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## **Digital Competence profiles for Ukrainian teachers, other citizens and Social inclusion profile**

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## 1. Rationale for creating DC profiles

Digital profile (DC-profile) means the list of competencies needed to meet a particular profession (position) or requirements, with the definition of the desired level of development of each the competence. The availability of the defined digital profiles for citizens and teachers helps to determine the direction of development of their own digital competences, stimulates interest and creates opportunities for their further development, and facilitates the development of a national strategy for developing digital competencies for the life and work of all the citizens in a growing digital economy.

The digital competence profile layout includes the following fields:

- profile name - specifies the profile name;
- general description - identifies the main purpose of the profile, describes the rationale for the purpose of the profile;
- a list of typical tasks that are performed within the profile;
- a list of competences needed to fulfil a given mission of a professional role (from a European or Ukrainian e-competency framework).

Important notes.

In the development of profiles, it is accepted that each subsequent profile assumes the skills and competences of the previous profile, that is, the acquisition of new competences or competences of the previous profile at a new level of proficiency. Level C digital competence is considered achievable but not required for teachers and citizens.

The profiles are based on the European digital competence frameworks for citizens (DigComp 2.1) and for teachers (DigCompEdu) and on the Ukrainian national digital competence framework proposed in Report 1.3<sup>1</sup> which is under discussion and has not yet been adopted in the country. The developed adapted model of the Ukrainian DigCompUA framework is represented in Table 1.1.

More information about profiles is represented in dComFra Reports 1.4<sup>2</sup>, 1.5<sup>3</sup> and Social inclusion DC Profile PSI Eng<sup>4</sup>.

<sup>1</sup> [https://drive.google.com/open?id=1KtdPAPRwDGC6YFR7c\\_tgCvqjUG1Z\\_IIR](https://drive.google.com/open?id=1KtdPAPRwDGC6YFR7c_tgCvqjUG1Z_IIR)

<sup>2</sup> [https://drive.google.com/open?id=13SepxKhX612L2sUBJdtEqDN\\_u7r8\\_Sta](https://drive.google.com/open?id=13SepxKhX612L2sUBJdtEqDN_u7r8_Sta)

<sup>3</sup> <https://drive.google.com/open?id=12Izbnk5JTsKe2SHjK0aAo2MsA99fOGP5>

<sup>4</sup> <https://drive.google.com/open?id=1BPxcERvcBeTZWHgnXUS-nFB6wAdfNcel>



*Table 1.1 - DigCompUA model*

Competence areas (CA) Dimension 1	Competences (C) Dimension 2
<b>CA0 Basic digital skills</b>	<p><b>C0.1 Using digital devices.</b> Functional literacy in the use of digital devices, mobile tools for communication. Ability to configure and deploy digital devices for your own use.</p> <p><b>C0.2 Using basic software for digital device.</b> Application of basic software for digital device; ability to install and work with operating systems, online services, applications, files, the Internet.</p>
<b>CA1 Information literacy and ability to handle data</b>	<p><b>C1.1 Browsing, searching and filtering data, information and digital content</b> To articulate information needs, to search for data, information and content in digital environments, to access them and to navigate between them. To create and update personal search strategies.</p> <p><b>C1.2 Evaluating data, information and digital content</b> To analyse, compare and critically evaluate the credibility and reliability of sources of data, information and digital content. To analyse, interpret, verify authenticity and critically evaluate the data, information and digital content.</p> <p><b>C1.3 Managing data, information and digital content</b> To organise, store and retrieve data, information and content in digital environments. To organise and process them in a structured environment.</p>
<b>CA2 Communication and collaboration</b>	<p><b>C2.1 Interacting through digital technologies</b> To interact through a variety of digital technologies and to understand appropriate digital communication means for a given context (In terms of cultural, social, gender- differences, etc.).</p> <p><b>C2.2 Sharing and collaboration through digital technology</b> Use digital tools and technologies for data, information and digital content sharing processes. Apply digital technologies and tools for collaboration, co-creation and development of digital resources and knowledge. To act as an intermediary, to know about referencing and attribution practices.</p> <p><b>C2.3 Engaging in citizenship through digital technologies</b> To participate in society through the use of public and private digital services. To seek opportunities for self-empowerment and for participatory citizenship through appropriate digital technologies.</p> <p><b>C2.4 Satisfaction of personal needs through digital technologies</b> Use digital tools and technologies for the sale and consumption of goods and services, recreation, healthy lifestyles etc.</p>



