



07^{October}
2022

Interoperable Europe (IOPEU) Academy Workshop

Evolution of advanced digital skills on interoperability with the Interoperable Europe Academy



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ICEGOV
2022 GUIMARÃES
PORTUGAL

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WELCOME!



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Agenda



- Interoperability Policy Introduction: 20 min
- IOPEU Academy in a nutshell: 20 min
- Q&A: 20 min
- Coffee break: 15 min
- Group work: 45 min
- Presentation of results: 30 min
- Conclusions and Q&A: 30 min



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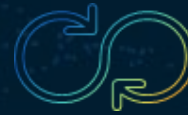


Interoperability is...

...essential for



The general capacity of organisations and systems to cooperate and interact



Solid foundation of digital government and seamless data exchanges



Bridging gaps between policy and IT, allowing administrations to make public services work across borders, sectors and organisations



Why does it matter?

Fundamental dimension for administrative simplification, enabling the interconnection & access to "authoritative data sources" towards the **once-only principle** (semantics).

A guiding instrument towards efficient, inclusive, accessible & timely **digitalisation** of public services, as proved by the pandemic.

A lever on **digital transformation and innovation**, through jointly experimentation & implementation of innovative solutions, like GovTechs.

What is the current state of EU public sector interoperability policy?



The European Interoperability Framework (EIF) is *the reference model* for ensuring interoperability



Provide guidance to public administrations on the **design and update** of national interoperability frameworks (NIFs), policies, strategies and guidelines



EU funded solutions are openly available for reuse at <https://joinup.ec.europa.eu/>



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Strengthened EU interoperability policy: Regulation proposal on interoperability

Establish a governance between EU public administrations
(Member States, CIOs, experts)

to **work and support** cross-border & cross-sector interoperability, with focus on:

01

Co-ownership & co-creation of interoperability resources
(EIF, solutions, investments, priorities,...)

02

Supporting **joint experimentation & innovation initiatives** amongst public sector entities, including with the private sector (“GovTech”)

03

Supporting EU policymaking that aims to be **digital-ready & interoperable-by-design**



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Implementing Instrument Digital Europe Programme



- New EC programme (not research) complementing other programmes
- Work Programme 2021-2022 adopted
- Former ISA² programme in EDGES
- New initiative GovTech Incubator

European Digital Government Eco System

Common Services Platform

eID and OOP

Interoperability Knowledge and Support Centre

GovTech Incubator

TESTA



Supporting tools: EIF toolbox



The EIF Toolbox is a guiding tool for national public administrations to align their National Interoperability Frameworks (NIFs) with the European Interoperability Framework (EIF).



EIF Perspective attributes of Joinup source code

[Glossary](#) [? What is EIF](#)

General information



Name of the solution: Joinup source code

Solution's owner: European Commission / DG Informatics (DIGIT) - Interoperability solutions for public administrations, businesses and citizens (ISA²)

Description: This is the source code for Joinup (<https://joinup.ec.europa.eu/>). Joinup is a collaborative platform created by the European Commission and funded by the European Union via the Interoperability solutions for public administrations, businesses, and citizens (ISA²) Programme. It offers several services that aim to help e-Government professionals share their experience with each other. We also hope to support them to find, choose, re-use, develop and implement interoperability solutions.

Type of solution: Common services, Generic tools

[Go to Solution](#)

[Edit EIF perspective](#)

The Joinup source code implements the following:

Principles

- ✓ Openness
- ✓ Reusability
- ✓ Technological neutrality and data portability

Interoperability layers

- ✓ Interoperability governance

Conceptual model

- ✓ Catalogues
- ✓ External information sources and services

Joinup source code implements the following EIF recommendations as explained below:

✓ Recommendation 3 | Openness

Joinup promotes the use of open source software by providing a catalogue of reusable solutions as well as by hosting the Open Source Observatory (OSOR) community, which serves as a place where users can find relevant open source software solutions and read about the use of free and open source in public administrations across and beyond Europe. Moreover, Joinup is available as an open source solution itself.

✓ Recommendation 6 | Reusability

Joinup facilitates the sharing and re-use of solutions for public administrations and provides the stakeholders with the means to collaborate.

✓ Recommendation 7 | Reusability

Joinup facilitates the sharing and re-use of information and data for the implementation of European public services.



