Seasonal School 2026 – Roadmap

Session 7 - Organisational methodologies for Europe: the European Commission's PM² methodologies

Session 8 - Where collaboration meets interoperability: the Interoperable Europe Community

Session 9 - Starting Digital Public Service development from the organisational perspective

Session 10 - Peer-learning policy briefs: a source of inspiration for public administrations

interoperable europe

Step 3

How do we collaborate and govern interoperable initiatives effectively?

Starting digital public service development from the organisational perspective

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Session 9

Interoperable Europe Academy
Seasonal School 2026

09-10 JUNE 2026

Agenda

01

Introduction

Objectives of the course

02

Why is organisational IOP important?

- Stakeholders need to agree on the way they collaborate beyond the technical and semantic aspects,
- Creating trust and certainty

03

What is organisational IOP?

- The EIF definition
- An operationalised definition in the context of the design of digital public services

04

An example method for addressing organisational IOP

Possible steps to set up organisational interoperability

Introduction

Objectives of this course

- Offer an example of method to follow to **set up organisational interoperability** when designing an interoperable digital public service mandated by a legal basis

- The focus, then, is the **collaboration and agreements** between organisations for the delivery of a digital public service.

Why is organisational interoperability important?

- Enable collaboration
- Gain trust and certainty

Importance of Organisational interoperability

- Stakeholders need to agree on the way they collaborate **beyond the technical and semantic agreements**.
- A digital public service is delivered through processes. These processes may **rely on data exchanges** with a network of organisations.
- For the network to operate, it needs that all organisations of the network **adhere to governance rules that enable collaboration**.
- This ensures **trust and certainty** for the organisations that rely on the network for delivering or consuming the digital public service.

What is organisational interoperability?

- The EIF source
- A restricted definition in the context of a public service design

EIF

Definition

This refers to the way in which public administrations align their business processes, responsibilities and expectations to achieve commonly agreed and mutually beneficial goals

Recommendations

Recommendation 28:
Document your business processes using commonly accepted modelling techniques and agree on how these processes should be aligned to deliver a European public service.

Recommendation 29:
Clarify and formalise your organisational relationships for establishing and operating European public services.

ORGANISATIONAL INTEROPERABILITY

The degree in which the internal structure of organisations allows them to reach a **common goal** through collaboration.

HIGHER INTEROPERABILITY

Greater alignment, smoother collaboration, and a higher likelihood of achieving the common goal.

Operationalised definition

To operationalise the concept, this training is developed based on a ***restricted definition in the context of the development of a digital public service:***

Restricted definition

The set of **organisational measures** that need to be **agreed** among the organisations where **collaboration is needed** to contribute to smoothly deliver a digital public service.

Note

Agreements on organisational measures fulfil organisational requirements documented in the **catalogue of requirements** throughout the design process

Additional considerations

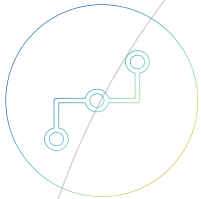
Some important considerations need to guide the elicitation of organisational interoperability requirements.

Governance over time

Governance must include change over time rules

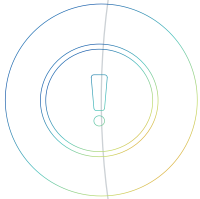
Federated by design

No single coordinator that can impose governance on others



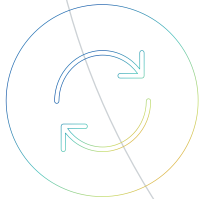
Exceptions handling

Exceptions are normal and agreements must be reached for managing them.



Participation creates requirements

Collaboration results in implementing organisational interoperability requirements



Collaboration requires shared meaning

Information exchanges during the collaboration need that the meaning of information is shared.

Organisational interoperability requirements

What are they?

Organisational interoperability requirements

Need to **ensure data sharing** and conform to an agreed collaboration

examples

- Need to be able to receive information from X belonging to the network
- Need to be able to reply with response information to X belonging to the network.
- Need to agree on semantics of the exchanged information

Need to **ensure alignment on the provision of the public service**

examples

- Governance rules for the public service
- Availability must be higher than 99.99%
- Conformance to agreed protocol must be tested

Need to align on how to **ensure privacy**

examples

- Data confidentiality must be respected

Need to align on how to **ensure security**

examples

- Data must be encrypted at rest

Need to **use a common infrastructure**

examples

- Datasets must be made available through the Common European Dataspace

Requirements catalogue, an example

Field	Example
Identifier	https://ec.europa.eu/requirements/project/1/req/5
Title	Valid purpose must be included in each request
Statement	Each cross-border information request must include the administrative purpose for which the information is requested.
Type	Legal requirement
Source or legal basis	Regulation (EU) 2018/1724
Rationale	The requesting authority must demonstrate that request is lawful
Affected organisations	Destination municipality, origin municipality, national register
Resulting agreement	Data-sharing agreement number 1
Priority	Must
Owner (Author)	Legal team
Status	Proposed

How to set up organisational interoperability for a digital public service

00
Governance
Confirm governance and support frameworks

01
Analyse legal basis
Including policy goals, mandated participants and their roles

02
Frame
Frame the cross-border digital public service

03
Map
Map the collaboration journey .

04
Consolidate
Consolidate organisational interoperability requirements

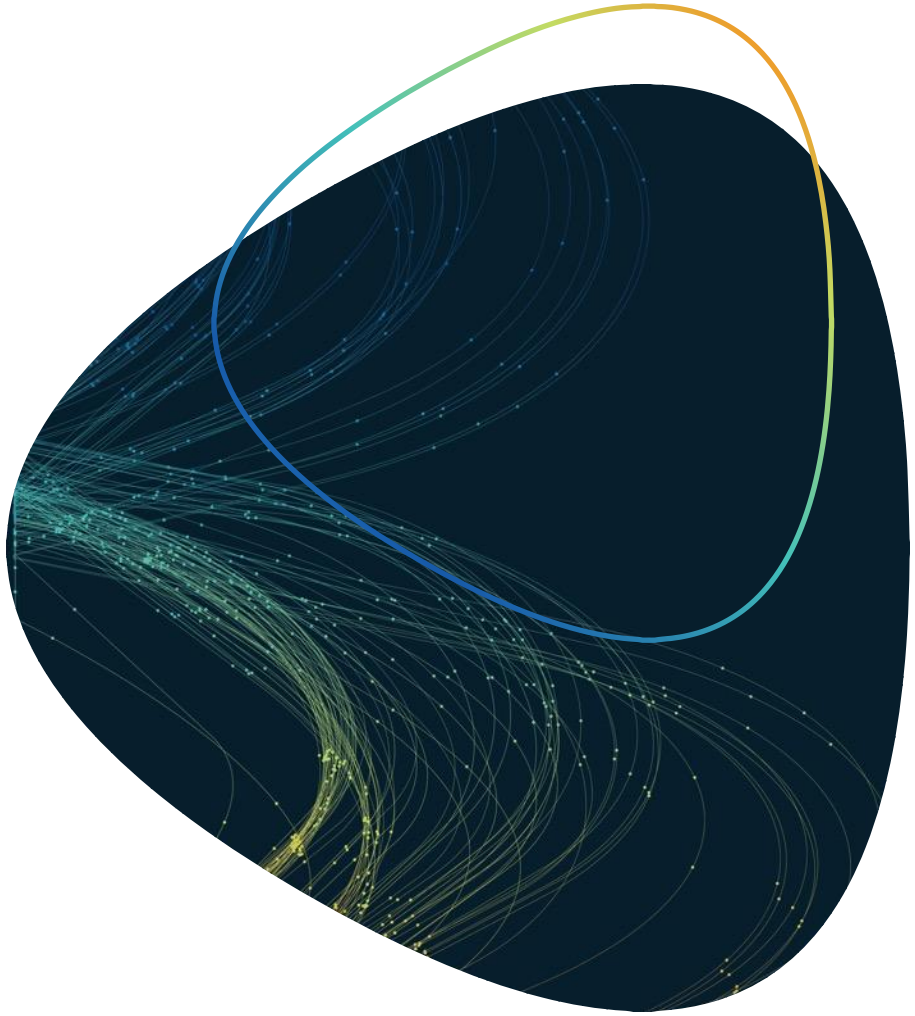
05
Design
Design interaction patterns and technical protocols.