Competence areas (CA) Dimension 1	Competences (C) Dimension 2
	<p><b>C2.5 Netiquette</b> To be aware of behavioural norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity in digital environments.</p> <p><b>C2.6 Managing digital identity</b> To create and manage one or multiple digital identities, to be able to protect one's own reputation, to deal with the data that one produces through several digital tools, environments and services.</p>
<p><b>CA3 Digital content creation</b></p>	<p><b>C3.1 Developing digital content</b> To create and edit digital content in different formats, to express oneself through digital means.</p> <p><b>C3.2 Integrating and re-elaborating digital content</b> To modify, refine, improve and integrate information and content into an existing body of knowledge to create new, original and relevant content and knowledge.</p> <p><b>C3.3 Copyright and licences</b> To understand how copyright and licences apply to data, information and digital content. Attitude to pirated software and content.</p> <p><b>C3.4 Programming and process automation</b> To plan and develop a sequence of understandable instructions in order to solve a given problem or perform specific task using digital tools.</p>
<p><b>CA4 Safety</b></p>	<p><b>C4.1 Protecting devices</b> To protect devices and digital content, and to understand risks and threats in digital environments. To know about safety and security measures and to have due regard to reliability and privacy.</p> <p><b>C4.2 Protecting personal data and privacy</b> To protect personal data and privacy in digital environments. To understand how to use and share personally identifiable information while being able to protect oneself and others from damages. To understand that digital services use a "Privacy policy" to inform how personal data is used.</p> <p><b>C4.3 Protecting health and well-being</b> To be able to avoid health-risks and threats to physical and psychological well-being while using digital technologies. To be able to protect oneself and others from possible dangers in digital environments (e.g. cyber bullying). To be aware of digital technologies for social well-being and social inclusion.</p>



Competence areas (CA) Dimension 1	Competences (C) Dimension 2
	<p><b>C4.4 Protection against fraud and abuse of consumer rights.</b> Knowledge of the most important legal provisions in term of consumer protection, ability to identify questionable online stores, compare prices, apply customer protection measures.</p> <p><b>C4.5 Protecting the environment</b> To be aware of the environmental impact of digital technologies and their use.</p>
<p><b>CA5 Problem solving and further learning</b></p>	<p><b>C5.1 Solving technical problems</b> To identify technical problems when operating devices and using digital environments, and to solve them (from trouble-shooting to solving more complex problems).</p> <p><b>C5.2 Identifying needs and technological responses</b> To assess needs and to identify, evaluate, select and use digital tools and possible technological responses to solve them. To adjust and customise digital environments to personal needs (e.g. accessibility).</p> <p><b>C5.3 Creatively using digital technologies</b> To use digital tools and technologies to create knowledge and to innovate processes and products. To engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments.</p> <p><b>C5.4 Identifying digital competence gaps</b> To understand where one’s own digital competence needs to be improved or updated. To be able to support others with their digital competence development. To seek opportunities for self-development and further learning; and to keep up-to-date with the digital evolution.</p>

According to the etalon European model, the Ukrainian digital framework should describe the levels of measurement of professional skills (Report 1.3). At this stage of the project to set for DigCompUA for each competency six levels of acquisition is proposed (Table 1.2). We consider that until the DigCompUA framework is adopted and tested in use in Ukrainian realities, it is very difficult to distinguish between Advanced and Highly specialized levels in practice. The need for a "Highly specialized" level can be identified in further studies.



**Table 1.2 - Key keywords characterizing skill level**

Levels in DigCompUA		Complexity of Task	Autonomy	Cognitive Domain
Foundation	<b>A1</b>	Simple tasks	With guidance	Remember
	<b>A2</b>	Simple tasks	Autonomy, guidance as needed	Remember
Intermediate	<b>B1</b>	Well-defined, routine tasks & straightforward problems	Independently	Understand
	<b>B2</b>	Well-defined tasks & non-routine problems	Independently and according to own needs	Understand
Advanced	<b>C1</b>	Different tasks & problems	Guiding others	Apply and Evaluate
	<b>C2</b>	Resolve complex problems with limited solutions	Integrate to contribute to professional practice	Evaluate and Create





## 2. DC profiles

### 2.1 Profile P01 “E-citizen”

This profile is characterized by having the simplest knowledge and skills in working with digital technologies, understanding of the key concepts of ICT, computers, devices and software: turning on the computer (PC), basic operating system settings, working with simple documents, basic concepts of management files, the concept of the network and the ability to connect to it, basic data protection, rules for safe use for your own health and more.

