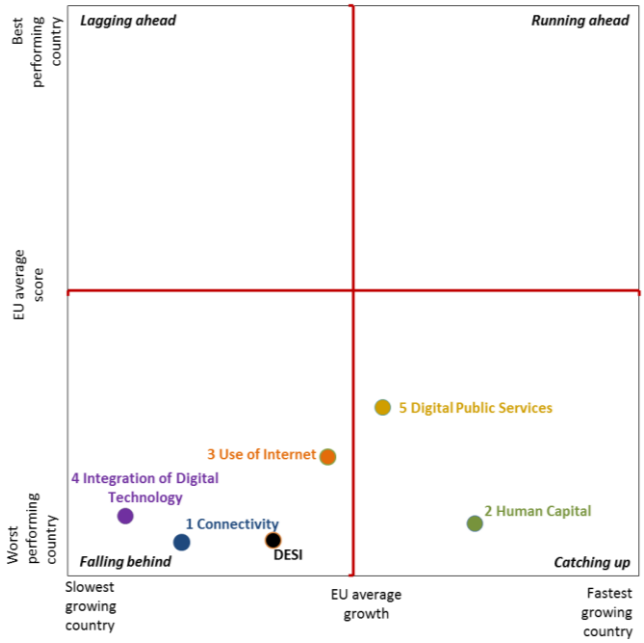
Europe's Digital Progress Report (EDPR) 2016

A report complementing the Digital Economy and Society Index (DESI)[1] country profile

GREECE

Greece ranks 26th out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2016[2]. Greece is part of the **falling behind** cluster[3] of countries: its score is lower than the EU average and over the last year it grew at a slower pace than the EU. The Human Capital dimension (i.e. digital skills) is where Greece made most progress; however, levels of digital skills remain low and hamper developments in the Use of Internet by citizens, the Integration of Digital Technologies by businesses, and limit the take up of broadband. Moreover, the country is facing a severe emigration of intelligent, well-educated individuals. Greece is a moderate performer in terms of Digital Public Services with a level of active eGovernment users above the EU average.



Greece's performance in the five DESI dimensions relative to other EU countries

The Prime Minister has announced the set-up of a "Digital Secretariat". This Secretariat could be fundamental for the overall coordination of the Digital Single Market in Greece and the related investments under European Structural and Investment Funds (ESIF) and the European Commission's Investment Plan for Europe ("Juncker Plan").

1 – Connectivity

Greece ranks only 26th among EU countries in terms of Connectivity and its progress is well below the EU average. While 99% of households are covered by fixed broadband, the number of fixed (in particular high speed) and mobile broadband subscriptions is well below EU average and coverage of fast networks providing at least 30 Mbps is available to only 36% of homes, far below the EU average of 71%.

Greece's broadband strategy relies on the private sector to take on the vast majority of investments in high speed networks, with public intervention focusing mostly on areas characterised by market failure (required funding is expected to range from €1.36 Billion to 4.53 Billion). The competitiveness,

[1] The Digital Economy and Society Index (DESI) is a composite index developed by the European Commission (DG CNECT) to assess the development of EU countries towards a digital economy and society. It aggregates a set of relevant indicators structured around 5 dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services. It clusters countries in four groups: Running ahead, Lagging ahead, Catching up and Falling behind. For more information about the DESI please refer to https://ec.europa.eu/digital-single-market/en/desi

[2] DESI Country Profile for Greece: https://ec.europa.eu/digital-single-market/en/scoreboard/greece

[3] Other falling behind countries are Bulgaria, Cyprus, Czech Republic, France, Hungary, Poland and Slovakia.

entrepreneurship and innovation Operation Programme (OP) and the European Agricultural Fund for Rural Development (EAFRD) provide a total of €369 Million funding for broadband[4].

From a regulatory capacity point of view, being without a chief executive for more than a year means that the Greek National Regulatory Authority (EETT), has not been in a position to adopt decisions. Major decisions expected in the area of ex ante market regulation and spectrum assignment have been delayed without any indication of timing, with negative effects being felt throughout the market.

