

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR DIGITAL SERVICES

Directorate B – Digital Enablers & Innovation **DIGIT.B.3 – Digital Trust**

eInvoicing Conformance Testing Service

Process Overview Description

Date:

20 March 2024

Version: Status: 1.4 Final

Table of Contents

1. HOW TO USE THE CONFORMANCE TESTING SERVICE STEP BY STEP	6
1.1. Public Entities, Solution and Service Providers and Software Owners	6
1.2. Process Overview	6
1.2.1. Web form upload (only for sender scenario)	7
1.2.2. Web service (only for sender scenario)	7
1.2.3. eDelivery	7
1.3. Processes steps for eDelivery (AS4) method	8
1.3.1. Step 1: Registration	8
1.3.2. Step 2: Preparation	11
1.3.3. Step 3: Execution & report feedback	15
2. CONTACT INFORMATION	. 21

European Union, 2024

Reuse of this document is authorised provided the source is acknowledged. The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents.

The eInvoicing Conformance testing Process Overview Description is intended for Service Providers and Public Entities that need detailed instructions for using the Conformance Testing Service. This document is to be used as an extension of the eInvoicing Conformance Testing Service Offering Description (SOD).

1. How to use the Conformance Testing Service step by step

This section describes the way users can use the eInvoicing Conformance Testing Service.

1.1. Public Entities, Solution and Service Providers and Software Owners

Public Entities, Solution and Service Providers and Solution Owners have the following responsibilities in the context of the eInvoicing Conformance Testing Service:

- Test the invoice compliance against the core eInvoicing specifications;
- Provide (on a voluntary basis) details of their solution to the Service Desk, so that they are listed on the <u>eInvoicing Conformant Solutions page</u>.

1.2. Process Overview

The figure below presents the main steps of the elnvoicing Conformance Testing Service process. Each process step is detailed in the next sections.



The figure below presents the technical options which any user can choose to apply for conformance testing. The sender scenario option starts with a file of an invoice in .xml format (hereafter called invoice.xml) issued by the user's system. Depending on the choice the user makes, he will need to perform the below steps (described on the picture).

These steps are described in the following sections.



Only the eDelivery testing sessions are recorded in the TestBed and can be validated or downloaded at a later stage if needed.

1.2.1. Web form upload (only for sender scenario)

If the user chooses to apply for the Conformance Testing Service via web form upload, he can request validation via uploading the invoice.xml file(s) through <u>https://www.itb.ec.europa.eu/invoice/upload</u>. This service is provided to all users (anonymous). Once the eInvoice is uploaded, it is validated and a detailed report is presented to the user, which can be downloaded and cross-checked against the submitted content.

1.2.2. Web service (only for sender scenario)

If the user chooses to apply for the Conformance Testing Service via web service, he can request the validation of an invoice via a web service call to a GITB-compliant content validation service. The web service (WSDL) is available at:

https://www.itb.ec.europa.eu/invoice/api/validation?wsdl

To facilitate the use of the web service, the user needs to contact the <u>Service Desk</u> to obtain the relevant configuration files needed for the SOAP request.

1.2.3. <u>eDelivery</u>

The eDelivery (AS4) option implies that at least one user is registered in the TestBed (see section §1.3.1 - Step 1: Registration).

eDelivery AS4 validation (For both sender and receiver scenarios)

- The user can choose to **send** an eInvoice for conformance testing via *eDelivery AS4*. If the message arrives successfully and the validation process is completed, the validation report can be checked or downloaded on the TestBed portal.
- The user can also choose to **receive** an eInvoice for conformance testing via *eDelivery AS4*. The testing platform (or TestBed) then sends an eInvoice to the user's AS4 gateway. In case the user needs validation of the successful tests by Service Desk, he is responsible for uploading the relevant pieces of evidence in the TestBed platform.

A test scenario can be executed after the user logged into the TestBed at <u>https://www.itb.ec.europa.eu/cef/itb/#/login.</u> using assigned credentials.

1.3. Processes steps for eDelivery (AS4) method

1.3.1. Step 1: Registration

Purpose: to register the user accounts and organisations/systems on the test platform. This registration is only required when applying for the Conformance Testing Service via the <u>AS4 eDelivery</u> protocol.

The overview of the registration process is shown in the diagram below:



Process:

- 1. Open the TestBed Welcome page https://www.itb.ec.europa.eu/cef/itb/#/login
- 2. Login

To be able to create an account on the GITB TestBed platform, the user must have an EU Login account. If the user does not have an EU Login account, he can create one on the EU Login page.

