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Test Design Specifications for Economic Operator Conformance Test Cases for Release 2

ICS2

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1.00	09/08/2021	Implementing review's cycle comment. Submitting for Acceptance (SfA) to DG TAXUD.	R, I	-
0.10	14/07/2021	First draft. Implementing the following RfCs: **RfC51195** – Set of sample data for R2; **RfC48085** – Set of sample data for R2; **RfC43080** – included in the R2 business scenarios; **RfC43102** - included in the R2 business scenarios; **RfC44205** - included in the R2 business scenarios; **RfC43096** – included in example messages; **RfC35584** - included in example messages. Submitted for Review (SfR) to DG TAXUD.	I	All

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1 INTRODUCTION

1.1 Purpose

This document describes the Test Cases and the Business Scenarios that will be followed by the Economic Operator in order to perform the Self Conformance Testing for the Release 2. The document will be used to guide the execution of all Test Cases defined as a means of validating the implementation. Information on detailing Test Cases with execution steps, the expected results as well as the test pass criteria are also included.

During Conformance Testing on the side of Economic Operators, it is verified that an EO System can connect to ICS2 without disturbing the correct functionality of the system. In particular, conformity against common functional system specifications is tested (Interface Control Document ICS2 Harmonised Trader Interface [R02] and ICS2 Common Functional System Specifications [R03]), as well as connectivity is verified in order to validate that there is no issue with communication between an EO System and ICS2.

1.2 Scope

According to ICS2 Master Test Plan [**R01**], during Economic Operator Conformance Testing, the implementation of S2S interfaces between ICS2 (in particular STI) and EO Systems is tested. This includes:

- Connectivity Testing;
    - Verification of connection which includes the following:
        - Compliance with AS4 interface profile, as defined in Interface Control Document ICS2 Harmonised Trader Interface [**R02**] and described in section 3.2 of ICS2 Conformance Test Organization Document for EO for R2 [**R08**];
        - Proper use of Digital Certificates (delivered by an agreed CA) registered in UUM&DS, and included encoded in messages and described in sections 3.1 and 3.3 of ICS2 Conformance Test Organization Document for EO for R2 [**R08**].
- Functional Testing;
    - Semantic validation of ICS2 messages delivered by Trader;
    - Testing of notifications dispatched towards Traders;
    - Trader Responses to ICS2 requests.

1.3 Target Audience

This document is addressed to parties who will participate in ICS2 Economic Operator Conformance Testing for Release 2:

- DG TAXUD Project team;
- DG TAXUD Development contractors;
- ITSM3 TES;
- ITSM3 OPS;
- QA4;
- Traders and Traders staff;
- Member States Helpdesk staff supporting EO conformance campaigns.

1.4 Structure of this document

The present document contains the following chapters:

- **Chapter 1 - Introduction:** describes the scope and the objectives of the document;
- **Chapter 2 - Approach Refinements:** describes the approach to use during the testing execution;
- **Chapter 3 - Environments Description:** lists the requirements of the testing environment and provides details on the execution of UI Test Cases/Suites;
- **Chapter 4 - Connectivity Test Cases:** describes the actual connectivity Tests cases;
- **Chapter 5 -Business Scenarios:** provides information on the business scenarios;
- **Chapter 6 - Functional Test Cases:** describes the actual Functional Test Cases;
- **Chapter 7 - Traceability to Test Scenarios:** presents the traceability from the Test Scenarios to the Test Cases;
- **Annexes:** describes the automated test scripts execution;
- **APPENDIX:** describes the integration with dependent systems and the prerequisites of the environmental needs.

1.5 Reference Documents

Ref.	Title	Reference	Version	Date
R01	ICS2 Master Test Plan	ICS2-MTP	3.40	08/04/2022
R02	Interface Control Document ICS2 Harmonised Trader Interface	SD-ICS2-HTI-ICD	3.30	31/03/2022
R03	ICS2 Harmonized Trader Interface Specifications	ICS2-HTI	2.00	30/07/2021
R04	ICS2 HTI BPM L4 Business Process Description	ICS2-HTI-BPML4	2.00	30/07/2021
R05	ICS2 HTI Definitions	ICS2-HTI-Definitions	1.11	16/03/2020
R06	eDelivery AS4 conformant solutions	eDelivery AS4 conformant solutions[2]	N/A	N/A
R07	Economic Operator Conformance Test Scenarios for Release 2	SD-ICS2-TDS-CTS-EO-R2	2.20	25/05/2022
R08	ICS2 Conformance Test Organization Document for EO for Release 2	TES-OTH-CTOD-ICS2-EO-R2	1.20	10/02/2022
R09	ICS2 Operational Model	CD3-ICS2-OM	3.50[3]	16/06/2021
R10	STI Installation Procedure Manual	CD3-STI-IPM	1.60	13/10/2021
R11	CR Installation Procedure Manual	CD3-CR-IPM	2.10	22/04/2022
R12	MON Installation Procedure Manual	CD3-MON-IPM	2.30	11/11/2021

[2] https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+AS4+conformant+solutions

[3] Document currently under review.

Ref.	Title	Reference	Version	Date
R13	ICS2 RNO System Process Test Tool	SD-ICS2-RNO-System Process Test Tool-1.8.0.0	1.00	24/05/2022
R14	STI-STP Use Cases	SD-ICS2-STI-STP-UCS	1.90	21/03/2022
R15	ICS2 IE Messages	ICS2-IE	2.01	22/12/2021

Table 1: Reference Documents

1.6 Applicable Documents

Ref.	Title	Reference	Version	Date
A01	Framework Contract	TAXUD/2021/CC/162	N/A	24/06/2021
A02	Specific Contract n° 03	TAXUD/2021/DE/1012	N/A	20/12/2021
A03	Framework Quality Plan	CD3-FQP	1.30	14/05/2020

Table 2: Applicable Documents

1.7 Abbreviations and Acronyms

For a better understanding of the present document, the following table provides a list of the principal abbreviations and acronyms used.

Abbreviation/Acronym	Definition
AEO	Authorised Economic Operator
AEOS	Authorised Economic Operator authorised for security and safety.
AirPLA	Air pre-loading risk analysis
CA	Certificate Authority
CCN	Common Communication Network
COFE	Customs Office of First Entry
CR	Common Repository
CRS	Computerised Reservation Systems
CS/RD2	Common Services / Reference Data 2
CTC	Conformance Test Case
DG TAXUD	Taxation and Customs Union DG
EC	European Commission
ECICS2	European Customs Inventory of Chemical Substances 2
ENS	Entry Summary Declaration
EO	Economic Operator
EORI	Economic Operator Registration and Identification
FQP	Framework Quality Plan
HC	House Consignment
HRCM	High Risk Cargo and Mail
ICD	Interface Control Document
ICS2	Import Control System 2
ID	Identification number
IMS	Involved Member State

Abbreviation/Acronym	Definition
IT	Information Technology
ITSM	IT Services Management
LRN	Local Reference Number
MRN	Master Reference Number
MS Excel	Microsoft Excel file
MTP	Master Test Plan
NES	National Entry System
PLACI	Pre-Loading Advance Cargo Information
QA	Quality Assurance
RMS	Responsible Member State
SOFT-DEV	Contractor for Software Development
STI	Shared Trader Interface
TAPAS	DG TAXUD AS4 Access Point
TARIC3	Tarif Intégré des Communautés européennes (version 3)
TDS	Test Design Specification
TES	Trans-European System
UI	User Interface
UUM&DS	Uniform User Management & Digital Signature
XML	Extensible Markup Language

Table 3: Abbreviations and Acronyms

1.8 Definitions

Name	Description
Access right of Permission	An operation or action allowed to an actor.
Person Filing	Person filing means any person that submits to the customs authority ENS filing in its complete or partial content and other notifications in the prescribed form and manner. This person can be any person that issues bill of lading or air waybill in any form and can be either carrier, NVOCC, freight forwarder, or any person identified by the legal provisions obliged to submit required particulars of ENS to the customs and can include postal operator, consignee stipulated in the lowest bill of lading. Person filing also includes representative of any of the persons mentioned above that submits the ENS Filing in its complete or partial content to the customs authority on behalf of the person that it is representing. *Source: ICS2-HTI-Definitions [R05].*

Name	Description
Carrier	Carrier means in the context of entry, the person who brings the goods, or who assumes responsibility for the carriage of the goods, into the customs territory of the Union. However, (i) in the case of combined transportation, "carrier" means the person who operates the means of transport which, once brought into the customs territory of the Union, moves by itself as an active means of transport; (ii) in the case of maritime or air traffic under a vessel- sharing or contracting arrangement, "carrier" means the person who concludes a contract and issues a bill of lading or air waybill for the actual carriage of the goods into the customs territory of the Union. *Source: ICS2-HTI-Definitions [R05].*
Mouse over	A mouse over is a graphical control element that is activated when the user moves or "hovers" the pointer over its trigger area, usually with a mouse, but also possible using a digital pen.
MS Excel	The application, Microsoft Excel, which the user will use to populate the metadata file and export it in a compatible format.
Navigation Map	An overview of the pages included in a webpage package, the relationship of the pages and the actions that result in the loading of the pages.
Role	A role is defined as the responsibility for performing specific behaviour, to which an actor can be assigned.
Test Case	A test case is a set of steps applied to transit the system from a known initial state to an expected final state. It is characterised by: • An identifier that uniquely identifies the test case; • A short description of its purpose; • One or several actors performing the actions on the system; • A set of prerequisites describing the initial state of the system; • A set of steps defining the actions performed by the actors and their expected results. Steps may describe input values and expected output values if applicable for the tested feature; • A set of post-conditions describing the state in which the system is expected to be after the execution of the steps; • A set of pass criteria defining the conditions under which the test can be considered as passed. A test scenario is realised by one or several test cases without an explicit mapping between the test cases and the test scenario guidelines.