The challenge for Greece is to accelerate the implementation of its strategy and to ensure that the relevant public funds are released as quickly as possible (e.g., by addressing all the pending elements of the ESIF ex-ante conditionality 2.1 on the national digital growth strategy). Moreover, the current situation of EETT creates legal uncertainty and is detrimental to the telecoms sector. Finally, Greece still has to complete its transposition of the Cost Reduction Directive[5], which will enable more efficient deployment of high-speed networks and will maximize the effect of public investment.

2 – Human Capital

In terms of human capital, Greece's performance is below the EU average, but it is making good progress. In 2015, only 63% of the Greek population was using the internet on a regular basis (versus 76% EU average) and only 44% of Greeks had at least basic levels of digital skills. Nowadays digital skills and competences are needed for nearly all jobs where digital technology complements existing tasks, and shortages can be a significant barrier to the country's economic development. The share of Science, Technology, Engineering and Math (STEM) graduates is increasing, providing potential for the take-up of new professions, but currently Greece has the lowest share of ICT specialists in the workforce (1.3%) in the EU. Greece faces a dual challenge: although an increasing number of intelligent, well-educated individuals emigrate in search for better pay or conditions ("brain drain"), the Greek ICT companies have difficulty in finding people with the right digital skills.

To address the challenge, a number of initiatives have been or are about to be introduced. In May 2014 the Greek Government (5 Ministries and 3 General Secretariats) along with the Federation of Hellenic ICT Enterprises (SEPE) launched a Greek National Coalition for the Digital Economy. The Ministry of Interior and Administrative Reconstruction is now planning to design a National Action Plan for digital skills by the end of 2016, in collaboration with several other Ministries and national stakeholders. Furthermore, the Ministry of Labour has recently launched an initiative aimed at training 3000 unemployed youngsters with the digital skills that are in high demand in the labour market. The stakeholder alliance "Women and Girls Go Digital in Greece" (WGGDG), is undertaking concrete actions to promote the participation of women in ICT professions and the digital society at large. Additionally, the "Digital School" programme, which was officially launched in 2010 but is suspended for the time being, is a large scale national initiative of the Greek Ministry of Education for the modernisation of school education. The Ministry also intends to carry out programmes offering ICT training to teachers; to introduce innovative teaching material and educational tools in the classroom; and to promote computational thinking from the first years of primary school.

Greece will benefit from developing new initiatives to address the chronic skills mismatch observed between the ICT industry's needs and the skills offered by formal education, as well as by providing leadership and cooperation between diverse stakeholders, and key resources for digital skills development. If successfully implemented, the Greek National Coalition for the Digital Economy

[4] This figure includes also funds under code 048 (ICT infrastructure). National contribution will be added to these figures.
[5] Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L155, 23 May 2014, p. 1)

could help building digital skills capacity with industrial relevance and could enable better collaboration, especially between government, education and industry.

3 – Use of Internet

A significant percentage of Greek Internet users engage in a wide range of online activities, such as reading news online, listening to music, watching films and playing games online, using the Internet to communicate via voice or video calls and participating in social networks. Nonetheless, Greeks are reluctant to engage in online transactions, like eBanking (21%) and online shopping (47%), for which participation levels are much lower than the EU average (57% and 65%, respectively), revealing a certain distrust in the online environment. Having said that, the share of users engaging in online shopping has improved significantly by 7 percentage points.

4 – Integration of Digital Technologies

The adoption of digital technologies by businesses is a catalyst for economic development and labour productivity growth. While the ICT industry performed reasonably well during the economic crisis and is focusing increasingly on international markets, Greece's overall industry performance in integrating digital technology is below par and progress is slow. The percentage of businesses using technologies such as electronic information sharing (ERP – 37%) and social media (18%) is nearly equal to the EU average; however, not many Greek businesses use RFID, eInvoices, or cloud services. Very few Small and Medium Enterprises (SMEs) in Greece sell online (6.1%) and even fewer sell online to other EU member states (3.4%), probably because of delivery costs. On the positive side, the Greek start-up ecosystem is viewed very favourably worldwide and investments in digital companies have multiplied over the last few years, from €500 000 in 2009 to more than €50 Million in 2015.