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Supporting tools: Joinup

Digital Gov News & events
Studies, factsheets etc.
IOP¹ & OSS² policies

Observatory

Collaborative
platform

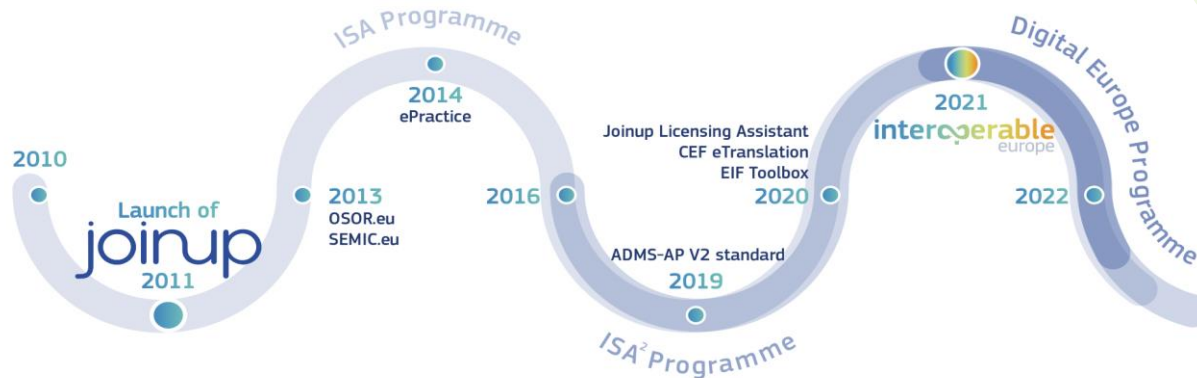
Digital Government
professionals
Public administrations
Businesses & academia
Citizens

A. Digital Government in practice Hub!
B. Digital Policy Hub!
C. Interoperability Solution Hub!

ICT Solutions
Repository

Open Source Software
ICT specifications
Frameworks & data models

joinup Timeline



Supporting tools: Interoperable Europe (IOPEU) Academy

Interoperability: An introductory course

Less than an hour Beginner

Course details

This course provides a solid understanding about interoperability, including the need for it, the interoperability environment at high level and the respective initiatives of the European Commission. The course also gives insights on the opportunities that can be leveraged to identify the appropriate interoperability modules for the implementation of the services reusing existing interoperable solutions.

Target audience

This course is aimed at learners who are new to the concept of trans-European e-services and interoperability and it is adjusted to both, technical and non-IT specialists/professionals such as:

- Young professionals
- Civil servants
- Policy makers
- Legal advisers
- Project/programme managers
- System architects and public service designers

Learning objectives

Upon completion of the course learners will:

- Provide the definition of interoperability identify / describe the main European Interoperability Framework concepts the main enablers and the main barriers for achieving interoperability.
- Articulate the need for Interoperability and how the concepts of the European Interoperability Framework and respective initiatives facilitate the implementation of significant legal acts for cross border services in the European Economic Area.
- Identify, locate, assess, reusable tools and participate to communities that accelerate the creation of a interoperable public services and develop the required advance digital skills.

Offered by

This content is offered by the European Commission. The European Commission is the European Union's politically independent executive arm. It is alone responsible for drawing up proposals for new European legislation, and it implements the decisions of the European Parliament and the Council of the European Union.



Resume

★★★★★ 5 (2)

Schedule

Introduction

Section 1 - Interoperability need and definition

Section 2 - Interoperability initiatives and context

Section 3 - Case study

Section 4 - FAQ

Quiz

Certificate of Completion

Tags

How does this eLearning work?

1. Interoperability need and definition

2. Interoperability initiatives and context

3. Practical examples / case study

4. FAQ, collaborative tools and more

5. Assessment

The completion of each section will take approximately 7 minutes.

At the end of the course, you will be asked to complete a self assessment in order to test your knowledge.



More: <https://academy.europa.eu> and <https://joinup.ec.europa.eu/collection/digital-skills-public-sector/solution/interoperable-Europe-academy>



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Interoperable Europe Academy

The Interoperability Academy
is an action running under **the DEP**

Aims at **improving the level of the advanced digital skills of civil servants** to support policy, service delivery and impact evaluation.

Offers

Online and
face-to-face
courses

Knowledge
exchange,
community

Summer
and winter
schools

Learning
materials

Interoperable Europe Academy



OBJECTIVE

Reduce the digital skills gap for civil servants and provide specialised eLearning courses and trainings will promoting the implementation of EIF.



