



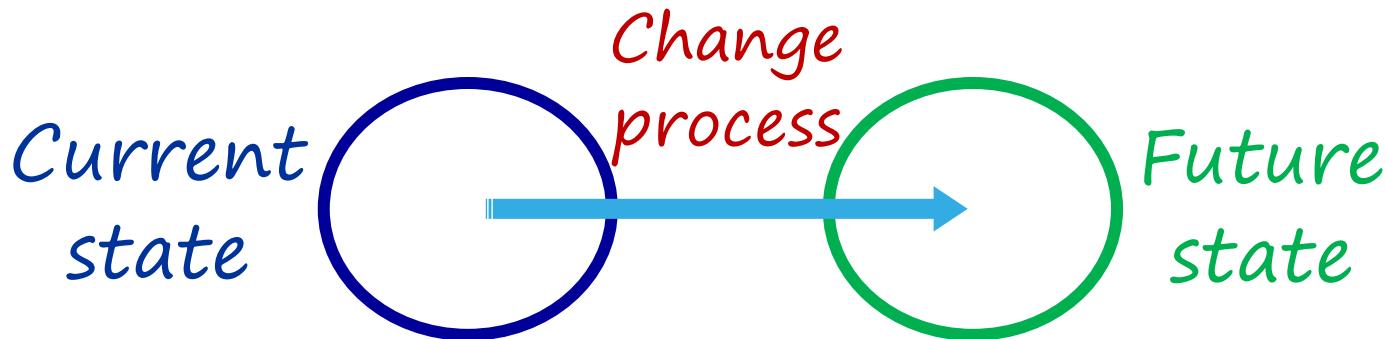
From DigCompOrg model to SELFIE tool for schools' digital capacity

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Joint Research Centre
the European Commission's
in-house science service

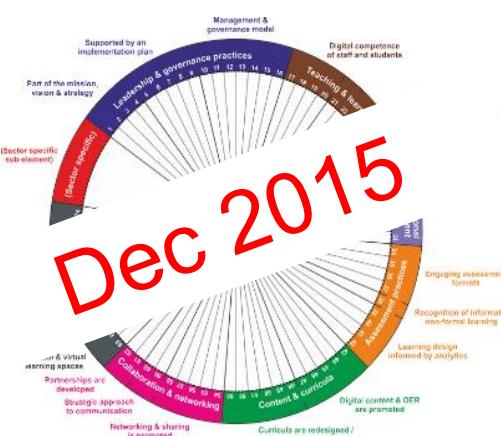


How to support the digital transformation of EU schools



1

DigCompOrg Conceptual Framework



2

DigCompOrg self-assessment tool



3

External evaluation & support



Holistic approach - Common
understanding

Self-reflection, benchmarking
& action plan for improvement

External evaluation,
recognition, training...

And the name is... **SELFIE!**

An online **self-assessment tool** for schools who want to reflect on their uptake of digital technologies for better learning.

The idea is that, **every year**, each schools **reflect** on their **current uptake** of digital technologies for innovative and effective **learning** and take snapshots of where they stand. So, this is like a selfie!! Schools can share their 'selfie' with the others, as they like, as people do with their selfies in social media.

SELFIE is the abbreviation for:

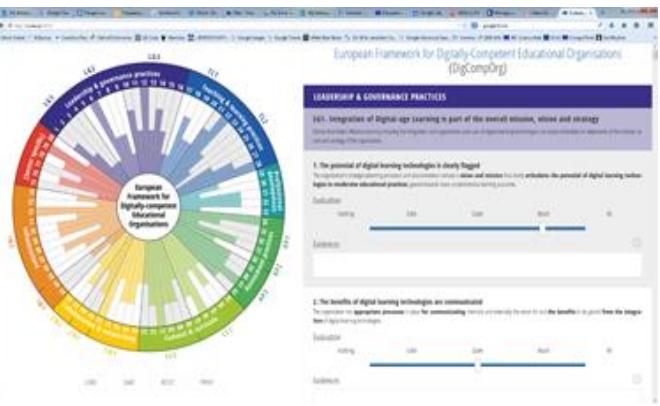
Self-reflection on **E**ffective **L**earning by **F**ostering **I**nnovation through **E**ducational **T**echnology



What can SELFIE offer?

For schools

- **Validated tool** for self-reflection based **both on research AND practice**
- Self-assessment process **is owned by the school**
- **School decides** how and with whom **to share the outcomes**
- Snapshot of their current level (**visual presentation of analysis**)
- **Recommendations** for raising level
- **Benchmarking** with others
- Acknowledgement (**badges**)



For researchers and policy makers

- Snapshot of the current (meso- & macro-)level through the analysis of aggregated, **anonymized** data
- Strategic planning for research and policy interventions

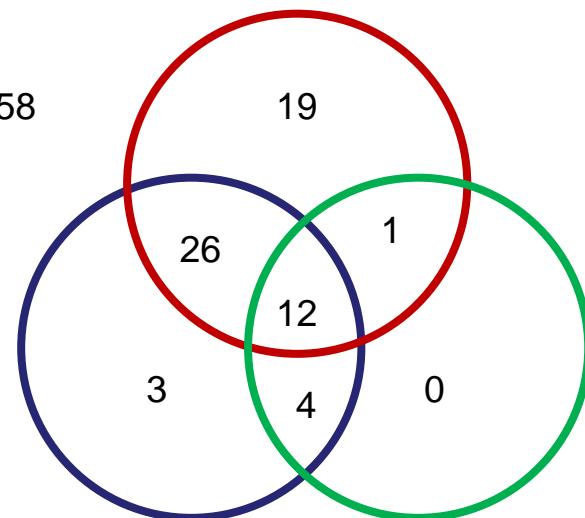
Theory and Practice: Online User Consultation

