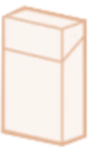


EU TPD Coding details

Information for the trade



Unit level unique identifier

Pack, pouch, tin, stand-up bags, etc.

Code structure



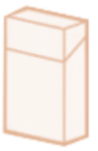
The code structure is imposed by the EU-TPD implementing Acts (IA) and is generated by ID issuers appointed in their respective country (manufacturing country by default or destination country by derogation).

Unit level unique identifier structure based on the standards provided in the EU-TPD IA

TPD IA Article reference	Data element	Length (nr. of characters)	Example	Comment
8.1 a	ID Issuer ID	3	“RIT”	Data carrier and human readable
8.1 b	Serial Number	Variable	“qW135tr8b”	Data carrier and human readable
8.1 c	Product code (business info)	Variable	“x52Ab7”	Data carrier only
8.1 d	Time Stamp	8	“19052111”	Data carrier only

Code example:

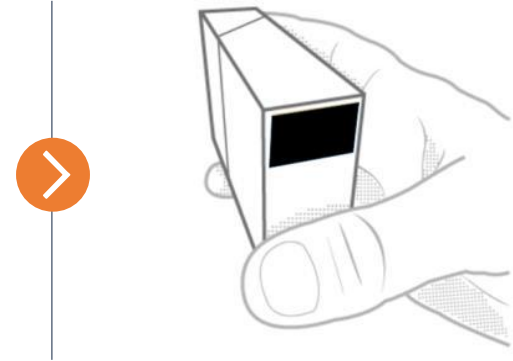
- Data carrier: “**RIT**q**W135tr8b**x**52Ab7**19052111”
- Human readable: “**RIT**q**W135tr8b**”



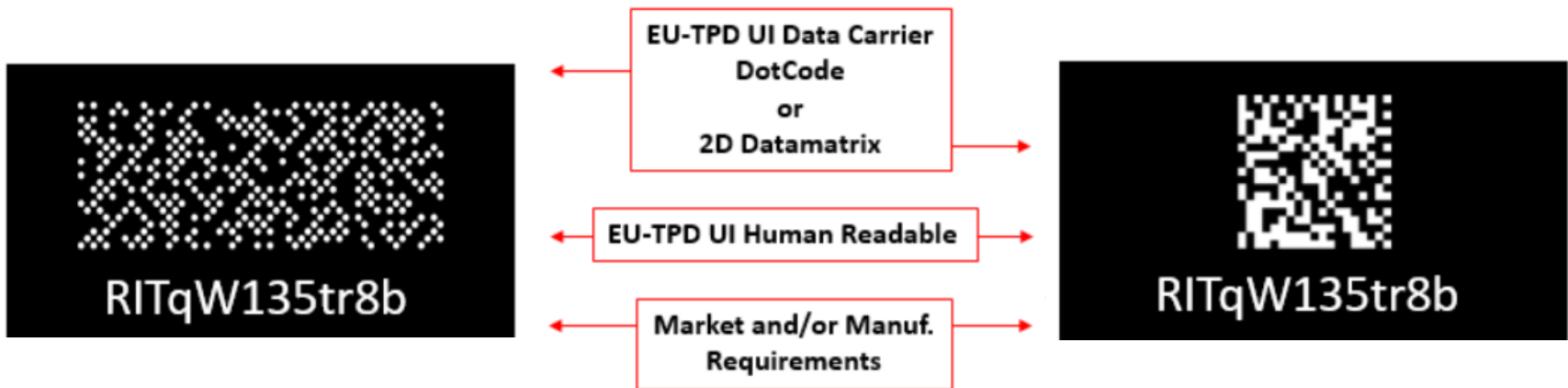
Code look and position

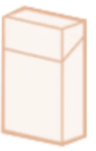
Pack, pouch, tin, stand-up bags, etc.

Data carrier is **Dotcode** or **2D Datamatrix**, positioned at the bottom of the pack for cigarettes (see illustration on the right) and on variable positions for Other Tobacco Products (OTP), such as pouches, tins, standup bags, etc.



Examples:





Code processing capability

Pack, pouch, tin, stand-up bags, etc.