VISION

Continue creating and providing online, self-paced courses and trainings, such as workshops and webinars to help modernize public administrations.



BENEFITS

Free and open online platform with 24/7 available, self-paced courses and eLearning resources with customised syllabus and various learning paths.



AIM

Be the go-to learning tool for professionals who work in the public sector and in the context of EU policies and help reduce administrative burden.

Interoperable Europe Academy: Roadmap



Interoperable Europe Academy



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TRAININGS & EVENTS



Catalogue of
learning
resources
on Joinup



more
than

2500
LEARNERS

more than

22

eLearning
courses



18

events
and counting



more than

190

ISSUED CERTIFICATES



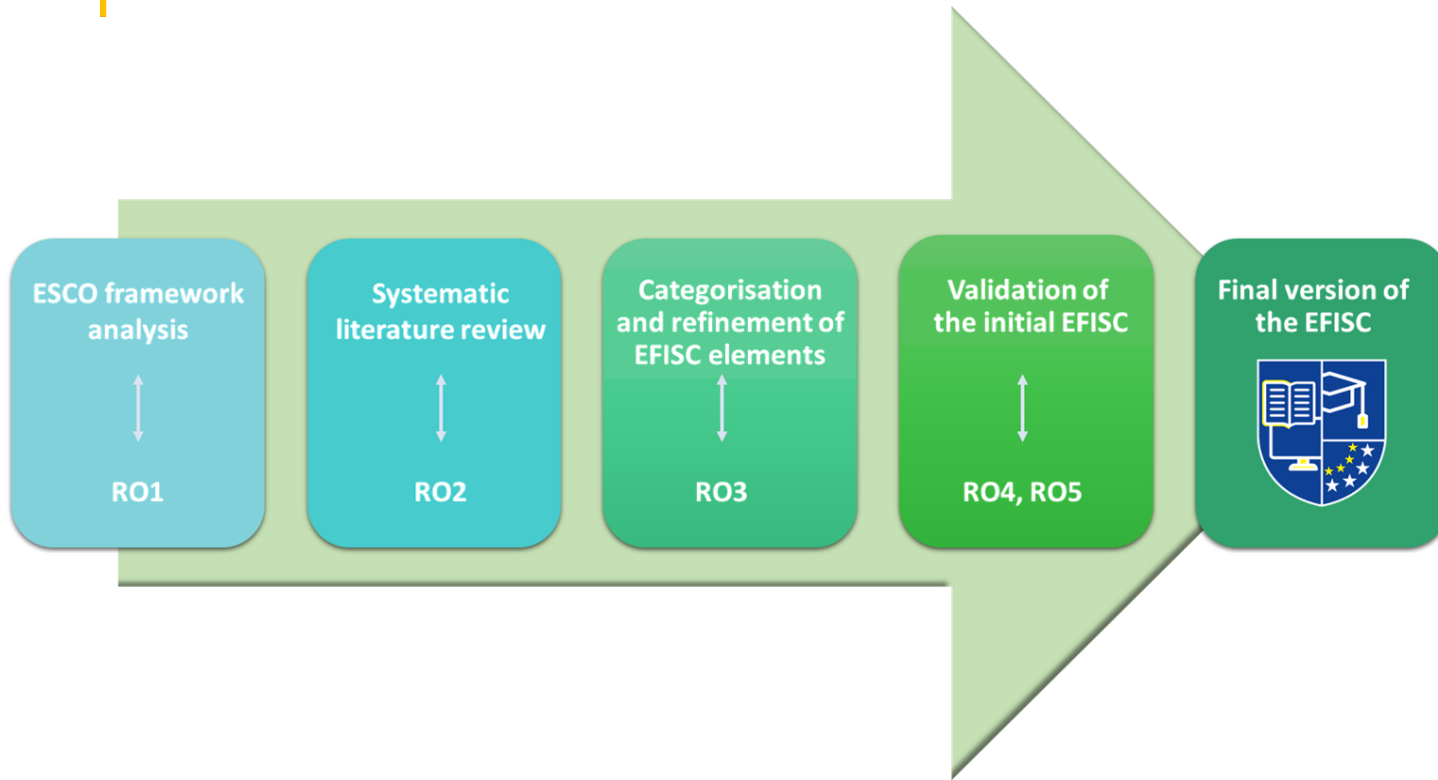
160
members of
the
Stakeholder
community
on Joinup +
more



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Interoperable Europe Academy: Skills & Competencies

A proposed European framework for interoperability skills and competences (EFISC) that can be applied to all public sector administrations and young professionals.



