

Peppol

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Peppol Reporting Test Suite

Reporting BIS Testing User Guide

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1 Introduction

This document provides information related to the Reporting Testing. Its purpose is to demonstrate and to provide a guide on how to use the Testbed User Interface for Reporting BIS testing. It describes the prerequisites as well as the key steps in carrying out the various test cases. The target audience for this document is Service Providers (SPs) that are interested in implementing Peppol Reporting mechanisms and wish to test their implementations by using the Peppol Reporting Test Suite.

1.1 Glossary

Abbreviations used in this document:

Abbreviation	Meaning
SP	Service Provider
AP	Access Point
EUSR	End User Statistics Report
TSR	Transaction Statistics Report
SMP	Service Metadata Publisher
UI	User Interface

Table 1 glossary

1.2 Process Overview

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

To achieve this, a test suite for Reporting BIS testing is offered by Peppol, which requires the completion of two test cases that verify the SP's ability to generate and submit Peppol Reporting BIS documents.

2 Prerequisites and preparation

2.1 Prerequisites

SPs must meet the following requirements before doing any testing.

2.1.1 Peppol PKI Test Certificate

SPs are authenticated to the Reporting Test Suite using PKI client authentication. As a result, the SP must have obtained a Peppol PKI test certificate and have it imported in their browser's keystore.

2.1.2 Access Point deployment

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

- AS4 URL available – must refer to HTTPS
- AP must be accessible over the internet
- AP must implement HTTPS with certificate chains to Certificate Authorities (CAs) which are trusted by Peppol.
- AP must have installed the same Peppol PKI AP test certificate used for the authentication to the Reporting Test Suite

2.2 Supported browsers

We can only guarantee that the Reporting Test Suite 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 (depending on what test you're running) in your browser before visiting the Reporting Test Suite 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](#)

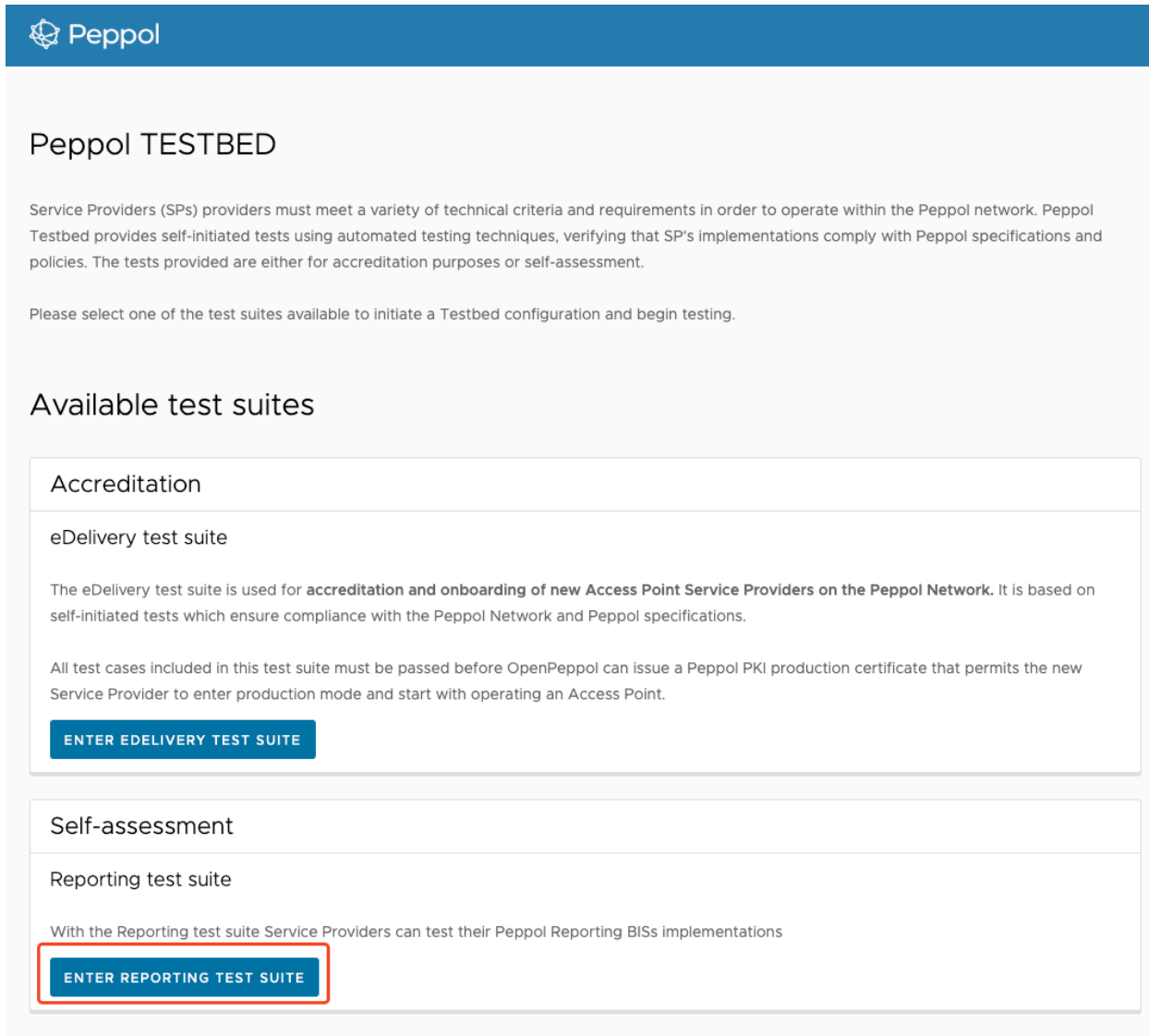
After installing the PKI certificates, go to <https://www.testbed.peppol.org/> which is the URL of the Testbed environment.