06
Agree
Set the agreement landscape
.

07
Onboarding and conformance
Prepare onboarding and conformance

STEP 0

Confirm governance and support frameworks



Confirm governance and support frameworks (1/2)

Objective

Understand the context in which the digital public service is to be designed, and set up a team with appropriate skills and working methods

Input

European Interoperability Framework and strategy, privacy framework, security framework and other frameworks

Role

Project manager

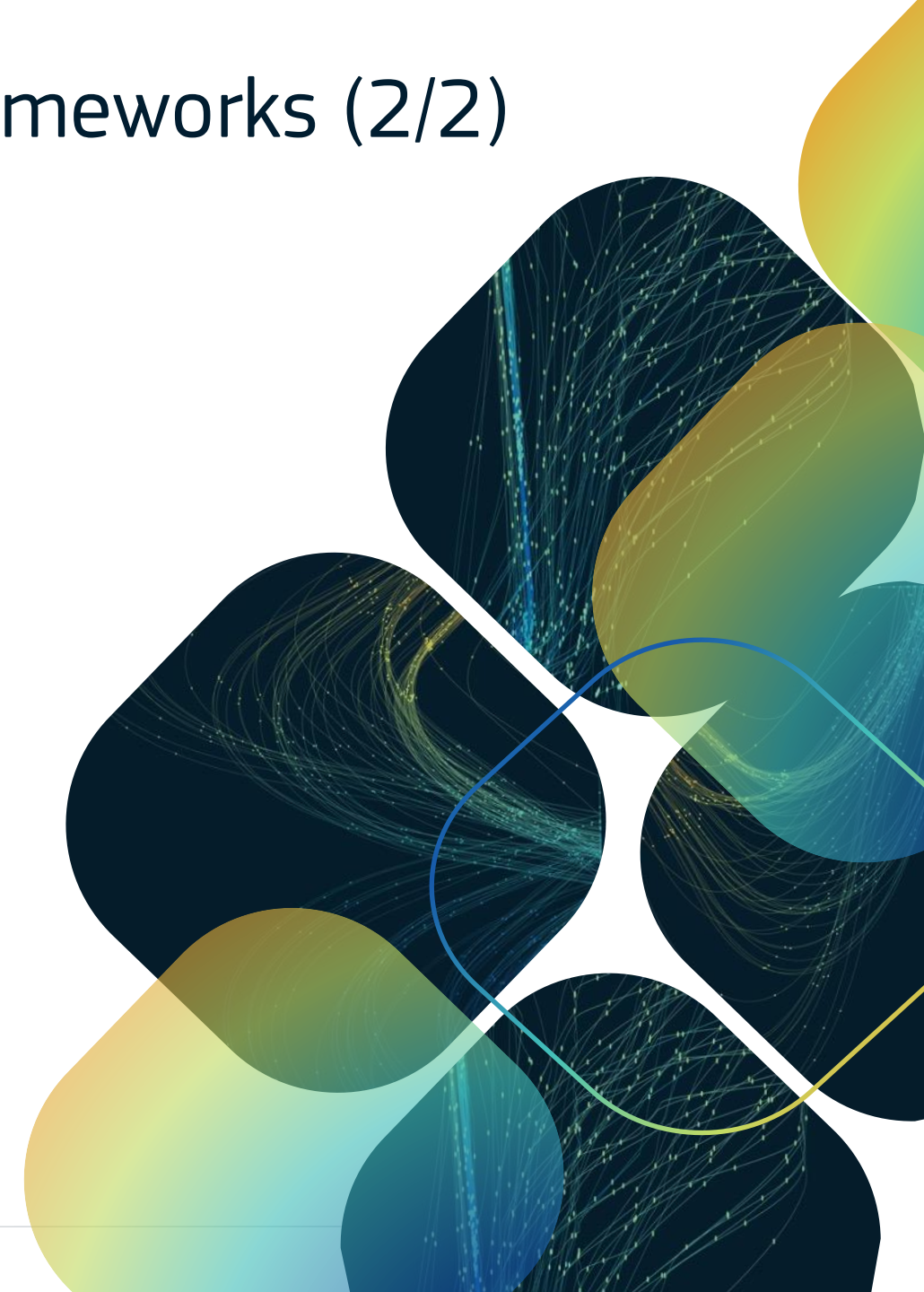
Confirm governance and support frameworks (2/2)

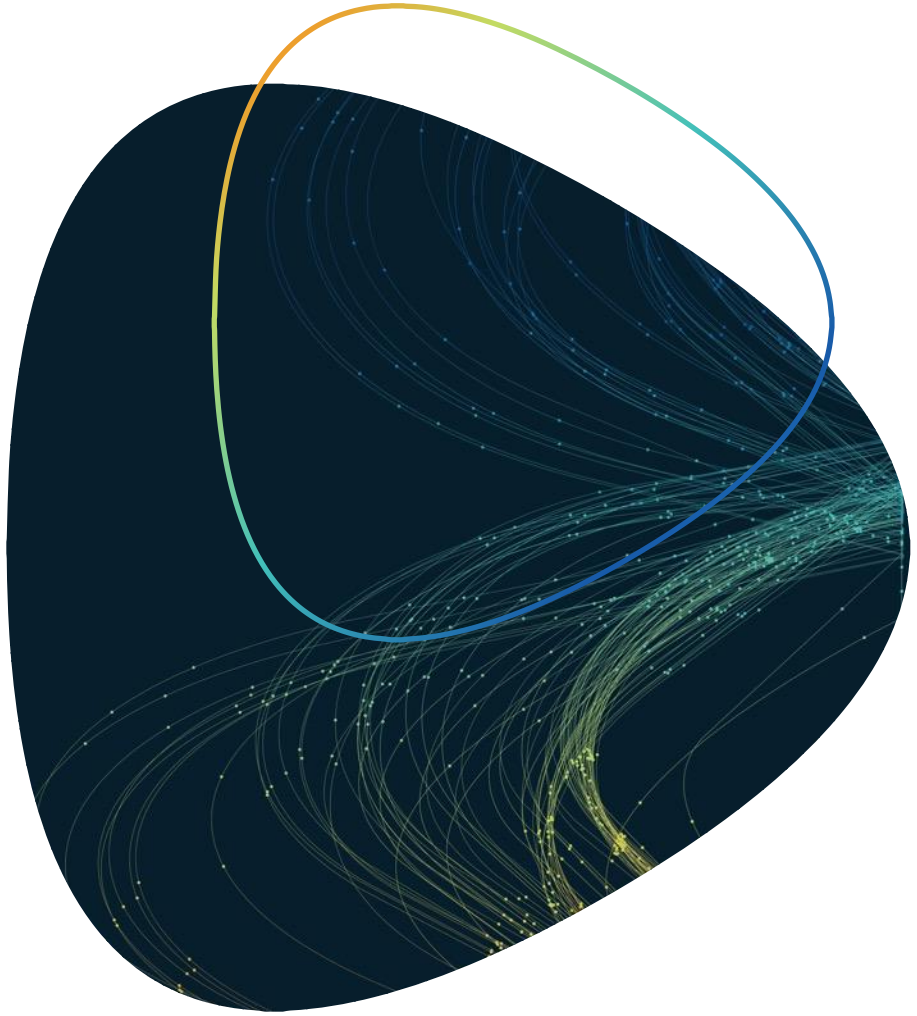
Activities

- Discover context
- Set up approach including aspects related to the catalogue of requirements, Identify needed skills and roles,
- Identify peers in other organisations

Output

- RACI of the extended project team,
- Catalogue of requirements initiated





STEP 1

Analyse the legal basis

Analyse the legal basis (1/2)

Objective

Identify policy problems, objectives and legal requirements including mandated scope, participants and their roles that shape the collaboration

