Introducing the Interoperability Test Bed

Interoperability Test Bed

European Commission, DIGIT

What is the Test Bed?

ITB

Interoperability Test Bed

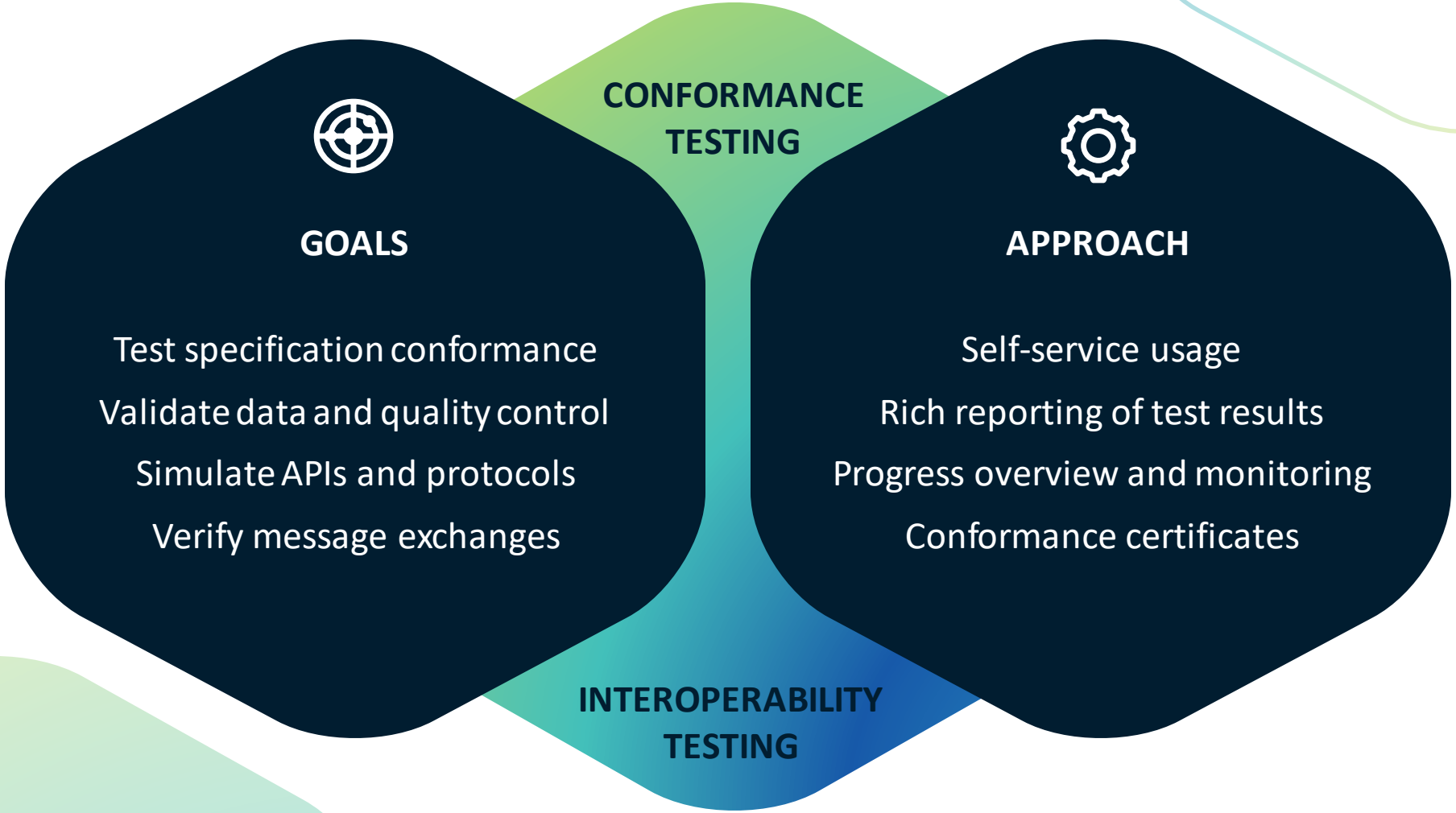
An online, intuitive and self-service platform for conformance testing of IT systems against semantic and technical specifications

Powered by DIGIT

Standards based (GITB CWA)

European Commission

What can it be used for?



Key services

VALIDATORS

Used for **data validation**

Anonymous and stateless

Multiple input channels

Various reporting outputs

Configuration-driven

CONFORMANCE TEST BED

Used for **conformance testing**

Account-based access

Scenario-based test cases

Rich monitoring and reporting

Extensible capabilities

Flexible usage models

USE AS A DIGIT SERVICE

Use as **services**

Shared cloud-based instances

Hosted and operated by DIGIT

User-managed configuration

Distinct setup per project

INSTALL ON-PREMISE

Use as **components**

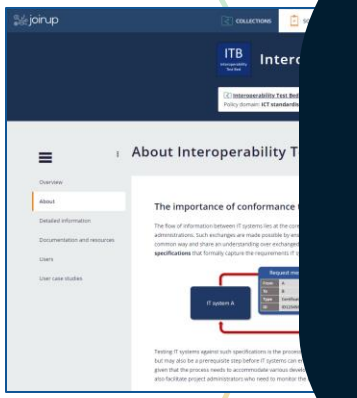
Public Docker images

Hosted and operated by users

Allows internal integrations

Allows access restrictions

Rich documentation



TEST BED JOINUP SPACE

Introduction and details

Documentation links

Releases and news

User stories

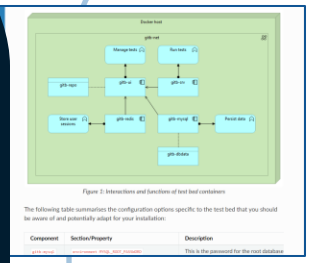
ONLINE DOCUMENTATION

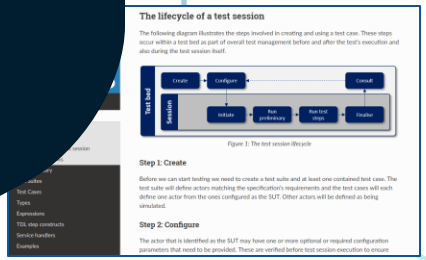
User guides

Developer guides

Documentation

Tutorials





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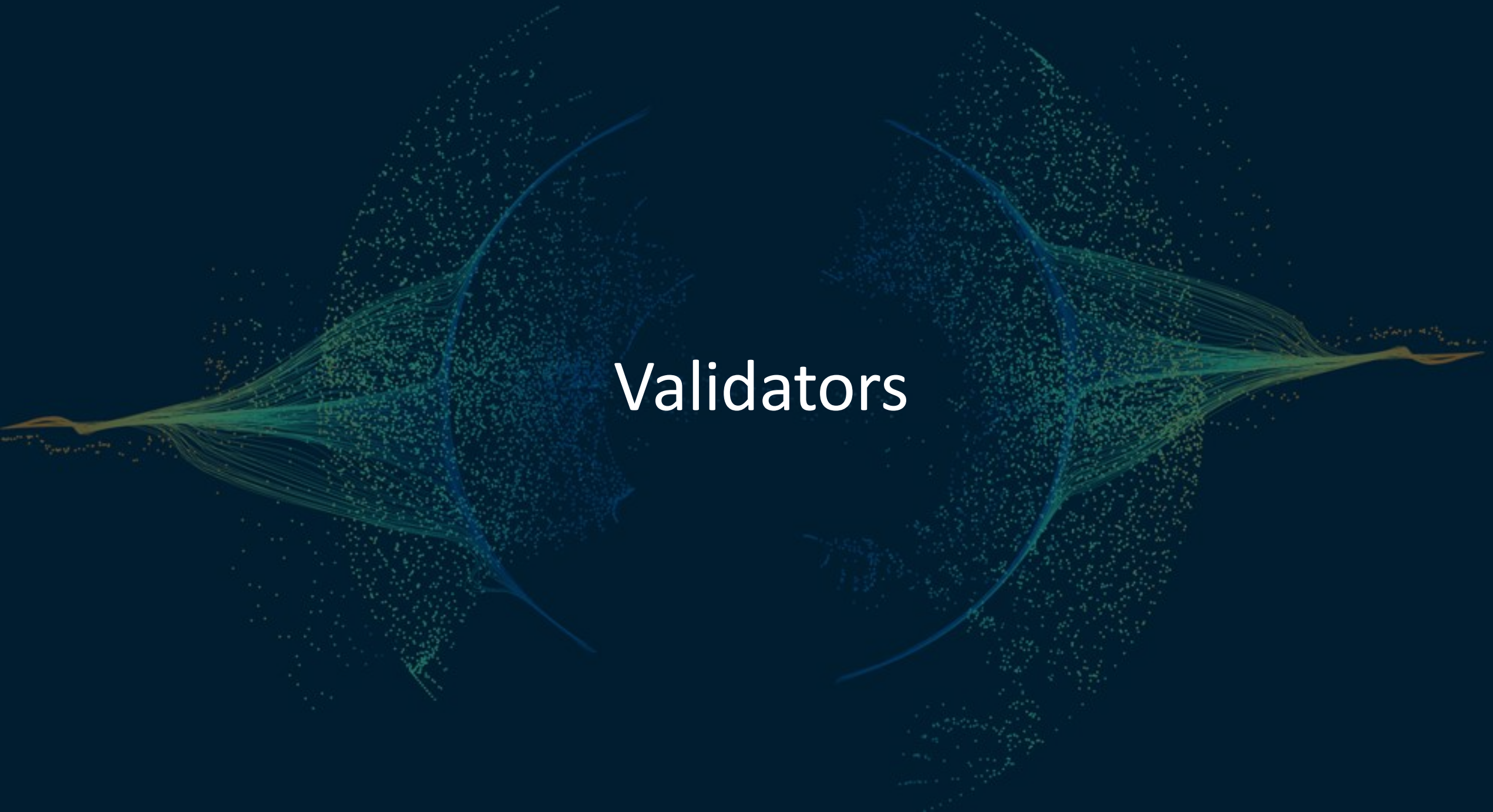

