

# Peppol

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## PKI Complete Migration testing (for G3)

### User Guide

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## 1 Introduction

This document provides information related to the PKI Complete Migration test suite. Its purpose is to provide a guide on how to use the PKI Complete Migration test suite's user interface. It describes the prerequisites as well as the key steps in carrying out the various test cases. This document's intended audience is Service Providers (SPs) who wish to validate their AP implementations during the migration from G2 AP certificates to G3 AP certificates, ensuring compatibility with both the current (G2 legacy) and upcoming (G3 new) Peppol PKI infrastructure.

### 1.1 Glossary

Abbreviations used in this document:

Abbreviation	Meaning
AP	Access Point
C2	Corner 2, sending AP
C3	Corner 3, receiving AP
CA	Certificate Authority
G2	Refers to the legacy generation of the Peppol PKI
G3	Refers to the next generation of the Peppol PKI
PKI	Public Key Infrastructure
SBD	Standard Business Document
SMK	Test instance of the SML
SML	Service Metadata Locator
SMP	Service Metadata Publisher
SP	Service Provider
SUT	System Under Test
UI	User Interface

*Table 1 glossary*

### 1.2 Process Overview

To execute a Peppol Process within the Peppol network, there are several capabilities that the SPs must have. The Testbed makes it easier to verify these capabilities through a structured predefined testing process.

To achieve this, three test suites for PKI Migration Testing are offered by Peppol, based on the AP's configuration certificate generation. All test suites require the completion of test cases that verify the SP's ability to operate and communicate through the Peppol network, with APs that are configured with either the old or the new PKI infrastructure, according to the Peppol specifications for their Access Points (APs).

This document provides detailed information on the testing process of the PKI Complete Migration Test Suite.<sup>1</sup>

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<sup>1</sup> For the PKI Reception Migration test suite and the PKI Submission Migration test suite you can consult the documents titled "PKI Reception Migration Testing User Guide" and "PKI Submission Migration Testing User Guide", which can be found in each testing environment's downloads section.

## 2 Prerequisites and preparation

### 2.1 Prerequisites

SPs must meet the following requirements before doing any testing.

#### 2.1.1 Peppol PKI AP Test Certificate

SPs are authenticated to the Peppol Testbed using PKI client authentication. As a result, the SP must obtain a Peppol PKI AP test certificate (G2 or G3) and import it into their browser's keystore.

#### 2.1.2 Access Point deployment

SPs must have an AP deployed; as a result, they need the following:

- An AS4 URL available – must refer to HTTPS.
- An AP must be accessible over the Internet.
- An AP must implement HTTPS with certificate chains to Certificate Authorities (CAs), which are trusted by Peppol. Self-signed certificates are considered non-compliant and will not be accepted when using the Testbed.
- The AP must have installed the same Peppol PKI AP test certificate used for the client authentication to the Testbed.
  - If you authenticated to the Testbed with a G2 certificate your AP must also be operated with a G2 certificate.
  - If you authenticated to the Testbed with a G3 certificate your AP must also be operated with a G3 certificate.
- Participant identifiers intended for message reception during testing must be correctly registered in a Peppol SMP.

### 2.2 Supported browsers

We can only guarantee that the Testbed website behaves in the correct manner if you are using any of the below web browsers:

- Google Chrome, version 100.0 and above
- Firefox, version 99.01 and above
- Microsoft Edge, version 101.0 and above

## 2.3 Preparation

A Peppol PKI AP Test Certificate must be installed in your browser before visiting the PKI Migration test suites for the first time.

Client certificate authentication must be setup in your browser according to the following instructions:

[Windows Google Chrome](#)

[Windows Mozilla Firefox](#)

[OS-X Generic](#)

After installing the PKI certificates, go to <https://www.testbed.peppol.org/>, which is the URL of the production Testbed.

When the browser prompts you to identify yourself with a certificate; choose your Peppol PKI AP test certificate.

The Testbed includes a set of available test suites that are enabled or disabled based on the certificate type imported by the user. You will only have access to test suites compatible with the currently imported certificate. In case of needing to use a disabled test suite (one that is not enabled by your current imported certificate type) you need to clear the cookies in your browser to reset your session and import a certificate that corresponds to the test suite you want to use.

Instructions on clearing browser cookies can be found here:

[Windows Google Chrome](#)

[Windows Mozilla Firefox<sup>2</sup>](#)

[Windows Microsoft Edge<sup>3</sup>](#)

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<sup>2</sup> In some cases when using Mozilla Firefox, even after clearing the cookies the browser does not trigger the certificate selection prompt. If that is the case, you should navigate to the browser settings > “Privacy & Security” and find the “Certificates” section. By clicking on the “View Certificates” option, a certificate manager window will pop-up. In the “Authentication Decisions” tab select the certificate you used for login into Testbed and press “Delete”. Revisit the Testbed page and login using your desired certificate.

<sup>3</sup> In some cases when using Microsoft Edge, even after clearing the cookies the browser does not trigger the certificate selection prompt. If that is the case, you should click on the lock icon on the left side of the URL bar. Select “Your certificate choices” option, and then click on “Reset certificate choices”. A “Reset certificate choices” window will show up on your screen. Select “Reset choices” and refresh the page. You can now login using your desired certificate.

### 3 PKI Migration Testing

The Testbed offers three PKI Migration testing options:

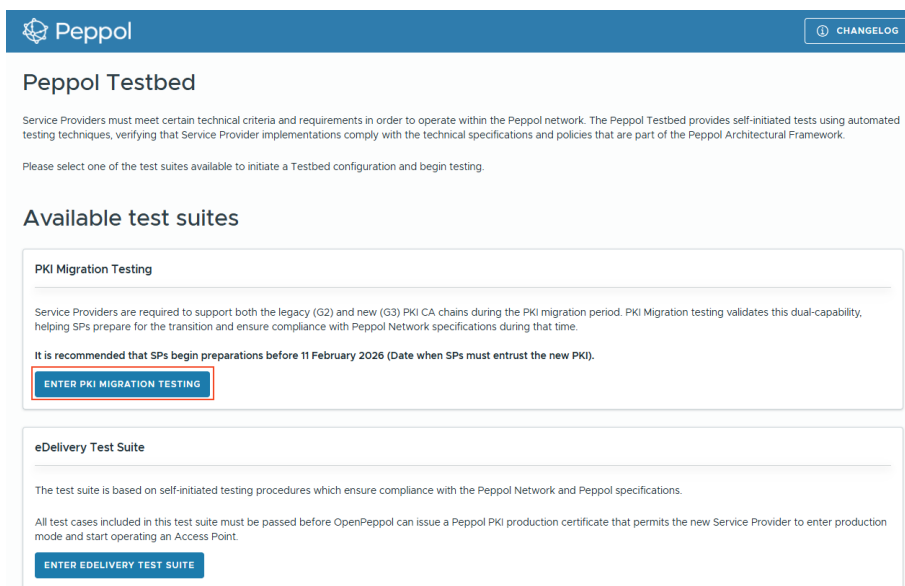
- **PKI Dual-Reception Migration** test suite, which verifies that an SP can receive messages from both the legacy (G2) and new (G3) PKIs while still operating with a G2 certificate.
- **PKI Submission Migration** test suite, which verifies that an SP can send messages using a G3 certificate.
- **PKI Complete Migration** test suite, which includes reception and submission test cases designed to support the full migration to operating with a G3 certificate.

