



EUROPEAN COMMISSION

DIGIT
Digital Europe Programme

Connectivity Testing

Service Offering Description

[Subject]

Version [1.17]

Status [Final]

© European Union, 2022

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.

Date: 27/04/2022

Document Approver(s):

Approver Name	Role
Maarten DANIELS	eDelivery Technical Support
Bogdan DUMITRIU	Project Manager

Document Reviewers:

Reviewer Name	Role
Amar DEEP	TESO Support
Caroline AEBY	TESO Support

Summary of Changes:

Version	Date	Created by	Short Description of Changes
0.01	23/05/2016	CEF PAO	First draft & structure
0.02	24/05/2016	CEF PAO	Reviewed
0.03	24/05/2016	CEF PAO	Final version
1.01	30/05/2016	CEF PAO	Updated to the latest version of the template
1.02	02/06/2016	CEF PAO	Update of the purpose and the benefits
1.03	16/06/2016	CEF PAO	Condition on delivery of services
1.04	14/09/2016	CEF Support	Update of the document
1.05	06/02/2017	CEF Support	Template Update
1.6	26/09/2017	CEF Support	Add dynamic discovery testing information.
1.7	09/10/2017	CEF Support	Changes in diagrams + static addressing replaced by static discovery
1.8	29/11/2017	Chaouki BERRAH Caroline AEBY	Update to include Dynamic Discovery
1.9	22/12/2017	Chaouki BERRAH	Update
1.10	17/01/2018	Chaouki BERRAH Caroline AEBY	SMP Connectivity Test included
1.10	19/01/2018	Caroline AEBY	Review
1.12	09/02/2018	Chaouki BERRAH	SMP Connectivity introduced
1.13	13/02/2018	Chaouki BERRAH	Reviewed and Updated
1.14	01/03/2018	Caroline AEBY	Only CEF eDelivery specifications compliant SMP for SMP connectivity tests. PEPPOL specifications SMP not supported.
1.15	12/04/2018	Caroline AEBY	Reuse policy notice added
1.16	25/09/2018	Caroline AEBY	No more Standby service
1.17	27/04/2022	Caroline AEBY	No more CEF references + links update

Table of Contents

1. INTRODUCTION	5
2. PURPOSE OF THE SERVICE	6
2.1. AS4 Connectivity testing service	6
2.2. SMP Connectivity testing service	7
2.3. Users	8
2.4. Scope	9
2.4.1. AS4 Connectivity testing	9
2.4.1.1. AS4 Access Point Specifications	9
2.4.1.2. AS4 European Commission Platform (Domibus)	9
2.4.1.3. AS4 Connectivity versus interoperability testing	9
2.4.2. SMP Connectivity testing	10
2.4.2.1. SMP Specifications	10
2.4.2.2. SMP European Commission test platform	10
2.5. Benefits	10
2.6. Roles and Responsibilities	11
2.6.1. AS4 Connectivity testing	11
2.6.2. SMP Connectivity testing	12
2.6.3. Service Provider	12
2.6.4. eDelivery Support Team	12
3. AS4 CONNECTIVITY TESTING PROCEDURE	14
3.1. How to use the service step by step	14
3.1.1. Process Overview	14
3.1.2. Step 1: Registration	14
3.1.2.1. AS4 connectivity Static Discovery	15
3.1.2.2. AS4 connectivity Dynamic Discovery Scenario 1	16
3.1.2.3. AS4 connectivity Dynamic Discovery Scenario 2	17
3.2. Step 2: AS4 Access Point Set-Up	19
3.3. Step 3: Execution	19
4. SMP CONNECTIVITY TESTING PROCEDURE	21
4.1. How to use the service step by step	21
4.1.1. Process Overview	21
4.1.2. Step 1: SMP Setup	21
4.1.2.1. Service Group	21
4.1.2.2. Signed Service Metadata	22
4.1.3. Step 2: Registration	23
4.1.4. Step 3: Execution	25
5. GLOSSARY	26
6. TERMS AND CONDITIONS	27

7. CONTACT INFORMATION 28

1. INTRODUCTION

This document describes the Connectivity Testing service provided by eDelivery. It includes an AS4 connectivity test and an SMP connectivity test for users that require it.

The AS4 connectivity test is valid for users using static discovery as well as those that choose dynamic discovery.

e-Delivery offers two different types of testing services:

- **Conformance Testing service:**

<https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eDelivery+Conformance+testing>

The goal of the eDelivery Conformance Testing service is to verify that an implementation of the eDelivery Access Point or SMP specifications, software package either commercial or Open Source, conforms to the relevant eDelivery specifications.

- **Connectivity Testing service:**

<https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eDelivery+Connectivity+testing>

The goal of the eDelivery Connectivity Testing service is to test if a newly installed AS4 Access Point, conformant with the eDelivery specifications, can successfully communicate with the sample AS4 Access Point hosted by the European Commission or if a newly installed SMP server, conformant with the eDelivery specifications, can respond to sample requests. If successful, these tests confirm that the relevant component is in all likelihood correctly deployed and configured.

This document describes only the **Connectivity Testing** service provided by eDelivery and that includes:

- The **AS4 Connectivity testing** using static discovery or dynamic discovery.
- The **SMP connectivity test** to test an SMP installation that is compliant with eDelivery specifications (formally known as OASIS).

The document introduces the purpose of the service, its users, its scope, its benefits, the related role and responsibilities and the overall process.

2. PURPOSE OF THE SERVICE

2.1. AS4 Connectivity testing service

The goal of the AS4 Connectivity testing service is to test if a newly installed AS4 Access Point, conformant with the eDelivery specifications, can successfully communicate with the sample AS4 Access Point hosted by the European Commission. If successful, these tests confirm that the new Access Point is in all likelihood correctly deployed and configured.

