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DIRECTION I-PPSC

Service 10-04 I-PPSC.3 Procurement, Production & Supply

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Notice 1 I-PPSC/2024

Uniform barcodes for managing Infrabel equipments

Edition	This notice replaces notice 12 I-AM/2019
Outline	Technical description of the uniform barcode that will be used by Infrabel for logistics tracking of equipment and spare parts which are tracked by a BOM number and a serial number. This document must be included as an attachment when these articles are purchased. It must also be mentioned when orders are placed under existing agreements.
Target group	• ICT Networks (I-ICT.1) • Asset Lifecycle (I-O.2) • Supply Chain (I-PPSC.3) • Purchasing (I-PPSC.11) • Contracts & Data Preparation (I-B.14) • Operations (I-ICT.31)
Entry into force	From the date of publication

Chief Proc., Prod. Supply C. Officer

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INFRABEL
Right On Track

The Infrabel barcode standard

Version management

Versions			
Number	**Date**	**Description**	**Author**
1.0	13/05/2014	First draft version	J. Smeets
1.1	09/09/2014	Validated by 'Barcode' workgroup	J. Smeets
2.0	22/03/2019	New version 2019	D. Haeseldonckx
3.0	10/10/2024	Update of Table 3 with the addition of AI 01 (GTIN) Adapt the maximum number of characters (§ 2.2) Change of the functional email address Update of examples in chapter 7.1 Renumber of tables	D. Demoulin

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Signature:	FVN8000 Signé numériquement par FVN8000 DN : cn=FVN8000 Date : 2024.10.13 14:12:34 +02'00'	Seet Jonathan Signature numérique de Seet Jonathan Date : 2024.10.11 15:37:23 +02'00'	Anne Decoster (Signature) Digitally signed by Anne Decoster (Signature) Date: 2024.10.14 16:14:54 +02'00'

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Contents

1 About this document

1.1 Subject

This document describes the technical specifications of the uniform barcode for tracking equipment items (*equipment items = article number + serial number*) and installations within the Asset Management Directorate.

This document contains general information about all the assets which require a barcode label. This document also describes the label form and content.

1.2 Who is the document intended for?

The instructions in this document must be followed by:

- External suppliers
- Internal divisions participating as the technical manager of articles with a serial number (=equipment item) and technical installations
- Internal divisions I-PPSC

The technical specifications serve as instructions for all suppliers (internal and external) which must affix an Infrabel label to their products.

1.3 Application

Purpose of the document:

- To explain the usefulness of barcodes.
- To explain the choices made regarding the barcode formats to be used.
- To establish internal agreements.
- To provide technical specifications to include in contractual specifications.

This document is not applicable to:

- technical installations,
- the use of barcode scanners, as this subject is covered by another document.

1.4 Abbreviations and definitions

The table below contains definitions of the main abbreviations and terms in this document.

Term	Abbr.	Definition
Application Identifier	AI	Allows multiple data to be combined into one code.
Article number or BOM number	NN	Infrabel number indicating the equipment type.
Equipment	—	Unique combination of an article number (BOM number) and a serial number.
Label	—	Physical base on which the barcode is printed.
Global Standard 1	GS-1	Global standard guaranteeing that the data has the same form and the same meaning for all partners.
Quick Response	QR	Bidimensional scannable code
Quiet zone	—	White area around the barcode, delimited by a black line with a minimum thickness.

Radio Frequency Identification	RFID	Identification by radio waves.
Serial number	SN	Unique number for a specific equipment item.

Table 1

2 Summary

2.1 Barcode type and applications

- Uniform barcode: global standard GS-1
- Equipment

2.2 Contents

- Infrabel logo
- Maximum 2.334 alphanumeric characters or 3.114 numeric characters
- Minimum mandatory Application Identifier (AI) -> See paragraph 5.2 Mandatory AIs

2.3 Form

- Barcode: GS-1 data matrix format
- Text version (e.g.: NN; SN)
- Minimum label size: 20 mm x 20 mm
- Minimum size of actual barcode: 10 mm x 10 mm
- The label must remain readable for 10 years
- The print colour is plain black
- Thermal transfer printing
- Printed with recognised software (NiceLabel, BarTender, etc.)
- Spaces are not allowed in barcodes

