



Trader Systems Functional Specifications

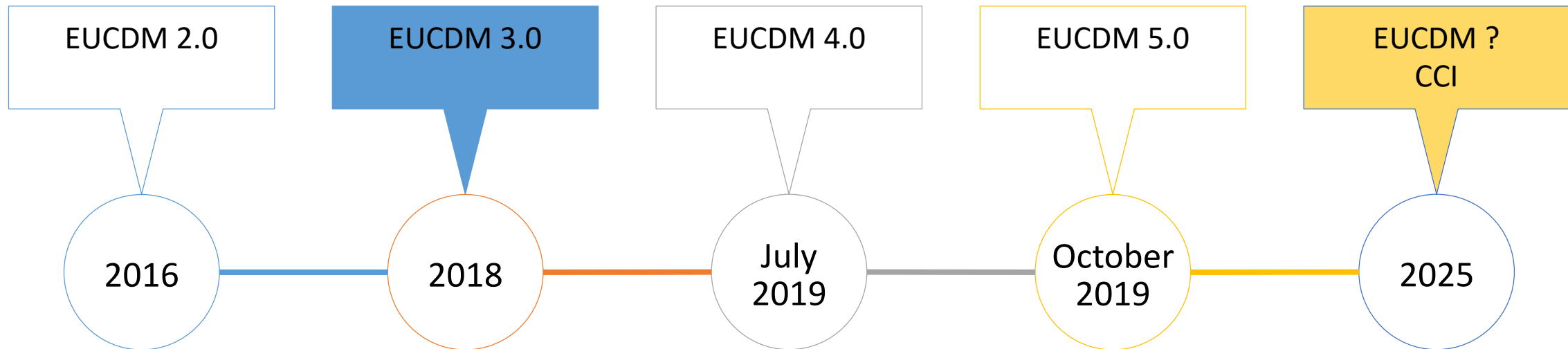
ECDP-AIS

Trader Systems Specification

Dublin October 2019

Revenue Commissioners - European Dynamics

EUCDM Evolution timeline



The functional specification is divided into the following functional areas:

- Entry of Goods
- Temporary Storage
- Import – Release for free circulation
- Import – Special Procedures
- Import – Controls
- Import – Refunds

For each functional area, the document contains:

- A Sequence Diagram listing the messages exchanged between Traders and Revenue Commissioners excluding technical details and processing logic.
- Summary Use Cases that describe the possible flows.

Intended audience

- Economic operators that conduct international movement of goods and intend to interact with the Republic of Ireland customs authorities. Working knowledge of customs procedures for import and the UCC (Union Customs Code) is essential to understand the terminology and concepts referenced in this document and its supplementing Annexes.

