



The Global Language of Business

GSMP:
General Specifications Change Notification (GSCN)

GSCN #	GSCN Name	Effective Date
16-336	Remove Ambiguity	7 Nov 2016

Associated Work Request (WR) Number:

16-336

Background:

Section 3.3.2 – 3.3.3 and 3.3.3 -3.3.4 are currently broken out to distinguish between variable measure and fixed measure while containing information that is better referenced elsewhere in the Gen Spec and other pieces that could be made clearer if better defined. Additionally, consolidating the fixed and variable measure sections would remove redundancy.

GS1 General Specification Change:

Insert the actual changes to the Gen Spec here.

2.1.5 Variable measure trade items – packages / containers not scanned in general retail at point-of-sale

Application description

Trade items may be of variable measure either because the production process does not guarantee consistency in weight, size, or length (e.g., carcasses of meat, whole cheeses) or because the items are created to meet a special order that states a quantity (e.g., textiles ordered by the metre, glass ordered by the square metre).

Only trade items that are sold, ordered, or produced in quantities, which can vary continuously, are covered by the rules outlined in this section. Trade items that are sold in discrete and pre-defined bands (e.g., as a nominal weight) are treated as fixed measure trade items.

A trade item must be considered a variable measure trade item if its measure is variable at any point in the supply chain. For example, a supplier may sell and invoice chickens in cases of 15 kilograms each; therefore, the quantity of contained chickens will vary. The customer, a retailer in this example, may need to know the exact number of chickens contained in each case in order to organise the distribution to his stores. In this example, the supplier should source mark the trade item by using a variable measure Global Trade Item Number (GTIN) and the variable count element string.

See section 3 for the use of AI (242) Made-to-Order variation number and its use in the Maintenance, Repair and Operations (MRO) industrial supply sector.

[Variable measure trade items not scanned at POS are identified with a GTIN-14 beginning with '9'. The digit 9 in the indicator position indicates that the item identified is a variable measure trade item that is not scanned at POS.](#)

[Unlike GTIN-14s beginning with indicator 1 to 8, which are used to identify fixed measure trade items \(see section 2.1.2.6.2, for other formats\), this GTIN-14 is not derived from the GTIN \(without check digit\) of the contained trade items.](#)

[The GTIN-14 must be processed in its entirety and not broken down into its constituent elements.](#)

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Figure 2.1.5-1. Format of the element string

Global Trade Item Number (GTIN)			
Indicator	GS1 Company Prefix	Item reference	Check digit
(GTIN-12)	0	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
(GTIN-14)	9	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

The check digit is explained in section 7.9. Its verification, usually carried out automatically by the barcode reader, ensures that the number is correctly composed. The symbology identifier shows whether or not the check digit has been validated. If it has not, the check digit verification must be programmed in the application software.

Any trade item of a given composition where the quantity/measure information cannot be pre-determined for any reason is a variable measure trade item. The most frequent types are shown in the figure below.

Figure 2.1.5-2. Main types of variable measure trade items

Type	Item description
A	Items traded in bulk, neither portioned nor pre-packed for retail sale, ordered in any quantity, and that are delivered as variable measure trade items (e.g., fish, fruit, vegetables, cables, carpets, timber, fabrics) The identification number denotes the item as a trade entity containing any quantity of the given product and, if applicable, the form of packaging. Weight or dimensions complete the identification of the individual unit.
B	Trade items ordered and delivered by piece (wrapped or unwrapped) and invoiced by weight or measure because weight or measure varies due to the nature of the product or due to the manufacturing process (e.g., whole cheese, sides of bacon, beef carcasses, fish, sausages, ham, chicken, cauliflower, motion picture films) The identification number denotes the item as a particular pre-defined entity and, if applicable, denotes the form of packaging. Price or weight or dimensions complete the identification of the individual item.
C	Portioned trade items, pre-packed for sale by weight to the consumer, not fixed in quantity. (e.g., meat, cheese, vegetables, fruit, fillets of fish, sliced poultry, cold cuts) The identification number denotes the item type according to business practice and the form in which it is packed. Price weight or dimension completes the identification of the individual unit.
D	Trade items with selectable dimensions where GS1 system standard numbering does not make sense to cover the multiplicity of all variations (e.g., wooden planks, carpeting) The identification number denotes the pre-defined basic trade item. The applicable dimension(s) completes the identification of the individual unit.
E	Composition of a fixed number of trade items that are Type B or Type C (e.g., a trade item containing 10 chickens (Type B).) The identification number denotes the trade item grouping as an entity and, if applicable, its form of packaging. The total weight of all items contained completes the identification of the particular trade item.
F	Trade items made to customer specifications, restricted in use to the Maintenance, Repairs and Operations industrial supply sector, and sold business-to-business. The identification number denotes a base custom item. The specific variation is identified by the Made-to-Order variation number. (See in section 3.2 for the list of all GS1 Application Identifiers).