All three test suites are available in the Testbed. However, to execute a given test suite, the tester must log in with the corresponding certificate (G2 for the Reception Migration suite, G3 for the Complete Migration and Submission Migration test suites).

The following sections describe in detail the testing process for the PKI Complete Migration test suite. For information about the PKI Dual-Reception Migration test suite or the PKI Submission Migration test suite, please refer to the corresponding documents.

The PKI Complete Migration test suite is used to help evaluate new AP deployments and ensure compliance with Peppol. The suite is based on self-initiated tests that an end user of the SP system chooses to run. The SP end user enrolls in the test suite, selects which test cases to run, and reviews the results from the from the Testbed's user interface.

To create a PKI Migration testing configuration, a user must first select “ENTER PKI MIGRATION TESTING” in the landing page, as illustrated in Figure 1.



Peppol Testbed

Service Providers must meet certain technical criteria and requirements in order to operate within the Peppol network. The Peppol Testbed provides self-initiated tests using automated testing techniques, verifying that Service Provider implementations comply with the technical specifications and policies that are part of the Peppol Architectural Framework.

Please select one of the test suites available to initiate a Testbed configuration and begin testing.

#### Available test suites

**PKI Migration Testing**

Service Providers are required to support both the legacy (G2) and new (G3) PKI CA chains during the PKI migration period. PKI Migration testing validates this dual-capability, helping SPs prepare for the transition and ensure compliance with Peppol Network specifications during that time.

It is recommended that SPs begin preparations before 11 February 2026 (Date when SPs must entrust the new PKI).

**ENTER PKI MIGRATION TESTING**

**eDelivery Test Suite**

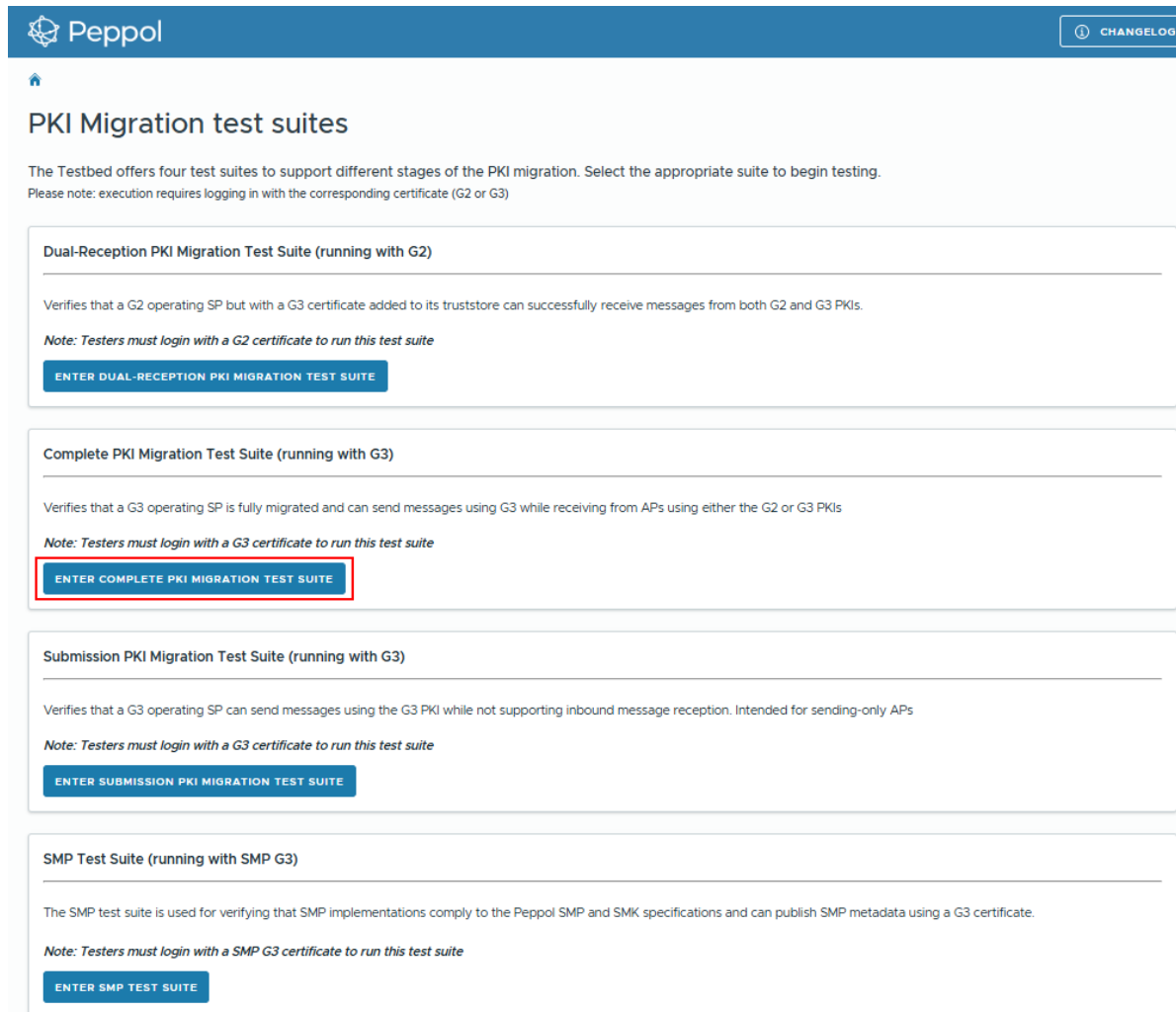
The test suite is based on self-initiated testing procedures which ensure compliance with the Peppol Network and Peppol specifications.

All test cases included in this test suite must be passed before OpenPeppol can issue a Peppol PKI production certificate that permits the new Service Provider to enter production mode and start operating an Access Point.

**ENTER EDELIVERY TEST SUITE**

Figure 1 Testbed Landing Page

Then after the user is navigated to the “PKI Migration Testing” page, the user must select the “ENTER PKI MIGRATION TEST SUITES FOR G3” option, in order to enter the PKI Migration testing environment (for G3). The UI interface is illustrated in Figure 2.



**Peppol** CHANGELOG

## PKI Migration test suites

The Testbed offers four test suites to support different stages of the PKI migration. Select the appropriate suite to begin testing.  
Please note: execution requires logging in with the corresponding certificate (G2 or G3)

**Dual-Reception PKI Migration Test Suite (running with G2)**

Verifies that a G2 operating SP but with a G3 certificate added to its truststore can successfully receive messages from both G2 and G3 PKIs.