The browser will prompt you to identify yourself with a certificate; choose your Peppol PKI AP test certificate.

3 Reporting testing user interface

The Reporting BIS testing used to help evaluate new AP deployments and ensure compliance with the Peppol Reporting BIS specifications. It is based on self-initiated tests that an end-user of the SP system chooses to run. The SP end user enrolls in the reporting test suite, selects which test case to run, and reviews the results from the user interface.

To create a reporting test suite configuration, a user must first select "*ENTER REPORTING TEST SUITE*" in the landing page, as illustrated in Figure 1.



Peppol TESTBED

Service Providers (SPs) providers must meet a variety of technical criteria and requirements in order to operate within the Peppol network. Peppol Testbed provides self-initiated tests using automated testing techniques, verifying that SP's implementations comply with Peppol specifications and policies. The tests provided are either for accreditation purposes or self-assessment.

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

Available test suites

Accreditation

eDelivery test suite

The eDelivery test suite is used for **accreditation and onboarding of new Access Point Service Providers on the Peppol Network**. It is based on self-initiated tests 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 with operating an Access Point.

[ENTER EDELIVERY TEST SUITE](#)

Self-assessment

Reporting test suite

With the Reporting test suite Service Providers can test their Peppol Reporting BISs implementations

[ENTER REPORTING TEST SUITE](#)

Figure 1 Testbed landing page

When the reporting test configuration is created, the user is navigated to the reporting test suite documentation as shown in Figure 2.