2.4 Approval process

Phase	Description
1	Before the first delivery, the supplier must provide a copy of the label, produced with the devices that will be used to print the barcodes at the time of delivery. This copy must be sent to the competent department within Infrabel at the following address : **10-04 I-PPSC.3 Procurement, Production & Supply / Frankrijkstraat 85, 1060 Brussel** Contact via the functional mailbox referenced on the first page of this document
2	Infrabel will provide feedback within 7 days of receipt. The barcode is checked with the barcode verifier (a device that reads the barcode and applies a specified standard such as ISO/IEC 15415). The barcode must have a structure which is decodable and which meets the conditions defined in this document.
3	If the test is positive, Infrabel will validate the label and if not, the supplier is asked to make the necessary changes.
4	If the type of label printer, equipment or software is changed (not replaced with the same type), the supplier must resubmit the label for approval.

Table 2

3 Why is uniformity important in labels?

Infrabel uses a labelling standard for its assets for the following reasons:

- Improved traceability
- Guaranteed uniqueness
- Misuse is impossible
- Simplified development of IT applications
- Better quality control and knowledge sharing

3.1 Guaranteed uniqueness

Uniqueness is guaranteed within Infrabel but also globally because no two assets (equipment items or technical installations) are ever labelled the same.

3.2 Misuse is impossible

Standardised Infrabel barcodes specific for the equipment items and the technical installations allow these assets to be distinguished:

- from each other, and
- from barcodes that may be used by suppliers.

3.3 Simplification in IT application development

The number of barcode formats requiring support is limited.
Although it is never possible to completely stop other barcode formats with te same application (for example for older barcodes), this standard ensures that there will be fewer formats in use in future,making it easier to develop an IT application that uses barcodes.

3.4 Quality control and knowledge sharing

Because everyone applies the same barcode standard, it is possible to develop shared *best practices*, for example for validating barcodes and creating labels.

4 General description of the standard barcode

4.1 General rule

The use of barcodes is **mandatory** for all articles managed with a **serial number in the Infrabel logistics chain.**

4.2 Choice of format: data matrix

In order to standardise logistics, Infrabel uses a uniform barcode type in the **"data matrix"** (2D) format to provide the necessary data for all important parts and their packaging.

Figure 1

The data matrix format has a number of advantages over other formats.

- It is more compact and more reliable than a 1D barcode with the same content.
- It is more compact and more reliable than a QR barcode with the same content.
- Better readability than a 1D barcode (linear)
- Integrated automatic error correction
- Cheaper, easier to use and more reliable than RFID

4.3 Choice of coding: according to the GS1 standard

The data within the barcode must be formatted according to the global **GS-1** standard. This standard guarantees that the data has the same form and the same meaning for all partners.

Figure 2

The GS-1 coding standard has the following benefits:

- Approved at international level
- Flexible because application identifiers (AIs) are used, allowing multiple data to be combined in a single code.

Go here to find out more about the GS-1 standard: www.gs1.org

4.4 Application identifiers

To specify the content of the barcode, the GS1 standard uses application identifiers (AIs).
Infrabel supports various application identifiers (AIs).
Some AIs are mandatory and others are optional. The use of AIs for the equipment items is explained later in this document.

5 Features for equipment items

5.1 Barcode content

As defined in the GS1 data matrix specification, each data block must be preceded by an application identifier, which indicates the type of information.

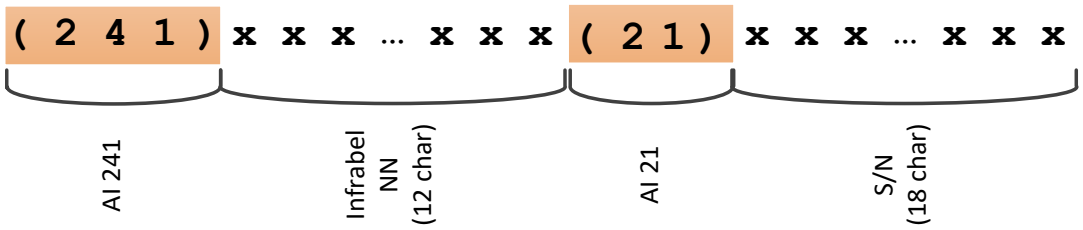

Figure 3

Notes
The order of data blocks *(with their respective AIs) is insignificant.*

*Brackets **only appear in the text version** and are not coded as such in the barcodes. This is a very common mistake.* For more details, please see the GS1 data matrix specification.

