***)	Logistic volume, cubic metres	N4+N6		VOLUME (m ³), log
337n (***)	Kilograms per square metre	N4+N6		KG PER m ²
340n (***)	Logistic weight, pounds	N4+N6		GROSS WEIGHT (lb)
341n (***)	Length or first dimension, inches	N4+N6		LENGTH (i), log
342n (***)	Length or first dimension, feet	N4+N6		LENGTH (f), log
343n (***)	Length or first dimension, yards	N4+N6		LENGTH (y), log
344n (***)	Width, diameter, or second dimension, inches	N4+N6		WIDTH (i), log
345n (***)	Width, diameter, or second dimension, feet	N4+N6		WIDTH (f), log
346n (***)	Width, diameter, or second dimension, yard	N4+N6		WIDTH (y), log
347n (***)	Depth, thickness, height, or third dimension, inches	N4+N6		HEIGHT (i), log
348n (***)	Depth, thickness, height, or third dimension, feet	N4+N6		HEIGHT (f), log
349n (***)	Depth, thickness, height, or third dimension, yards	N4+N6		HEIGHT (y), log
350n (***)	Area, square inches (variable measure trade item)	N4+N6		AREA (i ²)



AI	Data Content	Format (*)	FNC1 required (****)	Data title
351n (***)	Area, square feet (variable measure trade item)	N4+N6		AREA (f ²)
352n (***)	Area, square yards (variable measure trade item)	N4+N6		AREA (y ²)
353n (***)	Area, square inches	N4+N6		AREA (i ²), log
354n (***)	Area, square feet	N4+N6		AREA (f ²), log
355n (***)	Area, square yards	N4+N6		AREA (y ²), log
356n (***)	Net weight, troy ounces (variable measure trade item)	N4+N6		NET WEIGHT (t)
357n (***)	Net weight (or volume), ounces (variable measure trade item)	N4+N6		NET VOLUME (oz)
360n (***)	Net volume, quarts (variable measure trade item)	N4+N6		NET VOLUME (q)
361n (***)	Net volume, gallons U.S. (variable measure trade item)	N4+N6		NET VOLUME (g)
362n (***)	Logistic volume, quarts	N4+N6		VOLUME (q), log
363n (***)	Logistic volume, gallons U.S.	N4+N6		VOLUME (g), log
364n (***)	Net volume, cubic inches (variable measure trade item)	N4+N6		VOLUME (i ³)
365n (***)	Net volume, cubic feet (variable measure trade item)	N4+N6		VOLUME (f ³)
366n (***)	Net volume, cubic yards (variable measure trade item)	N4+N6		VOLUME (y ³)
367n (***)	Logistic volume, cubic inches	N4+N6		VOLUME (i ³), log
368n (***)	Logistic volume, cubic feet	N4+N6		VOLUME (f ³), log
369n (***)	Logistic volume, cubic yards	N4+N6		VOLUME (y ³), log
37	Count of trade items Count of trade items or trade item pieces contained in a logistic unit	N2+N..8	(FNC1)	COUNT
390n (***)	Applicable amount payable or Coupon value, local currency	N4+N..15	(FNC1)	AMOUNT
391n (***)	Applicable amount payable with ISO currency code	N4+N3+N..15	(FNC1)	AMOUNT
392n (***)	Applicable amount payable, single monetary area (variable measure trade item)	N4+N..15	(FNC1)	PRICE
393n (***)	Applicable amount payable with ISO currency code (variable measure trade item)	N4+N3+N..15	(FNC1)	PRICE
394n (***)	Percentage discount of a coupon	N4+N4	(FNC1)	PRCNT OFF
400	Customer's purchase order number	N3+X..30	(FNC1)	ORDER NUMBER
401	Global Identification Number for Consignment (GINC)	N3+X..30	(FNC1)	GINC
402	Global Shipment Identification Number (GSIN)	N3+N17	(FNC1)	GSIN
403	Routing code	N3+X..30	(FNC1)	ROUTE
410	Ship to - Deliver to Global Location Number	N3+N13		SHIP TO LOC