GS1 key

Definition

The GTIN-14 is the 14-digit GS1 identification key composed of an indicator digit (9), GS1 Company Prefix, item reference, and check digit used to identify trade items.



Rules

The GTIN-14 with the indicator 9 is used to identify a variable measure trade item. The presence of the variable measure information is mandatory for the complete identification of a particular variable measure trade item. The digit 9 in the first position is an integral part of the GTIN.

The GTIN-14 data structure beginning with indicator 9 is not used on an item intended to cross the Point-of-sale. Numbering of variable measure fresh food trade items intended to cross point-of-sale is defined in section 2.1.7.

Attributes

Required

The GTIN-14 identifies a variable measure trade item with respect to its fixed attributes or characteristics. To complete the identification of a variable measure trade item, the presence of an element string representing a trade measure is mandatory.

See section 3.2, Identification of a variable measure trade item (GTIN): AI (01).

Optional

Applicable trade measures depend on the nature of the product. They may be a quantity, a weight, or any dimension.

- An element string with **GS1** Application Identifier (30) is used if the variable measure of the trade item is the number of items contained. In order to generate a short barcode, always enter an even number of digits in the data field count of items by inserting a leading zero if necessary. Concatenation of this element string with the GTIN of the item enhances the accuracy of the application (see section 3.2.3.2, Variable count: AI (30)).
- An element string with **GS1** Application Identifiers (AIs) (31nn), (32nn), (35nn), and (36nn) is used if the variable measure of the respective trade item is weight, dimension, area, or volume. Only one element string of a given unit of measure may be applied on a particular item. Several element strings containing trade measures are possible on a particular item if the item is available in either unit of measure and if the applicable unit of measure is not distinguished for ordering and billing. This might apply if weight must be expressed in kilograms and pounds (see section 3.2, Trade measures: AIs (31nn, 32nn, 35nn, 36nn)).



Note: The fourth (and last) digit of the AI indicates the implied decimal point position. The value 0 means that the measurement is expressed in the basic unit of measure associated with the AI (e.g., kilograms). A value of 1 decreases the measurement by a factor of 10, a value of 2 by a factor of 100, and so on. For example, this enables metric weights to be represented from 999 kilograms to 1/1000 of a milligram.

- An element string with **GS1** Application Identifier (8001) contains the pre-defined variable fields of a roll product and it may be used for those variable roll products where the trade measures AI (31nn), (32nn), (35nn), (36nn) are not sufficient. The GTIN-14 can denote a basic roll product.

Rules

An element string with **GS1** Application Identifier (30) SHOULD never be used to indicate the quantity contained in a fixed measure trade item. However, if it appears on a fixed measure trade item, it SHOULD not invalidate the trade item identification.

An element string with **GS1** Application Identifier (8001) must never be used together with other element strings representing trade measures.



Data carrier specification

Carrier choices

Variable measure trade items not crossing a point-of-sale SHOULD be marked with an ITF-14 barcode, GS1-128 barcode or GS1 DataBar (*) barcode.

 **Note:** A GS1 DataBar barcode SHALL NOT be used to encode a GTIN-14 constructed from an ISBN.

(*) In 2014 GS1 DataBar became an open symbology and all scanning environments must be able to read these symbols.

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

See section 5.5.2.7.2, GS1 system symbol specification table 2.

Symbol placement

All the symbol placement guidelines defined in section 6.

Unique application processing requirements

For a description of processing requirements, see section 7.