*Note: Testers must login with a G2 certificate to run this test suite*

**ENTER DUAL-RECEPTION PKI MIGRATION TEST SUITE**

**Complete PKI Migration Test Suite (running with G3)**

Verifies that a G3 operating SP is fully migrated and can send messages using G3 while receiving from APs using either the G2 or G3 PKIs

*Note: Testers must login with a G3 certificate to run this test suite*

**ENTER COMPLETE PKI MIGRATION TEST SUITE**

**Submission PKI Migration Test Suite (running with G3)**

Verifies that a G3 operating SP can send messages using the G3 PKI while not supporting inbound message reception. Intended for sending-only APs

*Note: Testers must login with a G3 certificate to run this test suite*

**ENTER SUBMISSION PKI MIGRATION TEST SUITE**

**SMP Test Suite (running with SMP G3)**

The SMP test suite is used for verifying that SMP implementations comply to the Peppol SMP and SMK specifications and can publish SMP metadata using a G3 certificate.

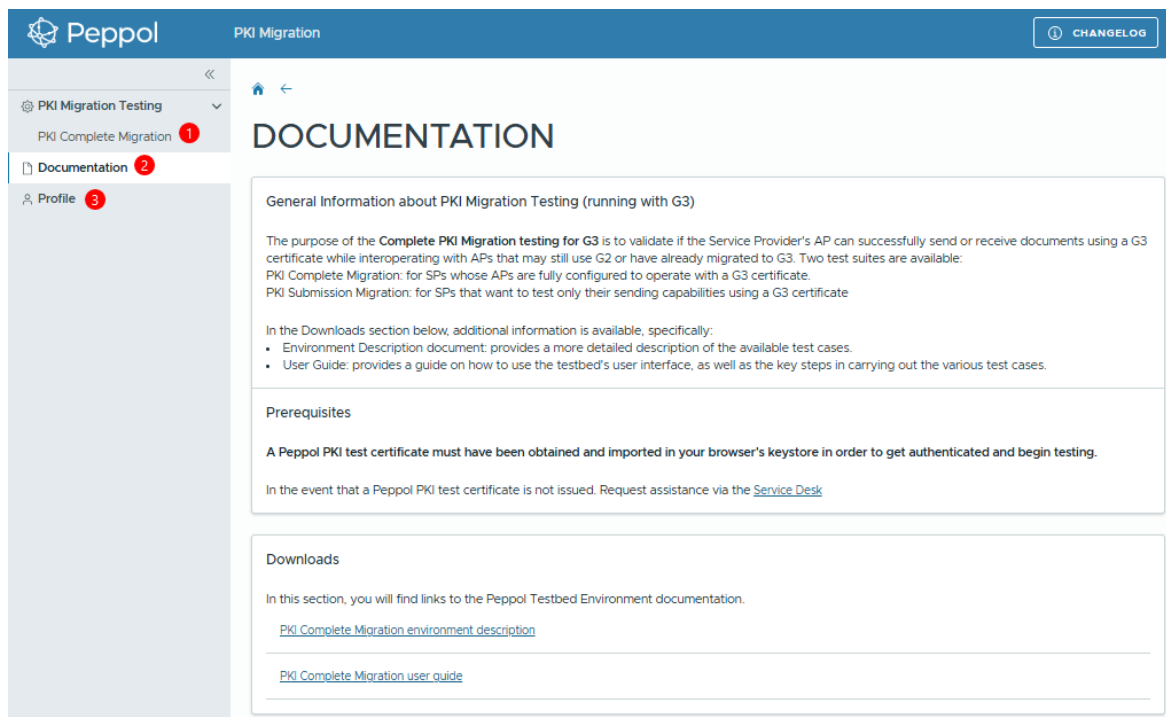
*Note: Testers must login with a SMP G3 certificate to run this test suite*

**ENTER SMP TEST SUITE**

Figure 2 PKI Migration Testing page

## 3.1 PKI Complete Migration Test Suite

When the PKI Migration test configuration is created, the user is navigated to the documentation page as shown in Figure 3.

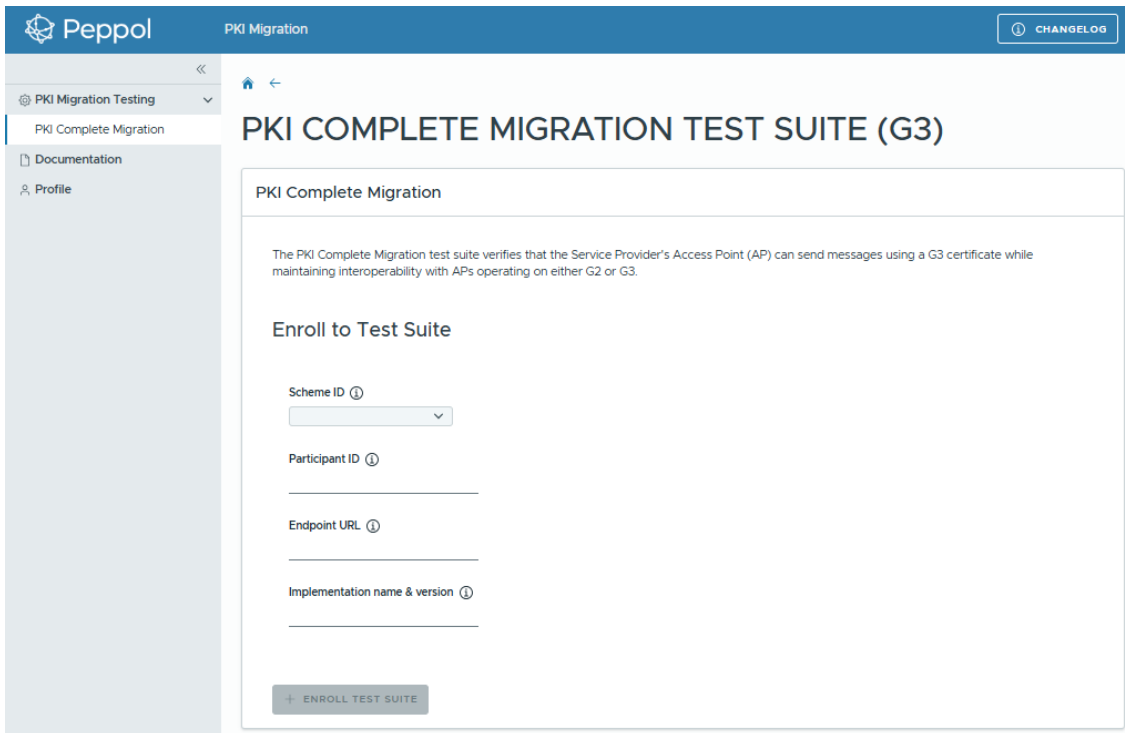


*Figure 3 UI overview after PKI Migration configuration*

The UI consists of the following pages (as shown in Figure 3):

1. PKI Complete Migration
2. Documentation
3. Profile

The PKI Complete Migration page (shown in Figure 4) is used to enroll to the PKI Complete Migration test suite.



