

Commission Implementing Regulation (EU) 2018/574 of 15 December 2017 on technical standards for the establishment and operation of a traceability system for tobacco products (Text with EEA relevance)

CHAPTER I

SUBJECT MATTER AND DEFINITIONS

Article 1

Subject matter

This Regulation lays down the technical standards for the establishment and operation of the traceability system provided for in Article 15 of Directive 2014/40/EU.

Article 2

Definitions

For the purposes of this Regulation, in addition to the definitions laid down in Article 2 of Directive 2014/40/EU, the following definitions shall apply:

- (1) ‘unique identifier’ means the alphanumeric code enabling the identification of a unit pack or an aggregated packaging of tobacco products;
- (2) ‘economic operator’ means any natural or legal person who is involved in the trade of tobacco products, including for export, from the manufacturer to the last economic operator before the first retail outlet;
- (3) ‘first retail outlet’ means the facility where tobacco products are placed on the market for the first time, including vending machines used for the sale of tobacco products;
- (4) ‘export’ means shipment from the Union to a third country;
- (5) ‘aggregated packaging’ means any packaging containing more than one unit packet of tobacco products;
- (6) ‘facility’ means any location, building or vending machine where tobacco products are manufactured, stored or placed on the market;
- (7) ‘anti-tampering device’ means the device allowing for the recording of the verification process following the application of each unit level unique identifier by means of a video or a log file, which once recorded cannot be further altered by an economic operator;
- (8) ‘offline flat-files’ means the electronic files established and maintained by each ID issuer that contain data in a plain text format allowing for the extraction of information encoded in the unique identifiers (excluding the time stamp) used at the unit packet and aggregated packaging levels without accessing the repositories system;

Status: This is the original version (as it was originally adopted).

- (9) ‘registry’ means the record established and maintained by each ID issuer of all the identifier codes generated for economic operators, operators of first retail outlets, facilities and machines along with the corresponding information;
- (10) ‘data carrier’ means a carrier representing data in a form readable with the aid of a device;
- (11) ‘machine’ means the equipment used for the manufacture of tobacco products which is integral to the manufacturing process;
- (12) ‘time stamp’ means the date and time of occurrence of a particular event recorded in UTC (Coordinated Universal Time) time in a prescribed format;
- (13) ‘primary repository’ means a repository storing traceability data relating exclusively to the products of a given manufacturer or importer;
- (14) ‘secondary repository’ means a repository containing a copy of all traceability data stored in the primary repositories;
- (15) ‘router’ means a device established within the secondary repository that transfers data between different components of the repositories system;
- (16) ‘repositories system’ means the system consisting of the primary repositories, the secondary repository and the router;
- (17) ‘common data dictionary’ means a set of information describing the contents, format, and structure of a database and the relationship between its elements, used to control access to and manipulation of the databases common for all primary and secondary repositories;
- (18) ‘working day’ means every day of work in the Member State for which the ID issuer is competent;
- (19) ‘trans-loading’ means any transfer of tobacco products from one vehicle to another during which tobacco products do not enter and exit a facility;
- (20) ‘vending van’ means a vehicle used for the delivery of tobacco products to multiple retail outlets in quantities that have not been predetermined in advance of the delivery.

CHAPTER II

TECHNICAL SPECIFICATIONS RELATED TO THE UNIQUE IDENTIFIER

SECTION 1

Common provisions

Article 3

ID issuer

1 Each Member State shall appoint an entity (the ‘ID issuer’) responsible for generating and issuing unique identifiers, in accordance with Articles 8, 9, 11 and 13, within a maximum period of one year from the date of entry into force of this Implementing Regulation.

2 Member States shall ensure that an ID issuer that intends to have recourse to subcontractors for the performance of its functions shall only be considered for appointment if the identity of any subcontractors proposed has been communicated to them.

3 The ID issuer shall be independent and comply with the criteria set out in Article 35.

4 Each ID issuer shall be equipped with a unique identification code. The code shall be composed of alphanumeric characters and comply with the International Organization for Standardisation/International Electrotechnical Commission standard ('ISO/IEC') 15459-2:2015.

5 Where the same ID issuer is appointed in more than one Member State, it shall be identifiable by the same code.

6 Member States shall notify the Commission of the appointment of the ID issuer and of its identification code within one month of its appointment.

7 Member States shall ensure that information related to the identity of the ID issuer appointed and its identification code is made publicly available and accessible online.

8 Each Member State shall put in place adequate measures to ensure:

- a that the ID issuer it has appointed continues to comply with the requirement of independence in accordance with Article 35; and
- b the continuous operation of the services provided by successive ID issuers, in case a new ID issuer is appointed to take over the services from the previous ID issuer. For this purpose Member States shall require the ID issuer to develop an exit plan laying down the procedure to be followed to guarantee the continuity of the operations until the new ID issuer is appointed.

9 The ID issuer may establish and charge fees to economic operators solely for generating and issuing unique identifiers. Fees are to be non-discriminatory and proportionate to the number of unique identifiers generated and issued to economic operators taking into account the mode of delivery.

Article 4

Competent ID issuers for generating and issuing unique identifiers

1 For tobacco products manufactured in the Union, the competent ID issuer shall be the entity appointed for the Member State in which the products are manufactured.

By derogation to the first subparagraph, the competent ID issuer shall be the entity appointed for the Member State on whose market the products are placed, where such a requirement is imposed by that Member State.

2 For tobacco products imported into the Union, the competent ID issuer shall be the entity appointed for the Member State on whose market the products are placed.

3 For tobacco products aggregated in the Union, the competent ID issuer shall be the entity appointed for the Member State in which the products are aggregated.

4 For tobacco products destined for export, the competent ID issuer shall be the entity appointed for the Member State in which the products are manufactured.