Interoperable Europe Academy: Skills & Competencies

European framework for interoperability skills and competences

9 Attitudes	17 Soft skills	6 Hard skills	6 Knowledge elements	4 Values
<ol style="list-style-type: none">1. Enthusiastic2. Responsible3. Persistent4. Efficient5. Innovative6. Service-oriented7. Results-oriented8. Evidence-based9. Culturally open	<ol style="list-style-type: none">1. Analytical thinking2. Critical thinking3. Collaboration4. Decision-making5. Negotiation6. Teamwork7. Creativity8. Adaptability9. Leadership10. Networking11. Precision12. Self-development13. Communication14. Future orientation15. Proactivity16. Empathy17. Holistic viewpoint	<ol style="list-style-type: none">1. Digital Information skills2. Research skills3. Reviewing skills4. IT skills5. Financial skills6. Management skills	<ol style="list-style-type: none">1. Information and communication technologies2. Knowledge in administrative workflows3. Organisational knowledge4. European Interoperability Framework knowledge5. Knowledge of national interoperability framework6. Knowledge of regulations related to their field, including General Data Protection Regulation	<ol style="list-style-type: none">1. Demonstrate the added value of interoperability2. Contribute to public values3. Understand the value of common standards4. Demonstrate consciousness about the relevance of interoperability



Interoperable Europe Academy: for whom?

Courses can target all, or some of the profiles, depending on topic

01

Chief Information Offices

Accountable for:

- ICT Strategy and Implementation
- ICT Governance Policy
- ICT Department & Budget.

02

Systems Architects

Accountable for:

- Solution Specification
- Integrated Solution

03

Policy Managers

Accountable for:

- Organisational policy positions
- Strategic alignment

04

Legal Advisors

Accountable for:

- Legal documentation
- Legal analysis and recommendations

05

Public Administration Managers

Accountable for:

- Government policy implementation
- Public policy implementation

06

Software developers

Accountable for:

- Documented code

07

Town/City Councilors

Accountable for:

- Local legislation
- Spending and budgetary targets
- Public relations

08

Financial Managers

Accountable for:

- Organisational accounts
- Annual report



+ other profiles involved in the process of digitalisation of public administration.

Interoperable Europe Academy: Courses



public sector leadership, innovation & knowledge sharing
PM C1 - PM² Essentials, Project Management Methodology



data, digital & technology
Innovative Public Services: Knowledge Exchange



public sector leadership, innovation & knowledge sharing
Access to Base Registries eLearning course



data, digital & technology
DCAT and DCAT-AP training: Basic user



public sector leadership, innovation & knowledge sharing
Publishing data with Linked Data Event Streams: why and how



public sector leadership, innovation & knowledge sharing
Interoperability: An introductory course



public sector leadership, innovation & knowledge sharing
Data Visualisation



data, digital & technology
DCAT and DCAT-AP training: General introduction



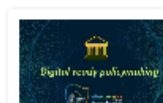
public sector leadership, innovation & knowledge sharing
The EIF Toolbox, support and guidance for the implementation of the EIF



data, digital & technology
Introduction to Core Vocabularies



data, digital & technology
DCAT and DCAT-AP



public sector leadership, innovation & knowledge sharing
Digital-ready policymaking



public sector leadership, innovation & knowledge sharing
What is "Better legislation for smoother implementation" and why it needs teamwork



public sector leadership, innovation & knowledge sharing
Introduction to CPSV-AP



data, digital & technology
DCAT and DCAT-AP training: Advanced user



public sector leadership, innovation & knowledge sharing
EIF & EIRA tutorial



public sector leadership, innovation & knowledge sharing
Wikibase and Semantic MediaWiki for data-driven semantics



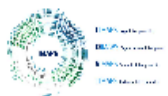
public sector leadership, innovation & knowledge sharing
Introduction to the Core Public Service Vocabulary Application Profile (CPSV-AP)



public sector leadership, innovation & knowledge sharing
Joinup Licensing Assistant (JLA) eLearning course



public sector leadership, innovation & knowledge sharing
European Interoperability Framework



public sector leadership, innovation & knowledge sharing
IMAPS in practice



data, digital & technology
PM A1-PM²-Agile Essentials

Interoperable Europe Academy: Courses for Interoperability

Learn how to
implement EIF in
your public
administration!