It is expected that a programme for "Upgrading of micro and small existing businesses to develop their capacity in new markets" will be issued under the OP Competitiveness - Entrepreneurship - Innovation of the National Strategic Reference Framework 2014-2020 (ESIF). This programme will reinforce existing micro and small enterprises operating in eight strategic priority sectors: agro-food, energy, cultural and creative industries, supply chain, environment, information and communication technologies (ICT), health - medicines and materials - construction. One of the proposed areas this programme will cover is support of small enterprises in simplifying and automating operational and production activities through modernisation of equipment and the introduction and/or increase of the use of ICT.

It is important that Greek businesses improve their level of digitisation in order to attain further efficiency and productivity gains so as to be able to benefit even more from taking advantage of the possibilities offered by online commerce. Greece would also benefit from an Industry 4.0 strategy as well as from European Fund for Strategic Investments (EFSI) dedicated funds for SMEs and larger companies.

5 – Digital Public Services

In Digital Public Services, Greece ranks 20th and its progress is just above the EU average. The percentage of Internet users that have exchanged filled forms with the public administration online is above EU average (37%). Greece's open data score is also higher than the EU average. However, Greece performs worse on the supply side of online public services[6].

[6] 8.1/100 in the Pre-filled Forms indicator (measuring the extent to which data that is already known to the public administration is pre-filled in the forms that are presented to the user), and of 54/100 in the Online Service Completion

Greece's strategy for eGovernment (2014-2020) aims at modernising the state and public administration and to reconnect citizens with them. An Action Plan for Open Government and Open Public Administration has been adopted. The commitments undertaken in the new Action Plan are structured along the following lines: encouraging public participation; open public data; and integrity and accountability. Moreover, a number of eGovernment portals have been put in place. Notably, 'Ermis', the Governmental Portal of Public Administration, aims to inform citizens and businesses, and ensure the safe use of eGovernment services through digital certificates. The 'Citizen Service Centres' (or 'KEP' in Greek transliteration) are the administrative one-stop service centres, where citizens can have access to public service information and to over 1,000 standardised administrative procedures. There are also plenty of additional initiatives, such as in eProcurement, the electronic Prescription programme (eHealth), as well as various public Networks.

The eGovernment Strategy of Greece appears to be comprehensive and offers a path towards the design of effective online services and tools that will increase transparency and efficiency. It could also enable greater citizen trust and participation.

Highlight: ePrescription helps to modernise Greece's medical care network

The "ePrescription" project is a digital social service which aims to connect and render interoperable all national social insurance funds through a fully integrated platform that helps to manage, monitor and control the drug prescription lifecycle. This cycle begins with the prescription or laboratory test referrals, and monitors them from issuance through to payment of the final beneficiaries, and encompasses the clearance of the transactions of all national social insurance funds, medical consultations and electronic medical act referrals. The total investment in the project "ePrescription" was almost €12 Million, of which the European Regional Development Fund contributed €10 Million, for the 2007-2013 programming period.

The first pilot project was initiated in 2010 and, thus far, ePrescription is the most important eHealth application. It has a high rate of coverage and penetration throughout the country and is positively affecting the public health and public finance systems. By using ePrescription patients benefit from reduced difficulties affecting their prescription insurance coverage and enjoy a simpler process, especially when it comes to renewal of prescriptions. Furthermore, health authorities are relieved of excess paperwork and bureaucratic procedures. From the doctor's point of view the project offers a clear overview of the patient's medical history and better alignment with guidelines.

indicator (measuring the extent to which the various steps in an interaction with the public administration – life event – can be performed completely online).