Validators

Validator syntax support

ITB
RDF validator

Validate **RDF** data with SHACL shapes

ITB
XML validator

Validate **XML** data with XSDs and Schematron

ITB
CSV validator

Validate **CSV** data with Table Schema

ITB
JSON validator

Validate **JSON** data with JSON Schema

Available as DIGIT services

See the RDF, XML, CSV, JSON guides

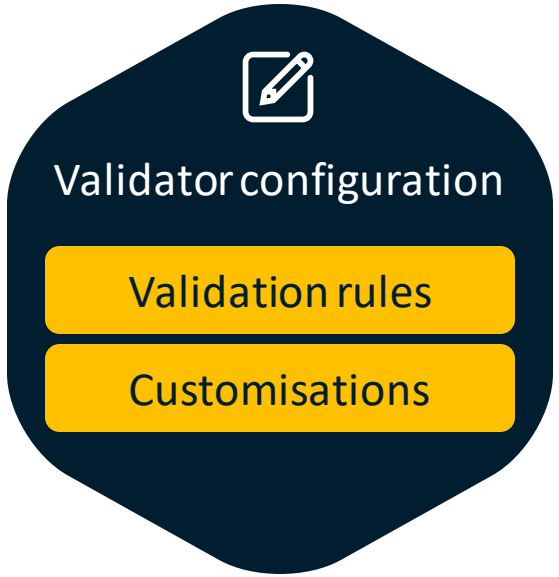
Available on Docker Hub

See the RDF, XML, CSV, JSON images

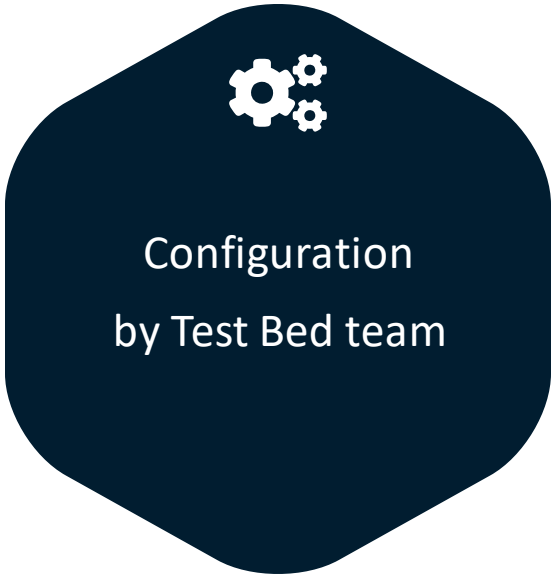
European Commission

Validator setup as DIGIT service

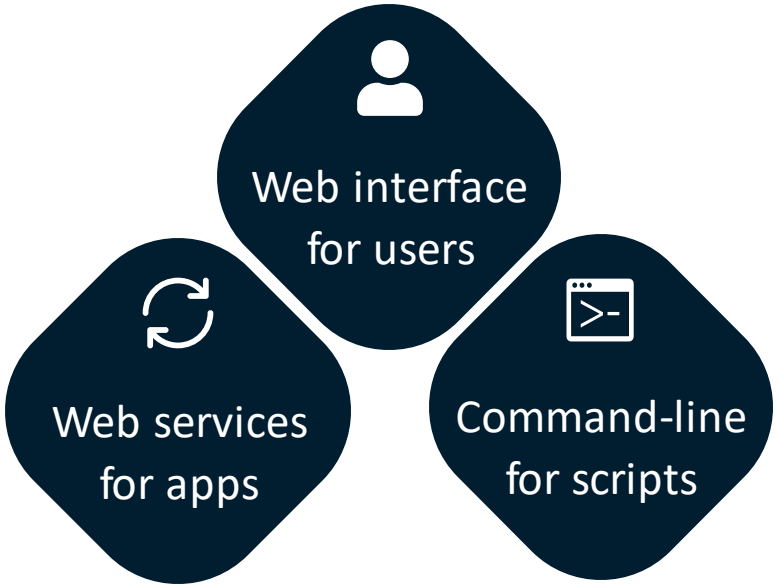
STEP 1
Define configuration



STEP 2
Share configuration



STEP 3
Use validator APIs

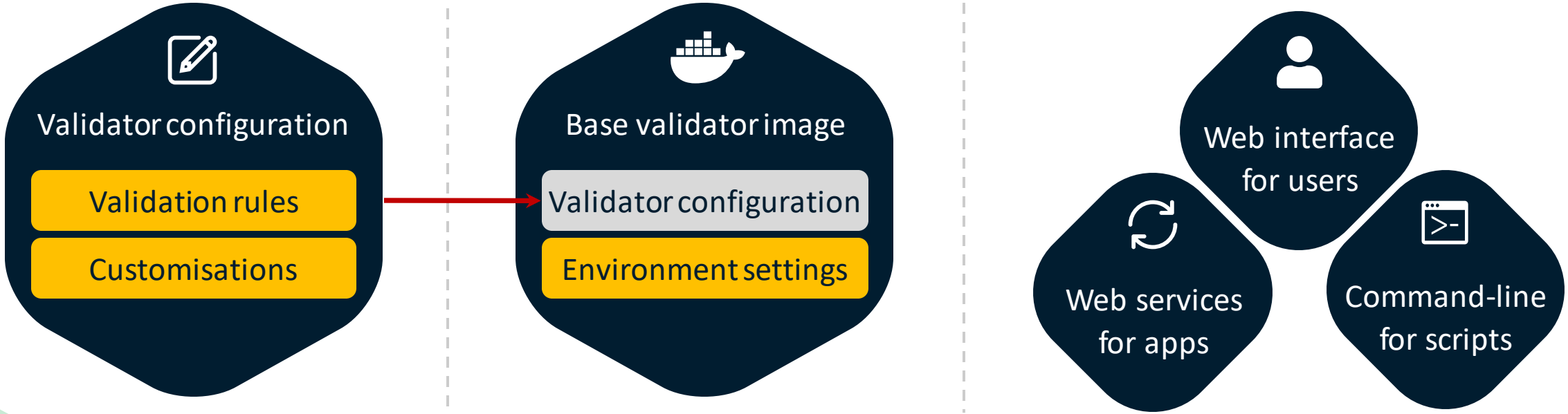


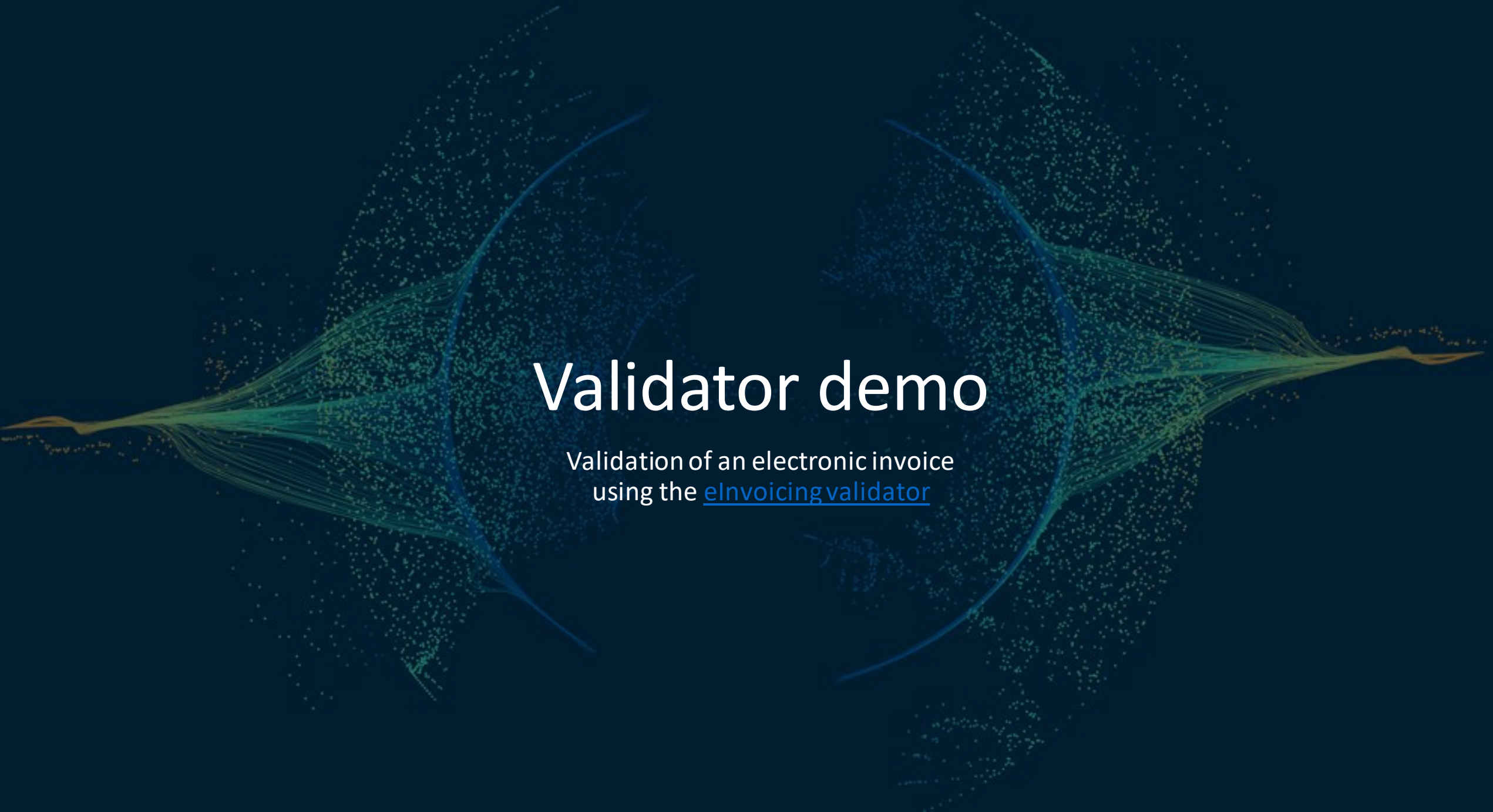
Validator setup on-premise

STEP 1
Define configuration

STEP 2
Create validator

STEP 3
Use validator APIs





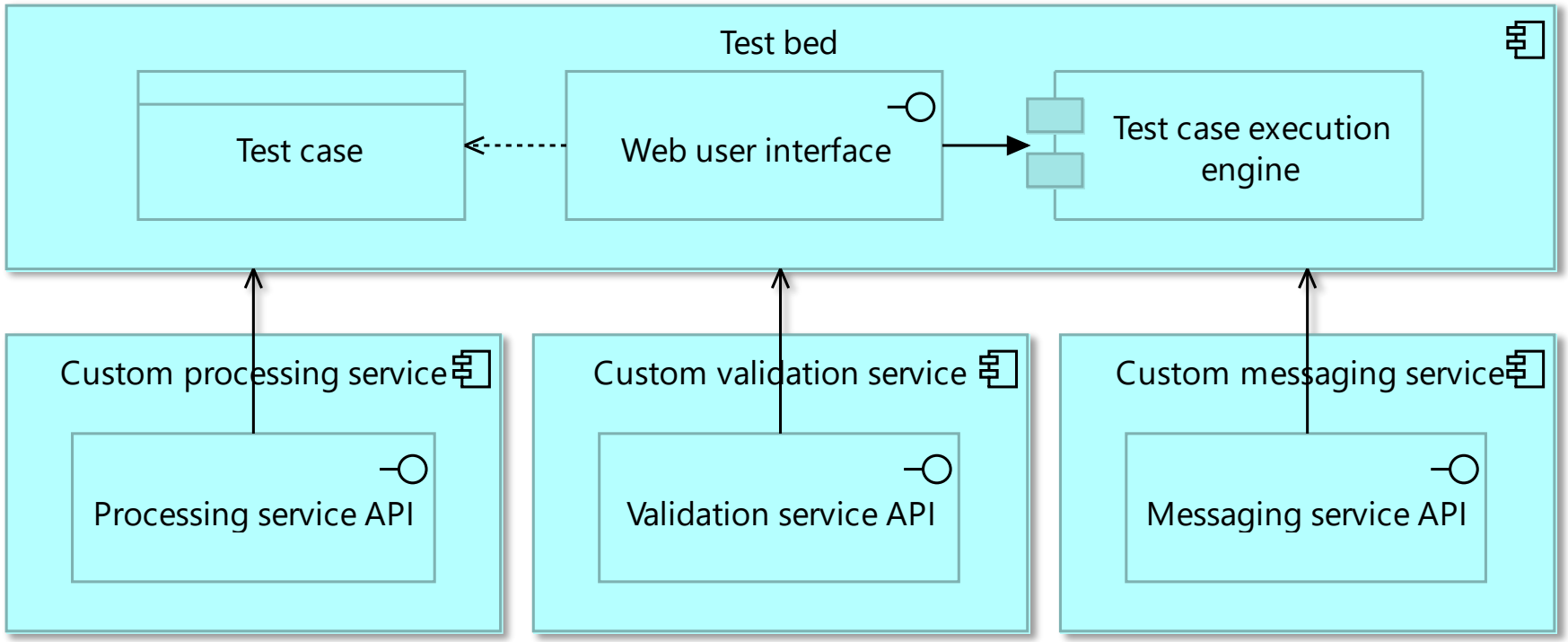
Validator demo

Validation of an electronic invoice
using the eInvoicing validator

Conformance Test Bed

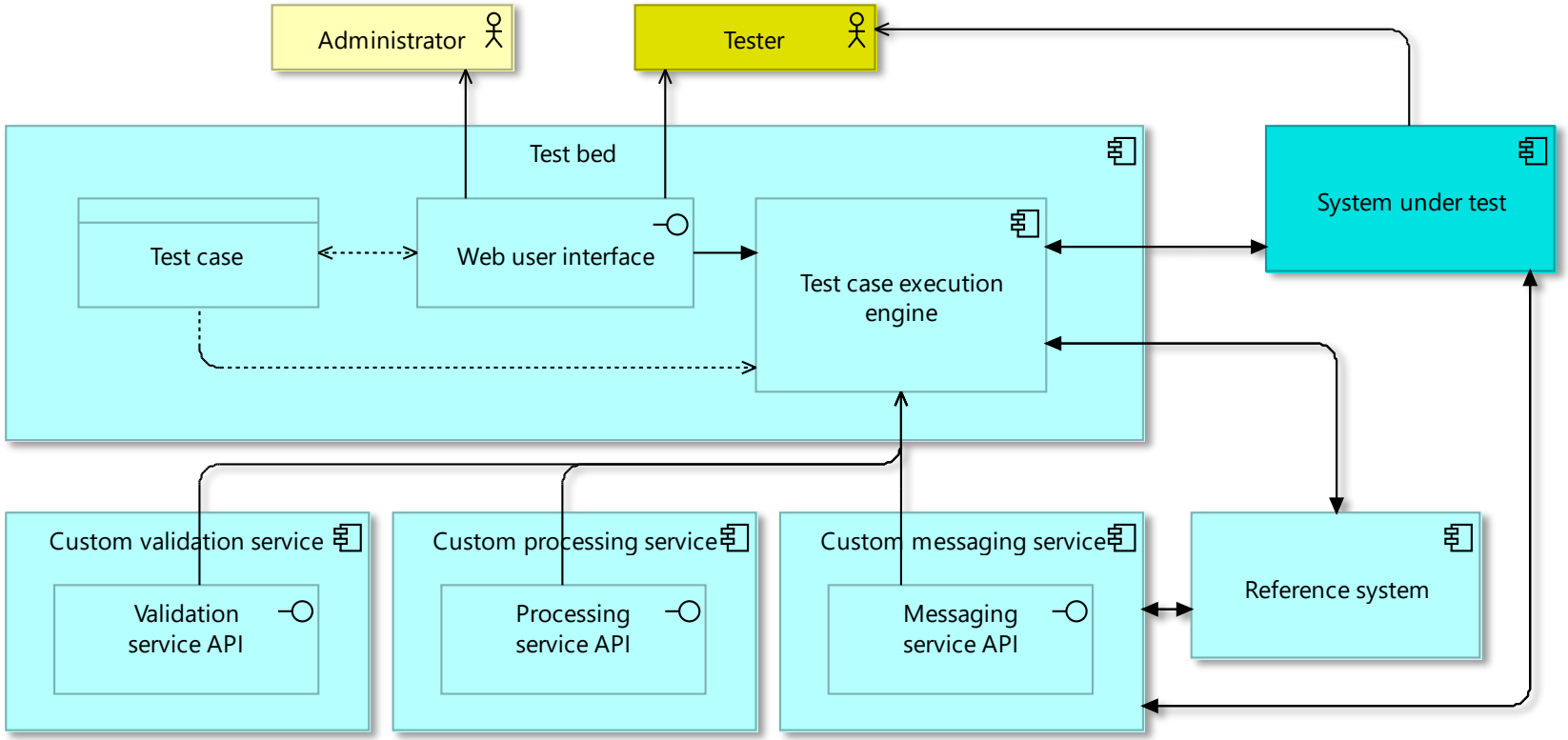