Survey statements		
School leaders	Teaching staff	Students
58	45	17



$$58+45+17=74!!!$$

Statements for School leaders: 58



Statements for Teachers: 45

Statements for Students: 17

NO user identification

NO personal data collection

NO obligatory questions (only demographics)



User Consultation Survey – more than 5000 completed questionnaires!



5052 completed questionnaires!

	School leaders	Teachers	Students	TOTAL
Estonian	43	168	491	702
Italian	51	338	769	1158
Spanish	93	426	1516	2035
Danish	12	96	569	677
English	25	126	329	480
TOTAL	224	1154	3674	5052

100+1 schools took part!

	VET	General	All
Estonian	5	13	18
Italian	5	18	23
Spanish	8	27	35
Danish	6	0	6
English	0	19	19
TOTAL	24	77	101

JRC B.4 is conducting an in-house analysis of UCS quantitative and qualitative data (with the support of SELFIE experts and national coordinators):

- ✓ Descriptive statistics
- ✓ Item analysis (Item Response Theory)
- ✓ Factor analysis
- ✓ Thematic analysis

3400+ replies to open-ended questions!

	School leaders	Teachers	Students	TOTAL
Estonian	24	75	172	271
Italian	45	139	722	906
Spanish	70	249	1238	1557
Danish	7	71	190	268
English	49	110	250	409
TOTAL	195	644	2572	3411

Evidence-based selection of standard set of SELFIE items

				SCHOOL LEADERS		TEACHERS		STUDENTS	
AREA	No	Lot 1 selection (using overall average)	Descriptors	% veryy important	Discriminatio n (do it)	% veryy important	Discrimination (do it)	% very important	Discrimination (do it)
5. Content and Curricula	46	OK	Digital tools and content are licensed as required	87%	Not discriminative				
	53	OK	Students' digital competence is developed across the curriculum	90%		76.50%			
	52	OK	Digital learning provision is evident across curriculum areas	78.30%					
	48	OK	Subject-based learning is reimagined to create more integrated approaches			72.90%			
	47	TBC	Open Educational Resources are promoted and used	77.40%		67.60%			
	51	OK	Learning in authentic contexts is promoted			75.30%		63.70%	
	49	OK	The time and place of learning is rescheduled			69.50%			
	45	TBC	Intellectual property and copyright are respected	66.10%		65.30%		58.90%	
	44		Content repositories are widely and effectively used			65.80%		54%	
	50		Online provision is a reality	53.10%				51.90%	
	43		Staff and students are creators of content			54.00%		49.70%	

...complemented by analysis of qualitative data and iterative consultations

The screenshot shows the NVivo Pro software interface. The top menu bar includes FILE, DATA, ANALYZE, QUERY, EXPLORE, LAYOUT, and VIEW. The left sidebar shows 'Sources' with categories like Internals, Externals, Memos, and Framework Matrices. Below this is a 'Nodes' section with a tree view of categories such as 0_MyCODES_UCS, DANISH4NVivo_SCHOOL, DANISH4NVivo_STUDEN, DANISH4NVivo_TEACHER, ENGLISH4NVivo_SCHOOL, ENGLISH4NVivo_STUDEN, ENGLISH4NVivo_TEACHE, ESTONIAN4NVivo_School, ESTONIAN4NVivo_STUDE, ESTONIAN4NVivo_TEACH, ITALIAN4NVivo_SL_T_S, ITALIAN4NVivo_SL_T_S(2), ITALIAN4NVivo_SL_T_S(3), SPANISH4NVivo_SCHOOL, SPANISH4NVivo_STUDEN, and SPANISH4NVivo_TEACHE. A 'Relationships' and 'Node Matrices' section is also present. The main workspace displays a table titled 'ENGLISH4NVivo_SchoolLEAD' with four columns: 1. Leadership and Governance Practices, 2. Teaching and Learning Practices, 3. Professional Development, and 4. Assessment. The table contains two rows of data, each with a text box containing qualitative notes. The bottom of the screen shows a taskbar with various icons and the system tray.

