

# "Bridging the digital gaps across Europe together"

28 May 2020

**EUROPEAN COMMISSION DIGIT D2 – Interoperability Unit Project Officers:** Kalogirou Victoria Lobo Georges

#### TRASYS INTERNATIONAL **Project Team**

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# **Interoperability Academy**

ISA<sup>2</sup> action 2019.01







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#### **Agenda**



- 1. Welcome note
- 2. Briefing from the previous Webinar
- 3. Policy context
- 4. EU Academy and Interoperability Academy
- 5. Course on European Interoperability Framework
- 6. European Skills, Competences, Qualifications and Occupations (ESCO)
- 7. Roadmap of the Interoperability Academy
- 8. A.O.B.



#### **Welcome Note**







- The Team
- Policy context
- Cooperation with the EU Academy and ESCO Teams



#### Present

- First course of the Interoperability (IOP) Academy European Skills, Competences, Qualifications and Occupations (ESCO)
- Roadmap for the IOP Academy



#### Discuss and exchange

- Impressions and testing of the first course
- Suggestions for the future courses
- Possibilities for collaboration



# Let's introduce ourselves



#### **The Interoperability Academy Team**

Natalia ARISTIMUÑO PÉREZ

Project Owner





Georges LOBO & Victoria KALOGIROU

**Project Officers** 







**Ludovic MAYOT** 

**Project Manager** 



#### **The Interoperability Academy Community**





Katarina MANOJLOVIC





Barry Konstantina KRUGER KYRIAKOPOULOU DUMONCEAU



Edouard



Johan CLEMENTE



Maxim CROMPVOETS CHANTILLON



Evrim TAN



Prof. Demetrios G. **SAMPSON** 



**Supporting advanced Digital Skills in the public sector** 





# Victoria Kalogirou

Programme Manager
Interoperability Unit
DG Informatics
European Commission



#### **Interoperability Academy Webinar**

**'Bridging the digital gaps across Europe together'** 



# Objectives of the IOP Academy

Minimise the digital skills gap & train civil servants

✓ provide specialisedelearning training programmes

#### **Objectives of Webinar 2**



**Digital Interdependence** 



**Inter-organisational Collaboration** 



Presentation of the first course in the IOP Academy



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#### **Interoperability Academy Webinar 1: Outcomes**

**Summary of Discussions** 



#### **Key Aspects of Discussion:**



1) Requirements of the IOP Academy Learning and Management System (LMS)



2) Developed Learner Profiles, Learning Paths & curriculum



3) Prior experience with **LMS platform** & features

#### **Main Conclusions:**

- Developed Learner Profiles and Learning Paths were representative to the roles in participants' organization accepted by the majority of attendees.
- ✓ Variety of topics & courses were suggested covering all levels of knowledge and layers of IOP; considering various learning needs.
- ✓ The LMS platforms used by participants include Moodle, Backboard, & ILIAS.
- ✓ Majority of courses are offered English or translated in English.
- ✓ To develop training modules that are attractive to users with 'easy to digest solutions'.



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## **Natalia Aristimuño Pérez**

Head of Interoperability Unit
DG Informatics
European Commission



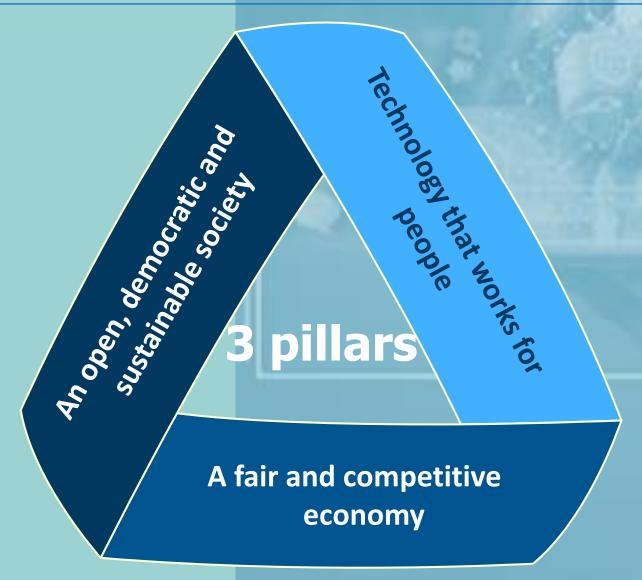






#### **Shaping Europe's future**





#### **Shaping Europe's future**



# Technology that works for people

✓ A Digital Education Action Plan (Q2 2020)