Conformance testing capabilities

Custom capability extensions



European Commission

Conformance testing overview



ADMINISTRATOR

Configure tests

Monitor progress

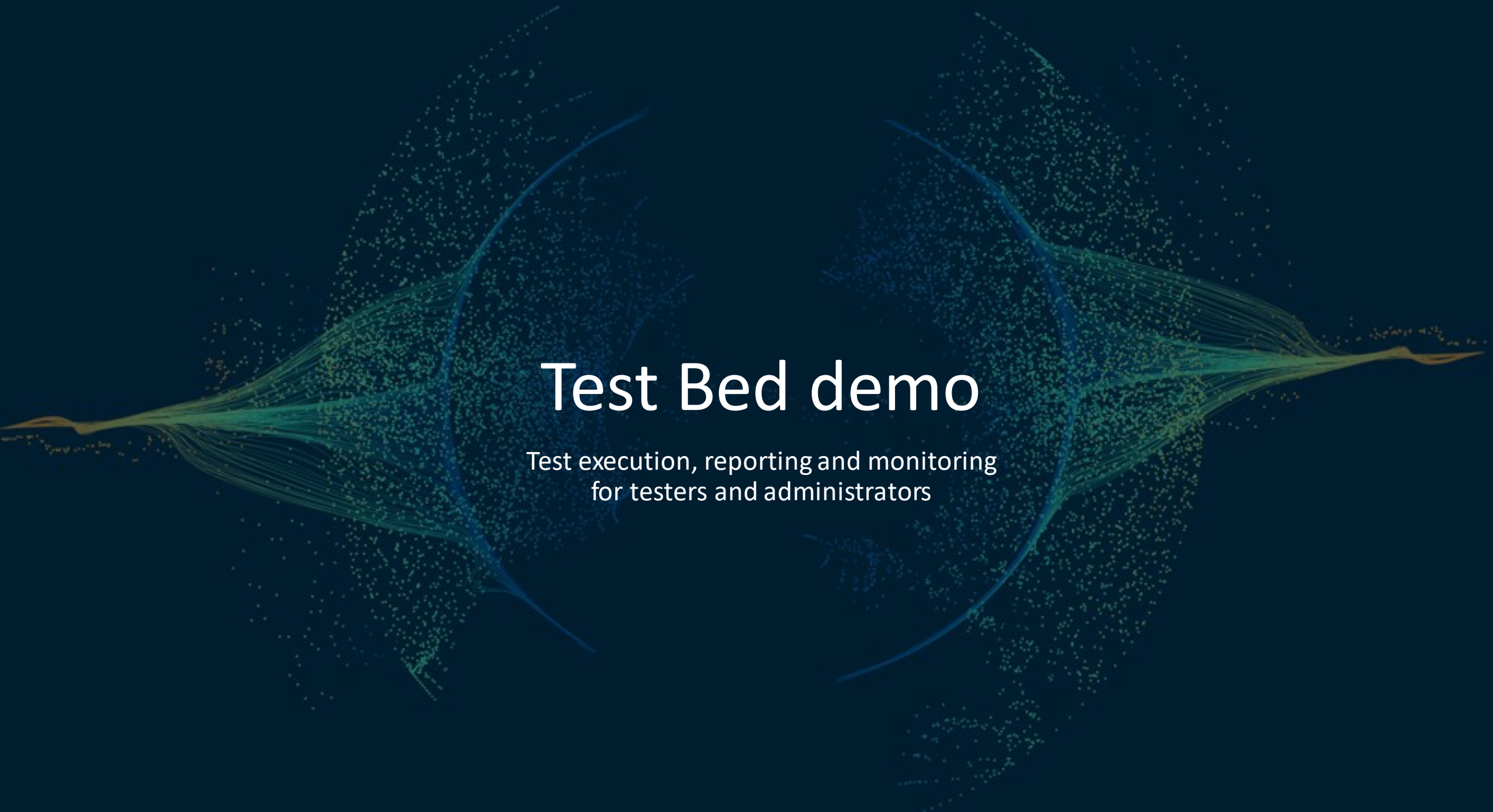
Manage users

TESTER

Manage organisation

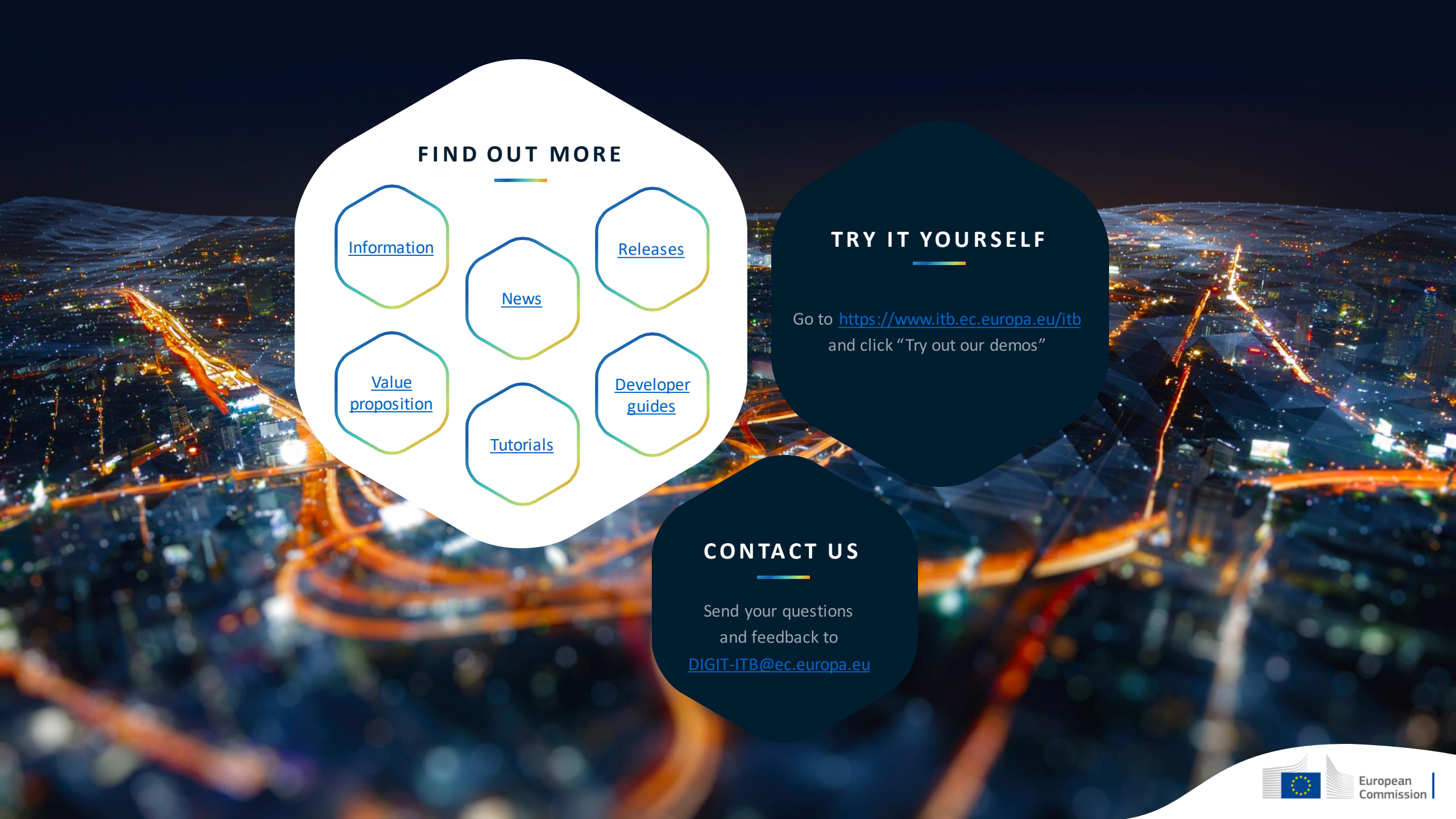
Execute tests

Review results



Test Bed demo

Test execution, reporting and monitoring
for testers and administrators



FIND OUT MORE

- Information
- News
- Releases
- Value proposition
- Tutorials
- Developer guides

TRY IT YOURSELF

Go to https://www.itb.ec.europa.eu/itb and click “Try out our demos”

CONTACT US

Send your questions and feedback to DIGIT-ITB@ec.europa.eu

European Commission

European Commission

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DIGIT-INTEROPERABILITY@ec.europa.eu

https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe

Annex A

Validator demo screenshots

Validator input

eInvoice Validator