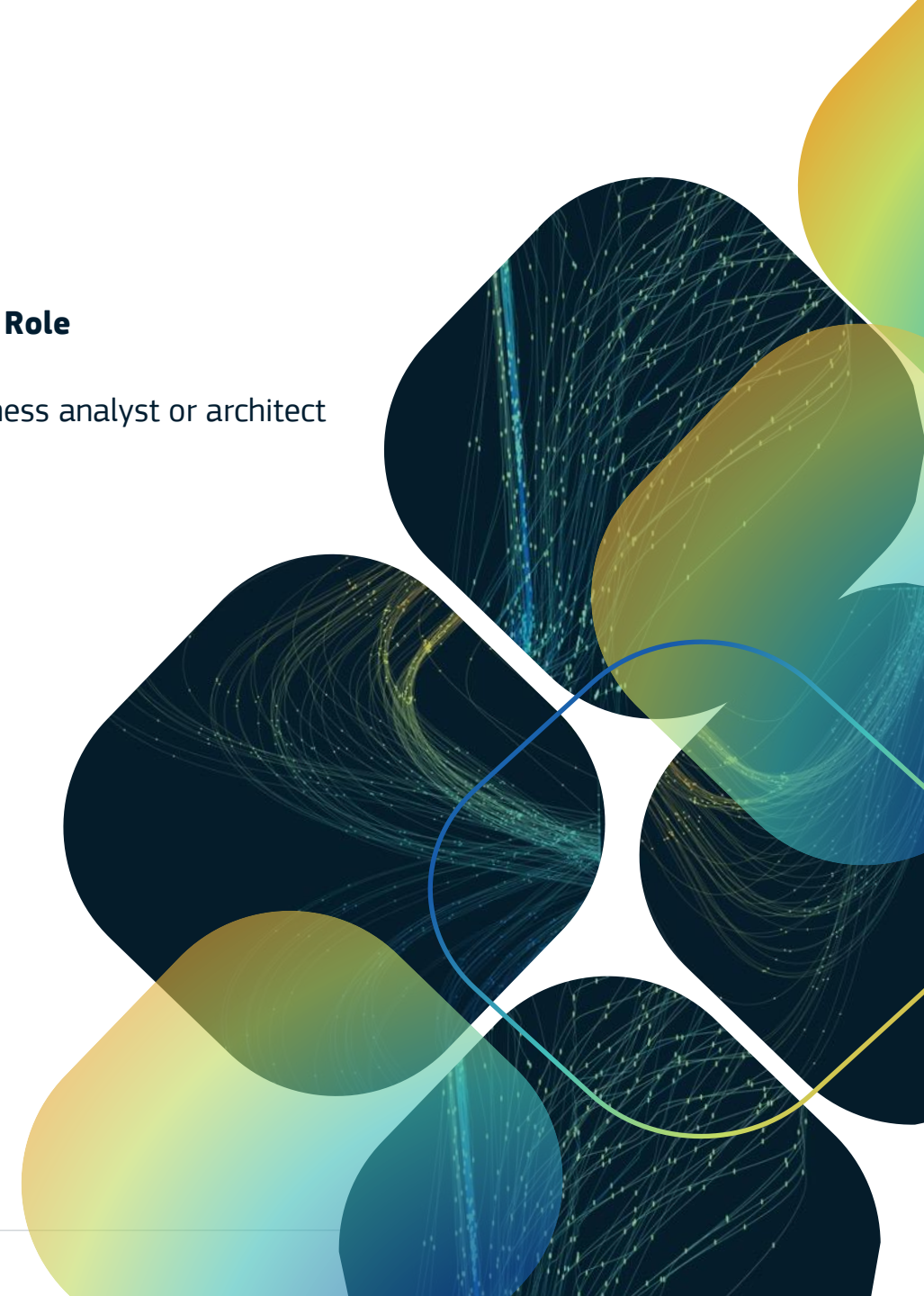
Input

Legal basis and policy documents, possibly interoperability assessment report

Role

Business analyst or architect

In a federated setting, when no legal requirement enforces a collaboration model,
no single organisation may be able to impose the collaboration model
→ Focus on creating a shared starting point



Analyse the legal basis (2/2)

Activities

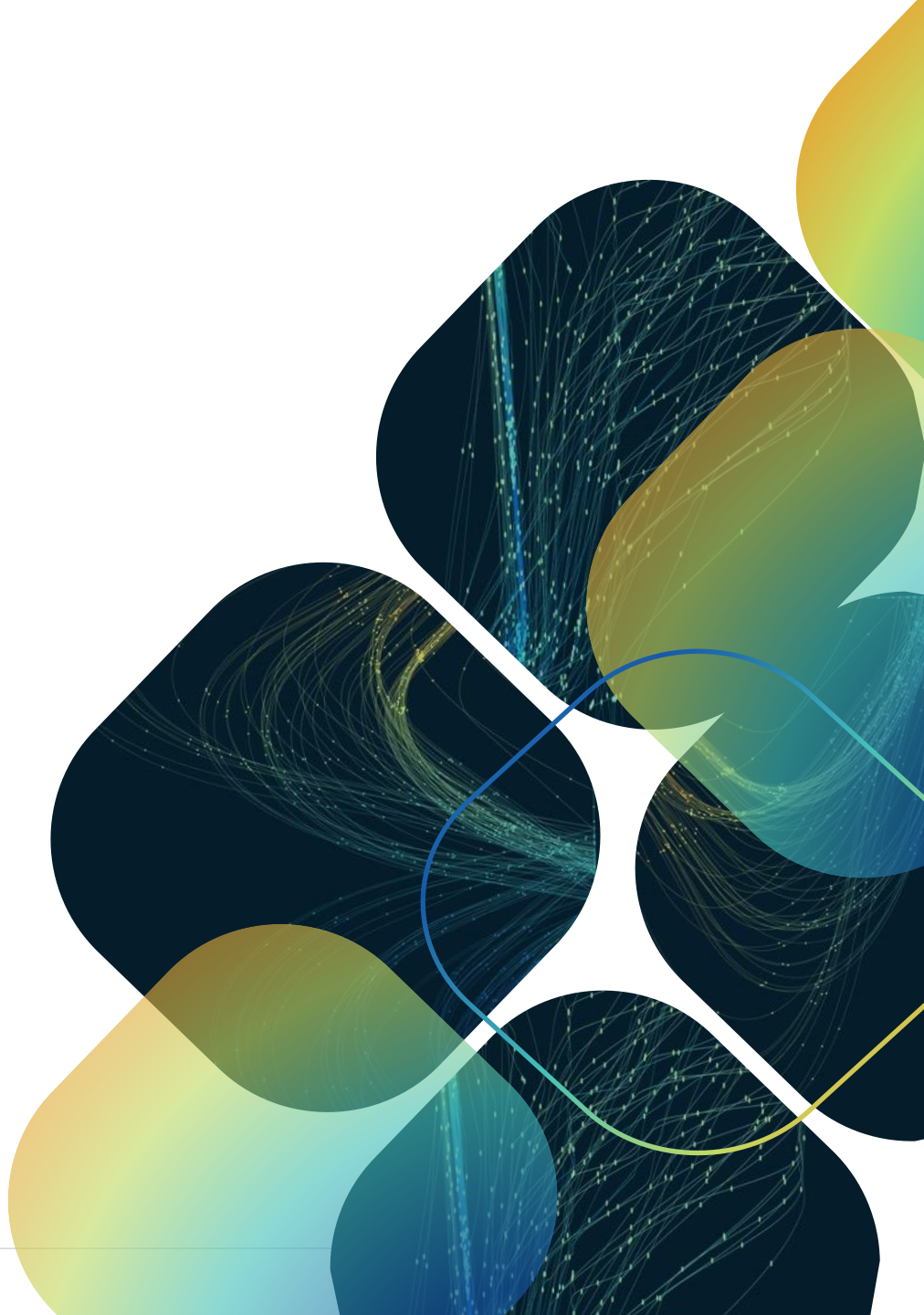
Identify policy problems, objectives and legal requirements including mandated scope, participants and their roles that shape the collaboration.

Use the interoperability assessment report when it is available.
Map policy and legal requirements & constraints -> EIRA can help (legal view)
Map participants (organisational view)

See guiding questions.

Output

- A set of legal requirements, that document, among others, organisations, their responsibilities and information exchanges.
- Requirements added to catalogue
- Risk registry initiated



Analyse the legal basis - Guiding questions

Answer questions such as :

Which laws, regulations, or policies apply (EU, national,…)?
(e.g. Data Act, GDPR, Apply AI, Open Data directive/HVD,…)

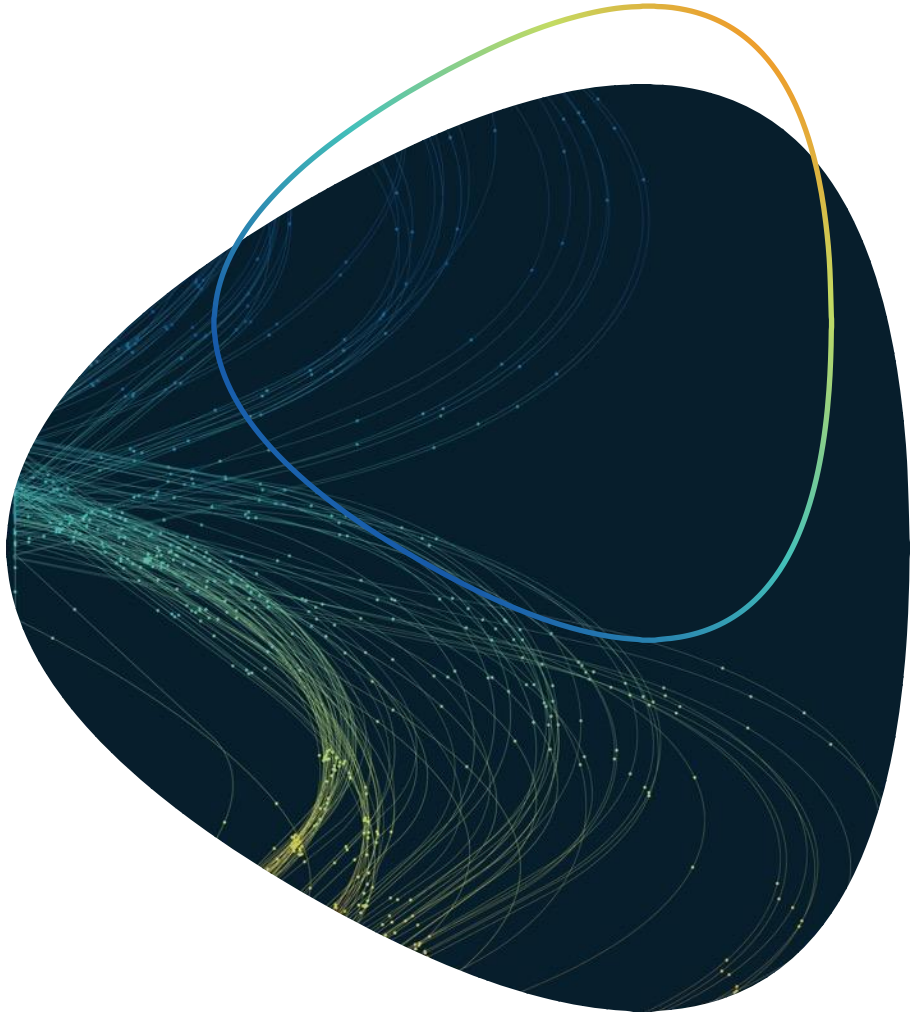
Which organisations
…have the mandate to provide the public service?
…maintain the relevant base registries?
…have the right to request, share or use information?
…have the right to consume the digital public service?

