Webinar on the Catalogue of Services tools and technical support

February 03-02-2021

10:00-11:30 (GMT+1)

Organised by the Catalogue of Services Action of the ISA² programme

Webinar practicalities

Click on « connect audio » but please mute your microphones.

You can share your questions and comments via the chat at any time during the webinar.

The webinar will be recorded.

1. Welcome

Speaker: Miguel Alvarez Rodriguez

Key objectives

- Introduction to the **ISA² Programme** actions: **Catalogue of Services (CoS)** and **Test Bed**
- Tackle the **supporting needs of the Member States** related to the description and exchange of information related to public services by showcasing tangible use cases.

Agenda

1.	Welcome	10’
2.	Introduction to the Catalogue of Services tools and Test Bed services	15’
3.	Use cases • Creation of a national catalogue of services • Validation of your services in compliance with a common model	40’
4.	Q&A	25’

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Poll question

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What do you know already about the Catalogue of Services tools?

[OPEN QUESTION]

Poll question

Check the tools of which you know what they can do (main functionality)

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- CPSV-AP Description Editor
- CPSV-AP Harvester
- CPSV-AP Validator

Poll question

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What would you like to have learnt at the end of this webinar about the tools?

[OPEN QUESTION]

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2. Introduction to Catalogue of Services tools and Test Bed services

Speaker: Florian Barthélemy and Costas Simatos

European Commission

ISA²
You click, we link

“The Catalogue of Services Action supports **public administrations** in building **digital catalogues** of **public services** allowing the exchange of information between citizens, businesses and public administrations across Europe.

Make your service descriptions fit for exchange

Help you create your catalogue of services

Exchange knowledge

Test and validate your solutions

Advise you in adopting standards and technologies

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Catalogue of Services overview

Data model

Controlled Vocabularies

CPSV-AP, SDG data model, taxonomy of public services

Tools

Pilots

Harvester, Editor, pilot activities

Raising awareness activities

Studies & reports

Webinars, workshops, studies, Joinup, GitHub

New Joinup Collection!

joinup

https://joinup.ec.europa.eu/collection/catalogue-services/about

Catalogue of Services handout

https://joinup.ec.europa.eu/collection/catalogue-services

European Commission

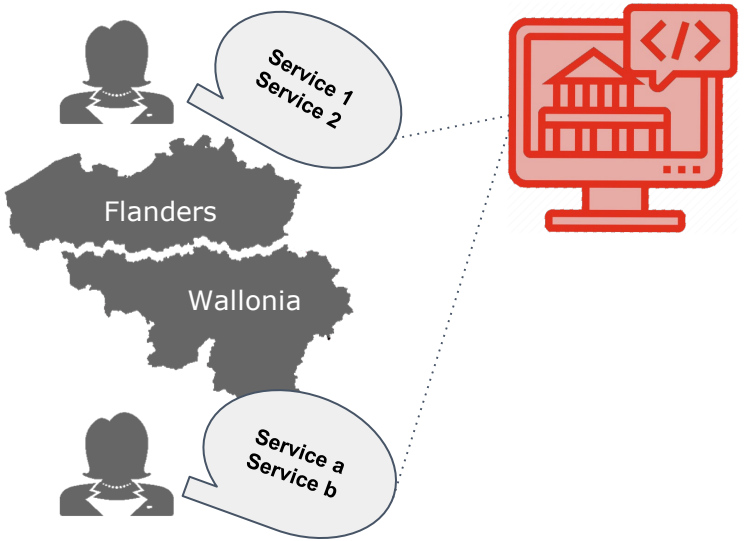
Introduction of the tools

STEP 0
Describing the public services

STEP 1
Harvesting

STEP 2
Validating

STEP 3
Manage and Publish



ITB
Interoperability Test Bed

"The Interoperability Test Bed is an online, intuitive and self-service platform for **conformance testing** of IT systems against semantic and technical specifications

Test specification conformance

Validate content

Test message exchanges

Simulate APIs

Based on EU standards

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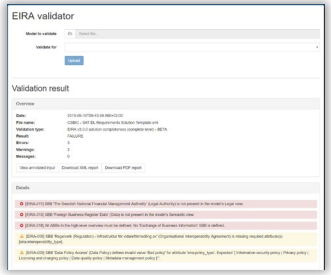
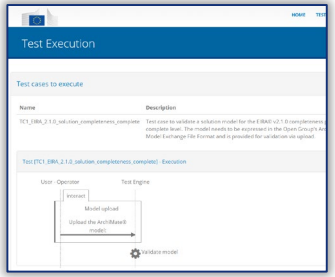
Main services



Validators

- ✓ Standalone validation
- ✓ Multiple input channels
- ✓ Anonymous
- ✓ Simple reporting



Complete Test Bed

- ✓ Scenario-based testing
- ✓ Extensible capabilities
- ✓ Account-based
- ✓ Monitoring & reporting

Flexible usage models

Cloud-based

- ✓ Hosting of public validator instances
- ✓ Shared (multi-tenant) Test Bed platform
- ✓ Configuration managed by users
- ✓ Operated by DIGIT

On-premise

- ✓ Components publicly shared (via Docker)
- ✓ Hosted and operated by users on-premise
- ✓ Allows access restrictions
- ✓ Allows internal resource usage

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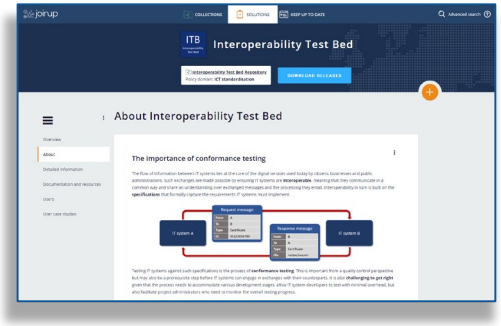
Rich documentation



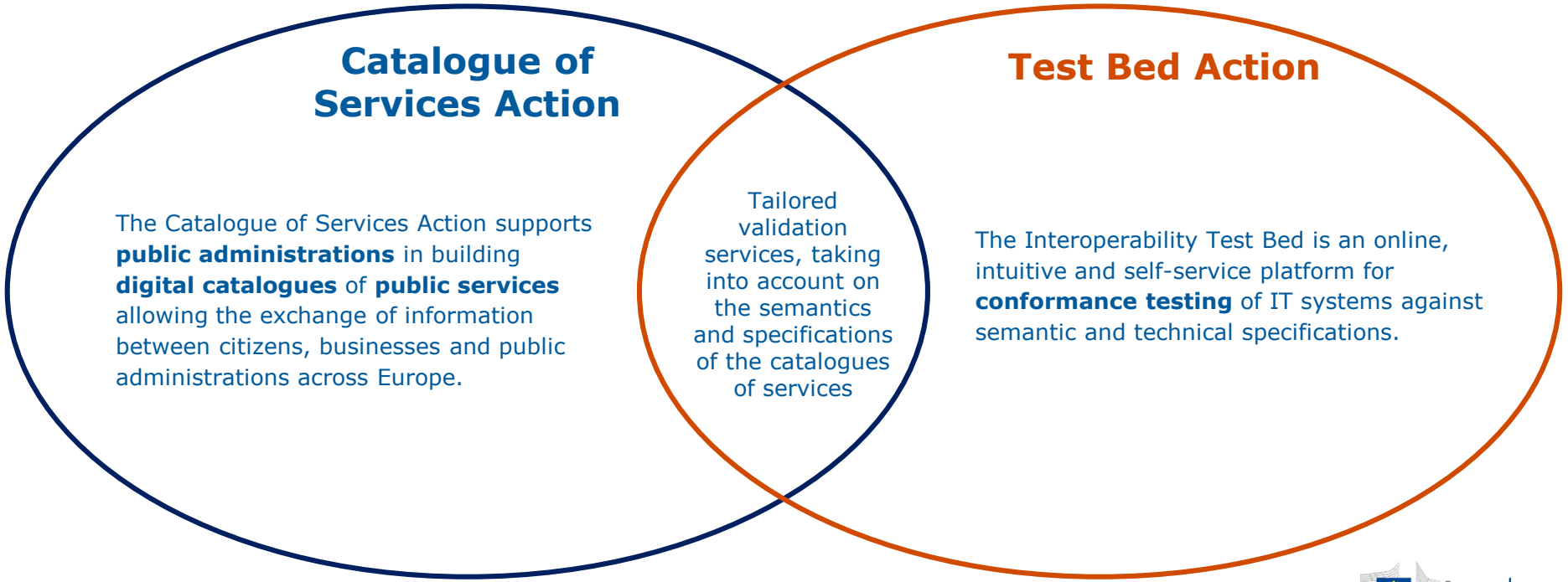
Test Bed **documentation hub** in Joinup

- ✓ Introduction and details
- ✓ Releases and news
- ✓ User stories

Extensive guides

- ✓ User and developer guides
- ✓ Documentation and tutorials

Actions - ISA² Programme



3. Use cases

Speakers: Maxime Pittomvils, Florian Barthélemy and Costas Simatos

Use case 1

'I am a national authority, creating a national catalogue of services.'