This is a service offered by the European Commission's DIGIT as part of the Digital Europe Programme, allowing you to validate electronic invoices against the requirements of the European Standard on eInvoicing. This service is also available via REST API and SOAP API, with complete eInvoicing conformance testing supported through the eInvoicing Test Bed.

Questions and feedback on this service can be sent to EC-EINVOICING-SUPPORT@ec.europa.eu.

File to validate File Select file...

Validate as

Validate

This service is powered by the Interoperability Test Bed, a conformance testing service offered by the European Commission's DG DIGIT for projects involved in the delivery of cross-border public services. Find out more here.

Validator result overview

Validation result

Overview

Date:	2021-06-10T09:07:30.701Z
File name:	invoice.xml
Validation type:	UBL Invoice XML
Result:	FAILURE
Errors:	25
Warnings:	17
Messages:	0

View annotated input | Download XML report | Download PDF report

Details

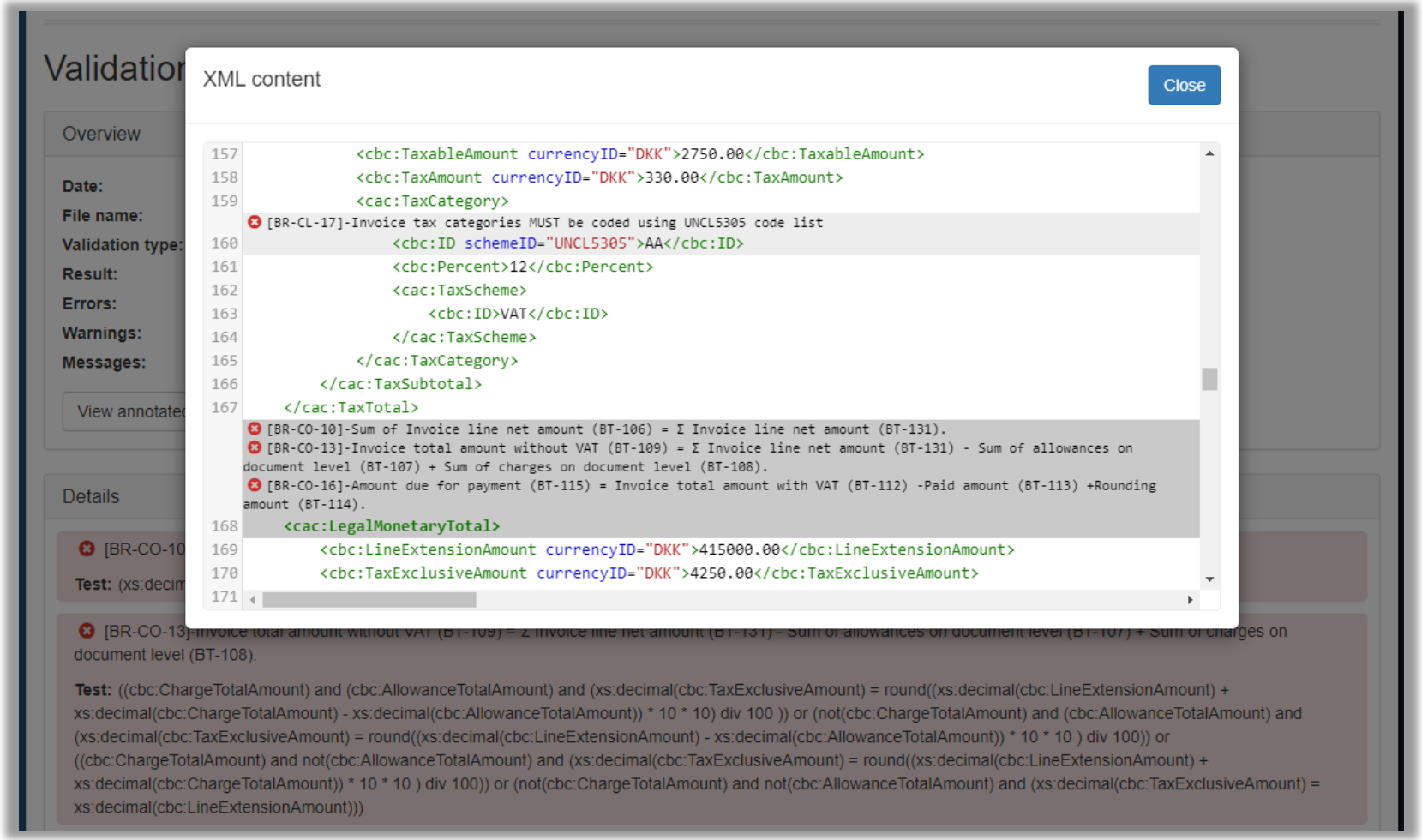
[BR-CO-10]-Sum of Invoice line net amount (BT-106) = Σ Invoice line net amount (BT-131).