The eDelivery Support Team facilitates the connectivity testing by making available a sample AS4 Access Point in a cloud environment, as well as providing guidelines and support during the testing process.

The diagrams below are simplified versions of the test setups for respectively the static and the dynamic discovery scenarios and only include components relevant for the connectivity testing:

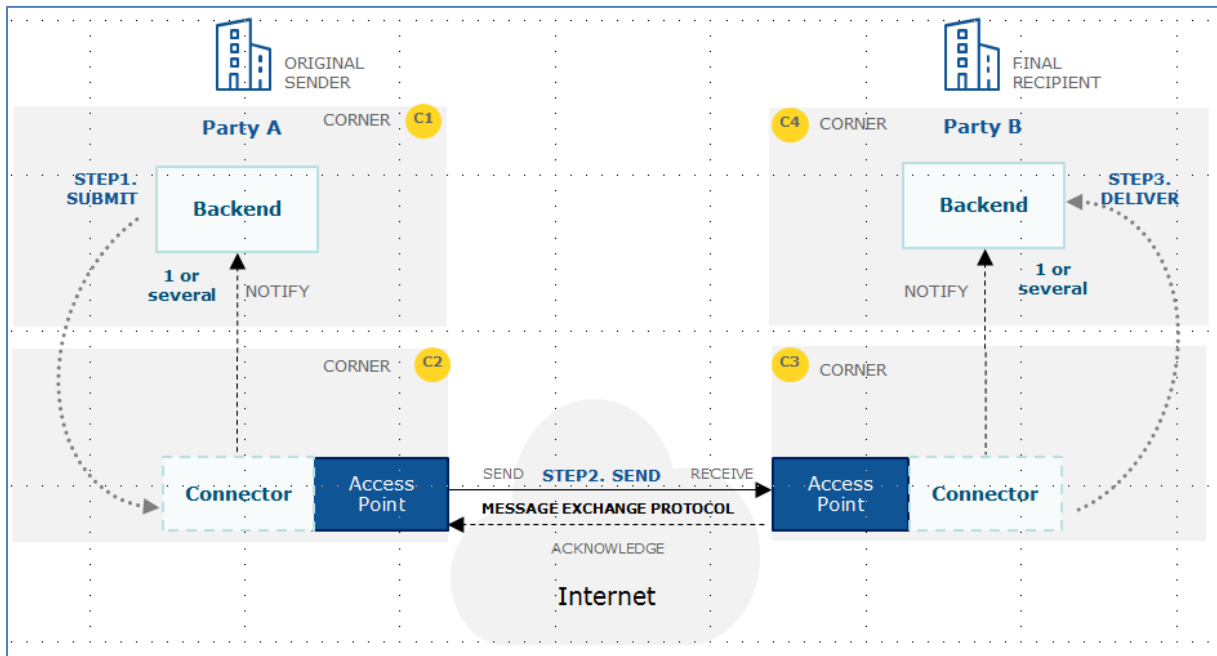


Figure 1. Static Discovery

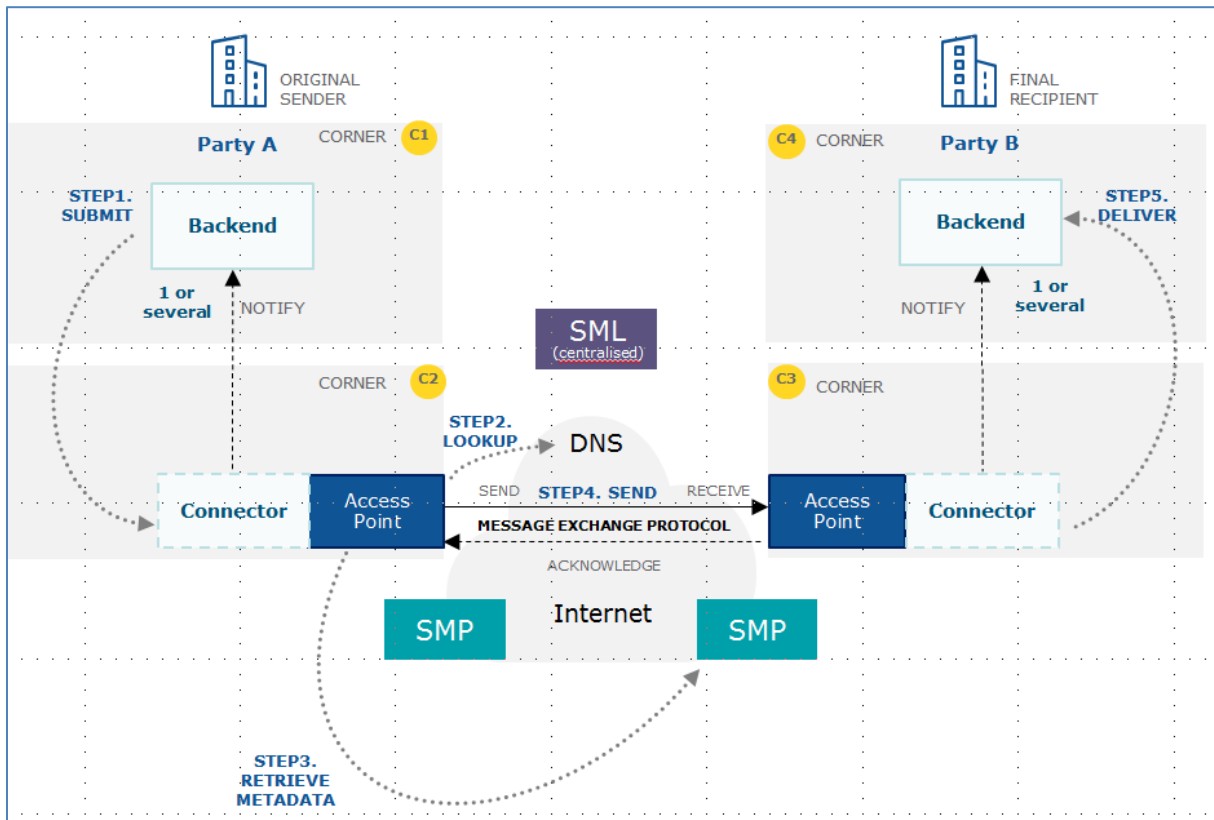


Figure 2. Dynamic Discovery¹

The platform hosted by the European Commission uses a Domibus Access Point. Connecting software/service providers can choose to connect via another eDelivery Access Point as long as it is conformant to the eDelivery AS4 profile. You can check the list of AS4 Access Points that are conformant with the eDelivery AS4 Profile on the eDelivery Single Web Portal². In the rest of this document, the term eDelivery Access Point is equivalent to the term AS4 Access Point.

The more technical and generic guidelines that can be used by software/service providers to set up their components and send/receive the sample messages is provided in the Connectivity Test Procedure document available on the Digital Web portal³. This document also provides Domibus specific guidelines for those companies that are re-using the same implementation of eDelivery Access Point as that is deployed in the connectivity test environment.

2.2. SMP Connectivity testing service

The goal of the SMP Connectivity testing service is to test if a newly installed SMP conformant⁴ with the eDelivery specifications can correctly respond to sample test platform requests.

¹ For Dynamic Discovery feature, usage of the SMP and BDMSL components is required. See Dynamic Discovery Test options for more details.

² <https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eDelivery+AS4+conformant+solutions>

³ <https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eDelivery+Connectivity+testing>

⁴ Attention, PEPPOL SMP specifications are not supported by the SMP connectivity testing tool, only eDelivery (formally OASIS) SMP specifications are supported.

Unlike other components such as an AS4 Access Point, the SMP does not require an adapter for establishing the connection between the system under test (SUT) and the test platform. Instead, the test platform only uses HTTP GET operations on the public interface of the SMP for querying the data to be evaluated.

Since the SMP specifications do not standardise the way that data is written (or updated or deleted) in an SMP, the test platform cannot populate the SUT with the data it expects to be returned in the standardised SMP read interface. Therefore the administrator of the SUT (user) is asked to populate the SMP with the expected data.

The eDelivery Support Team facilitates the SMP connectivity testing by making available a test platform in a cloud environment, as well as providing guidelines and support during the testing process.

2.3. Users

The eDelivery Connectivity Testing service is intended for the following type of users:

- For AS4 Connectivity testing service users:
 - **AS4 Software Providers:** to confirm that their AS4 software product is correctly deployed and can successfully communicate with the sample AS4 Access Point of the European Commission.