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AI	Data Content	Format (*)	FNC1 required (****)	Data title
411	Bill to - Invoice to Global Location Number	N3+N13		BILL TO
412	Purchased from Global Location Number	N3+N13		PURCHASE FROM
413	Ship for - Deliver for - Forward to Global Location Number	N3+N13		SHIP FOR LOC
414	Identification of a physical location - Global Location Number	N3+N13		LOC No
415	Global Location Number of the invoicing party	N3+N13		PAY TO
416	GLN of the production or service location	N3+N13		PROD/SERV LOC
420	Ship to - Deliver to postal code within a single postal authority	N3+X..20	(FNC1)	SHIP TO POST
421	Ship to - Deliver to postal code with ISO country code	N3+N3+X..9	(FNC1)	SHIP TO POST
422	Country of origin of a trade item	N3+N3	(FNC1)	ORIGIN
423	Country of initial processing	N3+N3+N..12	(FNC1)	COUNTRY - INITIAL PROCESS.
424	Country of processing	N3+N3	(FNC1)	COUNTRY - PROCESS.
425	Country of disassembly	N3+N3+N..12	(FNC1)	COUNTRY - DISASSEMBLY
426	Country covering full process chain	N3+N3	(FNC1)	COUNTRY - FULL PROCESS
427	Country subdivision of origin	N3+X..3	(FNC1)	ORIGIN SUBDIVISION
7001	NATO Stock Number (NSN)	N4+N13	(FNC1)	NSN
7002	UN/ECE meat carcasses and cuts classification	N4+X..30	(FNC1)	MEAT CUT
7003	Expiration date and time	N4+N10	(FNC1)	EXPIRY TIME
7004	Active potency	N4+N..4	(FNC1)	ACTIVE POTENCY
7005	Catch area	N4+X..12	(FNC1)	CATCH AREA
7006	First freeze date	N4+N6	(FNC1)	FIRST FREEZE DATE
7007	Harvest date	N4+N6..12	(FNC1)	HARVEST DATE
7008	Species for fishery purposes	N4+X..3	(FNC1)	AQUATIC SPECIES
7009	Fishing gear type	N4+X..10	(FNC1)	FISHING GEAR TYPE
7010	Production method	N4+X..2	(FNC1)	PROD METHOD
7020	Refurbishment lot ID	N4+X..20	(FNC1)	REFURB LOT
7021	Functional status	N4+X..20	(FNC1)	FUNC STAT
7022	Revision status	N4+X..20	(FNC1)	REV STAT
7023	Global Individual Asset Identifier (GIAI) of an assembly	N4+X..30	(FNC1)	GIAI - ASSEMBLY
703s	Number of processor with ISO Country Code	N4+N3+X..27	(FNC1)	PROCESSOR # s
710	National Healthcare Reimbursement Number (NHRN) - Germany PZN	N3+X..20	(FNC1)	NHRN PZN
711	National Healthcare Reimbursement Number (NHRN) - France CIP	N3+X..20	(FNC1)	NHRN CIP
712	National Healthcare Reimbursement Number (NHRN) - Spain CN	N3+X..20	(FNC1)	NHRN CN
713	National Healthcare Reimbursement Number (NHRN) - Brasil DRN	N3+X..20	(FNC1)	NHRN DRN
714	National Healthcare Reimbursement Number (NHRN) - Portugal AIM	N3+X..20	(FNC1)	NHRN AIM
... (****)	National Healthcare Reimbursement Number (NHRN) - Country "A" NHRN	N3+X..20	(FNC1)	NHRN xxx



AI	Data Content	Format (*)	FNC1 required (***)	Data title
723s (***** **)	<u>Certification reference</u>	N4+X2+X..28	(FNC1)	CERT # s
8001	<u>Roll products (width, length, core diameter, direction, splices)</u>	N4+N14	(FNC1)	DIMENSIONS
8002	<u>Cellular mobile telephone identifier</u>	N4+X..20	(FNC1)	CMT No
8003	<u>Global Returnable Asset Identifier (GRAI)</u>	N4+N14+X..16	(FNC1)	GRAI
8004	<u>Global Individual Asset Identifier (GIAI)</u>	N4+X..30	(FNC1)	GIAI
8005	<u>Price per unit of measure</u>	N4+N6	(FNC1)	PRICE PER UNIT
8006	<u>Identification of an individual trade item piece</u>	N4+N14+N2+N2	(FNC1)	ITIP or GCTIN (*****)
8007	<u>International Bank Account Number (IBAN)</u>	N4+X..34	(FNC1)	IBAN
8008	<u>Date and time of production</u>	N4+N8+N..4	(FNC1)	PROD TIME
8010	<u>Component/Part Identifier (CPID)</u>	N4+X..30	(FNC1)	CPID
8011	<u>Component/Part Identifier serial number (CPID SERIAL)</u>	N4+N..12	(FNC1)	CPID SERIAL
8012	<u>Software version</u>	N4+X..20	(FNC1)	VERSION
8013	<u>Global Model Number (GMN)</u>	N4+X..30	(FNC1)	GMN or BUDI-DI (*****)
8017	<u>Global Service Relation Number to identify the relationship between an organisation offering services and the provider of services</u>	N4+N18	(FNC1)	GSRN - PROVIDER
8018	<u>Global Service Relation Number to identify the relationship between an organisation offering services and the recipient of services</u>	N4+N18	(FNC1)	GSRN - RECIPIENT
8019	<u>Service Relation Instance Number (SRIN)</u>	N4+N..10	(FNC1)	SRIN
8020	<u>Payment slip reference number</u>	N4+X..25	(FNC1)	REF No
8110	<u>Coupon code identification for use in North America</u>	N4+X..70	(FNC1)	-
8026	<u>ITIP of contained pieces</u>	N4+N18	(FNC1)	ITIP CONTENT
8111	<u>Loyalty points of a coupon</u>	N4+N4	(FNC1)	POINTS
8112	<u>Paperless coupon code identification for use in North America (AI 8112)</u> <u>Paperless coupon code identification for use in North America (AI 8112)</u>	N4+X..70	(FNC1)	-
8200	<u>Extended Packaging URL</u>	N4+X..70	(FNC1)	PRODUCT URL
90	<u>Information mutually agreed between trading partners</u>	N2+X..30	(FNC1)	INTERNAL
91 to 99	<u>Company internal information</u>	N2+X..90	(FNC1)	INTERNAL

