





DIGITAL SKILLS FOR DIGITAL GREECE

Action Plan 2019

for the promotion of innovation and digital skills







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Part A

Introduction

The adjustment to the demands of the 4th Industrial Revolution requires the development of the capacity to respond to the complex social and economic environment which is influenced by digital innovation. Digital skills are the necessary tool for the transition to the new digital era, the utilization of digital technologies and the digital transformation overall, in order to improve the society and the economy, by offering more and better paying jobs. That is why new digital technologies and the improvement of digital skills are among the basic priorities of the programme Digital Europe.

The transition of the EU member states to the Digital Single Market is monitored and evaluated through specific Reports and Indexes, such as the Digital Economy and Society Index (DESI). The current action plan is focusing on the "Human Capital" dimension of the DESI Index, which monitors the level of digital skills in each member state.

According to the DESI Report for 2018, Greece is ranked as 26th in the "Human Capital" dimension. According to the Report, 46% of people have basic digital skills, much lower than the average rate of the EU (57%). Greece also, has a lowest number of ICT professionals in the EU, just 1.4 per 1000 employees and faces the problem of "brain leakage", which means lack of capacity to digital transform the economy. The lack of ICT specialists though is of vital importance for the digital transformation of the economy.

Also, according to the Women Digital Scoreboard for 2018, Greece is ranked in the 26th position with a score of 36.1 compared to 49.1, the average rate of the EU. It is important to note that women graduates are 13.7 per 1000 people aged 20-29, which is the 8th position in the EU level, but women ICT specialists are just 0.4% of the total of employment, which ranks Greece in the 28th position. The gap in the salary of women compared to men is 22%.

From the above information it is clear that Greece in the present time does not acquire enough people with the necessary digital skills to be employed in new job openings, whereas the existing number of ICT specialists is very low to support the digital transformation of the country. This weakness is also noticed in the digital public services, where Greek public governance is ranked 27th and the rate of users of digital public services is just 38% of the Internet users in total, bringing the country to the 26th position. It is clear that the lack of digital skills is influencing to a great extent the capacity of the country to digitally transform and the capacity of the users to support the transformation.

Additionally, the Digital Competence Framework is taken into account, according to which 17% of the EU citizens in 2017 did not possess digital skills and women in relation to men have a lower rate of basic digital skills (55% compared to 60%).

The Action Plan has taken into account 21 digital skills, defined by the above framework and which are reflected in 5 competence areas:

- 1. Information and data literacy
- 2. Communication and collaboration
- 3. Digital content creation
- 4. Safety
- 5. Problem solving

Moreover, the DESI Report for Greece defines the need to coordinate the policy related to digital skills with specific actions and initiatives, such as the National Coalition for Digital Skills, in order to quickly close the gap of digital skills in the country, giving emphasis to the 50% of people who do not possess basic digital skills.

The Unit of Innovation and Best Practices of the Ministry of the Administrative Reconstruction has taken all the above information into account and took the initiative to design and complete with success the strategy for the integration of the country to the Digital Map of the EU. The process included the drafting, submitting and approval of the first National Action Plan for Digital Skills on March 2018 from the European Commission.

The goal of the first Action Plan was to list, implement and monitor the actions of the first Members of the Coalition, whereas the revised Action Plan which was submitted in June 2018, included the dynamic of the National Coalition and the strategy of enlargement, bringing new members who can design and implement actions with big impact.

Strategic Framework

The Action Plan for 2019 is part of a general direction to create the context for a strategic framework for the development of digital skills for the period 2020-2022, which includes the mapping and analysis of the needs of digital transformation in public governance for the next three years, considering the general economic and social context and the implications from the digital technologies. More specifically, the goal is to define the new digital jobs and the digital profiles, to define the training needs in specific digital skills and the staffing of job positions with specific digital skills.

The new strategic framework also focuses on the development of skills of important organizations which design digital transformation policies, in order for them to make a huge digital transformation step. The improvement of these organisations' capacity will be the basis for their continuous improvement.

The third priority of the formulation of the strategy for digital skills is the alignment and coordination of different policy areas with horizontal strategic goals and national priorities, in order to reduce overlapping, opposite or parallel priorities and to strengthen their effectiveness.