Creation of a federal/cross-border catalogue of public services

Example of Finland and Estonia, collecting data from two different countries into a single catalogue.

Which technologies were used to build this catalogue?

‘I am a national authority, creating a national catalogue of services.’

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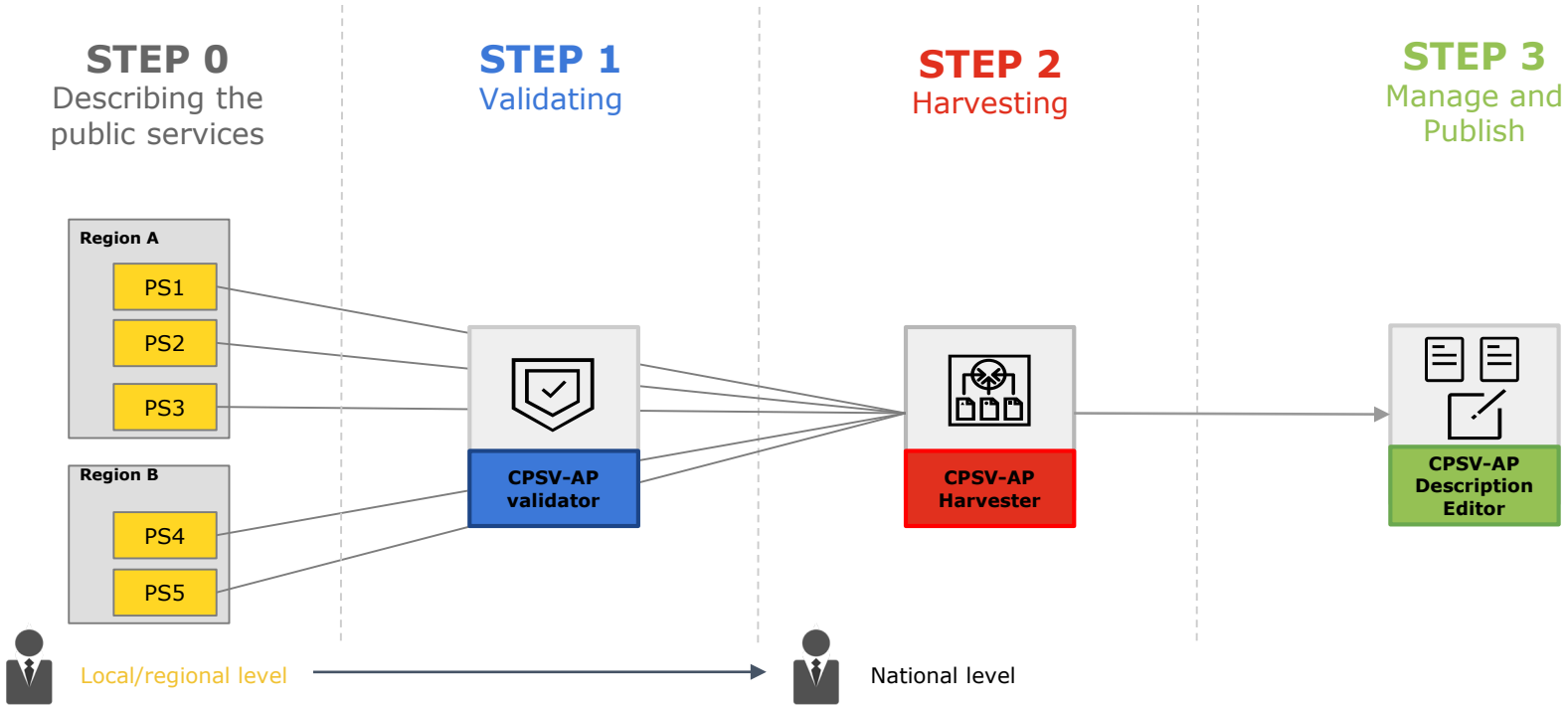

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Demo

'I am a national authority, creating a national catalogue of services.'

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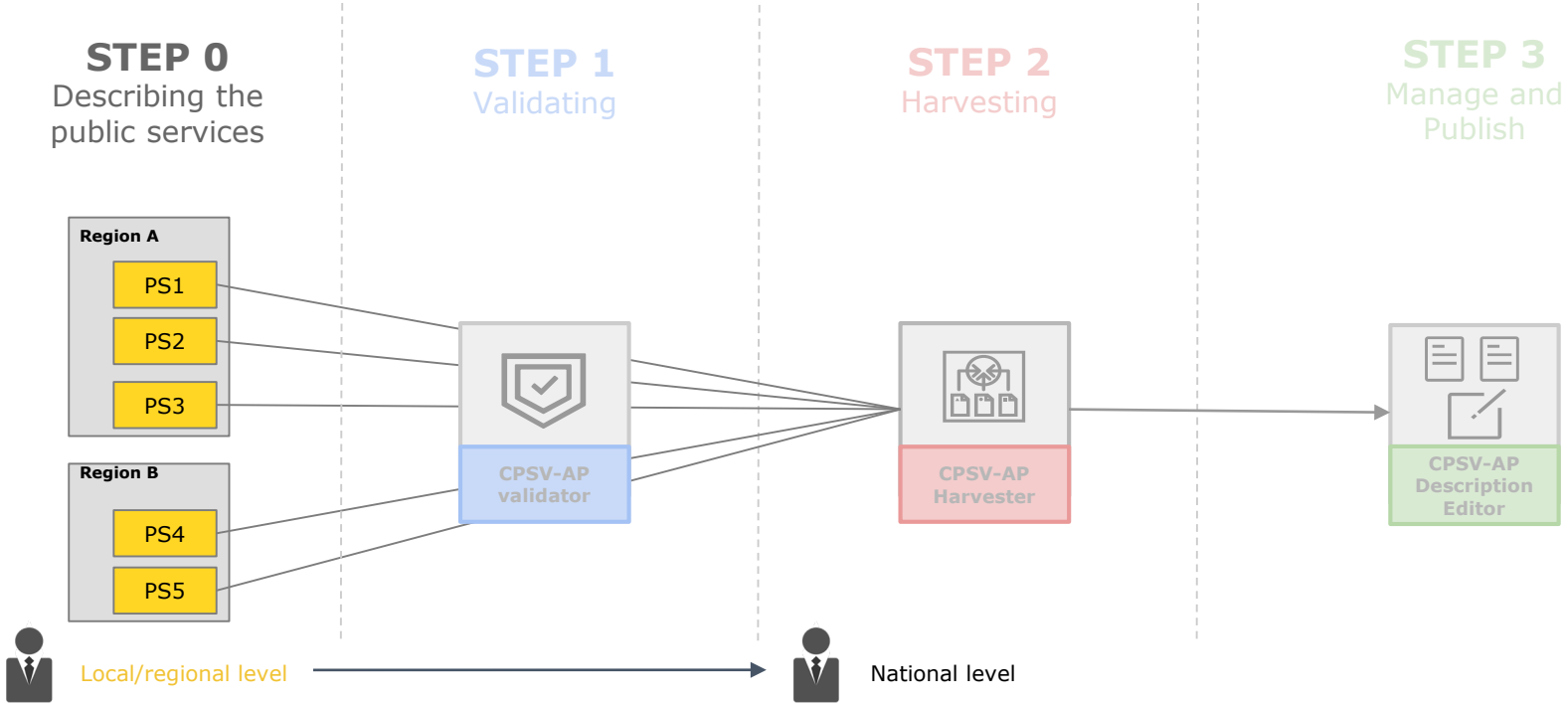
STEP 0: Describing the public services