5 In the event of the temporary absence of the competent ID issuer, the Commission may authorise economic operators to use the services of another ID issuer that has been appointed in accordance with Article 3.

Article 5

Validity of unique identifiers and deactivation

1 Unique identifiers generated by ID issuers may be used to mark unit packets or aggregated packaging, as provided for by Articles 6 and 10, within a maximum period of six months from the date of receipt of the unique identifiers by the economic operator. After this time period unique identifiers shall become invalid and economic operators shall ensure that they are not used to mark unit packets or aggregated packaging.

2 The repositories system shall ensure that the unique identifiers that have not been used within the six months period referred to in paragraph 1 shall be automatically deactivated.

3 At any time, manufacturers and importers may obtain the deactivation of unique identifiers by transmitting a deactivation request to the relevant primary repository. Other economic operators may obtain the deactivation of the unique identifiers by transmitting a deactivation request via the router. The deactivation request shall be introduced electronically, in accordance with Article 36, and shall contain the information listed in point 2.3 of Section 2 of Chapter II of Annex II, in the format indicated therein. The deactivation shall not interfere with the integrity of the information already stored related to the unique identifier.

SECTION 2

Unique identifiers at unit packet level

Article 6

Marking by means of unit level UIs

1 Manufacturers and importers shall mark each unit packet manufactured or imported in the Union with a unique identifier ('unit level UI') compliant with Article 8.

2 In the case of tobacco products that are manufactured outside the Union, the unit level UI shall be applied on the unit packet before the tobacco product is imported in the Union.

Article 7

Verification of unit level UIs

1 Manufacturers and importers shall ensure that the application of unit level UIs is directly followed by the verification of those unit level UIs in terms of correct application and readability.

2 The process referred to in paragraph 1 shall be protected with an anti-tampering device supplied and installed by an independent third party who shall provide a declaration to the relevant Member States and the Commission that the installed device meets the requirements of this Regulation.

3 Where the process referred to in paragraph 1 fails to confirm the correct application and full readability of the unit level UI, manufacturers and importers shall re-apply the unit level UI.

4 Manufacturers and importers shall ensure that the information recorded by the anti-tampering device remains available for a period of nine months from the time of recording.

5 Manufacturers and importers shall, upon request from Member States, provide full access to the record of the verification process created by the anti-tampering device.

6 By way of derogation from paragraphs 2, 4 and 5, the obligation to install an anti-tampering device shall not apply:

- a until 20 May 2020 to production processes operated by economic operators, or where applicable, the group of undertakings to which they belong, that handled less than 120 million unit level UIs at Union level during the calendar year 2019;
- b until 20 May 2021 to production processes operated by economic operators falling under the definition of small and medium enterprises set out in Commission Recommendation 2003/361/EC⁽¹⁾;
- c to fully manual production processes.

Article 8

Structure of unit level UIs

1 Each unit packet of tobacco products shall be marked with a unit level UI. It shall consist of as short a sequence of alphanumeric characters as possible, not exceeding 50 characters. The sequence shall be unique to a given unit packet and shall be composed of the following data elements:

- a in the first position, the alphanumeric characters that constitute the ID issuer identification code assigned pursuant to Article 3(4);
- b an alphanumeric sequence, whose probability to be guessed shall be negligible and in any case lower than one in ten thousand ('serial number');
- c a code ('product code') allowing for the determination of the following:
 - i. the place of manufacturing;
 - ii. the manufacturing facility referred to in Article 16;
 - iii. the machine used to manufacture the tobacco products referred to in Article 18;
 - iv. the product description;
 - v. the intended market of retail sale;
 - vi. the intended shipment route;
 - vii. where applicable, the importer into the Union;
- d in the last position, the time stamp in the form of a numeric sequence of eight characters, in the format YYMMDDhh, indicating the date and time of manufacture.

2 ID issuers shall be responsible for the generation of a code consisting of the elements listed in paragraph 1, points (a), (b), and (c).

3 Manufacturers or importers shall add the time stamp referred to in paragraph 1, point (d), to the code generated by the ID issuer pursuant to paragraph 2.

4 Unit level UIs shall not include any data elements other than those listed in paragraph 1.

Where ID issuers use encryption or compression for the generation of unit level UIs, they shall inform the competent authorities of the Member States and the Commission of algorithms used for such encryption and compression. Unit level UIs shall not be reused.

Article 9

Request and issuing of unit level UIs

1 Manufacturers and importers shall send a request to the competent ID issuer for unit level UIs referred to in Article 8. Requests shall be introduced electronically, in accordance with Article 36.

2 Manufacturers and importers introducing such a request shall supply the information listed in point 2.1. of Section 2 of Chapter II of Annex II, in the format indicated therein.

3 The ID issuer shall, within two working days from the receipt of the request and in the order indicated:

- a generate the codes referred to in Article 8(2);
- b transmit the codes along with the information referred to in paragraph 2 of this Article via the router to the primary repository of the requesting manufacturer or importer, as established under Article 26; and
- c electronically transmit the codes to the requesting manufacturer or importer.

4 However, a Member State may require ID issuers to offer physical delivery of unit level UIs as an alternative to electronic delivery. In cases where physical delivery of unit level UIs is offered, manufacturers and importers shall specify whether physical delivery is requested. In that case, the ID issuer shall within 10 working days from the receipt of the request, and in the following order:

- a generate the codes referred to in Article 8(2);
- b transmit the codes along with the information referred to in paragraph 2 via the router to the primary repository of the requesting manufacturer or importer, as established under Article 26;
- c deliver the codes to the requesting manufacturer or importer in the form of optical barcodes, compliant with Article 21, placed on physical carriers, such as adhesive labels.

5 Within one working day, manufacturers and importers may cancel a request which was sent pursuant to paragraph 1 by means of a recall message as further defined in Point 5 of Section 5 of Chapter II of Annex II.