Examples of variable measure trade item numbering and symbols

In the examples in the subsections that follow, the following factors apply:

- In order to be illustrative, all examples show the same presentation (e.g., price list, order, delivery, invoice, and recording in a data file).
- GS1-128 barcodes are used.
- The examples are given to demonstrate the correct use of a given [GS1](#) Application Identifier when used. When AI (02) is not used, information about the shipment must be received using Electronic Data Interchange (EDI) or other means prior to its physical receipt.

Example 1: Traded by Piece

The following example shows the order and delivery of an item traded by piece and invoiced by weight.

- The supplier's catalogue contains one entry: one salami weighing ~ 500 grams
- The order for 100 units is delivered in three boxes. Each box is marked with an SSCC (Serial Shipping Container Code) and, optionally, with information on the content of the box, expressed as follows:
 - AI (02) indicates the variable measure Global Trade Item Number (GTIN) of the units contained within the box.
 - AI (3101) indicates the total weight of the items contained within the box.
 - AI (37) indicates the count of items contained within the box.
- The three boxes may be stored on a pallet that may itself be marked with an SSCC and, optionally, with information on the contents of the pallet, expressed as follows:
 - AI (02) indicates the variable measure GTIN of the units contained within the pallet.
 - AI (3101) indicates the total weight of the items contained within the pallet.
 - AI (37) indicates the count of items contained within the pallet.

- The invoice refers to the GTIN and quantity delivered and shows the total weight and the price per kilogram. The GTIN and quantity of the invoice match the GTIN and quantity of the order.

Figure 2.1.5-3. Example 1: Traded by piece, invoiced by weight

Process	Description	Element strings used / symbol marking of the items
Supplier's catalogue	1 Salami ~ 500 g	GTIN 97612345000018
Order	100 salamis	100 x 97612345000018
Delivery	three logistic units Unit 1 = 33 salamis, 16.7 kg Unit 2 = 33 salamis, 16.9 g Unit 3 = 34 salamis, 17.1 kg	Unit 1: 00 376123450000010008 02 97612345000018 3101 000167 37 33 Unit 2: 00 376123450000010015 02 97612345000018 3101 000169 37 33 Unit 3: 00 376123450000010022 02 97612345000018 3101 000171 37 34
	If delivery is made on a pallet	Pallet: 00 376123450000010039 02 97612345000018 3101 000507 37 0100
Invoice	GTIN of items and the total weight (50.7 kg) + the price per kg	100 x 97612345000018; 50.7 kg x price per kg

Data file logistic units	Identification of logistic unit (SSCC)	GTIN of contained trade items	Total trade weight of content (grams)	Number of units contained
Either pallet	376123450000010039	97612345000018	50700	100
or individual units	376123450000010008	97612345000018	16700	33
	376123450000010015	97612345000018	16900	33
	376123450000010022	97612345000018	17100	34

Data file trade items	GTIN of trade item	Total trade weight (grams)	Number of trade items
One record per identification number	97612345000018	50700	100

An element string with an [GS1](#) Application Identifier (410) represents the Global Location Number (GLN) of the recipient of a logistic unit. The GLN refers to the address where a particular transport unit identified with an SSCC is to be delivered. This element string is used in single leg transport operations. A logistic unit may include a barcode carrying the GLN of the unit's intended destination. When scanning this element string, the data transmitted may be used to retrieve the related address and/or to sort the item by destination.

Example 2: Traded by trade item grouping

The following example shows the order and delivery of an item traded by trade item grouping and invoiced by weight.

- The supplier's catalogue contains one entry: one case of 20 steaks weighing ~ 200 grams each.
- The order is for three cases. Each case delivered is marked with the Global Trade Item Number (GTIN) of a single case followed by the actual weight of the items contained.



- The three cases may be stored on a pallet that may itself be marked with an SSCC (Serial Shipping Container Code) and, optionally, with information on the contents of the pallet, expressed as follows:
 - AI (02) indicates the variable measure GTIN of the units contained within the pallet.
 - AI (3102) indicates the total weight of the items contained within the pallet.
 - AI (37) indicates the count of cases contained within the pallet.
- The invoice refers to the GTIN and quantity delivered and shows the total weight and the price per kilogram. The GTIN and quantity of the invoice match the GTIN and quantity of the order.