The screenshot shows the Peppol web interface for PKI Migration. The top navigation bar includes the Peppol logo, the text 'PKI Migration', and a 'CHANGELOG' button. A left sidebar contains a menu with 'PKI Migration Testing' (selected), 'PKI Complete Migration', 'Documentation', and 'Profile'. The main content area is titled 'PKI COMPLETE MIGRATION TEST SUITE (G3)'. Below the title, there is a section 'PKI Complete Migration' with a descriptive paragraph: 'The PKI Complete Migration test suite verifies that the Service Provider's Access Point (AP) can send messages using a G3 certificate while maintaining interoperability with APs operating on either G2 or G3.' This is followed by an 'Enroll to Test Suite' section containing four input fields: 'Scheme ID' (a dropdown menu), 'Participant ID', 'Endpoint URL', and 'Implementation name & version'. At the bottom of this section is a button labeled '+ ENROLL TEST SUITE'.

*Figure 4 PKI Complete Migration test suite enrollment*

After enrolling to the PKI Complete Migration test suite, the user can choose test cases to execute, as shown in Figure 5, label 1. As illustrated in Figure 5, label 2, the user may also view details about the enrolled configuration.

**Available test cases** 1

Select test case to see more details

G2 - Valid certificate message reception	Paused
G2 - Invalid certificate message reception	Paused
G3 - Valid certificate message reception	Paused
G3 - Invalid certificate message reception	Paused
G3 message submission with G2 SignalMessage reception	Paused
G3 message submission with G3 SignalMessage reception	Paused

Enrolled configuration

Participant	9922:peppol-tester-subca-g3-sandbox
Endpoint URL	https://sut-ap.testbedng.sandbox.peppol.org/rcv5
Implementation name & version	PKI MIGRATION DEMO

## G2 - Valid certificate message reception

Paused

The Testbed will generate an SBD containing a **BIS Billing 3.0-compliant Invoice** and send it to the Access Point under test. This message will be **signed with a valid PEPPOL G2 certificate** and **encrypted with the receiver's registered certificate** (MUST be a G3 certificate).

The transaction will be addressed to **9922:peppol-tester-subca-g3-sandbox** from **9922:OPTBCNTRLSB1001**

To properly receive the AS4 message, the enrolled participant **MUST be registered in your SMP** with the capability to receive **BIS Billing 3.0-based Invoices** through **poacc:billing:3.0 (busdox)**.

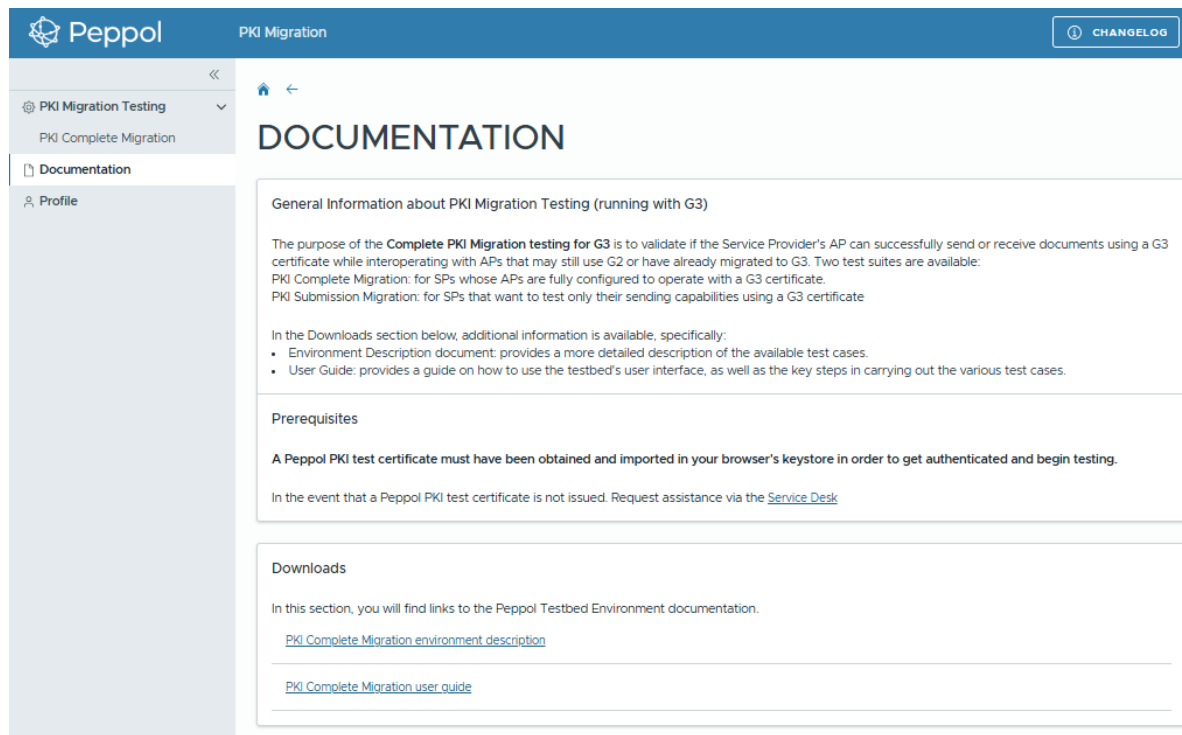
Document Type ID: `busdox-docid-gns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-2:Invoice#urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0:2.1`  
 Process ID: `cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0`

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

▶ START

Figure 5 Example of PKI Complete Migration test case selection

The Documentation page (shown in Figure 6) collects and makes available useful links and resources (e.g., environment documentations, user guides, etc.).



**DOCUMENTATION**

General Information about PKI Migration Testing (running with G3)

The purpose of the **Complete PKI Migration testing for G3** is to validate if the Service Provider's AP can successfully send or receive documents using a G3 certificate while interoperating with APs that may still use G2 or have already migrated to G3. Two test suites are available:

- PKI Complete Migration: for SPs whose APs are fully configured to operate with a G3 certificate.
- PKI Submission Migration: for SPs that want to test only their sending capabilities using a G3 certificate

In the Downloads section below, additional information is available, specifically:

- Environment Description document: provides a more detailed description of the available test cases.
- User Guide: provides a guide on how to use the testbed's user interface, as well as the key steps in carrying out the various test cases.

**Prerequisites**

A Peppol PKI test certificate must have been obtained and imported in your browser's keystore in order to get authenticated and begin testing.