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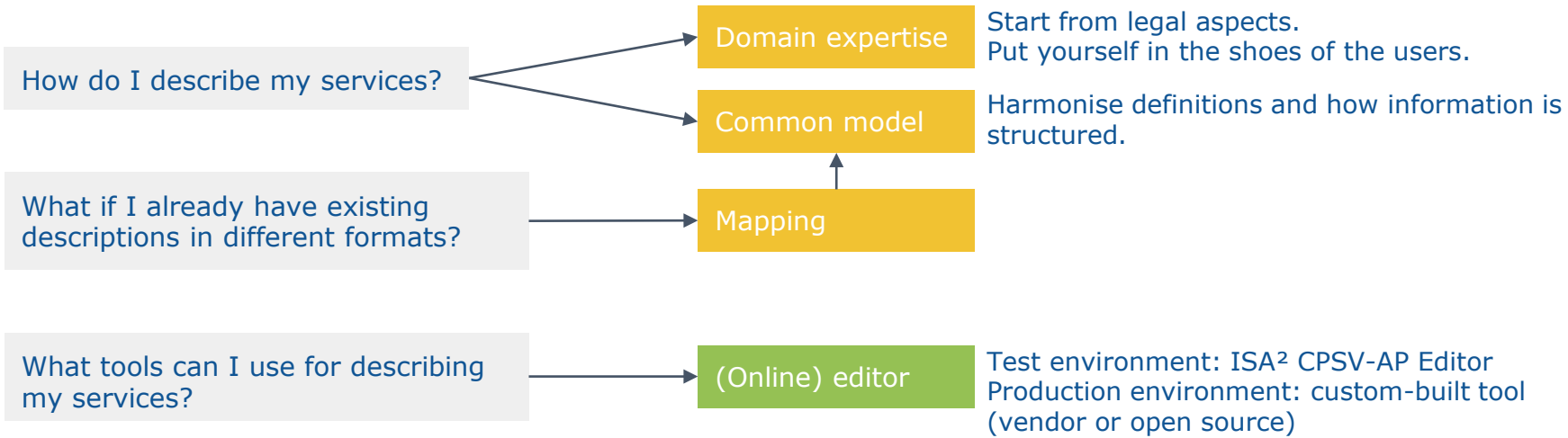
STEP 0: Describing the public services (local/regional/national level)



'I am a national authority, creating a national catalogue of services.'

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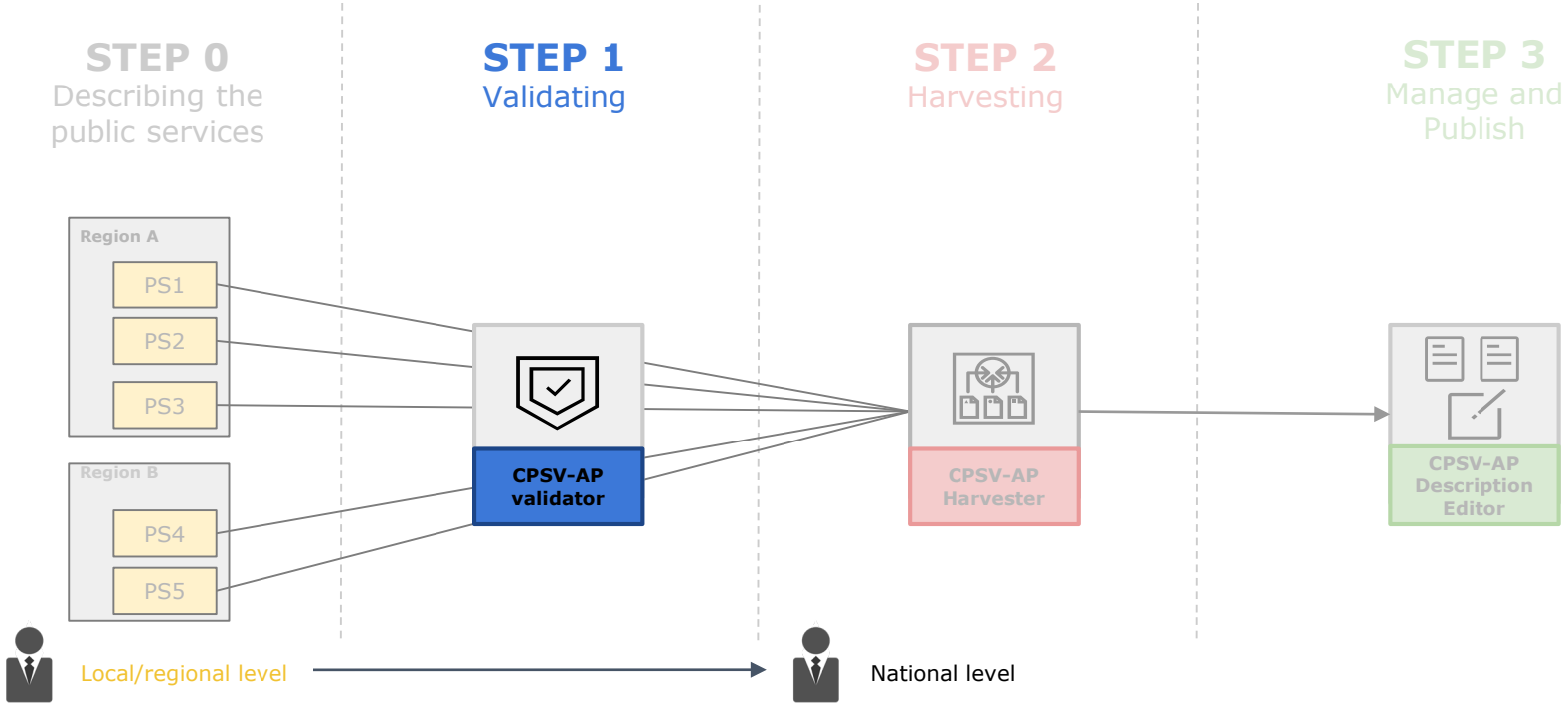
STEP 1: Validating



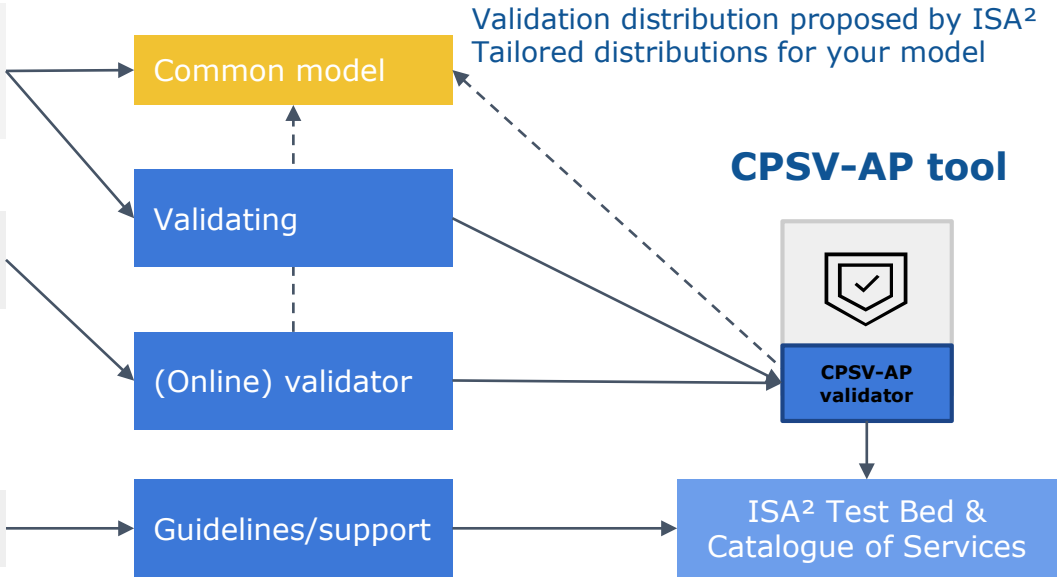
STEP 1: Validating

How do I make sure the public services are following commonly agreed rules and constraints?