SECTION 3

Unique identifiers at aggregated packaging level

Article 10

Marking by means of aggregated level UIs

- 1 Where economic operators choose to comply with the recording obligations provided for under Article 15(5) of Directive 2014/40/EU by means of the recording of aggregated packaging, they shall mark aggregated packages containing tobacco products with a unique identifier ('aggregated level UI').
- 2 Aggregated level UIs shall be generated and issued on the basis of a request to the competent ID issuer or directly by the economic operator.
- 3 Where the aggregated level UI is generated on the basis of a request to the competent ID issuer, it shall comply with the structure set out in Article 11(1).
- 4 Where the aggregated level UI is generated directly by the economic operator, it shall consist of an individual unit code generated in accordance with ISO/IEC 15459-1:2014 or ISO/IEC 15459-4:2014 or their latest equivalents.

Article 11

Structure of aggregated level UIs generated by ID issuers

- 1 For aggregated level UI generated on the basis of a request to the competent ID issuer, the structure of the aggregated level UI shall consist of a sequence of a maximum of 100 alphanumeric characters that is unique to a given aggregated package and shall be composed of the following data elements:
 - a in the first position, the alphanumeric characters that constitute the ID issuer identification code assigned under Article 3(4);
 - b an alphanumeric sequence, whose probability to be guessed shall be negligible and in any case lower than one in ten thousand ('serial number');
 - c the identifier code of the facility (as set out in Article 16) in which the aggregation process took place;
 - d in the last position, the time stamp in the form of a numeric sequence of eight characters, in the format YMMDDhh, indicating the date and time of aggregation.
- 2 ID issuers shall be responsible for the generation of a code consisting of the elements listed in paragraph 1, points (a), (b), and (c).
- 3 Economic operators shall add the time stamp, referred to in paragraph 1, point (d), to the code generated by the ID issuer pursuant to paragraph 2.
- 4 The aggregated level UI may be completed by the economic operator with additional information, provided that the maximum character limit set out in paragraph 1 is not exceeded. Any such information may only appear after the data referred to in paragraph 1.

Article 12

Link between UI levels

1 The aggregated level UI shall be capable of identifying the list of all unique identifiers contained within the aggregated packaging by means of an electronically accessible link to the repositories system.

2 In order to establish the link referred to in paragraph 1, manufacturers and importers shall transmit to their primary repository the information listed in point 3.2 of Section 2 of Chapter II of Annex II, in the format indicated therein.

3 In order to establish the link referred to in paragraph 1, economic operators other than manufacturers and importers shall transmit via the router to the secondary repository the information listed in point 3.2 of Section 2 of Chapter II of Annex II, in the format indicated therein.

Article 13

Request and issuing of aggregated level UIs generated by ID issuers

1 Economic operators requesting aggregated level UIs on the basis of a request to the competent ID issuer shall introduce such requests electronically, in accordance with Article 36.

2 Economic operators introducing such requests shall supply the information listed in point 2.2. of Section 2 of Chapter II of Annex II, in the format indicated therein.

3 For manufacturers and importers, the ID issuer shall, within two working days from the receipt of the request and in the order indicated:

- a generate the code referred to in Article 11(2);
- b transmit the codes along with the information referred to in paragraph 2 via the router to the primary repository of the requesting manufacturer or importer, as established under Article 26; and
- c transmit the codes electronically to the requesting manufacturer or importer.

4 For economic operators other than manufacturers and importers, the ID issuer shall, within two working days from the receipt of the request and in the order indicated:

- a generate the code referred to in Article 11(2);
- b transmit the codes along with the information referred to in paragraph 2 via the router to the secondary repository, as established under Article 26; and
- c transmit the codes electronically to the requesting economic operators.

5 Within one working day, economic operators may cancel a request which was sent pursuant to paragraph 1 by means of a recall message as further defined in point 5 of Section 5 of Chapter II of Annex II, in the format indicated therein.

6 Aggregated level UIs issued by competent ID issuers shall not be reused.

CHAPTER III

IDENTIFIER CODES FOR ECONOMIC OPERATORS, FACILITIES AND MACHINES

Article 14

Request for an economic operator identifier code

1 Economic operators and operators of first retail outlets shall apply for an economic operator identifier code from the ID issuer competent for each Member State in which they operate at least one facility. Importers shall apply for an identifier code from the ID issuer competent for each Member State on whose market they place their products.

2 Economic operators and operators of first retail outlets introducing a request pursuant to paragraph 1 shall provide the information listed in point 1.1 of Section 1 of Chapter II of Annex II, in the format indicated therein.

3 For operators of first retail outlets the obligation to apply for an economic operator identifier code may also be discharged by any other registered economic operator. Such registration by the third party shall be subject to the consent of the operator of the first retail outlet. The third party shall inform the operator of the first retail outlet of the full details of the registration, including the allocated economic operator identifier code.

4 Economic operators and operators of first retail outlets shall inform the ID issuer of any economic operator identifier codes allocated to them by other ID issuers. If not available at the time of registration, economic operators shall provide that information at the latest within two working days from the receipt of the economic operator identifier codes allocated by another ID issuer.

5 Any modification of the information submitted in the initial application form and any cessation of the operator activities shall be notified by the relevant operator to the ID issuer without delay, in the formats indicated in points 1.2. and 1.3. of Section 1 of Chapter II of Annex II.

Article 15

Issuing and registration of economic operator identifier codes

1 Upon receipt of a request pursuant to Article 14, the ID issuer shall generate an economic operator identifier code, which consists of the following data elements, to be placed in the following order:

- a in the first position, the alphanumeric characters that constitute the ID issuer identification code assigned under Article 3(4); and
- b in the second position, an alphanumeric sequence which is unique within the code pool of the ID issuer.