 - **AS4 Service Providers:** to confirm that their specific implementation and configuration of an AS4 Access Point can successfully communicate with the sample AS4 Access Point of the European Commission.
- For SMP Connectivity testing service users:
 - **SMP Software Providers:** to confirm that their SMP software product is correctly deployed and can successfully communicate with the test platform at the European Commission.
 - **SMP Service Providers:** to confirm that their specific implementation and configuration of an SMP can successfully communicate with the test platform at the European Commission.

For simplification purposes, the term “service provider” will be used to refer to the users of this Connectivity Testing Service, encompassing both software and service providers.

2.4. Scope

2.4.1. AS4 Connectivity testing

2.4.1.1. AS4 Access Point Specifications

The eDelivery Connectivity Testing service supports any implementation of the eDelivery AS4 Access Point as long as it is conformant with the eDelivery AS4 profile.

Specifications	Description	Link
eDelivery AS4 Profile	This standard is designed to support solid and secure document exchange using web services. The eDelivery AS4 profile is an open specification for the secure and payload-agnostic exchange of data using web services. It is based on the ebMS 3.0 standard of OASIS.	https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/Access+Point+specification

2.4.1.2. AS4 European Commission Platform (Domibus)

The connectivity test platform hosted by the European Commission uses a Domibus Access Point.

Access Point	Description	Link
Domibus	eDelivery offers a sample implementation (known as Domibus), maintained by the European Commission, of the AS4 Access Point. This is an open source implementation in JAVA of the eDelivery Profile of AS4. This software may be used to test other implementations of the technical specifications or as a working solution.	https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/Domibus

2.4.1.3. AS4 Connectivity versus interoperability testing

It is important to note that the information in this document will be used for connectivity testing only. Although the aim of the connectivity test is to provide a fair level of assurance of interoperability, it is important to note that this specific setup can be different from a specific setup used in the production environment of a particular project. Examples of potential differences are as following:

- The connectivity test environment is not hosted in the same data centre as the production environment.
- The Domibus version that will be used in production uses different technology stacks (e.g. WebLogic/Tomcat/WildFly with Oracle/MySQL DBMS) from the version deployed in the connectivity test environment (Tomcat/MySQL).

- In the connectivity test environment, the AS4 Access Point is not connected to other components (e.g. the back-office) that could be available in the production environment.
- The sample request and response are not based on the same data model as the particular project.
- The PMode settings are aligned with the eDelivery AS4 profile, but could be updated in the production environment (e.g. to take into account the correct service and action elements for a particular project).
- The certificates are self-signed test certificates.