Is information exchange
…mandatory, optional, or prohibited?
…limited on purpose, retention, reuse, or onward sharing?
…subject to audit, transparency, or evidence requirements?

Are there policy objectives that require cooperation with other administrations?

STEP 2

Frame the cross-border digital public service



Frame the cross-border digital public service (1/2)

Objective

Define and agree on the service outcome before discussing data exchange or technology

Input

- Legal requirements,
- Exchanges with stakeholders, Participants mapping
- Digital transformation strategy

Role

Architects, Business owners, Business analysts

Frame the cross-border digital public service (2/2)

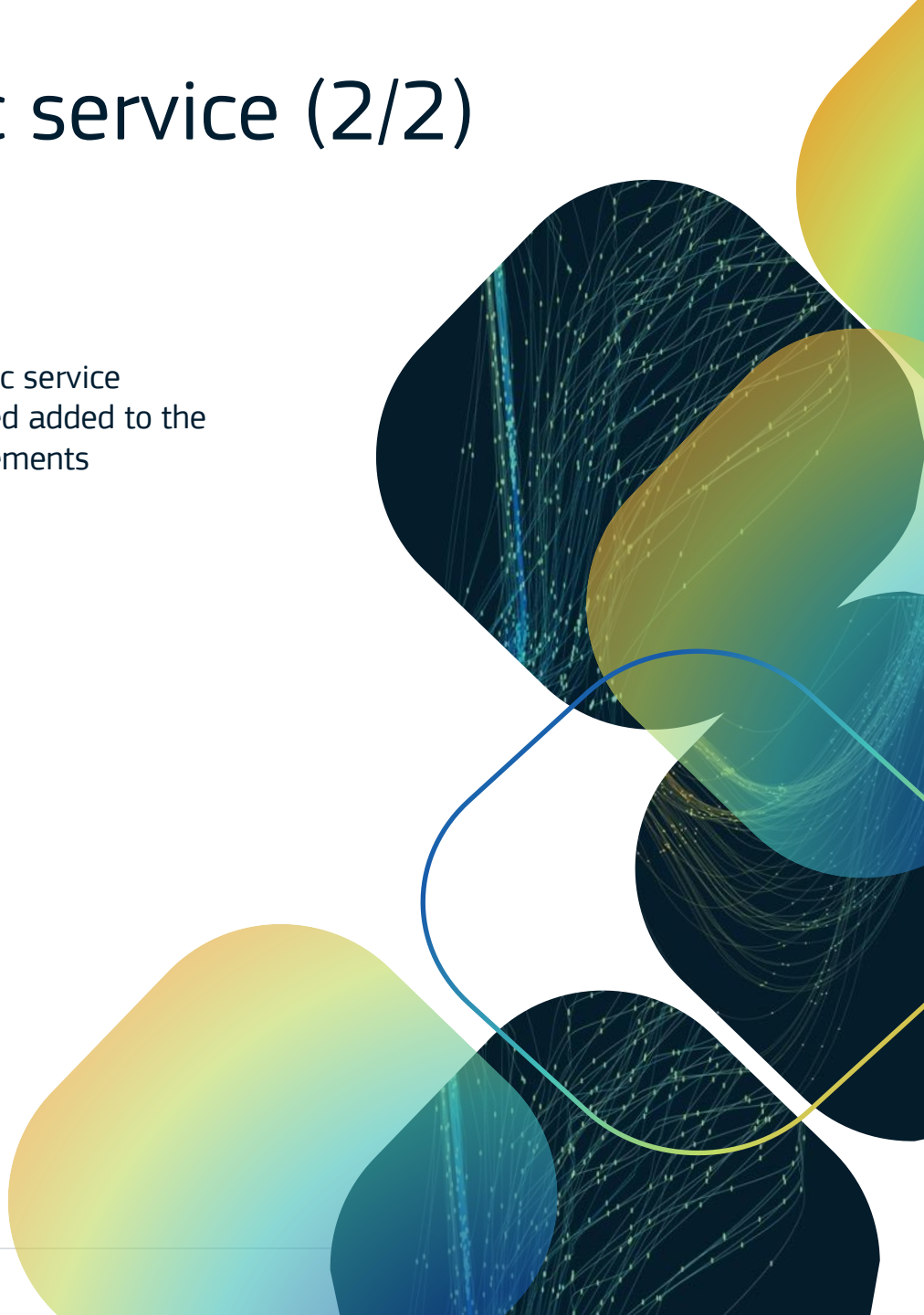
Activities

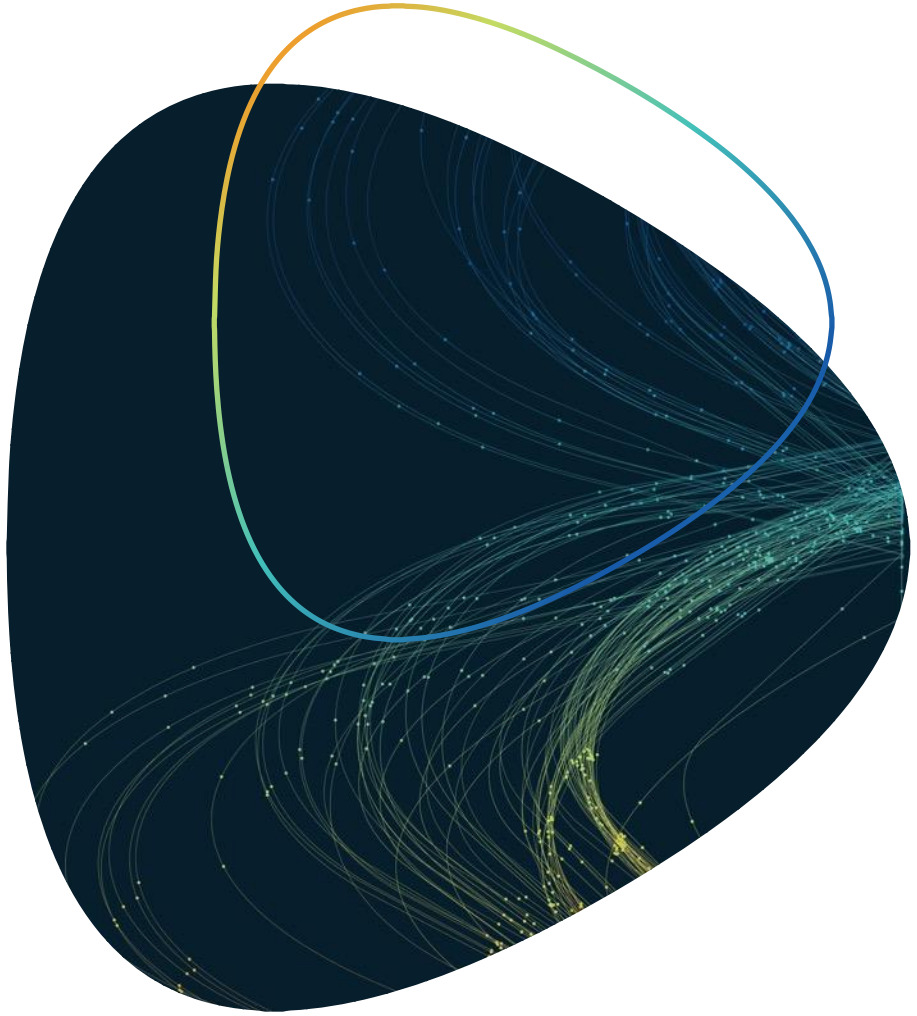
Engage with potential users.
Answer questions such as *(when not already addressed by the legal requirements)*

- What life, business or administrative event triggers the service?
- What should become easier, for whom?
- Which innovative solution could be reused?
- What burden should be reduced?
- Existing cross-border or cross-organisation issues?
- What does success look like?
- Which existing resource should it rely upon? (would an MoU be needed?)
- What specific security requirements should be addressed
- What specific privacy requirements should be addressed
- External requirements identified (e.g. MoU needed)

Output

Organisational public service requirements defined added to the catalogue of requirements





STEP 3

Map the collaboration journey

Map the collaboration journey (1/2)

Objective

Uncover the business processes and the required interaction points

Input

- participants mapping
- legal requirements

Role

Business analysts

In a federated setting, participants may have different mandates, capabilities, systems, and priorities
→ make those differences explicit

Map the collaboration journey (2/2)