2 Within two working days, the ID issuer shall transmit the code to the requesting operator.

3 All the information submitted to the ID issuer in accordance with Article 14(2), and the corresponding identifier codes, shall form part of a registry to be established, managed and kept up to date by the competent ID issuer.

4 In duly justified cases, Member States may, in accordance with their national laws, require the ID issuer to deactivate an economic operator identifier code. In such cases the Member State shall inform the economic operator or the operator of a first retail outlet of the deactivation, together with the grounds for such deactivation. The deactivation of an economic operator identifier code shall lead to the automatic deactivation of related facility identifier codes and machine identifier codes.

5 Economic operators and operators of first retail outlets shall exchange information on their respective economic operator identifier codes in order to allow economic operators to record and transmit the transactional information, as provided under Article 33.

Article 16

Request for a facility identifier code

1 All facilities from manufacturing to the first retail outlet shall be identified by a code ('facility identifier code') generated by the ID issuer competent for the territory in which the facility is located.

2 Economic operators and operators of first retail outlets shall apply for a facility identifier code providing to the ID issuer the information listed in point 1.4. of Section 1 of Chapter II of Annex II, in the format indicated therein.

3 For first retail outlets, the obligation to apply for a facility identifier code shall lie with the operator of the first retail outlet. This obligation may also be discharged by any other registered economic operator, who may act on behalf of the operator of the first retail outlet. The registration by the third party shall be subject to the consent of the operator of the first retail outlet. The third party shall inform the operator of the first retail outlet about the full details of the registration, including the allocated facility identifier code.

4 The obligation to apply for a facility identifier code related to manufacturing facilities located outside the Union shall lie with the importer established inside the Union. The importer shall apply to any ID issuer appointed by a Member State on whose market they place their products. The registration by the importer shall be subject to the consent of the entity responsible for the third country manufacturing facility. The importer shall inform the economic operator responsible for the third country manufacturing facility about the full details of registration, including the allocated facility identifier code.

5 Any modification of the information submitted in the initial application form and any facility closure shall be notified by the economic operator to the ID issuer without delay, in the formats indicated in points 1.5 and 1.6 of Section 1 of Chapter II of Annex II.

Article 17

Issuing and registration of facility identifier codes

1 Upon receipt of a request pursuant to Article 16, the ID issuer shall generate a facility identifier code, which consists of the following data elements, to be placed in the following order:

- a in the first position, the alphanumeric characters that constitute the ID issuer identification code assigned under Article 3(4); and
- b in the second position, an alphanumeric sequence which is unique within the code pool of the ID issuer.

2 Within two working days from the receipt of the request, the ID issuer shall transmit the code to the requesting operator.

3 All the information submitted to the ID issuer in accordance with Article 16(2), and the corresponding identifier codes shall form part of a registry to be established, managed and kept up to date by the competent ID issuer.

4 In duly justified cases, Member States may require the ID issuer to deactivate a facility identifier code. In such cases the Member State shall inform the economic operator or the operator of a first retail outlet of the deactivation, together with the grounds for such deactivation. The deactivation of a facility identifier code shall lead to the automatic deactivation of related machine identifier codes.

5 Economic operators and operators of first retail outlets shall exchange the information on their respective economic operator identifier codes in order to allow economic operators to record and transmit the information on product movements, as provided under Article 32.

Article 18

Request for a machine identifier code

1 Each machine shall be identified by a code ('machine identifier code') generated by the ID issuer competent for the territory in which the machine is located.

2 Manufacturers and importers shall apply for a machine identifier code by providing to the ID issuer the information listed in point 1.7. of Section 1 of Chapter II of Annex II, in the format indicated therein.

3 The obligation to apply for a machine identifier code related to machines located in manufacturing facilities outside the Union shall lie with the importer established inside the Union. The importer shall apply to any ID issuer appointed by a Member State on whose market they place their products. The registration by the importer shall be subject to the consent of the entity responsible for the third country manufacturing facility. The importer shall inform the economic operator responsible for the third country manufacturing facility as to the full details of the registration, including the allocated machine identifier code.

4 Any modification of the information submitted in the initial application form and any decommissioning of the registered machines shall be notified by the manufacturer or the importer to the ID issuer without delay, in the formats indicated in points 1.8 and 1.9 of Section 1 of Chapter II of Annex II.

Article 19

Issuing and registration of machine identifier codes

1 Upon receipt of a request pursuant to Article 18, the ID issuer shall generate a machine identifier code, which consists of the following data elements, to be placed in the indicated position:

- a in the first position, the alphanumeric characters that constitute the ID issuer identification code assigned under Article 3(4); and
- b in the second position, an alphanumeric sequence which is unique within the code pool of the ID issuer.

2 Within two working days, the ID issuer shall transmit the code to the requesting operator.

3 All the information submitted to the ID issuer in accordance with Article 18(2), and the corresponding identifier codes shall form part of a registry to be established, managed and kept up to date by the relevant ID issuer.

4 In duly justified cases, Member States may require the ID issuer to deactivate a machine identifier code. In such cases the Member State shall inform the manufacturers and importers of the deactivation, together with the grounds for such deactivation.

Article 20

Transfer of offline flat-files and registries

1 ID issuers shall establish offline flat-files, as well as registries relating to the information referred to in Articles 14(2), 16(2) and 18(2), along with explanatory notes on the structures thereof.

2 Offline flat-files shall be no larger than two gigabytes per ID issuer. Each line of the flat-file shall hold one record with fields separated by delimiters such as commas or tabs.

3 ID issuers shall ensure that an up-to-date copy of all offline flat-files, registries and related explanatory notes are electronically provided via the router to the secondary repository.

4 Member States may adapt the size limit for offline flat-files referred to in paragraph 2, taking into account both the average size of available memory installed on the verification devices used for offline checks of unique identifiers and the total number of ID issuers.