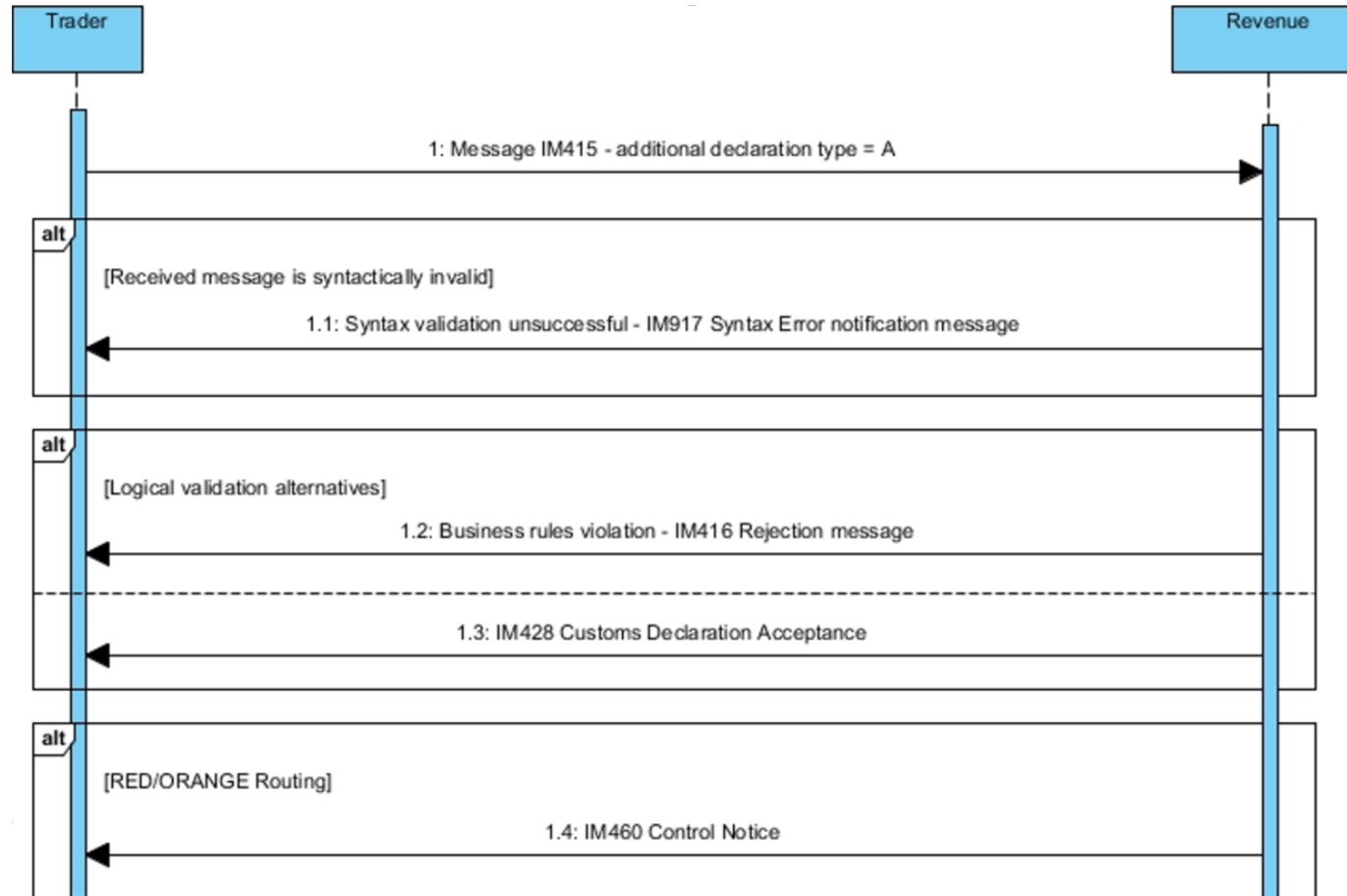
Documentation List

| Document name | Description |
|-----------------------------------|---|
| AIS-Message-Structures | This document describes the logical structure of the messages exchanged between traders and the Revenue Commissioners for AIS |
| AIS-Codelists | The codelists referred to within the message-structures document. |
| AIS-Business-Rules-and-Conditions | The business rules and conditions referred to within the message-structures document and applied during message validation |
| AIS XSDs | A set of XSDs describing the business message content in XML. |

