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Dentsu International

EU SECONDARY REPOSITORY SPECIFICATIONS CHANGES FROM VERSION 1.4.6 TO 2.0 DRAFT

This document details the changes in the List of Specifications and Data Dictionary from version 1.4.6 to version 2.0 DRAFT for the EU Secondary and Router.

Summary of changes

Date	Version	Done by	Comment
21.08.2023	1.0	Dentsu International	First version

Publication

Date	Version	Submitted to
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1 Introduction

1.1 Purpose

This document describes the changes proposed to the Data Dictionary version 2.0 and the List of Specifications version 2.0

1.2 Summary of changes

Several changes to reflect the new regulation, please refer to the details in the next sections.

2 List Of Specifications 2.0 Updates

The sections refer to the numbering in the version 1.4.6 of the document.

Global:

- Minor formatting adjustments
- Added "interface" column for all tables

Section 1.2 Scope and Objectives:

• Updated scope to reflect the new IR of 01/03/2023

Section 2 Definitions:

- Updated definition for aggregated packaging, disaggregation of aggregated packaging, facility and machine
- Added definitions for Anti-tampering device, Common data dictionary, Disaggregation of aggregated packaging, Export, IT Service Provider, Machine Part, Time stamp.

Section 3.3 Overview of Data Dictionary Processes:

• Added Machine Parts where appropriate.

Section 3.5 Secondary Repository Test Environment, 3.6 Secondary Repository User Acceptance Environment:

• New sections describing the test and user acceptance test environment.

Section 4.1.1.1 Description – Issuing of an Economic Operator Identifier code:

• Added a sentence to reflect the data storage obligation of ID Issuers

Section 4.1.3.1 Description – De-registration of Economic Operator identifier code:

• Added Machine Parts where appropriate.

Section 4.1.4.1 Description – Issuing of a Facility Identifier code:

- Added new rules for clarification on when to request a F-ID for retail outlet and non-retail outlet.
- Added new rules for clarification on F-IDs outside of the union.
- Added a sentence to reflect the data storage obligation of ID Issuers.

Section 4.1.6.1 Description – De-registration of a Facility Identifier code:

• Added Machine Parts where appropriate.

Section 4.1.7.1 Description – Issuing of a Machine Identifier code:

- Added a sentence to reflect the data storage obligation of ID Issuers.
- Added a recommendation to first register Machine Parts (if any) and afterwards register the whole Machine.

Section 4.1.7.2 Data Flow Diagram – Issuing of a Machine Identifier code:

• Added Machine Parts where appropriate.

Section 4.1.9.1 Description – De-registration of a Machine Identifier code:

• Added a sentence to reflect that the de-activation of a Machine will lead to the automatic de-registration of the associated machine parts.

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• Added sections relevant to machine parts (deactivation rules / deregistration rules).

Section 4.1.10 Machine Identifier code for a machine part, 4.1.11 Correction of information concerning a Machine Identifier code issued for a machine part, 4.1.12 De-registration of a Machine Part Identifier code issued for a machine part:

• New sections for Machine Parts

Section 4.2.1.1 Description – Issuing of unit level Unique identifiers (upUIs) for Unit packets:

• Added a validation description where codes cannot be ordered by using a Machine ID of type "Machine Part".

Section 4.2.6 Request for reactivation of UIs for products reported as stolen but recovered:

• New section for the new 2.4 reactivation message.

Section 4.3.8 Dispatch of tobacco products from a Facility to laboratories, waste disposal centres, national authorities, international governmental organisations, embassies and military bases:

• New section for the new 3.8 dispatch message.

Section 4.3.1.1 Description – Application of unit level Unique identifiers (upUIs) on Unit packets – Report from Manufacturers and Importers:

- Added the fact that the Human Readable code is provided by the ID Issuer and must be printed as-is in the tobacco products.
- Added a mention to the new validation that Primary Repository should perform on Human Readable codes.

Section 4.7.2 Reporting EOID, FID and MID:

• Rephrased to reflect what's written in the regulation revision.

Section 5.2 Secondary Repository and Router Interface:

• Added the mobile inspection app as a Secondary/Router interface.

Section 5.2.5 Version and backwards compatibility:

• Rephrased

Section 5.2.7.1 Overview:

• EPCIS interface deprecated.

Section 5.2.7.4 (former 5.2.7.5) Messages:

- Added the new message that can be recalled (3.8).
- Added the new possibility to recall a deactivation under some circumstances (message 2.3)

Section 5.2.8.4 Timeout handling:

• Added a clarification on timeout handling.

Section 5.2.11.2 Maximum number of UI:

- Reduced the limit of UIDs per message.
- Added the new message types.

Section 5.2.12 Number of simultaneous connections:

• Rephrased

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Section 5.2.13 Message Sequence:

• Extended scope to the parties reporting to the Router as well.