- 1 The Unit Level UI contains business specific data (such as product and manufacturing details) which are embedded by the ID Issuer which generated the code in a compressed way (3rd data element of the code).
- 2 The trade actors wishing to identify the product out of every Unit Level UI scanned should be able to integrate in their own scanning system's logic, the ID Issuer's specific decoding algorithm, relying on the set of "offline flat files" provided by the ID Issuers, as per EU-TPD IA, Article 20.
- 3 The trade actors not willing to implement this logic are also able to perform double scanning, relying on an initial scan of the existing EAN/GTIN-8/13 (available on every sellable unit in linear barcode format) to identify the product, and then the Unit Level UI requiring to be recorded and transmitted.



Aggregated level UIs

Outer, carton, bundle

Code structure



The manufacturers who are members of the DCTA* will be generating by themselves the required Aggregated Level UI compliant with **ISO 15495-4**, which will be applied on each outer unit, fully in data carrier and human readable formats.

Code structure is a **GS1-SGTIN** (Serialized GTIN), including special characters (i.e. <FNC1>) and Application Identifiers (AI) as mandated by the standard, and completed with additional GS1 compliant data elements at the manufacturer's convenience.

Data element	Length (nr. of characters)	Example	Comment
<FNC1>	n/a	n/a	Special character mandated by GS1
AI 01	2	"01"	AI used as GTIN prefix
GTIN-14	14	"04023500715224"	Outer GS1 GTIN GTIN-14 or EAN-13 prefixed by "0"
AI 21	2	"21"	AI used as SN prefix
Serial number	Variable (20 max)	"KVVJB497KL07"	Serial Number from GS1's 82 character set
<FNC1>	n/a	n/a	Special character mandated by GS1 if the AI 21 is less than 20 characters
AI 240	3	"240"	AI used as product code prefix
Product Code	Variable (30 max)	"PRD45678", "FA060408.14", "ManufProduct12", etc.	Product Code as defined by the manufacturer

Optional example:

<FNC1>	n/a	n/a	Special character mandated by GS1 if further AIs are included and the (240) is less than 30 characters
AI 10	2	"10"	AI used as production batch prefix
Production Batch	Variable (20 max)	"21ABCDEFGF"	Production Batch as defined by the manufacturer

*DCTA refers to the Digital Coding and Tracking Association founded in 2011 to promote coding standards and digital volume verification for the purpose of eliminating paper tax stamps

Aggregated level UIs

Outer, carton, bundle



Code length per manufacturer:

Current status, subject to changes in the future by each manufacturer

Data element	BAT (nr. of characters)	ITG (nr. of characters)	JTI (nr. of characters)	PMI (nr. of characters)
AI 01	2	2	2	2
GTIN-14	14	14	14	14
AI 21	2	2	2	2
Serial Number	19	17	12	12
AI 240	3	3	3	3
Product code	8	8	8	11

Optional:

AI 10	2	2	2	2
Production Batch	Variable	Variable	Variable	9

Code example:

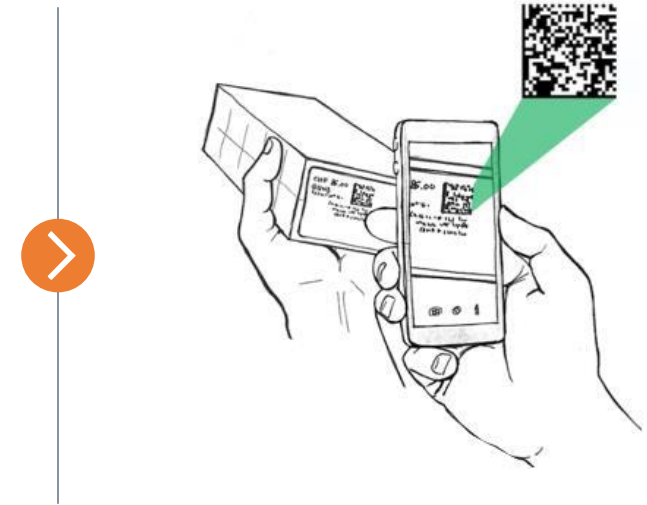
- Data carrier: “<FNC1>**0104023500715224****21KVVJB497KL07**<FNC1>**240PRD45678**”
- Human readable: “**(01) 04023500715224**
(21) KVVJB497KL07
(240) PRD45678”

Code look and position

Outer, carton, bundle



- Data carrier is 2D Datamatrix, positioned on the end panel of the outer, either on a label or directly applied on the carton.
- The EU-TPD compliant data carrier to be used by the trade actors is highlighted by the special marking “**TTT**” above or next to it, offering the guarantee that the aggregation content has been registered by the aggregated unit builder (manufacturer or previous trade actor).