CHAPTER IV

DATA CARRIERS

Article 21

Data carriers for the Unique Identifiers

1 Unit level UIs shall be encoded using at least one of the following types of data carriers:

- a an optical device-readable Data Matrix with error detection and correction equivalent to or higher than those of the Data Matrix ECC200. Barcodes conforming to ISO/IEC 16022:2006 shall be presumed to fulfil the requirements set out in this point;
- b an optical device-readable QR Code with a recovery capacity of approximately 30 %. Barcodes conforming to ISO/IEC 18004:2015 with the error correction level H shall be presumed to fulfil the requirements set out in this point;
- c an optical device-readable DotCode with the error detection and correction equivalent to or higher than those provided with the Reed-Solomon error correction algorithm with the number of check characters (NC) equal to three plus the number of data characters (ND) divided by two ($NC = 3 + ND/2$). Barcodes conforming to the ISS DotCode Symbology Specification published by the Association for Automatic Identification and Mobility ('AIM') (revision 3.0, August 2014) shall be presumed to fulfil the requirements set out in this point.

2 In the case of unit level UIs delivered electronically, manufacturers and importers are responsible for encoding unit level UIs in accordance with paragraph 1.

3 In the case of unit level UIs delivered physically, ID issuers are responsible for encoding the codes generated pursuant to Article 8(2), in accordance with paragraph 1.

4 By way of derogation from paragraph 1, manufacturers and importers may add the time stamp separately from the data carrier in the format YYMMDDhh as a human readable code.

5 Aggregated level UIs shall be encoded by economic operators using at least one of the following types of data carriers:

- a an optical device-readable Data Matrix with error detection and correction equivalent to or higher than those of the Data Matrix ECC200. Barcodes conforming to ISO/IEC 16022:2006 shall be presumed to fulfil the requirements set out in this point;
- b an optical device-readable QR Code with a recovery capacity of approximately 30 %. Barcodes conforming to ISO/IEC 18004:2015 with the error correction level H shall be presumed to fulfil the requirements set out in this point;
- c an optical device-readable Code 128 with the error detection equivalent to or higher than the one provided with the algorithm based on the even/odd — bar/space character parity and the check character. Barcodes conforming to ISO/IEC 15417:2007 shall be presumed to fulfil the requirements set out in this point.

6 In order to distinguish the data carriers referred to in paragraphs 1 and 5 from any other data carrier placed on unit packets or aggregated packaging, economic operators may add the marking ‘TTT’ next to such data carriers.

Article 22

Quality of the optical data carriers

1 Economic operators shall ensure high readability of the optical data carriers. A quality of the optical data carriers rated at least 3.5 in accordance with ISO/IEC 15415:2011 for the two-dimensional data carriers, or in accordance with ISO/IEC 15416:2016 for the linear symbols shall be presumed to fulfil the requirements set out in this Article.

2 Economic operators shall ensure that the optical data carriers are capable of remaining readable for at least five years after their creation.

Article 23

Human-readable code

1 Economic operators shall ensure that each data carrier includes a human-readable code that enables electronic access to the information related to the unique identifiers stored in the repositories system.

2 Where the dimensions of the packaging allow, the human-readable code shall be adjacent to the optical data carrier carrying the unique identifier.

CHAPTER V

REPOSITORIES SYSTEM

*Article 24***Components of the repositories system**

- 1 The repositories system shall be composed of the following sub-systems:
 - a repositories which are established for the purpose of storing data relating to tobacco products of individual manufacturers and importers ('primary repositories');
 - b a repository which contains a copy of all data stored in the primary repositories system ('secondary repository');
 - c a routing service ('router') set up and managed by the provider of the secondary repository system.
- 2 The sub-systems referred to in paragraph 1 shall be fully interoperable with one another, irrespective of the service provider used.

*Article 25***General characteristics of the repositories system**

- 1 The repositories system shall satisfy the following conditions:
 - a it shall allow for functional integration of the repositories system into the traceability system, as well as uninterrupted electronic data exchange between the repositories system and other relevant components of the traceability system;
 - b it shall allow for electronic identification and authentication of tobacco products, at unit packet and aggregation level, in accordance with the requirements set out in this Regulation;
 - c it shall allow for automatic deactivation of unique identifiers in accordance with the rules set out in Article 5;
 - d it shall ensure electronic receipt and storing of information recorded and sent to the repositories system by economic operators and ID issuers, in accordance with the requirements of this Regulation;
 - e it shall ensure storage of data for a minimum period of five years as of the moment the data are uploaded into the repositories system;
 - f it shall allow for automatic status messaging to economic operators, and to Member States and the Commission as requested, such as in the event of success, error or changes related to reporting activities, in accordance with the requirements of this Regulation;
 - g it shall allow for automatic validation of messages received from economic operators, including refusal of incorrect or incomplete messages, in particular reporting activities related to non-registered or duplicated unique identifiers, whereby the repositories system shall store the information concerning any refused message;
 - h it shall ensure messaging between all of its components which shall take place instantaneously, in accordance with the requirements of this Regulation, in particular the overall response time of the repositories system in sending acknowledgment messages, not considering the speed of the internet connection of the end user, which shall be no more than 60 seconds;

- i it shall ensure continuous availability of all components and services with a monthly uptime of at least 99,5 % and sufficient back-up mechanisms in place;
 - j it shall be guarded by security procedures and systems ensuring that access to the repositories and download of the data stored therein is only granted to persons authorised according to this Regulation;
 - k it shall be accessible by the competent authorities of Member States and by the Commission. National administrators designated by the Member States and Commission services shall be granted access rights enabling them to create, manage, and withdraw user access rights for repositories, and related operations stipulated in this Chapter, via a graphical user management interface. The graphical user management interface shall be compatible with Regulation (EU) No 910/2014, in particular the relevant reusable solutions provided as building blocks under the telecommunication part of the Connecting Europe Facility. National administrators designated by the Member States shall be able to grant subsequent access rights to other users under their responsibility;
 - l it shall enable Member States and the Commission to carry out downloads of full and selected sets of data stored in a repository;
 - m it shall maintain a complete record ('audit trail') of all operations concerning the stored data of the users performing those operations and of the nature of these operations, including the history of users access. The audit trail shall be created when the data is uploaded for the first time and, notwithstanding any additional national requirements, be maintained until at least five years after.
- 2 Data stored in the repositories system shall be used only for the purposes referred to in Directive 2014/40/EU and this Regulation.