✓ A reinforced Skills Agenda (Q2 2020)



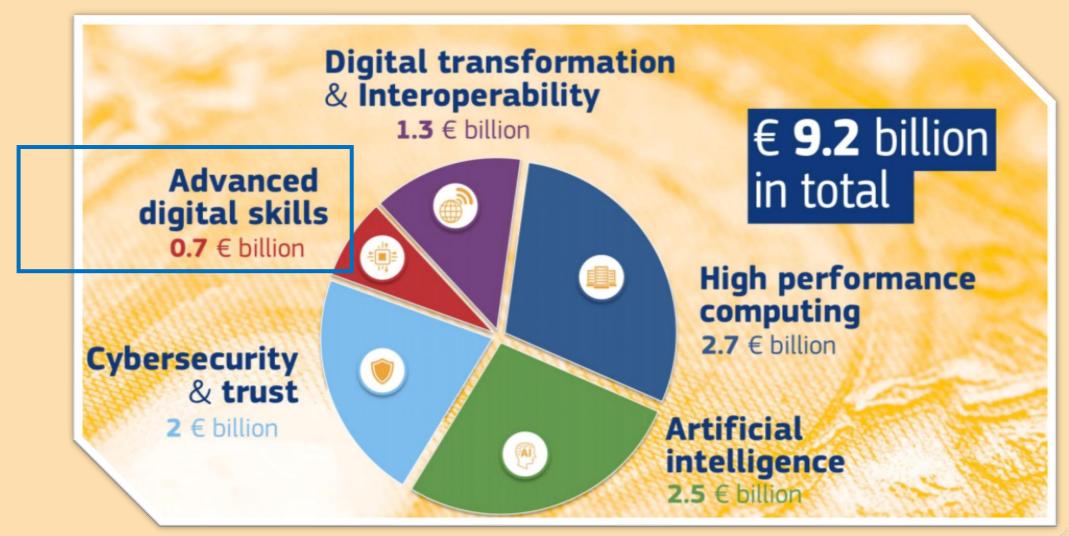
✓ A reinforced EU governments interoperability strategy supported by a strengthened European Interoperability Framework (EIF). (2021)



#### The Digital Europe Programme (DEP)

**Reinforcing digital capacities** 





Supporting advanced Digital Skills in the public sector



**E-learning resources on interoperability** 

**Syllabus and various learning paths** 

Free and open online platform





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# **Georges Lobo**

Programme Manager
Interoperability Unit
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European Commission



**Release of the IOP Academy - facts** 



Interoperability
Academy is going
live in June!

First course will be on the European Interoperability Framework.

IOP Academy will be hosted in the EU Academy eLearning platform.







**Testing of course release of the IOP Academy - timeline** 



- EU Academy platform test environment ready.
- Different roles assigned to team members to test the platform.

functional testing (now)

#### transfer (end of May)

- EIF course transferred to the EU Academy.
- Final testing of the course before the release.

- EU Academy MVP released.
- EIF course live on the platform ready for use.
- Anyone interested to test the course?

release (June)



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#### **Paul Hearn**

Senior Expert in Knowledge Management EU Joint Research Centre (JRC) European Commission

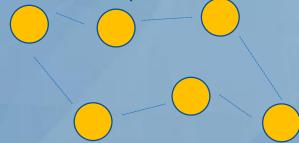


**Need and Vision for the EU Academy** 



# Why an EU Academy?

- Centralise the access to trainings that different EU Institutions are currently offering (currently scattered on different platforms).
- Trainings not necessarily online, but there is an increased need for e-learning
- Organise trainings and develop relevant topics, following the current priorities and needs of the European Institutions.



#### Vision

EU Academy is a go-to learning resource for external professionals who work at the interface between EU policy and its implementation.

Learning opportunities will take the form of self-directed e-learning modules as well as synchronous (real-time) virtual classroom events and community building activities.

#### Result

A GDPR-compliant world-class inter-institutional online learning platform delivering targeted high quality learning opportunities to external professionals working at the interface between EU policy and its implementation.