Section 5.3 EPCIS and EDI Support:

• Removed as EPCIS/EDI support is deprecated.

Section 5.4.2 (now 5.3.2) Registry:

• Updated to reflect Machine Parts.

Section 5.4.6.1 (now 5.3.6.1) Content and Structure:

• Updated to reflect Machine Parts.

Section 5.8.5 Reclaim of identifier codes:

New section

Section 6.2 Clarification on the Human Readable:

• Added a sentence to reflect that human readable codes are now explicitly delivered by ID Issuers to Manufacturers.

Section 9 Endpoints:

• Deprecated EPCIS/EDI endpoints.

3 Data Dictionary 2.0 Updates

The sections refer to the numbering in the version 1.4.6 of the document.

Global:

- Minor formatting adjustments
- Removed support for EPCIS and EDI

Section 2.1 Data Types:

- Updated country definition
- Updated Email regular expression (regex)
- Updated Text (X) definition
- Updated Time(L) definition
- Updated upUI(L) definition
- Added the new upUI(i) data type
- Updated upUI(s) definition

Section 2.4 Minimum Data Model:

- Updated entities to reflect the new fields (Address, Municipality, etc)
- Updated the data model to reflect the new changes (i.e. List of Machine parts)

Section 2.5 Registered Entities:

- Added new data definitions, such as:
 - EO_street, F_street -> Text(300)
 - EO_municipality, F_municipality -> Text(100)
 - EO_postcode, F_postcode -> Text(50)
 - EO_A_info, F_A_info -> Text(100)
 - PrevFID_B
 - PrevFID_ID
 - PrevMID_B
 - PrevMID_ID
 - o M_entirety
 - Machine parts related fields (i.e. P_ATD, P_Mobile, etc)

Section 2.6.1 Country Codes:

• Added "XZ" for International Waters

Section 2.6.4 EventType:

- Added new EventTypes:
 - EDX Dispatch 3.8
 - IRR Reactivation of UIs 2.4

Section 2.6.11 TobaccoProductType:

• Updated the Tobacco Product Type as per the new requirements (type 10 is reserved and not used intentionally by the regulators)

Section 3.1 Message Types to be exchanged:

• Added new messages EDX and IRR.

Section 3.1.2 Message and endpoints:

• Added new messages EDX and IRR to Primary Repository, Router and Secondary Repository.

Section 3.2.4.1 Information_Type:

• Added EDX to the list of messages supporting the optional field on the Router to return total number of upUIs present in the hierarchy of the message reported.

Section 3.3.2 Timestamps:

• Updated Message Time Long's precision to millisecond

Section 3.3.3.2 Message Structure Validation:

• Removed VAL_MSG_XML

Section 3.3.3.3 Message Transmission Validation:

• VAL_MSG_DUPLICATE – Added IRR and EDX to the Scope

Section 3.3.3.4.1 Message level validation:

• VAL_UI_MULT_MSG – Added IRR and EDX to the Scope

Section 3.3.3.4.2 Application Validation:

- Updated "upUIs" to "upUI(i)" as the new data type is more explicit.
- VAL_UI_HR_EXIST -> New validation to be used in activation message to check that the Human Readable exists.

Section 3.3.3.4.3 Existence:

- VAL_UI_EXIST_UPUI -> Added IRR and EDX to the Scope
- VAL_UI_EXIST_AUI -> Added IRR and EDX to the Scope
- VAL_UI_EXIST_UPUI_SEQ -> Added EDX to the Scope
- VAL_UI_EXIST_AUI_SEQ -> Added EDX to the Scope

Section 3.3.3.5.1 Sequence Validation overview:

- VAL_UI_ORD_SEQUENCE -> Added IRR and EDX
- Added IRR and EDX to the tables
- Clarified that ETL can be performed after EDX if reported with the full address like the case of export

Section 3.3.3.5.2 Application and deactivation sequence validation:

- VAL_UI_ORD_DEACTIVATED -> Added EDX
- VAL_UI_ORD_REACTIVATION_NOT_ALLOWED -> New validation

Section 3.3.3.5.3 Aggregation and Disaggregation Principles:

• Slight modifications of the wording of Principles 1,2 and 3. There is no functional change, just to explicitly clarify them better.

Section 3.3.3.5.4.1 Triggers:

• Added EDX to the list of events that can trigger implicit disaggregation.

Section 3.3.3.5.5 Aggregation and Disaggregation Validation:

- VAL_UI_ORD_DISAGG -> Added EDX, EPA (as children) and EUD to the scope of events.
- VAL_UI_ORD_IMPLDISAGG -> Added EDX and full EPA to the scope of events.

Section 3.3.3.5.6.1 UI Location Update:

• Added IRR (2.4) to the list of events that update the location of the UIs

Section 3.3.3.5.7 Dispatch and Arrival Validation:

• VAL_UI_ORD_ARRIVAL_RETURN -> Added EDX to the Description of events allowed before a Returns.