NEW COURSE!



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Introduction to the
**Core Public Service Vocabulary Application Profile
(CPSV-AP)**



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Interoperable Europe Academy: How to enroll?

An official website of the European Union How do you know? ▾

European Union

eu|academy


Log in En ▾

Sign up to follow courses on EU policy.

Sign up or log in


Explore by topic

What do you want to learn today? 🔍




Learn and teach smart

Improve and impart your knowledge of EU policy in a simple and accessible way.




Develop your skills

Gain and pass on new skills by following courses in different EU policy areas.



Be inspired and inspiring

Share your knowledge and discover valuable insights directly from EU experts.



The EU and you

Discover how EU policies affect your daily work and life and how your experience can make a difference.



More: <https://academy.europa.eu/>



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European
Commission

Interoperable Europe Academy: Community in joinup



Interoperable EuropeInteroperability SolutionsSign inGet started



Digital Skills in the public sector

Last update
about a month ago

179 Members
7 Solutions

JOIN THIS COLLECTION




Interoperable EuropeInteroperability SolutionsSign inGet started



Interoperable Europe Academy


**Digital Skills in the public sector**
Topic: Education, Collaboration, eGovernment, ICT


SUBSCRIBE TO THIS SOLUTION




- Overview
- Members
- About


This collection aims to enhance the collaboration on development of digital skills in the public sector between the European Commission, EU countries, international organisations and any other stakeholders through opening discussion topics and allowing information exchange. [Read more](#)

**37**
News

**23**
Events


**9**
Solutions

MORE




Interoperability Academy
@ Samos Summit

news




European Interoperability
Framework (EIF) Online
course

solution




Interoperability Academy
Webinar: 'Knowledge
Sharing'

news




EU Academy: the
European Union's brand
new hub for e-learning

news




Interoperable Europe
Academy

solution




#EUDatathon: pre-selected
teams announced!

news




Master in
Artificial Intelligence
for Public Services
(AI4Gov)

news




Join the webinar "Eurostat
regional yearbook goes
digital!"


news




- Overview
- Members
- About
- Winter School
- Catalogue of Educational Training Resources
- Resources for course development, managing and testing


The Interoperable Europe Academy, previously known as Interoperability Academy, is an action which started under the ISA² programme in 2019 and aims at contributing to advanced digital skills of civil servants in the area of interoperability to support policy, service delivery and impact evaluation. The action is now part of the Interoperable Europe initiative of the European Commission. Over the years, ISA/ISA² programmes, as well as CEF programme, have generated a number of solutions including... [Read more](#)

**11**
News

**7**
Events


**6**
Documents

Located in: **everywhere**




IOP EU Academy:
Workshop Highlights

news




New name! New courses!

news



Interoperable Europe
Academy Workshop

12/05/2022 event



Interoperability: the key
enabler of e-government

news

Interoperable Europe Academy: Reuse courses

The screenshot displays the Interoperable Europe Academy website. The main header features the 'joinup' logo and navigation links for 'Interoperable Europe', 'Interoperability Solutions', 'Sign in', and 'Get started'. A prominent banner for 'Digital Skills in the public sector' highlights a collection with 180 members and 9 solutions, accompanied by a 'JOIN THIS COLLECTION' button. Below this, a sidebar on the left offers navigation for 'Overview', 'Members', and 'About'. The main content area lists various courses, including the 'European Interoperability Framework (EIF) Online course', 'Interoperable Europe Academy', 'EIF Toolbox' eLearning course, and 'Interoperability: An introductory course'. A large orange arrow points from the '11 Solutions' count to the first course card. On the right, a detailed view of the 'EIF Online Training' course is shown, indicating it is 'Completed' and released on 16/12/2020. Another orange arrow points from the text '3 ready to use' to this course detail. The bottom of the page features the Interoperable Europe Academy logo and the European Commission logo.

joinup Interoperable Europe Interoperability Solutions Sign in Get started

DIGITAL SKILLS Digital Skills in the public sector

Last update 2 days ago 180 Members 9 Solutions JOIN THIS COLLECTION

This collection aims to enhance the collaboration on development of digital skills in the public sector between the European Commission, EU countries, international organisations and any other stakeholders through opening discussion topics and allowing information exchange. [Read more](#)

Overview 11 Solutions 37 News 23 Events MORE

Members About

European Interoperability Framework (EIF) Online course solution

Interoperable Europe Academy solution

'EIF Toolbox' eLearning course solution

'Interoperability: An introductory course' solution

EIF Online Training

Release number: v1.00

Status: Completed

16/12/2020 release

Related solutions

3 ready to use

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Thank you!