Example:

TTT



(01) 04023500715224
(21) KVVJB497KL07
(240) PRD45678

Code processing capability

Outer, carton, bundle



The Aggregated Level UI at outer level is a pure GS1 SGTIN according to ISO 15495-4, enabling any trade actor to identify the product out of the scanned UI, by using:

- 1 either the <GTIN-14> part (prefixed by AI “01”)
- 2 or the <Manufacturer Product Code> part (prefixed by AI “240”) providing a deeper product granularity
- 3 or both parts.

Code to be transmitted:

- While the accepted Aggregated Level UI format allows to include, in addition to the mandatory SGTIN parts “(01)..(21)..”, some more info prefixed with appropriate GS1 application identifiers (ex: (240).. or (10)..), it is unclear what UI part(s) will be requested to be transmitted to the EU-TPD repository (full code as read or only (01)..(21)..).
- Therefore, it is strongly recommended that the local tracking system fully relies on GS1 rules when capturing and storing the UI.



Aggregated level Uls

Master case

Code structure



The manufacturers who are members of the DCTA will be generating by themselves the required Aggregated Level Unique ID compliant with **ISO 15495-4**, which will be applied on each master case unit, fully in data carrier and human readable formats.

Code structure is a **GS1-SGTIN** (Serialized GTIN), including special characters (i.e. <FNC1>) and Application Identifiers (AI) as mandated by the standard, and completed with additional GS1 compliant data elements at the manufacturer's convenience.

Data element	Length (nr. of characters)	Example	Comment
<FNC1>	n/a	n/a	Special character mandated by GS1
AI 01	2	"01"	AI used as GTIN prefix
GTIN-14	14	"05410706718553"	Master Case GS1 GTIN GTIN-14 or EAN-13 prefixed by "0"
AI 21	2	"21"	AI used as SN prefix
Serial number	Variable (20 max)	"041703200737144901"	Serial Number from GS1's 82 character set

Optional example: can contain additional one according to GS1 rules

<FNC1>	n/a	n/a	Special character mandated by GS1 if further AIs are included and the (21) is less than 30 characters
AI 240	3	"240"	AI used as production batch prefix
Product Code	Variable (30 max)	"PRD45678", "FA060408.14", "ManufProduct12", etc.	Product Code as defined by the manufacturer
<FNC1>	n/a	n/a	Special characters mandated by GS1 if further AIs are included and the (240) is less than 30 characters
AI 10	2	"10"	AI used as production batch prefix
Production Batch	Variable (20 max)	"21ABCDEFG"	Production Batch as defined by the manufacturer



Aggregated level UIs

Master case

Code length per manufacturer:

Current status, subject to changes in the future by each manufacturer

Data element	BAT (nr. of characters)	ITG (nr. of characters)	JTI (nr. of characters)	PMI (nr. of characters)
AI 01	2	2	2	2
GTIN-14	14	14	14	14
AI 21	2	2	2	2
Serial Number	19	16	7	18

Optional:

AI 240	3	3	3	3
Product code	8	8	n/a	11
AI 10	2	2	2	2
Production Batch	Variable	Variable	8	9

Code example:

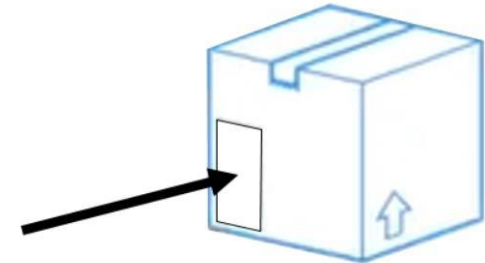
- Data carrier: "<FNC1>**010541070671855321041703200737144901**<FNC1>**240PRD45678**"
- Human readable: "(01) 05410706718553
(21) 041703200737144901
(240) PRD45678"



Code look and position

Master case

- Data carrier is 2D Datamatrix, integrated on the existing case label positioned on one or two sides of the master cases.
- Some manufacturers are applying, in addition to the 2D Datamatrix, the equivalent code in linear barcode (GTIN-128) format.
- The EU-TPD compliant data carrier to be used by the trade actors is highlighted by the special marking “**TTT**” above or next to it, offering the guarantee that the aggregation content has been registered by the aggregated unit builder (manufacturer or previous trade actor).



Example:

TTT



(01) 05410706718553
(21) 041703200737144901
(240) PRD45678



Code processing capability

Master case

The Aggregated Level UI at master case level is a pure GS1 SGTIN according to ISO 15495-4, enabling any trade actor to identify the product out of the scanned UI, by using:

- 1 either the <GTIN-14> part (prefixed by AI “01”)
- 2 or the <Manufacturer Product Code> part (prefixed by AI “240”) providing a deeper product granularity
- 3 or both parts.