The fourth priority is going deeper into the real needs of the economy and the society, the development of user –centric actions, in order to support economic growth and start-ups, social inclusion and the development of specific digital skills in public governance, as well as the connection with the international and national priorities within the Digital Single Market.

Action Plan 2019

The Action Plan for 2019 is designed according to the national and European priorities, considering the directions and recommendations of the European and international reports. It

also includes the necessary elements of governance, which will contribute to its successful completion, through specific and measurable results.

The Unit of Innovation and Best Practices followed the methodology presented below for the creation of the Action Plan:

Mapping: Preliminary work included the analysis and definition of current needs in digital skills, according to reports and action plans of the EU, such as the DESI Report 2018, eGovernment Benchmarking 2018 Report, OECD Government at a Glance 2018 Report, OECD Going Digital Project Report, European Action Plan for Digital Education 2018, European Action Plan for Digital Governance 2016-2020, Coalition for skills and Jobs Governing Board Action Plan, etc.

Illustration of skills: In order to respond to specific needs, an assessment of the organizations of the public, private and third sector was made for their capacity to design and implement actions for the development of digital skills. Data collection and management was done through more than 50 technical meetings from August to November 2018.

Cooperative innovation: Cooperation is at the heart of the innovation policy designed by the Unit of Innovation and Best Practices. The Action Plan includes cooperation and synergies, which were accomplished through the Innovation Lab, organized by the above Unit, having as a goal to increase the impact of the actions.

Alignment: The priorities of the Action Plan are aligned to the priorities defined at the formal reports of the European Commission. More specifically, the priority areas are aligned to the priorities which are already being implemented or being designed at European level, such as Digital Opportunity Traineeship and EU Code Week, improvement of digital public services etc.

Basic elements of the Action Plan

The Action Plan consists of seventy-eight (78) actions which have been designed and will be implemented by 19 members of the Coalition. The actions fulfill the goals and priorities defined from the analysis made during the first 6 months of 2018 and which were presented in July 2018 from the Unit of Innovation and Best Practices.

Goals of Action Plan for 2019:

- Creation of more actions with bigger impact
- More targeted actions, with measurable results and benefits
- Actions for targeted diverse groups
- Emphasis on innovation and new digital technologies
- Inclusive actions for people with no access to digital skills
- Increase in the effectiveness of actions through the development of synergies

Priorities of the Action Plan

- Digital skills of citizens and organizations
- Digital skills in the public sector
- Digital skills in education
- Orientation of girls to digital skills and reinforcement of employability of women in digital jobs
- Reinforcement of experimentation and development of systemic innovation in the public sector

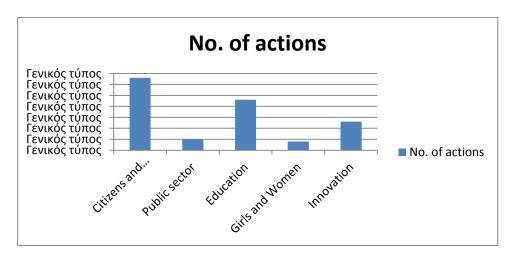


Table I.: Number of Actions per priority area

Management of the Action Plan

The Action Plan for 2019, is a result of synergies, knowledge and experience diffusion from organizations who design and implement digital skills actions.

The Ministry of Administrative Reconstruction has the horizontal responsibility for the support of digital transformation of public governance in all policy areas. Digital transformation includes the creation of a safe legislative environment, the development of structures and redesign of procedures, the design of public governance projects and their support with projects to promote the necessary digital skills in public governance.

The General Directorate for Public Organizations and specifically the Unit of Innovation and Best Practices has overtaken responsibility for the management of the Action Plan, its creation, monitoring and evaluation. In this context, the actions have been clearly defined to contribute effectively to the priorities, their monitoring and evaluation, according to the expected results.

The Unit of Innovation and Best Practices also works with the General Directorate of Communications Networks, Content and Technology (DGCNECT) of the European Commission and the Governing Board of the Coalition for Digital Skills and Jobs.