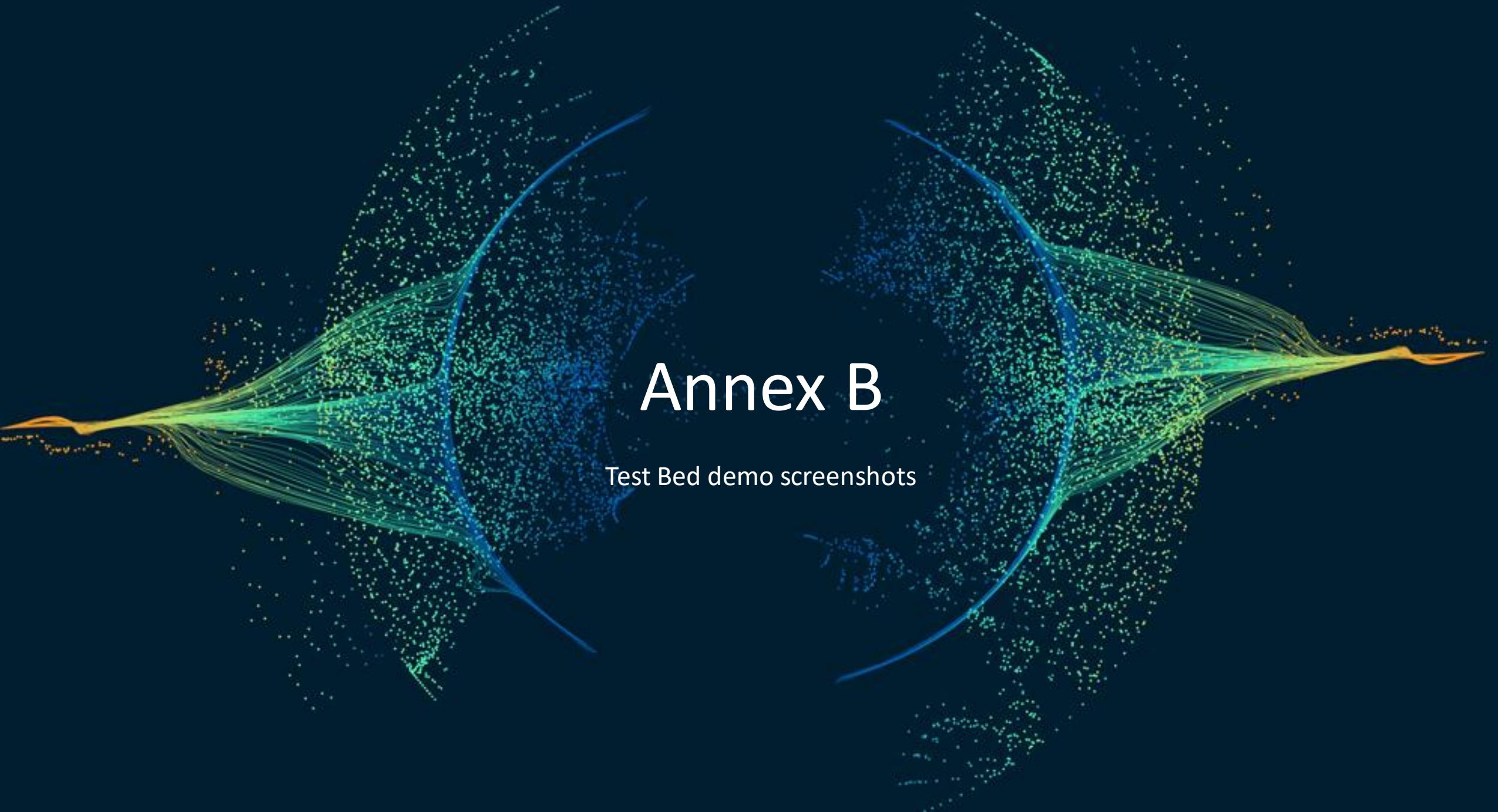
Test: (xs:decimal(cbc:LineExtensionAmount) = (round(sum(//(cac:InvoiceLine|cac:CreditNoteLine)/xs:decimal(cbc:LineExtensionAmount)) * 10 * 10) div 100))

[BR-CO-13]-Invoice total amount without VAT (BT-109) = Σ Invoice line net amount (BT-131) - Sum of allowances on document level (BT-107) + Sum of charges on document level (BT-108).

Test: ((cbc:ChargeTotalAmount) and (cbc:AllowanceTotalAmount) and (xs:decimal(cbc:TaxExclusiveAmount) = round((xs:decimal(cbc:LineExtensionAmount) + xs:decimal(cbc:ChargeTotalAmount) - xs:decimal(cbc:AllowanceTotalAmount)) * 10 * 10) div 100)) or (not(cbc:ChargeTotalAmount) and (cbc:AllowanceTotalAmount) and (xs:decimal(cbc:TaxExclusiveAmount) = round((xs:decimal(cbc:LineExtensionAmount) - xs:decimal(cbc:AllowanceTotalAmount)) * 10 * 10) div 100)) or ((cbc:ChargeTotalAmount) and not(cbc:AllowanceTotalAmount) and (xs:decimal(cbc:TaxExclusiveAmount) = round((xs:decimal(cbc:LineExtensionAmount) + xs:decimal(cbc:ChargeTotalAmount)) * 10 * 10) div 100)) or (not(cbc:ChargeTotalAmount) and not(cbc:AllowanceTotalAmount) and (xs:decimal(cbc:TaxExclusiveAmount) = xs:decimal(cbc:LineExtensionAmount)))