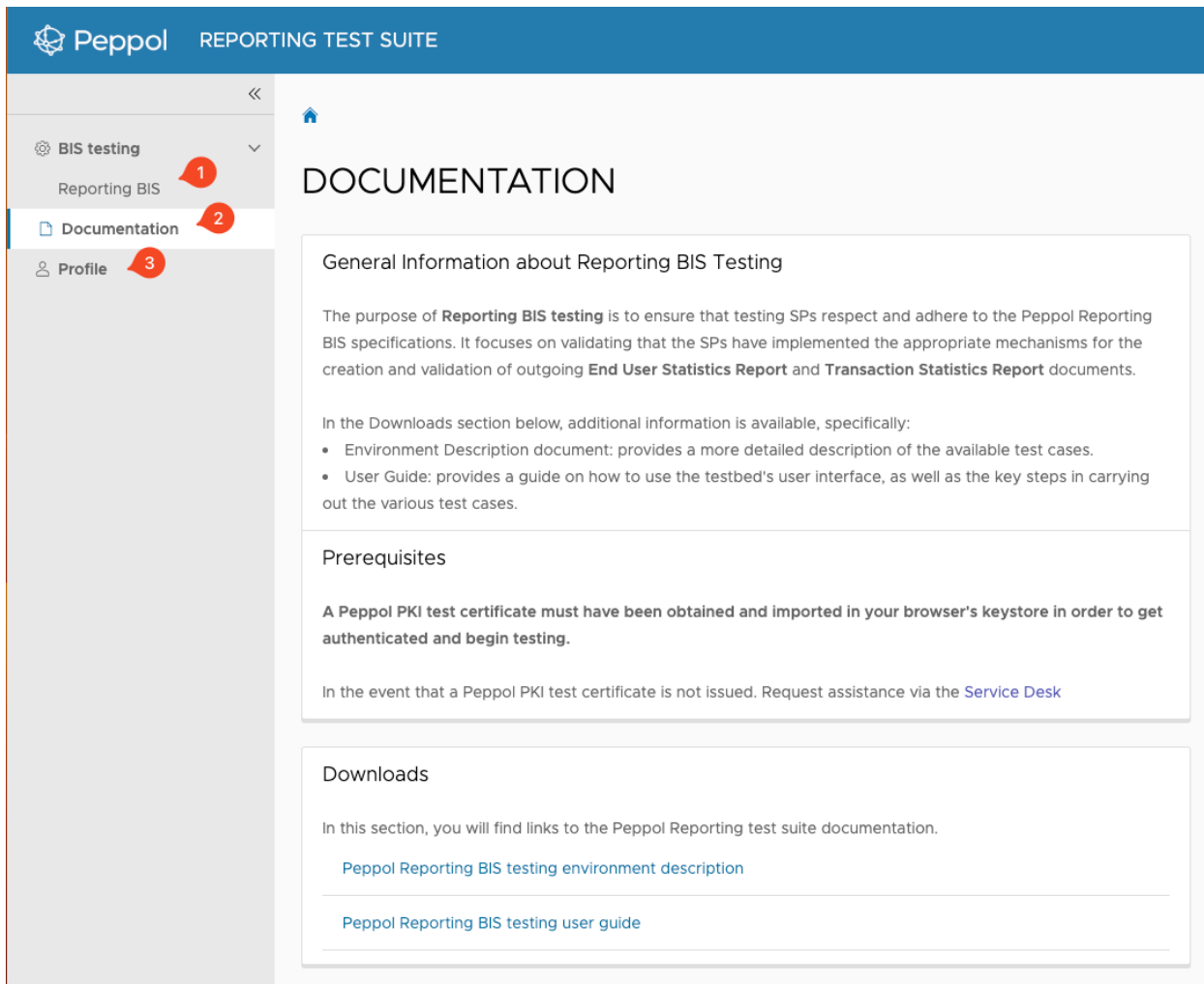
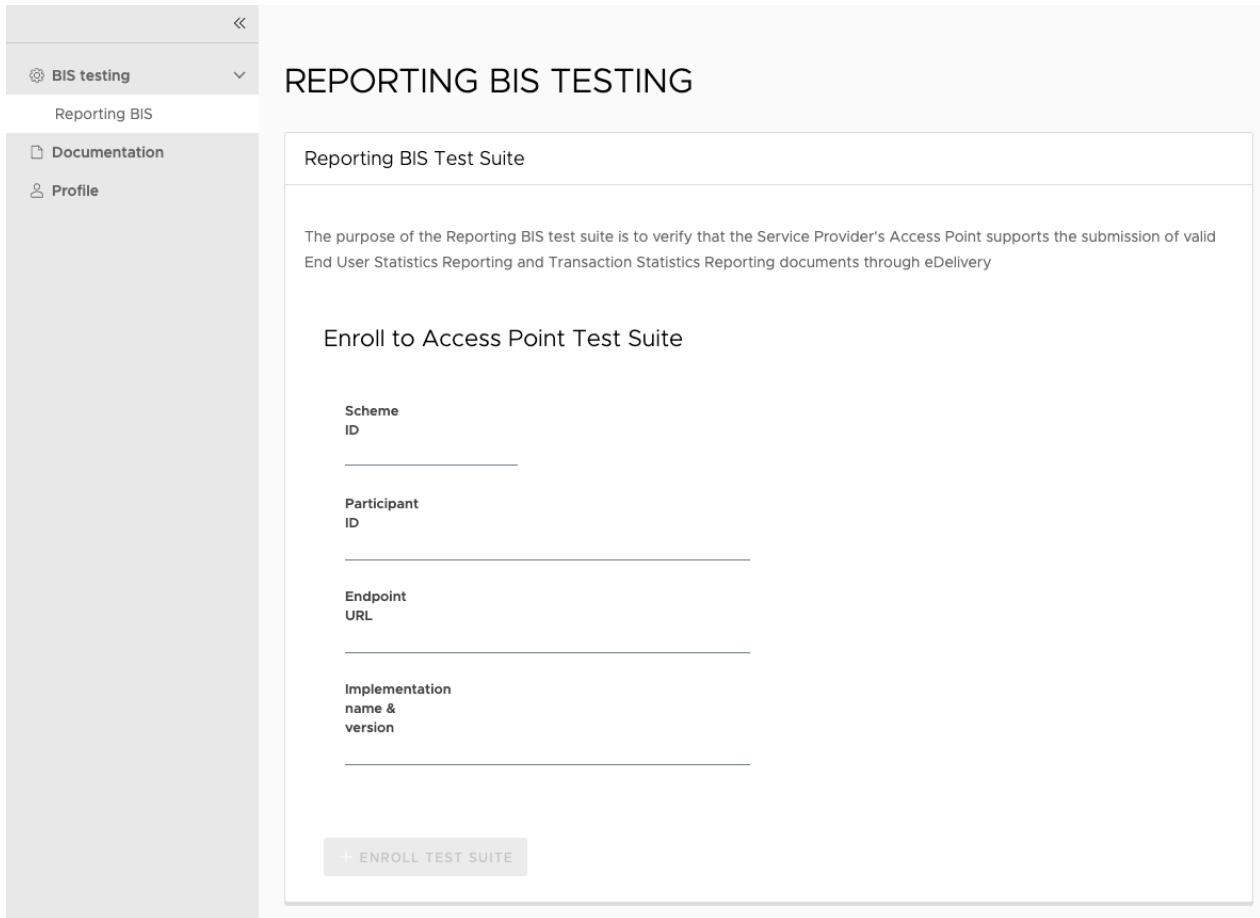


Figure 2 UI overview after entering the reporting test suite (documentation page)

The next section provides a general overview of the UI.