Article 26

Primary repositories

- 1 Each manufacturer and importer shall ensure the establishment of a primary repository. To that end each manufacturer and importer shall contract an independent third party provider, in accordance with the contractual requirements set out in Commission Delegated Regulation (EU) 2018/573⁽²⁾. The selection of the independent third party shall take place in accordance with the procedural rules laid down in Annex I, Part A.
- 2 Each primary repository shall exclusively host information which relates to the tobacco products of the manufacturer or importer who contracted the repository.
- 3 Whenever data are received by the primary repository on the basis of a reporting activity, or for any other permitted reason, it shall be forwarded to the secondary repository instantaneously.
- 4 In forwarding all data received to the secondary repository, the primary repositories shall use the data format and data exchange modalities defined by the secondary repository.
- 5 Primary repositories shall store the data in accordance with the common data dictionary provided by the secondary repository.
- 6 Member States, the Commission, and external auditors approved by the Commission shall be able to carry out basic query requests in relation to all data stored in a primary repository.

Article 27

Secondary repository

1 A single secondary repository containing a copy of all data stored in primary repositories shall be established. The operator of the secondary repository shall be appointed from among the providers of primary repositories in accordance with the procedure laid down in Annex I, Part B.

2 The secondary repository shall provide for graphical and non-graphical user interfaces that enable Member States and the Commission to access and query the data stored in the repositories system, using all commonly available database search functions, in particular by remotely carrying out the following operations:

- a retrieval of any information concerning one or multiple unique identifier(s), including the comparison and cross-checking of multiple unique identifiers and the related information, in particular their location in the supply chain;
- b creation of lists and statistics, such as product stocks and inflow/outflow numbers, associated with one or multiple elements of reporting information listed as Data Fields in Annex II;
- c identification of all tobacco products that have been reported by an economic operator to the system, including the products reported as recalled, withdrawn, stolen, missing or intended for destruction.

3 The user interfaces referred to in paragraph 2 shall enable each Member State and the Commission to define individual rules for:

- a automatic alerting based on exceptions and specific reporting events, such as abrupt fluctuations or irregularities in trade, attempts to introduce duplicate unique identifiers into the system, deactivation of the identifiers referred to in Articles 15(4), 17(4) and 19(4), or where a product is indicated by economic operators as stolen or missing;
- b the receipt of periodic reports based on any combination of the elements of reporting information listed as Data Field in Annex II.

4 Automatic alerts and periodic reports referred to in paragraph 3 shall be forwarded to recipient addresses indicated by Member States and the Commission such as individual email addresses and/or internet Protocol (IP) addresses belonging to external systems used and managed by national authorities or the Commission.

5 The user interfaces referred to in paragraph 2 shall enable Member States and the Commission to connect remotely to the data stored in the repositories system with the analytical software of their choice.

6 The user interfaces referred to in paragraph 2 shall be provided in the official languages of the Union.

7 The overall response time of the repository to any given query or alert trigger, not considering the speed of the internet connection of the end user, shall be no more than 5 seconds for the data stored for less than 2 years and no more than 10 seconds for the data stored for 2 years or more, in at least 99 % of all queries and automatic alerts foreseen under paragraphs 2 and 3.

8 The overall time between the arrival of reporting activity data and its accessibility, via the graphical and non-graphical interfaces, in the primary and secondary repositories shall be no more than 60 seconds in at least 99 % of all data transfer activities.

9 The repository shall allow for the receipt, storing and making available of offline flat-files for the purpose of updating verification devices used by Member States for offline decoding of unique identifiers.

10 The provider of the secondary repository shall establish and maintain a register of the information transferred to it in accordance with Article 20(3). A record of the information stored in the register shall be kept for as long as the traceability system is operational.

11 Member States and the Commission shall retain the right to enter into additional service level agreements with the provider of the secondary repository for the purpose of contracting the latter to carry out additional services not provided for by this Regulation. The provider of the secondary repository may charge proportionate fees for providing such additional services.

12 The repository services provided to Member States and the Commission under this Article shall be compatible with Regulation (EU) No 910/2014 and in particular allow for the use of reusable solutions provided as building blocks under the telecommunication part of the Connecting Europe Facility.

Article 28

Coordination tasks of the provider of the secondary repository

1 The provider operating the secondary repository shall communicate to providers operating primary repositories, ID issuers and economic operators, the list of specifications required for the data exchange with the secondary repository and the router. All specifications shall be based on non-proprietary open standards.

The list referred to in the first subparagraph shall be communicated no later than two months following the date when the provider operating the secondary repository was selected.

2 On the basis of the information listed in Annex II, the provider operating the secondary repository shall establish a common data dictionary. The common data dictionary shall refer to labels of data fields in the human readable format. The common data dictionary shall be communicated to the providers operating primary repositories no later than two months following the date when the provider operating the secondary repository was selected.

3 Whenever necessary to ensure the effective operation of the repositories system in accordance with the requirements of this Regulation, the provider operating the secondary repository shall update the list referred to in paragraph 1 and the common data dictionary referred to in paragraph 2. Any such update shall be communicated to the providers operating primary repositories at least two months prior to the date of implementing the update into the system.

