Report on the State of the Digital Decade 2024

Annex - Short Country Report 2024

Greece



Executive summary

Greece has scope to improve its performance to contribute to the European Union's (EU) Digital Decade objectives and targets, in view of a successful digitalisation that fosters competitiveness, resilience, sovereignty, European values and climate action.

In 2023, Greece made notable progress in rolling out Fibre to the Premises (FTTP) connectivity infrastructure, and digitalising public services. However, **important challenges** persist in the share of ICT specialists in employment and in the basic level of digital intensity of SMEs.

Although Greece still has a relatively low level of digital maturity, it has reversed the trend over the last 5 years. Greece's digital transition draws on a strong political commitment and an overall digital transformation strategy spanning 2020-2025. It started by focusing specifically on digitalising public services for people and businesses, and sustained efforts are yielding tangible results. Ongoing action is also directed towards digitalising other crucial public sectors such as education, justice, healthcare, and to economic sectors that still have great untapped potential. Overall, these initiatives, in line with the European Semester's country specific recommendations, benefited from funding under the Recovery and Resilience Facility at a crucial moment. However, since Greece started its digital transition late, some structural challenges are still pending. In particular, the lack of progress on digital skills of the population is a hurdle for digitalisation to steadily drive the country's competitiveness and prosperity, despite high investments in digital education and training.

According to the **special Eurobarometer survey 'Digital Decade 2024'**¹, 75% of respondents in Greece said that the digitalisation of daily public and private services makes their life easier, slightly above the EU average of 73%.

Greece is very active in collaborating at EU level. Greece is a member of the Alliance for Language Technologies EDIC (ALT-EDIC) and of the EUROPEUM-EDIC on blockchain (both already set up). Greece is expected to be the hosting Member State of the possible future Connected Public Administration EDIC and of the possible future Cybersecurity Skills Academy EDIC. Greece is developing the Statute and other relevant documents of the possible future Genome EDIC, within an informal working group. It is also engaging in discussions on the setup of possible future Cancer Image Europe (EUCAIM) EDIC, within an informal working group². Greece also participates in the IPCEI Microelectronics and Communication Technology (ME/CT) and in the EU Digital Wallet consortia: POTENTIAL, EWC, DC4EU.

Greece's Recovery and Resilience Plan (RRP) allocates 22.1% of its total budget to the digital transition (EUR 7.78 billion)³ with a strong priority on the transformation of the public administration and on digitising the economy, particularly SMEs. It is also investing significantly in increasing the digital skills of the population. Under Cohesion Policy, an additional EUR 2.7 billion (13% of the country's total Cohesion Policy funding) is allocated to the country's digital transformation⁴.

¹ Special Eurobarometer 551 on 'the Digital Decade' 2024: <u>https://digital-strategy.ec.europa.eu/en/news-redirect/833351</u>

² Information last updated on 31 May 2024.

³ The share of financial allocations that contribute to digital objectives has been calculated using Annex VII to the Recovery and Resilience Facility Regulation.

⁴ This amount includes all investment specifically aimed at or substantially contributing to digital transformation in the 2021-2027 Cohesion Policy programming period. The source funds are the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, and the Just Transition Fund.

Digital Decade KPI (1)	Greece			EU		Digital Decade target by 2030	
	DESI	DESI	Annual	DESI 2024	Annual	EL	EU
	2023	2024	progress	(year 2023)	progress		
Fixed Very High-Capacity Network (VHCN)	27.9%	38.4%	37.9%	78.8%	7.4%	100%	100%
Fibre to the Premises (FTTP) coverage	27.9%	38.4%	37.9%	64.0%	13.5%	100%	-
Overall 5G coverage	85.7%	98.1%	14.5%	89.3%	9.8%	100%	100%
Semiconductors		NA					
Edge Nodes		12		1 186		95	10 000
SMEs with at least a basic level of digital intensity	37.7%	43.3%	7.2%	57.7%	2.6%	79.7%	90%
Cloud	15.2%	18.1%	9.1%	38.9%	7.0%	56%	75%
Artificial Intelligence	2.6%	4.0%	24.0%	8.0%	2.6%	32%	75%
Data analytics	NA	25.0%	NA	33.2%	NA	40%	75%
Al or Cloud or Data analytics	NA	33.5%	NA	54.6%	NA		75%
Unicorns		3		263		20	500
At least basic digital skills	52.5%	52.4%	-0.1%	55.6%	1.5%	70.2%	80%
ICT specialists	2.5%	2.4%	-4.0%	4.8%	4.3%	4.5%	~10%
e ID scheme notification		No					
Digital public services for citizens	64.6	75.9	17.5%	79.4	3.1%	98.2	100
Digital public services for businesses	73.7	86.2	17.0%	85.4	2.0%	100	100
Access to e-Health records	60.7	73.8	21.6%	79.1	10.6%	100	100