The Reporting test suite UI consists of the following pages (as shown in Figure 2):

1. BIS testing – Reporting BIS test suite
 2. Documentation
 3. Profile
-
1. The Reporting BIS testing (shown in Figure 3) is used to enrol to the Reporting test suite.



The screenshot shows a web interface for the Peppol Reporting BIS Testing User Guide. On the left is a navigation menu with a back arrow, a 'BIS testing' dropdown menu, and three main sections: 'Reporting BIS', 'Documentation', and 'Profile'. The main content area is titled 'REPORTING BIS TESTING' and contains a section for the 'Reporting BIS Test Suite'. Below the title, there is a paragraph explaining the purpose of the test suite. The 'Enroll to Access Point Test Suite' section contains four input fields: 'Scheme ID', 'Participant ID', 'Endpoint URL', and 'Implementation name & version'. At the bottom of this section is a button labeled 'ENROLL TEST SUITE'.

REPORTING BIS TESTING

Reporting BIS Test Suite

The purpose of the Reporting BIS test suite is to verify that the Service Provider's Access Point supports the submission of valid End User Statistics Reporting and Transaction Statistics Reporting documents through eDelivery

Enroll to Access Point Test Suite

Scheme ID

Participant ID

Endpoint URL

Implementation name & version

ENROLL TEST SUITE

Figure 3 reporting test suite enrolment form

After enrolling to the reporting test suite, the user can choose test cases to execute, as shown in Figure 4, label 1. As illustrated in Figure 4, label 2, the user may also view details about the enrolled configuration.

Reporting BIS Test Suite RESET TEST SUITE

The purpose of the Reporting BIS test suite is to verify that the Service Provider's Access Point supports the submission of valid End User Statistics Reporting and Transaction Statistics Reporting documents through eDelivery

Available test cases 1

Select test case to see more details

TC1-Reporting-BIS End User Statistics Report Submission	Paused
TC2-Reporting-BIS Transaction Statistics Report Submission	Paused

Enrolled configuration 2

Participant	9901.ng-test
Domain	REPORTING
Endpoint URL	https://sut-ap.testbedng.sandbox.peppol.eu/as4
Implementation name & version	AP reporting test demo

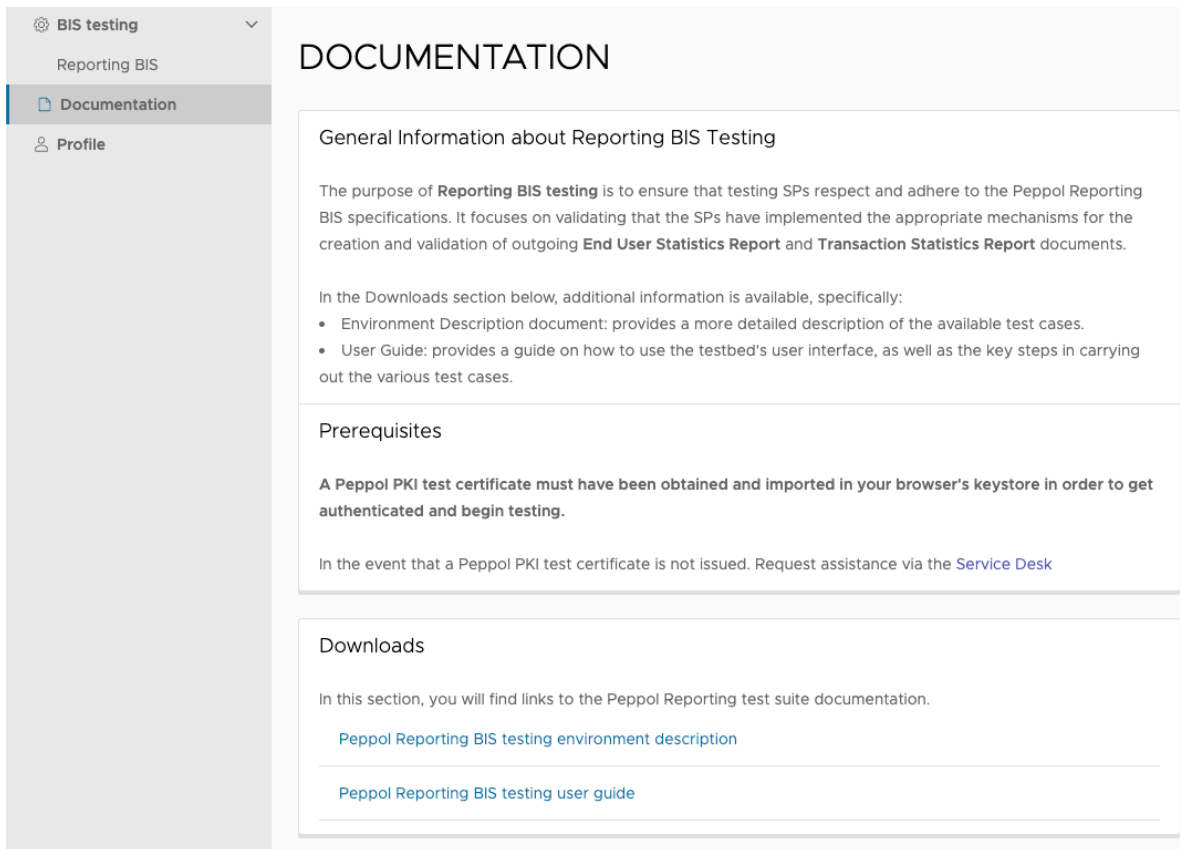
TC1-Reporting-BIS End User Statistics Report Submission Paused