In the event that a Peppol PKI test certificate is not issued. Request assistance via the [Service Desk](#)

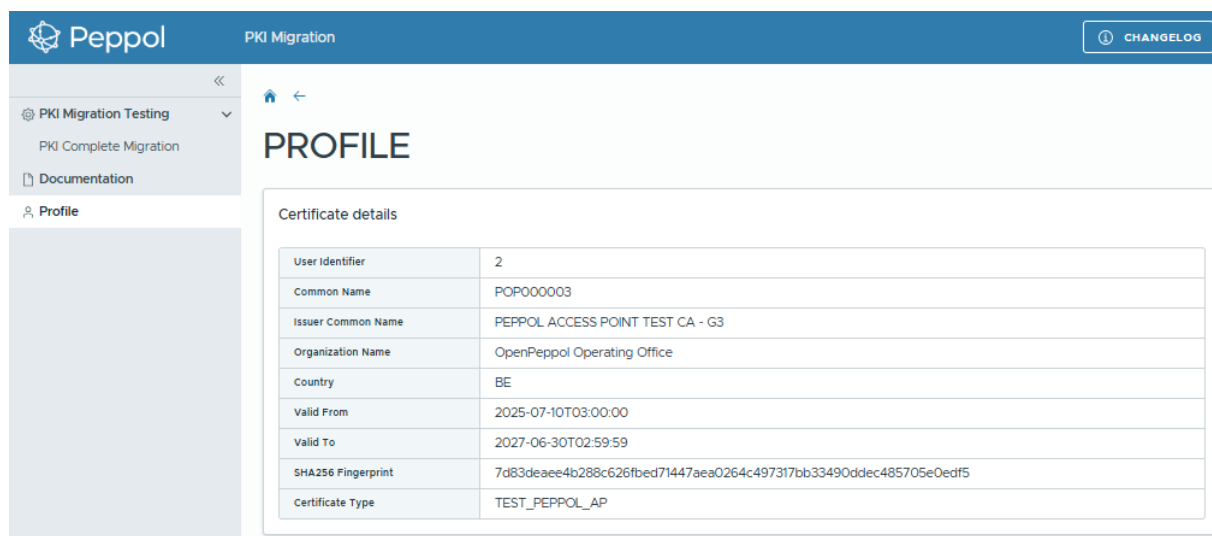
**Downloads**

In this section, you will find links to the Peppol Testbed Environment documentation.

- [PKI Complete Migration environment description](#)
- [PKI Complete Migration user guide](#)

Figure 6 Documentation Page

The Profile page (shown in Figure 7) provides details about the user account that the Testbed creates using the Peppol PKI AP Test Certificate that was imported into the browser.



**PROFILE**

Certificate details

User Identifier	2
Common Name	POPO00003
Issuer Common Name	PEPPOL ACCESS POINT TEST CA - G3
Organization Name	OpenPeppol Operating Office
Country	BE
Valid From	2025-07-10T03:00:00
Valid To	2027-06-30T02:59:59
SHA256 Fingerprint	7d83deae4b288c626fbed71447aea0264c497317bb33490ddec485705e0edf5
Certificate Type	TEST_PEPPOL_AP

Figure 7 Profile Page

### 3.1.1 PKI Complete Migration Test Suite Walkthrough

This part aims to show you how to use and complete the PKI Complete Migration test suite. This part requires that you have correctly setup your browser by installing a Peppol PKI AP test certificate as specified in section 2.3.

Navigate to <https://www.testbed.peppol.org/> after installing a Peppol PKI AP test certificate in your browser and select the PKI Migration test suite from the landing page, as shown in Figure 1.

If this is your first time using the PKI Complete Migration test suite, you must first enroll in the test suite by providing the following information:

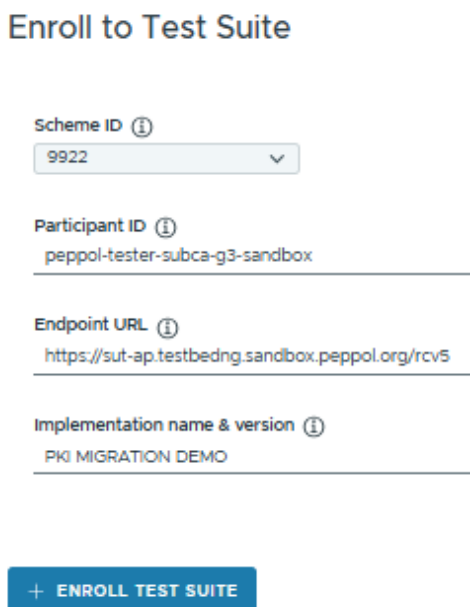
**Participant ID and Scheme ID:** Give a valid participant identifier. All the test cases available in the test suite will be carried out by using these identifiers.

**Endpoint URL:** The participant's AS4 endpoint URL

**Implementation name & version:** Give a name and version for your AP implementation.

After filling in the information, click the “ENROLL TEST SUITE” button.

An example filled-in the enrollment form is shown in Figure 8.



The screenshot shows a web form titled "Enroll to Test Suite". It contains four input fields, each with an information icon (i) to its right:

- Scheme ID:** A dropdown menu with "9922" selected.
- Participant ID:** A text input field containing "peppol-tester-subca-g3-sandbox".
- Endpoint URL:** A text input field containing "https://sut-ap.testbedng.sandbox.peppol.org/rcv5".
- Implementation name & version:** A text input field containing "PKI MIGRATION DEMO".

Below the form is a blue button with a white plus sign and the text "ENROLL TEST SUITE".

*Figure 8 Example AP filled-in form*

You will be presented with the available test cases for this test suite once you have successfully enrolled. Figure 9 illustrates this.

The following are the test cases included in the PKI Complete Migration test suite:

- G2 - Valid certificate message reception

- G2 - Invalid certificate message reception
- G3 - Valid certificate message reception
- G3 - Invalid certificate message reception
- G3 message submission with G2 SignalMessage reception
- G3 message submission with G3 SignalMessage reception

It's worth noting that the PKI Complete Migration test suite's test cases don't have to be performed in order. Instead, every test case is ready to be run at any moment. The sole restriction is that **only one test case may run at a time**.

Available test cases	
Select test case to see more details	
G2 - Valid certificate message reception	Paused
G2 - Invalid certificate message reception	Paused
G3 - Valid certificate message reception	Paused
G3 - Invalid certificate message reception	Paused
G3 message submission with G2 SignalMessage reception	Paused
G3 message submission with G3 SignalMessage reception	Paused

*Figure 9 PKI Complete Migration available test cases*

Figure 10 provides a complete visual representation of each test case UI element. As shown in Figure 10, label 2, each test case contains a title, a status, and a description.

When conducting each test case, make sure to follow the test case description. You can start a test case by pressing the "Start" button showcased in Figure 10, label 3. The configuration created by the user during the test suite enrollment is shown in Figure 10, label 4. As illustrated in Figure 10, label 5, audit logs of events are available that comprise the timing of the occurrence, the action done, a description and a status. Finally, if you wish to re-enroll in a new PKI Complete Migration test suite configuration and reset the current test suite and all its progress, select the "RESET TEST SUITE" button (Figure 10, label 6) and re-enroll in a new test suite.