2.4.2. *SMP Connectivity testing*

2.4.2.1. *SMP Specifications*

Specifications	Description	Link
eDelivery SMP profile	The eDelivery SMP profile is an open specification for publishing Service Metadata within a 4-corner network. To successfully send a business document in a 4-corner network, an entity must be able to discover critical metadata about the recipient (Access Point) of the business document, such as types of documents the Access Point is capable of receiving and methods of transport supported.	https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/SMP+specifications

2.4.2.2. *SMP European Commission test platform*

The SMP connectivity test platform is hosted by the European Commission.

eDelivery Support prepares a test, within the test platform, to perform a Service Group and Signed Service Metadata request against the user's SMP server.

2.5. Benefits

The eDelivery Connectivity Testing service has been designed to generate a list of benefits to the users of the service:

- Confirmation that a newly deployed AS4 Access Points can successfully communicate with a neutral organization i.e. the sample Access Point of the European Commission
- Confirmation of the successful deployment of an SMP, as it can be successfully queried from the test platform of the European Commission

- Testing supported by professional staff of the European Commission
- Quick testing cycle with reduced cost and time
- Testing anywhere at anytime
- Tests are fully domain-neutral

2.6. Roles and Responsibilities

This section describes the main roles in the eDelivery Connectivity Testing service and their responsibilities.

The following table summarises the split of roles and responsibilities between the different actors in the eDelivery Connectivity Testing process in the form of a RACI matrix where:

- **Responsible (R):** indicates the entities that perform the process-step. Every process-step has at least one responsible entity. Responsibilities can also be shared.
- **Accountable (A):** indicates the entity that is ultimately accountable for the process-step. Every process-step has only one accountable entity.
- **Consulted (C):** indicates the entities that give feedback or are consulted during the process-step. This is a two-way process. Not every process-step has an entity that is being consulted.
- **Informed (I):** indicates the entities that needs to be informed on the results of the process-step. This is a one-way process. Not every process-step has an entity that is being informed.

Note that the process is described in detail in §3 and 4.

2.6.1. AS4 Connectivity testing

Process/Service	Responsible Entity ⁵	
	Service Provider	eDelivery Support Team
Step 1: Registration	R	A/R
Step 2: Set-up	A/R	R/C
Step 3: Execution	A/R	R/C

⁵ RACI: R = Responsible; A = Accountable; C = Consulted, I = Informed.

2.6.2. SMP Connectivity testing

Process/Service	Responsible Entity ⁶	
	Service Provider	eDelivery Support Team
Step 1: Registration	R	A/R
Step 2: Set-up	R	A/C
Step 3: Execution	I	A/R

2.6.3. Service Provider

Role: user (of the eDelivery Connectivity Testing service)

Responsibilities:

- For AS4 Connectivity testing:
 - Request the service and provide the necessary information for registration.
 - Set-up and configure the AS4 Access Point to be tested (URL Endpoint, AS4 Party details, Certificates and PMode settings).
 - Optionally set-up an SMP and publish 'Service Group' & 'Service Metadata' for Dynamic Discovery.
 - Execute the connectivity testing by sending the test message and verifying the corresponding response message.
- For SMP Connectivity testing:
 - Request the service and provide the necessary information for registration.
 - Set-up and configure the SMP.
 - Provide the metadata to eDelivery Support

2.6.4. eDelivery Support Team

Role: first and second line support

Responsibilities:

- For AS4 Connectivity testing:
 - Register new requests for connectivity testing and provide the necessary information to set-up and configure the AS4 Access Point to be tested.
 - Act as the single point of contact to the service provider and provide support during both the configuration of the AS4 Access Point and the actual execution of the connectivity tests.

⁶ RACI: R = Responsible; A = Accountable; C = Consulted, I = Informed.

- For SMP Connectivity testing:
 - Register new requests for connectivity.
 - Act as the single point of contact to the service provider.
 - Execute the connectivity tests; verify the test message and the corresponding response messages.

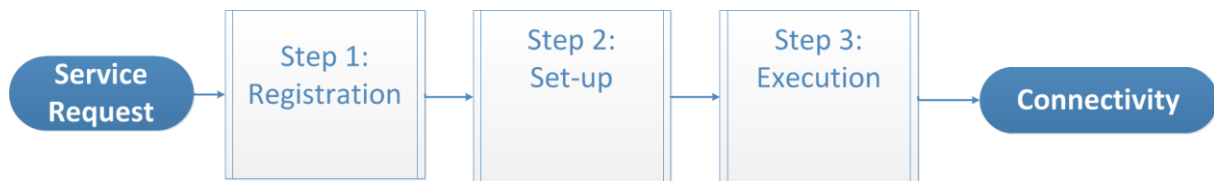
3. AS4 CONNECTIVITY TESTING PROCEDURE

3.1. How to use the service step by step

This section describes the processes that are part of the eDelivery AS4 Connectivity Testing service.

3.1.1. Process Overview

The figure below presents an overview of the main steps of the eDelivery AS4 Connectivity Testing service process. Each of the process steps is described in more detail in the next sections.



3.1.2. Step 1: Registration

Purpose: provide information on the AS4 Access Point to be tested to initiate the process of connectivity testing with the test Access Point hosted at the European Commission.

The AS4 connectivity testing service offers the use of either **Static Discovery** or **Dynamic Discovery**. For Dynamic Discovery, the participant can choose between 2 scenarios:

- Scenario 1: the participant uses the eDelivery SMP, which is installed and maintained by eDelivery Support.
- Scenario 2: the participant uses his own SMP.

Depending on his needs, the participant will choose one of the following scenarios: static discovery testing scenario, dynamic discovery scenario 1, or dynamic discovery scenario 2.