Any questions up to now?



Enjoy the break!
We are continuing in 15 min.



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How will we organise the work in this session?



01

Select topics

We will first select the topic in scope for today's session.

02

Divide into groups

Each group will develop the proposal for course structure, after receiving the input about the course creation process.

03

Present the proposal

Each group should think of how to present their proposal and collect feedback from the other group.



We will develop the course on the selected topic and you will be able to test it.

Select topics



01

How to better align NIFs and the EIF?

02

Interoperable public services design

03

Advanced interoperability & digital governance

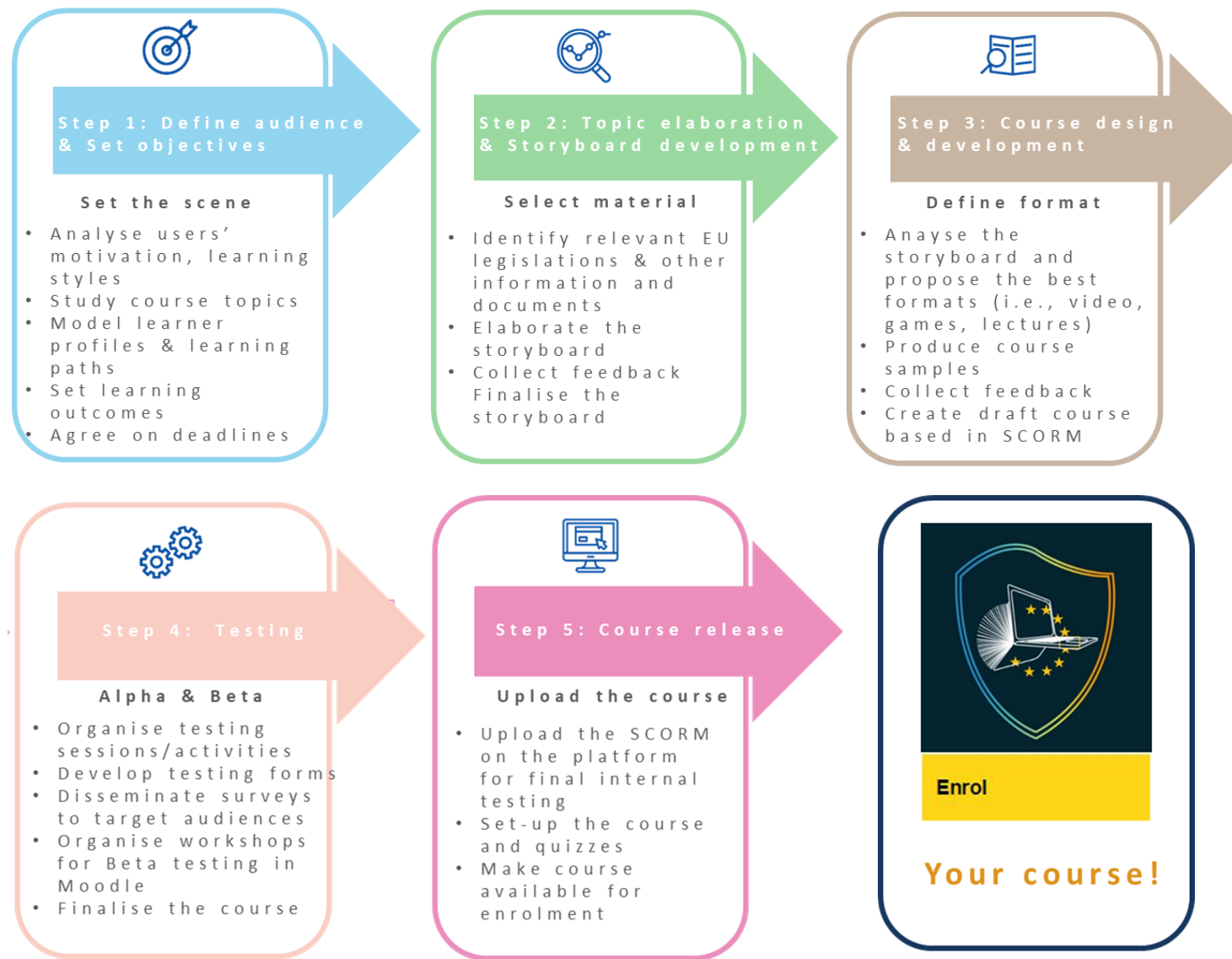
04

Open source & licencing as an interoperability enabler

05

Other topic?