Code to be transmitted:

- While the accepted Aggregated Level UI format allows to include, in addition to the mandatory SGTIN parts “(01)..(21)..”, some more info prefixed with appropriate GS1 application identifiers (ex: (240).. or (10)..), it is unclear what UI part(s) will be requested to be transmitted to the EU-TPD repository (full code as read or only (01)..(21)..).
- Therefore, it is strongly recommended that the local tracking system fully relies on GS1 rules when capturing and storing the UI.

Aggregated level Uls

Pallet, mixed case, logistic unit, etc.



Code structure



The manufacturers who are members of the DCTA will be generating by themselves the required Aggregated Level Unique ID compliant with **ISO 15495-1**, which will be applied on pallet, mixed cases and/or any logistic units entering in the EU-TPD scope, fully in data carrier and human readable formats.

Code structure is a **GS1-SSCC** (Serial Shipping Container Code), including special characters (i.e. <FNC1>) and Application Identifiers (AI) as mandated by the standard, and completed with additional GS1 compliant data elements at the manufacturer's convenience.

Data element	Length (nr. of characters)	Example	Comment
<FNC1>	n/a	n/a	Special character mandated by GS1
AI 00	2	"00"	AI used as SSCN prefix
SSCC	18	"034023500070013765"	Pallet or Logistics unit GS1 SSCC

Optional:

AI 10	2	"10"	AI used as production batch prefix
Production Batch	Variable (20 max)	"21ABCDEFGF"	Production Batch as defined by the manufacturer

Code example:

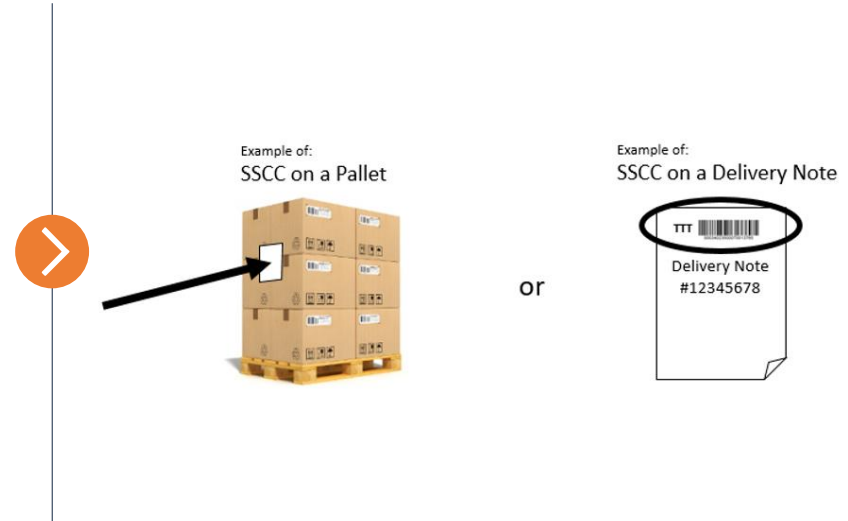
- Data carrier: "<FNC1>**00034023500070013765**"
- Human readable: "**(00) 0 34023500 07001376 5**"
- Code to be transmitted: **00034023500070013765**

Code look and position

Pallet, mixed case, logistic unit, etc.



- Data carrier is a Linear Barcode, integrated on the existing pallet label positioned on one side of the pallet. For manufacturers providing an aggregation for the entire delivery the linear bar code may also/instead be available on the physical Delivery Note document. As a further alternative some manufacturers may additionally provide electronic access to contents listing.
- It can alternatively be a 2D Datamatrix for mixed cases or smaller logistic units.
- The EU-TPD compliant data carrier to be used by the trade actors is highlighted by the special marking “TTT” above or next to it, offering the guarantee that the aggregation content has been registered by the aggregated unit builder (manufacturer or previous trade actor).



Note that this aggregation level (pallet, mixed case, logistic unit) is subject to change in the distribution. DCTA manufacturers have different ways to handle it, so they may not all guarantee the presence of “TTT” (confirming the registration of the aggregation content), which might be delegated to the relevant trade actors when needed.



The below examples illustrates some possibilities, but each DCTA manufacturer’s solution may vary.

Example:

TTT



(00) 0 34023500 07001376 5