Name	Description
Test Scenario	A test scenario is a set of guidelines enabling to assess the testing coverage of a feature against its specifications. It is characterised by: • An identifier that uniquely identifies the test scenario; • A description of the covered feature. A set of guidelines (e.g. a high-level action performed on an abstract set of data) that can be ordered if the tested feature requires it.
Test Suite	A Test Suite is a set of Test Cases for a component/service or system under test. It is usually used to group and/or facilitate the execution a number of similar Test Cases.

Table 4: Definitions

2 APPROACH REFINEMENTS

The approach to verify the conformance of the EO systems will be based on business scenarios and test cases. Those will be triggered from the ICS2 STI STP conformance campaign screen(s), dedicated solely for the purpose of an EO user to configure and execute the conformance test campaigns.

Each *Test Case* (section 5.6) defined in this document aims at covering a simple two-way message exchange between the EO systems and ICS2. A pre-defined *Business Scenario* (section 5) combines a number of steps to cover a specific functionality of the system.

The role that the trader system plays in the interaction with ICS2 will define which business scenarios must be executed to pass conformance. The different roles are:

1) Postal Operators;
2) Express Operators;
3) Notify Party;
4) Person Notifying the arrival;
5) Carriers;
6) House Filers.

2.1 Test Techniques

The first step in the ICS2 STI STP self-conformance test configuration screen is for an EO user to provide the configuration field Sender Party ID. The second step is to register a new Test Campaign.

When registering a new Test Campaign, the EO must select its role. Depending on this selection, a pre-defined set of business scenarios will be proposed to be executed.

Alternatively, for Carriers and House Filers, a list with the ENS Filings available for conformance will be displayed. The next step for them will be to select which types of filings are applicable to them and a set of business scenarios corresponding to those ENS Filings will be proposed to be executed.

To finish the configuration, the EO must provide an identification number for the list of messages requiring filling an identifier for the selected Business role and scenario.

Most of the tests of the EO Business Scenarios are triggered by the EO with a successful Registration of an ENS Filing and reception of the MRN, via the IE3R01 message. However, there are some exceptions for which the initial ENS Registration to start the flow must be mocked. For these scenarios, *launch test* action will be available in the Test Campaign Business Scenario screen.

The scenarios where the EO has a passive role and will only receive messages are the following ones:

- "Notify party" Business Scenario;
- "House Filer" F22 ENS Pending notification Business Scenario;
- "House Filer" F26 ENS Pending notification Business Scenario.

For the "Person notifying the Arrival" Business Scenario, the initial ENS Registration must be mocked as well and, additionally, the MRN generated by this registration will be communicated to EO, displayed as identifier of the message in the Message Flow screen, so it can be used by the EO to submit the Arrival Notification.

2.2 Business Scenarios

The business scenarios (a pre-defined sequence of test cases) will be used for the validation of the system. Each of these business scenarios, documented in Section 5, covers a specific functionality of the system.

For Postal Operators, Express Operators, Notify parties and Person Notifying the arrival, the following information is provided for each business scenario:

1. **Business scenario title**: The title of the business scenario that includes the business case, the combination of filing types used and any characteristics of the scenario that it covers;
2. **Summary**: A summary of the business scenario with the roles, messages and the main business logic that each business scenario covers;
3. **Attachment**: The flow of messages exchanged between the different systems, the business logic and rules that they cover;
4. **Flows – EO-CTC mapping**: The flow of messages between ICS2 and the trader systems and the mapping with the corresponding EO-CTC.

For Carriers and House filers, as not all types of filings are applicable for each, a list of business cases applicable per ENS filing to test the complete functionality is described; and for each ENS filing, there is an attachment with all the pertinent business scenarios, describing the flow of messages exchanged between the different systems. An example business scenario is described for each business case.

2.3 Test Cases Definition

The Conformance Test Cases included in this document were identified from the Economic Operator Conformance Test Scenarios for Release 2 [**R07**]. They include detailed steps to be used by the Economic Operators (Traders) for performing connectivity and functional testing as described in Section 1.2.

Each Test Case is identified by a unique identifier following a predefined structure providing information of the covered feature:

- **ICS2**: defines the covered IT application;
- **CTC-EO**: defines the type of testing, Conformance Test Cases for Economic Operator;
- **TS**: Test Scenario where test case is derived from;
- **Numbers**: Incremental value defined by test cases per scenario.

Example: ICS2-CTC-EO-TS2-010.

The traceability matrix between the EO Conformance Test Cases and the EO Conformance Test Scenarios is provided in Section 6.7.

3 ENVIRONMENTS DESCRIPTION

As mentioned above, Traders will use their actual systems during EO conformance testing. All interconnections with ICS2 will function according to specifications.

4 CONNECTIVITY TEST CASES

4.1 Prerequisites

The Traders access system is working as expected and a valid user is properly configured.
The integration with all systems will be realised by communicating with the actual systems.
The necessary requirements that the trader needs to fulfil, in order for his system to be able to send and receive ICS2 messages are described in chapter 3 of ICS2 Conformance Test Organization Document for EO for R2 [**R08**].

4.2 AS4 Message Connectivity

4.2.1 Successful Connectivity between TAPAS and EO System AS4 Access Points

<table>
<tr><th colspan="5">Successful Connectivity between TAPAS and EO System AS4 Access Points</th></tr>
<tr><td colspan="2">ID</td><td colspan="3">ICS2-CTC-EO-TS1-010</td></tr>
<tr><td colspan="2">Purpose</td><td colspan="3">Verify successful connectivity between TAPAS and EO System AS4 Access Points in both directions.</td></tr>
<tr><td colspan="2">Trader Role</td><td colspan="3">Postal Operator, Express Operator, Carrier, House filer, Notify Party, Person notifying the arrival.</td></tr>
<tr><td colspan="2">Pre-Conditions</td><td colspan="3">• EO System is an ICD conformant access point;
• EO should operate in push mode, otherwise test should be skipped;
• EO System certificate is properly registered in UUM&DS;
• EO System is properly configured according to ICS2 Interface Control Document [R02].</td></tr>
<tr><td colspan="5">Basic Flow of Events</td></tr>
<tr><td colspan="2">Trader Role Actions</td><td>Data</td><td colspan="2">Expected Result</td></tr>
<tr><td>1</td><td>EO System sends a test message to TAPAS.</td><td>AS4 message with the following test values:

eb:Action: http://docs.oasis-open.org /ebxml-msg/ebms/ v3.0/ns/core/200704/test

eb:Service: http://docs.oasis-open.org /ebxml-msg/ebms/ v3.0/ns/core/200704/servi ce</td><td>1</td><td>TAPAS verifies that the proper AS4 message connectivity is established including the validity of the message embedded certificate. Additionally it will validate that the EORI number embedded in the eb:From/PartyId is associated with the message in the embedded certificate using the information registered in UUM&DS.</td></tr>
<tr><td>2</td><td>Conformance test operator sends a test message from TAPAS to EO system.</td><td>AS4 message with the following test values:

eb:Action: http://docs.oasis-open.org /ebxml-msg/ebms/ v3.0/ns/core/200704/test

eb:Service: http://docs.oasis-open.org /ebxml-msg/ebms/ v3.0/ns/core/200704/servi ce</td><td>2</td><td>TAPAS will reply with a receipt AS4 signal message upon success allowing the EO system to observe the correct connectivity.</td></tr>
<tr><td colspan="2">Post-Conditions</td><td colspan="3">-</td></tr>
</table>

Pass Criteria	Expected Results are confirmed.