ID	1. Leadership and Governance Practices	2. Teaching and Learning Practices	3. Professional Development	4. Assessment
1	The greatest resource that is needed is time and although human resources and learning technologies are provided, time is not..... It must start with time, it would seem.	I never considered tracking or assessing digital competence of either students or teachers. Already, a new idea to work on.	Areas above that we are not engaged in are solely down to the fact that such programmes have not become available to us yet.	Assessment is only evident in individual teamwork - not in a managed way
2	Again the challenge is to answer this consistently from a whole school perspective rather than from a feeling that some teachers are doing this in some classes.	In relation to the statement '... tracks the digital competence of promotes peer-learning teachers and/or students', we do and peer observation a lot, this by way of observations and focus-group.	Gaelcholáiste Luimních	I would say that very little of this is done than in specific related subjects ECDL



Key challenge: the scale(s)/progression model

Maturity models/Scales from existing self-assessment tools												
	n/a	0	1	2	3	4	5	6	7	8	9	10
HEInnovate¹	n/a	-	1	2	3	4	5					
eP&OBMM	-	-	Aware	Exploring	Developing	Integrated	Transformative					
		Not yet	Aware	Committed	Established	Advanced						
JISC S ICT Toolkit	Don't know or N/A - Neutral	Strongly disagree		Disagree	-	Agree	Strongly agree					
Digital mirror² (Estonia)	-	-	Exchange	Enrich	Enhance	Extend	Empower					
eLemer	N/A	Not true ³	-	Partly true	-	Nearly true	Completely solved					
Opeka⁴	Neither agree nor disagree	Strongly disagree		Disagree	-	Agree	Strongly agree					
	-	Never	Less frequently	1-2 times per month	Weekly		Daily					
Ae-MoYS⁵	-	Strongly disagree		Disagree	-	Agree	Strongly agree					
	-	0-25%		26-50%	51-75%	76-100%						

Key design principles of SELFIE tool



Online platform with different versions of SELFIE for schools, IVET, HEIs

Single entry point using school's official email

A screenshot of a login interface. It features a dark header bar and a light gray content area. The content area has fields for 'Email' and 'Password'. The 'Email' field contains 'info@schoolname.net' and the 'Password' field contains a series of asterisks. Below the fields is a large green 'Login' button.

NO PERSONAL DATA!



Key design principles of SELFIE tool



School Data
Dashboard

SELFIE coordinator
in each school



Supported by
Q&A, videos,
case studies...

Fully customisable:

1. standard set of items,
2. optional items,
3. school-specific ones



Users will indicate
(not upload) '**evidence**'



European
Commission

Key design principles of SELFIE tool – Each school...



...will get a report with its
aggregated results



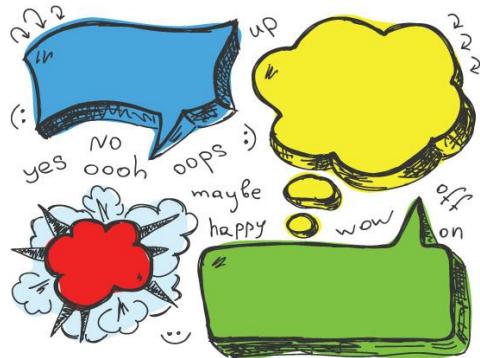
... will benchmark with
similar schools



Take Ownership

... will have full
ownership of its data

Key design principles of SELFIE tool



Internal dialogue based
on SELFIE results



Basis for school's
action plan



Aggregated data
for policy
making at regional,
national, EU level

Watson, I know what
caused the death

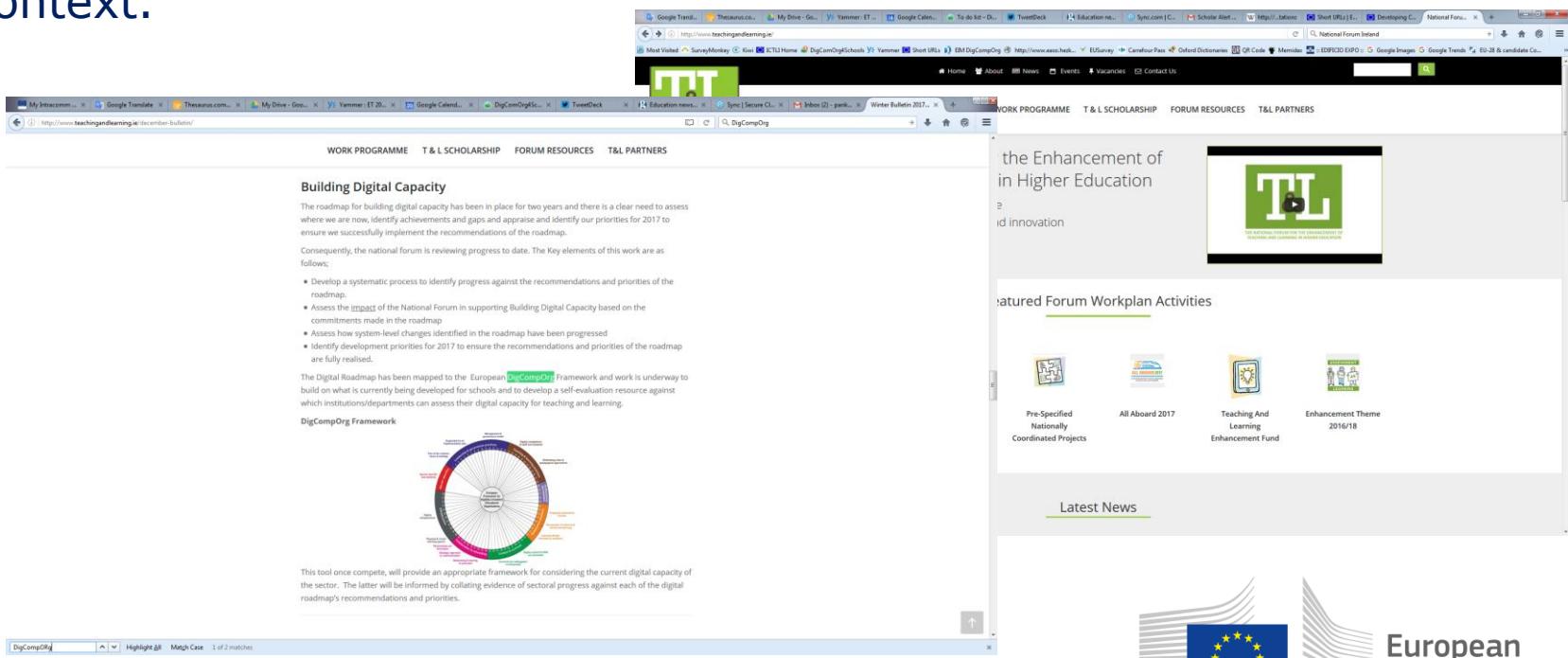
But you have only
administered a few interviews
and gone on two site visits.
Should you not collect
evidence that is more robust?



