



CEPIS

Council of European Professional
Informatics Societies

Awareness of the European Digital Competence
Framework for citizens (DigComp) framework
among the CEPIS community

1 Executive Summary

The European Digital Competence Framework for Citizens ([DigComp](#)) framework was developed by the European Commission and serves as a guidance to define and improve citizens' digital competences. The first version of DigComp was published in 2013 and since then, multiple iterations have been implemented, involving a large community of stakeholders across Europe. However, despite the rising use of this framework, there is a lack of information about the awareness of it by different stakeholders.

CEPIS represents informatics associations across greater Europe. The members of our member associations are IT professionals and, in some cases, IT companies. The goal of this survey was to find out how aware the CEPIS community is about the use of the DigComp framework in their countries. The questionnaire was circulated in April and closed in May 2021. The questions enquired about the use of the framework by the national governments, education sector and industry. CEPIS members were also asked to name the key benefits and challenges that they saw in applying DigComp.

CEPIS received replies from its network across 22 countries in greater Europe. Responses showed that CEPIS members are mostly aware of DigComp use by government and education sectors in their countries. There were very few examples shared of DigComp use by the industry. The benefit of DigComp mentioned most frequently was its potential for harmonising and standardising the measurement of citizens' digital skills across sectors and countries. A possibility to use it as a self-reflection tool to identify and fill in the individual skills gaps was also mentioned as an advantage. The complexity of the framework, lack of its localisation, and insufficient awareness about it were mentioned as the main challenges for effective use of DigComp.

2 Findings

The survey has shown that most of the CEPIS members have a limited awareness about DigComp use in their countries. Members in only 5 countries (Austria, Croatia, Germany, Hungary, and Luxembourg) reported a widespread usage of the framework across all three sectors – government, education, and industry. CEPIS members are mostly aware of the government's use of DigComp (77% of responding countries), with 50% of the surveyed countries reporting use of DigComp in the education sector, and 45% in industry. It is important to note that the answers provided by CEPIS members cannot be generalised to their countries. For example, the fact that CEPIS members are less aware of DigComp use by the industry in their countries might mean that the use of the framework by businesses is limited, but it might also be a sign that CEPIS members work more closely with public and education institutions and are thus less familiar with industry trends. Nevertheless, the findings of the survey can be used to generalise the overall awareness of the DigComp framework by CEPIS members and as a source of useful information about DigComp's application examples as well as its benefits and challenges as perceived by the CEPIS community.

2.1 Government

The responses received show that in most countries CEPIS members are aware of the use of DigComp by their respective Ministries of Education and related governmental bodies. In several countries, governments are using DigComp as a basis for a national digital skills framework and/or curricula development. For example, in **Austria**, DigComp was consulted in developing the mandatory school curriculum of "*Digitale Grundbildung*" (grades 5 to 8). The Austrian government also used the DigComp framework to add four additional competences to their own version of DigComp AT framework. In **Hungary**, there is a governmental decision on the DigComp 2.0 local implementation called *DigKomp*. A governmental agency is working on the detailed implementation plan. In the **United Kingdom**, DigComp was aligned to the Basic Digital Skills Framework (now replaced by the Essential Digital Skills Framework).

The responses showed that CEPIS members are also aware of the use of DigComp by their governments for specific initiatives and programmes. In **Croatia**, the Ministry of Science and Education carried out a project "Implementation of the European agenda for adult learning" and developed a "Curriculum for development of basic digital, mathematical and reading competences of adult learners



- Basic skills of functional literacy" that comprises digital skills based on the DigComp framework. The Croatian Academic and Research Network is also currently implementing the second phase of the project "[e-Schools - establishing a system for developing digitally mature schools](#)" (in Croatian). The project includes development of digital skills for teachers in primary and secondary education based on the DigComp framework, as well as development of open educational resources for digital competences for teachers and students. In **Lithuania**, it was used as a basis for updating ICT programmes in primary schools, as well as a basis for the project '[Connected Lithuania](#)', where all training programmes are prepared according to the 1-2 levels of DigComp. In **Luxembourg**, it is used by the Ministry of Education for initial education (example: *Project Compas*) and special continuous trainings (example: *Project "Diplôme +"*) they provide. The Ministry of Labour and the Employment Agency also provide continuous trainings aligned to DigComp to job seekers or employees at risk).