Concept









Inter-institutional



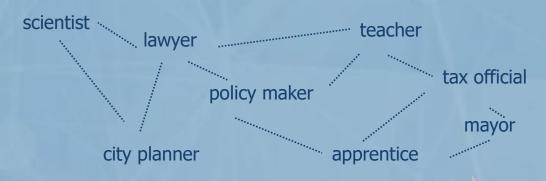
Highest quality content

# **EU ACADEMY**

EU policy and implementation



#### External professionals





**Planning** 



The plan is to beta launch the Academy over the summer with a selection of first courses from 8 Directorates-General of the Commission, and to bring online new features and functionalities, as well as learning opportunities, in the coming months and years.







#### **Questions for Discussion**

We want to hear your opinion!





- In your view, what is the highest potential that IOP Academy can reach in partnership with the EU Academy?
- What would you consider important to have in the IOP Academy (i.e. multilingualism, search menu for topics easily, find similar course, link my course with badges)?

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### **Miguel Alvarez Rodriguez**

Programme Manager
Interoperability Unit
DG Informatics
European Commission



The new EIF and the role of ISA<sup>2</sup>





conceptual model

4-4
levels of interoperability

4-12
underlying principles

4-47
recommendations

Interoperability governance 5 recommendations Integrated public service governance Legal interoperability Organisational interoperability Semantic interoperability Technical interoperability

In accordance to ISA<sup>2</sup> decision, the ISA<sup>2</sup> programme is in charge of contributing to and monitoring the implementation of the EIF across the EU Member States.

- ✓ The **new EIF** is part of an EC Communication (2017/134) adopted in March 2017.
- ✓ The framework gives guidance on the establishment of interoperable digital public services.



**Aim and Structure** 



**Aim:** Engage the target audience with the EIF in order to promote the 3 pillars (principles, layers and conceptual model) and learn how interoperability helps to design integrated public services with a practical case.

The integrated e-Learning solution will consist of 2 main components:

- ✓ Online Learning Course: will deliver key knowledge and practical skills to implement the EIF recommendations;
- ✓ **Interactive Guide:** will enable instant access to all EIF information presented in the course for daily activities.

#### **Structure of EIF Module**

- ✓ Duration: 50 minutes
- √ 6 Modules
- ✓ The modules include:
  - PPT presentations
  - video animations 7-8'
  - a quiz at the end of each module



ONLINE COURSE

Linear navigation, designed to deliver knowledge in a self-paced



INTERACTIVE GUIDE

Drill-down navigation with embedded search, designed for instant access of information



**Aim and Structure** 



#### **Topics of EIF Course**

1

Overview: What is the EIF and define key components 3

Interoperability layers

5

Monitoring mechanism

2

Underlying principles

4

Conceptual model

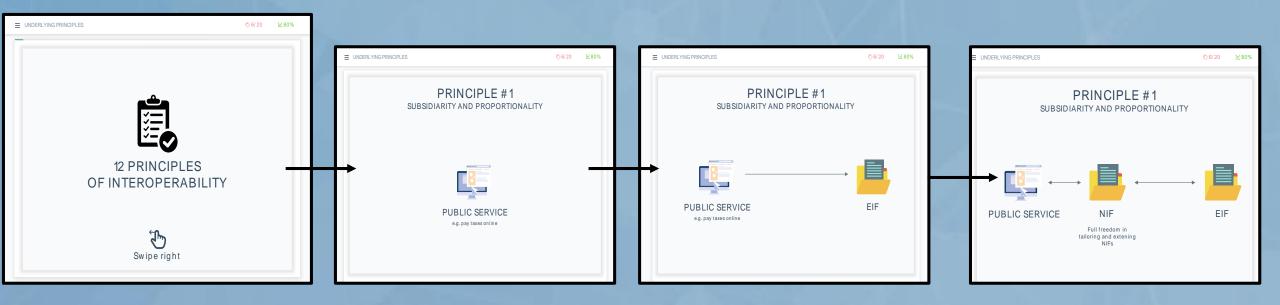
6

EIF implementation

**Module Example: Topic 'Underlying Principles'** 



**Aim:** This module will help public administrations understand the key principles of the EIF in a way that enables them to apply them in a real context.