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NOTES:

(*): The first position indicates the length (number of digits) of the GS1 Application Identifier. The following value refers to the format of the data content. The following convention is applied:

- n implied decimal point position
- N numeric digit
- X any character in figure 7.11-1
- N3 3 numeric digits, predefined length
- N..3 up to 3 numeric digits
- X..3 up to 3 characters in figure 7.11-1

(**): If only year and month are available, DD must be filled with two zeroes.



(***): The fourth digit of this GS1 Application Identifier indicates the number of decimal places (and in that way the implied decimal point position).
 Example:
 ■ 3100 Net weight in kg without a decimal point
 ■ 3102 Net weight in kg with two decimal places

(****): All GS1 element strings that begin with GS1 Application Identifiers not contained in the predefined table shown in figure 7.8.4-2 SHALL be separated by a separator character unless this element string is the last one to be encoded in the symbol. For details on the separator character see section 7.8.3.

(*****): An example to illustrate future additional National Healthcare Reimbursement Numbers (NHRNs). If additional NHRN AIs are required, a request for a new NHRN AI SHALL be made through the GS1 GSMP.

(*****): ITIP is the preferred data title for AI (8006) and GCTIN will have a sunset date of January 2020.

(*****): For medical devices, the default, global data title is BUDI-DI

(*****): The fourth digit of this GS1 Application Identifier indicates the sequence number, allowing for multiple occurrences of the AI.

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3.3 GS1 Application Identifiers starting with digit 0

3.3.1 Identification of a logistic unit (SSCC): AI (00)

The GS1 Application Identifier (00) indicates that the GS1 Application Identifier data field contains an SSCC (Serial Shipping Container Code). The SSCC is used to identify logistic units (see section 2.2).

The extension digit is used to increase the capacity of the serial reference within the SSCC. It is assigned by the company that constructs the SSCC. The extension digit ranges from 0-9.

The GS1 Company Prefix is allocated by GS1 Member Organisations to the company that allocates the SSCC – here the physical builder or the brand owner of the logistic unit (see section 1.4.4). It makes the SSCC unique worldwide but does not identify the origin of the unit.

The structure and content of the serial reference is at the discretion of owner of the GS1 Company Prefix to uniquely identify each logistic unit.

The check digit is explained in section 7.9. Its verification, which must be carried out in the application software, ensures that the number is correctly composed.

Figure 3.3.1-1. Format of the element string

GS1 Application Identifier	SSCC (Serial Shipping Container Code)																	
	Extension digit	GS1 Company Prefix							Serial reference							Check digit		
0 0	N ₁	N ₂	N ₃	N ₄	N ₅	N ₆	N ₇	N ₈	N ₉	N ₁₀	N ₁₁	N ₁₂	N ₁₃	N ₁₄	N ₁₅	N ₁₆	N ₁₇	N ₁₈

The data transmitted from the barcode reader means that the element string denoting the SSCC of a logistic unit has been captured. When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **SSCC**

3.3.2 Identification of a trade item (GTIN): AI (01)

The GS1 Application Identifier (01) indicates that the GS1 Application Identifier data field contains a GTIN. The GTIN is used to identify trade items (see section 4).

The GTIN for trade items may be a GTIN-8, GTIN-12, GTIN-13 or a GTIN-14. See section 2.1 for the rules for GTIN formats and mandatory or optional attributes in the various trade item applications.

The check digit is explained in section 7.9. Its verification, which must be carried out in the application software, ensures that the number is correctly composed.

unit or the GTIN of the variable measure trade item to which it relates. When indicating this element string in the non-HRI text section of a barcode label, the data title in section 3.2 SHOULD be used.

3.6.4 Kilograms per square metre: AI (337n)

The GS1 Application Identifier (337n) indicates that the GS1 Application Identifier data field contains the kilograms per square metre of a particular trade item.

The GS1 Application Identifier digit shown as "n" indicates the implied decimal point position, where, for example, the digit 0 means that there is no decimal point, and the digit 1 means that the decimal point is between N5 and N6.

