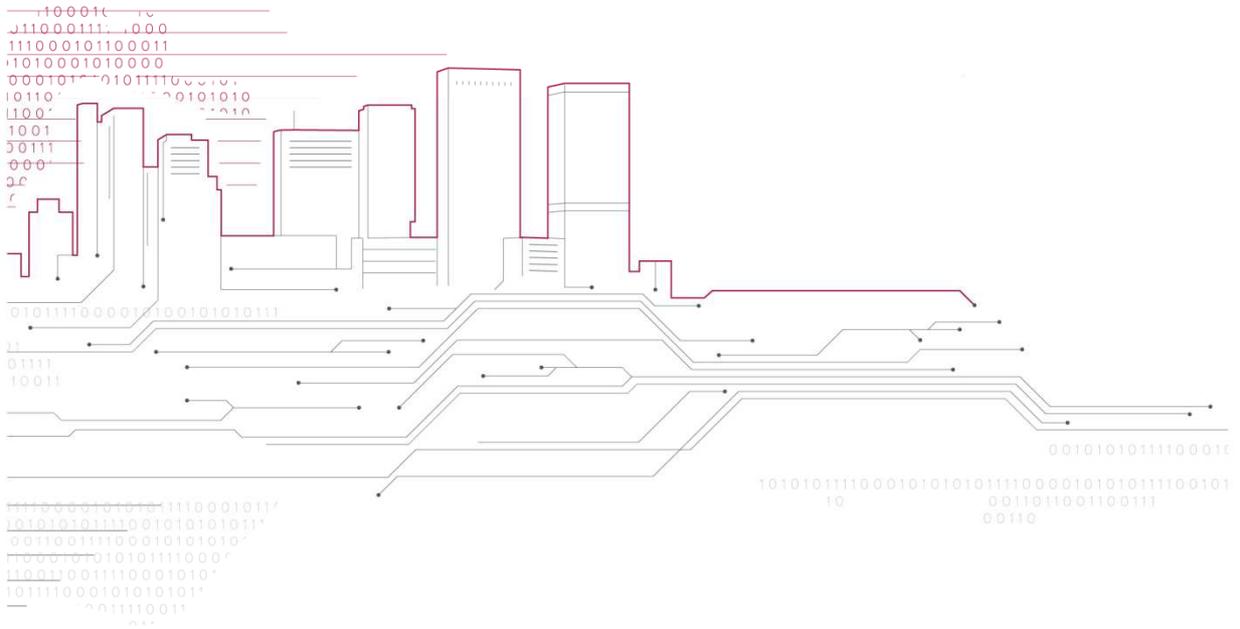


Structure of the unit packet unique identifiers

Date: 2019-09-25

Version: 1.0



1 Changelog

Version	Date	Description
0.1	2018-09-25	Initial creation
0.2	2018-10-04	Change of the template
0.3	2018-10-16	Taking into account the PMI requirements allowing to distinguish the product code from the serial number in the identifier.
0.4	2018-12-04	Modifications for the 5-character prefix.
0.5	2019-01-25	Modifications according to purchase of the 6-character prefix
0.6	2019-03-22	Modifications according to the obtaining IAC code from Aimglobal.
0.7	2019-04-30	Cardinality corrections for an invariant character set
1.0	2019-09-25	Adding a description of the use of qualifiers

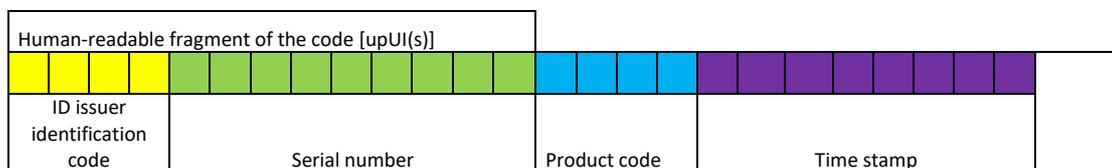
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3 Structure of the unit packet unique identifiers

3.1 Assumptions

1. Unit packet unique identifier upUI created by the ID issuer (defined in UE implementing regulation 2018/574 Article 8 p. 1 a),b) and c)) will consist of the 3 elements described in the regulation:
 - a. ID issuer identification code (**4 characters**)
 - b. Serial number (**9 characters**)
 - c. Product code (**4 characters**)



upUI identifier generated by the PWPW (without time stamp) will be 17 characters long.

The complete identifier for the unit packaging, supplemented by the producers with 8 characters of the upUI (L) date and time of production, will be 25 characters long.

The unique identifier fragment in human-readable format, consisting of the issuers's identification code of the identifiers and the serial number, will be 13 characters long.

3.2 ID issuer identification code

The unique identification code of the ID issuer in accordance with the Regulation must meet the conditions of the standard ISO/IEC 15459-2:2015.