Table 5 ICS2-CTC-EO-TS1-010

5 BUSINESS SCENARIOS

The provided Business Scenarios are aimed to facilitate the preparation of the sample data to be used during the EO Conformance Testing and to illustrate how the responses generated by the STI are matched to the initially lodged ENS data. Each business scenario, attached as a Microsoft Excel file, concerns a particular business role (Postal operator, Express operator, Carrier, House filer or Notify party) and, where applicable (for Carrier and House filer business roles), for a particular business case (mandatory basis, referrals, amendment, etc.).

Prior to the execution of the Business Scenarios, the Economic Operator must configure their conformance campaign themselves using STI-STP portal, following the use case UC-STI-STP-15 [**R14Error! Reference source not found.**].

The steps from the end-to-end business scenarios are depicted in the sections below and are linked to the relevant test cases listed in Section 6 Business Scenario for Person Notifying the Arrival

This section depicts the End-to-end business scenario in which the Person filing lodges a F20.

The Person notifying the arrival sends an Arrival Notification for the means of transport. The decision to Control the HC is communicated to the Person notifying the arrival.

A second Arrival notification is sent, with the same identifier previously used, and Incorrect State Notification is triggered and sent to the Person Notifying the arrival.

The *Person filing* messages, marked in grey italics in the flow, will be simulated in order to generate the MRN required for the EO messages sent during the campaign. The generated MRN is a pre-condition to fill the Related MRN in IE3N06 messages to be sent by the Person Notifying the Arrival.

ICS2 R2 EO Self conformance Arrival r

	Person notifying the arrival		**Person filing**		**STI**	
1			*IE3F20*	→		*Successful Registration of ENS Filling and Receipt of an MRN*
2				←	*IE3R01*	
3				←	*IE3N03*	*Successful Reception of Assessment Complete notification*
4				←	*IE3N03*	
5				←	*IE3N03*	
6	IE3N06	→	→	→		Successful Registration of Arrival Notification
7		←	←	←	IE3R04	
8		←	←	←	IE3N08	Successful Reception of Control Notification
9	IE3N06	→	→	→		Successful Registration of Arrival Notification
10		←	←	←	IE3R04	
11		←	←	←	IE3N07	Successful Reception of ENS in Incorrect State Notification

Functional Test Cases. The steps must be executed in the exact sequence as depicted in each business scenario relevant table. One test case can be executed more than once in the context of different business scenarios. During the execution of a test case if there is a failure of the test case, then the test

case needs to be re-triggered. If the preceding test cases have already been successfully executed, there is no need for them to be re-executed.

The data to be prepared and used for the EO Conformance Testing must be customized by each Economic Operator to include their production similar data such as “Declarant”, “Addressed Member State”, "LRN", etc. For the data dependencies per business scenario there will be specific instructions included in the STP self-conformance user interface.

5.1 Business scenarios for Postal Operators

5.1.1 Postal Business Scenario 1 – Postal most common (F43 and F44)

The current section depicts the most common business scenario for the Postal mode of transport for ICS2 Release 2.

F43 is lodged and assessment complete message is generated for each house consignment[4], F44 is lodged.

Postal Data flow 1_Most common _202

	Postal EO		STI	
1	IE3F43	→		Successful Registration of ENS Filling and Receipt of an MRN**Error! Reference source not found.**
2		←	IE3R01	
3		←	IE3N03[4]	Successful Reception of Assessment Complete notification
4		←	IE3N03	
5	IE3F44	→		Successful Registration of ENS Filling and Receipt of an MRN
6		←	IE3R01	

Table 6 Postal Business Scenario 1

5.1.2 Postal Business Scenario 3 – Postal, Referrals and ENS consultation (F43 and F44)

This section depicts the End-to-end business scenario for the Postal mode of transport.

F44 and F43 are lodged. An assessment complete is generated for all the house consignments for which no RfS/RfI are requested. For one of the house consignments an RfI and an RfS are received and responded. Then an assessment complete is generated.

Postal Data flow 3_Postal with IMS invo

[4] The number of the included house consignments in the ENS filings is not pre-defined and the EO can submit ENS filings with different number of house consignments (as per the ICS2 HTI Specifications). The respective number of Assessment complete messages will be generated. The dependencies concerning the house consignments between the combinations of ENS filings, for example, F43 and F44, should be respected.

	Postal EO		STI	
1	IE3F44	→		Successful Registration of ENS Filling and Receipt of an MRN**Error! Reference source not found.**
2		←	IE3R01	
3	IE3F43	→		Successful Registration of ENS Filling and Receipt of an MRN
4		←	IE3R01	
5		←	IE3N03[5]	Successful Reception of Assessment Complete notification
6		←	IE3Q02	Provide Additional Information Response
7	IE3R02	→		
8		←	IE3Q03	Provide HRCM screening response
9	IE3R03	→		
10		←	IE3N03	Successful Reception of Assessment Complete notification
11	IE3Q05	→		Successful Consultation of ENS Filing
12		←	IE3R08	

Table 7 Postal Business Scenario 3

5.2 Business scenarios for Express Operators

5.2.1 Express Business Scenario 1 – Express (F30 + F32) and Split consignment

This section depicts the End-to-end business scenario for the Express mode of transport for ICS2 Release 2 where there is a Split consignment.

F32 is lodged and assessment complete message is generated for each house consignment[4]. F30 is lodged by the Express operator containing the HCs from the F32. An assessment complete is generated. Arrival notification is sent by the Express operator through the STI.
An additional F30 with the same content with the first F30 with the Split consignment indicator is filed. An assessment complete is sent. Arrival notification is sent by the Express operator through STI.

Express Data flow 1_Express (F30 + F32)

	Express Operator		STI	
1	IE3F32	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	

[5] The number of the included house consignments in the ENS filings is not pre-defined and the EO can submit ENS filings with different number of house consignments (as per the ICS2 HTI Specifications). The respective number of Assessment complete messages will be generated. The dependencies concerning the house consignments between the combinations of ENS filings, for example, F43 and F44, should be respected.

	Express Operator		STI	
3		←	IE3N03[6]	Successful Reception of Assessment Complete notification
4		←	IE3N03	
5	IE3F30	→		Successful Registration of ENS Filling and Receipt of an MRN
6		←	IE3R01	
7		←	IE3N03	Successful Reception of Assessment Complete notification
8	IE3N06	→		Successful Registration of Arrival Notification
9		←	IE3R04	
10	IE3F30	→		Successful Registration of ENS Filling and Receipt of an MRNSuccessful Registration of ENS Filling and Receipt of an MRN
11		←	IE3R01	
12		←	IE3N03	Successful Reception of Assessment Complete notification
13	IE3N06	→		Successful Registration of Arrival Notification
14		←	IE3R04	

Table 8 Express Business Scenario 1

5.2.2 Express Business Scenario 2 – Express (F31 + F32) and Re-entry

This section depicts the End-to-end business scenario for the Express mode of transport for F31 and F32 combination when there is re-entry.

F32 is lodged and assessment complete message is generated for each house consignment[5], assessment complete is sent. F31 containing the master level contract details is received. The means of transport is diverted, and an arrival notification is sent for the second MS.

A new F31 is lodged with a re-entry indicator. The person filing, which hold an AEOS, receives an AEO control notification. The means of transport re-enters the Customs union, the arrival notification is sent and a Control notification is received by the EO.

Express Data flow 2_Express (F31 + F32)

	Express Operator		STI	
1	IE3F32	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	

[6] The number of the included house consignments in the ENS filings is not pre-defined and the EO can submit ENS filings with different number of house consignments (as per the ICS2 HTI Specifications). The respective number of Assessment complete messages will be generated. The dependencies concerning the house consignments between the combinations of ENS filings, for example, F32 and F30, should be respected.

3		←	IE3N03[7]	Successful Reception of Assessment Complete notification
4		←	IE3N03	
5	IE3F31	→		Successful Registration of ENS Filling and Receipt of an MRN
6		←	IE3R01	
7		←	IE3N03	Successful Reception of Assessment Complete notification
8	IE3N06	→		Successful Registration of Arrival Notification
9		←	IE3R04	
10	IE3F31	→		Successful Registration of ENS Filling and Receipt of an MRN
11		←	IE3R01	
12		←	IE3N03	Successful Reception of Assessment Complete notification
13		←	IE3N09	Successful Reception of AEO control notification
14	IE3N06	→		Successful Registration of Arrival Notification
15		←	IE3R04	
16		←	IE3N08	Successful Reception of Control Notification

Table 9 Express Business Scenario 2

5.2.3 Express Business Scenario 3 –Express (F21 + F32 + F33)

This section depicts the End-to-end business scenario for the Express business case where a Carrier submits the master level contract details.

The Express operator files an F32 and assessment complete message is generated for each house consignment[8], assessment complete is sent. The Express operator lodges a F33 with additional House air waybill information. An assessment complete for the ENS is generated after the master level filing is lodged.

The *Carrier* messages, marked in light grey italics in the flow, will be simulated in order to send the IE3N03 required messages to the EO during the campaign.