How can I easily validate my public services data?

- Without managing anything?
- Based on my custom data model?
- Decentrally (within each region)?
- Centrally?

How do I set up my validation services?



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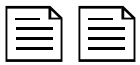
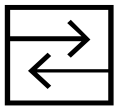
STEP 1: Validating – EXAMPLE validation from regional to national level



1 I have public services described regarding the waste management at regional level.

2 I want to exchange these public services with the national level.



3 I make sure my public services are in machine readable format and described according to the national level validation rules.

4 I validate my data against the validator provided by the national level and solve any remaining issues.

5 I can successfully share my public services with the national level.

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STEP 1: Validating – EXAMPLE on the rules

Public service:
Waste management

Identifier: ID_Waste_ Management

Name: Waste management

Description: The guidelines for managing waste

Sector: Agriculture

Is Grouped By: doing a business

Has A Competent Authority: Economic development

Identified as '**Public service**'.

A public service **must** have **one identifier**.

A public service **must** have **one name**.

A public service **must** have **one description**.

A public service **can** have **one** or **multiple sectors.**

A public service **can** be grouped by **one or multiple business or life events.**

A public service **must** have **one competent authority**.

Additional checks on the format (is it a text, is it a number, etc) are also in place.

CPSV-AP validator

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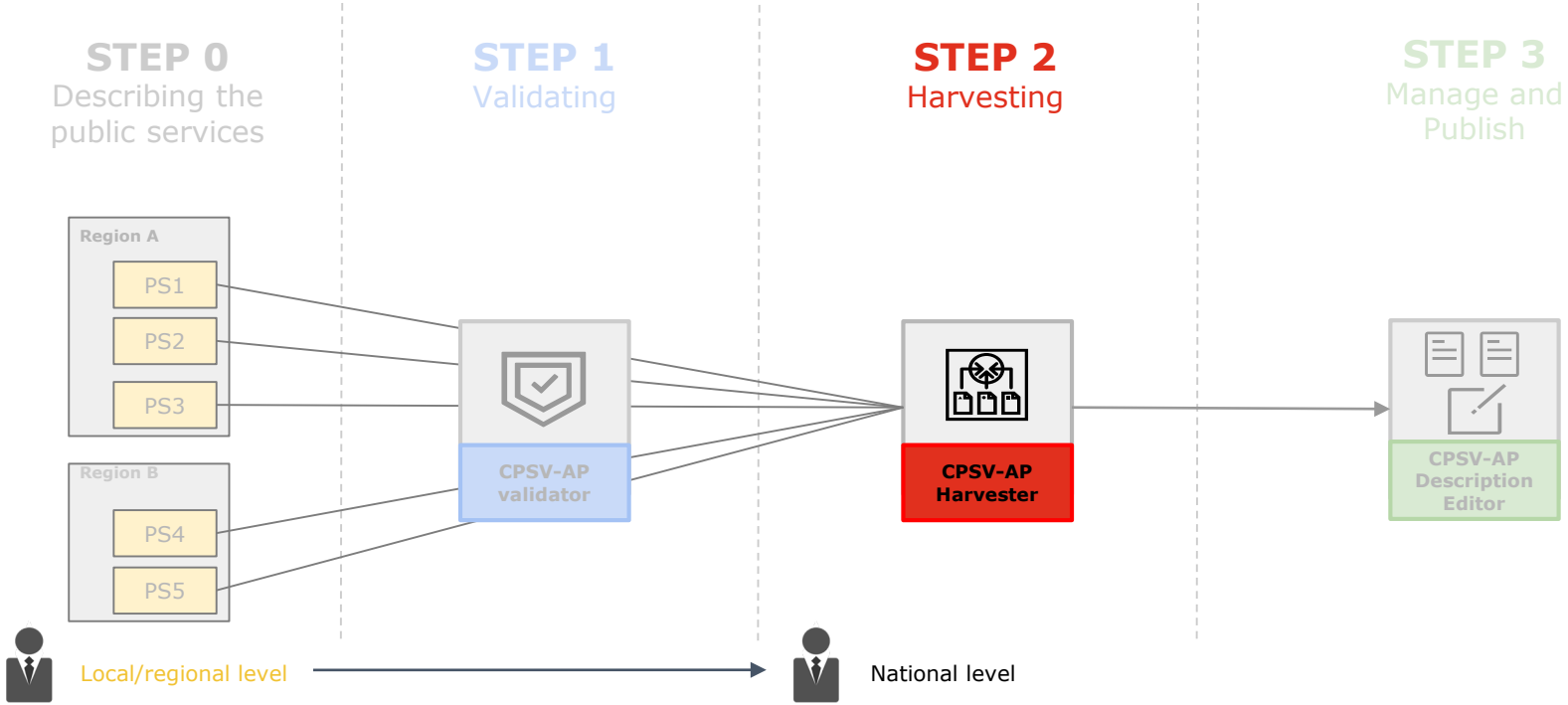
STEP 2: Harvesting



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STEP 2: Harvesting

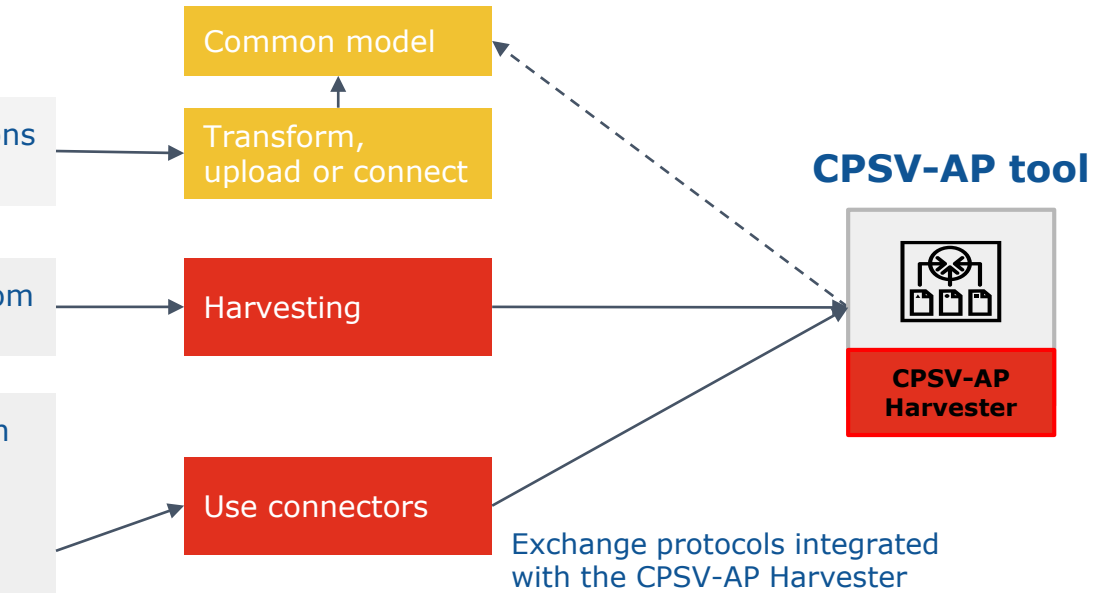
What if I already have existing descriptions in different formats?

How do I retrieve public services data from several sources automatically?

How can I set up the connectors between the sources and my central catalogue? (APIs)

Which data formats can I harvest?

Which exchange protocols do I need to use to retrieve the data? (REST/SOAP/..)



'I am a national authority, creating a national catalogue of services.'