Complemented by
qualitative research

A self-assessment tool for HEIs is also under development!

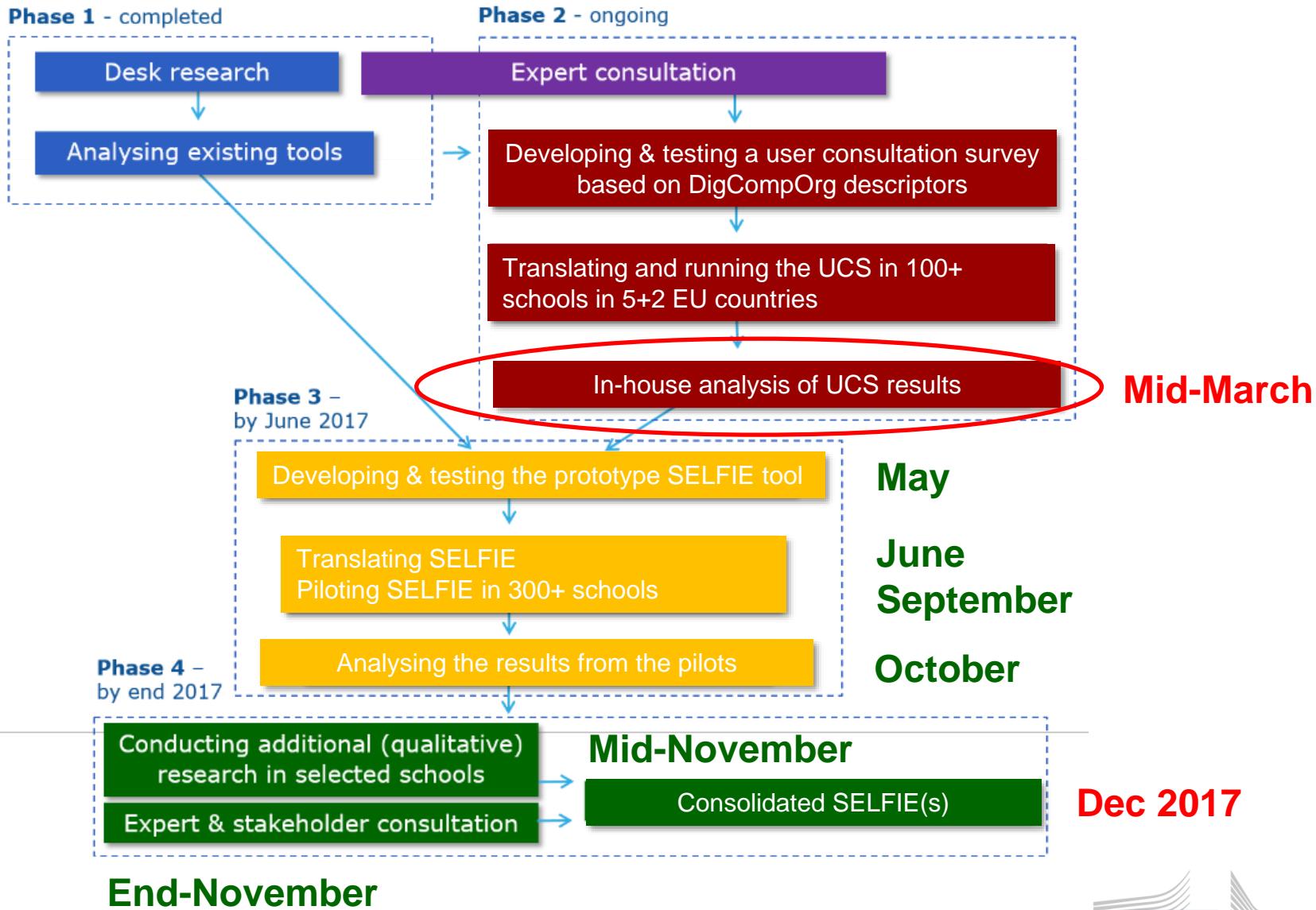
The **Irish National Forum for the Enhancement of Teaching and Learning in Higher Education** is currently developing a self-assessment tool for HEIs digital capacity, based on DigCompOrg framework. The experts of the National Forum aim to use the same design principles and an adaptation of SELFIE tool for schools to run a pilot implementation in the course of 2017. Universities from Spain and Greece have expressed their interest to adapt and pilot the tool in their own context.