Article 29

Router

1 The provider of the secondary repository shall set up and manage a router.

2 Data exchange between the router and the primary and secondary repositories shall take place using the data format and data exchange modalities defined by the router.

Status: This is the original version (as it was originally adopted).

3 Data exchange between the router and an ID issuer shall take place using the data format and data exchange modalities defined by the router.

4 Economic operators other than manufacturers and importers shall send the information recorded pursuant to Article 15 of Directive 2014/40/EU and in accordance with this Regulation to the router, which shall transfer it to the primary repository serving the manufacturer or importer whose tobacco products are concerned. A copy of those data shall be transferred instantaneously to the secondary repository system.

Article 30

Costs of the repositories system

1 All costs related to the repositories system referred to in Article 24(1), including those that arise from its establishment, operation and maintenance, shall be borne by manufacturers and importers of tobacco products. Those costs shall be fair, reasonable, and proportionate:

- a to the services rendered; and
- b to the amount of unit level UIs requested over a given period of time.

2 The costs, as applicable, of establishing, operating and maintaining the secondary repository and the router shall be transmitted to manufacturers and importers of tobacco products through the costs charged to them by the providers of the primary repositories.

Article 31

Deadline for the establishment of the repositories system

The repositories system shall be established and functional for testing purposes by 20 March 2019.

CHAPTER VI

RECORDING AND TRANSMITTING

Article 32

Recording and transmission of information on product movements

1 To allow the determination of the actual shipment route of unit packets manufactured in, or imported into the Union, economic operators shall record the following events:

- a application of unit level UIs on unit packets;
- b application of aggregated level UIs on aggregated packaging;
- c dispatch of tobacco products from a facility;
- d arrival of tobacco products at a facility;
- e trans-loading.

2 Manufacturers and importers shall transmit the information listed in points 3.1 to 3.5 of Section 3 of Chapter II of Annex II, in the format indicated therein, to the primary repository contracted by them. All other economic operators shall transmit the information listed in points 3.1 to 3.5 of Section 3 of Chapter II of Annex II, in the format indicated therein, via the router.

3 For disaggregation of aggregated packaging marked pursuant to Article 10(4), where an economic operator intends to reuse an aggregated level UI in any future operations, manufacturers and importers shall transmit the information listed in point 3.6 of Section 3 of Chapter II of Annex II, in the format indicated therein, to the primary repository contracted by them. All other economic operators shall transmit the information listed in point 3.6 of Section 3 of Chapter II of Annex II, in the format indicated therein, via the router.

4 For deliveries to multiple first retail outlets by means of a vending van, manufacturers and importers shall transmit the information listed in point 3.7 of Section 3 of Chapter II of Annex II, in the format indicated therein, to the primary repository contracted by them. All other economic operators shall transmit the information listed in point 3.7 of Section 3 of Chapter II of Annex II, in the format indicated therein, via the router.

5 For dispatch and trans-loading of unit or aggregated packaging of tobacco products with total weight below 10 kg destined outside the Union, Member States in which the dispatch facility is located may allow the recording obligation referred to in paragraph 1 in points (c) to (e) to be discharged by means of providing access to the logistic or postal operator's own track and trace system records.

6 If following the application of the unique identifier tobacco products are destroyed or stolen, economic operators shall promptly transmit a deactivation request in accordance with the scope and format specified in point 2.3 of Section 2 of Chapter II of Annex II.

7 The information concerning the event shall be deemed to have been transmitted correctly upon the positive acknowledgement by the primary repository or the router. The acknowledgement shall include a message recall code to be applied by the economic operator if the original message needs to be cancelled.

Article 33

Recording and transmission of transactional information

1 To allow the determination of the transactional information referred to in Article 15(2), points (j) and (k) of Directive 2014/40/EU, economic operators shall record the following events:

- a issuing of the order number;
- b issuing of the invoice;
- c receipt of the payment.

2 Manufacturers and importers shall transmit the information listed in Section 4 of Chapter II of Annex II, in the format indicated therein, to the primary repository contracted by them. All other economic operators shall transmit the information listed in Section 4 of Chapter II of Annex II, in the format indicated therein, via the router.

3 The responsibility for recording and transmitting the information referred to in paragraph 2 shall lie with the vendor.

4 The information referred to in paragraph 2 shall be deemed to have been transmitted correctly upon the positive acknowledgement by the primary repositories or the router. The acknowledgement shall include a message recall code to be applied by the economic operator if the original message needs to be cancelled.

Article 34

Time frame for transmission of required information

1 Economic operators shall transmit the information referred to in Article 32(1) points (a), (b) and (d), Articles 32(3) and (4), and Article 33(1), within 3 hours from the occurrence of the event. The information referred to in Article 32 shall be transmitted in the order of the occurrence of the events.

2 For the purposes of paragraph 1, the events referred to in Article 33 shall be deemed to occur at the moment when they can be associated with the relevant unit packets for the first time.

3 Economic operators shall transmit the information concerning the dispatch of tobacco products from a facility and trans-loading referred to in Article 32(1) points (c) and (e), within 24 hours prior to the occurrence of the event.

4 By way of derogation from paragraph 1, economic operators may transmit the information referred to in Article 32(1) points (a), (b) and (d), Articles 32(3) and (4), and Article 33(1), within 24 hours from the occurrence of the event, if they fulfil any of the following conditions:

- a they, or where applicable, the group of undertakings to which they belong, handled less than 120 million unit level UIs at Union level during the previous calendar year;
- b they are small and medium enterprises within the meaning of Commission Recommendation 2003/361/EC.

5 Paragraph 1 shall apply from 20 May 2028. Until that date all economic operators may transmit the information referred to in paragraph 1 within 24 hours from the occurrence of the event.

CHAPTER VII

FINAL PROVISIONS

Article 35

Independence

1 ID issuers, providers of repository services and anti-tampering devices as well as, where applicable, their subcontractors shall be independent and exercise their functions impartially.