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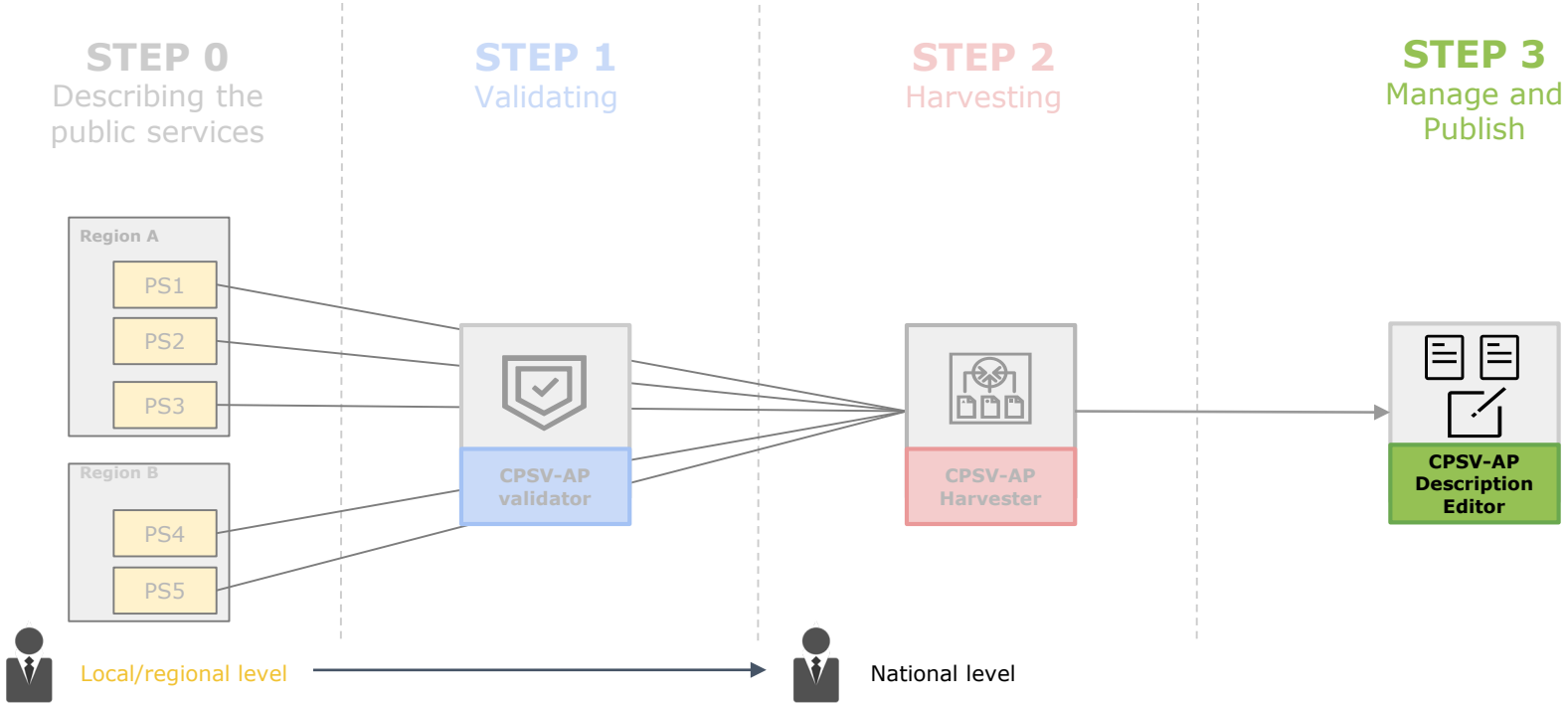
STEP 3: Manage and Publish



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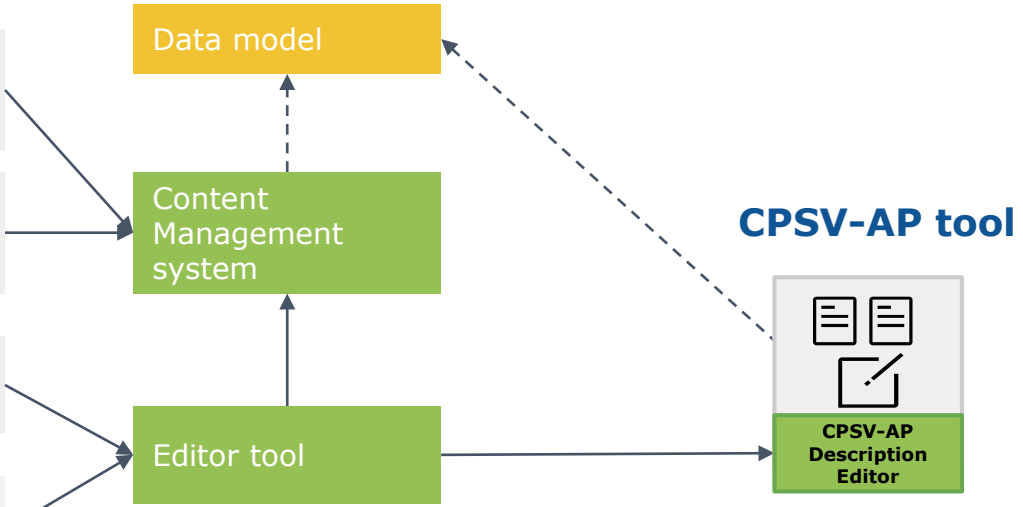
STEP 3: Manage and Publish

Why do I need to use a content management system?

How do I set up my content management system?

Which tool can I use for describing my public services data?

How do I create/update/delete public service descriptions?



'I am a national authority, creating a national catalogue of services.'

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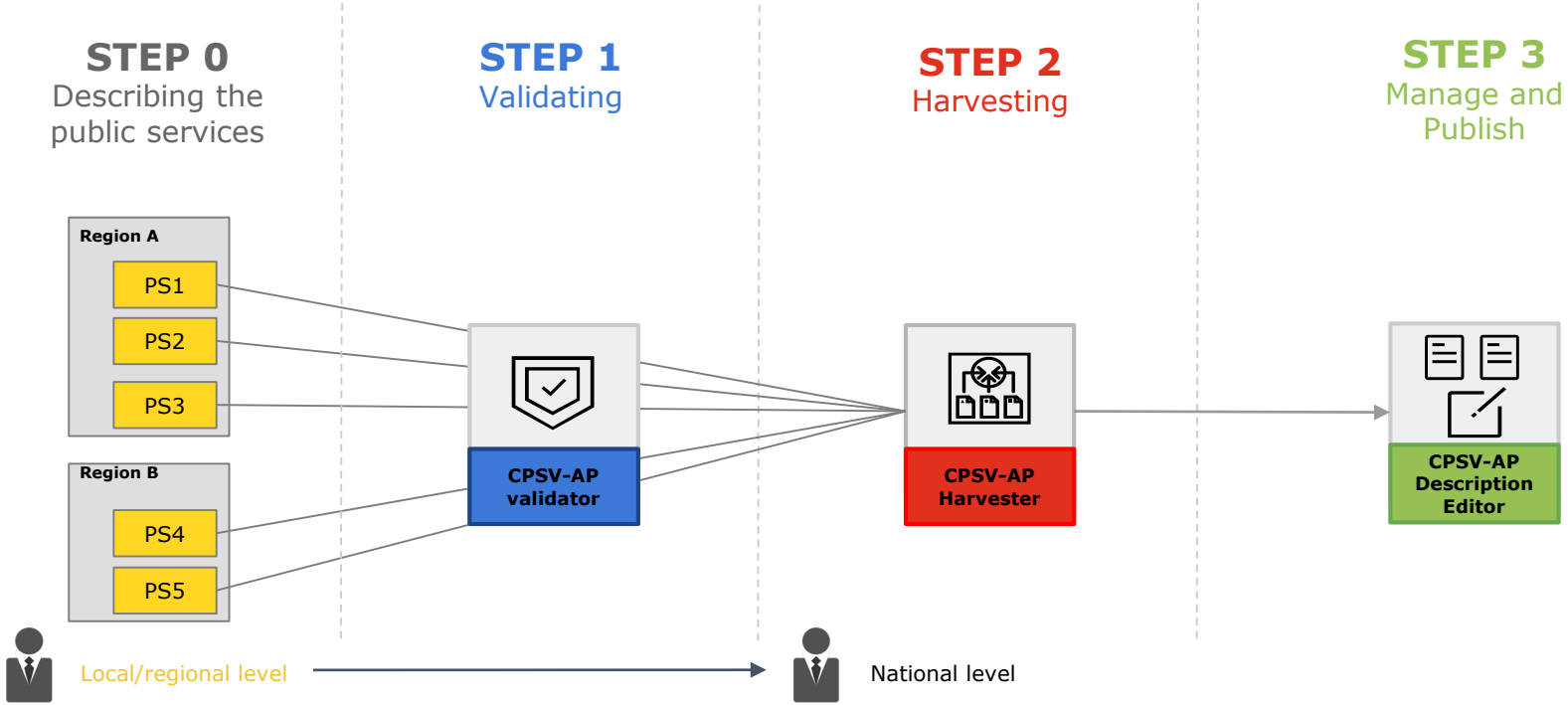
Overview



