

Peppol

The future is open

Peppol Reporting Test Suite

Reporting Test Suite Environment description

Status: FINAL - Version: 1.0

Last updated: 16.05.2023

OpenPeppol AISBL
Rond-point Schuman 6, box 5
1040 Brussels Belgium

info@peppol.eu
www.peppol.eu
Last updated: 16.05.2023

Table of Contents

1	Introduction	3
2	Testing Process	3
2.1	Overview	3
2.1.1	System.....	3
2.1.2	Process.....	4
2.2	Prerequisites.....	4
2.2.1	Peppol PKI Test Certificate	5
2.2.2	Access Point deployment	5
3	Reporting BIS Testing	5
3.1	Reporting BIS test suite	5
3.1.1	TC1-Reporting-BIS End User Statistics Report Submission	5
3.1.2	TC2-Reporting-BIS Transaction Statistics Report Submission	7

1 Introduction

This document provides information related to the Peppol Reporting Test Suite. It aims at providing a more detailed description of the environment and the testing process. This document's intended audience is Service Providers (SPs) interested in implementing Peppol reporting mechanisms.

2 Testing Process

2.1 Overview

Peppol defines a number of technical criteria and capabilities that SPs must have in order to operate within the Peppol network. By providing the Reporting Test Suite environment and establishing a testing procedure, OpenPeppol will make it simple for SPs to become familiar with all the different needed capabilities and will assist them in validating and verifying them. The sections that follow provide a high-level overview of the test environment system components as well as the testing procedure of the reporting test suite.

2.1.1 System

The Peppol Reporting Test Suite consists of the following components, as indicated in Figure 1:

AP Validation Tool

Verify that the SP system's deployed Access Point (AP) complies to Peppol eDelivery specifications.

Reporting BIS Validation Tool

Validate that the SP system's produced BIS Documents comply to the Peppol Reporting specifications.

Access Point, SMK, Peppol Directory, SMP

These components are used in the test cases that require eDelivery network simulation for the Reporting BIS testing.