If the user needs more help regarding EU login, he can use the link to the <u>EU Login tutorial</u> on the TestBed Welcome page.

2.1. The user clicks on the **Click to log in** button:

Welcome to the Interoperability Test Bed
The Interoperability fest Bed is a platform to help you test conformance against one or more specifications. Click to log in Assigned a new role by an administrator? Confirm your new role. New to the Test Bed? Register in a public community.
To connect to the Test Bed you need to first authenticate using your EU Login account. If you are new to EU Login follow this tutorian to get started. Privacy note: By connecting you consent to the use of cookies to manage your session. Please refer to our legal notice for more information. Migration note: If you have been using a functional account to log in click here to migrate it to EU Login. Step-by-step instructions are available in this guide.
GITB User guide Legal notice 1.9/

2.2. The user provides his EU Login account credentials or creates his EU Login account:

EU Login One account, many f	EU services	Where is ECAS?	English (en)
	ISA2_ITB requires	you to authe	nticate
	Sign in to	continu	ue
_	Use your e-mail address		
	N	ext	
	Create a	n account r	_
	Select your cou	ntry	
	Easy, fast and secure: do	wnload the EU Log row pogle Play	jin app remo∕rt

3. Choose role/Create Organisation

3.1. If the user is already logged in but does not have any assigned role or registered Organisation, he clicks on the "Link a role to your account" button:

Welcome to the Interoperability Test Bed
No roles are currently linked to your account
To use the Test Bed you need to first be assigned a role in one or more organisations. To link such a role to your account click the button below to view available options.
Link a role to your account .**
GITB User guide Provide feedback Legal notice v1.7.0

- 3.2. The user chooses the option **Register in a public community.**
- 3.3. The user provides the **Token** for joining the **eInvoicing community** (*token: cefeinvoicing*)
- 3.4. The user starts registering his organisation by filling the required fields.
 - Short name: a short name for his organisation to appear in reports;
 - **Full name:** the full name of his organisation;

• Access Point (gateway) implementation: the AS4 software implementation and version he uses.

Remark: The parameters signed by "* "are mandatory, the test will not start if the user does not fill in the information

4. The user clicks on **Complete**:

l want to .	 Confirm a role assigned to me by an administrator 			
	Register in a public community			
	O Migrate an existing account to my EU Login account			
Select the communit listed you need to re	r you want to register for and provide the requested informat quest from an administrator to register you on your behalf.	ion. If your community is not		
Privacy note: By registering you grant your consent to link your name, email and EU Login user ID to your new administrator account.				
Community				
Name	Description			
CEF eArchiving community	Definition of information packages for the transmission, descr Jata based on the e-ARK Common Specification for Informatic	ription and preservation of digital on Packages (CS IP).		
elnvoicing community	The exchange of electronic invoices using the Universal Busine ndustry Invoice (CII) syntaxes according to European elnvoicir	ess Language (UBL) 2.1 and Cross ng standard.		
* Registration toker	*****	Θ		
	You can find information about how to get token, in the Process Ove	erview Description here: elnvoicing		
Organization data				
Organisation deta		/		
* Short name	ACME	۲		
* Full name	ACME Corporation	0		
Access Point (gateway	Domibus 5.1.2	0		

4.1. The user chooses his new linked role by clicking on it.

Welcome to the Interoperability Test Bed
Select a role linked to your account Administrator of ACME Corporation (CEF elivoicing community)
Link another role to your account

This completes the login process, and makes the user enter to the system as an Organisation Administrator.

1.3.2. Step 2: Preparation

Purpose: to prepare the test scenario on the TestBed.

- The user logs on to the GITB platform on <u>https://www.itb.ec.europa.eu/cef/itb/#/login</u> with his EU Login.
 For more information about EU Login, check §1.3.1 Step 1: Registration.
- 2. The user clicks on the **My organisation** button on the navigation menu:
- 3. The user clicks on the **Create system** button:

	My organisation			
Home > N	ly organisation			
A	Organisation details			
	* Short name:	ACME		0
0	* Full name:	ACME Corporatio	n	0
	Additional property	ties 🕐		
ŀ				
	Update Manage tests			
»	🔊 Systems 💄 Users			
	Create system			
	Short name	Full name	Description	Version
			No systems found	
	бітв	<u>v</u>	ser guide Contact support Legal notion	ce Find out more 1.21.1

