

dentsu TRACKING

Dentsu Aegis Network

EU SECONDARY REPOSITORY SPECIFICATIONS CHANGES FROM VERSION 1.4.2 TO 1.4.3

This document details the changes in the List of Specifications and Data Dictionary from version 1.4.2 to version 1.4.3 for the EU Secondary and Router.

Summary of changes

| Date | Version | Done by | Comment |
|------------|---------|----------------------|---------|
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| | | | |

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1 Introduction

1.1 Purpose

This document describes the changes proposed to the Data Dictionary version 1.4.2 and the List of Specifications version 1.4.2.

1.2 Type of updates

In order to provide a better understanding of the proposed updates, each change is categorized as following.

- **Cosmetic:** the change corrects typo or wording elements without changing the feature purpose
- **Technical:** The change completes the current feature or correct minor omissions.
- **Functional:** the change adds or modifies the initial feature.

1.3 Summary of changes

This document update contains the change in the country list to prepare for the Brexit related activities.

In addition to clarifications regarding the message sequence reporting including the handling of timeouts, this update consolidates the features introduced during the September 1st 2020 release.

1.4 Impact

The changes require development on IT systems for the following stakeholders.

| Update | Secondary Repository and Router | ID Issuer | Primary Provider | Service Provider | Economic Operator Manufacturer / Importer | Economic Operator Distributor / Retail Outlet |
|---|---------------------------------|-----------|------------------|------------------|---|---|
| XI country codes | X | X | X | X | X | X |
| Optional LDI Lookup Dispatch Interface | | | | | X | |
| Optional Checksum in acknowledgement | X | | | X | X | X |
| EOID FID MID validation on Primary Repository | | | X | X | X | |

2 List Of Specifications 1.4.3 Updates

2.1 [Clerical] Clarification of message acknowledgement and timeout handling.

Section: "5.2.8 Message response"

Description of the change: clarification of the event acknowledgment and timeout handling.

Message response

A message transmission corresponds to a message request performed by a sender system and a message response provided by the destination system back to the sender system.

The Message response contains and http status and the body of the message response.

2.1.1.1 Successful response or event acknowledgment

As per the Implementing Regulation, A message or event is considered reported upon the reception of the acknowledgement message (successful) transmitted back by the destination system.

The http status for the message positive response without any warning are 200 and 202.

A warning (http status 299) is considered as a successful response.

2.1.1.2 Negative response

The destination system is providing with a negative response if the reported event is not meeting the technical specifications.

Negative response http status is in the range of 400-499 and 500-599.

2.1.1.3 Timeout

The destination system did not produce a response within the time that the sender system was prepared to wait. The sender system MAY repeat the request without modifications at any later time.

The absence of response (or the http timeout response) indicates that the message is NOT acknowledged.

2.1.1.4 Timeout handling

In case of a timeout for a certain request, the sender system should retransmit the original message (identical payload).

If the sender system changes the original message (by updating the Message Time Long for example), the receiving system will consider the message as a different message.

2.2 [Clerical] Message Sequence.

Section: "5.2.13 Message Sequence"

Description of the change: clarification on the sequence reporting.

Message sequence must be respected as per regulation.

The primary repository must report the messages reported by the manufacturer in the same sequence. The reporting of messages to the secondary repository is completed upon reception of an acknowledgement message by the Secondary repository.

Note: If the primary repository reports two messages affecting the same group of UIs without waiting for the acknowledgment from the Secondary repository, both messages are considered to be reported simultaneously and NOT in sequence. By "affecting the same group of UIs" we mean either explicitly mentioned UIs between the messages or implicitly calculated UIs based on previous messages (i.e. hierarchy related UIs).

2.3 [Functional] EOID FID MID Validation on Primary repository.

Section: "8.8 Validation Responsibility."