Actors:

- Service Provider
- eDelivery Support Team

Process:

The service provider sends an email with the necessary information to the eDelivery Support Team to request the eDelivery Connectivity Testing service. Depending on which option the service provider chose, he will send one of below emails that must comply with one of the three formats shown below:

3.1.2.1. AS4 connectivity Static Discovery

Email To: CEF-EDELIVERY-SUPPORT@ec.europa.eu

Subject: Static Discovery AS4 Connectivity test

Body:

Hello,

I am person [X] from company [Y], project [Z].

I am contacting you in the context of the AS4 connectivity.

Please find my requested details below and provide me with the certificates and configuration details.

Parameter	Value
Company Name	
AS4 Access Point Service URL	
The AS4 Gateway implementation (Holodeck, domibus, flame...)	
Are you performing the connectivity tests in the context of an INEA grant (Yes/No)? If Yes, please specify the CEF action number for the INEA grant (e.g.: 2015-NL-IA-XXXX).	
Business Domain (e.g.: EUCEG/ODR) (optional)	
Contact details for technical team during connectivity tests.	Name: Email: Telephone:

Best Regards, X

As a response, you will receive an email with:

1. The **Certificate** for the Access Point (Truststore and Keystore).
2. The Endpoint URL of the test AS4 Access Point.
3. The **PMode settings**: This is the Domibus specific PMode XML file if Domibus is used. If another Access Point Software is used, this is a generic description of the PMode settings.
4. For Domibus only: A **SoapUI** Project to use for sending and receiving messages using the default WS plugin. It includes a "sendMessage" request for Static Discovery.

3.1.2.2. AS4 connectivity Dynamic Discovery Scenario 1

In the AS4 Dynamic Discovery Scenario 1, the Service Provider will install an AS4 Access point and will use the eDelivery SMP which is installed and maintained by eDelivery Support.

Email To: CEF-EDELIVERY-SUPPORT@ec.europa.eu

Subject: Dynamic Discovery Scenario 1 AS4 Connectivity test

Body:

Hello,

I am person [X] from company [Y], project [Z].

I am contacting you in the context of the Dynamic Discovery Scenario 1 AS4 connectivity.

Please find my requested details below and provide me with the certificates and configuration details.

Parameter	Value
Company Name	
AS4 Access Point Service URL	
The AS4 Gateway implementation (Holodeck, domibus, flame...)	
Are you performing the connectivity tests in the context of an INEA grant (Yes/No)? If Yes, please specify the CEF action number for the INEA grant (e.g.: 2015-NL-IA-XXXX).	
Business Domain (e.g.: EUCEG/ODR) (optional)	
Your technical team contact details, during connectivity tests.	Name: Email: Telephone:

Best Regards, X

As a response, you will receive a registration email from eDelivery Support with:

1. A detailed user's guide.
2. A **Private Key & Certificate** for the Access Point (Keystore and truststore).
3. The **Participant ID, Participant Scheme, Document ID** and the **Document Scheme**.
4. The **PMode settings**: This is the Domibus specific PMode XML file to be uploaded in Domibus. If another Access Point Software is used, this is a generic description of the PMode settings.

5. A **SoapUI** Project to use to manage the eDelivery SMP's Service Group & Service Metadata and sending/receiving messages with Domibus. To be used in eDelivery components only (Domibus and SMP).

Remark:

As Step 4 and 5 are specific to eDelivery SMP, please refer to the corresponding documentation in other conformant implementations.

3.1.2.3. AS4 connectivity Dynamic Discovery Scenario 2

In this scenario, the Service Provider will set-up their own Access Point and SMP and publish the Service Group & Service Metadata on their SMP.

Email To: CEF-EDELIVERY-SUPPORT@ec.europa.eu
 Subject: Dynamic Discovery Scenario 2 AS4 Connectivity test
 Body:

Hello,

I am person [X] from company [Y], project [Z].

I am contacting you in the context of the Dynamic Discovery Scenario 2 AS4 connectivity.

Please find my requested details below and provide me with the certificates and configuration details.

Parameter	Value
Company Name	
AS4 Access Point Service URL	
SMP Endpoint URL	
The AS4 Gateway implementation (Holodeck, domibus, flame...)	
Are you performing the connectivity tests in the context of an INEA grant (Yes/No)? If Yes, please specify the CEF action number for the INEA grant (e.g.: 2015-NL-IA-XXXX).	
Business Domain (e.g.: EUCEG/ODR) (optional)	
Your technical team contact details, during connectivity tests.	Name: Email: Telephone:

Best Regards, X

As a response, eDelivery Support will **register your SMP in the SMK** under the connectivity test Domain.