4. The user fills in the details of the new system information and clicks on Save:

* Short na	8: Sample	
* Full na	Sample System	
Descript	a: Sample System for einvolcing Conformance Testing	
* Vers	1.0	

5. The user clicks on the My conformance statements button:

6. The user clicks on the **Create statements** button:

My	' confo	ormance staten	hents		
ome 🕨 M	y organisatio	on > Sample > Conformance s	tatements		
A	Confor	mance statements		<u> </u>	Create statements
1	System	Sample System			
	No con	formance statements defined.			
Ħ					
»					
G	ітв		<u>User guide</u>	support Legal notice	Find out more 1.21.1

- 7. The user chooses the **needed** scenario and clicks on **Confirm**:
 - SENDER scenario> AS4_sender The user's access point sends messages to the TestBed with the eInvoices he wants to test.
 - RECEIVER scenario> AS4_receiver The TestBed sends messages to the user's access point with sample eInvoices, so that he can test the reception and processing of compliant eInvoices in his eInvoicing system.

	My organisation
Home > M	ly organisation > Sample > Conformance statements
*	Create conformance statements
	Search conformance statements × Select statements •
	SAS4 Exchange of UBL 2.1 and CII invoices as AS4 messages.
	Access point receiving invoices as AS4 messages.
>>>	Access point sending invoices as AS4 messages.
	Confirm Cancel
	Сітв

8. The test is now ready to be configured, the user clicks on the needed scenarios one by one and do the following configuration:

9. The user clicks on the Configuration parameters tab :

and sets the **accessPointUrl** parameter by clicking on the (edit) button:

Home >	My organisation > Sample > Conformance statements > AS4 - AS4_sender				
A	Conformance statement details				
0	Organisation Org System Sample System				
	AS4 Exchange of UBL 2.1 and CII invoices as AS4 messages. AS4_sender Access point sending invoices as AS4 messages.				
>>	Status INCOMPLETE Test results 0 < 0 < 1				
	Download report View system - Back Del	lete statement			
	E Conformance tests	`			
	Set? Parameter Configured value Description	\mathbf{i}			
	× *accessPointUrl The URL of your access point.				
	× * configBundle The configuration bundle to set up your access point (set by the administrator).				
	V V samidavad Assass Baint Hul The access paint HDL that corresponds to the configD undle / so the the administrate	1			

10. The user inputs his Access Point public URL into accessPointUrl and clicks on Save:

Remark: This is a mandatory parameter; the test will not start if the user does not fill in the information.

Edit parameter	
Name:	accessPointUrl
Description:	The URL of your access point.
* Value:	http://as4.acme.com:8080/domibus/msh
	Save Delete Cancel

11. The user downloads his configuration package.

If the user saved his valid **accessPointUrl** parameter, the TestBed generates a Party ID and a configuration package.

The user refreshes the current page under the **Configuration parameters** tab, until he finds the downloadable package in the **configBundle** parameter, then he clicks on it for downloading.

onfig	uration parameters			-
ndpole lescrip	it as-linfo tion Configuration parameters fo	r your AS4 access point.		
Set?	Parameter	Configured value	Description	Action
1	* accessPointUrl	http://as4.acme.com:8080 /domibus/msh	The URL of your access point.	1
-	* configBundle	confieBundje zio	The configuration bundle to set up your access point (set by the administrator).	
1	* consideredAccessPointUrl	http://as4.acme.com:8080 /domibus/msh	The access point URI, that corresponds to the configBundle (set by the administrator).	
×	evidence		Evidence (e.g. screenshots) from your elswoicing system about the successfully processed sample elswoices sent by the TestBed. (Not about the receiving, but the processing)	1
	* partyld	eliniolong_71	The party ID of your access point that will be receiving invoices (set by the administrator).	

The user has now completed the preparation and continues with the execution as described in §1.3.3-Step 3: Execution & report feedback.

If the user needs support while conducting the test, he can contact the eInvoicing Service Desk team (<u>EC-EINVOICING-SUPPORT@ec.europa.eu</u>). For contact information see also \$2 - Contact Information.

1.3.3. Step 3: Execution & report feedback

Purpose: to execute the conformance tests and generate a test report.

- 1. The user executes the conformance tests using the testing platform.
- 2. The user resolves the failed tests (with or without the support of the eInvoicing Service Desk).
- 3. The eInvoicing Service Desk provides technical support to the user during the execution of the conformance tests.
- 4. If needed the user may request validation from the eInvoicing Service Desk once all conformance tests have successfully passed and the required evidence was uploaded.
- 5. If validation was requested, the eInvoicing Service Desk assesses the recorded test sessions and the provided evidence. If the results are found correct, the eInvoicing Service Desk logs the successful test record in an internal register.
- 6. On a voluntary basis, the user can promote his solution on the <u>Digital eInvoicing page</u>. To do so, the user must request validation from eInvoicing Service Desk and share the solution information with the eInvoicing Service Desk (information listed on the page).