Express Data flow 3_Express (F21 + F32

	Carrier	Express Operator		STI	
1		IE3F32	→		Successful Registration of ENS Filling and Receipt of an MRN**Error! Reference source not found.**
2			←	IE3R01	
3			←	IE3N03[8]	

[7] The number of the included house consignments in the ENS filings is not pre-defined and the EO can submit ENS filings with different number of house consignments (as per the ICS2 HTI Specifications). The respective number of Assessment complete messages will be generated. The dependencies concerning the house consignments between the combinations of ENS filings, for example, F32 and F30, should be respected.

[8] The number of the included house consignments in the ENS filings is not pre-defined and the EO can submit ENS filings with different number of house consignments (as per the ICS2 HTI Specifications). The respective number of

	Carrier		Express Operator		STI	
4				←	IE3N03	Successful Reception of Assessment Complete notification
5			IE3F33	→		Successful Registration of ENS Filling and Receipt of an MRN
6				←	IE3R01	
7	IE3F21	→	→	→		Successful Registration of ENS Filling and Receipt of an MRN
8		←	←	←	IE3R01	
9				←	IE3N03	Successful Reception of Assessment Complete notification

Table 10 Express Business Scenario 3

5.3 Business scenarios for Notify Parties

This section depicts the End-to-end business scenario for a scenario in which the Person filing lodges an F20. Assessment complete is sent.

In a simulated flow, the Person notifying the arrival issues an Arrival Notification, which will include the details of the EO performing the tests as Notify party. The EO performing the self-conformance test verifies that for the Notify Party actor receives the notification. The decision to Control the HC is communicated to the Notify Party.

The *Person filing* and the *Person notifying the arrival* messages, marked in light grey italics in the flow, will be simulated in order to send the IE3R04 and IE3N08 required messages to the EO during the campaign. The start of the scenario with these messages will be triggered by the EO during the registration of the campaign.

ICS2 R2 EO Self conformance Notify p

	Notify Party		Person notifying the arrival		Person filing		STI	
1					*IE3F20*	→		*Successful Registration of ENS Filling and Receipt of an MRN*
2						←	*IE3R01*	
3						←	*IE3N03*	*Successful Reception of Assessment Complete notification*
4						←	*IE3N03*	
5						←	*IE3N03*	
6			*IE3N06*	→	→	→		Successful Registration of Arrival Notification
7				←	←	←	*IE3R04*	
8	←		←	←	←	←	IE3R04	Successful Reception of Arrival Registration Response
9				←	←	←	*IE3N08*	*Successful Reception of Control Notification*

Assessment complete messages will be generated. The dependencies concerning the house consignments between the combinations of ENS filings, for example, F32 and F30, should be respected.

	Notify Party	Person notifying the arrival		Person filing		STI	
10	←	←	←	←	←	IE3N08	**Error! Reference source not found.**

Table 11 Business Scenario for Notify Parties

5.4 Business scenarios for Carriers

As not all types of filings are applicable for each (air cargo) Carrier, a carrier must select which types of ENS filing they intend to send: F20, F21, F27, F28, F29, F42.

For each ENS filing selected, the table below defines the business cases that must be covered to test the complete functionality.

Business case / ENS Filing	F20	F21	F27	F28	F29	F42
Most Common flow (Mandatory basis)	X	X	X	X	X	X
Do Not Load	X			X		
Referrals	X	X	X	X	X	
Amendment and Invalidation	X	X	X	X	X	X
Controls and Arrival Notification	X	X	X	X	X	X
ENS Not Complete Notification		X				

Table 12 Carrier functionality

The functionality will be considered covered once all the business cases applicable per ENS Filing are performed. If more than one ENS filing is selected, all the applicable business cases must be performed for each of them.

As an example, if a carrier selects to support F21 and F42, s/he should perform the following business cases to cover the complete functionality:

- F21 – Most Common flow, Referrals, Amendment and Invalidation, Controls and Arrival Notification and ENS Not Complete Notification;
- F42 - Most Common flow, Amendment and Invalidation and Controls and Arrival Notification.

The *House filer* messages, present in some of the scenarios, will be simulated in order to send the required messages to the EO during the campaign.

The embedded Excel files below describe the End-to-end business scenarios for a Carrier for ICS2 Release 2 when sending the ENS filings.

F20 **F21** **F27** **F28** **F29** **F42**

ICS2 R2 EO Self conformance F20_202

ICS2 R2 EO Self conformance F21_202

ICS2 R2 EO Self conformance F27_202

ICS2 R2 EO Self conformance F28_202

ICS2 R2 EO Self conformance F29_202

ICS2 R2 EO Self conformance F42_202

An example business scenario of each business case is defined below.

5.4.1 Carrier Business Scenario - Mandatory basis for F20

This section depicts the mandatory basis business scenario for a Carrier for ICS2 Release 2 when sending an F20.

	Person filing		STI	
1	IE3F20	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3N03	Successful Reception of Assessment Complete notification
4		←	IE3N03	
5		←	IE3N03	

Table 13 Carrier Business Scenario F20 – Mandatory basis

5.4.2 Carrier Business Scenario - Do Not Load for F20

This section depicts the End-to-end business scenario of Do Not Load for a Carrier for ICS2 Release 2 when sending an F20.

	Person filing		STI	
1	IE3F20	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3Q01	Successful Reception of Do not Load request
4		←	IE3N03	Successful Reception of Assessment Complete notification
5		←	IE3N03	

Table 14 Carrier Business Scenario F20 – Do not Load

5.4.3 Carrier Business Scenario – Referrals for F21

This section depicts the End-to-end business scenario of Referrals for a Carrier for ICS2 Release 2 when sending an F21.

	Person filing		House filer		STI	
1	IE3F21	→	→	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	←	←	IE3R01	
3			IE3F26	→		Successful Registration of ENS Filling and Receipt of an MRN
4				←	IE3R01	
5		←	←	←	IE3R01	
6				←	IE3Q02	Provide Additional Information Response & Successful Reception of Additional Information Request notification.
7		←	←	←	IE3N04	
8			IE3R02	→		
9				←	IE3Q03	Provide HRCM screening response & Successful Reception of High Risk Cargo & Mail screening Request notification
10		←	←	←	IE3N05	
11			IE3R03	→		

	Person filing		House filer		STI	
12				←	IE3N03	Successful Reception of Assessment Complete notification
13		←	←	←	IE3Q02	Provide Additional Information Response
14	IE3R02	→	→	→		
15		←	←	←	IE3Q02	Acceptance of ENS Filing Amendment after Additional Information Request
16	IE3A21	→	→	→		
17		←	←	←	IE3N10	
18		←	←	←	IE3N03	Successful Reception of Assessment Complete notification

Table 15 Carrier Business Scenario F21 - Referrals

5.4.4 Carrier Business Scenario – Referrals for F28

This section depicts the End-to-end business scenario of Referrals for a Carrier for ICS2 Release 2 when sending an F28.

	Person filing		STI	
1	IE3F28	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3Q02	Provide Additional Information Response
4	IE3R02	→		
5		←	IE3Q02	Acceptance of ENS Filing Amendment after Additional Information Request
6	IE3A28	→		
7		←	IE3N10	
8		←	IE3Q03	Provide HRCM screening response
9	IE3R03	→		
10		←	IE3N03	Successful Reception of Assessment Complete notification
11		←	IE3N03	

Table 16 Carrier Business Scenario F28 - Referrals

5.4.5 Carrier Business Scenario – Amendment and Invalidation for F20

This section depicts the End-to-end business scenario of Amendment and invalidation for a Carrier for ICS2 Release 2 when sending an F20.

	Person filing		STI	
1	IE3F20	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3	IE3A20	→		Successful Amendment of ENS Filing
4		←	IE3N10	
5		←	IE3N03	
6		←	IE3N03	

	Person filing		STI	
7		←	IE3N03	Successful Reception of Assessment Complete notification
8	IE3Q04	→		Successful Invalidation of an ENS Filing
9		←	IE3R07	

Table 17 Carrier Business Scenario F20 – Amendment and invalidation

5.4.6 Carrier Business Scenario - Controls and Arrival Notification for F28

This section depicts the End-to-end business scenario of Controls and Arrival Notification for a Carrier for ICS2 Release 2 when sending an F28.

	Person filing		STI	
1	IE3F28	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3N03	Successful Reception of Assessment Complete notification
4		←	IE3N03	
5		←	IE3N09	Successful Reception of AEO control notification
6	IE3N06	→		Successful Registration of Arrival Notification
7		←	IE3R04	
8		←	IE3N08	Successful Reception of Control Notification
9	IE3N06	→		Successful Registration of Arrival Notification
10		←	IE3R04	
11		←	IE3N07	Successful Reception of ENS in Incorrect State Notification

Table 18 Carrier Business Scenario F28 – Controls and Arrival Notification

5.4.7 Carrier Business Scenario - ENS Not Complete Notification for F21

This section depicts the End-to-end business scenario of ENS Not Complete Notification for a Carrier for ICS2 Release 2 when sending an F21.