Figure 2.1.5-4. Example 2: Traded by trade item grouping, invoiced by weight

Process	Description	Element strings used / symbol marking of the items
Supplier's catalogue	1 case of 20 steaks ~ 200 g vacuum packed	GTIN 97612345000117
Order	Three cases	3 x 97612345000117
Delivery	Three trade items Unit 1: weight = 4.150 kg Unit 2: weight = 4.070 kg Unit 3: weight = 3.980 kg	Unit 1: 01 97612345000117 3102 000415 Unit 2: 01 97612345000117 3102 000407 Unit 3: 01 97612345000117 3102 000398
	If delivery is made on a pallet	Pallet: 00 376123450000010091 02 97612345000117 3102 001220 37 03
Invoice	GTIN of items and the total weight (12.20 kg) + the price per kg	3 x 97612345000117; 12.2 kg x price per kg

Data file logistic units	Identification of logistic unit (SSCC)	GTIN of contained trade items	Total trade weight of content (Grams)	Number of units contained
Pallet	376123450000010091	97612345000117	12200	3

Data file trade items	GTIN of trade item	Total trade weight	Number of trade items
One Record	97612345000117	12200	3

Example 3: Traded in bulk

The following example shows an order and delivery of an item traded in bulk.

- The supplier's catalogue contains one entry: cabbage unwrapped sold in bulk by kilogram.
- The order is for 100 kilograms. It is delivered in two cases. Each case is marked with the Global Trade Item Number (GTIN) of the cabbage followed by the actual weight of the items contained.
- The two cases may be stored on a pallet that may itself be marked with an SSCC (Serial Shipping Container Code).
- The invoice refers to the GTIN as ordered and shows the total weight and the price per kilogram. The delivered weight may be verified as being close to the ordered quantity.



Figure 2.1.5-5. Example 3: Traded in bulk

Process	Description	Element strings used / symbol marking of the items
Supplier's catalogue	Cabbage unwrapped sold in bulk by kilogram	GTIN 97612345000049
Order	100 kg of cabbage	100 kg x 97612345000049
Delivery	Two trade items Unit 1: weight = 42.7 kg Unit 2: weight = 57.6 kg	Unit 1: 01 97612345000049 3101 000427 Unit 2: 01 97612345000049 3101 000576
	If delivery is made on a pallet	Pallet: 00 376123450000010107
Invoice	GTIN of item and the total weight (100.3 kg) + the price per kg	97612345000049 100.3 kg x price per kg

Data file logistic units	Identification of logistic unit (SSCC)	GTIN of contained trade items	Total trade weight of content (Grams)	Number of units contained
Pallet	376123450000010107	97612345000049	42700	1
		97612345000049	57600	1

Data file trade items	GTIN of trade item	Total trade weight (grams)	Number of trade items
One record per trade item	97612345000049	42700	1
	97612345000049	57600	1

Example 4: Traded by trade item grouping

The following example shows an order of variable measure trade items by case that are invoiced by the number of pieces delivered.

- The supplier's catalogue contains one entry: one case of ~ 10 cabbages sold by piece.
- The order is for two cases. Each case delivered is marked with the Global Trade Item Number (GTIN) of a single case followed by the actual count of the items contained.
- The two cases may be stored on a pallet that may itself be marked with an SSCC (Serial Shipping Container Code) and, optionally, with information on the contents of the pallet, expressed as follows:
 - AI (02) indicates the variable measure GTIN of the units contained within the pallet.
 - AI (30) indicates the total count of the items contained within the pallet.
 - AI (37) indicates the count of cases contained within the pallet.
- The invoice refers to the GTIN as ordered and delivered and the total count of items.