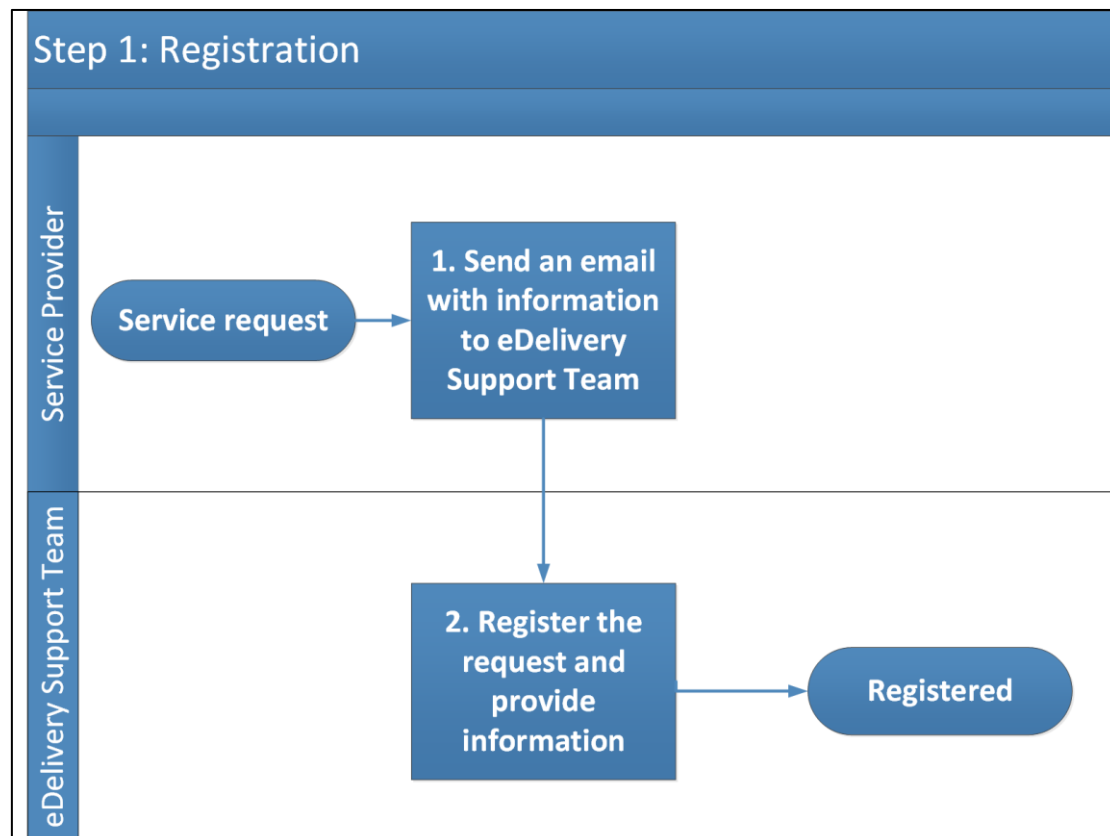
You will then receive an email with:

1. A detailed user's guide.
2. For the Access Point:
 - a. The **Private Key & Certificate** for the Access Point (Truststore and Keystore)
 - b. The **Participant ID, Participant Scheme, Document ID, Document Scheme**.
 - c. The **PMode settings**: This is the Domibus specific PMode XML file to be uploaded into Domibus. If another provider Access Point Software is used, this is a generic description of the PMode settings.
3. For the SMP
 - a. The SMP ID that has been used to register the Service Provider's SMP (by the eDelivery Support Team) in the SMK.
 - b. The **Private Key & Certificate** for the service provider's **SMP**.
4. A **SoapUI** Project to use to manage the eDelivery SMP's Service Group & Service Metadata and sending/receiving messages with Domibus. To be used in eDelivery components only (Domibus and SMP).

Remark:

As Step 4 is specific to eDelivery SMP, please refer to the corresponding documentation in other conformant implementations.

Below the overview of the registration process:



3.2. Step 2: AS4 Access Point Set-Up

Purpose: configure the AS4 Access Point to be tested using the details received during the registration process.

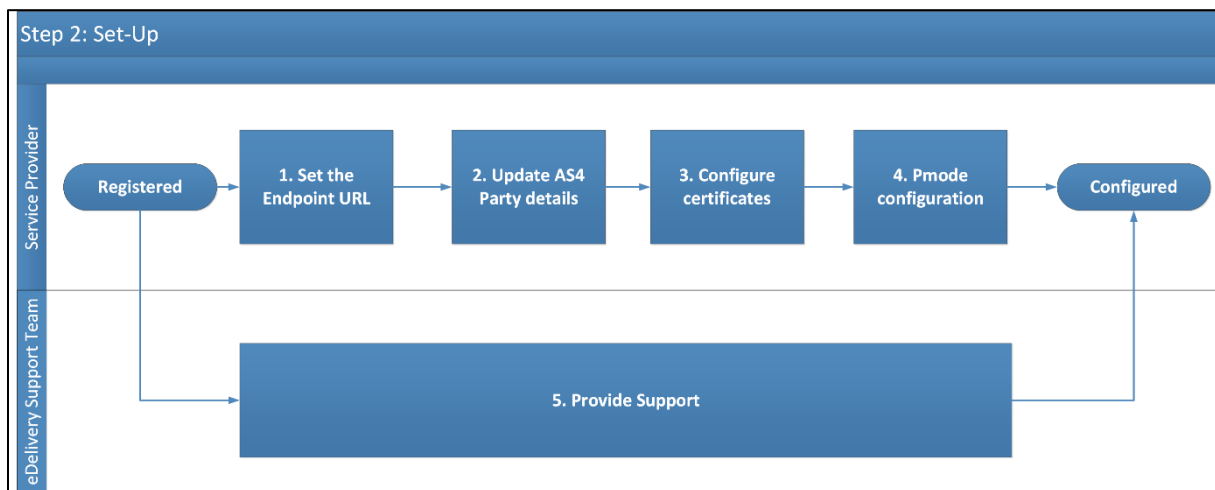
Actors

- Service Provider
- eDelivery Support Team

Process:

1. Set the Endpoint URL of the test AS4 Access Point. (Domibus specific guidelines can be found in the [AS4 Connectivity Test Procedure⁷](#)).
2. Update the AS4 Party details of the AS4 Access Point to be tested and the test AS4 Access Point provided by the European Commission.
3. Configure the certificates for both the AS4 Access Point to be tested (private key) and the test AS4 Access Point provided by the European Commission (public key).
4. Configure the PMode settings into the AS4 Access Point to be tested.
5. The eDelivery Support Team can be contacted in case of questions or issues during the connectivity test process.

The overview of the set-up process is shown in the diagram below.



3.3. Step 3: Execution

Purpose: Verify whether the service provider that wants to connect via a specific installation and configuration of an eDelivery Access Point can effectively communicate with the Access Point implementation of the connectivity test platform.