5.2 Mandatory AIs

To guarantee unique tracking of important products, the following AIs are **mandatory**.

AI	GS-1 data content	Contents	Format
01	Global trade item number (GTIN)	Global trade item number	8 – 12 – 13 or 14 numeric characters
241	Customer part number	Infrabel article number (= BOM number)	12 numeric characters
21	Serial number	Serial number of the article	Max. 18 alphanumeric characters

Table 3

The combination of the article number and the serial number must always be unique. The technical manager must ensure that serial numbers are always unique.

At the time of first delivery, the supplier must work with Infrabel to coordinate the serial number structure in order to guarantee the uniqueness of the NN/SN combination.

5.3 Optional AIs

Other AIs may contain useful additional information and may be attached to the code **as an option**. This list is for guidance only, and other AIs officially supported in GS-1 may be added to it. Annex B: complete list of GS1 application identifiers contains the full list of available AIs on page 22 ff.

It is important to ensure that the total length of the barcode content, **never exceeds the number of characters defined at paragraph 2.2 Contents**.
Care must be taken when adding extra AIs. The purpose of a barcode is to guarantee the unique identification of an equipment item, and not to state the full technical description. The

data in a barcode must not be variable in time (to avoid having to affix a new barcode if a property of the equipment changes).
Optional AIs are often used as listed in table 4.

AI	GS-1 data content	Contents	Format
10	Batch or Lot number	Batch number of the article (= lot)	10 numeric characters
11	Production date	Date of production of the article	YYMMDD (6 characters) *If only the year (YY) and the month (MM) are known, use "00" for the day (DD).*
17	Expiration date	Date of expiration of the article	YYMMDD (6 characters) *If only the year (YY) and the month (MM) are known, use "00" for the day (DD).*

Table 4

Care should be taken when using **AI 90 to 99 inclusive**. These AIs may be used freely, and the content is mutually agreed between Infrabel and an external supplier. To use these AIs, always ask the permission to the competent department within Infrabel.

6 Technical specifications

6.1 General technical specifications

6.1.1 Readability

6.1.1.1 Readable text

The data used in the barcode must be added legibly to the label provided the dimensions of the asset allow for a label of sufficient size. If there is not enough space, the readable text may be omitted with the approval of the relevant department within Infrabel.

6.1.1.2 Font and size for readable text

- Font: Arial
- Minimum size for readable texts on the label: 10 points

6.1.1.3 Infrabel logo

The Infrabel logo must be added legibly to the label provided the dimensions of the asset allow for a label of sufficient size. If there is not enough space, the readable text may be omitted with the approval of the relevant department within Infrabel.

. There is a choice between a colour logo and a black/white logo.

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6.1.1.4 Approved label formats

- Maximum label dimensions: width 70 mm x height 35 mm. The width is horizontal and parallel to the print head (of a desktop printer).

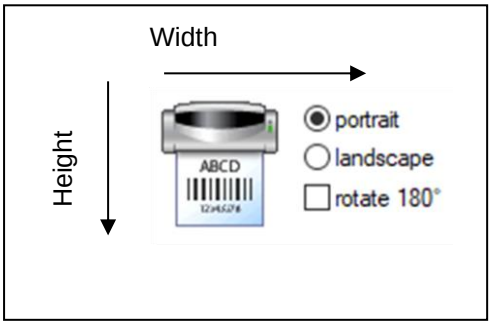

Figure 4

- Minimum label dimensions: width 20 mm x height 20 mm.
- Minimum dimensions of the actual barcode: 10 mm x 10 mm.
- Example of label printed to maximum size:

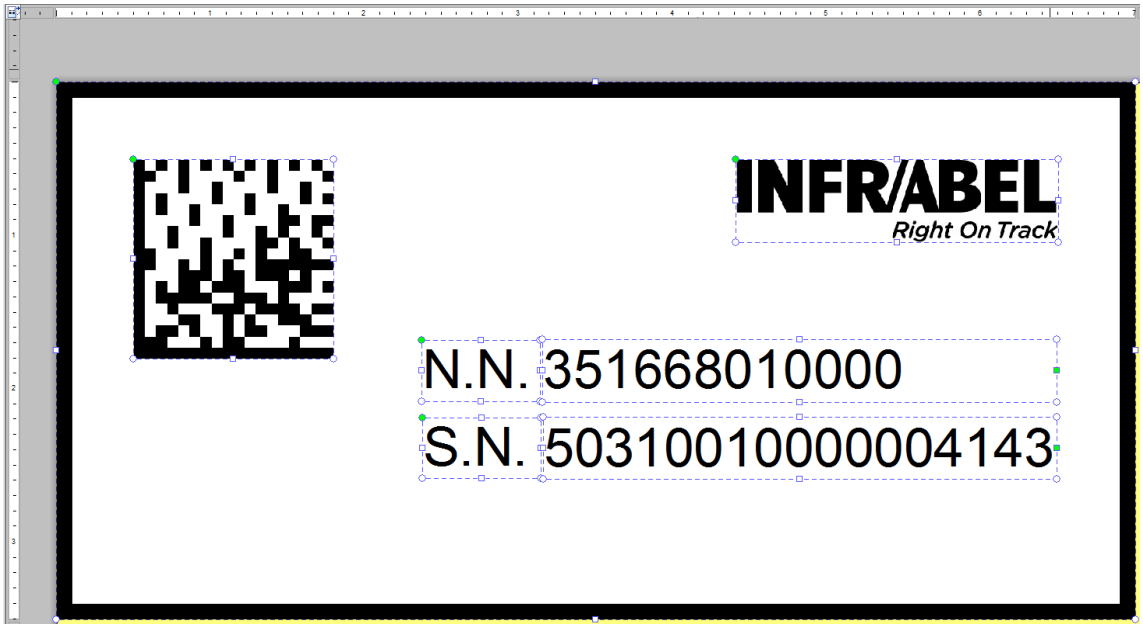

Figure 5

- Example of label printed to minimum size:

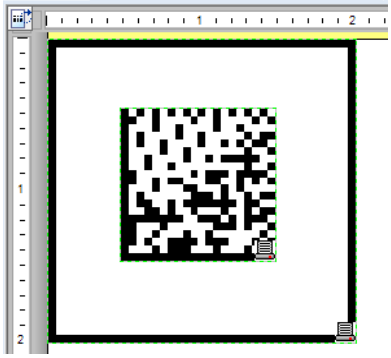

Figure 6

6.1.1.5 Label colour

Labels must have a white background to create a contrast of at least 70% (ISO646)

6.1.1.6 Position of the label on the equipment

Labels must be affixed to the equipment in a clearly visible position. It is important that the barcode is still readable and scannable even after the equipment is installed. If this is not physically possible, the technical manager of the product may be asked to make an exception.

If the packaging has a window, the label must be positioned so it is visible from the outside.

6.1.2 Durability

The printed information must stay readable **for 10 years** in the conditions in which the article is used or stored

6.1.3 Printing

6.1.3.1 Ink type

- The ink must be able to withstand external influences (wear and tear) and UV radiation.
- The ink must be indelible and must not rub off.

6.1.3.2 Printing method

- Thermal transfer printing must be used. Direct thermal printing is not allowed.
- The print colour is black.
- The label must be printed on a label printer with built-in barcode functionality.
- Barcodes must not be printed on laser or inkjet office printers.
- To avoid problems with distortion and readability, barcodes must not be printed as graphics or duplications.

6.1.4 Adhesion

6.1.4.1 Depending on packaging

Different packaging types (cardboard, wood, plastic, metal, etc.) each have specific characteristics making them more or less able to guarantee permanent adhesion and readability.

The adhesion method (type of adhesive, surface preparation) must be suitable.

6.1.4.2 Type of adhesive

The type of adhesive to use depends on the surface to which the labels will be affixed and the conditions in which the equipment will be used:

Type of equipment	Properties required for adhesion
All equipment	Permanent adhesive capable of fixing the label for 10 year in the conditions of use of the equipment as defined in EN50125.
Equipment producing heat	The adhesive and the label must be resistant to the heat generated by the equipment in normal use. It may be necessary to formulate additional specifications.
Outdoor equipment/elements	Frost-resistant adhesive as defined in EN50125.

Table 5

6.1.4.3 Surface preparation

Degreasing will be necessary for certain equipment before affixing the labels in order to guarantee permanent adhesion.