Figure 2.1.5-6. Example 4: Traded by trade item grouping, invoiced by piece

Process	Description	Element strings used / symbol marking of the items
Supplier's catalogue	Case containing ~10 cabbages sold by pieces	GTIN 97612345000285



Process	Description	Element strings used / symbol marking of the items
Order	Two cases	2 x 97612345000285
Delivery	Unit 1: 11 pieces Unit 2: 12 pieces	Unit 1: 01 97612345000285 30 11 Unit 2: 01 97612345000285 30 12
	If delivery is made on a pallet	Pallet: 00 376123450000010138 02 97612345000285 30 23 37 02
Invoice	GTIN of the trade item and the total quantity	2 x 97612345000285 23 pieces x price per piece

Data file logistic units	Identification of logistic unit (SSCC)	GTIN of contained trade items	Total number of pieces contained in the trade item	Number of units contained
Pallet	376123450000010138	97612345000285	23	2

Data file trade items	GTIN of trade item	Total number of pieces	Number of trade items
One Record	97612345000285	23	2

Example 5: Traded in Bulk

The following example shows a product that can be purchased from a supplier or sold to a customer by any length in metres.

- The supplier's catalogue contains one entry: cable T49 sold in metres.
- The order is for one length of cable of 150 metres. The delivered package is marked with the Global Trade Item Number (GTIN) of the cable followed by the actual length of cable contained.
- The invoice refers to the GTIN as ordered and delivered and the total length.

Figure 2.1.5-7. Example 5: Traded in bulk

Process	Description	Element strings used / symbol marking of the items
Supplier's catalogue	Cable T49 sold in any length in MTR	GTIN 97612345000063
Order	One trade item of 150 MTR	97612345000063 x 150 MTR
Delivery	One trade item, 150 MTR	01 97612345000063 3110 000150
Invoice	GTIN of the trade item and the total quantity	1 x 97612345000063 150 x price per MTR

Data file trade items	GTIN of trade item	Total trade length (metres)
One record	97612345000063	150

3.3.2 Identification of a fixed-measure 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 fixed-measure 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.

Figure 3.3.2-1. Format of the element string

	Application Identifier	Global Trade Item Number (GTIN)												Check digit	
		GS1-8 Prefix or GS1 Company Prefix						Item reference							
(GTIN-8)	0 1	0	0	0	0	0	0	N ₁	N ₂	N ₃	N ₄	N ₅	N ₆	N ₇	N ₈
(GTIN-12)	0 1	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
(GTIN-13)	0 1	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
(GTIN-14)	0 1	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

The data transmitted from the barcode reader means that the element string denoting the GTIN of a fixed measure trade item 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): **GTIN**

3.3.3 Identification of a variable-measure trade item (GTIN): AI (01)

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3.3.3.2 Identification of a variable-measure trade item (GTIN) scanned at POS: 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 variable-measure trade item scanned at POS can include a GTIN-12 or GTIN-13 Identification Number. 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 3.3.3.1-1. Format of the element string

	Application Identifier	Global Trade Item Number (GTIN)												Check digit	
(GTIN-12)	0 1	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
(GTIN-13)	0 1	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

The data transmitted from the barcode reader with first digit carrying "0" means that the element string denoting the GTIN of a variable-measure trade item has been captured. This element string must be processed together with the variable information of the same trade item (see 3.6.13.6.1 and 3.6.23.6.2 optional attributes).

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 3.23.2): **GTIN**

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3.3.3.3 Identification of a variable measure trade item (GTIN) not scanned at POS: AI (01)

The GS1 Application Identifier (01) indicates that the GS1 Application Identifier data field contains a GTIN. GTINs with indicator digit 9 are used to identify variable measure trade items not scanned at POS (see section 4).

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The GTIN for variable measure trade items is a special application of the GTIN-14 data structure. The digit 9 in the indicator position indicates that the item identified is a variable measure trade item Not Scanned at POS.

Unlike GTIN-14s used to identify fixed measure trade items (see section 2, Identification of Trade Item Groupings of Identical Trade Items), this GTIN-14 is not derived from the GTIN (without check digit) of the contained trade items.

The GTIN-14 must be processed in its entirety and not broken down into its constituent elements. Each average measurement grouping must be assigned its own GTIN-14 according to the *GTIN Allocation Rules Management Standard*.