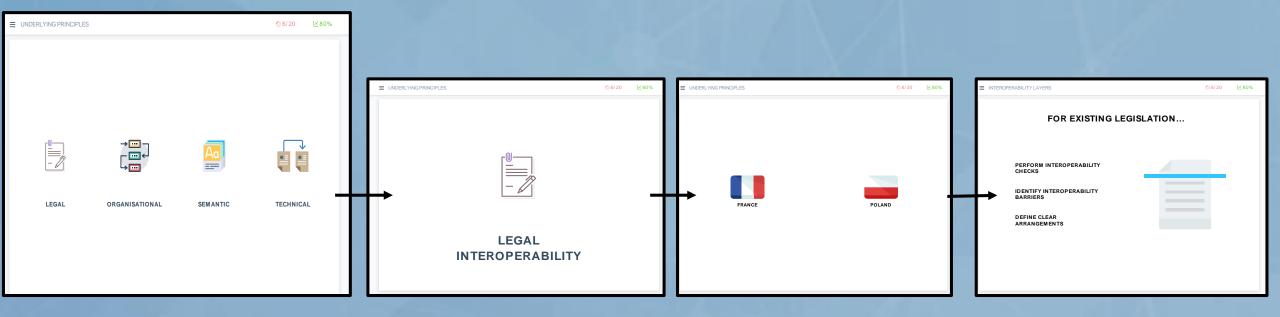




**Module Example: topic 'Interoperability Layers'** 



**Aim:** This module will help public administrations understand the 4 layers of interoperability and how they support the EIF.





#### **Questions for Discussion**

We want to hear your opinion!





- In your organisations, do you already have courses on interoperability and/or advanced digital skills?
- In the context of your strategic objectives, what courses would you like to see on the Interoperability Academy?
- Would you be interested to explore synergies between our initiatives and exchange expertise (i.e. course co-creation/transformation or testing)?



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**Supporting advanced Digital Skills in the public sector** 





#### **Barry Kruger**

eLearning Expert Trasys International



**Skills & Competences frameworks for the Public Sector** 





Interoperability Academy aims to offer courses which will support development of relevant advanced digital skills in the public sector

## Learner profiles and learning paths are developed based on:

- 1. European e-Competence Framework (e-CF)
  - 2. CEN CWA 16458-1 European ICT Professionals Role Profiles
- 3. ESCO (Skills, Competences, Qualifications and Occupations) classification
  - 4. DigiComp
- 5. ISA<sup>2</sup> and JRC user- and learner-centricity work.

#### **Work in progress:**

Study on Skills & Competences frameworks for the Public Sector

Research and analysis on existing skills and competences frameworks to be customised for the needs of IOP Academy

IOP Academy curriculum/competences framework



	Occupation: MAPPING TO ESCO AND CWA 16458-1	Learner Canvas
	SUMMARY DESCRIPTION	Challenges
IMAGE		PERSONA RELATED INFO
	Accountable for:  Responsible for:	
	MAPPING TO CWA 16458-1	
Age profile: Role-type: Motivation:	Tasks  MAPPING TO ESCO AND CWA 16458-1	Knowledge
PERSONA RELATED INFO	WALLESCO FIND CWA 10430 1	MAPPING TO ESCO
Qualifications	E-CF Competencies	
	MAPPING TO DIGI-COMP, e-CF AND EQF	ESCO URI  LINK TO ESCO RECORD

## The Interoperability Academy

**Supporting advanced Digital Skills in the public sector** 





## **Dimitrios Pikios**

ESCO Project Coordinator
Skills and Qualifications Unit (E2)
DG Employment, Social Affairs and
Inclusion
European Commission



**EU** goals in a digital labour market



- Better link education-training to labour ensure access to the best opportunities
- Ensure transparency of information on skills through systems' interoperability
- Allow open-fair access to information on skills, qualifications, jobs and training
- avoid monopolisation of data in digital labour market
- European open standards to counteract risks of proprietary standards



European Skills/Competences, qualifications and Occupations

European Commission > ESCO > Skills/competences





### ₽ SKILLS/COMPETENCES

- > A attitudes and values
- > K knowledge
- > L language skills and knowledge
- > S skills