6.1.5 L-45 technical specifications

The L-45 technical specification is applicable. For stickers and for printing, we would like a global quality which meets the requirements for an outdoor PVC sticker (column 1 in point 3. Particular conditions of TB L-45.). However, the UV test described in this specification is replaced with a QUV-A test of 500h based on ASTM G153, with a post-test colouration limited to Delta E < 1 unit and a 10% reduction in gloss level.

6.1.6 Barcode generating software

6.1.6.1 Choice of software

- The barcode layouts must be designed using approved barcode software (e.g. NiceLabel or BarTender) and must not be produced by means of drawing programs (graphics) or barcode fonts.
- It is essential for the software to support correct coding according to the GS1 standard. In particular, this includes support for the FNC1 delimiter (Function 1 Symbol).

6.1.6.2 Resolution and expansion factor

The following table sets out the expansion factors depending on the printer resolution:

Resolution	Expansion factor
203 dpi	3 to 5 (15 to 25 mils)
300 dpi	4 to 7 (17 to 23 mils)
600 dpi	10 to 15 (16 to 25 mils)

Table 6

These barcodes are scannable at distances of 10 cm to one metre depending on the scanner used.

6.1.6.3 Coding requirements

It is also important not to use spaces for the coding of barcodes.

6.1.7 Labels on multiple boxes

Affix the barcodes in such a way that they remain scannable when boxes are stacked on pallets or other boxes. The barcodes on the boxes must be identical to the barcode affixed to the equipment inside the boxes.
If necessary, affix more than one label.

6.1.8 Accompanying list of goods for pallets

6.1.8.1 Rules

Pallets must be accompanied by a list of goods with identical barcodes for each element or package on the pallet. The barcodes must meet the same requirements as the barcodes described here, except for those which can be printed on an office printer.

6.1.8.2 Quality check

These barcodes must also undergo a quality check before use.

7 Examples

7.1 Correct examples of data matrix barcodes


Symbology: GS1 Data Matrix ECC200 Code content (HR): (01)54100001234594(241)351667520000(21)78910
Global trade item number : 54100001234594 (Prefix 01)
Article number : 351667520000 (Prefix 241)
Serial number : 78910 (Prefix 21)

Figure 7


Symbology: GS1 Data Matrix ECC200 Code content (HR): (01)54100001234594(21)78910(241)351667520000
Global trade item number : 54100001234594 (Prefix 01)
Article number: 351667520000 (Prefix 241)
Serial number: 78910 (Prefix 21)

Figure 8

7.2 Examples of incorrect data matrix codes

This data matrix code is not scannable because it was not created with software able to create GS1 data matrix barcodes. This is a very common mistake.

Scanner reads: `(241)321105000000(21)15120011`

Symbology: GS1 Data Matrix ECC200
Code content (HR): (241)321105000000(21)15120011

For example the brackets ( ) of the application identifiers have also been coded in the barcode, and this is not right.

This barcode is not readable because there is no AI.

Symbology: GS1 Data Matrix ECC200
Code content (HR): 32110500000015120001

It is important to use software that supports the GS-1 standard. Software currently used in industry: BarTender or NiceLabel. These two packages support GS-1 data matrix without difficulty. Virtually all the problems we encounter with barcodes are caused by the use of wrong softwares which do not support the GS-1 data matrix (there is a real difference in the way data matrices are coded, for us, it is GS-1 coding).

8 Quality check

8.1 Prototype check

The prototype control takes place according to the steps described in paragraph 2.4 Approval process

8.2 Production check

- Following approval, the barcode quality must be kept to the same standard as the approved prototype.
- Periodic checks will take place when deliveries are made.

8.3 Inbound check

Inbound deliveries may be spot-checked to ensure that:

- A label consistent with the prototype is affixed in a visible place (after the equipment is installed) on the equipment.
- The serial number and the BOM number in readable text on this label match the equipment to which the label is affixed.
- The serial number and BOM number in the data matrix code on the label match the readable text on the label. (The barValid mobile app may be used to do this)
- The box containing the equipment is properly identified with a label matching the equipment, in a position on the box which is visible when placed on a pallet.
- The serial number and BOM number (in readable text and contained in the data matrix code) on the label on a box match the equipment inside the box.
- The serial number and BOM number (in readable text and contained in the data matrix code) on an accompanying list of good match the equipment to which the list relates.