The AccessPoint under test is expected to send an SBD with a Peppol Reporting BIS-compliant **End User Statistics Report** included. The testbed will process the received document accordingly and will pass it through the relevant XSD Schemas and Schematrons. Sender will now be **9901:ng-test**, and receiver will be **9922:NGTBCNTRLSB1001**

▶ START

Figure 4 example of reporting test case execution

2. The Documentation page (shown in Figure 5) collects and makes available useful links and resources (e.g., environment documentation, user guide, etc.)

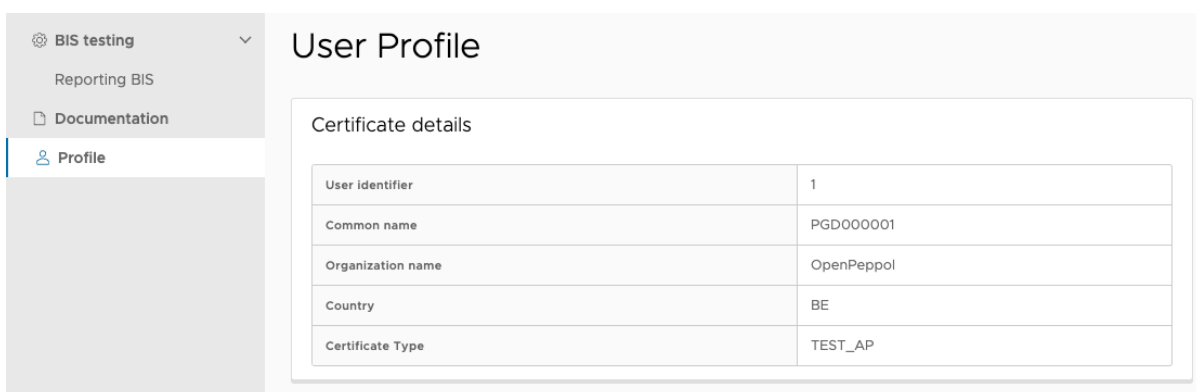


The screenshot shows the 'Documentation' page within the 'Reporting BIS' section. The left sidebar contains navigation links for 'BIS testing', 'Reporting BIS', 'Documentation', and 'Profile'. The main content area is titled 'DOCUMENTATION' and includes the following sections:

- General Information about Reporting BIS Testing**: A paragraph explaining the purpose of Reporting BIS testing and a bulleted list of additional information available in the Downloads section.
- Prerequisites**: A bolded statement that a Peppol PKI test certificate must be obtained and imported into the browser's keystore, followed by a link to the Service Desk for assistance.
- Downloads**: A section with links to the 'Peppol Reporting BIS testing environment description' and 'Peppol Reporting BIS testing user guide'.

Figure 5 Documentation page

- The Profile page (shown in Figure 6) provides details about the user account that the Reporting Test Suite environment creates using the Peppol PKI Test Certificate that was imported into the browser.



The screenshot shows the 'User Profile' page. The left sidebar is the same as in Figure 5, but 'Profile' is selected. The main content area is titled 'User Profile' and contains a 'Certificate details' table:

Certificate details	
User identifier	1
Common name	PGD000001
Organization name	OpenPeppol
Country	BE
Certificate Type	TEST_AP

Figure 6 User profile page

4 Reporting Test Suite Walkthrough

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

4.1 Reporting BIS Test suite

Navigate to <https://www.testbed.peppol.org/reporting> after installing a Peppol Test AP certificate in your browser. The Reporting Test Suite will automatically recognize that it is an AP certificate and load the Reporting test suite page if your browser is set correctly and the certificate is installed.