## **Skills**

13485 skills / competences The ESCO skills pillar distinguishes between i) skill/competence concepts and ii) knowledge concepts by indicating the skill type. There is however no distinction between skills and competences. Each of these concepts comes with one preferred term and a number of non-preferred terms in each of the 27 ESCO languages. Every concept also includes an explanation in the form of

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### **CURRENT ESCO IMPLEMENTATION- JANUARY 2020**

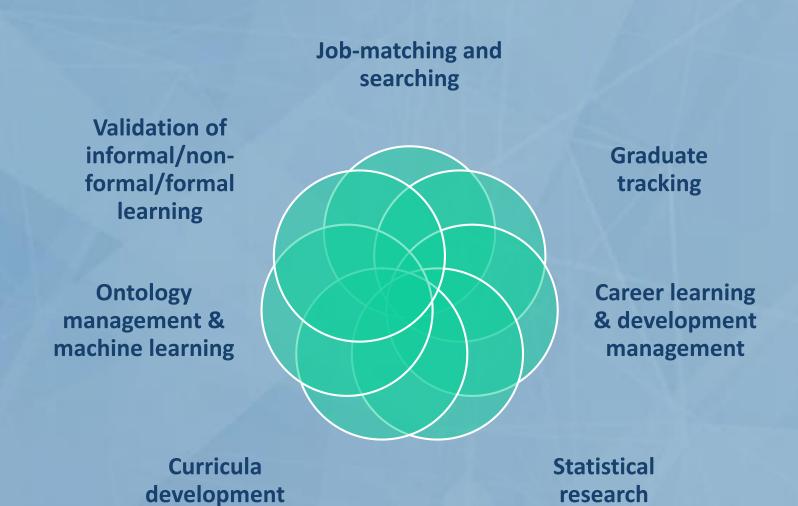
- All the European PES by the end of 2021
- 5 Implementations in EU Public Administrations (e.g. EURES, CEDEFOP EUROPASS)
- 15 EU-Funded Projects

More than 60 implementers across Europe

- 8 Job-boards
- 40 Private
   Companies
- 5 Education
   Institutions
- 4 Public & 1 Private
   Employment Service
   use ESCO directly in
   their system

**ESCO** in digital applications: use cases





**Use of ESCO by EU public authorities** 



Job-matching & searching

Job-matching; career learning & development management

Career learning & development management

**EURES** 



**EUROPASS** 



DG HR-EU Learn



Statistical research

Job-matching; Career learning & development management

Skills documentation

CEDEFOP - OVATE



DG EAC – EIT Inno-energy



EU 3<sup>rd</sup> country nationals tool





**ESCO** mission & implementers





#### **Public Implementers**

#### **Private implementers**

ADDRESSING THE NEEDS OF STUDENTS, EDUCATION AND TRAINING INSTITUTES AND EMPLOYERS: ESCO CONNECTS THE WORLD OF WORK WITH WHAT STUDENTS ARE LEARNING

### **ESCO** connects the labour market to education and training systems

**How can ESCO inform** education and training reforms & talent management strategies?

- Curricula development: transparency, comparison and analysis of the content of a
- · Creation of learning outcomes
- Creation of skills passports

qualification

 Personalised digital career guidance services: suggestion of online & offline courses based on skills gaps, desired career path and trends in the labour market

- Skills assessments and creation of psychometric tests
- Endorsement and visualisation of informal/non-formal learning via open badges
- Evidence-based curricula reforms through skills intelligence
- Collection and analysis of data on skills trends to inform education and training bodies
- Creation of individual's skills mapping for upskilling and re-skilling strategies















### SKILL MATCH MAKER

Openskimr is a life-long

companion which guides talents

through their career in the STEM

area.

Openskimr is a platform for an

### EXPERT AND TALENT COMMUNITY

independent expert and talent community. People from the research consortium and the

### MATCHING ALGORITHMS

The Openskimr team develops a set of algorithms which involve match-making and recommendations of jobs and

### **EUROPEAN CLASSIFICATION** SYSTEM ESCO

Openskimr is built on the latest version of the European classification system ESCO (European Skills, Competences,

# Skills Mapping Technology that Delights Employees

HR leaders, solve your most critical HR challenges with our Skills Mapping Technology. You and your teams will love it.