⁽¹⁾ See the methodological note for the description of the indicators and other descriptive metrics

National digital decade strategic roadmap

With respect to **Greece's** contribution to the Digital Decade reflected in its roadmap, it is demonstrating a **very high ambition** and, based on this document, intends to allocate **significant effort** to achieve the Digital Decade objectives and targets.

The roadmap is mostly complete and presents 14 national trajectories and targets to be achieved by **2030.** The national targets set for connectivity, digital transformation of public services and e-health match the EU's 2030 targets, but the targets for digital skills and for the digital transformation of businesses are below the EU's 2030 targets. The roadmap contains a detailed analysis of the current state of play, and a comprehensive set of measures and initiatives designed to meet the objectives and targets of the Digital Decade to transform the country into a digitally advanced and inclusive society by 2030. It is based on the Digital Transformation Bible 2020-2025, the country's current national digital strategy. Funding for the digital transformation relies heavily on EU funds (RRF and cohesion policy funding).

The total public funding for the 104 measures in the roadmap is estimated at EUR 5 230.2 million (about 2.37% of GDP). The priorities are on the digital transformation of the public sector including the health sector, the digital transformation of the economy, and the uptake of advanced digital technologies by businesses. The roadmap also gives a rough estimate of private investments for the coming years in data centres and gigabit connectivity of EUR 6 900 million.

When adjusting the roadmap in accordance with Article 8(3) of the Digital Decade Policy Programme (DDPP) Decision, Greece should:

- **TARGETS:** Consider in due time reviewing all the national targets that are not aligned with the EU's 2030 targets, and in particular **the take up of cloud, data analytics and AI** by enterprises, the target for which is currently low on ambition.
- MEASURES: Review and reinforce the strategy and measures to contribute to the targets (i) that are the most challenging to reach, such as digital infrastructure, ICT specialists; and (ii) that have a low level of ambition, the take up of cloud, data analytics and AI by enterprises. Provide additional details on how existing and planned measures for the digitalisation of SMEs will contribute to reaching the target for 2030; (iii) Provide more information on the implementation of digital rights and principles, including the national measures that contribute to it.

Digital rights and principles

The Special Eurobarometer 'Digital Decade 2024' provides insights into Greeks' perceptions of digital rights. Only 33% of Greeks believe that the EU protects their digital rights well, although this figure has increased by 1 point since last year, it remains significantly below the EU average of 47%. Concerns are escalating, with 62% worried about children's online safety, up 2 points, and 51% about control over personal data, while overall respondents seem to be more worried about their digital rights and principles than the EU average. On a positive note, 85% of respondents value digital technologies for connecting with friends and family, which is above the EU average of 83%. The monitoring of the Declaration on Digital Rights and Principles shows that increasing the profile of the Declaration at national level and fostering better stakeholder engagement could help improve outcomes in the years to come⁵.

A competitive, sovereign, and resilient EU based on technological leadership

With significant support from EU funds, Greece is taking action to start upgrading its digital and research infrastructure and to develop ecosystems for innovation in cutting-edge technologies, which are currently in their infancy. The country still faces several challenges. It lags behind on the deployment of fibre networks to deliver gigabit connectivity for all, although its National Broadband Plan 2021-2027 is starting to bear fruit. Moreover, all the indicators on the digitalisation of enterprises indicate a below EU average performance. Many SMEs have a relatively moderate level of innovation and a low level of digital maturity. In 2023, only 43.3% of SMEs had at least a basic level of digital intensity, below the EU average (57.7%). Businesses in Greece also have a low level of take up of advanced technologies such as AI, cloud, and data analytics in general. However, the dynamic start-up ecosystem is a positive sign of a digital ecosystem in development.

Recommendations – Greece should:

⁵ See SWD 'Digital Decade in 2024: Implementation and perspective' with annexes, SWD(2024)260: <u>https://digital-strategy.ec.europa.eu/en/news-redirect/833325</u>, Annex 4.