**Table 2.1 – Description of profile P01**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P01</b>		
	Profile Name	e-Citizen		



## 2.2 Profile P02 “Plant and machine operators and assemblers”

Operators and installers of installations (machines) and machines, in addition to basic PC operating skills, must be able to use digital tools and technologies for data and digital content exchange processes to perform professional tasks.

**Table 2.2 – Description of profile P02**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies	+		
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P02</b>		
	Profile Name	Plant and machine operators and assemblers		



## 2.3 Profile P03 “Craft and related trades workers”

Citizens who study on such profile may need digital skills to redo and improve digital content, disseminate personal work results, skills in protecting personal data and privacy, copyright in digital environments, the ability to protect themselves and others from harm while using and sharing information, etc. to implement your own business management, accounting, record keeping and customer service. Digital competencies will help sell your products to customers, marketing organizations or markets.

**Table 2.3 – Description of profile P03**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content	+		
	3.3. Copyright and licenses	+		
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy	+		
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P03</b>		
	Profile Name	Craft and related trades workers		



## 2.4 Profile P04 “Skilled agricultural, forestry and fishery workers”

Skills that match the P04 profile are similar to the skills offered in the P03 profile. Therefore, for the P04 profile, such digital skills are necessary: to redo and improve digital content, disseminate personal work results, skills in protecting personal data and privacy, copyright in digital environments, the ability to protect themselves and others from harm while using and sharing information, etc. to implement your own business management, accounting, record keeping and customer service is proposed.

**Table 2.4 – Description of profile P04**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P04</b>		
	Profile Name	Skilled agricultural, forestry and fishery workers		



## 2.5 Profile P05 “Service and sales workers”

In order to successfully accomplish their professional tasks, trade and service professionals have not only work confidently with information and digital content (at B level) but also communicate with others through appropriate digital technologies and act as an intermediary. Citizens of this group may additionally need digital competencies to safely search, browse and store information on the Web through search engines and social networking programs, critically evaluate, manage and streamline it with various tools, knowledge and skills to protect their information and data, protecting your computer, devices or networks from malware and unauthorized access, secure communication on the Internet (email and customs message, backup, and data recovery), and more.

*Table 2.5 – Description of profile P05*

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content	+		
	2.3. Citizen participation online	+		
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses	+		
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P05</b>		
	Profile Name	Service and sales workers		



## 2.6 Profile P06 “Clerical support workers”

In their professional activities, technical support workers are engaged in obtaining, processing and storing information, editing and creating digital content of various formats. Therefore, they need competencies to organize and process databases, formulate requests to obtain specific information from the database, understand the key features of the Health Information System (HIS), use it safely and effectively.

**Table 2.6 – Description of profile P06**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P06</b>		
	Profiles Name	Clerical support workers		



## 2.7 Profile P07 “Technicians and associate professionals”

A high level of training, technical and research professional tasks require a fairly high level of digital competence from this category of citizens. It is appropriate to add to this training program the knowledge of project management through appropriate software, including setting deadlines, project costs and resources, monitoring progress and transferring work, including charts and reports. In order to solve professional tasks, they need knowledge of two-dimensional design to create and save drawings, create, import and export drawings, measure distances, angles, areas, and more. At this level, professional proficiency in text and spreadsheets is assumed.

**Table 2.7 – Description of profile P07**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices	+		
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment	+		
CA5 Problem Solving	5.1. Solving technical problems	+		
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P07</b>		
	Profile Name	Technicians and associate professionals		



## 2.8 Profile P08 “Professionals”

Citizens who choose this profile should not only have the highest level of education, but also be creative and innovative in information technology, be able to teach everyone else, solve any problems in digital environments.

**Table 2.8 – Description of profile P08**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming	+		
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively	+		
	5.4. Identifying gaps in digital competence	+		
	Profile Code	<b>P08</b>		
	Profile Name	Professionals		





## 2.9 Profile P09 “Managers”

Managers plan, direct, coordinate and evaluate the overall activities of enterprises, governments and other organizations or units, formulate and review their policies, laws, regulations. An analysis of the professional tasks of this profile leads to the conclusion that some digital competencies (programming, solving technical problems, creative use of digital tools and technologies) are outdated at this level and can be removed from the DC profile.

**Table 2.9 – Description of profile P09**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P09</b>		
	Profile Name	Managers		



## 2.10 Profile P10 “Armed forces occupations”

The military training program is selected according to a digital profile such as that of technical specialists (specialists) - P07.

**Table 2.10 – Description of profile P10**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>P10</b>		
	Profile Name	Armed forces occupations		



## 2.11 Profile PE01 “Primary school teacher”

Profiles of all categories of teachers are based on the P08 digital profile of "Professionals". Their main professional tasks are to organize the search and development of effective methods of teaching and upbringing of students, the introduction of innovative teaching technologies, diversification of forms of individual approach to education and upbringing of students in order to identify and develop creatively gifted students, discover their creative abilities, learning their creative abilities.