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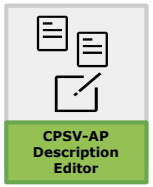
Access to the tools

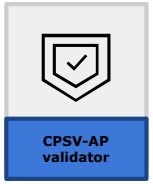


CPSV-AP Description Editor

http://cpsv-ap.semic.eu/cpsv-ap_editor/

CPSV-AP Harvester

http://cpsv-ap.semic.eu/cpsv-ap_harvester/cpsv-harvester.html



CPSV-AP Validator

https://www.itb.ec.europa.eu/shacl/cpsv-ap/upload

Use case 2

'I need validation of my public service data.'

‘I need validation of my public service data.’

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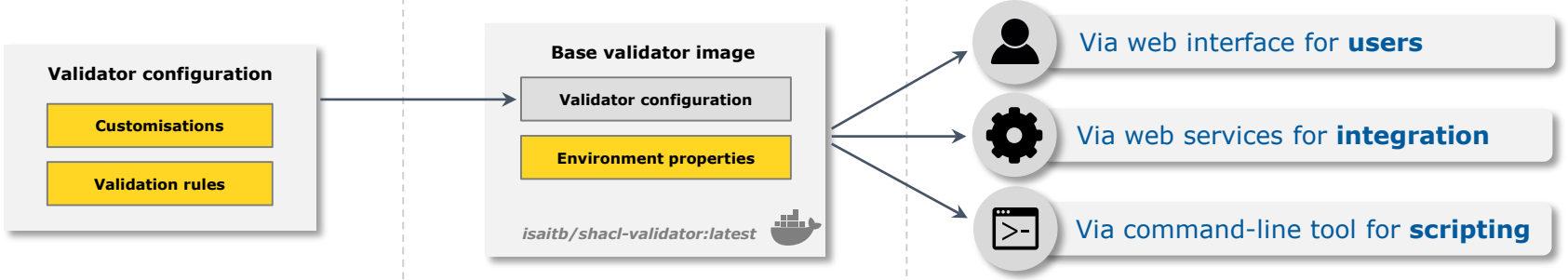
Test Bed validator setup

STEP 1
Define configuration

STEP 2
Create validator

STEP 3
Use validator APIs



What are the options to operate your validator?

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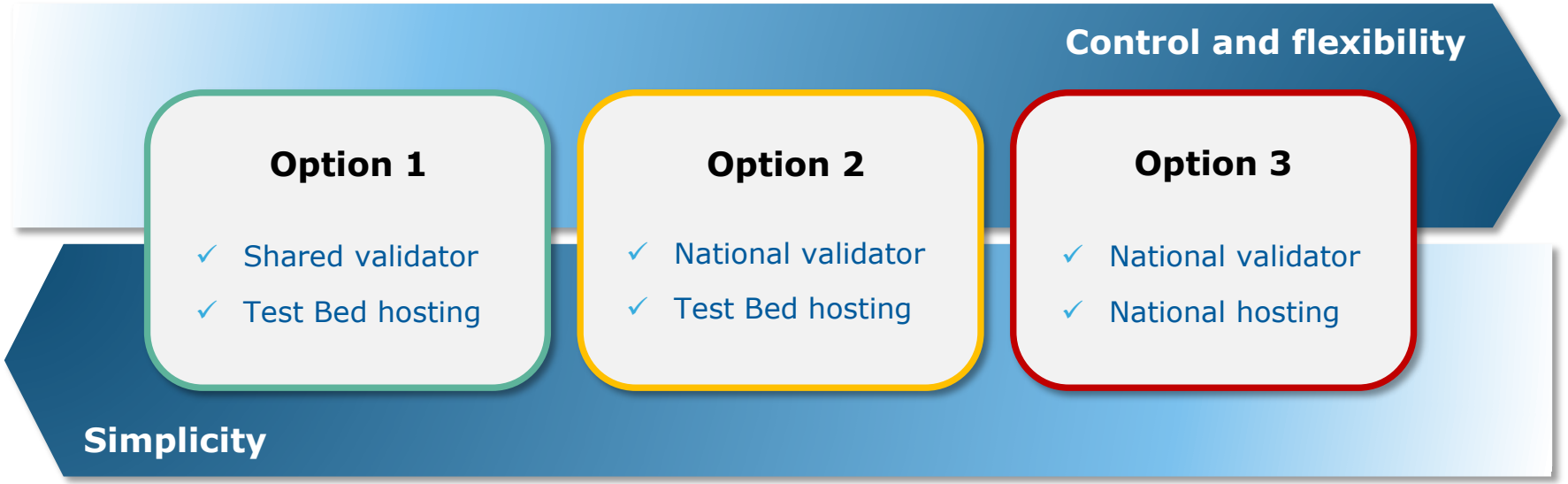
Validator operation options



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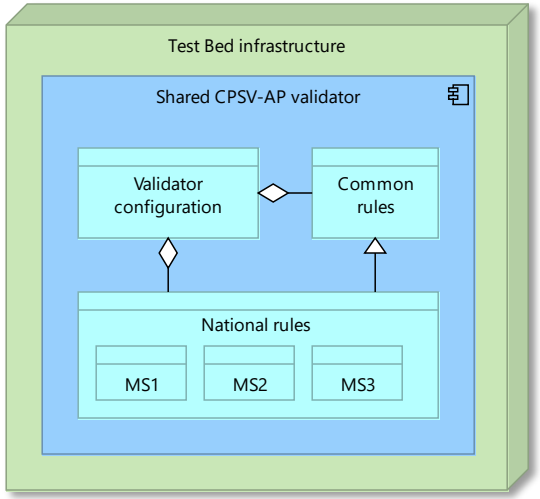
Option 1 Shared validator hosted on Test Bed resources



- ✓ Single, publicly accessible validator
- ✓ No operational, hosting or monitoring concerns
- ✓ Choice to validate against common or National rules
- ✓ Rule configuration managed by CoS team (e.g. via shared GitHub repository)
- ✓ National updates published following review process by CoS team

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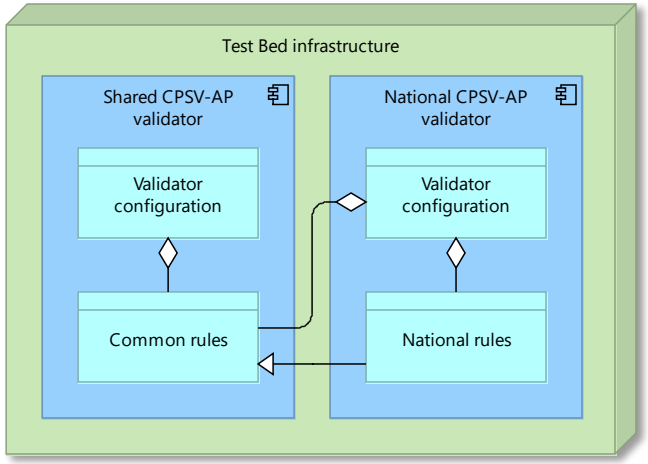
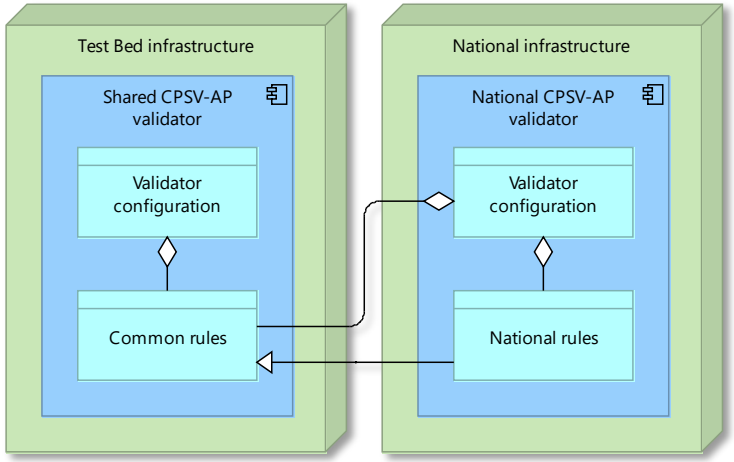
Option 2 National validator hosted on Test Bed resources