The screenshot shows the homepage of the Irish National Forum for the Enhancement of Teaching and Learning in Higher Education. The main navigation menu includes 'WORK PROGRAMME', 'T & L SCHOLARSHIP', 'FORUM RESOURCES', and 'T&L PARTNERS'. The 'WORK PROGRAMME' section is currently active. The 'Building Digital Capacity' section discusses the roadmap for building digital capacity and the key elements of the work. The 'DigCompOrg Framework' section features a circular diagram illustrating the framework. The 'Latest News' section highlights various forum activities and projects. The European Commission logo is in the bottom right.

<http://www.teachingandlearning.ie/december-bulletin/>

SELFIE Planning



Overview of the take up of DigComprOrg



United Kingdom

Denmark



Denmark

Finland



Estonia



Lithuania

Russia



UNESCO Institute
for Information Technologies
in Education

Spain



Italy



Italy

Croatia



Croatia

Hungary



Hungary

Serbia



Serbia

Greece



Greece

Cyprus



Cyprus



*EU member country

Participating in SELFIE tool pilots



United Kingdom

Ireland

Spain

Spain

Denmark

Denmark

Italy

Italy

Estonia

Estonia

Greece

Greece

Russia



UNESCO Institute
for Information Technologies
in Education



*EU member country

Translating DigCompOrg report (MoEs, national agencies etc.)

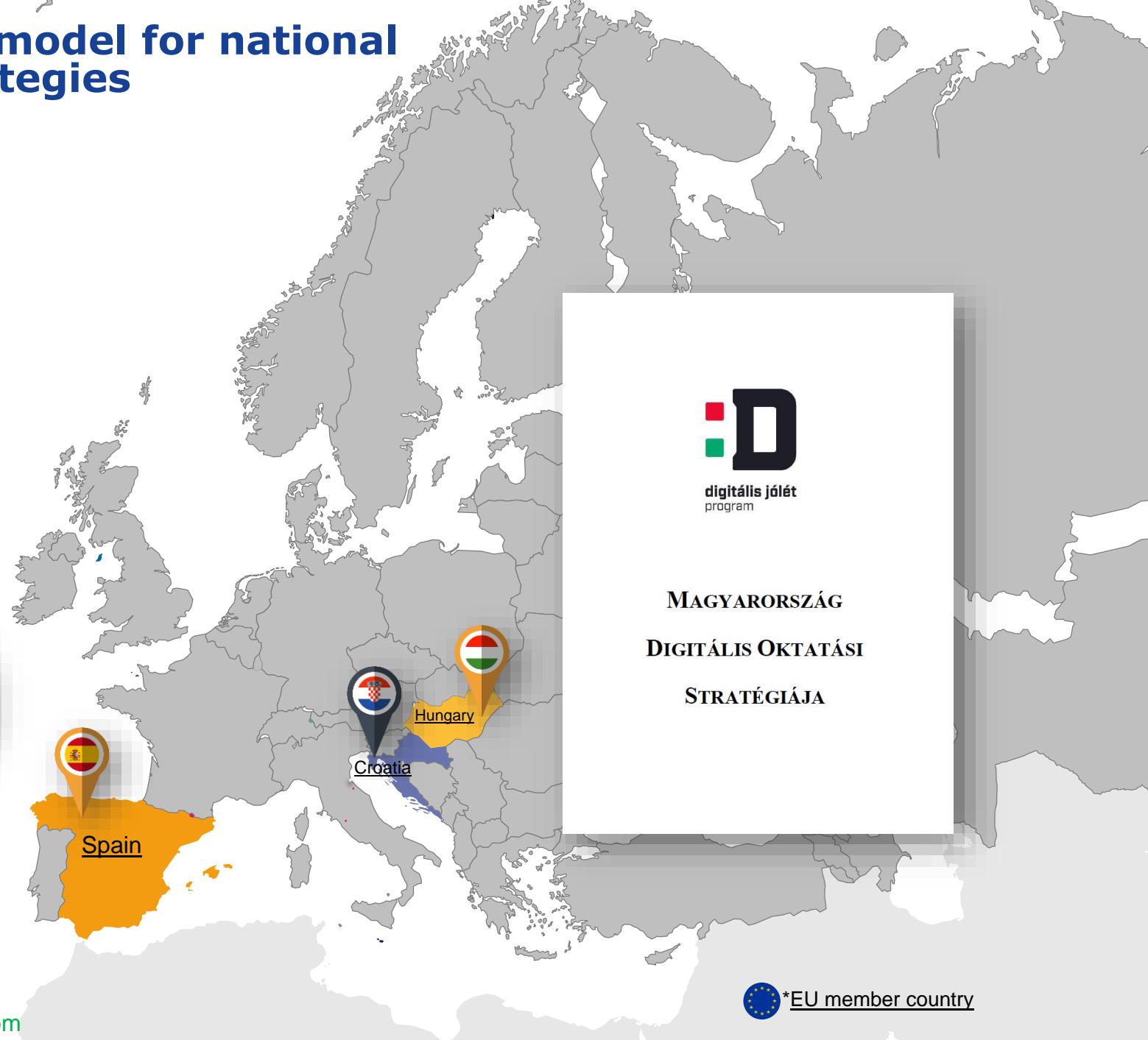


Available in EN, IT, ES (& Basque Language), EL, EE, Lithuanian and partly in DK and HU