The **kilograms per square metre** field contains the weight per area of the respective trade item. The unit of measure is kilograms.

Figure 3.6.4-1. Format of the element string

GS1 Application Identifier	Kilograms per square metre					
3 3 7 n	N ₁	N ₂	N ₃	N ₄	N ₅	N ₆

The data transmitted from the barcode reader means that the element string denoting kilograms per square metre has been captured. As this element string is an attribute of a trade item, it must be processed together with the GTIN of the trade item to which it relates.

When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **KG PER m²**

3.6.5 Count of trade items or trade item pieces contained in a logistic unit: AI (37)

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The GS1 Application Identifier (37) indicates that the GS1 Application Identifier data field contains the number of trade items contained in a logistic unit. This element string is a mandatory completion of AI (02) or AI (8026) described in sections 3.3.3 and 3.9.16.

The count of ~~trade~~ items field contains the number of trade items or number of trade item pieces contained in the respective logistic unit. This information refers to the identification number of the contained ~~trade~~-items.

Figure 3.6.5-1. Format of the element string

GS1 Application Identifier	Count of trade items
3 7	N ₁ —variable length—> N ₈

The data transmitted from the barcode reader means that the element string denoting a number of trade items contained in a logistic unit has been captured. This element string must be processed together with the GTIN represented in AI (02) (see section 3.3.3 or with the ITIP represented in AI (8026) (see section 3.9.16) appearing on the same logistic unit.

When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **COUNT**

3.6.6 Amount payable or coupon value - Single monetary area: AI (390n)

The GS1 Application Identifier (390n) indicates that the GS1 Application Identifier data field contains the amount payable of a payment slip or the coupon value.

The GS1 Application Identifier digit shown as "n" indicates the implied decimal point position, where the digit 0 means that there is no decimal point, and the digit 1 means that the decimal point is before the last position of the amount payable. See examples in figure below.

The applicable amount payable contains the sum to be paid with the respective payment slip or the coupon value.



the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **GSRN - RECIPIENT**

3.9.14 Service Relation Instance Number (SRIN): AI (8019)

The GS1 Application Identifier (8019) indicates that the GS1 Application Identifier data field contains a Service Relation Instance Number (SRIN). The SRIN is used when the identification of a "Subject of Care" Global Service Relation Number for the Service Recipient (GSRN - RECIPIENT) needs to be further qualified with a sequence indicator during the episode of care. The SRIN is further used when an identification (e.g., a badge) of a "Provider of Care" with Global Service Relation Number for the Service Provider (GSRN - PROVIDER) needs to be decommissioned and a replacement issued. The resultant element string provides a means for the organisation issuing badges to distinguish between badges with identical GSRNs.

The structure and content of the Service Relation Instance Number is at the discretion of the organisation offering the service, in order to uniquely identify each service relation instance.

Figure 3.9.14-1. Format of the element string

GS1 Application Identifier	Service Relation Instance Number
8 0 1 9	N ₁ —variable length—> N ₁₀

The data transmitted from the barcode reader means that the element string denoting a Service Relation Instance Number has been captured. When indicating this element string in the non-HRI text section of a barcode label, one of the following data title SHOULD be used as appropriate (see also section 3.2): **SRIN**

3.9.15 Payment slip reference number: AI (8020)

The GS1 Application Identifier (8020) indicates that the GS1 Application Identifier data field contains a payment slip reference number.

The payment slip reference number, assigned by the invoicing party, identifies a payment slip within a given Global Location Number (GLN) of an invoicing party. Together with the GLN of the invoicing party, the payment slip reference number uniquely identifies a payment slip. The data field is alphanumeric and may contain all characters contained in figure 7.11-1.

Figure 3.9.15-1. Format of the element string

GS1 Application Identifier	Payment slip reference number
8 0 2 0	X ₁ —variable length—> X ₂₅

The data string transmitted from the barcode reader means that the element string denoting a payment slip reference number has been captured. This element string must be processed together with the GLN of the invoicing party, AI (415).

When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **REF NO.**

3.9.16 Identification of pieces of a trade item contained in a logistic unit: AI (8026)

The GS1 Application Identifier (8026) indicates that the GS1 Application Identifier data field includes the ITIP of the contained piece of a trade item. The ITIP is used to identify a piece of a trade items.

The GTIN that is included in this element string is the GTIN for the complete trade item.

The piece number identifies an piece of the trade item. The total count provides the total number of pieces of the trade item.

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Figure 3.9.16-1. Format of the element string

GS1 Application Identifier	Global Trade Item Number (GTIN)	Piece number	Total count
8 0 2 6	N ₁ N ₂ N ₃ N ₁₂ N ₁₃ N ₁₄	N ₁₅ N ₁₆	N ₁₇ N ₁₈

Note: This element string SHALL be used only on a logistic unit if:

- the logistic unit is not itself a trade item; and
- all the pieces of the trade item that are contained have the same ITIP.