Request Demo

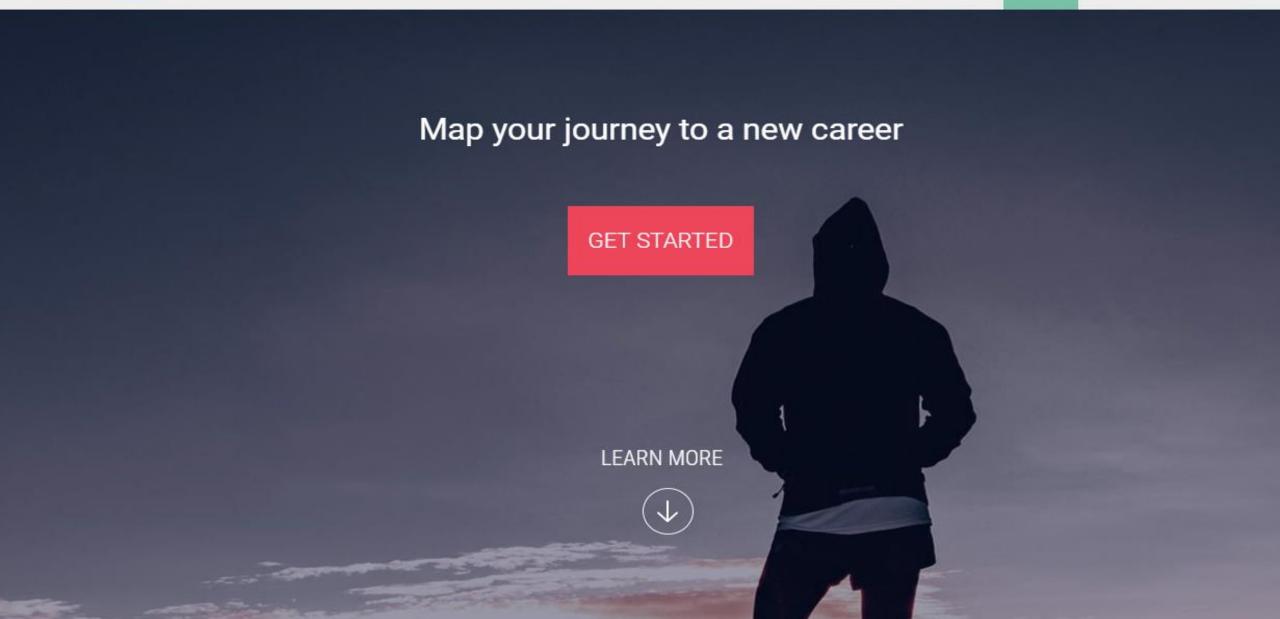
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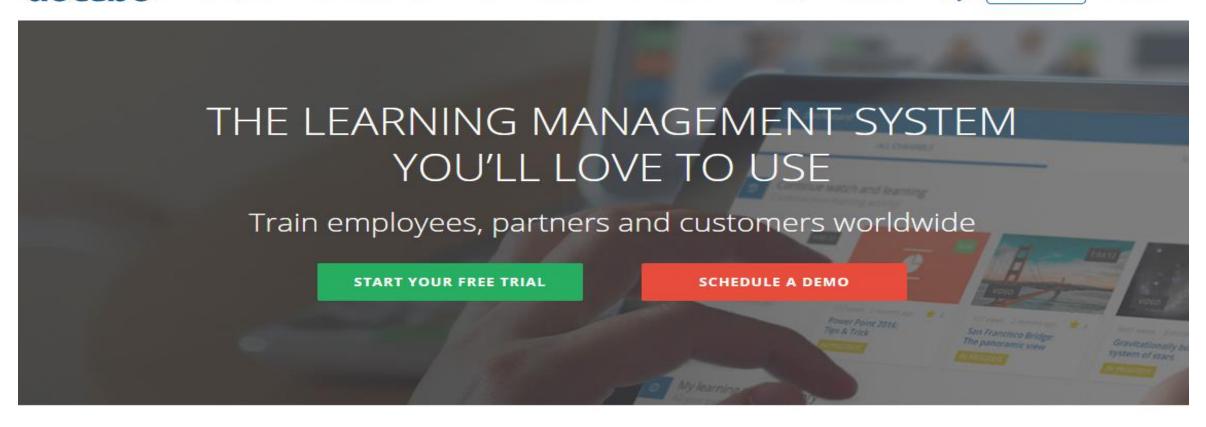