If this is your first time using the Reporting BIS test suite, you must first enroll 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 & version for your AP implementation

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

An example filled-in the enrolment form is shown in Figure 7

Reporting BIS Test Suite

The purpose of the Reporting BIS test suite is to verify that the Service Provider's Access Point supports the submission of valid End User Statistics Reporting and Transaction Statistics Reporting documents through eDelivery

Enroll to Access Point Test Suite

Scheme ID
9901

Participant ID
ng-test

Endpoint URL
<https://sut-ap.testbedng.sandbox.peppol.eu/as4>

Implementation name & version
AP reporting test demo

[+ ENROLL TEST SUITE](#)

Figure 7 example filled in Reporting test suite enroll form

You will be presented with the available test cases for this test suite once you have successfully enrolled in, as shown in Figure 8.

The following are the test cases included in the Reporting BIS test suite (shown in Figure 9, label 1):

- Reporting BIS End User Statistics Report Submission
- Reporting BIS Transaction Statistics Report Submission

Reporting BIS Test Suite
↻ RESET TEST SUITE

The purpose of the Reporting BIS test suite is to verify that the Service Provider's Access Point supports the submission of valid End User Statistics Reporting and Transaction Statistics Reporting documents through eDelivery

Available test cases
Select test case to see more details

TC1-Reporting-BIS End User Statistics Report Submission Paused

TC2-Reporting-BIS Transaction Statistics Report Submission Paused

> Enrolled configuration

TC1-Reporting-BIS End User Statistics Report Submission

Paused

The AccessPoint under test is expected to send an SBD with a Peppol Reporting BIS-compliant **End User Statistics Report** included. The testbed will process the received document accordingly and will pass it through the relevant XSD Schemas and Schematrons. Sender will now be **9901:ng-test**, and receiver will be **9922:NGTBCNTRLSB1001**