PWPW received a 3-character IAC code from the AIM organization with the value of 'KPL'. On this basis, the full code of the ID issuer supplemented with its own one-digit CIN code will have the value 'KPL1'.

3.3 Encoding of the serial number and product code

In order to meet the manufacturers' requirements of separating the serial number and the product code, separate coding of the serial number elements and the product code will be carried out in the character system. And then gluing both coded elements. In this way, in the next identifiers for a given product code, the invariable fragment corresponding to the product code will be visible. The regulation allows coding using the invariant set of characters contained in the ISO 646: 1991 standard. According to this standard, the number of characters available without control characters is 83.

To encode a "Serial number" containing a human readable part, the number of available characters is limited to 59. In this field there are only numbers and uppercase and lowercase letters without

national characters. Also, values with a similar graphic representation were removed which would be difficult to distinguish (O (ASCII 0x4F), I (ASCII 0x6C), and (ASCII 0x49)). The set of values used to encode the serial number is:

"0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ".

To encode the "**Product code**", which does not have to have a graphical representation in a human-readable form, a wider range of acceptable characters has been applied and it is 82. Only the space character (ASCII 0x20) has been removed from the full range of 83 characters.

3.4 Encoding of the unique identifier on the data carrier

The coding of the unique identifier on the data carrier by the economic operators affixing these identifiers to the unit packets of tobacco products must be in accordance with the recommendations of the European Commission described in the following table:

Structure of a unit-level unique identifier

(after encoding into a data carrier)

compliant with Implementing Regulation 2018/574 and the applicable international standards

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Unique identifier	Symbology Identifier	Mandatory Data Qualifier	ID Issuer Identification Code	Optional Data Qualifier	Serial Number	Optional Data Qualifier	Product code	Optional Data Qualifier	Timestamp
Type	Qualifier	Qualifier	String (data element)	Qualifier	String (data element)	Qualifier	String (data element)	Qualifier	String (data element)
Position within the unique identifier:	Fixed	Fixed	Fixed	Free	Free	Free	Free	Fixed	Fixed
Regulated by:	Art. 21(1) and ID issuer's coding structure	Art.3(4), Art.8(1)(a), Art. 21(1) and ID issuer's coding structure	Art.3(4) and Art.8(1)(a)	Art. 21(1) and ID issuer's coding structure	Art.8(1)(b)	Art. 21(1) and ID issuer's coding structure	Art.8(1)(c)	Art. 21(1), Art. 21(4) and ID issuer's coding structure	Art.8(1)(d) and Art.21(4)
Applicable international standards:	ISO/IEC 16022:2006, or ISO/IEC 18004:2015, or ISS DotCode Symbology Spec.	ISO 15459-2:2015 and ISO 15459-3:2014	ISO 15459-2:2015 and ISO 15459-3:2014						
Process	Applied by EO	Applied by EO	Generated by ID issuer	Applied by EO	Generated by ID issuer	Applied by EO	Generated by ID issuer	Applied by EO	Applied by EO
Transmission to the repositories system	No	No	Yes	No	Yes	No	Yes	No	Yes

Note: For the purpose of the above schema, group separators (/FNC1) are considered in the same manner as optional data qualifiers, i.e. their use depends on ID issuer's coding structure.

This table describes the need to supplement the identifiers generated by ID ISSUER with additional qualifiers to comply with international standards (ISO/IEC 16022:2006, or ISO/IEC 18004:2015, or ISS DotCode Symbology Spec.) to which the data carriers of unique identifiers must be subject according to the Regulation.

PWPW indicates the value '5R' for the mandatory data qualifier described in column (2) of the above table. In accordance with the ANSI MH10 standard, this value is intended to be used by publishers of identifiers designated in accordance with ISO/IEC 15459 and has also been accepted by part of the European ID ISSUER.

The choice of the 5R value for the data qualifier according to the ANSI MH10 standard also requires an additional qualifier with the value ":" in the position marked with column (4) in the above table, after the ID ISSUER Identification Code.

Other optional qualifiers included in columns (6) and (8) of the PWPW recommendation do not need to be completed.

The Economic Operator reading the encoded identifier must ensure that additional qualifiers are removed from the read identifier according to the above table before the information is sent to the router. In the process of sending events to the router, the identifiers themselves must be sent in the form generated by the ID ISSUER, supplemented only by the production time stamp, without additional qualifiers "5R" and ":".

Examples:

Unit packet unique identifiers generated by the ID ISSUER:

KPL1CULaTZH4v!!+o

Identifier value supplemented with qualifiers and production time stamp by the entity marking the identifiers on the data carrier to the unit packs:

5RKPL1:CULaTZH4v!!+o19092415

Identifier value read from the unit package, prepared to be sent to the router by removing qualifiers:

KPL1CULaTZH4v!!+o19092415