- CONNECTIVITY INFRASTRUCTURE: (i) closely monitor the progress on the gigabit coverage to identify early enough any remaining investment gaps to reach the target for 2030; (ii) ensure sufficient access of new players to spectrum for innovative business-to-business (B2B) and business-to-consumer (B2C) applications and encourage operators to speed up the deployment of 5G stand-alone core networks.
- **CYBERSECURITY:** Continue the implementation of the 5G Cybersecurity Toolbox to ensure secure and resilient 5G networks.
- **SEMICONDUCTORS, QUANTUM TECHNOLOGIES, EDGE NODES:** Develop additional measures in due time to accelerate the deployment of digital and data infrastructure and promote the use of digital capabilities and the access to digital technologies.
- DIGITAL TRANSFORMATION OF BUSINESSES: Consider reinforcing the framework conditions to enable (i) less digitally mature SMEs to adopt digital transition; and (ii) all enterprises to benefit from the data economy by a rapid adoption of advanced technology (AI, cloud, data analytics) as a competitive advantage; (iii) stimulate the adoption of next generation cloud infrastructure and services by companies of all sizes, including by liaising with the Cloud IPCEI Exploitation office and/or the coordinators and the Member States participating in the IPCEI-CIS.

Protecting and empowering EU people and society

The concerted efforts made on digital transformation in recent years have resulted in a demonstrable and significant improvement in the public digital services available to citizens and businesses. This is expected to make a significant contribution to the country's resilience and competitiveness. However, in terms of empowering people to benefit from opportunities created by an increasingly digitalised society and economy, Greece has not yet met the challenge of training its population in the level of digital skills needed, despite several recent measures, investments and reforms. In 2023, only 52.4% of the population had at least basic digital skills (EU average 55.5%), indicating no progress since the previous data collection in 2021. The number of ICT specialists in terms of the share of employment is 2.4%, far below the EU average (4.8%). However, in 2023, information technology was <u>reported</u> to be the business sector in Greece with the highest score on intention to hire new professionals, with employment prospects reaching 27%.

Recommendations – Greece should:

- **DIGITAL SKILLS**: Review and consider whether additional targeted measures to train the population are sufficient to reach the target, boost the resilience of the economy and society and achieve inclusive growth.
- **ICT SPECIALISTS**: Reinforce the strategy and the measures to increase the number of ICT specialists and retain the best talents.
- **e-ID**: Greece should notify to the Commission an e-ID scheme under the eIDAS Regulation.
- **e-Health**: (i) Make the data types of medical imaging reports and medical images available to people through the online access service, (ii) Ensure that the online access service complies to web accessibility guidelines.

Leveraging digital transformation for a smart greening

Greece national roadmap mentions some measures related to the green transition in addition to the measures related to establishing more sustainable, energy- and resource-efficient digital infrastructure and technologies (e.g., sovereign cloud, edge nodes and 5G infrastructure). Greece also set goals in its national energy and climate plan and in the RRP for which digital technologies can be used as smart agents to trigger the green transition (e.g., smart meters). In 2023, a programme supported by cohesion policy funding has been launched for the 'green transformation of SMEs' to support projects aiming at developing and using modern technologies to upgrade their products, services and processes in terms of energy upgrading, the circular economy and the adoption of clean energy sources. However, a more comprehensive approach to make the digital sector more environmentally friendly and sustainable is missing. According to the Eurobarometer 2024 survey, 86% of respondents in Greece said that ensuring that digital technologies serve the green transition should be an important action for public authorities (above the EU average of 81%). In this regard the Data Centre that is operated by the General Secretariat of Information Systems and Digital Governance of the Ministry of Digital Governance has adopted and implemented the European Code of Conduct for Energy Efficiency in Data Centres.

Recommendations - Greece should:

- Develop a coherent approach to twinning the digital and green transitions. First, promote improvements in energy and material efficiency of digital infrastructure, in particular data centres. Second, support the development and deployment of digital solutions that reduce the carbon footprint in other sectors, such as energy, transport, buildings, and agriculture, including the uptake of such solutions by SMEs.
- Monitor and quantify the emission reductions of the deployed digital solutions in line with the relevant EU guidance and with the support of the methodology developed by the <u>European Green Digital Coalition</u>, in view of future policy development, as well as of attracting relevant financing.