The Action Plan is part of an overall design work for the creation of strategy for the digital transformation of public governance and the priority area of innovation is based on innovation policy and introduces in the form of actions the innovation agenda in public governance, targeting the development of digital skills through innovative actions.

The current Action Plan is expected with its completion to form a basis for the design of the digital skills strategy for 2019 from the Unit of Innovation and Best Practices, for the period 2020-2022 in the framework of strategic goals mentioned above.

Comments and observations about the Action Plan

In relation to the diffusion of the actions of the current Action Plan, we notice that:

- The actions designed by the Members of the National Coalition are focused to a large extent on developing the digital skills of citizens and businesses and refer to basic digital skills.
- There is a big number of actions in the area of education, including training actions for teachers, introducing digital tools to schools and introducing new technical equipment. It is important to note that the Ministry of Education is designing an action introducing a digital tool for children with special learning needs and also the National Certificate for ICT.
- An emphasis is given for the first time to the development of advanced digital skills, specifically to organizations with a big need for ICT, as evaluated by the Unit of Innovation and Best Practices for the period 2017-2018 within the framework of the European process of evaluation.

Additionally, the Ministry of Administrative Reconstruction is designing projects for the digital transformation of public governance, regarding the mapping of needs for digital job positions and digital profiles, as well as the creation of a strategy for the development of digital skills and tools. The Unit of Innovation and Best practices will also present in the beginning of 2019 a new Innovation Platform, to promote Innovation and best practices in the public sector, acting as a central point for communication of the Greek public sector with the relevant international platforms.

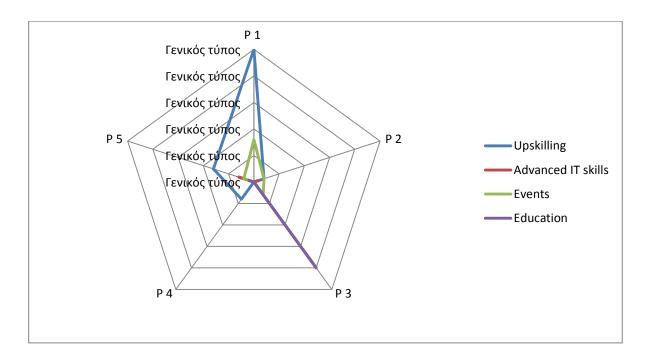


Table II.: Type of action per priority area

Finally, it is important to note that the actions designed only for women are few, there are however proposals in process which can be converted to actions and projects for 2019, in cooperation with the General Secretariat for Gender Equality. Emphasis will be also given in 2019 to introduce a quota for women in all the actions planned.

Part C

Priority areas- Actions

Priority 1: Improving the digital skills of citizens and businesses

There are 33 actions planned, focusing on improving the digital skills of citizens and businesses and are divided in the following groups:

 <u>Re-skilling</u>: There are 12 actions planned for re-skilling. 9 actions are targeted to unemployed people of all ages. Training subjects include basic digital skills, social media, media literacy and digital marketing. 3 actions are targeted to SMEs and training subjects include digital marketing, digital transactions and electronic procedures for establishing a brand name.

- <u>Upskilling</u>: There are 13 actions planned for upskilling. 4 actions are targeted to SMEs and training subjects include digital marketing, using technology tools for in-house training and digital signature procedures. 9 actions are targeted to citizens and training subjects include a big variety of digital skills, from basic digital skills to web design, network management, MS Office, social media, programming, Internet of Things, 3dScanning etc.
- <u>Events</u>: There are 8 events planned in areas such as new technologies, cloud services, European Commission Digital Opportunity Traineeships, media literacy etc.

Priority 2: Improving digital skills in the public sector

There are 5 actions planned, focusing on improving the digital skills in the public sector and are divided in the following groups:

- <u>Advanced digital skills:</u> 1 action is planned for employees working in the public sector and includes training in IT and networking essentials.
- <u>Upskilling</u>: 2 actions are planned for upskilling, in thematic areas such as MS Office and Google apps.
- <u>Events</u>: There are 2 events planned, for open public data, cyber-security and networks.