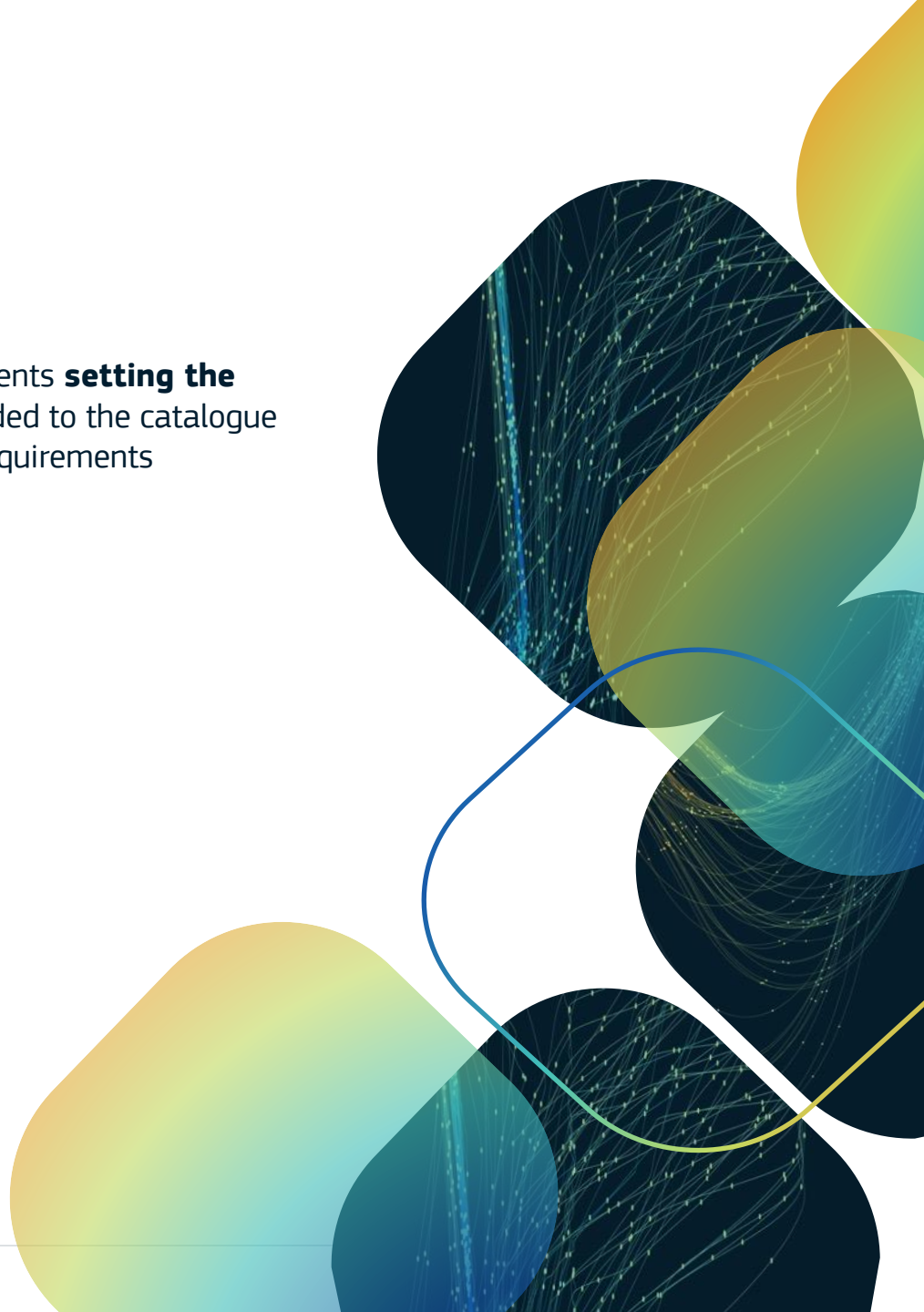
Activities

Answer questions such as *(when not already addressed by the legal requirements)*

- Which interaction points between organisations are needed?
- What role each of them plays?
- Which information do they need at these interaction points ?

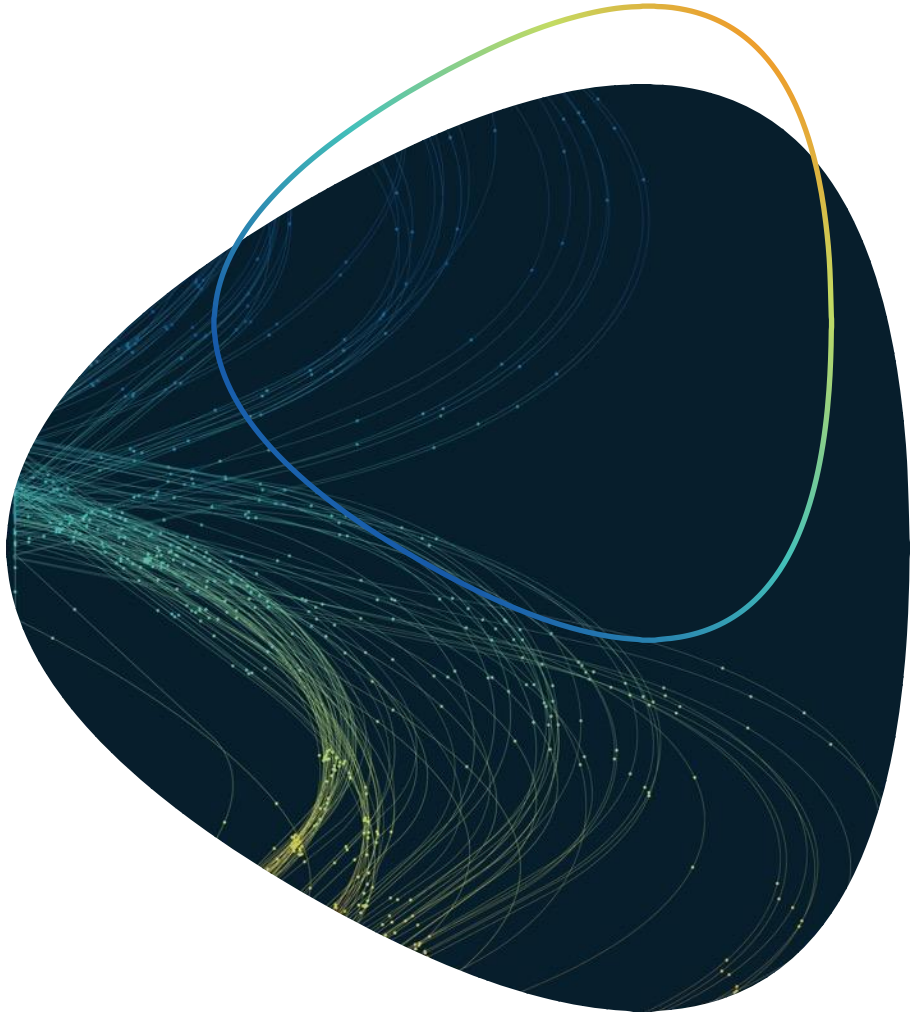
Output

Additional requirements **setting the collaborations** added to the catalogue of organisational requirements



STEP 4

Consolidate organisational interoperability requirements



Consolidate organisational interoperability requirements (1/2)

Objective

Consolidate the requirements collected since the start of the process and make them actionable

Input

The requirements catalogue is opened in Step 0 and updated throughout the process

Role

- Business owner
- Product owner
- Enterprise Architect

Consolidate organisational interoperability requirements (2/2)

Activities

Review the catalogue to ensure that requirements are clear, classified, traceable, assigned, prioritised, linked to agreements, and prepared for
later technical and conformance work