The data transmitted from the barcode reader means that the element string denoting the ITIP of the trade item piece contained in a logistic unit has been captured. This element string must be processed together with the count of items, AI (37), which must appear on the same unit (see section 3.6.5). When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **ITIP CONTENT**

3-9-163.9.17 Coupon code identification for use in North America (AI 8110)

See GS1 US for the *North American Coupon Application Guideline using GS1 DataBar Expanded Symbols* for detailed information on GS1 US coupon code data content.

The coupon barcode is constructed by starting with a coupon GS1 Application Identifier (8110), followed by the required and optional data elements, until all desired data is encoded (or the limit of 70 digits is reached).

Figure 3.9.17-1. Format of the element string

GS1 Application Identifier	Formatted according to rules of North American Coupon Application Guideline using GS1 DataBar Expanded Symbols
8 1 1 0	X ₁ —————variable length—————>X ₇₀

The data string transmitted from the barcode reader means that the element string denoting a Coupon code for use in North America has been captured.

3-9-173.9.18 Loyalty points of a coupon: AI (8111)

The GS1 Application Identifier (8111) indicates that the GS1 Application Identifier data field contains the loyalty points of a coupon.

Figure 3.9.18-1. Format of the element string

GS1 Application Identifier	Loyalty points of a coupon
8 1 1 1	N ₁ N ₂ N ₃ N ₄

The data string transmitted from the barcode reader means that the element string denoting the loyalty points of a coupon has been captured. This element string must be processed together with the Global Coupon Number, AI (255) of the coupon to which it relates.

When indicating this element string in the non-HRI text section of a barcode label, the following data title SHOULD be used (see also section 3.2): **POINTS**

3-9-183.9.19 Paperless coupon code identification for use in North America (AI 8112)

See GS1 US for the *North American Coupon Application Guideline using GS1 DataBar Expanded Symbols* for detailed information on GS1 US coupon code data content.

The paperless coupon data string is constructed by starting with a coupon GS1 Application Identifier (8112), followed by the required and optional data elements, until all desired data is encoded (or the limit of 70 digits is reached).

4.14 Data relationships

This section defines the rules for allowed combinations of element strings on the same physical entity, irrespective of the data carrier(s) applied to the entity. The rules are application-neutral, which means that they apply to all applications listed in section 2 and to any other application where multiple element strings are combined on the same physical entity.

The rules are presented in two tables:

1. Invalid pairs of element strings, indicating which combinations of element strings are not allowed on the same physical entity.
2. Mandatory pairs of element strings, indicating which element strings must occur in combination with one or more other element strings.

- ✔ **Note:** In both tables, the GS1 Application Identifiers (AIs) are used to indicate the element string. But when evaluating the rule the complete element string, i.e. the AI and the data field, needs to be taken into account.
- ✔ **Note:** GTINs encoded in an EAN/UPC and ITF-14 symbols are to be regarded as element strings prefixed by an inferred AI (01).
- ✔ **Note:** Duplicate element strings (e.g., two serial numbers, two batch/lot numbers, two Extended Packaging URLs) MAY appear on the same physical entity (for example in multiple barcodes). In that case they SHALL have the same value in each occurrence on that entity.

4.14.1 Invalid pairs of element strings

This section defines the pairs of element strings that SHALL NOT appear together on the same physical entity. The table does not provide a finite list of all possible rules, only situations that have proven to pose difficulties in practice are included.

Some explanation on figure [4.14.1-1](#):

- The table is sorted by AI value, with the lowest AI value displayed in the first column.
- Multiple AIs may be listed in the first or third column, separated by commas. This means that the same rule applies to all listed AIs.
- The rules work in both directions, e.g., if it states AI (01) SHALL NOT be combined with AI (37) this implies that AI (37) SHALL NOT be combined with AI (01).

Figure 4.14.1-1. Invalid pairs of element strings

Invalid pairs of element strings				Rule
AI	Designation	AI	Designation	
01	GTIN	01	GTIN	All occurrences of GTIN SHALL have one value. It is for example not allowed to include GTINs of other packaging levels.
01	GTIN	02	GTIN of contained trade items	GTIN of contained trade items is intended to list the trade items contained in a logistic unit, and SHALL NOT be used to identify the contents of a trade item.
01	GTIN	37	Count of units contained	The count of units contained SHALL only be used with GTIN of contained trade items <u>or trade item pieces</u> .
01	GTIN	255	Global Coupon Number	A trade item SHALL NOT also be identified as a coupon.
420	Ship to postal code, single postal authority	421	Ship to postal code with ISO country code	Only one ship to postal code SHALL be applied on the same physical entity.