Section 3.3.3.5.7.1 Imported goods Exception:

• Reworded to better explain the scenario. No functional change.

Section 3.3.3.5.7.3 Arrival and Return:

• Rephrased section title and description to better explain the point. No functional change.

Section 3.3.3.5.7.4 Dispatch Validation:

- Added "Reactivated on that location" to the description.
- Added EDX to the Scope

Section 3.3.3.6 Message Event Time Validation:

• VAL_EVT_TIME -> Added EDX to the scope

Section 3.3.3.7 Identification Code validation:

- VAL_ENT_EXIST_EOID -> Added EDX and IRR to the scope
- VAL_ENT_EXIST_FID -> Added EDX and IRR to the scope
- VAL_ENT_ACTIVE_EOID -> Added EDX and IRR to the scope
- VAL_ENT_ACTIVE_FID -> Added EDX and IRR to the scope
- Added new validation VAL_ENT_MPART

Section 3.3.3.8.3 Recall Validation Controls:

• Added new validation VAL_RECALL_EXPIRED

Section 3.3.4 Validation Scope:

- Removed VAL_MSG_XML from the table
- Added columns for IRR and EDX
- Added the new validation VAL_UI_ORD_REACTIVATION_NOT_ALLOWED
- Added the new validation VAL_ENT_MPART
- Added the new validation VAL_UI_HR_EXIST
- Added the new validation VAL_RECAL_EXPIRED

Section 3.3.5 Validation Responsibility:

- Added the new validation VAL_UI_ORD_REACTIVATION_NOT_ALLOWED
- Added the new validation VAL_ENT_MPART
- Added the new validation VAL_UI_HR_EXIST
- Added the new validation VAL_RECALL_EXPIRED

Section 3.3.6 Validation and Error Code:

- Added the new validation VAL_UI_ORD_REACTIVATION_NOT_ALLOWED
- Added the new validation VAL_ENT_MPART
- Added the new validation VAL_UI_HR_EXIST
- Added the new validation VAL_RECALL_EXPIRED

Section 3.3.7 Transition Period Validation:

• This section has been removed. It was the "Transition period validation" that applied during 2019 and 2020.

Section 3.3.8 Sequence Valdiation Grace Period:

• This section has been removed. It was the "grace period" that applied during 2020.

Section 3.4.1 REO – (1.1) Registration of an Economic operator:

• Updated the REO (1.1 – Registration of an Economic Operator) request with the new fields required. The old fields have been removed, so the expectation is that any new registration of Economic Operator is performed using the new address identification fields.

Section 3.4.2 REOD – Data Registration of an Economic operator:

• Removed REOD as it is redundant with REO's response.

Section 3.4.3 CEO – (1.2) Correction for an economic operator identifier code:

• Updated the CEO (1.2 – Correction for an Economic Operator identifier code) request with the new fields required.

Section 3.4.4 DEO – (1.3) De-registration of economic operator identifier code:

• Updated the description of DEO to reflect that ID Issuers must recursively de-register all associated FIDs and MIDs with the de-registered EO-ID.

Section 3.4.5 RFA – (1.4) Request for a facility identifier code:

- Updated the RFA description to reflect the new functionality where an audit trail of previous Identifier Codes by previous owners must be reported.
- Updated the RFA (1.4 Request for a Facility Identifier code) request with the new fields required.

Section 3.4.6 RFAD – Data Registration for a facility identifier code:

• Removed RFAD as it is redundant with RFA response.

Section 3.4.7 CFA – (1.5) Correction of information concerning the facility identifier code:

• Updated CFA with the new fields described.

Section 3.4.8 DFA – (1.6) De-registration of facility identifier code:

• Updated DFA's (1.6 De-registration of a facility identifier code) description to reflect that now this request must de-register all associated Machine IDs (Please note that Machine Parts are identified by Machine IDs as well and therefore shall also be de-registered).

Section 3.4.9 RMA – (1.7) Request for a machine identifier code:

- Updated RMA (1.7 Request for a machine identifier code) to accommodate Machine Parts
- Updated the description to explain specificities of Entire Machines and Machine Parts as well as which ones can be used to request codes with the ISU (2.1) message.
- Added an example request for Machine Part
- Added an example request for Entire Machine

Section 3.4.10 RMAD – Data Request for a machine identifier code:

• Removed RMAD as it is redundant with RMA response.

Section 3.4.11 CMA – (1.8) Correction of information concerning the machine identifier code:

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• Updated CMA (1.8 Correction of information concerning the machine identifier code) to accommodate Machine Parts.

Section 3.4.12 DMA – (1.9) De-registration of machine identifier code

• Updated description to reflect that machine parts associated with the registered machine should be automatically de-registered.