How are we creating the course?



How are we creating the course 1/2?



Step 1: Define audience & Set objectives

Set the scene

- Analyse users' motivation, learning styles
- Study course topics
- Model learner profiles & learning paths
- Set learning outcomes
- Agree on deadlines



Step 2: Topic elaboration & Storyboard development

Select material

- Identify relevant EU legislations & other information and documents
- Elaborate the storyboard
- Collect feedback
Finalise the storyboard



Step 3: Course design & development

Define format

- Analyse the storyboard and propose the best formats (i.e., video, games, lectures)
- Produce course samples
- Collect feedback
- Create draft course based in SCORM

How are we creating the course 2/2?



Step 4: Testing

Alpha & Beta

- Organise testing sessions/activities
- Develop testing forms
- Disseminate surveys to target audiences
- Organise workshops for Beta testing in Moodle
- Finalise the course



Step 5: Course release

Upload the course

- Upload the SCORM on the platform for final internal testing
- Set-up the course and quizzes
- Make course available for enrolment



Enrol

Your course!

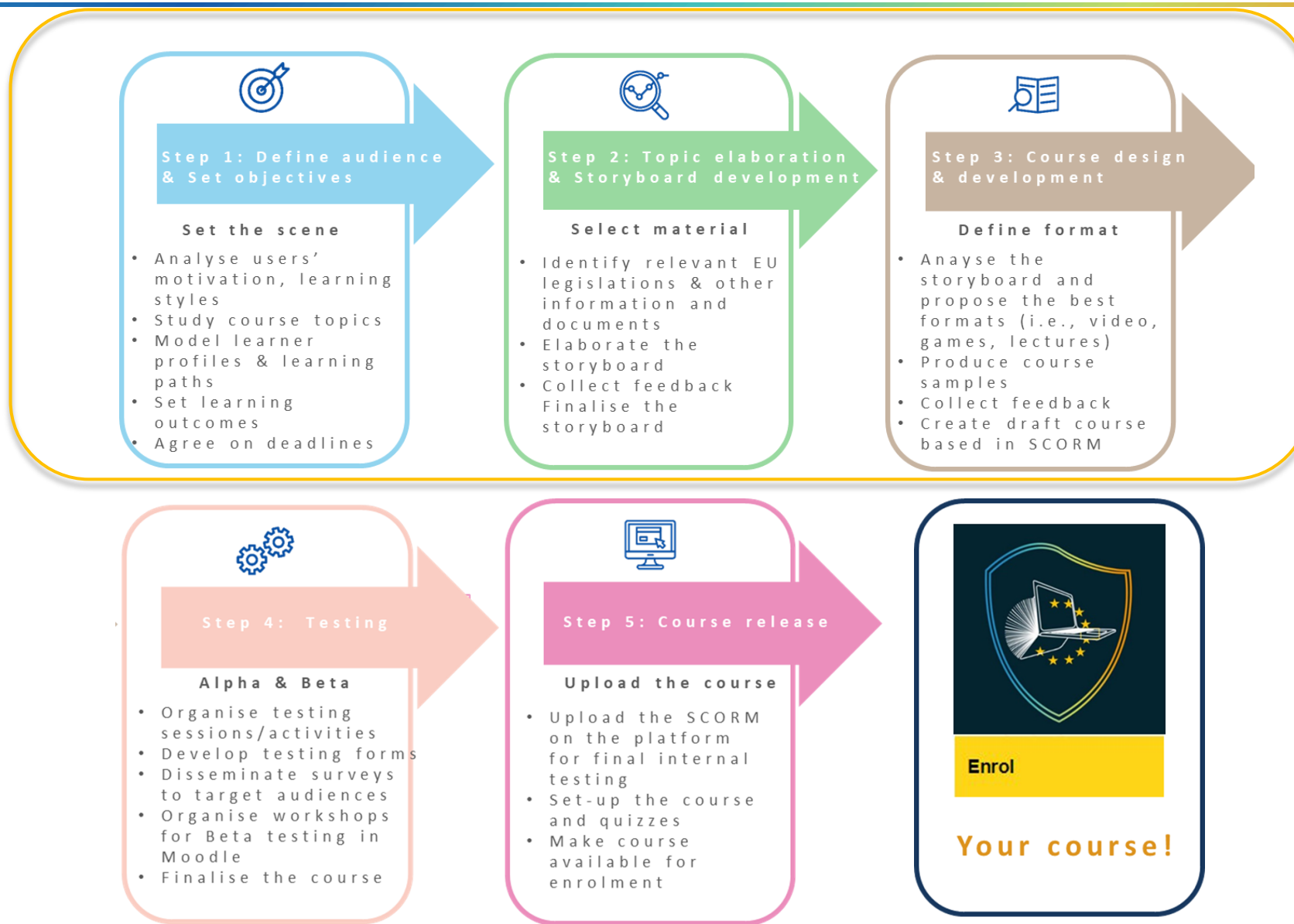


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Commission

How are we creating the course?



Step 1



Step 1: Define audience & Set objectives

Set the scene

- Analyse users' motivation, learning styles
- Study course topics
- Model learner profiles & learning paths
- Set learning outcomes
- Agree on deadlines

Audience

- How much time one has for training?
- What is their motivation for the course?
- What motivates them in general when it comes to learning and professional development?
- What their expectations are?

Objectives

- Why are you offering this course?
- What is the learning outcome?
- How will the course make an impact on the audience?



The answers to these questions will provide you the framework for your course.

Step 2



Step 2: Topic elaboration & Storyboard development

Select material

- Identify relevant EU legislations & other information and documents
- Elaborate the storyboard
- Collect feedback
Finalise the storyboard

Topic

- Do you know any relevant laws, documents to support the topic?
- What exactly do you want to present to your audience?
- What concepts would you like to include?

Storyboard

- How many modules would you like to create?
- Do you consider telling a story thanks to an example or case study?

Step 3



Step 3: Course design & development

Define format

- Analyse the storyboard and propose the best formats (i.e., video, games, lectures)