Validator result details

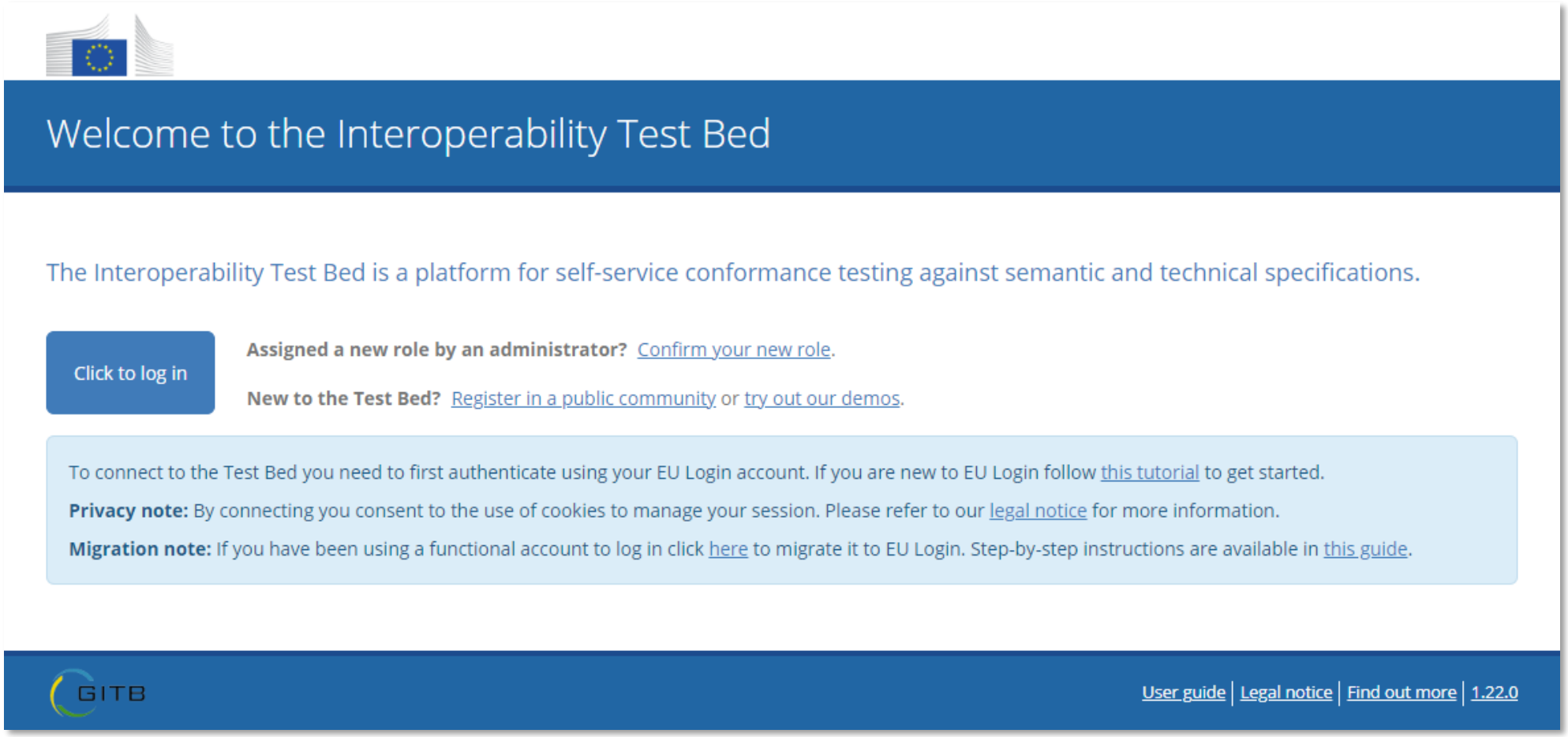




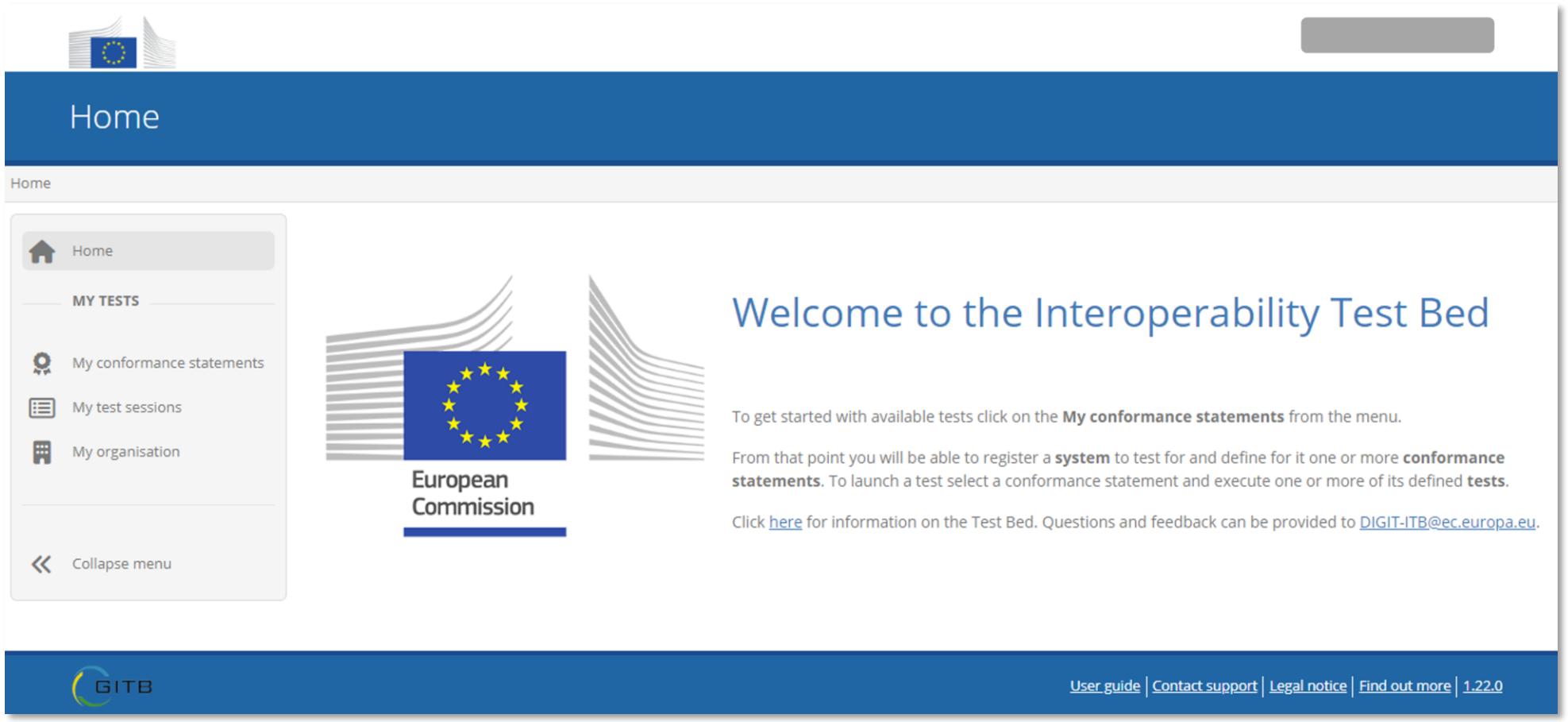
Annex B

Test Bed demo screenshots

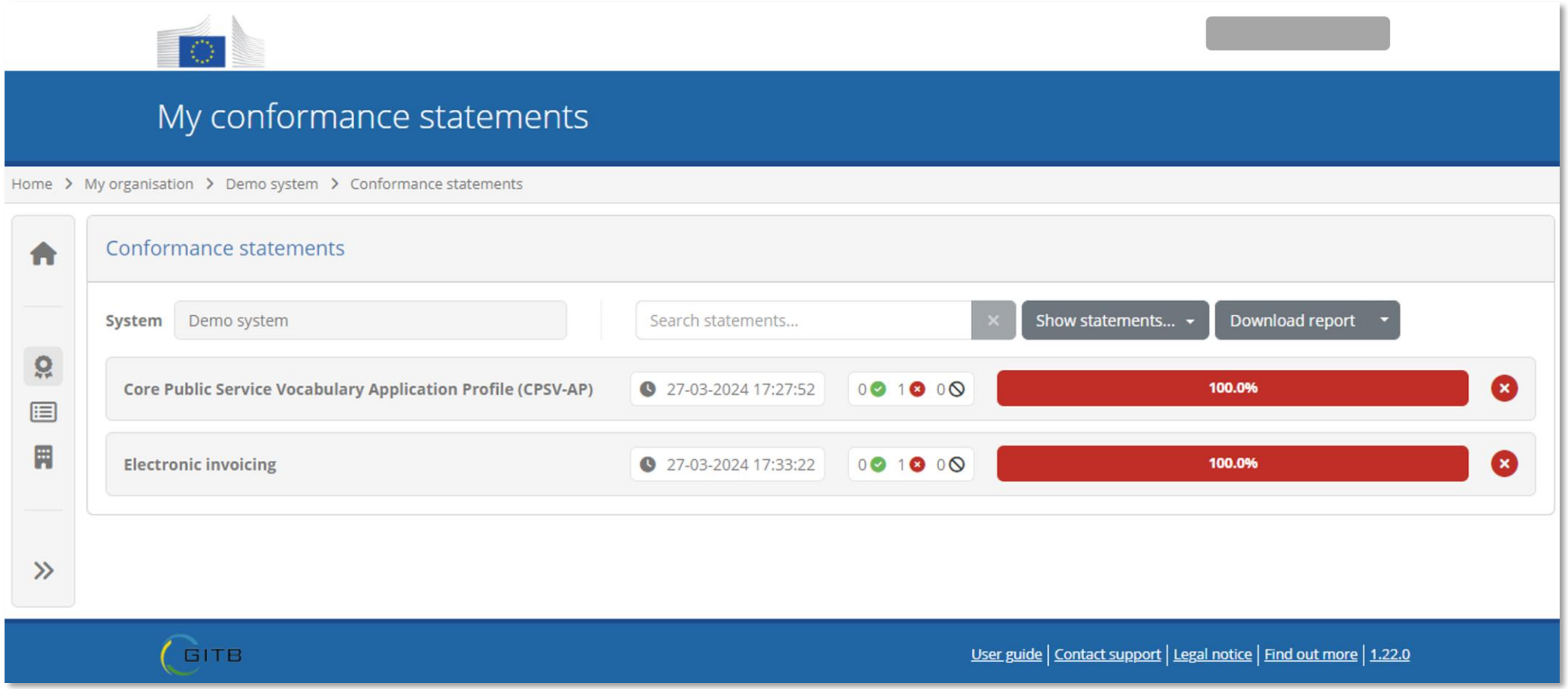
Welcome page



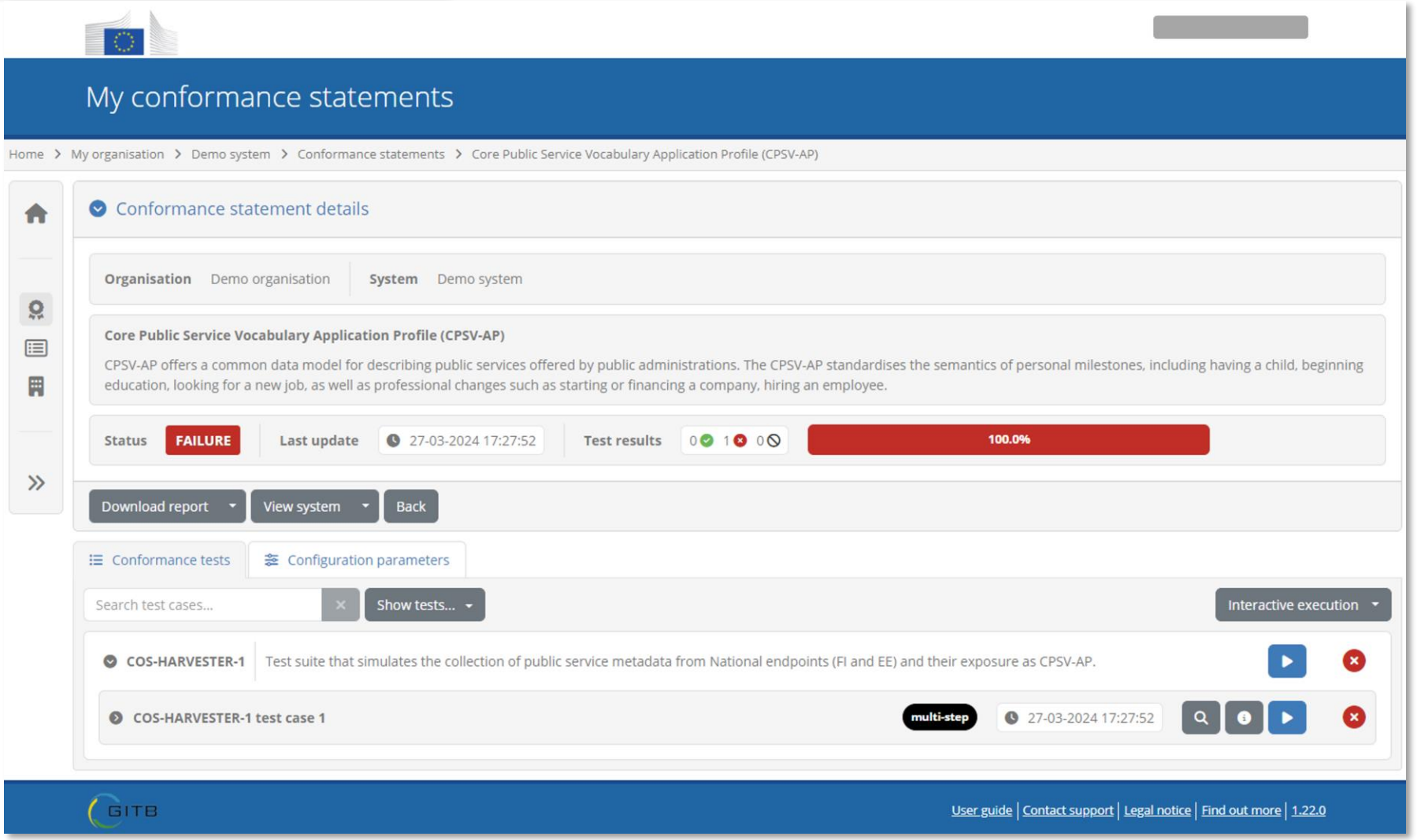
Home page


Home
Home
Home
MY TESTS
My conformance statements
My test sessions
My organisation
Collapse menu
European Commission
Welcome to the Interoperability Test Bed
To get started with available tests click on the My conformance statements from the menu.
From that point you will be able to register a system to test for and define for it one or more conformance statements. To launch a test select a conformance statement and execute one or more of its defined tests.
Click here for information on the Test Bed. Questions and feedback can be provided to DIGIT-ITB@ec.europa.eu.
GITB
User guide | Contact support | Legal notice | Find out more | 1.22.0