PKI Complete Migration
RESET TEST SUITE

The PKI Complete Migration test suite is intended to test that the Service Provider's Access Point implementation (configured with a G3 certificate) adheres to the Peppol Network specifications related to the PKI infrastructure migration.

**Available test cases**  
Select test case to see more details

G2 - Valid certificate message reception	Paused
G2 - Invalid certificate message reception	Paused
G3 - Valid certificate message reception	Paused
G3 - Invalid certificate message reception	Paused
G3 message submission with G2 SignalMessage reception	Paused
G3 message submission with G3 SignalMessage reception	Paused

Enrolled configuration

Participant	9922:peppol-tester-subca-g3-sandbox
Endpoint URL	https://sut-ap.testbeding.sandbox.peppol.org/rcv5
Implementation name & version	PKI MIGRATION DEMO

### G2 - Valid certificate message reception Paused

The Testbed will generate an SBD containing a BIS Billing 3.0-compliant Invoice and send it to the Access Point under test. This message will be signed with a valid PEPPOL G2 certificate and encrypted with the receiver's registered certificate (MUST be a G3 certificate).

The transaction will be addressed to **9922:peppol-tester-subca-g3-sandbox** from **9922:OPTBCNTRL581001**

To properly receive the AS4 message, the enrolled participant **MUST be registered in your SMP with the capability to receive BIS Billing 3.0-based Invoices through poacc:billing:3.0 (busdox)**.

Document Type ID: busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2:invoice#urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0:2.1  
Process ID: cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0

Refers to the certificate published in the SMP for the registered capability of the receiver participant.

▶ START

### Audit Log


Event Time	Action	Description	Test Case Status
			

Figure 10 Test case overview

### 3.1.1.1 G2 - Valid certificate message reception

In the “**G2 - Valid certificate message reception**” test case, the Testbed environment will generate an SBD artifact containing a BIS Billing 3.0 Invoice payload and send it to the SUT AP using eDelivery. The AS4 message will be digitally signed with a valid G2 certificate.

The participant’s addressing information will be dynamically discovered via the SMK/SMP. The transaction will be addressed to the receiver identifier provided during the test suite enrollment (participant id and scheme id). To properly receive the message sent by the testbed AP, you must register your enrolled participant to a Peppol SMP, with the capabilities of receiving BIS Billing 3.0 Invoices. More specifically:

**Document identifier:**

busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1

**Process identifier:**

cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0

**Transport profile:** AS4 v2

Figure 11, label 1 illustrates an unsuccessful attempt to pass the test case, which results in an error. The error occurred due to the absence of the appropriate document type receiving capability registration in a Peppol SMP.

Figure 11, label 2 shows the successful reception of the message through the eDelivery network and passing the test.

Available test cases  
Select test case to see more details

G2 - Valid certificate message reception	Passed
G2 - Invalid certificate message reception	Failed
G3 - Valid certificate message reception	Failed
G3 - Invalid certificate message reception	Failed
G3 message submission with G2 SignalMessage reception	Failed
G3 message submission with G3 SignalMessage reception	Failed

Enrolled configuration

Participant	9922.peppol-tester-subca-g3-sandbox
Endpoint URL	https://sut-ap.testbeding.sandbox.peppol.org/rcv5
Implementation name & version	PKI MIGRATION DEMO

#### G2 - Valid certificate message reception Passed

The Testbed will generate an SBD containing a BIS Billing 3.0-compliant Invoice and send it to the Access Point under test. This message will be signed with a valid PEPPOL G2 certificate and encrypted with the receiver's registered certificate. (MUST be a G3 certificate).

The transaction will be addressed to 9922.peppol-tester-subca-g3-sandbox from 9922:OPTBCNTRLSB101

To properly receive the AS4 message, the enrolled participant **MUST** be registered in your SMP with the capability to receive BIS Billing 3.0-based Invoices through poacc:billing.3.0 (busdox).

Document Type ID: busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing.3.0:2.1  
 Process ID: cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

▶ START

**Audit Log**

Event Time	Action	Description	Test Case Status
2025-09-12T12:50:34	START	Transaction (with instance identifier POPO000003-24-20250912T125036) to testing AP failed to be delivered. Error: Failed to verify the SMP certificate generation. The participant iso6523-actorid-ups:9922.peppol-tester-subca-g3-sandbox is expected to be published via an SMP that has been configured with a G3 SMP certificate. If this issue persists, please contact the OpenPeppol Service Desk for support.	Failed <span style="color: red;">❌</span>
2025-09-12T12:50:51	RESTART	Transaction (with instance identifier POPO000003-25-20250912T125051) to testing AP was sent without any reported errors.	Passed <span style="color: green;">✅</span>

Figure 11 G2 - Valid certificate message reception example

### 3.1.1.2 G2 - Invalid certificate message reception

In the “**G2 - Invalid certificate message reception**” test case, the Testbed environment will generate an SBD artifact containing a BIS Billing 3.0 Invoice payload and send it to the SUT AP using eDelivery. The AS4 message will be digitally signed with an invalid (revoked) G2 certificate.

The participant’s addressing information will be dynamically discovered via the SMK/SMP. The transaction will be addressed to the receiver identifier provided during the test suite enrollment (participant id and scheme id). To properly receive the message sent by the testbed AP, you must register your enrolled participant to a Peppol SMP, with the capabilities of receiving BIS Billing 3.0 Invoices. More specifically:

**Document identifier:**

```
busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-  
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:bill  
ing:3.0::2.1
```

**Process identifier:**

```
cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0
```

**Transport profile:** AS4 v2

Figure 11, label 1 illustrates an unsuccessful attempt to pass the test case, which results in an error. The error occurred due to the absence of the appropriate document type receiving capability registration in a Peppol SMP.

Figure 12, label 1 illustrates an error as well. This time the error occurred due to the unexpected behavior of the SUT AP. (The message should be rejected since the certificate is invalid).

Figure 12, label 2 shows the successful reception of the message through the eDelivery network and passing the test.

**Available test cases**  
Select test case to see more details

G2 - Valid certificate message reception	Passed
<b>G2 - Invalid certificate message reception</b>	Passed
G3 - Valid certificate message reception	Paused
G3 - Invalid certificate message reception	Paused
G3 message submission with G2 SignalMessage reception	Paused
G3 message submission with G3 SignalMessage reception	Paused

Enrolled configuration

### G2 - Invalid certificate message reception

Passed

The Testbed will generate an SBD containing a **BIS Billing 3.0-compliant Invoice** and send it to the Access Point under test. This message will be signed with an **invalid PEPPOL G2 certificate** and encrypted with the receiver's registered certificate (MUST be a G3 certificate).

The transaction will be addressed to **9922:peppol-tester-subca-g3-sandbox** from **9922:OPTBCNTRL:SB1001**

To properly receive the AS4 message, the enrolled participant **MUST be registered in your SMP** with the capability to receive **BIS Billing 3.0-based Invoices** through **poacc:billing:3.0 (busdox)**.