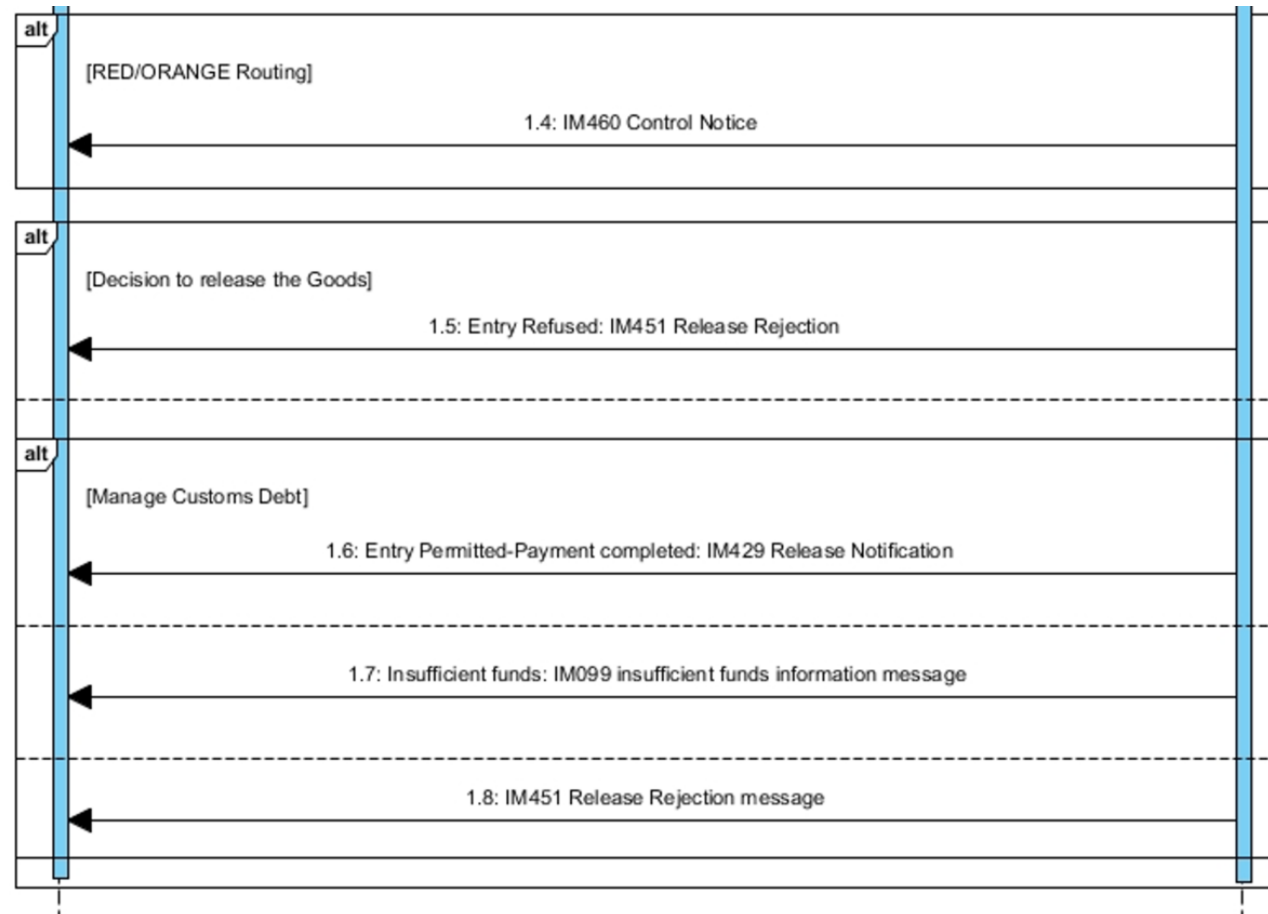


AIS Message Exchanges

Sample Message Flow (Sequence Diagram)



Sample Message Flow (Sequence Diagram)



Sample Message Flow (Use Case)

Core Flow - Standard Customs Declaration

- AIS receives an IM415 message (additional declaration type = A)
- The message is syntactically valid
- The message is logically valid (No business rules violation)
- The declaration is Green routed
- The declaration is accepted
- AIS sends an IM428 acceptance message to the Trader

Sample Message Flow (Use Case)

Alt 1 - The declaration is syntactically invalid

- The IM415 message is syntactically invalid
- AIS sends an IM917 Syntax Error message to the Trader

Alt 2 - The declaration is logically invalid

- The IM415 message is logically invalid (Business rules violation)
- AIS sends an IM416 rejection message to the Trader

Alt 3 – RED/ORANGE Routing

- The Declaration is Orange/Red routed
- AIS sends an IM460 Control Notice message to the Trader

Alt 4 - Decision to release the Goods - Entry Refused

- The Goods cannot be released
- AIS sends an IM451 release rejection message to the Trader

Alt 5 - Decision to release the Goods - Entry Permitted

- The payment process is completed successfully
- The Goods can be released
- AIS sends an IM429 release notification message to the Trader

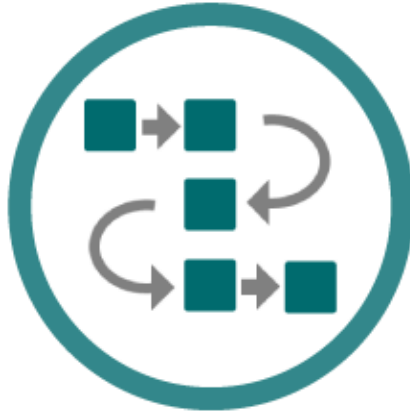
Sample Message Flow (Use Case)