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Invalid pairs of element strings				Rule
AI	Designation	AI	Designation	
422, 423, 424, 425	Country of origin, initial processing, processing, or disassembly	426	Country of full processing	Country of origin, initial processing, processing, or disassembly SHALL NOT be used in combination with country of full processing, since this would lead to ambiguous data.
390n	Amount payable – single monetary area	391n	Amount payable – with ISO currency code	Only one amount payable element string SHALL be applied on a payment slip.
390n	Coupon value	394n, 8111	Percentage discount of a coupon, Loyalty points of a coupon	The element strings coupon value, percentage discount of a coupon and loyalty points of a coupon SHALL NOT be applied in combination.
392n	Amount payable for a variable measure trade item – single monetary area	393n	Amount payable for a variable measure trade item and ISO currency code	Only one amount payable element string SHALL be applied on a variable measure trade item.
394n	Percentage discount of a coupon	8111	Loyalty points of a coupon	The element strings percentage discount of a coupon and loyalty points of a coupon SHALL NOT be applied in combination.
8006	Identification of an individual trade item piece ITIP	01	GTIN	The GTIN SHALL NOT be used in combination with the identification of an individual trade item piece. The GTIN of the trade item to which the individual trade item piece belongs is contained in the element string.
8006	ITIP	37	Count of units contained	The count of units contained SHALL only be used with GTIN of contained trade items or trade item pieces.
8018	GSRN for the recipient	8017	GSRN for the provider	Only one Global Service Relation Number (recipient or provider) SHALL be applied at one time for identification of an individual in a given service relationship
8026	Identification of a trade item piece contained in a logistic unit	02, 8006	GTIN of contained trade items, Identification of an individual trade item piece	Identification of the trade item piece contained in a logistic unit SHALL NOT be used in combination with GTIN of contained trade items or identification of an individual trade item piece.

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4.14.2 Mandatory association of element strings

This section defines the element strings that mandate the appearance of another element string on the same physical entity.

Note: This does not necessarily mean that the element strings need to appear in the same data carrier. For example, multiple GS1-128 barcode symbols may be used in combination on a GS1 Logistics Label.

Some explanation on figure [04.14.2-1](#):

- The table is sorted by AI value, with the AI that is the trigger for the rule displayed in the first column. This means that this table cannot be read in both directions. For example, a rule that says AI (17) must be used together with AI (01), does not imply that AI (17) can only be used together with AI (01), since it can also be used with AI (255) GCN.
- Multiple AIs may be listed in the first column, separated by commas. This means that the rule applies to all of the listed AIs (element strings).
- The same AI can occur in the first column multiple times, in different rows. This means that depending on the value of the element string different rules need to be applied.



- When multiple AIs are included in the third column, this is always done with an AND, OR or XOR logical operator between them:
 - AND means that both element strings SHALL appear on the physical entity
 - OR means that one or both of the element strings SHALL appear on the physical entity.
 - XOR means that one of the element strings SHALL appear on the physical entity, and the other element string SHALL NOT.

Figure 4.14.2-1. Mandatory association of element strings

If element string		Then mandatory associated element string	Rule
AI	Designation	AI	
01 with N ₁ = 0	GTIN of a variable measure trade item scanned at POS	30 OR 3nnn*	The GTIN of a variable measure trade item scanned at POS SHALL occur in combination with: <ul style="list-style-type: none"> ■ a variable count of items; or ■ a trade measure Note: Master data will be needed to determine whether the GTIN represents a variable measure trade item scanned at POS. Also see the note below this table.
01 with N ₁ = 9, 02 with N ₁ = 9	GTIN of a variable measure trade item not scanned at POS	30 OR 3nnn* OR 8001	The GTIN of a variable measure trade item not scanned at POS SHALL occur in combination with: <ul style="list-style-type: none"> ■ a variable count of items; or ■ a trade measure; or ■ the dimensions of a roll product. Note: The first position of the GTIN is "9" for such trade items. Also see the note below this table.
01 with N ₁ = 9	GTIN of a custom trade item.	242	The GTIN of a custom trade item SHALL be used in combination with the Made-to-Order variation number. Note: The first position of the GTIN is "9" for such trade items.
02	GTIN of contained trade items	00 AND 37	The GTIN of contained trade items SHALL occur in combination with an SSCC and the count of the trade items.
10	Batch/lot number	01 XOR 02 XOR 8006 XOR 8026 ***	Batch/lot number SHALL occur in combination with: <ul style="list-style-type: none"> ■ a GTIN; or ■ a GTIN of contained trade items; or ■ an ITIP the identification of an individual trade item piece ■ an ITIP of contained trade item pieces .
11, 13, 15, 16, 17	Production date, packaging date, best before date, sell by date, expiration date (of a trade item)	01 XOR 02 XOR 8006 XOR 8026 ***	These dates SHALL occur in combination with: <ul style="list-style-type: none"> ■ a GTIN; or ■ a GTIN of contained trade items; or ■ an ITIP ■ an ITIP of contained trade item pieces the identification of an individual trade item piece.
12	Due date	8020 AND 415	The due date SHALL occur in combination with the payment slip reference number and the GLN of the invoicing party
17	Expiration date (of a coupon)	255	The expiration date of a coupon SHALL occur in combination with the GCN.
20	Internal product variant	01 XOR 02 XOR 8006 XOR 8026 ***	Internal product variant SHALL occur in combination with: <ul style="list-style-type: none"> ■ a GTIN; or ■ a GTIN of contained trade items; or ■ an ITIP ■ an ITIP of contained trade item pieces the identification of an individual trade item piece.