▶ START

Audit Log


Event Time	Action	Description	Status
			

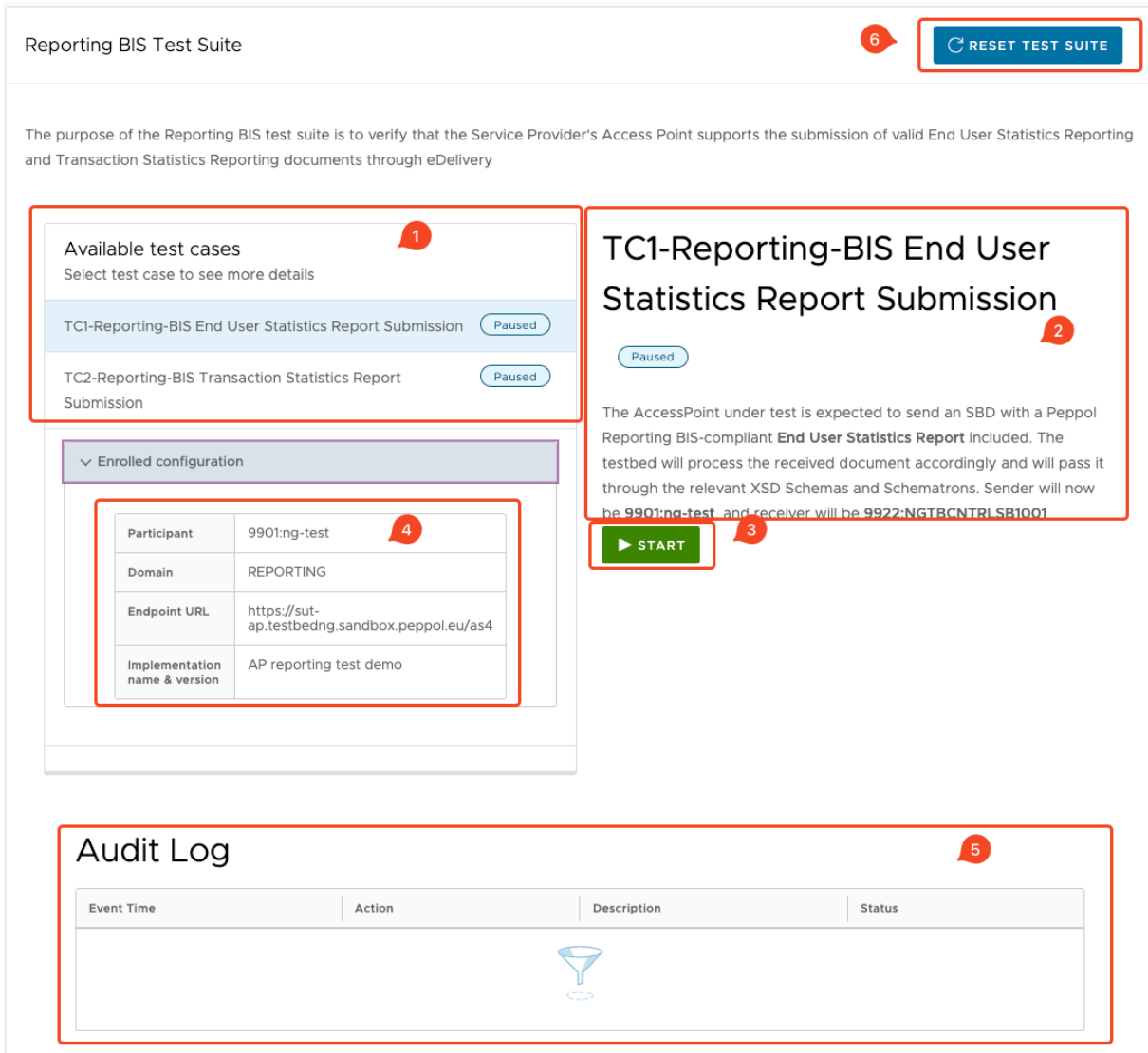
Figure 8 Reporting BIS test cases

It's worth noting that the Reporting BIS test suite's test cases don't have to be performed in order. Instead, every reporting test case is ready to be run at any moment. The sole restriction is that **only one test case may run at a time**. Once a test case is running, the remainder of the test cases become **unavailable** until the current one is finished.

Figure 9 provides a complete visual representation of each test case UI element. As shown in Figure 9, 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 9, label 3. The configuration created by the user during the test suite enrolment is shown in Figure 9, label 4. As illustrated in Figure 9, 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-enrol in a new reporting test suite and reset the current test suite and all of its test cases, select the “RESET TEST SUITE” button (Figure 9, label 6) and re-enrol in a new test suite.



The screenshot shows the 'Reporting BIS Test Suite' interface. At the top right, there is a 'RESET TEST SUITE' button (label 6). Below the header, a paragraph explains the purpose of the test suite. The main content is divided into several sections:

- Available test cases (label 1):** A list of test cases with 'Paused' buttons. The first one is 'TC1-Reporting-BIS End User Statistics Report Submission' (label 2).
- Enrolled configuration (label 4):** A table with the following data:

Participant	9901:ng-test
Domain	REPORTING
Endpoint URL	https://sut-ap.testbedng.sandbox.peppol.eu/as4
Implementation name & version	AP reporting test demo
- TC1-Reporting-BIS End User Statistics Report Submission (label 2):** A detailed view of the selected test case, including a 'START' button (label 3) and a description: 'The AccessPoint under test is expected to send an SBD with a Peppol Reporting BIS-compliant End User Statistics Report included. The testbed will process the received document accordingly and will pass it through the relevant XSD Schemas and Schematrons. Sender will now be 9901:ng-test and receiver will be 9922:NGTRCNTRL SB1001'.
- Audit Log (label 5):** A table with columns for Event Time, Action, Description, and Status. It currently shows a funnel icon in the Description column.

Figure 9 Test case overview

In the “TC1-Reporting-BIS End User Statistics Report Submission” test case, the under test AP is expected to send an SBD with a End User Statistics Report compliant business document generated according to the test case’s instructions provided by the Reporting Test Suite, as illustrated in the test case description in Figure 10, label 1 and the “START” audit log instructions shown in Figure 10, label 2. The sender will be the participant provided during enrolment (participant id and scheme id), and the receiver will be the Reporting Test Suite

environment AP. Start the test case, and read the information given in the “**START**” audit log as shown in Figure 10, label 2. The generated End User Statistics BIS artifact needs to contain the information from the test case “**START**” audit log description so that the Reporting Test Suite environment can correlate the sent document correctly. Once the document is received, the Reporting Test Suite environment performs schematron checks to the received document and provides back the validation results, as the examples shown in Figure 10, labels 3 (fail) and 4 (pass).

Available test cases
Select test case to see more details

TC1-Reporting-BIS End User Statistics Report Submission Passed

TC2-Reporting-BIS Transaction Statistics Report Submission Paused

▼ Enrolled configuration

Participant	9901:ng-test
Domain	REPORTING
Endpoint URL	https://sut-ap.testbedng.sandbox.peppol.eu/as4
Implementation name & version	AP reporting test demo

TC1-Reporting-BIS End User Statistics Report Submission Passed

The AccessPoint under test is expected to send an SBD with a Peppol Reporting BIS-compliant End User Statistics Report included. The testbed will process the received document accordingly and will pass it through the relevant XSD Schemas and Schematrons. Sender will now be 9901:ng-test, and receiver will be 9922:NGTBCNTRLSB1001 1