	Person filing		STI	
1	IE3F21	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3N02	Successful Reception of ENS Not Complete Notification
4		←	IE3N11	Successful Reception of ENS Pending Notification

Table 19 Carrier Business Scenario F21 – ENS Not complete Notification

5.5 Business scenarios for House filers

As not all types of filings are applicable for each (air cargo) House filer, a house filer must select which types of ENS filing they intend to send: F22, F23+F25, F24, F26.

For each ENS filing, the following table defines the business cases that must be covered to test the complete functionality.

Business case / ENS Filing	F22	F23 + F25	F24	F26
Most Common flow (Mandatory basis)	X	X	X	X
Do Not Load		X	X	X
Referrals	X	X	X	X
Amendment and Invalidation	X	X	X	X
AEO Control Notification	X			X
ENS Not Complete Notification	X			X
ENS Pending Notification	X			X

Table 20 House filers functionality

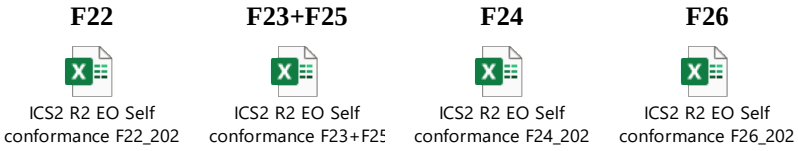
The functionality will be considered covered once all the business cases applicable per ENS Filing are performed. If more than one ENS filing is selected, all the applicable business cases must be performed for each of them.

As an example, if a house filer selects to support F22 and F24, s/he should perform the following business cases to cover the complete functionality:

- F22 – Most Common flow, Referrals, Amendment and Invalidation, AEO Control Notification, ENS Not Complete Notification and ENS Pending Notification;
- F24 - Most Common flow, Do Not Load, Referrals and Amendment and invalidation.

The *Carrier* messages, present in some of the flows, will be simulated in order to send the required messages to the EO during the campaign.

The embedded Excel files below describe the End-to-end business scenarios for a Carrier for ICS2 Release 2 when sending the ENS filings.



An example business scenario of each business case is defined below.

5.5.1 House filer Business Scenario - Mandatory basis for F24

This section depicts the mandatory basis business scenario for a House Filer for ICS2 Release 2 when sending an F24.

The *Carrier* messages, marked in light grey italics in the flow, are mocked by the ICS2 Carrier mock, which will send the required messages as response to the EO messages sent during the campaign.

	Person filing (House filer)		Carrier mock		STI	
1	IE3F24	→	→	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	←	←	IE3R01	
3				←	*IE3R01*	
4		←	←	←	IE3N03	Successful Reception of Assessment Complete notification
5			*IE3F27*	→		*Successful Registration of ENS Filling and Receipt of an MRN**Error! Reference source not found.***
6				←	*IE3R01*	
7				←	*IE3N03*	Successful Reception of Assessment Complete notification

Table 21 House filer Business Scenario F24 – Mandatory basis

5.5.2 House filer Business Scenario – Do not Load for F26

This section depicts the End-to-end business scenario of Do not Load for a House filer for ICS2 Release 2 when sending an F26.

	Person filing (House filer)		STI	
1	IE3F26	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	IE3R01	
3		←	IE3Q01	Successful Reception of Do not Load request

Table 22 House filer business Scenario F26 – Do not Load

5.5.3 House filer Business Scenario – Referrals for F24

This section depicts the End-to-end business scenario of Referrals for a House filer for ICS2 Release 2 when sending an F24.

The *Carrier* messages, marked in light grey italics in the flow, are mocked by the ICS2 Carrier mock, which will send the required messages as response to the EO messages sent during the campaign.

	Person filing (House filer)		Carrier mock		STI	
1	IE3F24	→	→	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	←	←	IE3R01	
3				←	*IE3R01*	
4		←	←	←	IE3Q02	
5	IE3A24	→	→	→		Successful Amendment of ENS Filing
6		←	←	←	IE3N10	
7		←	←	←	IE3Q02	Provide Additional Information Response
8	IE3R02	→	→	→		
9		←	←	←	IE3Q03	Provide HRCM screening response
10	IE3R03	→	→	→		

	Person filing (House filer)	Carrier mock	STI	
11	←	← ←	IE3N03	Successful Reception of Assessment Complete notification
12		*IE3F27* →		*Successful Registration of ENS Filling and Receipt of an MRN*
13		←	*IE3R01*	
14	←	← ←	IE3Q02	Provide Additional Information Response
15	IE3R02 →	→ →		
16	←	← ←	IE3N03	Successful Reception of Assessment Complete notification
17		←	*IE3N03*	

Table 23 House filer Business Scenario F24 – Referrals

5.5.4 House filer Business Scenario – Amendment and Invalidation for F22

This section depicts the End-to-end business scenario of Amendment and invalidation for a House filer for ICS2 Release 2 when sending an F22

	Person filing	STI	
1	IE3F22 →		Successful Registration of ENS Filling and Receipt of an MRN
2	←	IE3R01	
3	IE3A22 →		Successful Amendment of ENS Filing
4	←	IE3N10	
5	IE3Q04 →		Successful Invalidation of an ENS Filing
6	←	IE3R07	

Table 24 House filer Business Scenario F22 – Amendment and invalidation

5.5.5 House filer Business Scenario – AEO Control Notification for F26

This section depicts the End-to-end business scenario of AEO notification for a House filer for ICS2 Release 2 when sending an F26.

The *Carrier* messages, marked in light grey italics in the flow, are mocked by the ICS2 Carrier mock, which will send the required messages as response to the EO messages sent during the campaign.

	Person filing (House filer)	Carrier mock	STI	
1	IE3F26 →	→ →		Successful Registration of ENS Filling and Receipt of an MRN
2	←	← ←	IE3R01	
3		←	*IE3R01*	
4	←	← ←	IE3N03	Successful Reception of Assessment Complete notification
5		*IE3F21* →		*Successful Registration of ENS Filling and Receipt of an MRN*
6		←	*IE3R01*	
7		←	*IE3N03*	Successful Reception of Assessment Complete notification
8	←	← ←	IE3N03	

9		←	←	←	IE3N09	Successful Reception of AEO control notification

Table 25 House filer business Scenario F22 – AEO Notification

5.5.6 House filer Business Scenario - ENS Not Complete Notification for F26

This section depicts the End-to-end business scenario of ENS Not Complete Notification for a House filer for ICS2 Release 2 when sending an F26.

	Person filing (House filer)		Person not yet filed		STI	
1	IE3F26	→	→	→		Successful Registration of ENS Filling and Receipt of an MRN
2		←	←	←	IE3R01	
3		←	←	←	IE3N02	Successful Reception of ENS Not Complete Notification

Table 26 House filer business Scenario F26 – ENS Not Complete Notification

5.5.7 House filer Business Scenario – ENS Pending Notification for F22

This section depicts the End-to-end business scenario of ENS Pending notification for a House filer for ICS2 Release 2 when sending an F22.

The *Carrier* messages, marked in light grey italics in the flow, are mocked by the ICS2 Carrier mock, which will send the required messages as response to the EO messages sent during the campaign.

	Person not yet filed		Carrier mock		STI	
1			*IE3F21*	→		*Successful Registration of ENS Filling and Receipt of an MRN*
2				←	*IE3R01*	
3				←	IE3N02	Successful Reception of ENS Not Complete Notification
4		←	←	←	IE3N11	Successful Reception of ENS Pending Notification

Table 27 House filer business Scenario F22 – ENS Pending Notification

5.6 Business Scenario for Person Notifying the Arrival

This section depicts the End-to-end business scenario in which the Person filing lodges a F20.

The Person notifying the arrival sends an Arrival Notification for the means of transport. The decision to Control the HC is communicated to the Person notifying the arrival.

A second Arrival notification is sent, with the same identifier previously used, and Incorrect State Notification is triggered and sent to the Person Notifying the arrival.

The *Person filing* messages, marked in grey italics in the flow, will be simulated in order to generate the MRN required for the EO messages sent during the campaign. The generated MRN is a pre-condition to fill the Related MRN in IE3N06 messages to be sent by the Person Notifying the Arrival.