Alt 6 - Insufficient funds

- Customs debt is due, Trader's Revenue account has insufficient funds
- AIS sends an IM099 "insufficient funds" information message to the Trader

Alt 7 - Timer for payment expired

- Trader has failed to fulfil their financial obligation to Revenue within a specified time-limit
- AIS sends an IM451 Release Rejection message to the Trader



AIS Message Structures

Messages Structure

Notations

- Each message has a unique identifier, such as IM099, TS304, etc., which denotes the category of the message and the numeric identifier of the message in the category.

The document uses two tables to describe each message:

- The summary table outlines the structure of the message. It lists only the high level elements of the message, up to level three (3).
- The detailed description table, which includes all the XML elements of the message.

Messages Structure

For each XML element the following information is included:

| Column name | Description |
|----------------|--|
| LEVEL (L) | The level of the given element in the hierarchy of all the XML elements of the message. One level one, there is only one, the so called “root” element of the XML document. Its name is the same as the identifier of the message (e.g. IM099, TS304). |
| MESSAGE ENTITY | The description of the message entity. The indentation visually represents the level of the entity in the hierarchy. Where applicable the entity is prefixed with the UCC identifier of the entity. |
| XML TAG | The actual XML tag (element) for this entity. |
| WCO CODE | Where applicable, this is the WCO code of the entity. |

Messages Structure

For each XML element the following information is included:

| Column name | Description | |
|-------------|--|--|
| REPETITIONS | The repetitions (cardinality) of the element. The notation is explained in the examples below. | |
| | REP | Description |
| | 0..1 | Zero or one repetitions. Therefore, this is an optional element that may exist up to one time. |
| | 1..1 | Exactly one repetition. This is a mandatory element that may exist up to one time. |
| | 0..99 | This is an optional element that may be repeated up to 99 times. |

Messages Structure

For each XML element the following information is included:

The type of the element. The notation is explained in the examples below. Note that the type defined in this document is abstract. There can be more restrictions to the acceptable syntax of each element. These are described in details in the respective XSD file.

| REP | Description |
|----------------|---|
| Complex | This is a complex XML element. It does not include any final information. It includes elements of lower order below it. |
| date | Date formatted element. |
| a | Alphabetic element. Only letters and no number are allowed. |
| n | Numeric element. Only numbers and no letters are allowed. |

Messages Structure

For each XML element the following information is included:

| | |
|---------|---|
| an | Alphanumeric element. Both letters and number are allowed. |
| an8 | Alphanumeric element with exact length of eight (8) characters. |
| an1..70 | Alphanumeric element with a length between 1 and 70 characters. |
| n..16,6 | Numeric, decimal element. The maximum permitted total digits are 16. Out of them, a max of six [6] can be decimal digits. |
| int | Integer number. |
| boolean | Boolean values (true, false). |

Messages Structure

For each XML element the following information is included:

| Column name | Description |
|----------------------|--|
| CODE LIST | Elements with a reference to a code list can take values only from the specified code list. Please refer to the “AIS- <u>Codelists</u> ” document, where the code lists are documented. |
| RULES AND CONDITIONS | The values of some elements are validated against rules and conditions. In that case, the codes of the rules and conditions are included in the last column. Please refer to the “AIS-Business-Rules-and-Conditions” document. |

3.19 MESSAGE IM429: RELEASE NOTIFICATION

Messages Structure

Summary

| L | MESSAGE ENTITY | XML TAG | REP | TYPE |
|---|----------------------------------|-------------------------------|------|---------|
| 1 | IM429: Release Notification | IM429 | 1..1 | Complex |
| 2 | Declaration | Declaration | 1..1 | Complex |
| 3 | 1/1: Declaration type | DeclarationType_1_1 | 1..1 | a2 |
| 3 | 1/2: Additional declaration type | AdditionalDeclarationType_1_2 | 1..1 | a1 |
| 3 | 2/5: LRN | LRN_2_5 | 1..1 | an1..22 |
| 3 | 2/6: Deferred payment | DeferredPayment_2_6 | 0..1 | an1..35 |
| 3 | MRN | MRN | 0..1 | an18 |
| 3 | Date Limit for Response | ResponseDateLimit | 0..1 | date |
| 3 | Valuation Information | ValuationInformation | 0..1 | Complex |
| 3 | Goods Information | GoodsInformation | 0..1 | Complex |
| 3 | Transport Information | TransportInformation | 0..1 | Complex |