About



















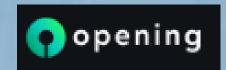
Docebo is the only learning platform that combines formal, social and experiential learning with skills management to maximize learner performance

**ESCO supports start-ups & SMEs** 

































**Reflections on ESCO moving forward** 





- **Is ESCO improving** the functioning of the labour market, as a common reference terminology to bridge employment with education-training?
- How should ESCO's implementation contribute to an integrated digital labour market based on open, correct and well-structured data and on communication across languages, domains and use cases?
- **ESCO's sustainability**, v1.1 and beyond: an expert- and data-driven taxonomy? Role of AI technology?

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## The Interoperability Academy

**Supporting advanced Digital Skills in the public sector** 





## **Konstantina Kyriakopoulou**

Consultant Trasys International



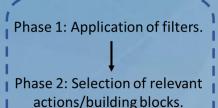
## The Interoperability Academy

Selecting and Developing Courses



A methodology was developed for assessment and selection of existing training materials in order to identify those that could be transferred (upon amendments, if necessary) to the Interoperability Academy eLearning platform.

## STAGE 1 Selection of relevant actions/building blocks.



### **STAGE 2 Quality Analysis on** shortlisted actions/building blocks.



Evaluation of relevant material under selected actions/building blocks.

### STAGE 3

Comparison of selected actions/building blocks.



Ordering of the shortlisted actions/building blocks in terms of material quality.

### STAGE 4

**Recommendation and Decision-Making.** 



Phase 1: Provision of a list of recommendations

Phase 2: Implementation of the courses in the platform.

Recommendations for the development of 2-3 courses for transferring to the eLearning platform





## The Interoperability Academy Roadmap

**Achievements and Future Plans** 



### **Achievements**

- Defined Requirements for IOP Academy LMS.
- Preparation and testing of the first training course for the IOP Academy LMS.

### **Ongoing Tasks**

- Release of the first course, EIF in the Interoperability Academy.
- Selecting initial topics for the next IOP Academy courses.

March May 2020 July 2020

September 2020

November 2020

December 2020 - onwards

### **Future Plans**

• Identify more courses for transferring to the eLearning platform.

### **Future Plans**

- Preparation and testing of the second training course.
- Establish Guidelines for the development/transformation of material for Action Owners.

### Vision for the future

- Release of the second course on SEMIC action on the Interoperability Academy.
- Continue to identify potential topics for the next IOP Academy courses.







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https://joinup.ec.europa.eu/col lection/digital-skills-publicsector



## Digital Skills in the public sector

Last update 11 days ago 8 63 Members 1 Solution

This collection aims to enhance the collaboration on development of digital skills in the public sector between the European Commission, EU cour

international organisations and any other stakeholders through opening discussion topics and allowing information exchange. Read more

JOIN THIS COLLECTION

Step 2: Become a member!!

Step 4: Share some

info about your

initiative!!



MORE

Add custom page

Add solution

Add news

Add discussion

Add document

Add event



About: all policy domains >

Help us shape the Interoperability Academy! We are eager to implement the best practices and create a modern platform accessible 24/7, free of

0 @ discussion @



The new phase of the Interoperability Academy!

news 1



training and awareness

news Iff

Welcome to the EU Academy

news (#

Step 5: Tell us about your needs & expectations from the IOP!

Step 3: Comment on existing material.

About



Course on Interoperability in Health Informatics now free

news (m)



ELISE Webinar - Location Intelligence and Partnerships to support

30/04/2020 event 77 ()





ELISE Webinar - The role of Organisational Interoperability in the

11/02/2020 event 77 (5)



Academy

news I

Talk to us: IOP-Academy@ec.Europa.eu

## Let us know more about your initiative!

And read about similar initiatives across Europe!



e-Governance Academy (eGA)

### The digital transformation of a country requires teamwork at the highest level



<u>Uuno VALLNER</u> Published on: 25/11/2019 | Last update: 08/01/2020





eGA is a non-profit think tank and consultancy organisation, a joint initiative of the Government of Estonia, Open Society Institute (OSI) and the United Nations Development Programme, eGA's mission is to help governments increase their governance efficiency and improve their democratic processes.

eGA is empowering central and local government decision-makers to lead digital transformation programmes to create smart, sustainable and effective e-government, e-democracy and cyber security solutions through consultancy, training, networking, research and assistance in the implementation of e-government technical solutions.