Some CEPIS members also indicated that in their countries, governments use DigComp for defining broader education policies. For example, in **Czechia**, the Ministry of Education refers to DigComp for definition of their education goals. In **Germany**, DigComp is used by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany ([Kultusministerkonferenz – KMK](#)) as a guideline for general digital competence policies and frameworks. In **Ireland**, it was used in developing the Adult Literacy, Numeracy and Digital Literacy (ALND) strategy by Solas, the Further Education and Training Authority of Ireland. In **Lithuania**, DigComp was involved in the Digital Agenda 2014-2020 as a recommendation for digital skills. The Authority for Digitalisation of **Romania** has initiated programmes for digital education included in measure 1.5 of the National Plan for Recovery and Resilience. In **Spain**, DigComp is used as a reference by some units within Ministries (INTEF) and by some regional/local authorities, but only for some tools and self-assessment proposals.

A few CEPIS members also indicated that their countries have been translating DigComp into their local languages. For example, in **Italy**, the AgID (the Agency for Digital Italy - *Agenzia per l'Italia Digitale*) was the first European body to translate the 2.1 version of the DigComp framework to Italian. The National Education Institute of the Republic of **Slovenia** has translated and published DigComp 2.1. into Slovenian.

Finally, in **Poland**, the respondent reported that DigComp is used by the Ministry of Development as a catalogue of competences to be granted to the participants of trainings financed by the European Union funding programmes. The respondent from **Bosnia and Herzegovina** indicated that DigComp is used by the Ministry of Justice.

2.2 Education

Several CEPIS members noted that the education sector is aware of the DigComp framework but is not using it in any formal way. For example, in **Italy** there are publications about possible adoption of DigComp as a reference framework for digital competences, especially in secondary schools, but as far as the respondent was aware, these publications referred to the 2.1 framework (2018) and there was no evidence of its actual usage in schools or in universities. In **Slovenia**, DigComp 2.1 was translated and published. However, the Slovenian respondent was not aware of any curricula directly related to the five DigComp areas. In **Spain**, there are no references to DigComp as an official guideline for educational programmes or of widespread use by education sector stakeholders.

The **Croatian** respondent stated that primary and secondary schools in Croatia are participating in a national project carried out by the Croatian Academic and Research Network with partners from higher education. Open educational resources, including learning scenarios based on DigComp framework, were developed both for students and as a part of continuous education of teachers. One dimension of a framework and a rubric for assessing digital maturity of schools developed within the project is related to digital competences of teachers, and was based on DigComp. The Faculty of Organisation and Informatics of the University of Zagreb has participated in a Horizon 2020 project "[CRISS](#) - Demonstration of a scalable and cost-effective cloud-based digital learning infrastructure through the Certification of digital competences in primary and secondary schools". Several Erasmus+ projects by

NGOs also applied DigComp framework in providing training for young workers and educators. In **Poland**, many education companies created special new trainings and certifications under the DigComp brand, since being aligned to DigComp is a condition of receiving relevant funding from the EU programmes.

Since CEPIS established the ICDL digital certification programme (previously called ECDL) in 1995, many of CEPIS members are closely familiar with the implementation of ICDL certification in their countries. The ICDL programme is kept fully aligned to the latest versions of DigComp. Several answers to the survey showcased the use of ICDL as an example of the use of DigComp in their countries' education sectors:

- In **Austria**, DigComp was consulted in further development of the ICDL modules that provide digital competences for all. More than 750 schools are providing the ICDL programme for their students, thus aligning a part of their education programme to the DigComp framework.
- In **Ireland** the correspondence of Digcomp with ICDL is well known among schools who offer ICDL to students.
- In **Romania**, the Bacalaureate Exams include a digital competence test. The test is based on elements of DigComp and ICDL/ECDL. The latter is also recognised as an equivalent of the Digital Competence Test.
- In **Slovenia**, the State Employment Service financially supports training and testing of unemployed persons for ICDL modules.