Commented [C12]: WR18-115, several similar changes related to the introduction of AI 8026



If element string		Then mandatory associated element string	Rule
AI	Designation	AI	
21	Serial number	01 XOR 8006***	The serial number SHALL occur in combination with: <ul style="list-style-type: none"> a GTIN; or an ITIP the identification of an individual trade item piece. Note: SGTIN is a common term for the combination of GTIN and serial number.
22	Consumer product variant	01	The consumer product variant SHALL occur in combination with a GTIN of a retail consumer trade item.
240	Additional product identification	01 XOR 02 XOR 8006 XOR 8026***	The additional product identification SHALL occur in combination with: <ul style="list-style-type: none"> a GTIN; or a GTIN of contained trade items; or an ITIP an ITIP of contained trade item pieces the identification of an individual trade item piece.
241	Customer part number	01 XOR 02 XOR 8006 XOR 8026***	The customer part number SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items; or an ITIP an ITIP of contained trade item pieces the identification of an individual trade item piece.
242	Made-to-Order variation number	(01 with N _i = 9) XOR (02 with N _i = 9) XOR (8006*** with N _i = 9) XOR (8026 with N _i = 9)***	The Made-to-Order variation number SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items; or an ITIP an ITIP of contained trade item pieces the identification of an individual trade item piece. Note: The GTIN must relate to a custom trade item. The first position of the GTIN is "9" for such trade items.
243	Packaging Component Number	01	The Packaging Component Number SHALL occur in combination with the GTIN
250	Secondary serial number	(01 XOR 8006***) AND 21	The secondary serial number SHALL occur in combination with the serial number and: <ul style="list-style-type: none"> the GTIN; or the identification of an individual trade item piece. an ITIP
251	Reference to source entity	01 XOR 8006***	The reference to source entity SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the identification of an individual trade item piece. An ITIP
254	GLN extension component	414	The GLN extension component SHALL occur with the Identification of a physical location (GLN).
30	Variable count of items	01 XOR 02	The variable count of items SHALL occur with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items. Note: The GTIN must relate to a variable measure trade item.
3nnn*	Trade measures	01 XOR 02	Trade measures SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items. Note: The GTIN must relate to a variable measure trade item.



If element string		Then mandatory associated element string	Rule
AI	Designation	AI	
3nnn**	Logistic measures	00 OR 01	Logistic measures SHALL occur in combination with: <ul style="list-style-type: none"> an SSCC a GTIN
337n	Kilograms per square metre	01	Kilograms per square metre SHALL occur in combination with a GTIN.
37	Count of units contained	00 AND (02 XOR 8026)	The count of units contained SHALL occur in combination with the SSCC and: <ul style="list-style-type: none"> the GTIN of contained trade items, or the ITIP of contained trade item pieces.
390n	Amount payable – single monetary area	8020 AND 415	The amount payable (single monetary area) SHALL occur in combination with the payment slip reference number and the GLN of the invoicing party.
390n	Coupon value – single monetary area	255	The coupon value (single monetary area) SHALL occur in combination with the Global Coupon Number.
391n	Amount payable – with ISO currency code	8020 AND 415	The amount payable (with ISO currency code) SHALL occur in combination with the payment slip reference number and the GLN of the invoicing party.
392n	Applicable amount payable – single monetary unit	01 AND (30 XOR 3nnn*)	The applicable amount payable (single monetary area) SHALL occur in combination with the GTIN and either: <ul style="list-style-type: none"> variable count of items; or a trade measure. Note: The GTIN must relate to a variable measure trade item.
393n	Applicable amount payable – with ISO currency code	01 AND (30 XOR 3nnn*)	The applicable amount payable (with ISO currency code) SHALL occur in combination with the GTIN and either: <ul style="list-style-type: none"> variable count of items; or a trade measure. Note: The GTIN must relate to a variable measure trade item.
394n	Percentage of a coupon	255	The percentage of a coupon SHALL occur in combination with the Global Coupon Number.
403	Routing code	00	The routing code SHALL occur in combination with an SSCC.
415	GLN of the invoicing party	8020	The GLN of the invoicing party SHALL occur in combination with the payment slip reference number.
422	Country of origin	01 XOR 02 XOR 8006 XOR 8026 ***	The country of origin SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items; or an ITIP an ITIP of contained trade item pieces, the identification of an individual trade item piece.
423	Country of initial processing	01 XOR 02	The country of initial processing SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
424	Country of processing	01 XOR 02	The country of processing SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
425	Country of disassembly	01 XOR 02	The country of disassembly SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.