**Table 2.11 – Description of profile PE01**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Professional Engagement	1.1. Organisational communication			
	1.2. Professional Collaboration			
	1.3. Reflective Practice			
	1.4. Digital Continuous Professional Development			
CA2. Digital resources	2.1. Selecting digital resources			
	2.2. Creating and modifying digital resources			
	2.3. Managing, protecting and sharing digital resources			
CA3. Teaching and Learning	3.1. Teaching			
	3.2. Guidance			
	3.3. Collaborative learning			
	3.4. Self-regulated Learning			
CA4. Assessment	4.1. Assessment strategies			
	4.2. Analysing evidence			
	4.3. Feedback and Planning			
CA5. Empowering Learners	5.1. Accessibility and inclusion			
	5.2. Differentiation and personalization			
	5.3. Actively engaging learners			
CA6. Facilitating Learners' Digital Competence	6.1. Information and media literacy			
	6.2. Digital communication and collaboration			
	6.3. Digital content creation			
	6.4. Responsible use			
	6.5. Digital problem solving			
	Profile Code	<b>PE01</b>		
	Profile Name	Primary school teacher		



## 2.12 Profile PE02 “Teachers of particular topic”

For a high school teacher, active and diverse use of ICT becomes a compulsory and urgent need to solve the following tasks: individualization and differentiation of the learning process; carrying out objective monitoring and evaluation with error diagnosis and feedback, formulating learning goals with a result-oriented approach; exercise of self-control and self-correction of educational activity; visualization of educational information, the ability to present in a multimedia form unique information materials; visualization of the investigated phenomena, processes and relationships between objects, carrying out laboratory work in the conditions of simulation on a computer of real experience or experiment; enhancing learning motivation, forming a culture of cognitive activity; organization of interaction between users providing school workflow, various control measures, management of the school; development of educational software; automation of input, accumulation, processing, transmission, operational management of information; development of creative potential, further self-study, self-development and self-realization; continuous, active and creative interaction with students, parents and colleagues.

**Table 2.12 – Description of profile PE02**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Professional Engagement	1.1. Organisational communication			
	1.2. Professional Collaboration			
	1.3. Reflective Practice			
	1.4. Digital Continuous Professional Development			
CA2. Digital resources	2.1. Selecting digital resources			
	2.2. Creating and modifying digital resources			
	2.3. Managing, protecting and sharing digital resources			
CA3. Teaching and Learning	3.1. Teaching			
	3.2. Guidance	+		
	3.3. Collaborative learning			
	3.4. Self-regulated Learning			
CA4. Assessment	4.1. Assessment strategies	+		
	4.2. Analysing evidence			
	4.3. Feedback and Planning			
CA5. Empowering Learners	5.1. Accessibility and inclusion			
	5.2. Differentiation and personalization	+		
	5.3. Actively engaging learners	+		
CA6. Facilitating Learners' Digital Competence	6.1. Information and media literacy			
	6.2. Digital communication and collaboration	+		
	6.3. Digital content creation			
	6.4. Responsible use			
	6.5. Digital problem solving			
	Profile Code	PE02		
	Profile Name	Teachers of particular topic		



## 2.13 Profile PE02 “Informatics teacher”

The secondary school informatics teacher is a leader in implementing ICT in the educational process and school activities. His job is to be creative in digital competencies himself and to teach colleagues and students.

**Table 2.13 – Description of profile PE03**

Area	Competences	Proficiency levels		
		A	B	C
CA1. Professional Engagement	1.1. Organisational communication			
	1.2. Professional Collaboration			
	1.3. Reflective Practice			
	1.4. Digital Continuous Professional Development			
CA2. Digital resources	2.1. Selecting digital resources			
	2.2. Creating and modifying digital resources			
	2.3. Managing, protecting and sharing digital resources			
CA3. Teaching and Learning	3.1. Teaching			
	3.2. Guidance			
	3.3. Collaborative learning			
	3.4. Self-regulated Learning	+		
CA4. Assessment	4.1. Assessment strategies			
	4.2. Analysing evidence			
	4.3. Feedback and Planning	+		
CA5. Empowering Learners	5.1. Accessibility and inclusion			
	5.2. Differentiation and personalization			
	5.3. Actively engaging learners			
CA6. Facilitating Learners' Digital Competence	6.1. Information and media literacy	+		
	6.2. Digital communication and collaboration	+		
	6.3. Digital content creation	+		
	6.4. Responsible use	+		
	6.5. Digital problem solving	+		
	Profile Code	<b>PE03</b>		
	Profile Name	Informatics teachers		