To date, eGA has cooperated with more than 200 organisations and trained more than 5,500 officials in 130 countries and regions. eGA is playing key roles in e-government and digital transformation policy planning and implementation including the formation of the lead organisations responsible for developing a nation's interoperability framework and related legal and technical framework development and management.

eGA is offering customised study tours and training programmes in the area of digital transformation. More information about the eGA and training topics you can find here.

References

UNU - eGOV

### UNU - eGOV - United Nations University



Elisabete SIMOES | Published on: 20/11/2019 | Last update: 22/11/2019

UNU-EGOV, part of the United Nations University (UNU), based in the city of Guimarães, Portugal, is a think tank dedicated to Electronic Governance; a core centre of research, advisory services and training; a bridge between research and public policies; an innovation enhancer; a solid partner within the UN system and its Member States with a particular focus on sustainable development, social inclusion and active citizenship. UNU-EGOV strives to cement its role as an international reference of excellence in this area, bringing together multidisciplinary and multicultural teams around complex problems and emerging challenges.

UNU-EGOV is also offering training courses designed to equip Government Chief Information Officers (GCIOs), at all levels of Public Administration, with some of the required competencies to fulfil their responsibilities and to enable the development of an internationally-recognised profession.

All courses have a flexible curriculum design which can be adapted to the context, training aims and trainees' backgrounds of each Administration, Agency or Service. In all cases, however, they include an experimental, interactive component fostering group synergies and active learning strategies.



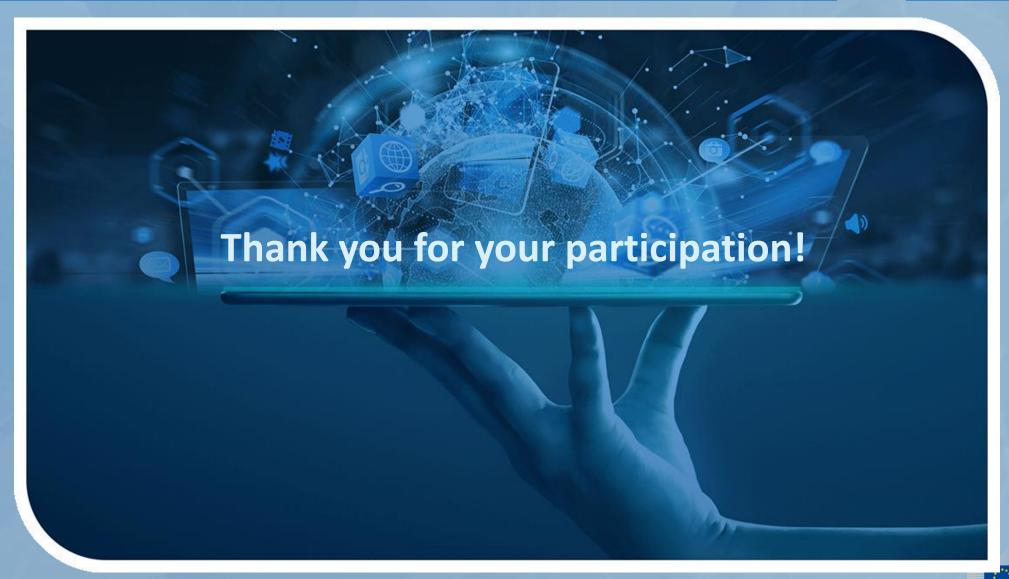
More information about the trainings you can find here.





## Stay in touch!







ISA<sup>2</sup> programme

You click, we link!



Stay in touch: ec.europa.eu/isa2 or Joinup.ec.europa.eu



@ EU\_isa2 + @ joinup\_eu



IOP-Academy@ec.Europa.eu

Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the <u>ISA<sup>2</sup> programme</u> provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.