9 Annex B: complete list of GS1 application identifiers

AI	Data Content	Format*
00	SSCC (Serial Shipping Container Code)	n2+n18
01	Global Trade Item Number (GTIN)	n2+n14
02	GTIN of Contained Trade Items	n2+n14
10	Batch or Lot Number	n2+X..20
11 (**)	Production Date (YYMMDD)	n2+n6
12 (**)	Due Date (YYMMDD)	n2+n6
13 (**)	Packaging Date (YYMMDD)	n2+n6
15 (**)	Best Before Date (YYMMDD)	n2+n6
17 (**)	Expiration Date (YYMMDD)	n2+n6
20	Variant Number	n2+n2
21	Serial Number	n2+X..20
22	Secondary Data Fields	n2+X..29
240	Additional Item Identification	n3+X..30
241	Customer Part Number	n3+X..30
242	Made-to-Order Variation Number	n2+n…6
250	Secondary Serial Number	n3+X..30
251	Reference to Source Entity	n3+X..30
253	Global Document Type Identifier (GDTI)	n3+n13+n..17
254	GLN Extension Component	n3+X..20
30	Count of Items (Variable Measure Trade Item)	n2+n..8
310 (***)	Net weight, kilograms (Variable Measure Trade Item)	n4+n6
311 (***)	Length of first dimension, metres (Variable Measure Trade Item)	n4+n6
312 (***)	Width, diametre, or second dimension, metres (Variable Measure Trade Item)	n4+n6
313 (***)	Depth, thickness, height, or third dimension, metres (Variable Measure Trade Item)	n4+n6
314 (***)	Area, square metres (Variable Measure Trade Item)	n4+n6
315 (***)	Net volume, litres (Variable Measure Trade Item)	n4+n6
316 (***)	Net volume, cubic metres (Variable Measure Trade Item)	n4+n6
320 (***)	Net weight, pounds (Variable Measure Trade Item)	n4+n6

AI	Data Content	Format*
321 (***)	Length or first dimension, inches (Variable Measure Trade Item)	n4+n6
322 (***)	Length or first dimension, feet (Variable Measure Trade Item)	n4+n6
323 (***)	Length or first dimension, yards (Variable Measure Trade Item)	n4+n6
324 (***)	Width, diametre, or second dimension, inches (Variable Measure Trade Item)	n4+n6
325 (***)	Width, diametre, or second dimension, feet (Variable Measure Trade Item)	n4+n6
326 (***)	Width, diametre, or second dimension, yards (Variable Measure Trade Item	n4+n6
327 (***)	Depth, thickness, height, or third dimension, inches (Variable Measure Trade Item)	n4+n6
328 (***)	Depth, thickness, height, or third dimension, feet (Variable Measure Trade Item)	n4+n6
329 (***)	Depth, thickness, height, or third dimension, yards (Variable Measure Trade Item)	n4+n6
330 (***)	Logistic weight, kilograms	n4+n6
331 (***)	Length or first dimension, metres	n4+n6
332 (***)	Width, diametre, or second dimension, metres	n4+n6
333 (***)	Depth, thickness, height, or third dimension, metres	n4+n6
334 (***)	Area, square metres	n4+n6
335 (***)	Logistic volume, litres	n4+n6
336 (***)	Logistic volume, cubic litres	n4+n6
337 (***)	Kilograms per square metre	n4+n6
340 (***)	Logistic weight, pounds	n4+n6
341 (***)	Length or first dimension, inches	n4+n6
342 (***)	Length or first dimension, feet	n4+n6
343 (***)	Length or first dimension, yards	n4+n6
344 (***)	Width, diametre, or second dimension	n4+n6
345 (***)	Width, diametre, or second dimension	n4+n6
346 (***)	Width, diametre, or second dimension	n4+n6
347 (***)	Depth, thickness, height, or third dimension	n4+n6
348 (***)	Depth, thickness, height, or third dimension	n4+n6
349 (***)	Depth, thickness, height, or third dimension	n4+n6
350 (***)	Area, square inches (Variable Measure Trade Item)	n4+n6
351 (***)	Area, square feet (Variable Measure Trade Item)	n4+n6
352 (***)	Area, square yards (Variable Measure Trade Item)	n4+n6
353 (***)	Area, square inches	n4+n6