## 2.14 Profile PSI “Social inclusion”

The profile is developed on the basis of analysis: European and Ukrainian sources covering the status, requirements and problems of social integration of citizens; the requirements for the professional profile P01 "E-citizen", which are minimal and fulfilment of which provides basic opportunities for further enhancing the level of digital competence of citizens; requirements for mastering the digital competences of the area CA0. Basic digital skills introduced in the Digital Competence Framework for Citizens of Ukraine (DigCompUA) proposed in the dComFra project.

Competences of the area CA0. Basic digital skills determine the requirements for functional literacy in the use of digital devices, mobile communications, including customization and use of digital devices for personal use, and the use of basic digital device software, the ability to install and work with operating systems, online services, applications, files, the Internet. Based on the special needs and limitations of the various categories of citizens for whom the PSI Social Inclusion profile is created, within the competence of the area CA0. Basic digital skills citizens have to:

- master the competences of C0.1 Using digital devices and C0.2 Using basic software for digital device, depending on their specific needs, for further use of special digital equipment in mastering the competences of the C1, C2, C4 spheres defined in the profile;
- obtain, through the acquisition of C0.1 and C0.2 competences, the ability to master the digital competences of the C1, C2, C4 spheres identified in the profile on an equal footing with citizens with no special needs.

In our opinion, when developing and implementing a PSI profile, it may be advisable to expand the E-citizen training module with sections (topics) that will provide first-hand mastery by FPD individuals software already implemented, in particular, in Microsoft products: use a magnifier to facilitate viewing of objects on the screen; Windows shortcuts; use of high contrast mode; work with the onscreen speaker in Windows 10; use of colour filters in Windows 10; setting up closed captioning in Windows 10; use text or visual elements instead of sound; use of touch input in Windows; use the on-screen keyboard (OSK) to enter text; Windows voice commands and voice recognition; Setting up the mouse, keyboard and other input devices; work with Windows 10 view control system and more.

As a result of mastering all the competencies of the PSI "Social inclusion" profile, citizens will meet the requirements of the professional profile P01 "E-citizen" and may be considered ready for social integration in the ICT field, which will ensure:

- the relevance of their digital competencies to the professional group Elementary Professions with the ability to hold relevant positions;
- prospects for further increase their level of digital competence.

To fulfil the tasks of the future profession, as well as to meet the daily necessities of life, it is necessary to possess such digital competences: C0.1 Using digital devices; C0.2 Using basic software for digital device; C1.1 Browsing, searching and filtering data, information and digital content; C1.2 Evaluating data, information and digital content; C1.3 Managing data, information and digital content; C2.1 Interacting through digital technologies; C2.5 Netiquette; C2.6 Managing digital identity; C4.3 Protecting health and well-being. The mastering level of the digital competences is basic.



**Table 2.14 – Description of profile PSI**

Area	Competences	Proficiency levels		
		A	B	C
CA0. Basic digital skills	0.1. Using digital devices			
	0.2. Using basic software for digital device			
CA1. Information and data literacy	1.1. Browsing, searching and filtering data, information and digital content			
	1.2. Evaluating data, information and digital content			
	1.3. Managing and retrieval of data, information and digital content			
CA2 Communication and Collaboration	2.1. Interacting through digital technologies			
	2.2. Sharing information and digital content			
	2.3. Citizen participation online			
	2.4. Collaborating through digital technologies			
	2.5. Netiquette			
	2.6. Managing digital identity			
CA3 Digital content creation	3.1. Developing digital content			
	3.2. Integrating and re-elaborating digital content			
	3.3. Copyright and licenses			
	3.4. Programming			
CA4 Safety	4.1. Protecting devices			
	4.2. Protecting personal data and privacy			
	4.3. Protecting health			
	4.4. Protecting the environment			
CA5 Problem Solving	5.1. Solving technical problems			
	5.2. Identifying technological needs and responses			
	5.3. Innovation and use of digital technologies creatively			
	5.4. Identifying gaps in digital competence			
	Profile Code	<b>PSI</b>		
	Profile Name	Social inclusion		



## Conclusion

Developed digital profiles are based on the European frameworks of digital competences for citizens (DigComp 2.1) and for teachers (DigCompEdu).

The developed DC profiles form the basis for the next steps of the dComFra project on training Ukrainian teachers and other citizens in digital competencies and further certification of the acquired skills.