⁷ <https://ec.europa.eu/digital-building-blocks/wikis/display/DIGITAL/eDelivery+Connectivity+testing>

More specifically, the test scenario involves firstly the sending of a sample message from the AS4 Access Point to be tested to the AS4 Access Point of the connectivity test platform and secondly the receiving of a sample message from the AS4 Access Point of the connectivity test platform.

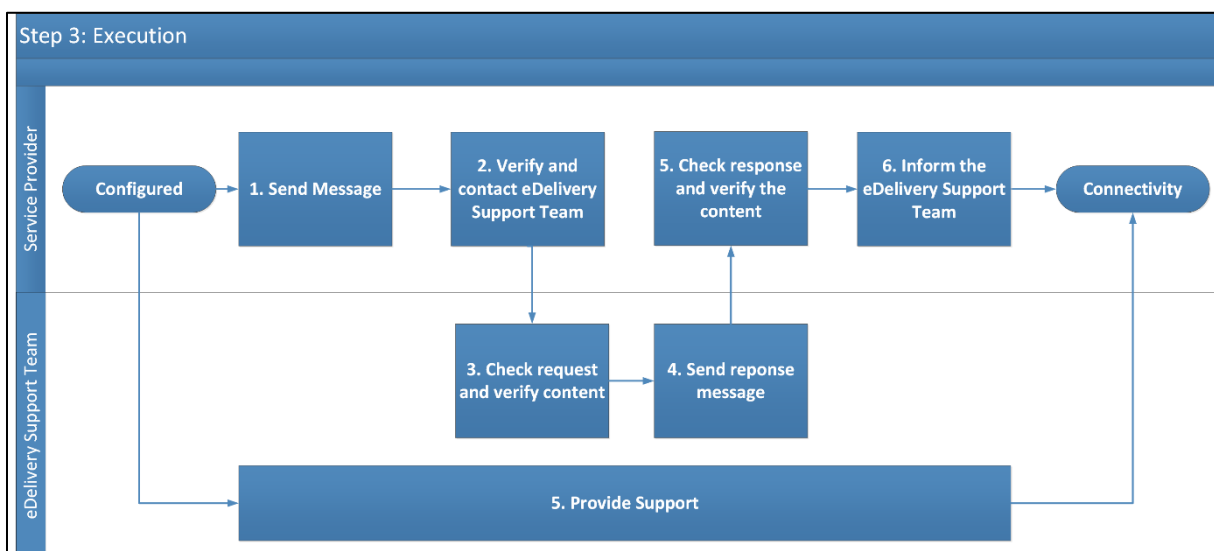
Actors

- Service Provider
- eDelivery Support Team

Process:

1. Send a predefined message from the AS4 Access Point to be tested to the AS4 Access Point of the test platform.
2. Verify if the AS4 Access Point to be tested has correctly sent the message and contact the eDelivery Support Team by email indicating that the request message has been sent.
3. The eDelivery Support Team will check if the request has been correctly received and will verify its content.
4. The eDelivery Support Team informs you about the status of the request and if positive, will send back a predefined response message from the AS4 Access Point of the test platform to the AS4 Access Point to be tested.
5. Check the AS4 Access Point to be tested if the response message has been correctly received and verify its content.
6. Inform the eDelivery Support Team by email about the status of the response. If both the request and response message have been sent/received correctly, the connectivity test has been completed successfully.
7. The eDelivery Support Team can be contact is case of questions or for troubleshooting during the connectivity test process.

The overview of the execution process is shown in the diagram below.



4. SMP CONNECTIVITY TESTING PROCEDURE

4.1. How to use the service step by step

This section describes the processes that are part of the eDelivery SMP Connectivity Testing service.

4.1.1. Process Overview

The figure below presents an overview of the main steps of the SMP Connectivity Testing service process. Each of the process steps is described in more detail in the next sections.



4.1.2. Step 1: SMP Setup

Actors

- Service Provider

Process:

The Service Provider (SMP administrator) needs to configure some data elements in their SMP so that the test tool can verify if these data elements are correctly returned in the response to the requests.

4.1.2.1. Service Group

- ID_SCHEME
- ID
- SMP_SERVER_URL
- DOCUMENT_SCHEME
- DOCUMENT_ID
- EXTENSION

Example of a basic Service Group XML File (servicegroup.xml):

```

<ServiceGroup xmlns="http://docs.oasis-open.org/bdxx/ns/SMP/2016/05">
  <ParticipantIdentifier scheme="ID_SCHEME">ID</ParticipantIdentifier>
  <ServiceMetadataReferenceCollection>
  
```

```

<ServiceMetadataReference
href="SMP_SERVER_URL/ID_SCHEME%3A%3AID/services/DOCUMENT_SCHEME%3A%3ADOCUMENT_ID"/>

</ServiceMetadataReferenceCollection>

<Extension>EXTENSION</Extension>

</ServiceGroup>

```

4.1.2.2. Signed Service Metadata

- The Service Provider has to also specify the following parameters for the Signed Service Metadata:
 - PROCESS_IDENTIFIER_TYPE
 - PROCESS_IDENTIFIER
 - TRANSPORT_PROFILE
 - ENDPOINT_REFERENCE
 - REQUIRE_BUSINESSLEVEL_SIGNATURE
 - SERVICE_ACTIVATION_DATE
 - SERVICE_EXPIRATION_DATE
 - CERTIFICATE
 - SERVICE_DESCRIPTION
 - TECHNICAL_CONTACT_URL