- Produce course samples
- Collect feedback
- Create draft course based in SCORM

Formats

- In which form do you want to tell your story? Do you want to:
 - ❖ Include a lecture?
 - ❖ Include animations?
 - ❖ Prepare an animated video?
 - ❖ Create a game?
 - ❖ Create a quiz?

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Where are we?



Step 1: Define audience & Set objectives

Set the scene

- Analyse users' motivation, learning styles
- Study course topics
- Model learner profiles & learning paths
- Set learning outcomes
- Agree on deadlines



Step 2: Topic elaboration & Storyboard development

Select relevant material

- Identify relevant EU legislations & other information and documents
- Elaborate the storyboard
- Collect feedback on the first draft proposal
- Finalise the storyboard



Step 3: Course design & development

Define course format

- Analyse the storyboard and propose the best formats (i.e., video, games, lectures)
- Produce course samples
- Collect feedback on proposed formats
- Create draft course(s) based in SCORM



Step 4: Testing

Alpha & Beta testing

- Organise testing sessions/activities
- Develop testing forms
- Disseminate surveys to target audiences
- Organise workshops for Beta testing in Moodle
- Finalise the course



Step 5: Course release

Upload the course

- Upload the SCORM on the platform for final internal testing
- Set-up the course and quizzes
- Make course available for enrolment



Your course!

Group A - Presentation



Presentation of the main results for steps:

- 1. Define Audience & set Objectives**
- 2. Topic elaboration & Storyboard development**
- 3. Course design & development**



10 minutes for presentation and 5 minutes for feedback

Group B - Presentation



Presentation of the main results for steps:

- 1. Define Audience & set Objectives**
- 2. Topic elaboration & Storyboard development**
- 3. Course design & development**

10 minutes for presentation and 5 minutes for feedback

Group C - Presentation



Presentation of the main results for steps:

- 1. Define Audience & set Objectives**
- 2. Topic elaboration & Storyboard development**
- 3. Course design & development**



10 minutes for presentation and 5 minutes for feedback

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Conclusions and Q&A: 15 min

Thank you!

Any questions?



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innovation ∞ govtech ∞ community



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[Interoperable Europe | YouTube](#)



[Interoperable Europe | LinkedIn](#)



IOP-Academy@ec.europa.eu



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