Priority 3: Improving digital skills in education

There are 23 actions planned, focusing on improving digital skills in education, i.e. the digitals skills of pupils, students and teachers, divided in the following groups:

 <u>Training actions</u>: 20 actions are planned, in the areas of coding, teaching with the use of new technologies, robotics, National IT Certification for pupils, eTwinning initiatives, eSafety Label (digital security in schools), Open School Doors initiative, digital platforms for teaching, creation of digital material for pupils with special learning needs, European agenda for adult education, training for students interested in working in tourism. • <u>Events</u>: 3 actions are planned, 2 national Robotics contests and 1 event in robotics training and coding.

In addition to the above actions, the Ministry of Education has also planned various actions for the upgrading of the technological equipment of the schools at national level.

Priority 4: Improving digital skills of girls and women (horizontal priority)

There are 4 actions planned. The 4 actions are focused on the upskilling of digital skills of girls and women. 1 action is focused on training on MS Office and Google apps, 2 actions are targeted to school girls and include training in coding and new technologies and 1 action is targeted to female students and is focused on network management.

Priority 5: Empowering innovation, experimentation and innovation skills in the public sector

There are 13 actions planned, focusing on innovation skills, divided in the following groups:

- <u>Advanced digital skills:</u> 3 actions are planned in the areas of cyber-security, network management and data analytics in decision-making.
- <u>Upskilling</u>: 9 actions are planned to promote innovation, 6 actions are Innovation Labs for different policy areas, which will be organized by the Unit of Innovation and Best Practices, 2 actions are planned for coding and 1 training action is planned in the form of a workshop on digital economy indexes.
- <u>Events</u>: 1 event is planned, the Innovation and Best Practices Conference, for the public sector, which will be organized by the Unit of Innovation and Best Practices.

Part C

Implementation

The implementation of this action plan, starting immediately, will be necessary to achieve its objectives. An ambitious timetable and the meticulous, coordinated execution of the planned actions will be supported by a set of key short-term deliverables to be adopted by the end of 2019.

The actions identified in this action plan will be implemented by a number of partners, experts in designing, developing and operating their digital solutions. They must signal to the Unit of Innovation, challenges or issues arising from their implementation or could pose a failure risk, so that joint actions can be undertaken to address the problem.

In order to ensure the continuous monitoring and follow-up of the implementation, Unit of Innovation and Best Practices in collaboration with the other members of the National Coalition, will present 12 monthly progress reports to the Minister of Administrative Reconstruction starting in January 2019. Also, there will be a mid-term review of the Action Plain, in June 2019. The mid-term review will be a pivotal milestone. It will examine the state of play, prioritize ongoing actions and identify new actions, taking into account political priorities and opportunities so as to continue the delivery of significant progress in the promotion of digital skills in Greece.

It is important to note that at the moment, there is no formal strategy for the digital transformation of the public sector at national level, especially in areas such the development of digital skills and the identification of digital profiles. Moreover, it is also observed that there no strategy for the development of innovation in public governance. Bearing in mind these two very critical observations, the Unit of Innovation and Best Practices, is aiming to formulate the two strategies starting from 2020. The year 2019, with the completion of all the actions planned and the key findings, will be a year of preparation of the basic elements of the two strategies.

In conclusion, demand for basic and advanced digital skills to support digital transformation is at a crossroad. Innovative and inclusive policies from the core ministries are needed to deliver results to the society and economy. This action plan is the result of

cooperation of main ministries working on digital skills policy to deliver concrete actions for the improvement of specific priority areas.

Finally, the way forward to digital transformation will be supported by the success of the main public governance actors to build capacity in areas such as design and evaluation of relevant policy. Within this context the Ministry of Administrative Reconstruction has set a target for the project funded under the MFF 2021-2017 to support the digital skills strategy in public governance.

Director General of Public Organizations Ministry of Administrative Reconstruction

Nikos Michalopoulos

ΑΚΡΙΒΕΣ ΑΝΤΙΓΡΑΦΟ

Η προϊσταμένη του Τμήματος της Γραμματείας και Παροχής Πληροφοριών του Υπουργείου Διοικητικής Ανασυγκρότησης κ.α.α. Λογοθέτη Ζαμπέτα