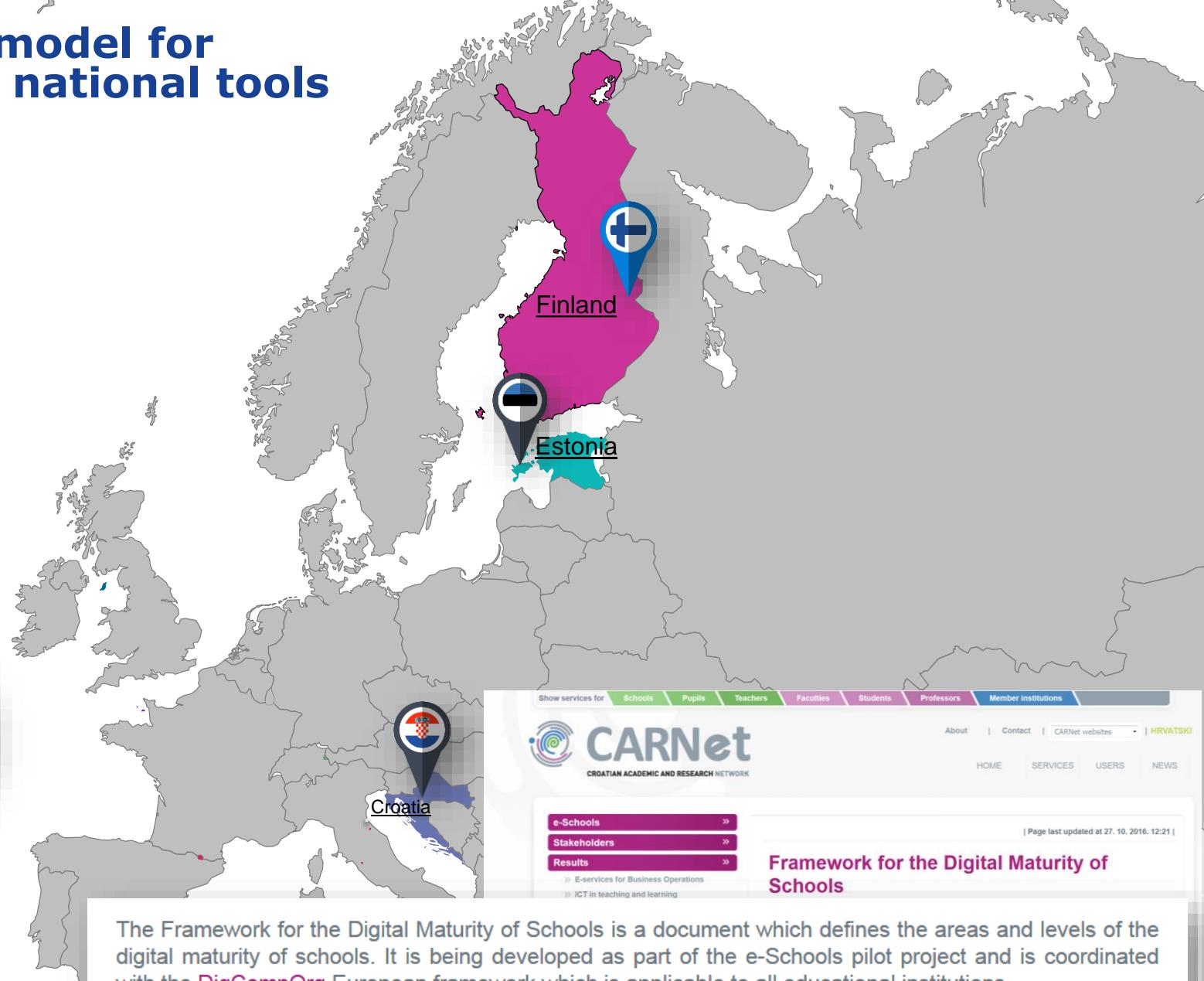


*EU member country

Reference model for national digital strategies



Reference model for developing national tools



The Framework for the Digital Maturity of Schools is a document which defines the areas and levels of the digital maturity of schools. It is being developed as part of the e-Schools pilot project and is coordinated with the [DigCompOrg](#) European framework which is applicable to all educational institutions.

Reference model for national calls, pilots and training materials (e.g. MOOCs)



Finland

SZÉCHENYI 2030
NÉPZÖLTÖZÉK
MINISZTERIUM

FELHÍVÁS
A 21. századi szakképzés és felnőttképzés minőségeinek, valamint tartalmának fejlesztése
GINOP-6.2.4-VEKOP/16

Magyarország Kormányának felhívása a szakképzés és felnőttképzés minőségi és tartalmi fejlesztésének támogatására¹.

A Kormány a Partnerségi Megállapodásban célul tűzte ki szak- és felnőttképzési intézményrendszer munkaerő-piaci igények igazodó minőségi fejlesztését, az egész életen át tartó tanulás lehetőségeinek való egyenlő hozzáférés fejlesztését.