AI	Data Content	Format*
354 (***)	Area, square feet	n4+n6
355 (***)	Area, square yards	n4+n6
356 (***)	Net weight, troy ounces (Variable Measure Trade Item)	n4+n6
357 (***)	Net weight (or volume), ounces (Variable Measure Trade Item)	n4+n6
360 (***)	Net volume, quarts (Variable Measure Trade Item)	n4+n6
361 (***)	Net volume, gallons U.S. (Variable Measure Trade Item)	n4+n6
362 (***)	Logistic volume, quarts	n4+n6
363 (***)	Logistic volume, gallons U.S.	n4+n6
364 (***)	Net volume, cubic inches (Variable Measure Trade Item)	n4+n6
365 (***)	Net volume, cubic feet (Variable Measure Trade Item)	n4+n6
366 (***)	Net volume, cubic yards (Variable Measure Trade Item)	n4+n6
367 (***)	Logistic volume, cubic inches	n4+n6
368 (***)	Logistic volume, cubic feet	n4+n6
369 (***)	Logistic volume, cubic yards	n4+n6
37	Count of Trade Items	n2+n..8
390 (***)	Applicable Amount Payable, local currency	n4+n..15
391 (***)	Applicable Amount Payable with ISO Currency Code	n4+n3+n..15
392 (***)	Applicable Amount Payable, single monetary area (Variable Measure Trade Item)	n4+n..15
393 (***)	Applicable Amount Payable with ISO Currency Code (Variable Measure Trade Item)	n4+n3+n..15
400	Customer's Purchase Order Number	n3+x..30
401	Global Identification Number for Consignment (GINC)	n3+x..30
402	Global Shipment Identification Number (GSIN)	n3+n17
403	Routing Code	n3+x..30
410	Ship to - Deliver to Global Location Number	n3+n13
411	Bill to - Invoice to Global Location Number	n3+n13
412	Purchased from Global Location Number	n3+n13
413	Ship for - Deliver for - Forward to Global Location Number	n3+n13
414	Identification of a Physical Location - Global Location Number	n3+n13
415	Global Location Number of the Invoicing Party	n3+n13
420	Ship to - Deliver to Postal Code Within a Single Postal Authority	n3+X..20
421	Ship to - Deliver to Postal Code with ISO Country Code	n3+n3+X..9
422	Country of Origin of a Trade Item	n3+n3
423	Country of Initial Processing	n3+n3+n..12
424	Country of Processing	n3+n3

AI	Data Content	Format*
425	Country of Disassembly	n3+n3
426	Country Covering full Process Chain	n3+n3
7001	NATO Stock Number (NSN)	n4+n13
7002	UN/ECE Meat Carcasses and Cuts Classification	n4+X..30
7003	Expiration Date and Time	n4+n10
7004	Active Potency	n4+n..4
703s	Approval Number of Processor with ISO Country Code	n4+n3+X..27
8001	Roll Products (Width, Length, Core Diametre, Direction, Splices)	n4+n14
8002	Cellular Mobile Telephone Identifier	n4+X..20
8003	Global Returnable Asset Identifier (GRAI)	n4+n14+X..16
8004	Global Individual Asset Identifier (GIAI)	n4+X..30
8005	Price Per Unit of Measure	n4+n6
8006	Identification of the Components of a Trade Item	n4+n14+n2+n2
8007	International Bank Account Number (IBAN)	n4+X..30
8008	Date and Time of Production	n4+n8+n..4
8018	Global Service Relation Number (GSRN)	n4+n18
8020	Payment Slip Reference Number	n4+X..25
8100	GS1-128 Coupon Extended Code	n4+n6
8101	GS1-128 Coupon Extended Code	n4+n1+n5+n4
8102	GS1-128 Coupon Extended Code	n4+n1+n1
8110	Coupon Code Identification for Use in North America	n4+an..30
90	Information Mutually Agreed Between Trading Partners	n2+X..30
91 to 99	Company Internal Information	n2+X..30

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.
(**) If only year and month are available, DD must be filled with two zeroes.
(***) The fourth digit of this GS1 Application Identifier indicates the implied decimal point position.

Example:

- 3100 Net weight in kg without a decimal point
- 3102 Net weight in kg with two decimal points