2.3 Industry

More than half of the respondents indicated that they were not aware of any use of DigComp by businesses. In the few instances where any use was mentioned, it was mostly a basis for assessment tools for either employees' competences or labour market needs. The respondent from the **United Kingdom** mentioned that it is used to assess labour market skills and identify areas of workforce development required. The respondent from **the Netherlands** was aware of the use of DigComp in companies such as Tata Steel. In **Luxembourg**, some training institutes (such as the respondent's own - *Chambre des Salariés*) deliver continuous trainings providing the skills/competences included in DigComp. However, they do not always explicitly reference the framework. In **Italy**, there are suggestions about possible use of DigComp in evaluating digital competences of workers, but, as far as the respondent was aware, there was no real adoption of the framework. The **Bulgarian** respondent reported that companies use their own digital competence frameworks rather than DigComp. The **Slovenian** representative said that there may be some cases where DigComp is used in a particular company, but professional associations and trade unions are not systematically approaching the issue.

2.4 Benefits and challenges

The survey responses showed that the members of the CEPIS network are well aware of the **benefits** of DigComp. The most mentioned benefit was that it can be used to align training and certification across a wide geographical and sectoral scope and create a consistent understanding and recognition of digital competences. Many respondents also emphasised DigComp's potential for self-assessment. For example, DigComp could help adults with self-evaluation of their skills and help to identify training opportunities, thus improving job prospects and value to employers. Several respondents also recognised its value as a general framework for defining national education guidelines and providing a recognised summary of the specific requirements for basic digital literacy. The suitability of DigComp as a benchmark for digital skills development and attainment was also mentioned.

Concerning **challenges**, the majority of respondents cited lack of awareness about DigComp as the main stumbling block. Responses from many countries identified a "vicious circle" – authorities and other stakeholders are not sufficiently aware of DigComp and its potential, therefore they do not invest in localising the framework (translation, promotional materials etc.). Thus, national stakeholders remain unaware of it, and, even if they know of its existence, they do not see the value of implementing it. On the other hand, the respondent from **Poland** noted that initially the government had adopted DigComp as a "one-size-fits-all" solution, assigning European funds only for those training and certification

providers who claimed to cover all areas and levels of the framework. This meant that the key element of accessing funds was self-declared compliance with DigComp rather than providing competences needed for the specific target group.

Several respondents also pointed out that the framework seems too complex and theoretical, which also discourages its use – there are insufficient examples of the use of DigComp providing tangible, practical benefits. Although DigComp might be recognised as a useful framework for defining broad policy guidelines, this phenomenon accounts for the lack of the use of DigComp in industry. Respondents pointed out that the framework on its own does not provide an upskilling solution; it must be embedded into practical training and certification schemes. It could be effective if it was complemented by a map of certifications of digital skills or guidelines for certification of skills which is what education stakeholders and recruiters would like to have.

3 Conclusion

It is clear from the results of this survey that the majority of the members of CEPIS network have a good awareness of DigComp and its use (or lack thereof) in their countries. The CEPIS community is mainly aware of the use of the framework by the national education authorities (Ministries of Education or similar) for the development of school curricula, as an inspiration for similar national frameworks, and for specific government-funded projects and initiatives. The respondents recognise the value of DigComp, especially as a tool for self-assessment and a means to standardise the understanding and policies of digital competences throughout Europe. However, the lack of awareness among other stakeholders is preventing the countries, especially the private sector, from fully benefiting from the use of this framework. The members of CEPIS network thus recommend investing in localisation and promotion of DigComp and producing materials that would present the framework in a more accessible way, making it appear less theoretical and abstract and focusing on the practical benefits for countries, businesses and citizens.

About CEPIS

The Council of European Professional Informatics Societies (CEPIS) is the representative body of national informatics associations throughout greater Europe. Established in 1989 by 9 European informatics societies, CEPIS has since grown to represent hundreds of thousands of IT professionals in 28 countries. Our ambition is that informatics professionals' voice be heard and respected in Europe. As a civil society institution, we care about the social impact of information technology and raise our voice when an issue is close to the content of our concern. Digital skills are one of these key issues.