Example of a related Signed Service Group Metadata XML files (signedservicemetadata.xml):

```

<?xml version="1.0" encoding="utf-8"?>

<SignedServiceMetadata

xmlns="http://docs.oasis-open.org/bdxr/ns/SMP/2016/05"

xmlns:ds="http://www.w3.org/2000/09/xmldsig#">

<ServiceMetadata>

<ServiceInformation>

<ParticipantIdentifier scheme="ID_SCHEME">ID</ParticipantIdentifier>

<DocumentIdentifier scheme="DOCUMENT_SCHEME">

DOCUMENT_ID

</DocumentIdentifier>

```

```
<ProcessList>

  <Process>

    <ProcessIdentifier scheme="PROCESS_IDENTIFIER_TYPE">

      PROCESS_IDENTIFIER

    </ProcessIdentifier>

    <ServiceEndpointList>

      <Endpoint transportProfile="TRANSPORT_PROFILE">

        <EndpointURI>ENDPOINT_REFERENCE</EndpointURI>

        <RequireBusinessLevelSignature>REQUIRE_BUSINESSLEVEL_SIGNATURE</RequireBusinessLevelSignature>

      <ServiceActivationDate>

        SERVICE_ACTIVATION_DATE

      </ServiceActivationDate>

      <ServiceExpirationDate>

        SERVICE_EXPIRATION_DATE

      </ServiceExpirationDate>

      <Certificate>CERTIFICATE</Certificate>

      <ServiceDescription>SERVICE_DESCRIPTION</ServiceDescription>

      <TechnicalContactUrl>TECHNICAL_CONTACT_URL</TechnicalContactUrl>

    </Endpoint>

  </ServiceEndpointList>

</Process>

</ProcessList>

  <Extension>EXTENSION</Extension>

</ServiceInformation>

</ServiceMetadata>

<!-- Message signature, details omitted for brevity -->

<ds:Signature/>

</SignedServiceMetadata>
```

4.1.3. Step 2: Registration

Purpose: Provide information on the SMP to be tested to initiate the process of connectivity testing with the test platform at the European Commission.

Actors:

- Service Provider
- eDelivery Support Team

Process:

The service provider sends an email with the necessary information to the eDelivery Support Team to request the SMP Connectivity Testing service. The email should comply with the format shown below:

Email To: CEF-EDELIVERY-SUPPORT@ec.europa.eu

Subject: SMP Connectivity test

Body:

Hello,

I am person [X] from company [Y], project [Z]. I am contacting you in the context of the SMP connectivity. Please find my requested details below and provide me with the results of the testing.

Parameter	Value
Company Name	
Service Group Parameters	
ID_SCHEME	
ID	
SMP_SERVER_URL	
DOCUMENT_SCHEME	
DOCUMENT_ID	
EXTENTION	
Signed Service Metadata Parameters	
PROCESS_IDENTIFIER_TYPE	
PROCESS_IDENTIFIER	
TRANSPORT_PROFILE	
ENDPOINT_REFERENCE	
REQUIRE_BUSINESSLEVEL_SIGNATURE	
SERVICE_ACTIVATION_DATE	
SERVICE_EXPIRATION_DATE	
CERTIFICATE	
SERVICE_DESCRIPTION	
TECHNICAL_CONTACT_URL	
Other Details	
If Yes, please specify the CEF action number for the INEA grant (e.g.: 2015-NL-IA-XXXX).	
Business Domain (e.g.: EUCEG/ODR) (optional)	
Your technical team contact details, during connectivity tests.	Name:
	Email:
	Telephone:

Best Regards, X

4.1.4. Step 3: Execution

Purpose: Perform a verification, from the European Commission test platform, to insure that the installed SMP under test is available and correctly responds to sample requests.

Actors

- eDelivery Support Team

Process:

1. eDelivery Support creates the Test case for the Service Provider, providing the details for Service Group and Signed Service Metadata request.
2. eDelivery Support runs the test case to verify that the SMP is available and correctly responding to both requests.
3. C eDelivery EF Support keeps the Service Provider informed about the testing and helps troubleshooting any potential issues during the connectivity test process.

5. GLOSSARY

The key terms used in this Component Offering Description are defined in the Definitions section on the Digital Web Portal:

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/CEF+Definitions>

The key acronyms used in this Component Offering Description are defined in the Glossary on the Digital Web Portal:

<https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?spaceKey=CEFDIGITAL&title=CEF+Glossary>

6. TERMS AND CONDITIONS

The general terms and conditions of Digital Europe Programme Building Blocks can be consulted in the Master Service Arrangement, available on the Digital Web Portal:

<https://ec.europa.eu/digital-building-blocks/wikis/x/oQAHHQ>

The terms and conditions specific to the eDelivery Connectivity Testing service are described in the table below.

Term / Condition	Description
Obligations of the Client	<p>It is the responsibility of the Client to:</p> <ul style="list-style-type: none"> a) ensure that sufficient information is given in due time to enable the required services to be performed; b) Fulfil the technical requirements outlined in this document, including the set-up and configuration of the AS4 Access Point/SMP to be tested and the application of the appropriate changes based on the test results.
Delivery of the services	<p>The European Commission will provide the connectivity testing services using reasonable care and skill and in accordance with the technical specifications and procedures outlined in this document. The connectivity testing services and the results thereof are based on the version of the test AS4 Access Point in effect and hosted on the test platform of the European Commission at the time of testing.</p> <p>The timing of completion of the connectivity testing services and the delivery of the test results is based on best effort.</p> <p>The European Commission is entitled to suspend or terminate the provision of the services in case of failure of the Client to comply with its obligations, as described above, or any other conditions preventing the successful delivery of the service.</p>

7. CONTACT INFORMATION

eDelivery Support Team

By email: CEF-EDELIVERY-SUPPORT@ec.europa.eu

Standard Service: 8am to 6pm (Normal EC working Days)