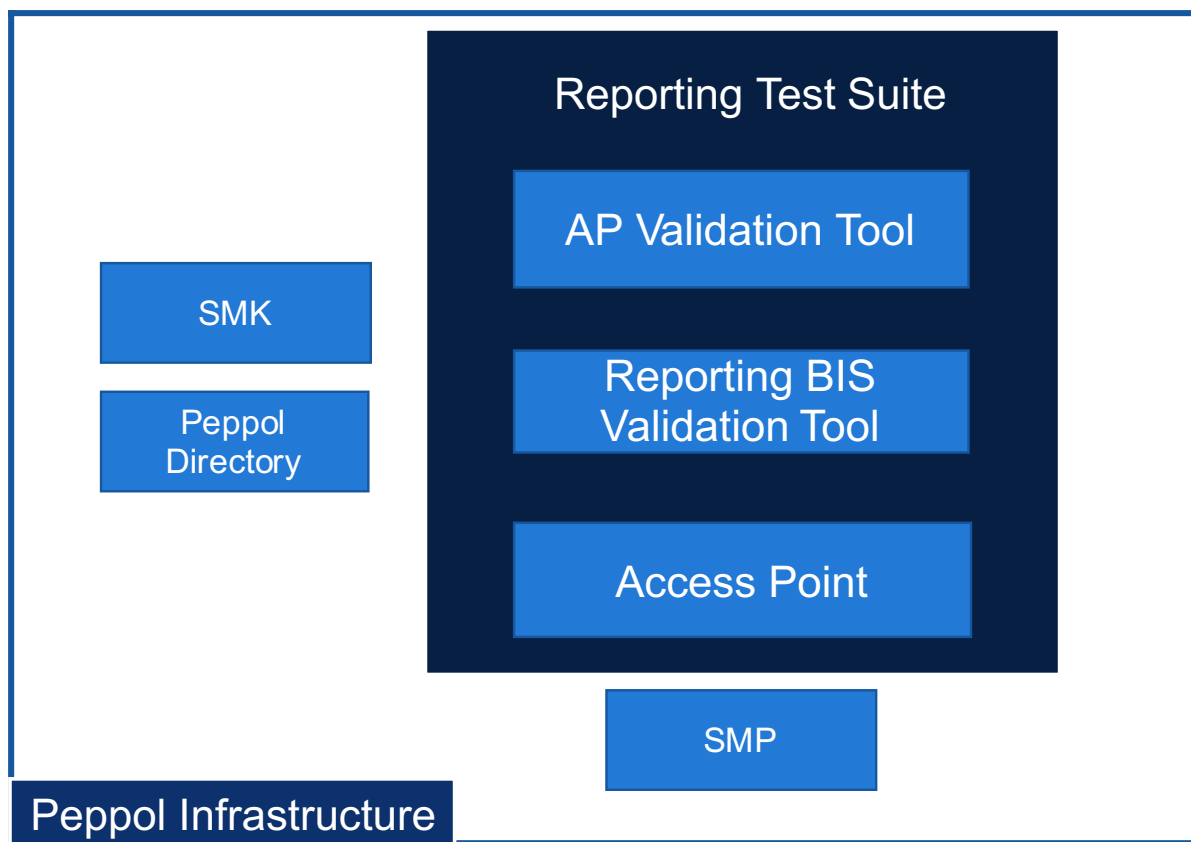


Figure 1 Overview of Reporting Test Suite environment test infrastructure

2.1.2 Process

In order a Peppol Reporting BIS Process to be executed within the Peppol network, there are several capabilities that the SPs must have. Through a structured predefined testing process, the Reporting Test Suite environment will make it easier to verify these capabilities.

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

2.2 Prerequisites

SPs must meet the following requirements before doing any testing.

2.2.1 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.

2.2.2 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

3 Reporting BIS Testing

Reporting BIS testing is designed to test that the testing SPs respect and comply with the Peppol Reporting BIS specifications. It focuses on testing that the SPs have put in place proper mechanisms for validating outgoing End User Statistics Report and Transaction Statistics Report documents. The test cases that are part of the Reporting BIS testing are described in the sections that follow. In addition, in all test cases there is an end user of the SP system that enrolls to the test suite, chooses which test case to be executed and also reads the validation results (this interaction is omitted from the following test case interaction diagrams for brevity reasons).

3.1 Reporting BIS test suite

The Reporting BIS test suite includes the following test cases:

3.1.1 TC1-Reporting-BIS End User Statistics Report Submission

In this test case, the SP will test their ability to generate and submit valid End User Statistics Report documents. The Reporting Test Suite environment supplies the essential details on how to pass the test and what the BIS document must be. The End User Statistics Report BIS Document is generated by the tester and is sent to the Reporting Test Suite environment following the test case instructions. By running schematron checks, the Reporting Test Suite environment verifies that a valid End User Statistics Report document was received and that

it adheres to the test case's requirements. The Reporting Test Suite will also provide informative validation results to the end user.

The steps for executing TC1-Reporting-BIS End User Statistics Report Submission are as follows, as indicated in Figure 2. Consider that an end user of the system-under-test has already selected the test case and that the Reporting Test Suite provided the essential details on how/what the BIS Document needs to be. These interactions are omitted from Figure 2 for brevity reasons.

1. The SUT generates the End User Statistics Report BIS document (SBD file) to be sent according to the test case instructions provided by the Reporting Test Suite environment
2. The SUT AP acts as the document sender and performs an SMK lookup to locate the Reporting Test Suite environment participant's SMP
3. The SUT AP queries the located Reporting Test Suite environment SMP for the receiving capabilities of the Reporting Test Suite environment AP and retrieves the metadata necessary to transmit the AS4 message to the recipient endpoint
4. The SUT AP sends the AS4 message (SBD file) prepared in step 1
5. The SUT AP receives an AS4 message receipt from the Reporting Test Suite environment AP
6. The received End User Statistics Report BIS Document is validated by the Reporting Test Suite environment
7. The validation results of the performed schematron checks run on the received End User Statistics Report BIS Document are shown to the end user.