▶ START

Audit Log

Event Time	Action	Description	Status
2023-05-09T11:10:42	START	The test case awaits for an SBD with a Peppol Reporting BIS-compliant End User Statistics Report included, that has the following specs: Document Type Id: busdox-docid-qns::urn:fdc:peppol:end-user-statistics-report:1.0::EndUserStatisticsReport#urn:fdc:peppol.eu:edec:trns:end-user-statistics-report:1.0:1.0 Process Type Id: cenbil-procid-ubl::urn:fdc:peppol.eu:edec:bis:reporting:1.0 Instance Identifier: PGD000001-211-20230509T111042 2	Running
2023-05-09T11:11:55	RECEIVE	Received transaction document with Instance Identifier PGD000001-211-20230509T111042 Peppol Reporting - EndUserStatisticsReport Schematron validation failed 3	Failed
2023-05-09T11:12:06	RESTART	The test case awaits for an SBD with a Peppol Reporting BIS-compliant End User Statistics Report included, that has the following specs: Document Type Id: busdox-docid-qns::urn:fdc:peppol:end-user-statistics-report:1.0::EndUserStatisticsReport#urn:fdc:peppol.eu:edec:trns:end-user-statistics-report:1.0:1.0 Process Type Id: cenbil-procid-ubl::urn:fdc:peppol.eu:edec:bis:reporting:1.0 Instance Identifier: PGD000001-212-20230509T111206	Running
2023-05-09T11:12:27	RECEIVE	Received transaction document with Instance Identifier PGD000001-212-20230509T111206 Peppol Reporting - EndUserStatisticsReport Schematron validation success 4	Passed

Figure 10 EUSR Submission test case execution example

A failed audit log entry will notify you in the event of a failed test attempt. By pressing the button labeled 3 in Figure 10, you can get further information about the mistakes that occurred, like shown in Figure 11. Examine the errors in the audit log, make any necessary corrections, and restart the test case till successfully passing the test case.

Error details

Error	Description
VALIDATION	[SCH-EUSR-01] The customization ID MUST use the value 'urn:fdc:peppol.eu:redectrns:end-user-statistics-report:1.0'

Figure 11 Error details

In the “**TC2-Reporting-BIS Transaction Statistics Report Submission**” test case, the under test AP is expected to send an SBD with a Transaction Statistics Report compliant business document generated according to the test case’s instructions provided by the Reporting Test Suite environment, as illustrated in the test case description in Figure 12, label 1 and the “START” audit log instructions shown in Figure 12, label 2. The sender will be the participant provided during enrolment (participant id and scheme id), and the receiver will be the Reporting Test Suite environment AP. Start the test case, and read the information given in the “**START**” audit log as shown in Figure 12, label 2. The generated Transaction Statistics BIS artifact needs to contain the information from the test case “**START**” audit log description so that the Reporting Test Suite environment can correlate the sent document correctly. Once the document is received, the Reporting Test Suite environment performs schematron checks to the received document and provides back the validation results, as the examples shown in Figure 12, label 3.

Reporting BIS Test Suite RESET TEST SUITE

The purpose of the Reporting BIS test suite is to verify that the Service Provider's Access Point supports the submission of valid End User Statistics Reporting and Transaction Statistics Reporting documents through eDelivery

Available test cases TEST SUITE COMPLETED

Select test case to see more details

TC1-Reporting-BIS End User Statistics Report Submission Passed

TC2-Reporting-BIS Transaction Statistics Report Submission Passed

> Enrolled configuration

DOWNLOAD REPORT

TC2-Reporting-BIS Transaction Statistics Report Submission

The AccessPoint under test is expected to send an SBD with a Peppol Reporting BIS-compliant **Transaction Statistics Report** included. The testbed will process the received document accordingly and will pass it through the relevant XSD Schemas and Schematrons. Sender will now be **9901:ng-test**, and receiver will be **9922:NGTBCNTRLSB1001**

▶ 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	Status
2023-05-09T11:53:06	START	The test case awaits for an SBD with a Peppol Reporting BIS-compliant Transaction Statistics Report included, that has the following specs: Document Type Id: busdox-docid-qns::urn:fdc:peppol:transaction-statistics-report:1.0::TransactionStatisticsReport#urn:fdc:peppol.eu:edec:trns:transaction-statistics-reporting:1.0:1.0 Process Type Id: cenbil-procid-ubl::urn:fdc:peppol.eu:edec:bis:reporting:1.0 Instance Identifier: PGD000001-215-20230509T115306	2 Running
2023-05-09T11:55:08	RECEIVE	Received transaction document with Instance Identifier PGD000001-215-20230509T115306 Peppol Reporting - TransactionStatisticsReport Schematron validation success	3 Passed

Figure 12 TSR Submission test case execution example

A failed audit log entry will notify you in the event of a failed test attempt. You can get further information about the mistakes that occurred in the Transaction statistics report, just like in the End User Statistics Report test case shown in Figure 11. Examine the errors in the audit log, make any necessary corrections, and restart the test case till successfully passing the test case.

When the test suite is complete (all test cases have been passed) you may also download a pdf report as shown in Figure 12, label 4.