See guiding questions

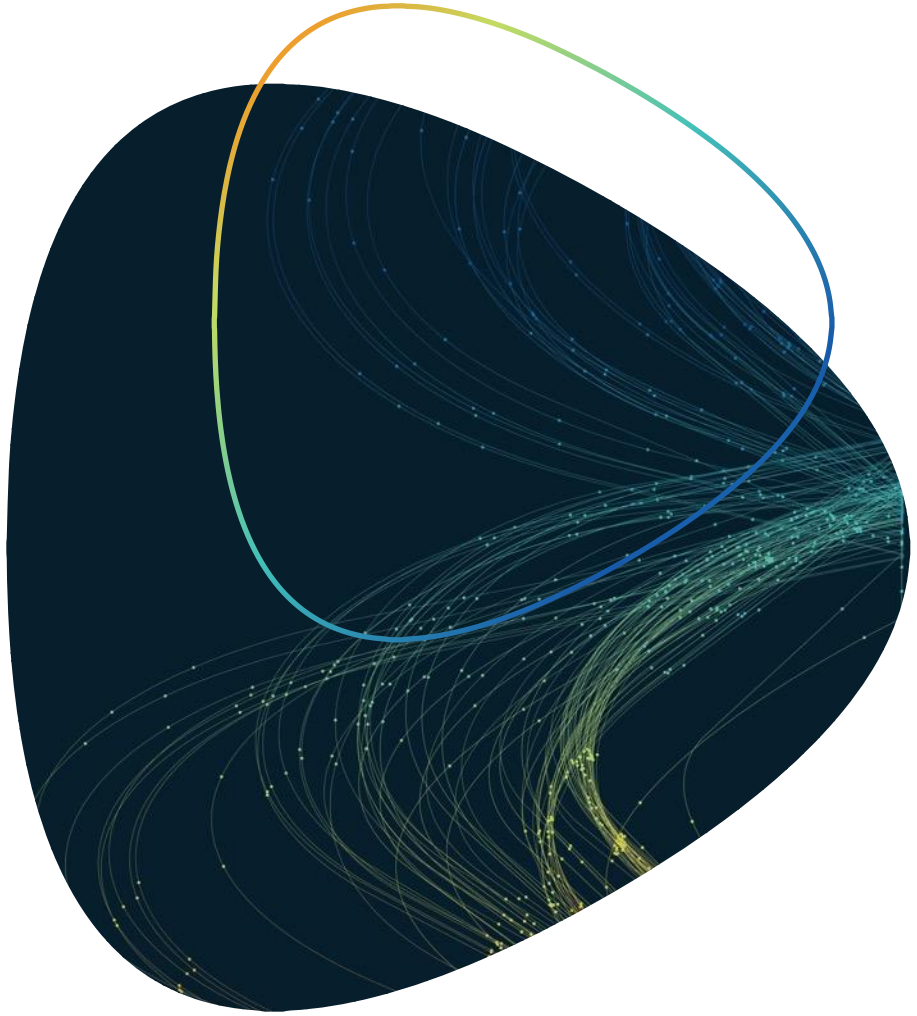
Output

Refined catalogue of organisational interoperability requirements

Consolidate organisational interoperability requirements: guiding questions

Answer to key questions

- Is the requirement **mandated by a legal basis** or should it be **fulfilled by an agreement**?
- Do identified requirements adhere to the EIF **interoperability principles**?
- Duplicates or requirements that should be merged or split?
- Does each requirement have ...
  ....a link to its source?
  ... a link to the affected organisations?
  ... an owner?
  ...a priority?
  ...a conformance implication, where relevant?
- Are there unresolved gaps, conflicts, or risks?



STEP 5

Design interaction patterns and technical protocols

Design interaction patterns and technical protocols (1/3)

Objective

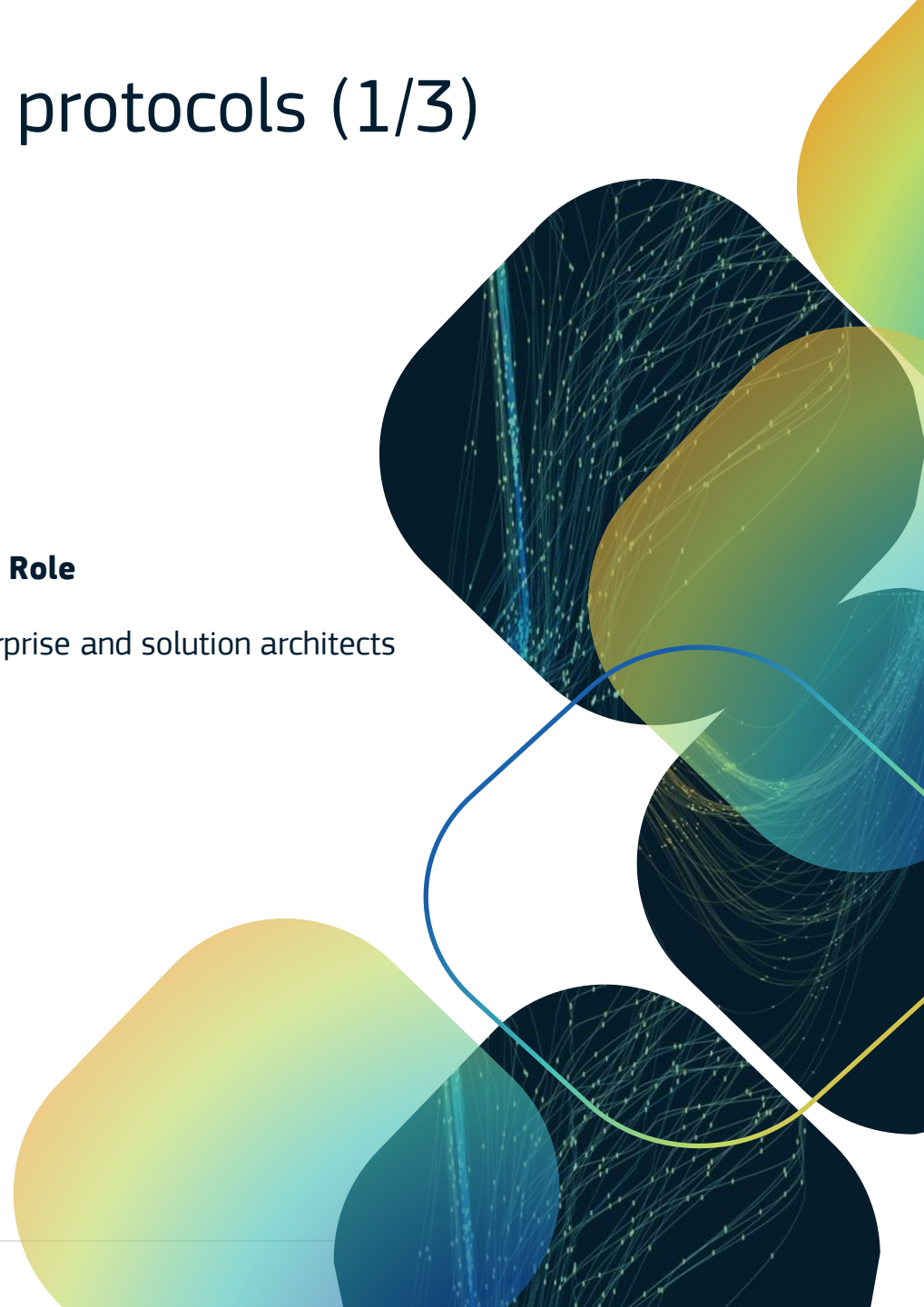
Define and test the technical exchange of data

Input

Organisational interoperability requirements

Role

Enterprise and solution architects



Design interaction patterns and technical protocols (2/3)

Activities

Assess feasibility of organisational requirements (see guiding questions)

Output

- Feasibility of the organisational requirements interoperability
- Refined organisational interoperability requirements

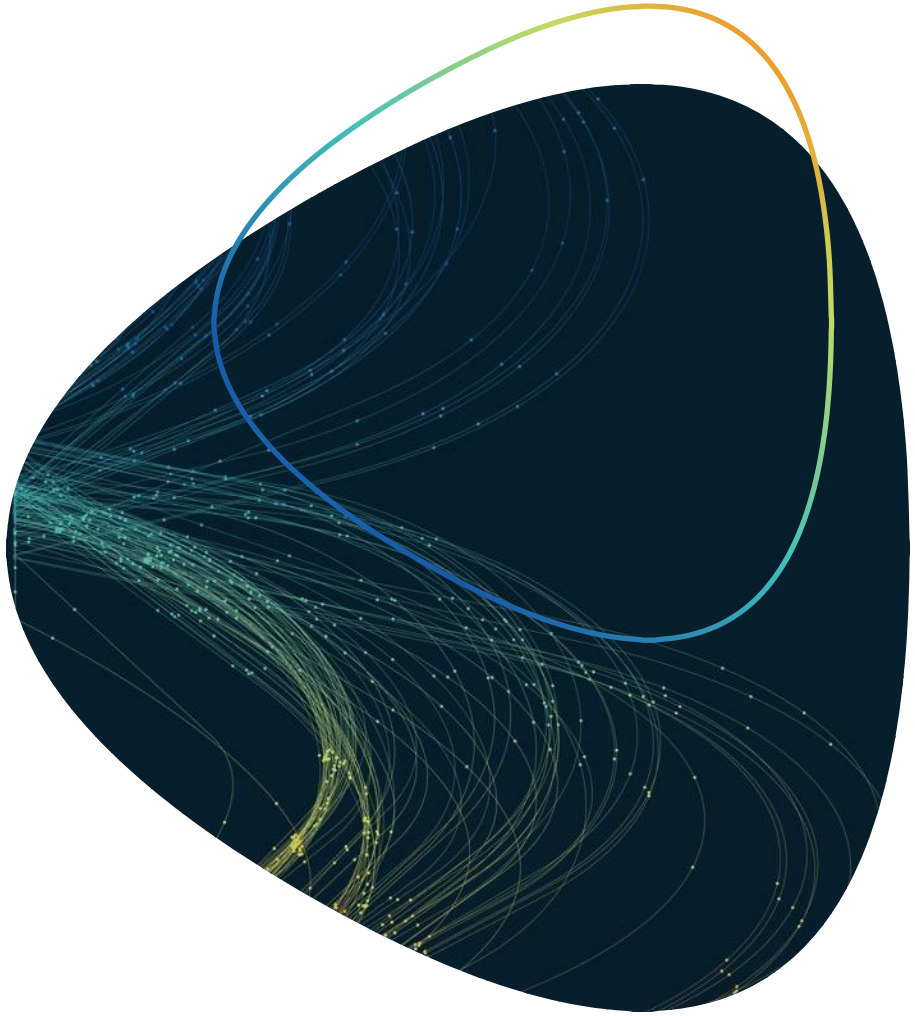
Design interaction patterns and technical protocols (3/3)

Learn which

- ...interaction pattern best supports the service journey?
- ...technical protocol is suitable?
- ...semantic gaps still exist?
- ...organisational or operational issues surfaced?
- ...participant requirements affect the technical design?
- ...aspects must be covered by agreements?
- ...conformance tests will guarantee successful onboarding?