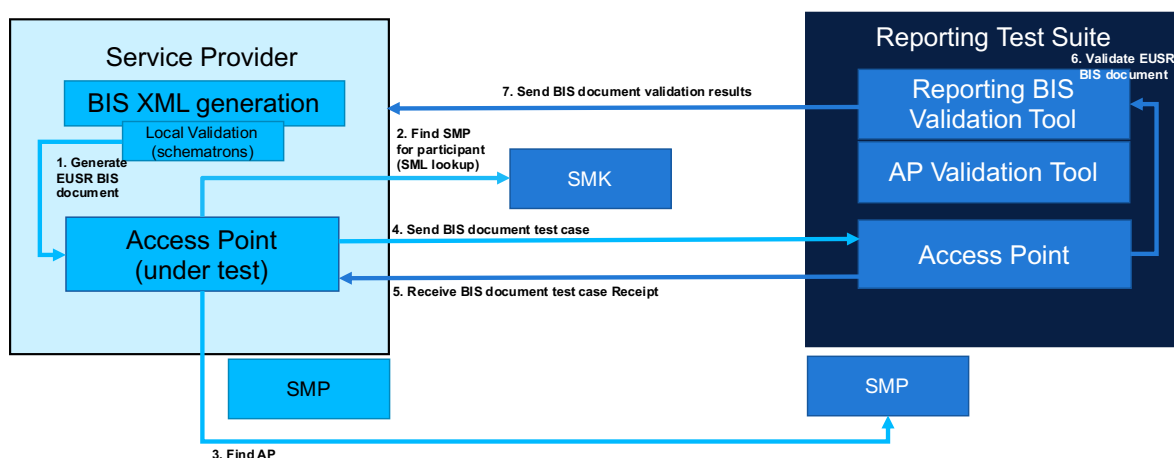


Figure 2 SP generates and sends EUSR BIS document

Expected results: Verification that the SP is able to generate and validate EUSR business documents using their SUT AP

3.1.2 TC2-Reporting-BIS Transaction Statistics Report Submission

In this test case, the SP will test their ability to generate and submit valid Transaction Statistics Report BIS documents. The Reporting Test Suite environment supplies the essential details on how to pass the test and what the Transaction Statistics Report BIS document must be. The BIS Document is generated by the tester and is sent to the Reporting Test Suite environment following the test case instructions. By running schematron checks, the Reporting Test Suite environment verifies that a valid Transactions Statistics Report document was received and that it adheres to the test case's requirements. The Reporting Test Suite environment will also provide informative validation results to the end user.

The steps for executing TC2-Reporting-BIS Transaction Statistics Submission are as follows, as indicated in Figure 3. Consider that an end user of the system-under-test has already selected the test case and that the Reporting Test Suite environment provided the essential details on how/what the BIS Document needs to be. These interactions are omitted from Figure 2 for brevity reasons.

1. The SUT generates the BIS document (SBD file) to be sent according to the jurisdiction scenario instructions provided by the Reporting Test Suite environment
2. The SUT AP acts as the document sender and performs an SMK lookup to locate the Reporting Test Suite environment participant's SMP
3. The SUT AP queries the located Reporting Test Suite environment SMP for the receiving capabilities of the Reporting Test Suite environment AP and retrieves the metadata necessary to transmit the AS4 message to the recipient endpoint
4. The SUT AP sends the AS4 message (SBD file) prepared in step 1
5. The SUT AP receives an AS4 message receipt from the Reporting Test Suite environment AP
6. The received BIS Document is validated by the Reporting Test Suite environment
7. The validation results of the performed schematron checks run on the received BIS Document are shown to the end user

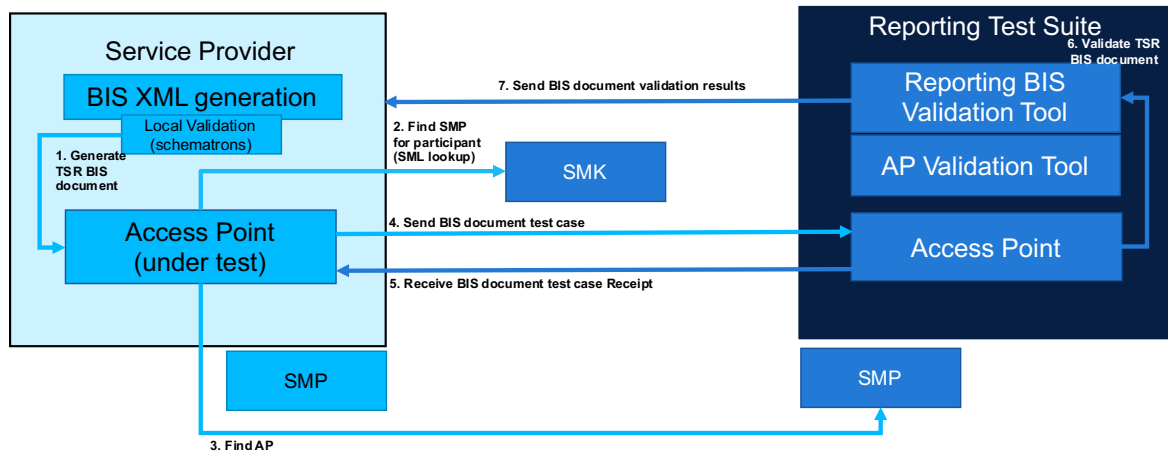


Figure 3 SP generates and sends TSR BIS document

Expected results: Verification that the SP is able to generate and validate TSR business document using their SUT AP