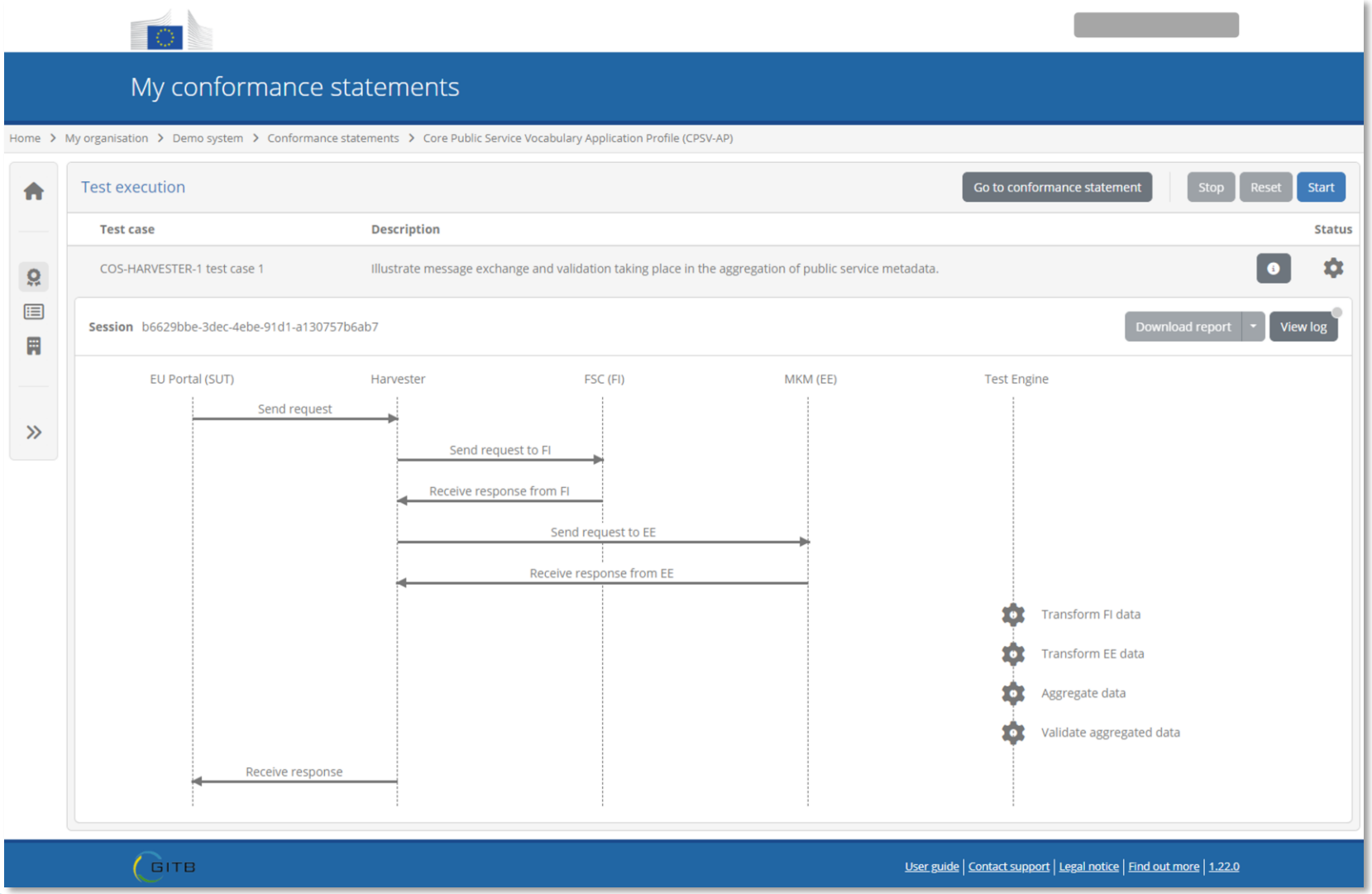
List of conformance statements (specifications to test for)



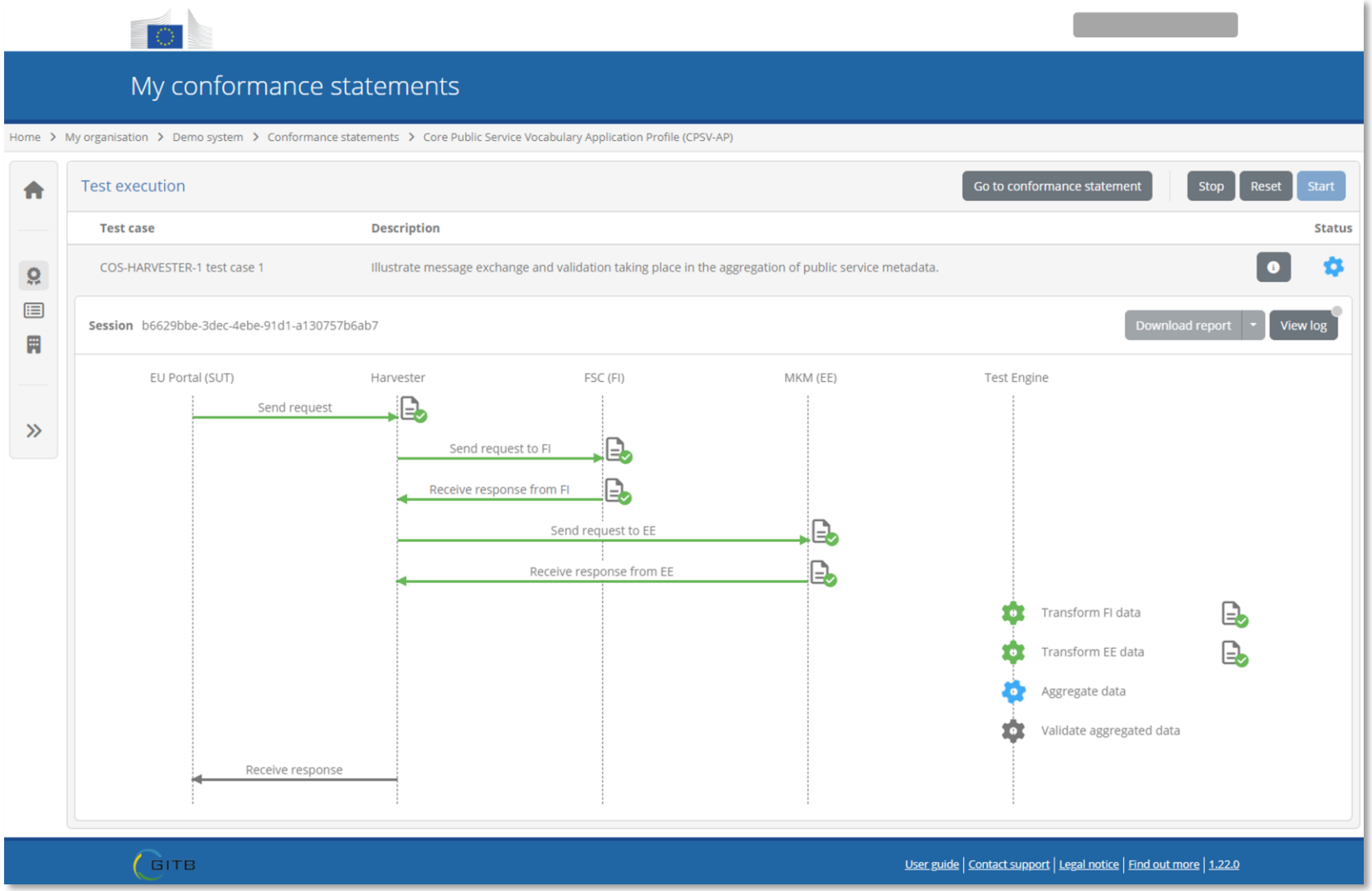
Conformance statement details



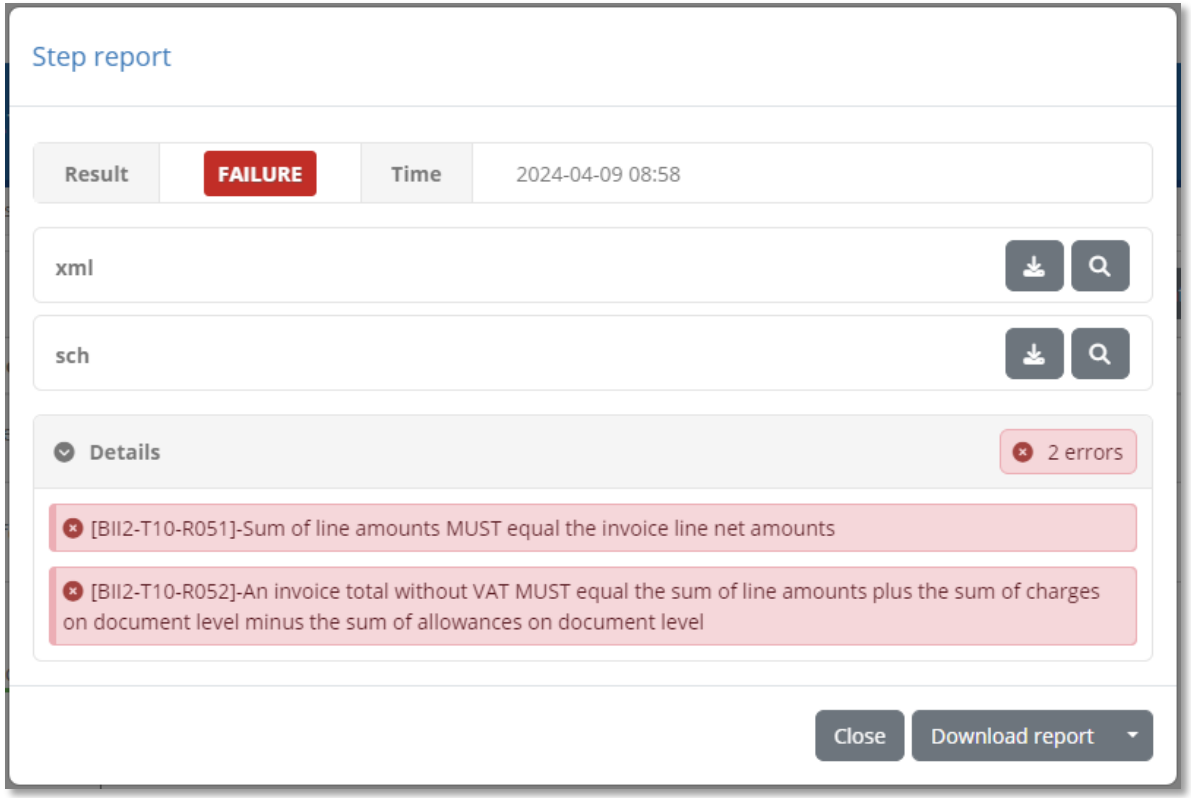
Test session (before starting)