ICS2 R2 EO Self conformance Arrival r

	Person notifying the arrival		Person filing		STI	
1			*IE3F20*	→		*Successful Registration of ENS Filling and Receipt of an MRN*
2				←	*IE3R01*	
3				←	*IE3N03*	*Successful Reception of Assessment Complete notification*
4				←	*IE3N03*	
5				←	*IE3N03*	
6	IE3N06	→	→	→		Successful Registration of Arrival Notification
7		←	←	←	IE3R04	
8		←	←	←	IE3N08	Successful Reception of Control Notification
9	IE3N06	→	→	→		Successful Registration of Arrival Notification
10		←	←	←	IE3R04	
11		←	←	←	IE3N07	Successful Reception of ENS in Incorrect State Notification

6 FUNCTIONAL TEST CASES

6.1 Register ENS Filing

6.1.1 Successful Registration of ENS Filling and Receipt of an MRN

Successful Registration of ENS Filling and Receipt of an MRN				
ID	ICS2-CTC-EO-TS2-010			
Purpose	Verify EO System can send a valid ENS Filing to the STI and receive a registration response containing the assigned MRN.			
Trader Role	Carrier.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send a valid IE3FXX ENS Filing.	**IE3FXX**	1	IE3FXX ENS Filing is sent.
2	Receive IE3R01 ENS Registration response.	**IE3R01**	2	IE3R01 ENS Registration response containing the assigned MRN is received.
Carrier Mandatory basis for F20	1 – IE3F20		2 – IE3R01	
Carrier Do Not Load for F20	1 – IE3F20		2 – IE3R01	
Carrier Amendment and Invalidation F20	1 – IE2F20		2 – IE3R01	
Carrier Referrals for F21	1 – IE3F21		2 – IE3R01	
Carrier ENS Not complete for F21	1 – IE3F21		2 – IE3R01	
House filer AEO for F26	5 – IE3F21		6 – IE3R01	
House filer ENS Pending for F22	1 – IE3F21		2 – IE3R01	
House filer Amendment and Invalidation for F22	1 – IE2F22		2 – IE3R01	
House filer Mandatory basis for F24	1 – IE3F24		2 – IE3R01	
House filer Referrals for F24	1 – IE3F24		2 – IE3R01	
Carrier Referrals for F21	3 – IE3F26		4 – IE3R01, 5 – IE3R01	
House filer Do Not Load for F26	1 – IE3F26		2 – IE3R01	
House filer AEO for F26	1 – IE3F26		2 – IE3R01	
House filer ENS Not Complete for F26	1 – IE3F26		2 – IE3R01	
House Filer Mandatory basis for F24	5 – IE3F27		6 – IE3R01	
House Filer Referrals for F24	12 – IE3F27		13 – IE3R01	

Carrier Referrals for F28	1 – IE2F28	2 – IE3R01
Carrier Controls and AN for F28	1 – IE2F28	2 – IE3R01
Express Business Scenario 1	5 – IE3F30	6 – IE3R01
	10 – IE3F30	11 – IE3R01
Express Business Scenario 2	5 – IE3F31	6 – IE3R01
	10 – IE3F31	11 – IE3R01
Express Business Scenario 1	1 – IE3F32	2 – IE3R01
Express Business Scenario 2	1 – IE3F32	2 – IE3R01
Express Business Scenario 3	1 – IE3F32	2 – IE3R01
Express Business Scenario 3	5 – IE3F33	6 – IE3R01
Postal Business Scenario 1	1 - IE3F43	2 – IE3R01
Postal Business Scenario 3	3 – IE3F43	4 – IE3R01
Postal Business Scenario 1	5 – IE3F44	6 – IE3R01
Postal Business Scenario 3	1 – IE3F44	2 – IE3R01
Post-Conditions	IE3R01 ENS Registration response containing the assigned MRN is received.	
Pass Criteria	IE3R01 ENS Registration response containing the assigned MRN is received.	

Table 28 ICS2-CTC-EO-TS2-010

6.1.2 Semantical Validation Error of Registration ENS Filing

ENS Semantical Validation Error of Registration ENS Filing				
ID	ICS2-CTC-EO-TS3-010			
Purpose	Verify that one semantical error in IE3FXX ENS Filing returns IE3N99 Error Notification to EO System.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send a semantic invalid IE3FXX ENS filing.	**IE3FXX**	1	IE3FXX ENS Filing is sent.
2	Receive IE3N99 notification.	**IE3N99**	2	• IE3N99 error notification is successfully received by the EO system. • Error described in IE3N99 message is indeed the expected error according to input IE3FXX message. • The EO System acknowledged the reception of the Error

				Notification by a correctly signed AS4 receipt message.

Table 29 ICS2-CTC-EO-TS3-010

6.1.3 ENS Lifecycle Validation Error of Registration ENS Filing

ENS Lifecycle Semantical Validation Error of Registration ENS Filing				
ID	ICS2-CTC-EO-TS4-010			
Purpose	Verify that one ENS lifecycle error in IE3FXX ENS Filing returns IE3N01 Error Notification to EO System.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send an invalid IE3FXX ENS filing.	**IE3FXX**	1	IE3FXX ENS Filing is sent.
2	Receive IE3N01 notification.	**IE3N01**	2	• IE3N01 ENS lifecycle validation error notification is successfully received by the EO System. • Error described in IE3N01 message is indeed the expected error according to input IE3FXX message. • The EO System acknowledged the reception of the ENS Lifecycle Validation Error by a correctly signed AS4 receipt message.

Table 30 ICS2-CTC-EO-TS4-010

6.2 Amend ENS Filing

6.2.1 Successful Amendment of ENS Filing

Successful Amendment of ENS Filing	
ID	ICS2-CTC-EO-TS5-010
Purpose	Verify EO System can send an Amendment to an already lodged ENS Filing.
Trader Role	Carrier.
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.
Basic Flow of Events	

Trader Role Actions		Data	Expected Result	
1	Send a valid IE3AXX ENS filing amendment.	**IE3AXX**	1	IE3AXX ENS Filing amendment is sent.
2	Receive IE3N10 Amendment notification.	**IE3N10**	2	IE3N10 Amendment notification is received.
Carrier Amendment and Invalidation F20		3 – IE3A20		4 – IE3N10
House filer Amendment and Invalidation for F22		3 – IE3A22		4 – IE3N10
House filer Referrals for F24		5 – IE3A24		6 – IE3N10
Post-Conditions		IE3N10 Amendment notification is received.		
Pass Criteria		IE3N10 Amendment notification is received.		

Table 31 ICS2-CTC-EO-TS5-010

6.2.2 Semantical Validation Error in Amendment of ENS Filing

ENS Semantical Validation Error in Amendment of Registration ENS Filing				
ID		ICS2-CTC-EO-TS6-010		
Purpose		Verify that one semantical error in IE3AXX ENS Filing returns IE3N99 Error Notification to EO System.		
Trader Role		Postal Operator, Express Operator, Carrier and House filer.		
Pre-Conditions		• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.		
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send a semantic invalid IE3AXX ENS filing.	**IE3AXX**	1	IE3AXX ENS Filing is sent.
2	Receive IE3N99 notification.	**IE3N99**	2	• IE3N99 error notification is successfully received by the EO system. • Error described in IE3N99 message is indeed the expected error according to input IE3FXX message. • The EO System acknowledged the reception of the Error Notification by a correctly signed AS4 receipt message.

6.2.3 ENS Lifecycle Validation Error in Amendment of Registration ENS Filing

ENS Lifecycle Semantical Validation Error of Registration ENS Filing

ID	ICS2-CTC-EO-TS7-010			
Purpose	Verify that one ENS lifecycle error in IE3AXX ENS Filing returns IE3N01 Error Notification to EO System.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send an invalid IE3AXX ENS filing.	**IE3AXX**	1	IE3AXX ENS Filing is sent.
2	Receive IE3N01 notification.	**IE3N01**	2	• IE3N01 ENS lifecycle validation error notification is successfully received by the EO System. • Error described in IE3N01 message is indeed the expected error according to input IE3FXX message. • The EO System acknowledged the reception of the ENS Lifecycle Validation Error by a correctly signed AS4 receipt message.

6.3 Invalidate ENS Filling

6.3.1 Successful Invalidation of an ENS Filing

Successful Invalidation of ENS Filing				
ID	ICS2-CTC-EO-TS8-010			
Purpose	Verify that EO System can send an invalidation request for an existing ENS Filing.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed. • EO requested to have this functionality.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Send IE3Q04 Invalidation request.	**IE3Q04**	1	IE3Q04 Invalidation request is sent.
2	Receive IE3R07 Invalidation acceptance response.	**IE3R07**	2	IE3R07 Invalidation acceptance response is received.
Carrier Amendment and Invalidation F20	8 – IE3Q04		9 – IE3R07	
House filer Amendment and Invalidation F20	5 – IE3Q04		6 – IE3R07	
Post-Conditions	IE3R07 Invalidation acceptance response is received.			
Pass Criteria	IE3R07 Invalidation acceptance response is received.			