STEP 6

Set the agreement landscape



Set the agreement landscape (1/2)

Objective

Design the set of agreements needed for the participating administrations to deliver or use the service

Input

Catalogue of organisational interoperability requirements

Role

Defined as part of the RACI matrix
e.g. legal, signatories, PMO, …

Set the agreement landscape (2/2)

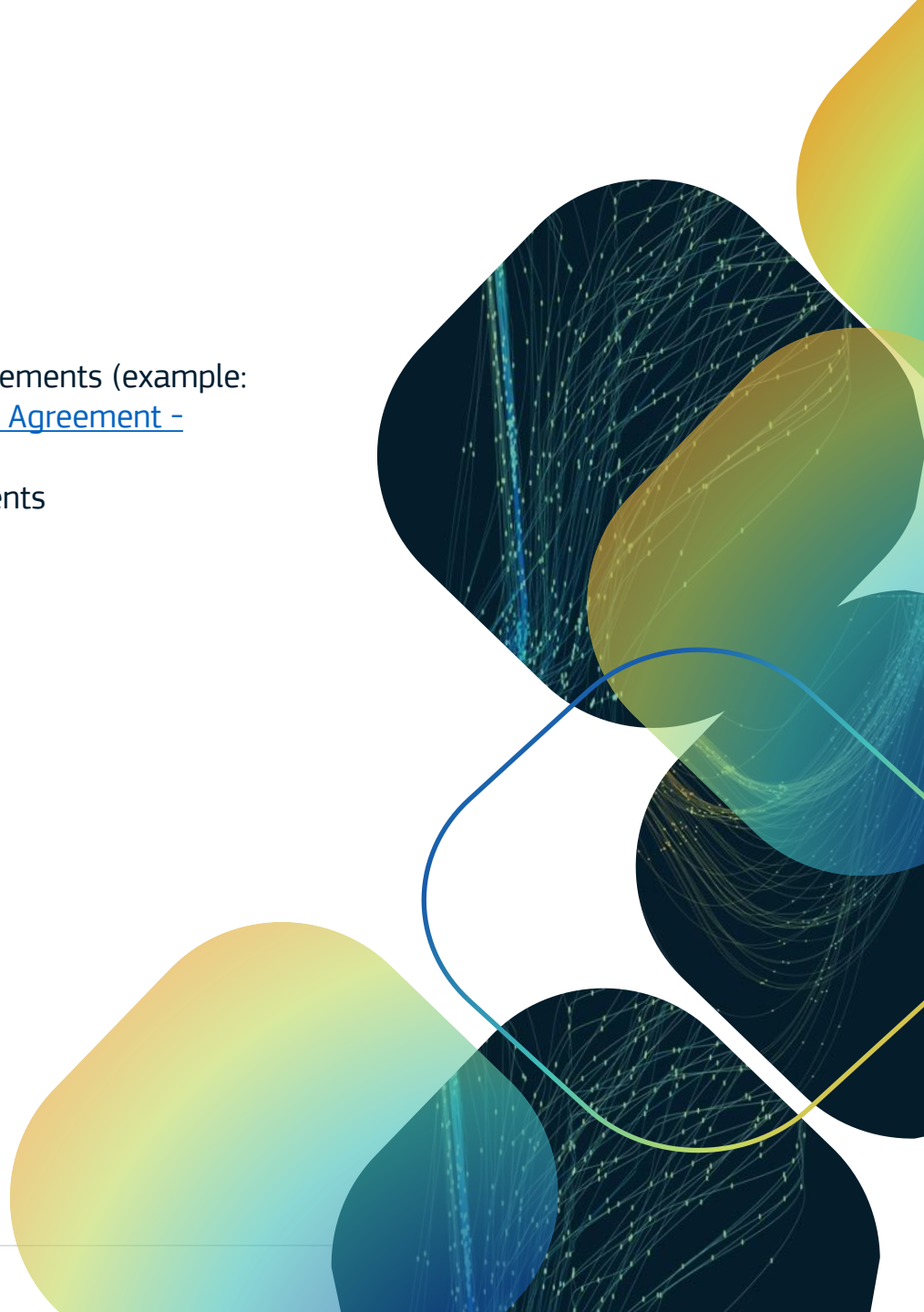
Activities

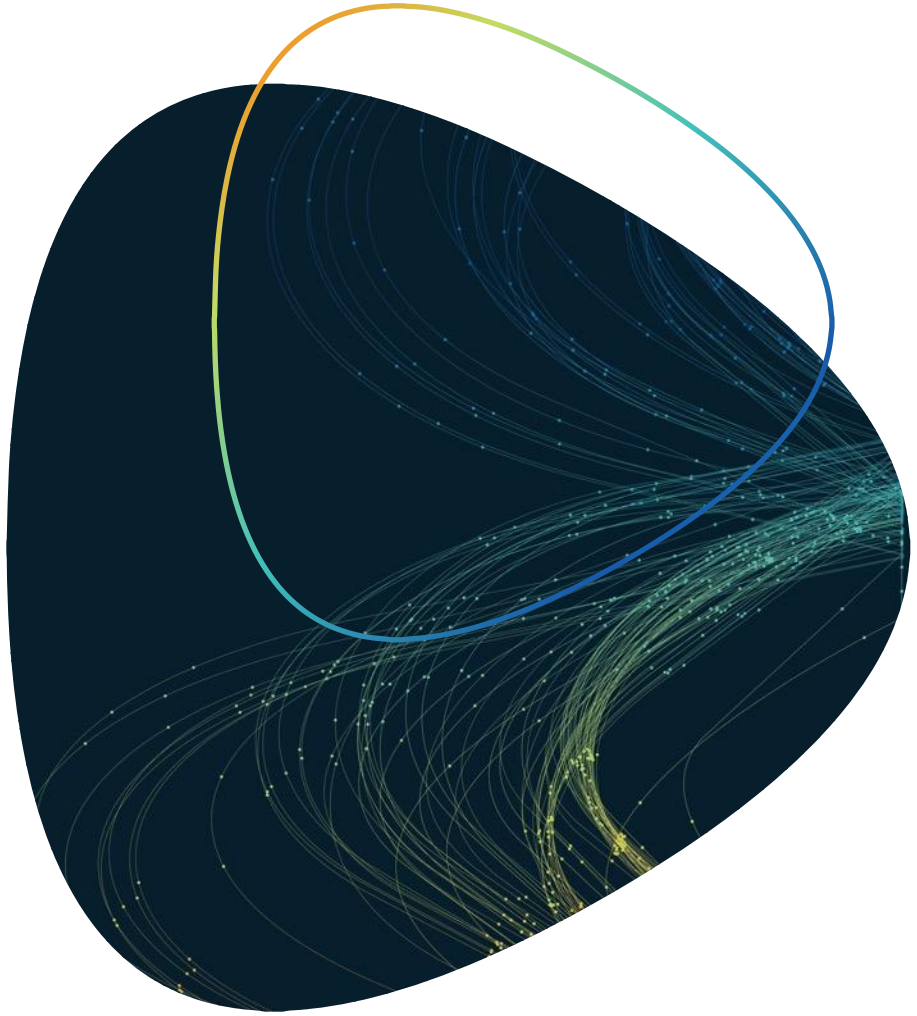
Review the catalogue of organisational requirements to assess those which need agreements (e.g. when no legal basis supports the requirement)

Draft agreement
Use template agreements
Sign agreement
Register agreement

Output

- Registry of agreements (example: Service Provider Agreement - OpenPeppol)
- Signed agreements





STEP 7

Prepare onboarding and conformance

Prepare onboarding and conformance (1/2)

Objective

Facilitate the delivery and **long-term stability** of the digital public service

*How can each participating organisation demonstrate that it is **ready and trusted to join** the federated service, and how will **continued conformance** be verified over time?*

Input

Catalogue of interoperability requirements (organisational, semantic technical)

Role

Architects

Prepare onboarding and conformance (2/2)