Section 3.5.1 ISU - (2.1) Request for unit level UIs:

- Updated ISU's description to reflect that a validation shall be put in place by ID Issuers to reject messages where the Machine ID is a Machine Part.
- Updated ISU message field "P_type" so that Other Tobacco Product is P_Type 12 instead of 11 as per the new regulation.
- Updated description of P_Brand.
- Added new fields P_SubType_Exist, P_SubType_Name
- Updated TP_PN description and when/when not it's mandatory to declare (Note that "Northern Ireland" XI is considered a Member State for the purpose of the usage of this field).

Section 3.5.2 IRU – Message to report the issuance of serial numbers at unit packet level:

- Updated IRU message to accommodate the new fields/field behaviour (upUI(s), P_SubType_Exist, P_SubType_Name, P_units, TP_PN).
- Updated description to describe the new changes
- Updated limit of UIs per message to 20.000 (10.000 for upU(i) and 10.000 for upUI(s))
- Field upUI has been renamed to upUI_i
- Field upUI_s has been added.

Section 3.5.2.5 UI Duplicate Validation:

• Removed non applicable paragraphs.

Section 3.5.2.6 Machine Part Validation:

• New section

Section 3.5.3.7 Request Sample:

• Updated sample

Section 3.5.2.9 (former 3.5.2.8) Error response sample:

• Updated table with VAL_ENT_MPART

Section 3.5.6.1.3 Deactivation upUI:

• Modified the description to indicate that IDA (Deactivation) can be sent on UIs using the 3 formats (upUI(s), upUI(i) and upUI(L)).

Section 3.5.6.2 Description of the fields:

• Modified Data Type of "Deact_upUI" to include upUI(i).

Section 3.5.8 IRR – (2.4) Request for reactivation of UIs for products reported as stolen but recovered:

• New section, for the new IRR message.

Section 3.6.1 EUA – (3.1) Application of unit level UIs on unit packets:

• Added the new validation VAL_UI_HR_EXIST into the description.

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Section 3.6.2.4 Sequence Validation:

• Added IRR+EPA to the list of authorized transitions, which it's matching description.

Section 3.6.3 EDP – (3.3) Dispatch of tobacco products from a facility:

- Modified fields Destination_ID5's description to align with the new regulation.
- Added new fields Destination_ID6, Destination_ID7 and Destination_ID8 for the dispatch for export scenario to align with the new regulation.

Section 3.6.5 ETL – (3.5) Trans-loading:

- Modified description of Destination_ID3 to match the new regulation
- Added fields Destination_ID4, Destination_ID5 and Destination_ID6 as described in the new regulation

Section 3.6.8 EDX – (3.8) Dispatch of tobacco products from a facility to laboratories, waste disposal centres, national authorities, international governmental organisations, embassies and military bases:

• New section for the new message EDX.

Section 3.7 EPCIS Reporting operational events (product movement information):

• Removed section, EPCIS no longer supported.

Section 3.8.1 EIV – (4.1) Issuing of the invoice:

- Modified Buyer_Address1 to align with the new regulation
- Added Buyer_Address2 and Buyer_Address3.

Section 3.8.3 EPR – (4.3) Receipt of the payment:

- Modified Payer_Address1 to align with the new regulation
- Added Payer_Address2 and Payer_Address3.

Section 3.9 EDI – Reporting transactional events (trade information):

• Removed section, EDI no longer supported.

Section 3.10 Recall:

- Added message 3.8 to the events that can be recalled
- Added the possibility to recall message 2.3 under certain conditions.

Section 3.11 EPCIS - Recall:

• Removed section, EPCIS no longer supported.

Section 3.14.1.5.3 EO Element JSON Object:

- Added the new address fields to the EO Element.
- Modified Mandatory fields to reflect they change depending on the registration date of the Economic Operator

Section 3.14.1.5.4 Facility Element JSON Object:

- Added the new address fields to the Facility Element
- Modified Mandatory fields to reflect they change depending on the registration date of the Facility ID

Section 3.14.1.5.5 Machine Element JSON Object:

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- Added the new machine parts fields to the Machine Element
- Modified Mandatory fields to reflect they change depending on the registration date of the Machine ID

Section 3.14.1.5.6 Event Element JSON Object:

• Added the new fields to Dispatch (3.3 EDP)

Section 3.15 Manufacturer interface:

• Updated LDI to allow checking any Dispatch transmitted to the Primary Repository at the Secondary Repository/Router level.

Section 4.1 Registry:

- Added the new address fields to the Economic Identifier.
- Added the new address fields to the Facility Identifier
- Added the new machine parts fields to the Machine Identifier
- Modified the Mandatory fields to be based on the registration date

Section 4.2.1.2 ProductLookup:

• Updated P_OtherType to be Mandatory if P_Type = 12 instead of 11