Description of the change: Adding the EOID FID and MID validation checks. Update the table with the HTTP responses

Validation Responsibility

| | Primary Repository Error http status for EO | Router Error http status for EO | Secondary Repository Error http status for Primary |
|---------------------------------|---|---|--|
| Technical validation | | | |
| VAL_SEC_HASH | 400 | 400 | 400 |
| VAL_SEC_TOKEN | 401 | 401 | 401 |
| VAL_MSG_JSON | 400 | 400 | 400 |
| VAL_MSG_XML | 400 | 400 | 400 |
| VAL_MSG_TYPE | 400 | 400 | 400 |
| VAL_FIE_MAN | 400 | 400 | 400 |
| VAL_FIE_FORMAT | 400 | 400 | 400 |
| VAL_FIE_REF | 400 | 400 | 400 |
| VAL_MSG_DUPLICATE | 400 | 400 | 400 |
| VAL_MSG_CODE_DUPLICATE | 400 | | 400 |
| Business rule validation | | | |
| VAL_UI_MULT_MSG | 400 | 400 | 400 |
| VAL_UI_EXIST_APP | 400 | | 400 |
| VAL_UI_DUPLICATE_APP | 400 | | 400 |
| VAL_UI_FID_APP | 400 | | 400 |
| VAL_UI_EXIST_UPUI | 400 | 400 | 400 |
| VAL_UI_EXIST_AUI | 400 | 400 | 400 |
| VAL_UI_EXIST_UPUI_SEQ | 400 | 400 | 400 |
| VAL_UI_EXIST_AUI_SEQ | 400 | 400 | 400 |
| VAL_UI_EXPIRY | 400 | | 400 |
| VAL_UI_ORD_REACTIVATION | 400 | 400 | 400 |
| VAL_UI_ORD_DEACTIVATED | 400 | 400 | 400 |
| VAL_UI_ORD_AGG_MULT | 400 | 400 | 400 |
| VAL_UI_ORD_DISAGG | 400 | 400 | 400 |
| VAL_UI_ORD_IMPLDISAGG | 400 | 400 | 400 |
| VAL_UI_ORD_AGG_FID | 400 | 400 | 400 |
| VAL_UI_ORD_ARRIVAL | 400 | 400 | 400 |
| VAL_UI_ORD_ARRIVAL_RETURN | 400 | 400 | 400 |

| | | | |
|----------------------|-----|-----|-----|
| VAL_UI_ORD_DISPATCH | 400 | 400 | 400 |
| VAL_EVT_24H | 299 | 299 | |
| VAL_EVT_TIME | 299 | 299 | |
| VAL_ENT_EXIST_EOID | 400 | 400 | 400 |
| VAL_ENT_EXIST_FID | 400 | 400 | 400 |
| VAL_ENT_EXIST_MID | 400 | 400 | 400 |
| VAL_ENT_ACTIVE_EOID | 400 | 400 | 400 |
| VAL_ENT_ACTIVE_FID | 400 | 400 | 400 |
| VAL_ENT_ACTIVE_MID | 400 | 400 | 400 |
| VAL_ENT_REL_EOID_FID | | 400 | 400 |
| VAL_ENT_REL_FID_MID | | 400 | 400 |
| VAL_RECALL_EXIST | 400 | 400 | 400 |
| VAL_RECALL_LAST | 400 | 400 | 400 |

3 Data Dictionary 1.4.3 Updates

3.1 [Technical] Add Time(ms) in DataTypes

Section: "2.1 Data Types"

Description of the change: Add the millisecond precision timestamp.

| | | | |
|----------|--|--|--------------------------------|
| | | | |
| Time(ms) | Time(ms) format format : yyyy-MM-ddTHH:mm:ss.fffZ | | E.g '2020-08-13T16:01:34.477Z' |

3.2 [Technical] Add XI ISO country code definition

Section: "2.6.1 Country Codes"

Description of the change: In order to prepare for the Brexit, the XI country code is added to the list of supported countries.

Action: Add XI in the list of country codes

| | |
|----|------------------|
| | |
| XI | Northern Ireland |

3.3 [Clerical] update the data type for the upUI field from upUI(s) to upUI(L) without timestamp

Section: "3.4.2 IRU to report the issuance of serial numbers at unit package level"

Description of the change: update the data type for the upUI field from upUI(s) to upUI(L) without timestamp.

| request for reporting the issuance of serial numbers at unit packet level – request | | | | | |
|---|---|---------------------------|-------------|----------|--------|
| Field | Description | Data Type | Cardinality | Priority | Values |
| upUI | List of unit packet level UI issued by the ID Issuer. | upUI(L) without timestamp | M | M | |

3.4 [Technical] LDI Lookup Dispatch Interface

Section: “3.14.1 LDI Lookup Dispatch Interface”

Description of the change: Provide the manufacturer the ability to check the validity of the final dispatch messages (when the subsequent arrival message is expected to be sent to the router). Ensuring the successful reception of the goods by the distributors.