Document Type ID: `busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2:Invoice#urn:cen.eu:en16931:2017#compliant:urn:fdc:peppol.eu:2017:poacc:billing:3.0:2.1`  
Process ID: `cenb1-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0`

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

**▶ START**

### Audit Log

Event Time	Action	Description	Test Case Status
2025-09-12T16:11:09	START	Transaction (with instance identifier POPO00003-2-20250912T161109) to testing AP was <b>incorrectly accepted</b> , with reason: Transaction successful, no errors reported.	Failed 1
2025-09-12T16:26:09	RESTART	Transaction (with instance identifier POPO00003-3-20250912T162610) to testing AP was <b>correctly rejected</b> , with reason: SMP lookup was successful, but message transmission failed. <b>Error description:</b> [OUTGOING-SBDH-1] Failed to send Peppol message via AS4: AS4_ERROR_MESSAGE_RECEIVED. <b>Error description value 1:</b> [OUTGOING-SBDH-1] AS4 Error: The signature in the Security header intended for the "ebms" SOAP actor, could not be validated by the Security module. - The received Peppol message is signed with a Peppol AP certificate invalid at 2025-09-12T13:26:17.004Z. Rejecting incoming message: Reason: certificate is revoked	Passed 2

Figure 12 G2 - Invalid certificate message reception example

### 3.1.1.3 G3 - Valid certificate message reception

In the “**G3 - Valid certificate message reception**” test case, the Testbed environment will generate an SBD artifact containing a BIS Billing 3.0 Invoice payload and send it to the SUT AP using eDelivery. The AS4 message will be digitally signed with a valid G3.

The participant’s addressing information will be dynamically discovered via the SMK/SMP. The transaction will be addressed to the receiver identifier provided during the test suite enrollment (participant id and scheme id). To properly receive the message sent by the testbed AP, you must register your enrolled participant to a Peppol SMP, with the capabilities of receiving BIS Billing 3.0 Invoices. More specifically:

**Document identifier:**

busdov-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1

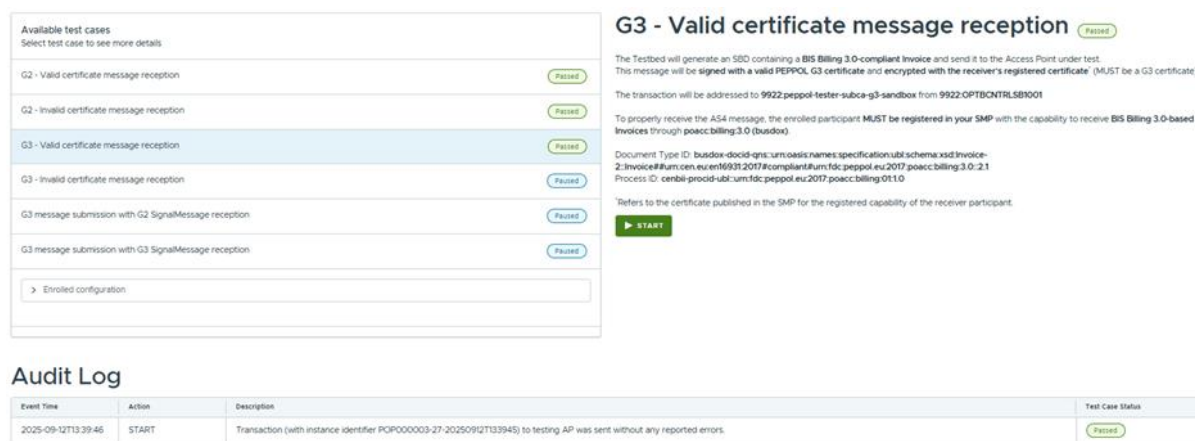
**Process identifier:**

cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0

**Transport profile:** AS4 v2

Figure 11 illustrates an unsuccessful attempt to pass the test case, which results in an error. The error occurred due to the absence of the appropriate document type receiving capability registration in a Peppol SMP.

Figure 13 shows the successful reception of the message through the eDelivery network and passing the test.



The screenshot displays the testbed interface for the 'G3 - Valid certificate message reception' test case. On the left, a list of available test cases is shown, with the selected test case highlighted. The main panel on the right provides detailed information about the test case, including its status (Passed), a description of the test procedure, and the specific document and process identifiers. Below the test case details, an 'Audit Log' table is visible, showing a single event with the action 'START' and a description of the transaction.

Event Time	Action	Description	Test Case Status
2025-09-12T13:39:46	START	Transaction (with instance identifier POPO00003-27-20250912T133946) to testing AP was sent without any reported errors.	Passed

Figure 13 G3 - Valid certificate message reception example

### 3.1.1.4 G3 - Invalid certificate message reception

In the “**G3 - Invalid certificate message reception**” test case, the Testbed environment will generate an SBD artifact containing a BIS Billing 3.0 Invoice payload and send it to the SUT AP using eDelivery. The AS4 message will be digitally signed with an invalid (revoked) G3 certificate.

The participant’s addressing information will be dynamically discovered via the SMK/SMP. The transaction will be addressed to the receiver identifier provided during the test suite enrollment (participant id and scheme id). To properly receive the message sent by the testbed AP, you must register your enrolled participant to a Peppol SMP, with the capabilities of receiving BIS Billing 3.0 Invoices. More specifically:

**Document identifier:**

```
busdox-docid-qns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-  
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:bill-  
ing:3.0::2.1
```

**Process identifier:**

```
cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:01:1.0
```

**Transport profile:** AS4 v2

Figure 11 illustrates an unsuccessful attempt to pass the test case, which results in an error. The error occurred due to the absence of the appropriate document type receiving capability registration in a Peppol SMP.

Figure 12, label 1 illustrates an error as well. This time the error occurred due to the unexpected behavior of the SUT AP. (The message should be rejected since the certificate is invalid).

Figure 14 shows the successful reception of the message through the eDelivery network and passing the test.

Available test cases	
Select test case to see more details	
G2 - Valid certificate message reception	Passed
G2 - Invalid certificate message reception	Passed
G3 - Valid certificate message reception	Passed
G3 - Invalid certificate message reception	Passed
G3 message submission with G2 SignalMessage reception	Failed
G3 message submission with G3 SignalMessage reception	Failed
<input type="button" value="Enrolled configuration"/>	

## G3 - Invalid certificate message reception Passed

The Testbed will generate an SED containing a **BIS Billing 3.0-compliant Invoice** and send it to the Access Point under test. This message will be **signed with an invalid PEPPOL G3 certificate and encrypted with the receiver's registered certificate** (MUST be a G3 certificate).

The transaction will be addressed to **9922:peppol-tester-subca-g3-sandbox** from **9922:OPTBCNTRLSB1001**

To properly receive the AS4 message, the enrolled participant **MUST be registered in your SMP** with the capability to receive **BIS Billing 3.0-based Invoices** through **poacc:billing.3.0 (busdox)**.