- ✓ Separate, publicly accessible validator
- ✓ No operational, hosting or monitoring concerns
- ✓ Validator configuration, theming, behaviour and rules managed fully by Member State
- ✓ Common rules can be reused as needed
- ✓ Automatic service updates for new changes

Option 3 National validator hosted on National resources



- ✓ Separate, public or private validator(s)
- ✓ Hosting and operation by Member State
- ✓ Validator configuration, theming, behaviour and rules managed fully by Member State
- ✓ Common rules can be reused as needed
- ✓ Flexibility to integrate in internal processes (e.g. automatic validation of ingested data, integration with internal triple stores)

Demo

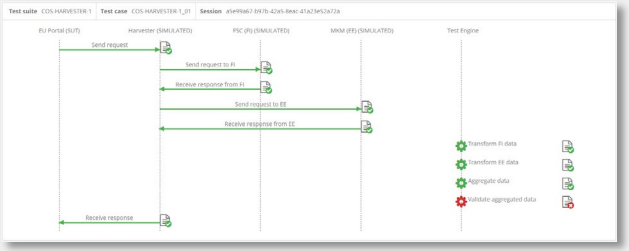
Further conformance testing options

Additional validators

- ✓ Define National validators for any specification based on RDF, XML, JSON or CSV, using the Test Bed’s services
- ✓ Use as **public tools**, internal **quality control** services, …

Complete conformance testing

- ✓ Use the shared Test Bed platform or a National instance
- ✓ Define your specifications’ **conformance testing strategy**
- ✓ Reuse your validators as **building blocks** in test cases



Poll question

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Which approach would you prefer for your public service data validators ?

- I want to only provide my rules without operational concerns
- I want to set up my own validators but delegate their hosting
- I want full control and prefer to operate my validators myself

Poll question

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What kind of support would you be interested in?

- **Harvesting**
- **Describing public services**
- **Validation services**

You can directly email us in case you want to have a chat or have questions.

Poll question

Were the presented use cases in line with the support you expect from us?

- **YES**
- **NO**

Poll question

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What other kind of use cases or services would you be interested in?

e.g. automated tagging, chatbots, Natural language processing

[OPEN QUESTION]

Next steps

1. **Direct support** to the Member States related to:
   - the use of the tools;
   - the use of CPSV-AP;
   - the compliance with CPSV-AP.
2. **Communication activities and learning materials**
3. **Maintenance or development of open specifications**, e.g. CPSV-AP

Poll question

What training materials would you be interested in?

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- How to use the CPSV-AP tools
- How to validate my public services
- Understanding the CPSV-AP data model
- Mapping my data to the CPSV-AP data model
- other

Feel free to mention other training materials in the chat or email us.

4. Q&A

ISA² programme

You click, we link!

Stay in touch

ec.europa.eu/isa2

@ EU_isa2

ISA² Programme

DIGIT-ISA2-COMM@ec.europa.eu

Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the ISA² programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.