Table 32 ICS2-CTC-EO-TS8-010

6.4 Notify Arrival of Means of Transport

6.4.1 Successful Registration of Arrival Notification

Successful Registration of Arrival Notification					
ID	ICS2-CTC-EO-TS9-010				
Purpose	Verify EO System can send a valid Arrival notification to the STI and receive a registration response containing the assigned MRN.				
Trader Role	Person notifying the arrival				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Send a valid IE3N06 Arrival notification.	IE3N06	1	IE3N06 Arrival notification is sent.	
2	Receive IE3R04 Arrival registration response.	IE3R04	2	EO System confirms the reception of the IE3R04	
Express Business Scenario 1	8 – IE3N06		9 – IE3R04		
	13 – IE3N06		14 – IE3R04		
Express Business Scenario 2	8 – IE3N06		9 – IE4R04		
	14 – IE3N06		15 – IE3R04		
Person notifying the arrival Business Scenario	6 – IE3N06		7 – IE3R04		
	9 – IE3N06		10 – IE3R04		
Carrier Controls and AN for F28	6 – IE3N06		7 – IE3R04		
	9 – IE3N06		10 – IE3R04		
Post-Conditions	IE3R04 Arrival Registration response containing the assigned MRN is received.				
Pass Criteria	IE3R04 Arrival Registration response containing the assigned MRN is received.				

Table 33 ICS2-CTC-EO-TS9-010

6.4.2 Semantical Validation Error Notification of Arrival Notification

Semantical Validation Error Notification of Arrival Notification					
ID	ICS2-CTC-EO-TS10-010				
Purpose	Verify that one semantical error in arrival notification (IE3N06) returns IE3N99 Error Notification to EO System.				
Trader Role	Person notifying the arrival				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Send an IE3N06 Arrival notification with one semantical error.	IE3N06	1	IE3N06 Arrival notification is sent.	

2	Receive IE3N99 notification response.	IE3N99	2	• IE3N99 error notification is successfully received by the EO System. • Error described in IE3N99 message is indeed the expected error according to input IE3N06 message. • The EO System acknowledged the reception of the Error Notification by a correctly signed AS4 receipt message.

Table 34 ICS2-CTC-EO-TS10-010

6.5 Receive Notifications from STI

6.5.1 Successful Reception of Assessment Complete notification

Successful Reception of Assessment Complete notification				
ID	ICS2-CTC-EO-TS12-010			
Purpose	Verify EO System can receive Assessment Complete notification .			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3N03 Assessment complete notification.	**IE3N03**	1	IE3N03 Assessment complete notification is received.
Postal Business scenario 1	3 – IE3N03			
	4 – IE3N03			
Postal Business Scenario 3	5 – IE3N03			
	10 – IE3N03			
Express Business Scenario 1	3 – IE3N03			
	4 – IE3N03			
	7 – IE3N03			
	12 – IE3N03			
Express Business Scenario 2	3 – IE3N03			
	4 – IE3N03			
	7 – IE3N03			
	12 – IE3N03			
Express Business Scenario 3	3 – IE3N03			
	4 – IE3N03			
	9 – IE3N03			
Carrier Mandatory basis for F20	3 – IE3N03			
	4 – IE3N03			

	5 – IE3N03
Carrier Do Not Load F20	4 – IE3N03
	5 – IE3N03
Carrier Amendment and Invalidation F20	5 – IE3N03
	6 - IE3N03
	7 - IE3N03
Carrier Referrals for F21	12 - IE3N03
	18 – IE3N03
Carrier Referrals for F28	10 – IE3N03
	11 – IE3N03
Carrier Controls and AN for F28	3 – IE3N03
	4 – IE3N03
House Filer Mandatory basis for F24	4 – IE3N03
	7 - IE3N03
	8 - IE3N03
House filer Referrals for F24	11 - IE3N03
	16 - IE3N03
	17 - IE3N03
House filer AEO for F26	4 - IE3N03
	7 - IE3N03
	8 - IE3N03
Post-Conditions	IE3N03 Assessment complete notification is received.
Pass Criteria	IE3N03 Assessment complete notification is received.

Table 35 ICS2-CTC-EO-TS12-010

6.5.2 Successful Reception of Do not Load request

Successful Reception of Do not Load request				
ID	ICS2-CTC-EO-TS13-010			
Purpose	Verify EO System can receive Do Not Load request.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3Q01 Do not load request.	IE3Q01	1	IE3Q01 Do not load request is received.
Carrier Do Not Load F20	3 – IE3Q01			
House filer Do Not Load for F26	3 – IE3Q01			
Post-Conditions	IE3Q01 Do not load request is received.			
Pass Criteria	IE3Q01 Do not load request is received.			

Table 36 ICS2-CTC-EO-TS13-010

6.5.3 Successful Reception of AEO control notification

Successful Reception of AEO control notification				
ID	ICS2-CTC-EO-TS14-010			
Purpose	Verify EO System can receive AEO control notification.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed. • EO is an authorized economic operator.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3N09 Authorised Economic Operator control notification.	IE3N09	1	IE3N09 Authorised Economic Operator control notification is received.
Express Business Scenario 2	13 – IE3N09			
Carrier Controls and AN for F28	5 – IE3N09			
House filer AEO for F26	9 – IE3N09			
Post-Conditions	IE3N09 Authorised Economic Operator control notification is received.			
Pass Criteria	IE3N09 Authorised Economic Operator control notification is received.			

Table 37 ICS2-CTC-EO-TS14-010

6.5.4 Successful Reception of Control Notification

Successful Reception of Control notification				
ID	ICS2-CTC-EO-TS15-010			
Purpose	Verify EO System can receive Control notification.			
Trader Role	Person notifying the arrival and Notify Party.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3N08 Control notification.	IE3N08	1	IE3N08 Control notification is received.
Express Business Scenario 2	16 – IE3N08			
Person notifying the arrival Business Scenario	8 – IE3N08			
Carrier Controls and AN for F28	8 – IE3N08			
Notify Party Business Scenario	10 – IE3N08			
Post-Conditions	IE3N08 Control notification is received.			
Pass Criteria	IE3N08 Control notification is received.			

Table 38 ICS2-CTC-EO-TS15-010

6.5.5 Successful Reception of ENS in Incorrect State Notification

Successful Reception of ENS In Incorrect State notification					
ID	ICS2-CTC-EO-TS16-010				
Purpose	Verify EO System can receive ENS in Incorrect State notification.				
Trader Role	Person notifying the arrival.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3N07 Incorrect State notification.	IE3N07	1	IE3N07 Incorrect State notification is received.	
Person notifying the arrival Business Scenario	11 – IE3N07				
Carrier Controls and AN for F28	11 – IE3N07				
Post-Conditions	IE3N07 Incorrect State notification is received.				
Pass Criteria	IE3N07 Incorrect State notification is received.				

Table 39 ICS2-CTC-EO-TS16-010

6.5.6 Successful Reception of ENS Not Complete Notification

Successful Reception of ENS Not Complete notification					
ID	ICS2-CTC-EO-TS17-010				
Purpose	Verify EO System can receive ENS Not Complete notification.				
Trader Role	Carrier or House filer.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3N02 ENS Not Complete notification.	IE3N02	1	IE3N02 ENS Not Complete notification is received.	
Carrier ENS Not Complete for F21	3 – IE3N02				
House filer ENS Not Complete for F26	3 – IE3N02				
House filer ENS Pending for F22	3 – IE3N02				
Post-Conditions	IE3N02 ENS Not Complete notification is received.				
Pass Criteria	IE3N02 ENS Not Complete notification is received.				

Table 40 ICS2-CTC-EO-TS17-010

6.5.7 Successful Reception of ENS Pending Notification

Successful Reception of ENS Not Complete notification					
ID	ICS2-CTC-EO-TS18-010				
Purpose	Verify EO System can receive ENS Pending notification.				
Trader Role	'Person not yet filed'				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3N11 ENS Pending notification.	IE3N11	1	IE3N11 ENS Pending notification is received.	
Carrier ENS Not Complete for F21	4 – IE3N11				
House filer ENS Pending for F22	4 – IE3N11				
Post-Conditions	IE3N11 ENS Pending notification is received.				
Pass Criteria	IE3N11 ENS Pending notification is received.				

Table 41 ICS2-CTC-EO-TS18-010

6.5.8 Successful Reception of Arrival Registration Response

Successful Reception of Arrival Registration Response					
ID	ICS2-CTC-EO-TS22-010				
Purpose	Verify EO System can receive Arrival Registration response.				
Trader Role	Notify Party.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3R04 Arrival Registration Response-	IE3R04	1	IE3R04 Arrival Registration Response is received.	
Notify Party Business Scenario	8 – IE3R04				
Post-Conditions	IE3R04 Arrival Registration Response is received.				
Pass Criteria	IE3R04 Arrival Registration Response is received.				