3.4.1 LDI Lookup Dispatch Interface

3.4.1.1 Context

Provide the manufacturer the ability to check the validity of the final dispatch messages (when the subsequent arrival message is expected to be sent to the router). Ensuring the successful reception of the goods by the distributors.

3.4.1.2 Approach

The Recallcode validation.

The Manufacturer will be able to

- Retrieve the **status of the dispatch** on the secondary repository. Allowing the confirmation that the primary has processed the dispatch message and transmitted it successfully to the Secondary repository.
- Confirm the **arrival status** at the distributor side by "simulating" the arrival process and provide the router response.

3.4.1.3 Response information

The Traceability response to the manufacturer request over the dispatch

3.4.1.3.1 Dispatch status

| | Description |
|---|--|
| 0 | The recallcode of the dispatch message (3.3) is not present in the Secondary repository |
| 1 | The recallcode of the dispatch message (3.3) is present in the Secondary repository and has been successfully processed. |

3.4.1.3.2 Arrival status

The system will execute the reception validation controls.

The result of the validation controls will be provided in the arrival status.

3.4.1.4 Daily Limit

The limit per manufacturer is set to 30 000 calls per day.

3.4.1.5 Description of the fields

| Application and aggregation envelop event | | | | | |
|---|-------------------------------------|---|-------------|----------|--------------------|
| Field | Description | Data Type | Cardinality | Priority | Values |
| BasicInfo_Req | Block of basic information elements | Component << Basic Information Request >> | S | M | Message_Type = LDI |

| | | | | | |
|-------------------|----------------------|---------|---|---|--|
| Message_Time_long | Message sending Time | Time(L) | S | M | |
| Dispatch_Code | Dispatch RecallCode | | S | M | |
| Dispatch_EOID | EOID | | S | M | |

3.4.1.6 Response:

| upUI application event – response | | | | | |
|-----------------------------------|---|--|-------------|----------|--------------------|
| Field | Description | Data Type | Cardinality | Priority | Values |
| BasicInfo_Resp | Block of basic information elements | Component << Basic Information Response >> | S | M | Message_Type = LDI |
| Validation_Time | Validation Timestamp | | S | M | |
| Dispatch_Code | Dispatch RecallCode | | S | M | |
| Dispatch_Status | | | S | M | |
| Arrival_Status | Response of the simulated arrival related to the dispatch | | | | |

3.4.1.7 Request sample

```
{
  "Message_Type": "LDI",
  "Code": null,
  "Dispatch_Code": "873345b2-882f-4064-91f0-90669b46c30a",
  "Dispatch_EOID": "AAAAAAA",
  "Message_Time_Long": "2019-03-20T14:16:45Z"
}
```

3.4.1.8 Successful response sample

HTTP Status 200

```
{
  "Code": "873345b2-882f-4064-91f0-90669b46c30a",
  "Message_Type": "LDI",
  "Dispatch_Code": "873345b2-882f-4064-91f0-90669b46c30a",
  "Validation_Time": "2019-03-20T14:16:45Z",
  "Dispatch_Status": 1,
  "Arrival_Status": {
    "Error": false,
    "Errors": null
  },
  "Error": false,
  "Errors": null,
  "Checksum": "G6HF5H"
}
```

3.4.1.9 Error response sample

| HTTP status | | |
|----------------------------|-------------------|---|
| << Common response code >> | | |
| 400 | FAILED_VALIDATION | In case the maximum number of requests is reached |

3.5 [Technical] Optional Checksum in acknowledgement

Description of the change: In order to allow EO to request the additional check sum will reflect the number of unit-level unique identifiers concerned with a given acknowledgement, an optional information request field is added to the messages.

This checksum feature will only be available on the Router endpoint.

The primary repository will not support the checksum feature.

| Basic information block concerning the response - schema | | | | | |
|--|--|-----------|-------------|----------|------------------|
| Field | Description | Data Type | Cardinality | Priority | Values |
| Information | Indicates the request of additional optional information | Boolean | S | 0 | 0 - No 1- Yes |

This optional field is supported on the following requests

- EPA - (3.2) Application of aggregated level UIs on aggregated packaging
- EDP - (3.3) Dispatch of tobacco products from a facility
- ERP - (3.4) Arrival of tobacco products at a facility
- ETL - (3.5) Trans-loading
- EVR - (3.7) Report the delivery carried out with a vending van to retail outlet