Az intézkedés kiemelt célja az oktatási és képzési rendszerek munkaerő-piaci igényekhez való igazodásának javítása, a tanulásból a munkába történő átmenet megkönnyítése, a szakmai oktatás és a képzési rendszerek megerősítése és minőségének javítása többek között a készségek iránti igény előrejelzésén alapuló mechanizmusok, a tananyagok kiigazítása, a munkaalapú tanulási rendszerek – beleértve a duális tanulási rendszert és a tanulószerződéses gyakorlati képzéseket továbbfejlesztése.



Hungary

Serbia
(in collaboration with ETF)

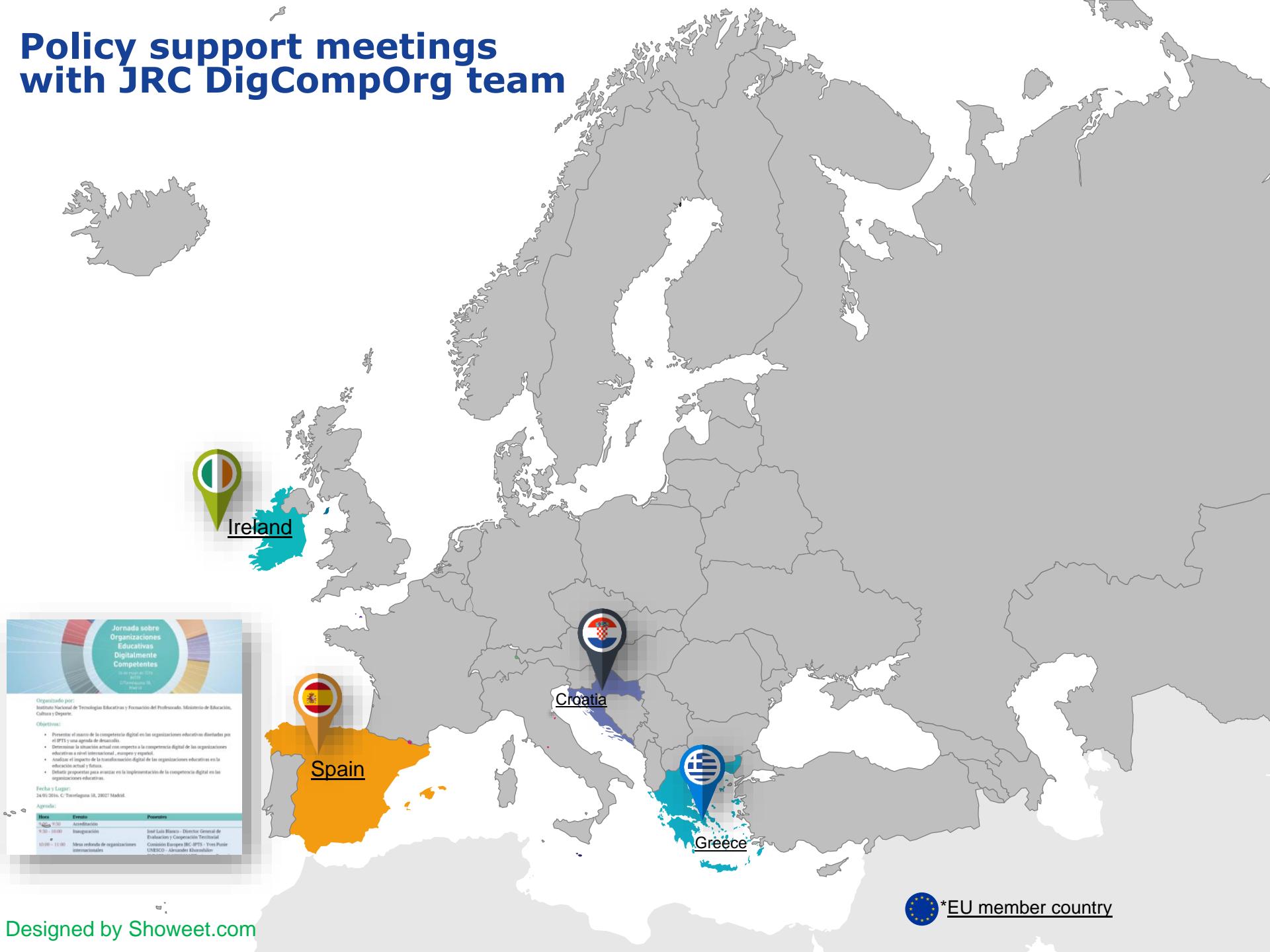
ETF
Working together
Learning for life

**DIGITAL AND ONLINE
LEARNING IN VOCATIONAL
EDUCATION AND TRAINING
IN SERBIA
A CASE STUDY**



*EU member country

Policy support meetings with JRC DigCompOrg team



*EU member country

It's your turn now!

Which of these **uses** you think are **most relevant** for your country/context? Is there something that is missing that you would like to add to the current take-up of DigCompOrg?



The principles of

DESIGN

Which of the **design principles** are the **most relevant** for your country/context? Is there something that you would like add/change?

Do you want **to stay informed** about the developments in DigCompOrg & DigCompEdu?
Do you want even **to be involved**? Please let us know!