2 For the purposes of paragraph 1, the following criteria shall be used to assess independence:

- a independence from the tobacco industry in terms of legal form, organisation and decision making. In particular it shall be assessed whether the undertaking or the group of undertakings is not under the direct or indirect control of the tobacco industry, including a minority shareholding;
- b independence from the tobacco industry in financial terms, which will be presumed if, before assuming their functions the undertaking or the group of undertakings concerned generates less than 10 % of its annual worldwide turnover, excluding VAT and any other indirect taxes, from goods and services supplied to the tobacco sector over the

past two calendar years, as may be determined on the basis of the most recent approved accounts. For each subsequent calendar year, the annual worldwide turnover, excluding VAT and any other indirect taxes, from goods and services supplied to the tobacco sector shall not exceed 20 %;

- c absence of conflicts of interests with the tobacco industry of the persons responsible for the management of the undertaking or the group of undertakings, including members of the board of directors or any other form of governing body. In particular, they:
 - (1) shall not have participated in company structures of the tobacco industry for the last five years;
 - (2) shall act independently from any pecuniary or non-pecuniary interest linked to the tobacco industry, including possession of stocks, participation in private pension programmes or interest held by their partners, spouses or direct relatives in the ascending or descending line.

3 Where ID issuers, providers of repository services and providers of anti-tampering devices have recourse to sub-contractors, they shall remain responsible for ensuring compliance by those subcontractors with the independence criteria set out in paragraph 2.

4 For the purposes of complying with their obligations under Article 3(8)(a) Member States, as well as the Commission may require ID issuers, providers of repository services and providers of anti-tampering devices, including where applicable their sub-contractors to provide them with documents necessary to assess compliance with the criteria set out in paragraph 2. Such documents may include annual declarations of conformity with the independence criteria set out in paragraph 2. Member States and the Commission may require that the annual declarations include a full list of services provided to the tobacco industry during the last calendar year as well as individual declarations of financial independence from the tobacco industry provided by all management members of the independent provider.

5 Any change in circumstances related to the criteria referred to in paragraph 2, capable of affecting the independence of ID issuers, providers of repository services and providers of anti-tampering devices (including, where applicable, their subcontractors), that subsist for two consecutive calendar years, shall be communicated without delay to the relevant Member States and to the Commission.

6 Where, information obtained in accordance with paragraph 4, or the communication referred to in paragraph 5, discloses that providers of repository services and providers of anti-tampering devices (including, where applicable, their subcontractors), no longer meet the requirements laid down in paragraph 2, then within a reasonable time period and at the latest by the end of the calendar year following the calendar year in which the information or communication was received, Member States and, in relation to the provider of secondary repository, the Commission shall take all measures to ensure compliance with the criteria set out in paragraph 2.

7 ID issuers, providers of repository services and providers of anti-tampering devices shall inform without delay the relevant Member States and the Commission about any occurrences of threats or other attempts at exercising undue influence that may actually or potentially undermine their independence.

8 Public authorities or undertakings governed by public law along with their subcontractors shall be presumed independent from the tobacco industry.

9 The procedures governing the appointment of ID issuers, providers of repository services and providers of anti-tampering devices and the monitoring of their compliance with the independence criteria set out in paragraph 2 shall be subject to periodic review by the

Commission with a view to assessing their conformity with the requirements of Article 15 of Directive 2014/40/EU and this Regulation. Conclusions of the review shall be published and form part of the report on the application of Directive 2014/40/EU provided for under Article 28 of that Directive.

Article 36

Security and interoperability of communications and data

1 All electronic communication provided for under this Regulation shall be carried out using secure means. Applicable security protocols and connectivity rules shall be based on non-proprietary open standards. They shall be established by:

- a the ID issuer for communications between the ID issuer and the economic operators registering with the ID issuer or requesting unique identifiers;
- b the providers of the primary repositories for communications between the primary repositories and manufactures or importers;
- c the provider of the secondary repository for communications between the secondary repository and the router and:
 - i. the ID issuers;
 - ii. the primary repositories; and
 - iii. economic operators using the router, i.e. economic operators other than manufacturers and importers.

2 Providers of primary and secondary repositories shall be responsible for the security and integrity of hosted data. Data portability shall be secured in accordance with the common data dictionary set out in Article 28.

3 For all transfers of data, the sending party is responsible for the completeness of transferred data. In order for the sending party to discharge this obligation, the receiving party shall acknowledge the receipt of transferred data including a checksum value of actual transmitted data or any alternative mechanism allowing for validating the integrity of transmission, in particular its completeness.

Article 37

Transitional provision

1 Cigarettes and roll-your-own tobacco that were manufactured in the Union or imported into the Union before 20 May 2019 and not marked by means of unit level UIs in accordance with Article 6 may remain in free circulation until 20 May 2020. In relation to these tobacco products which are allowed to remain in free circulation, but not marked with a unit level UIs, the obligations referred to in Chapter VI shall not apply.

2 Tobacco products other than cigarettes and roll-your-own tobacco that were manufactured in the Union or imported into the Union before 20 May 2024 and not marked by means of unit level UIs in accordance with Article 6 may remain in free circulation until 20 May 2026. In relation to these tobacco products which are allowed to remain in free circulation, but not marked with a unit level UIs, the obligations referred to in Chapter VI shall not apply.

Article 38

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 15 December 2017.

For the Commission

The President

Jean-Claude JUNCKER

Status: This is the original version (as it was originally adopted).

- (1) Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises ([OJ L 124, 20.5.2003, p. 36](#)).
- (2) Commission Delegated Regulation (EU) 2018/573 of 15 December 2017 on key elements of data storage contracts to be concluded as part of a traceability system for tobacco products (see page 1 of this Official Journal).