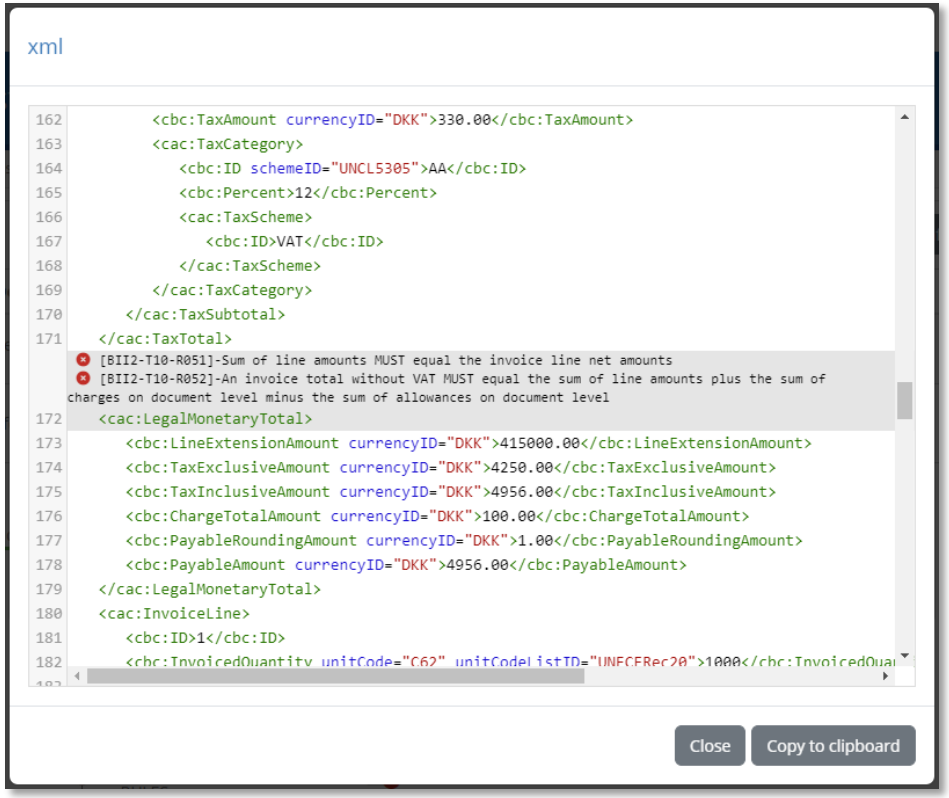


Test session (during execution)

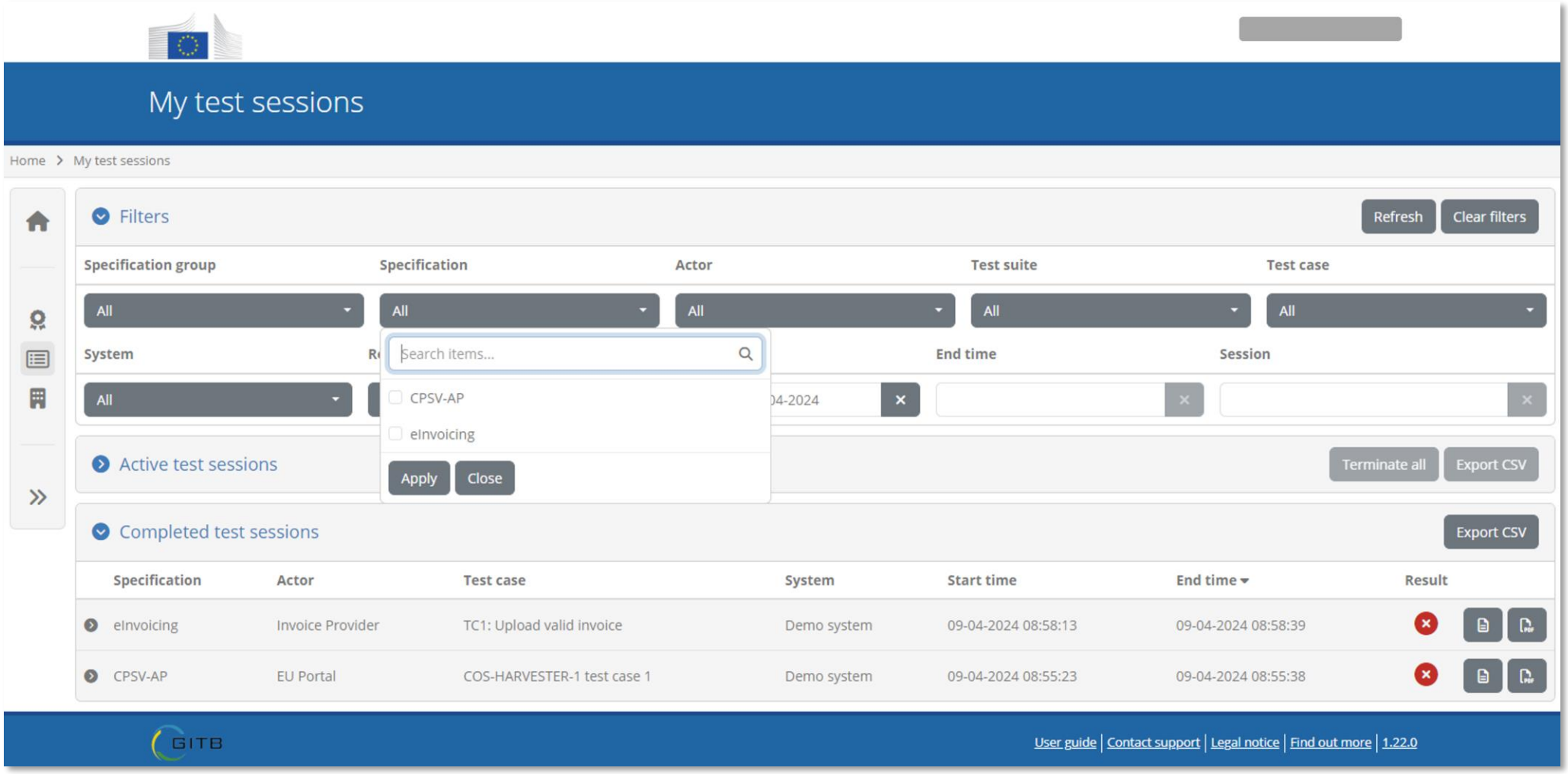
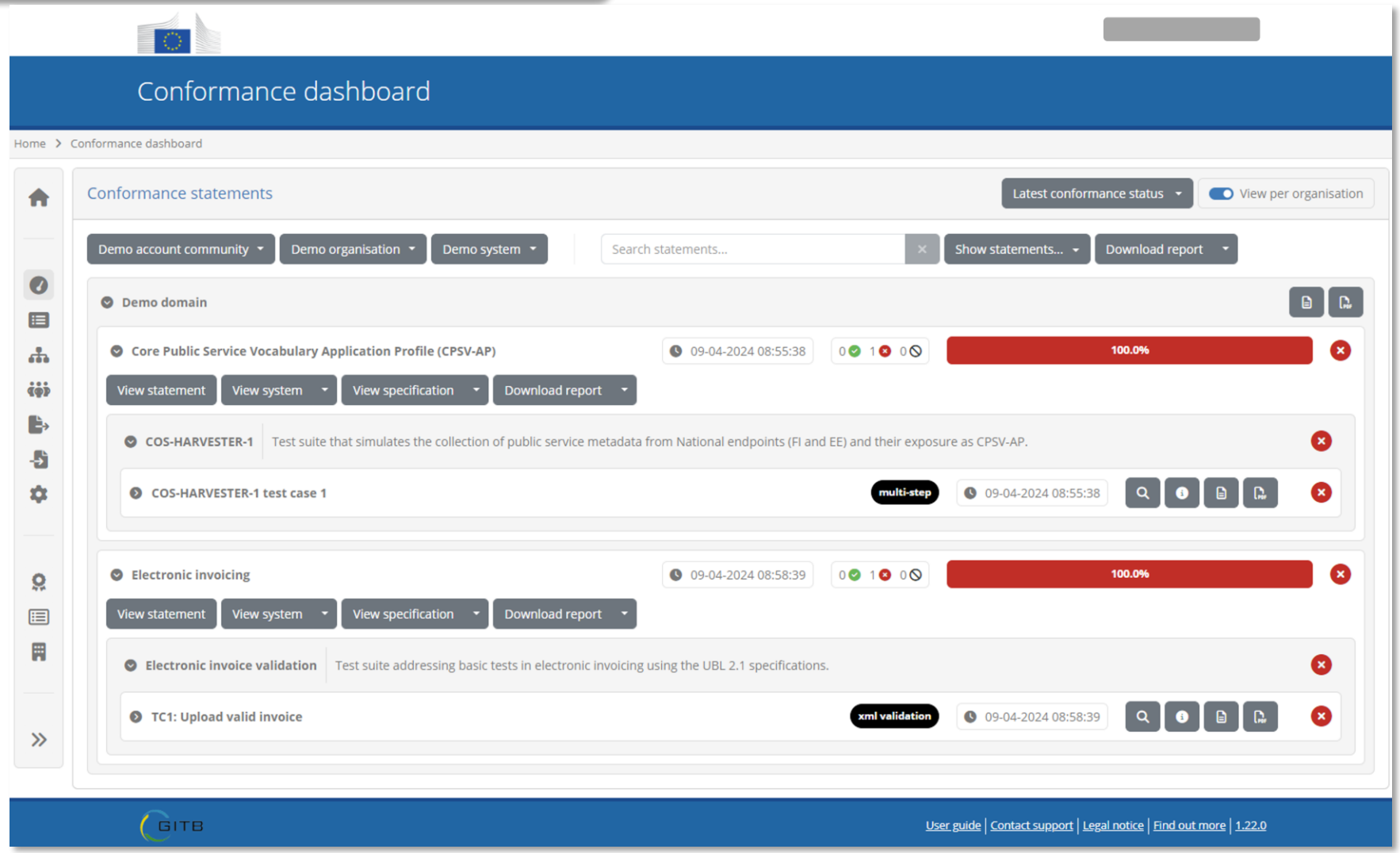


Validation error details





Overview of executed tests



Conformance dashboard (administrator)