Table 42 ICS2-CTC-EO-TS22-010

6.5.9 Successful Reception of Additional Information Request notification.

Successful Reception of Additional Information Request notification	
ID	ICS2-CTC-EO-TS23-010
Purpose	Verify EO System can receive Arrival Registration response.
Trader Role	Carrier.

Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed. • Carrier has requested to receive 'Additional Information Request' notification message IE3N04, by configuring it in the Manage Trader preferences page on ICS2 STI STP conformance test configuration screens.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3N04 Additional Information Request notification.	IE3N04	1	IE3N04 Additional Information Request notification is received.	
Carrier Referrals for F21	7 – IE3N04				
Post-Conditions	IE3N04 Arrival Registration Response is received.				
Pass Criteria	IE3N04 Arrival Registration Response is received.				

Table 43 ICS2-CTC-EO-TS23-010

6.5.10 Successful Reception of High Risk Cargo & Mail screening Request notification

Successful Reception of High Risk Cargo & Mail screening Request notification					
ID	ICS2-CTC-EO-TS24-010				
Purpose	Verify EO System can receive Arrival Registration response.				
Trader Role	Carrier.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed. • Carrier has requested to receive 'Additional Information Request' notification message IE3N05, by configuring it in the Manage Trader preferences page on ICS2 STI STP conformance test configuration screens.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3N05 High Risk Cargo & Mail screening Request notification.	IE3N05	1	IE3N05 High Risk Cargo & Mail screening Request notification is received.	
Carrier Referrals for F21	10 – IE3N05				
Post-Conditions	IE3N05 Arrival Registration Response is received.				
Pass Criteria	IE3N05 Arrival Registration Response is received.				

Table 44 ICS2-CTC-EO-TS24-010

6.6 Respond to Requests from STI

6.6.1 Provide Additional Information Response

Provide Additional Information Response

ID	ICS2-CTC-EO-TS19-010			
Purpose	Verify that EO System can provide an Additional information response to a received Additional information request.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3Q02 Additional information request.	IE3Q02	1	IE3Q02 Additional information request is received.
2	Send IE3R02 Additional information response.	**IE3R02**	2	IE3R02 Additional information response is sent.
Postal Business Scenario 3	6 – IE3Q02		7 – IE3R02	
Carrier Referrals for F21	6 – IE3Q02		8 – IE3R02	
	13 – IE3Q02		14 – IE3R02	
Carrier Referrals for F28	3 – IE3Q02		4 – IE3R02	
House filer Referrals for F24	7 – IE3Q02		8 – IE3R02	
	14 – IE3Q02		15 – IE3R02	
Post-Conditions	IE3R02 Additional information response is sent.			
Pass Criteria	IE3R02 Additional information response is sent.			

Table 45 ICS2-CTC-EO-TS19-010

6.6.2 Provide HRCM screening response

Provide HRCM Screening Response				
ID	ICS2-CTC-EO-TS20-010			
Purpose	Verify that EO System can provide an HRCM screening response to a received HRCM screening request.			
Trader Role	Postal Operator, Express Operator, Carrier and House filer.			
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.			
Basic Flow of Events				
Trader Role Actions		**Data**	**Expected Result**	
1	Receive IE3Q03 HRCM Screening request.	**IE3Q03**	1	IE3Q03 HRCM Screening request is received.
2	Send IE3R03 HRCM Screening response.	**IE3R03**	2	IE3R03 HRCM Screening response is sent.
Postal Business Scenario 3	8 – IE3Q03		9 – IE3R03	
Carrier Referrals for F21	9 – IE3Q03		11 – IE3R03	
Carrier Referrals for F28	8 – IE3Q03		9 – IE3R03	
House filer Referrals for F24	9 – IE3Q03		10 – IE3R03	
Post-Conditions	IE3R03 HRCM Screening response is sent.			
Pass Criteria	IE3R03 HRCM Screening response is sent.			

Table 46 ICS2-CTC-EO-TS20-010

6.6.3 Acceptance of ENS Filing Amendment after Additional Information Request

Acceptance of ENS Filing Amendment after Additional Information Request					
ID	ICS2-CTC-EO-TS21-010				
Purpose	Verify that EO system can send an ENS Filing amendment as a result of an Additional information request.				
Trader Role	Postal Operator, Express Operator, Carrier and House filer.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Receive IE3Q02 Additional information request.	IE3Q02	1	IE3Q02 Additional information request is received.	
2	Send IE3AXX ENS Filing amendment.	IE3AXX	2	IE3AXX ENS Filing amendment is sent.	
3	Receive IE3N10 Amendment notification.	**IE3N10**	3	IE3N10 Amendment notification is received.	
Carrier Referrals for F21	15 – IE3Q02	16 – IE3A21	17 – IE3N10		
Carrier Referrals for F28	5 - IE3Q02	6 -. IE3A28	7 - I E3N10		
Post-Conditions	IE3N10 Amendment notification is received.				
Pass Criteria	IE3N10 Amendment notification is received.				

Table 47 ICS2-CTC-EO-TS21-010

6.7 Consult ENS Filing

6.7.1 Successful Consultation of ENS Filing

Successful Consultation of ENS Filing					
ID	ICS2-CTC-EO-TS25-010				
Purpose	Verify that EO System can send a consultation request for an existing ENS Filing.				
Trader Role	Postal Operator, Express Operator, Carrier and House filer.				
Pre-Conditions	• EO System certificate is properly registered in UUM&DS. • Connectivity test cases of section **Error! Reference source not found.** have been successfully completed. • EO requested to have this functionality.				
Basic Flow of Events					
Trader Role Actions		**Data**	**Expected Result**		
1	Send IE3Q05 ENS Consultation request.	**IE3Q05**	1	IE3Q05 ENS Consultation request is sent.	
2	Receive IE3R08 ENS Consultation result.	**IE3R08**	2	EO System confirms the reception of the IE3R08.	
Postal Business Scenario 3	11 – IE3Q05	12 – IE3R08			
Post-Conditions	IE3R08 ENS Consultation result is received.				
Pass Criteria	IE3R08 ENS Consultation result is received.				

Table 48 ICS2-CTC-EO-TS25-010

7 TRACEABILITY TO TEST SCENARIOS

The traceability between the EO Conformance Test Cases and the EO Conformance Test Scenarios is defined in the embedded Excel file below:

ICS2-CTC-EO-Traceability_Matrix.xlsx

8 ANNEXES

[Disclaimer: This Annex is to be read and used solely for internal testing and it is not intended for EOs.]

8.1 Annex 1: Execution Instructions for the Automated Test Scripts (for internal testing)

The first step is to configure the test campaign in the test environment. In the ICS2 STI STP conformance test configuration screen, the configuration fields *Sender Party ID*, *Pmode configuration* and *Certificate Authority* are provided.

The second step is to select the role that is going to be tested.

For Postal operators, Express operators and Notify Parties, a pre-defined set of business scenarios are proposed to be executed.

Alternatively, for Carriers and House Filers, a list with the ENS Filings available for conformance is displayed. The third step for this case is to select which types of filings are applicable and a set of business scenarios corresponding to those ENS Filings are proposed to be executed.

An automated script will be executed, simulating an EO, to send the messages that will trigger the Business Scenarios and will validate the reception of the expected messages.

The campaign will be successful once the scenario is completed.

8.1.1 Automated Test Cases

Each scenario is linked to an automated test execution. After each execution, reports are available in the test report folder. The campaign status can also be viewed/exported directly from the STI-STP UI after each execution.

8.1.2 Test package information

Below in the “how to” document, you can find the requirements and information on how to execute the automated test cases.

HowTo.docx

8.1.3 Test Case Matrix

The test case matrix includes all the scenarios linked to its test cases with the possible execution commands.

TestCase_Matrix.xls

9 APPENDIX

[Disclaimer: This Annex is to be read and used solely by ITSM3 and it is not intended for Economic Operators.]

9.1 Prerequisites

The following systems must be fully integrated with the ICS2 system:

- the ECICS2, CRS, CS/RD2, TARIC3;
- the CCN2 instances that offers message exchange and authorization;
- the UUM&DS system that offers the Login functionality.

The integration with all systems will be realised by communicating with the actual systems.

9.2 Environmental needs for the ICS2 system (operated by ITSM3)

The environment to use for the execution of the tests for the ICS2 system, is hosted in the DG TAXUD Data Centre and it is as described within the ICS2 Operational Model [**R09**] as well as within the STI Installation Procedure Manual [**R10**], CR Installation Procedure Manual [**R11**] and MON Installation Procedure Manual [**R12**].

The ICS2 application and all its dependencies must be correctly installed and configured on the appropriate server as detailed in the mentioned Installation Procedure Manuals.

The scenario of Postal 3 is impacted by the configured IM/MS rules from the CR UI. With the standard setup, all configured MS would receive the incoming message. For testing purposes, one MS was used for this specific scenario.