DigComOrg4Schools

Campfire

Message Board

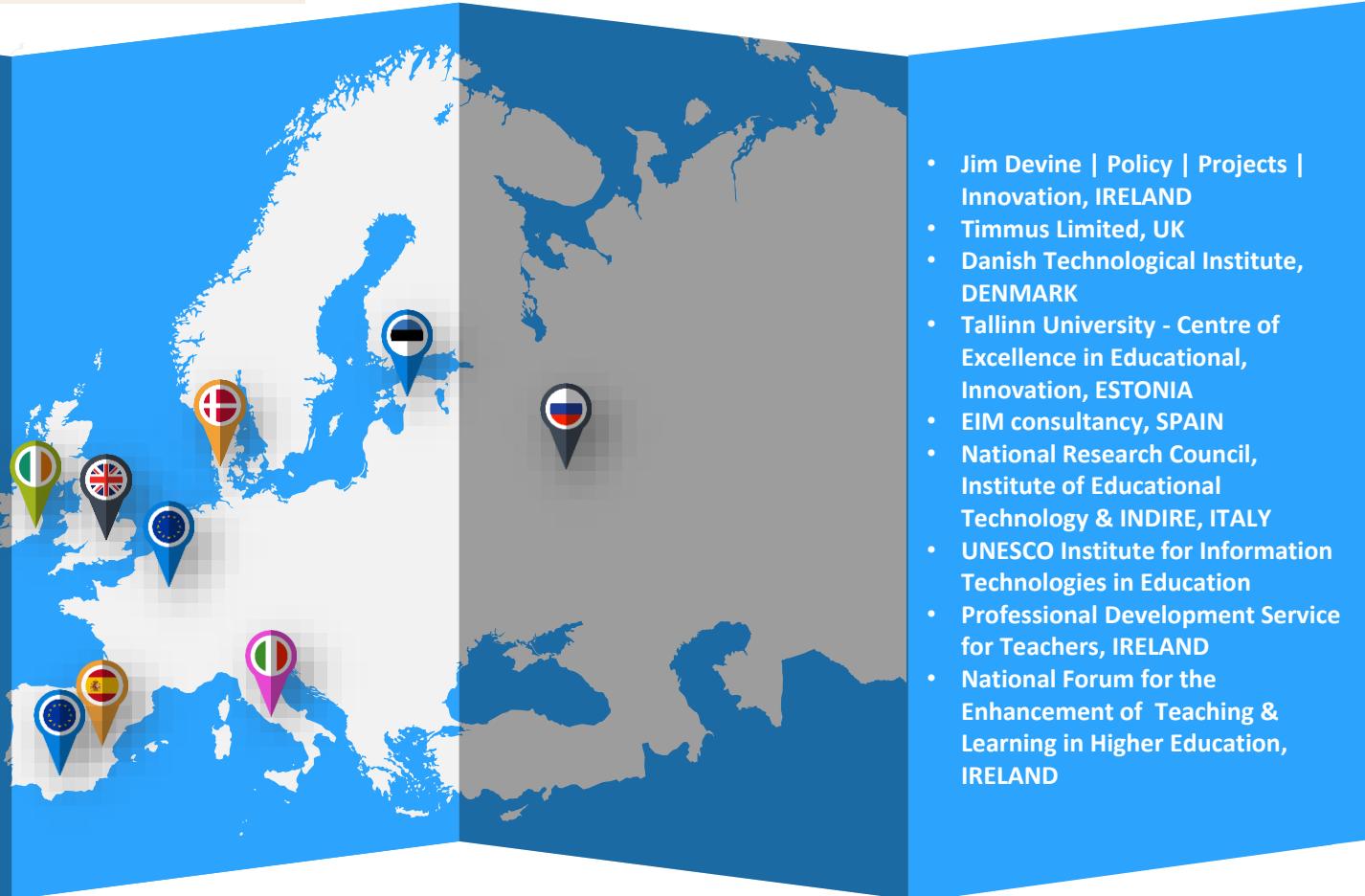
To-dos

Schedule

Automatic Check-ins

Docs & Files

European Commission's (EC) **Joint Research Centre**, Human Capital and Employment Unit (JRC B.4 in short) has designed and run the study for EC's **Directorate General Education and Culture (DG EAC)**. JRC B.4 collaborates with a group of international experts.



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DigiCompOrg

Digital-Competent Educational Organisations

DigCompOrg Framework

The DigCompOrg framework has seven key elements and fifteen sub-elements. It is common to all education sectors. There is also scope for the addition of sector-specific elements and sub-elements. For more information and download of DigiCompOrg, a modular set of descriptions and concepts are available on the website.

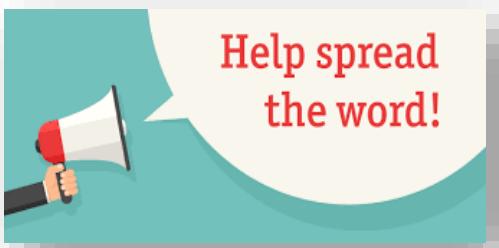
Related Publications: Promoting Effective Digital-Age Learning: A European Framework for Digitally Competent Educational Organisations

Related Topics: Innovation in Education, Training & lifelong learning

Related People: Panagiota KARPLYDI

JRC Institutes: IPTS

<https://ec.europa.eu/jrc/en/digcomporg>



JRC SCIENCE FOR POLICY REPORT

Promoting Effective Digital-Age Learning

A European Framework for Digitally Competent Educational Organisations

Perotis Karplydi, Yves P. de J. Devos

2015

JRC-27599-EN

<http://europa.eu/!TP78Wq>