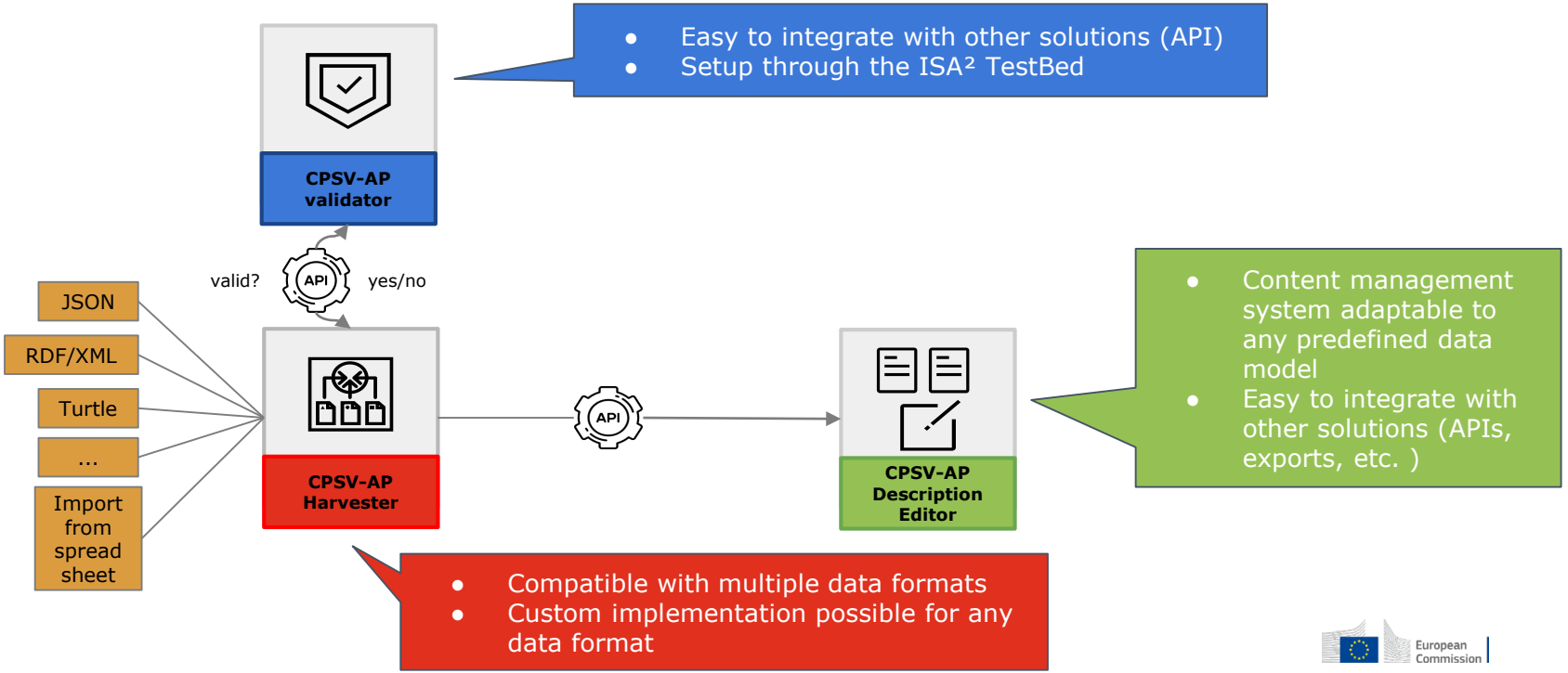
Shaping together

the future policy on public sector interoperability

KNOW MORE and GET INVOLVED

Annex

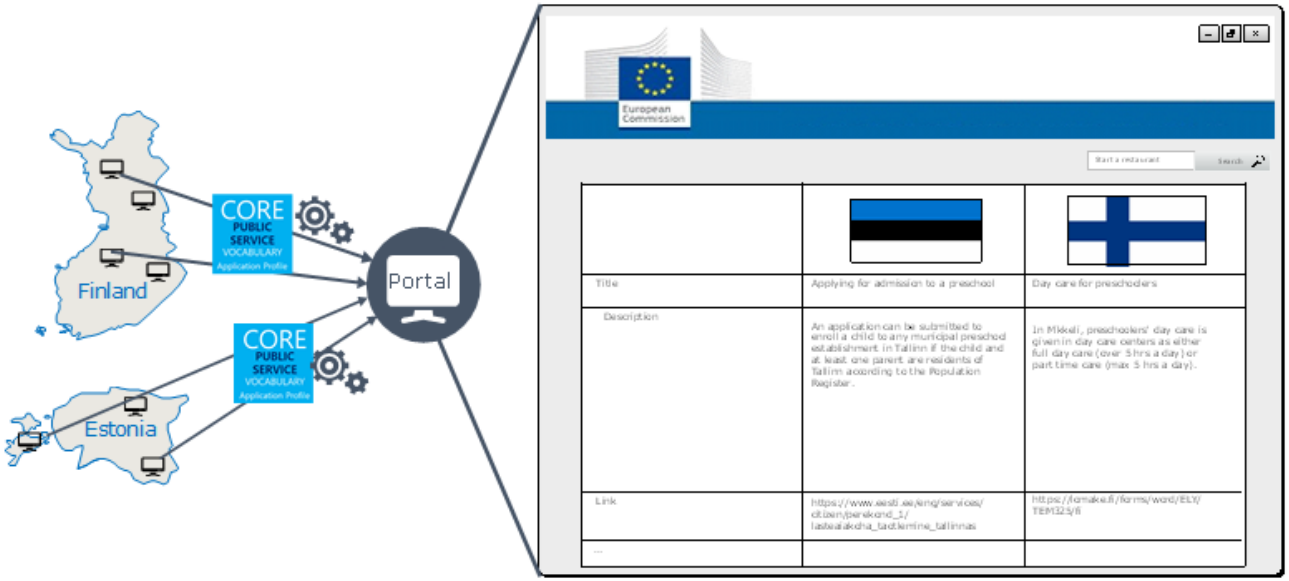
Overview of the tools



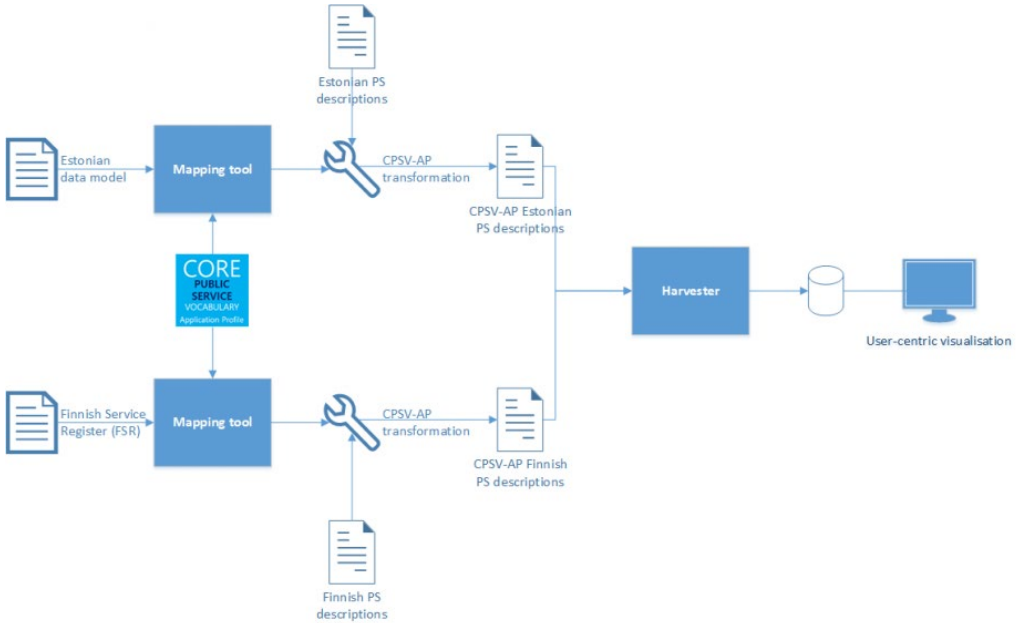
Catalogue of Services pilot examples

- Creation of a federal/cross-border catalogue of public services (pilot 1)
- Implementation of a description editor (pilot 2)
- Automated validation of compliance for CPSV-AP (pilot 3)

Pilot 1: Creating a cross-border catalogue of public services with Finland and Estonia



Pilot 1: Creating a cross-border catalogue of public services with Finland and Estonia



Tools used in pilot:

- Harvester
- Mapping tool

Documentation available online:

- Joinup
- GitHub

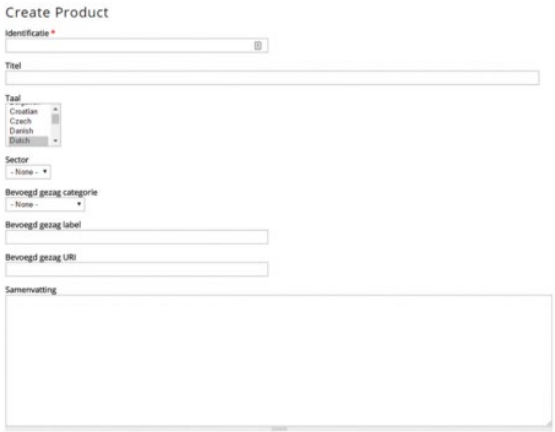
Pilot 2: Tailoring the public service description editor for the Netherlands

GOAL:

A Simple way of creating public service descriptions that follow the Dutch national data model for describing and exchanging public services.

APPROACH;

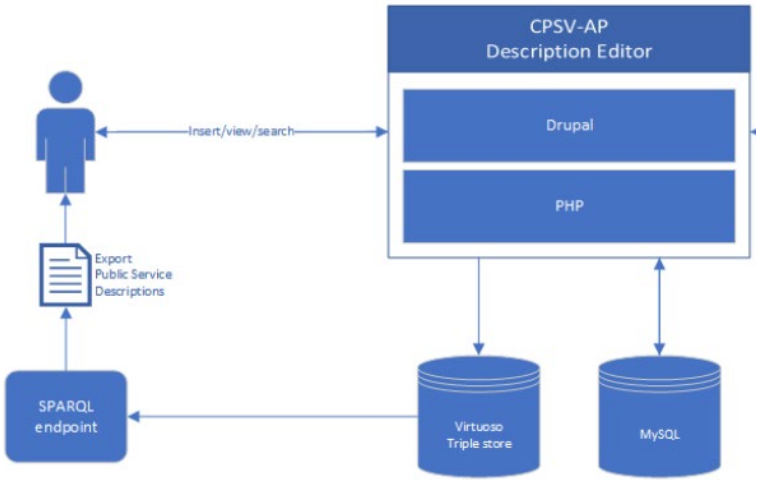
By **adapting the** CPSV-AP Description Editor, to the Dutch national data model format, it enabled the user to create descriptions following the Dutch data model, save these and edit them later in an user-friendly way.



Template in the Description editor for adding a 'Product' according to the Dutch data model

Pilot 2: Tailoring the public service description editor for the Netherlands

CPSV-AP Description Editor architecture



Tools used:

- Description Editor
- APIs

Documentation available online:

- Joinup
- GitHub

Pilot 3: Adapting the CPSV-AP Validator for CPSV-AP italy

Description

In this pilot, we tailored the CPSV-AP Validator to be able to validate the public service descriptions. This involved modifying the rules of the Validator according to the Italian specifications, namely CPSV-AP_IT

Documentation available online:

- Joinup

Showing 1 to 5 of 5 entries

Class Name	Rule ID	Rule Severity	Rule Description	Message
PublicService	179	error	cpsvapit:PublicService non esiste.	La classe obbligatoria cpsvapit:PublicService non esiste.
RoleInTime	180	error	cpsvapit:RoleInTime non esiste.	La classe obbligatoria cpsvapit:RoleInTime non esiste.
Role	181	error	cpsvapit:Role non esiste.	La classe obbligatoria cpsvapit:Role non esiste.
Input	182	error	cpsvapit:Input non esiste.	La classe obbligatoria cpsvapit:Input non esiste.
Channel	183	error	cpsvapit:Channel non esiste.	La classe obbligatoria cpsvapit:Channel non esiste.

Validation results