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If element string		Then mandatory associated element string	Rule
AI	Designation	AI	
426	Country of full processing	01 XOR 02	The country of full processing SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
427	Country subdivision of origin	(01 XOR 02) AND 422	The country subdivision of origin SHALL occur in combination with the country of origin <u>and</u> : <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7001	NATO stock number	01 XOR 02 XOR 8006 XOR 8026 ***	The NATO stock number SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items; or an ITIP an ITIP of contained trade item pieces the identification of an individual trade item piece.
7002	UN/ECE meat carcasses and cuts classification	01 XOR 02	The UN/ECE meats carcasses and cuts classification SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7003	Expiration date and time	01 XOR 02	The expiration date and time SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7004	Active potency	01 AND 10	The expiration date and time SHALL occur in combination with the batch/lot number and the GTIN.
7005	Catch area	01 XOR 02	The catch area SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7006	First freeze date	01 XOR 02	The first freeze date SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7007	Harvest date	01 XOR 02	The harvest date SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7008	Species for fishery purposes	01 XOR 02	The species for fishery purposes SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7009	Fishing gear type	01 XOR 02	The fishing gear type SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
7010	Production method	01 XOR 02	The production method SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
703(s)	Number of processor	01 XOR 02	The number of processor SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
710, 711, 712, 713, 714	National Healthcare Reimbursement Number	01	National Healthcare Reimbursement Number(s) SHALL occur in combination with the GTIN.



If element string		Then mandatory associated element string	Rule
AI	Designation	AI	
7020	Refurbishment lot ID	(01 XOR 8006***) AND 416	The refurbishment lot ID SHALL occur in combination with the GLN of production/service location and : <ul style="list-style-type: none"> the GTIN; or the identification of an individual trade item piece. an ITIP
7021	Functional status	01 XOR 8006***	The functional status SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or an ITIP the identification of an individual trade item piece.
7022	Revision status	(01 XOR 8006***) AND 7021	The revision status SHALL occur in combination with the functional status and : <ul style="list-style-type: none"> the GTIN; or an ITIP the identification of an individual trade item piece.
723s	Certification reference	01 XOR 8004	Certification reference SHALL occur in combination with: <ul style="list-style-type: none"> a GTIN; or a GIAI
8001	Dimensions of roll products	01	Dimensions of roll products SHALL occur in combination with the GTIN. Note: The GTIN must relate to a variable measure trade item.
8005	Price per unit of measure	01 XOR 02	The price per unit of measure SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items. Note: The GTIN must relate to a variable measure trade item.
8007	International Bank Account Number	8020 AND 415	The International Bank Account Number SHALL occur in combination with the payment slip reference number and the GLN of the invoicing party.
8008	Date and time of production	01 XOR 02	The date and time of production SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or the GTIN of contained trade items.
8011	CPID serial number	8010	The CPID serial number SHALL occur in combination with the CPID.
8012	Software Version	01 XOR 8006***	The software version SHALL occur in combination with: <ul style="list-style-type: none"> the GTIN; or an ITIP the identification of an individual trade item piece.
8019	Service Relation Instance Number	8017 XOR 8018	The Service Relation Instance Number SHALL occur in combination with: <ul style="list-style-type: none"> the GSRN for the provider; or the GSRN for the recipient.
8020	Payment slip reference number	415	The payment slip reference number SHALL occur in combination with the GLN of the invoicing party.
8026	ITIP of contained pieces	00 AND 37	The ITIP of contained pieces SHALL occur in combination with an SSCC and the count of the pieces.
8111	Loyalty points of a coupon	255	Loyalty points of a coupon SHALL occur in combination with the GCN.
8200	Extended packaging URL	01	The extended packaging URL SHALL occur in combination with the GTIN.

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* The AIs for trade measures are set out in section [3.6.2 Trade measures: AIs \(31nn, 32nn, 35nn, 36nn\)](#)



- ** The AIs for logistics measures are set out in section [3.6.3](#) *Logistic measures: AIs (33nn, 34nn, 35nn, 36nn)*
- *** If used [in combination with the identification of trade item pieces \(ITIP\)](#), the optional AIs on all individual pieces of the trade item- SHALL be identical.



Note: Exception for point-of-sale. See figure [2.7-1](#). *Areas of GS1 system application*.