Document Type ID: **busdox-doid-gns:urn:oasis:names:specification:ubl:schema:xsd:Invoice-2:Invoice#urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0:2.1**  
Process ID: **cenbii-procid-ubl:urn:fdc:peppol.eu:2017:poacc:billing:011.0**

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

## Audit Log

Event Time	Action	Description	Test Case Status
2025-09-12T13:40:13	START	Transaction (with instance identifier POPO00003-28-20250912T134013) to testing AP was <b>correctly rejected</b> , with reason: SMP lookup was successful, but message transmission failed. <b>Error description:</b> [OUTGOING-SBDH-12] Failed to send Peppol message via AS4: AS4_ERROR_MESSAGE_RECEIVED. <b>Error description value 1:</b> [OUTGOING-SBDH-12] AS4 Error: The signature in the Security header intended for the "ebms" SOAP actor, could not be validated by the Security module. - The received Peppol message is signed with a Peppol AP certificate invalid at 2025-09-12T13:40:13.919Z. Rejecting incoming message. Reason: certificate is revoked	Passed

Figure 14 G3 - Invalid certificate message reception example

### 3.1.1.5 G3 message submission with G2 SignalMessage reception

In the “**G3 message submission with G2 SignalMessage reception**” test case, the SUT AP is expected to send the prepared SBD containing a BIS Billing 3.0 Invoice payload to the Testbed AP. The AS4 message must be signed with a valid G3 certificate. The SUT must perform a BIS Billing 3.0 Invoice (busdox) capability lookup before submission. The document is generated by the Testbed and is expected to be send according to the test case’s instructions provided by the Testbed, that can be found in the test case description, and “**START**” audit log instructions. The sender will be the participant provided during enrollment (participant id and scheme id), and the receiver will be the Testbed’s environment AP. Start the test case, and read the information given in the “**START**” audit log. Before sending the file, do not alter it in any way, as the Testbed may have trouble correlating it appropriately.

During the AS4 message exchange, the Testbed replies to the SUT with a SignalMessage, that has been signed using a valid G2 certificate. While the migration window is still open (up to T2) the SUT AP’s expected behavior is to accept the transaction, so that the exchange is concluded.

Figure 15, illustrates a successful transaction.

Available test cases	
Select test case to see more details	
G2 - Valid certificate message reception	Passed
G2 - Invalid certificate message reception	Passed
G3 - Valid certificate message reception	Passed
G3 - Invalid certificate message reception	Passed
G3 message submission with G2 SignalMessage reception	Passed
G3 message submission with G3 SignalMessage reception	Paused
> Enrolled configuration	

#### G3 message submission with G2 SignalMessage reception Passed

The Access Point under test **MUST** send the document supplied by the Testbed, signed with a PEPPOL G3 certificate and encrypted with the receiver’s registered certificate (G2).

Upon successful reception, the Testbed will respond with a Signal Message that is signed with a PEPPOL G2 certificate.

In this test, the sender is **9922:peppol-tester-subce-g3-sandbox** and the receiver is **9922:OPTBCNTRLSB5001**

After starting the test case, a ZIP package will become available in the Audit Log section (bottom of the page). It contains the document required to complete this test.

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

**▶ START**

#### Audit Log

Event Time	Action	Description	Test Case Status
2025-09-12T13:44:06	START	Here is a prepared <a href="#">ZIP package</a> , download it locally and extract its contents. It contains one or more files that are ready to be sent by your Access Point implementation. Please send them in any sequence you like and be observant of any errors that would occur. Do not manipulate the files in any way before sending them, otherwise the Test Bed might experience problems correlating them appropriately.	Running
2025-09-12T13:46:55	RECEIVE	Received file: POPO00003-29-20250912T134406. It matched correctly and was expected to be seen.	Passed

Figure 15 G3 message submission with G2 SignalMessage reception example

### 3.1.1.6 G3 message submission with G3 SignalMessage reception

In the “**G3 message submission with G3 SignalMessage reception**” test case, the SUT AP is expected to send the prepared SBD containing a BIS Billing 3.0 Invoice payload to the Testbed AP. The AS4 message must be signed with a valid G3 certificate. The SUT must perform a BIS Billing 3.0 Invoice (busdox) capability lookup before submission. The document is generated by the Testbed and is expected to be send according to the test case’s instructions provided by the Testbed, that can be found in the test case description, and “**START**” audit log instructions. The sender will be the participant provided during enrollment (participant id and scheme id), and the receiver will be the Testbed’s environment AP. Start the test case, and read the information given in the “**START**” audit log. Before sending the file, do not alter it in any way, as the Testbed may have trouble correlating it appropriately.

During the AS4 message exchange, the Testbed replies to the SUT with a SignalMessage, that has been signed using a valid G3 certificate. The SUT AP’s expected behavior is to accept the transaction, so that the exchange is concluded.

Figure 16 illustrates a successful transaction. When the test suite is complete (all test cases have been passed) you may also download a PDF report as shown in Figure 16, label 1.

Available test cases	TEST SUITE COMPLETED
Select test case to see more details	
G2 - Valid certificate message reception	Passed
G2 - Invalid certificate message reception	Passed
G3 - Valid certificate message reception	Passed
G3 - Invalid certificate message reception	Passed
G3 message submission with G2 SignalMessage reception	Passed
G3 message submission with G3 SignalMessage reception	Passed
Enrolled configuration	
<span style="border: 1px solid red; padding: 2px;">DOWNLOAD REPORT</span>	

#### G3 message submission with G3 SignalMessage reception

The Access Point under test **MUST** send the document supplied by the Testbed, signed with a PEPPOL G3 certificate and encrypted with the receiver’s registered certificate (G3).

Upon successful reception, the Testbed will respond with a Signal Message that is signed with a PEPPOL G3 certificate.

In this test, the sender is **9922:peppol-tester-subca-g3-sandbox** and the receiver is **9922:OPTBCNTRLSBS5002**

\*After starting the test case, a ZIP package will become available in the Audit Log section (bottom of the page). It contains the document required to complete this test.

\*Refers to the certificate published in the SMP for the registered capability of the receiver participant.

▶ START

Re-execution of passed test cases in a completed test suite is disabled. Please reset the test suite to start over.

#### Audit Log

Event Time	Action	Description	Test Case Status
2025-09-12T13:47:17	START	Here is a prepared ZIP package, download it locally and extract its contents. It contains one or more files that are ready to be sent by your Access Point implementation. Please send them in any sequence you like and be observant of any errors that would occur. Do not manipulate the files in any way before sending them, otherwise the Test Bed might experience problems correlating them appropriately.	Running
2025-09-12T13:47:41	RECEIVE	Received file: POPO00003-30-20250912T134716. It matched correctly and was expected to be seen.	Passed

Figure 16 G3 message Submission with G3 SignalMessage reception example