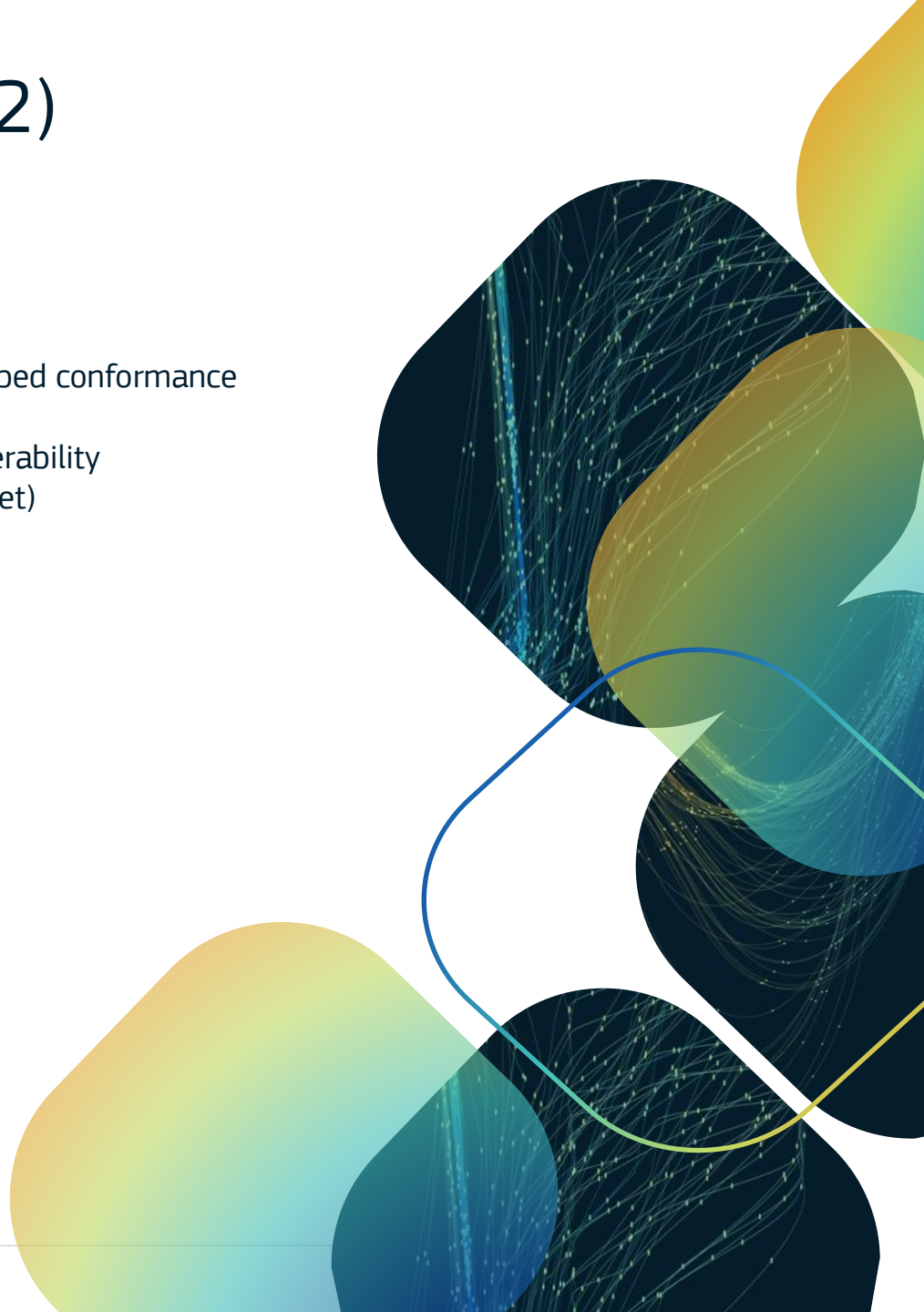
Activities

Design the collaboration test scenarios (that include semantic and technical interoperability requirements)

Note that not all organisational interoperability requirements can be expressed as test scenarios

Output

Interoperability testbed conformance scenarios
(confirming interoperability requirements are met)



Test execution

Go to conformance statement | Stop | Reset | Start

Test case 1: Demonstration of order and backend invoice processing | Simulation-based test case that sends a purchase order to a retailer, so that this eventually is processed by its back office and invoicing service to generate an invoice to send back to the order creator.

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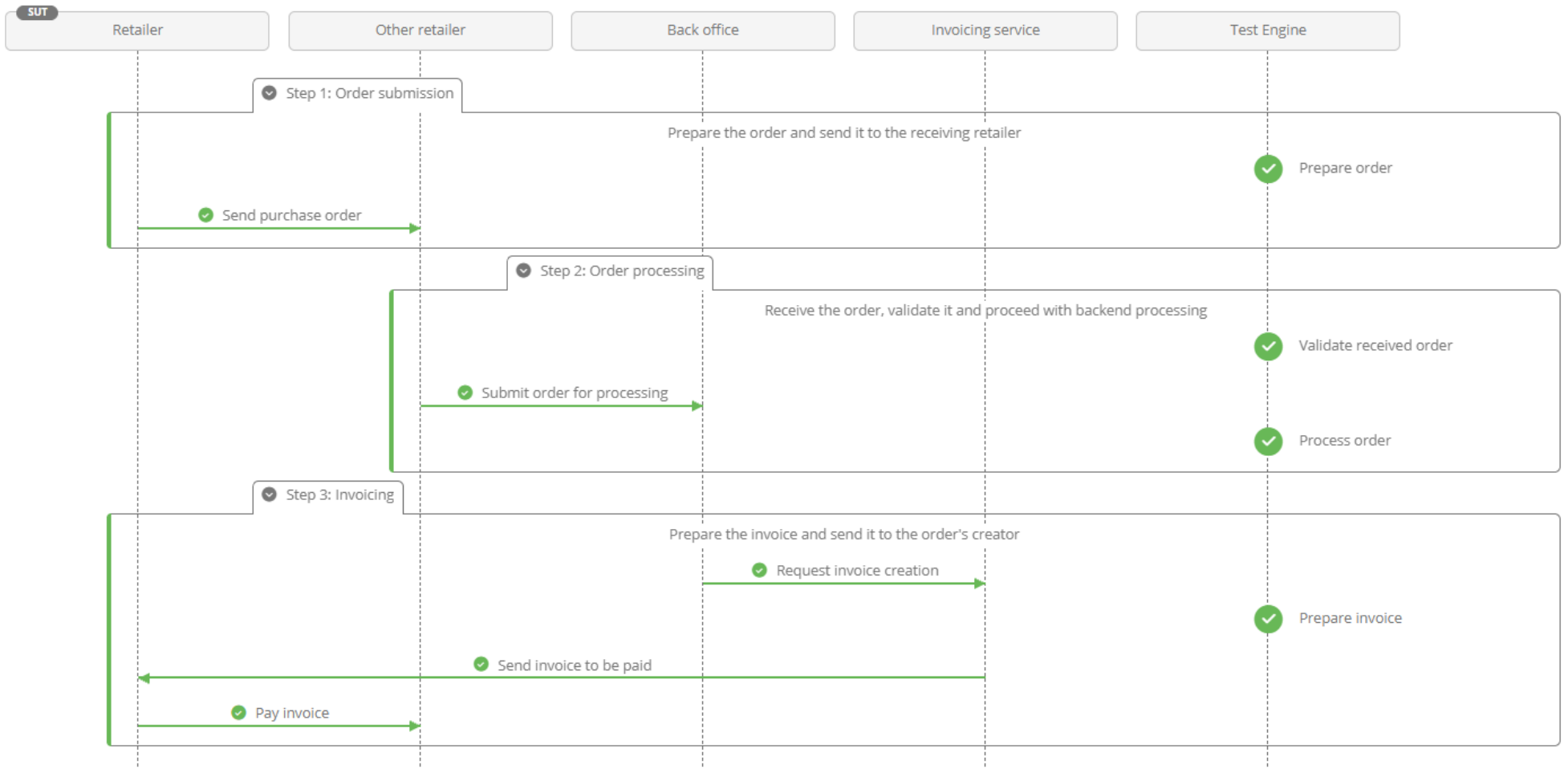
Download report | Comment | View log



Demonstration completed. This illustrated how a purchase order is sent to a retailer, and subsequently processed to result in the final invoicing and payment. Feel free to click on the steps' reports for more details.

Key takeaways

- Organisational interoperability must be addressed at **design time to ensure a smooth delivery** of digital public service**.**
- Organisational interoperability **enables trust** among collaborating organisations.
- The context and as-is landscape is determinant to understand the constraints on the set up of organisational interoperability.
- The legal basis of the public service mandates some organisational requirements (but not all required for the realisation of the public service).
- The **catalogue of organisational requirements** is instrumental to set up organisational interoperability.
- Agreements on organisational measures fulfil the organisational requirements that are not ascertained by law.
- Some organisational requirements can be tested and it is important to set up a testing environment in the deployment strategy to ensure long-term stability of the digital public service.

Appetite for a deeper dive

Interoperability assessment:

- Assessment guidelines | Interoperable Europe Portal

Interoperable Reference Architecture:

- EIRA | Interoperable Europe Portal
- EIRA guidelines for the TOGAF interoperability ADM cycle | Interoperable Europe Portal

Testbed:

- Guide: Governance interoperability design and conformance testing — ITB Guides
- User case studies | Interoperable Europe Portal

Thank you!

Stay in touch

Interoperable Europe

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