Messages Structure

| L | MESSAGE ENTITY | XML TAG | WCO CODE | REP | TYPE | CODE LIST | RULES AND CONDITIONS |
|---|---|--------------------------------|------------|--------------|----------------|----------------------|----------------------|
| 5 | ----- 5/14: Country of dispatch/export code | CountryDispatch_5_14 | 062 | 0..1 | a2 | CountryCodesFullList | |
| 5 | ----- 5/15: Country of origin code | CountryOrigin_5_15 | 063 | 0..1 | a2 | CountryCodesFullList | |
| 5 | ----- 5/16: Country of preferential origin code | CountryPreferentialOrigin_5_16 | 501 | 0..1 | an1..4 | | |
| 5 | ----- 5/31: Date of acceptance | AcceptanceDate_5_31 | | 0..1 | date | | |
| 4 | ---- Goods Information | GoodsInformation | | 1..1 | Complex | | |
| 5 | ----- 6/1: Net mass (kg) | NetMass_6_1 | 128 | 0..1 | n..16,6 | | |
| 5 | ----- 6/2: Supplementary units | SupplementaryUnits_6_2 | 130 | 0..1 | n..16,6 | | |
| 5 | ----- 6/5: Gross mass (kg) | GrossMass_6_5 | 126 | 0..1 | n..16,6 | | BR6053, C0630, C0632 |
| 5 | ----- 6/8: Description of goods | GoodsDescription_6_8 | 137 | 1..1 | an1..512 | | CD6081 |
| 5 | ---- Packaging | Packaging | 93A | 0..99 | Complex | | |
| 6 | ----- 6/9: Type of packages | TypePackage_6_9 | 141 | 1..1 | an1..2 | KindOfPackages | |

Code Lists



AIS Codelists

Code Lists

2.6 Authorisation type code

| Code | Name / description |
|------|--|
| AEOC | Application or authorisation for the status of Authorised Economic Operator — Customs simplifications |
| AEOF | Application or authorisation for the status of Authorised Economic Operator — Customs simplifications/Security and safety |
| AEOS | Application or authorisation for the status of Authorised Economic Operator — Security and safety |
| CVA | Application or authorisation for the simplification of the determination of amounts being part of the customs value of goods |
| TST | Application or authorisation for the operation of storage facilities for the temporary storage of goods |
| BTI | Application or decision relating to Binding Tariff Information |
| BOI | Application or decision relating to Binding Origin Information |
| CGU | Application or authorisation for the provision of a comprehensive guarantee, including possible reduction or waiver |
| DPO | Application or authorisation for the deferment of payment |
| REM | Application or decision for the remission of the amounts of import or export duty |
| REP | Application or decision for the repayment of the amounts of import or export duty |

Rules and Conditions



AIS Business Rules and Conditions

Rules and Conditions

| Code | Description |
|----------------|--|
| BR8063 | IF IM413 received the following fields cannot be modified: 1. MRN 2. LRN (DE 2/5) 3. Declaration Type (DE 1/1) 4. Additional Declaration Type (DE 1/2) 5. Customs Office of Lodgement |
| BR8064 | IF IM413 received AND receive date is > 36 months from RELEASE date of MRN THEN REJECT with message IM405 |
| BR8065 | VIII/1 MRN (Title for Recovery) must exist in ECDP-AIS |
| BR8066 | IF VIII/1 MRN status is RELEASED THEN AT LEAST one IM404 must exist with this MRN ELSE IF VIII/1 MRN status is INCATIVE THEN there must exist message IM409 with POSITIVE result (invalidation request accepted) |
| BR8068 | DE 1/1 of application must be "REM" |
| BRA1061 | The decision reference number is structured as follows: 1) Identifier of the Member State where the decision is taken (a2) 2) Decision code type (an..4) 3) Unique identifier for the decision per country (an..29) |

Thank you!