The overview of the Execution process is shown in the diagram below:

The user can test an elnvoice once the registration and the preparation on the GITB platform are completed and when he has configured his Access Point and elnvoicing system. To do so the user shall download and use the configuration package that contains the required files (manual, sample SOAP project, a private key, a Pmode and a Truststore). The package can be downloaded from the configBundle parameter (see configuration section at § 1.3.2 - Step 2: Preparation -

Step 11.), which needs to be adapted to the user's environment. Non-Domibus users should use the Pmode as a guideline for setting up his environment.

- The user logs on to the GITB platform at <u>https://www.itb.ec.europa.eu/cef/itb/#/login</u> with his EU Login account credentials.
 For more information about EU Login, check §1.3.1 - Step 1: Registration.
- 2. The user selects the required role (organisation) linked to his account.
- 3. The user clicks on the **My conformance statements** button.
- 4. The user selects the System created in the preparation phase.

- 5. The user selects the scenario on the Conformance statement page which was created in the preparation phase.
- 6. The user verifies that the configuration parameter was set correctly as described in the preparation phase (**accessPointUrl**) and that other mandatory parameters were generated successfully by the TestBed (configBundle, consideredAccessPointUrl, partyId).

The next steps depend on the chosen scenario of the Conformance statement:

• Sender scenario:

The user is the **sender** and will send an AS4 message using the eInvoice intended to be tested to the GITB TestBed which is the receiver.

1. The user chooses the only available Test Case (AS4_send) and opens it by clicking on the **Play** button:

Conforr	nance tests	、
Test case	Description	Result
AS4_send	Send an invoice or credit note as an AS4 message.	

Remark: If any mandatory parameter is missing for the test, the user will get a list of missing parameters in the next screen instead of the screen below. The user must fill them before continuing with the further steps.

On the **Test execution** page, the user can find the required data he needs for configuring his AS4 access point. The user must note the **as4.gateway.url** of the TestBed (Receiver) Access Point. He will use this when configuring the PMode of his (Sender) Access Point.

ecution	
s to execute	Next
Description	Statu
Send an invoice or credit note as an AS4 message.	ф
_send] - Preliminary phase	
l configurations for AS4 sender Freceiver	
• assigned and a services in a service of the servi	
	ecution s to execute Description Send an invoice or credit note as an AS4 message. send] - Preliminary phase configurations for AS4 sender receiver a receiver a sa4.gateway.url: https://www.itb.ec.europa.eu/cef/domibus/services/msh

• The user updates (if needed) and installs the Pmode downloaded in the configuration package, at preparation phase on his (Sender) Access Point.

- The user installs the Truststore downloaded from the configuration package, on his (Sender) Access Point: by default, the Truststore password is set to "test123".
- The user installs the Keystore downloaded from the configuration package, on his (Sender) Access Point: by default, the Keystore password is set to "test123".
- 2. The user clicks on the **Next** button to complete and clicks on the **Start** button to start the test:

ame	Description	Sta
S4_direct_ap	Send an invoice as an AS4 message directly to a receiver access point (no SML or SMP involved). The communication channel is not encrypted.	<
Test [AS4_direc	t_ap] - Execution	
AS4 Gatewa	y - Operator Test Engine AS4 Gateway (SUT) Test Bed (SIMULATED)	
	Interact Message ID Message ID to wait for Content type ('cil' for CII invoice, 'ubl' for UBL Invoice, 'ubl' for UBL credit note)	
	Receive message from SUT	

3. Once the process starts, the **Server interaction** screen will be displayed:

S	erver interaction
	Message ID to wait for
	Content type ('cii' for CII invoice, 'ubl' for UBL invoice, 'credit' for UBL credit note)
	Send

- 4. At this point the user can start his Access Point and send an AS4 message to the TestBed with the eInvoice in the attachment. If needed, he can use the SOAPUI project provided by the eInvoicing Service Desk as a template.
- 5. The user writes down the resulting **messageID**.
- 6. The user inputs the messageID in the testbed **Server interaction** screen, together with the chosen eInvoice format (**cii** or **ubl**) and clicks on **Send** to execute:

5	Server interaction
	Message ID to wait for
	e310fabd-2cba-4ffe-808a-655de1ad79cd@domibus.eu
	Content type ('cii' for CII invoice, 'ubl' for UBL invoice, 'credit' for UBL credit note)
	ubl
	Send

7. The test status will then be displayed. If all phases were successful, they will be displayed in **green** as shown in this successful test example below:

Fest cases to	execute	Reset
Name	Description	Status
AS4_direct_ap	Send an invoice as an AS4 message directly to a receiver access point (no SML or SMP involved). The communication channel is not encrypted.	0
Test [AS4_dire	ct_ap] - Execution	
AS4 Gatew	ay - Operator Test Engine AS4 Gateway (SUT) Test Bed (SIMULATED)	

- 8. If any phase is marked with a red cross, this means it was unsuccessful. The user clicks on the document with the red **x** to get detailed information on the error.
- 9. If all phases are finished successfully, the user can check or download his report of the performed test. The user navigates back to the **Performed Tests page** to find his test results.
- 10. If the user's solution successfully passed all the Conformance Testing and the results were validated by eInvoicing Service Desk, the user can promote (on a voluntary basis) his solution on the <u>Digital eInvoicing page</u>. To do so, the user must share the solution information with the eInvoicing Service Desk (information listed on the page).

• Receiver scenario:

The user is the **receiver** and receives an AS4 message with a sample compliant eInvoice, from the GITB TestBed who is the sender.

1. There are multiple sample eInvoices in the GITB TestBed repository. The user can select any of them according to his need or his eInvoicing system requirements.

The user chooses any of the available Receiver test cases and opens it by clicking on the **Play** button:

Conformance tests	Conformance tests		
Test case	Description	Result	
AS4_UBL_receive_valid_simple	Receive a valid UBL 2.1 invoice (including only mandatory information) as an AS4 message.		
AS4_UBL_receive_valid_simple_vat	Receive a valid UBL 2.1 VAT invoice (including only mandatory information) as an AS4 message.	UNDEFINED	
ASA LIBL receive valid complete	Receive a valid LIBL 2.1 invoice (including mandatory and		

Remark: If any mandatory parameter is missing for the test, the user will get a list of missing parameters in the next screen instead of the screen below. The user should fill them before moving to the next steps.

The user clicks on the **Next** button to complete and clicks on the **Start** button to start the test. The TestBed then sends the chosen sample eInvoice in an AS4 message to his Access Point.

2. If the message was received successfully, it will be displayed in **green** as shown in the successful test example below:

Fest cases to execute		Reset
Name	Description	Status
AS4_UBL_receive_valid_simple	Receive a valid UBL 2.1 invoice (including only mandatory information) as an AS4 message.	0
Test [AS4_UBL_receive_valid_	simple] - Execution	
Test Bed (SIMULATED) Send me	AS4 Gateway (SUT) AS4 Gateway - Operator ssage to SUT interact Next steps Evidence:	
Back View log		

- 3. If any of the phases is marked with a red **x**, it means that it was unsuccessful. The user should click on the document with the red **x** to get detailed information on the error.
- 4. After successfully completing one of the receiving test scenarios, the user can check or download his report of the performed test. The user navigates back and opens the **Performed Tests page**, where he will find all his test results.
- 5. If the user requests validation, the eInvoicing Service Desk will also request the user's test evidence of the **processing** of the received sample eInvoice to certify that the user's receiver action was successfully completed. This test evidence can consist of screenshots from the user's **eInvoicing system**, where the sent sample eInvoices are successfully **processed** and where it is possible to identify the sample eInvoices on the picture.

The evidence files should be uploaded into the **evidence** parameter at the Configuration parameters section on the Tests page (see configuration section § 1.3.2 - Step 2: Preparation – *Step 9*). If the user wants to provide more than one file, he can put all his files together in a zip file.

6. If the user's solution successfully passed all the Conformance Testing and the results were validated by eInvoicing Service Desk, - on a voluntary basis - the user can promote his solution on the <u>Digital eInvoicing page</u>. To do so, the user must share the solution information with the eInvoicing Service Desk (information listed on the page).

2. CONTACT INFORMATION

eInvoicing Service Desk

Digital website: https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/eInvoicing

Service desk: https://ec.europa.eu/digital-building-blocks/tracker/plugins/servlet/desk/portal/8

By email: EC-EINVOICING-SUPPORT@ec.europa.eu

Support Service: 8am to 6pm (Normal European Commission working days)