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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 3.3.3.2-1. Format of the element string

Application Identifier	Indicator	Global Trade Item Number (GTIN)											Check digit	
		GS1 Company Prefix					Item reference							
0-1	9	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

The data transmitted from the barcode reader means that the element string denoting the GTIN of a variable measure trade item has been captured. This element string must be processed together with the variable information of the same trade item (see 3.6 optional attributes). 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 3.23.2): **GTIN**

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3.3.43.3.3 Identification of fixed measure trade items contained in a logistic unit: AI (02)

The GS1 Application Identifier (02) indicates that the GS1 Application Identifier data field includes the GTIN of the contained trade items. 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 for the rules for GTIN formats and mandatory or optional attributes in the various trade item applications.

The GTIN of the trade items contained is the GTIN of the highest level of trade item contained in the logistic unit.

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

- the logistic unit that is not itself a trade item; and
- and if all trade items that are contained at the same highest level have the same GTIN.

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The GTIN of the trade items contained represents the identification number of the highest level of trade item contained in the 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 3.3.3-1. Format of the element string

Application Identifier	GTIN of the contained trade items	Check digit
0 2	<i>N₁ N₂ N₃ N₄ N₅ N₆ N₇ N₈ N₉ N₁₀ N₁₁ N₁₂ N₁₃</i>	<i>N₁₄</i>

Application Identifier	Global Trade Item Number (GTIN)													Check digit		
	GS1-8 Prefix or GS1 Company Prefix						Item reference									
(GTIN-8)	0	0	0	0	0	0	<i>N₁</i>	<i>N₂</i>	<i>N₃</i>	<i>N₄</i>	<i>N₅</i>	<i>N₆</i>	<i>N₇</i>	<i>N₈</i>		
(GTIN-12)	0	0	<i>N₁</i>	<i>N₂</i>	<i>N₃</i>	<i>N₄</i>	<i>N₅</i>	<i>N₆</i>	<i>N₇</i>	<i>N₈</i>	<i>N₉</i>	<i>N₁₀</i>	<i>N₁₁</i>	<i>N₁₂</i>		
(GTIN-13)	0	2	<i>N₁</i>	<i>N₂</i>	<i>N₃</i>	<i>N₄</i>	<i>N₅</i>	<i>N₆</i>	<i>N₇</i>	<i>N₈</i>	<i>N₉</i>	<i>N₁₀</i>	<i>N₁₁</i>	<i>N₁₂</i>	<i>N₁₃</i>	
(GTIN-14)	0	2	<i>N₁</i>	<i>N₂</i>	<i>N₃</i>	<i>N₄</i>	<i>N₅</i>	<i>N₆</i>	<i>N₇</i>	<i>N₈</i>	<i>N₉</i>	<i>N₁₀</i>	<i>N₁₁</i>	<i>N₁₂</i>	<i>N₁₃</i>	<i>N₁₄</i>

The data transmitted from the barcode reader means that the element string denoting the GTIN of fixed-measure trade items contained in a logistic unit has been captured. This element string must be processed together with the count of trade 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): **CONTENT**

3.3.5 Identification of variable measure trade items contained in a logistic unit: AI (02)

The GS1 Application Identifier (02) indicates that the GS1 Application Identifier data field includes the GTIN of the contained trade items. Indicator digit 9 is required for a GTIN-14 used for variable measure trade items.

Note: This element string may be used only on a logistic unit that is not itself a trade item and if all trade items that are contained at the same level have the same GTIN. If the trade items are variable measure trade items, then this GTIN will be the implied item number that does not appear on the items contained.

The GTIN of the trade items contained represents the identification number of the highest level of items contained in the 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 3.3.5-1. Format of the element string

Application Identifier	GTIN of the contained trade item	Check digit
0 2	<i>9 N₂ N₃ N₄ N₅ N₆ N₇ N₈ N₉ N₁₀ N₁₁ N₁₂ N₁₃</i>	<i>N₁₄</i>

The data transmitted from the barcode reader means that the element string denoting the GTIN of a variable-measure trade item contained in a logistic unit has been captured. This element string must be processed together with the count of trade items, AI (37), and a valid trade measure that must appear on the same unit (see section 3.6.5.3.6.5). When indicating this element string in the non-HRI

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text section of a barcode label, the following data title SHOULD be used (see also section [2.23.2](#)):

CONTENT

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