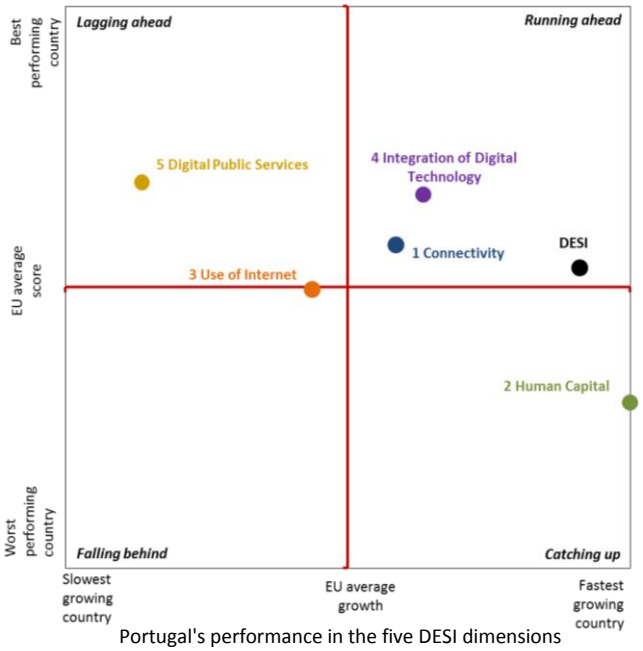
Europe's Digital Progress Report (EDPR) 2016

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

PORTUGAL

Portugal ranks 14th out of the 28 EU Member States in the European Commission's Digital Economy and Society Index (DESI) 2016[2]. Portugal is part of the **running ahead** cluster[3] of countries because its DESI score is above the EU average and overall the country has developed faster than the EU over the last year. Portugal's progress is in great part due to noteworthy developments in human capital. However, human capital continues to be the country's weakest area. Conversely, Portugal's strongest performing dimension is digital public services, but this was the dimension that saw the frailest development over the last year.



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

1 – Connectivity

Portugal is performing well and making good progress in Connectivity. Broadband network coverage is good: fixed broadband is available to all homes and next generation access networks (NGA) capable of providing at least 30 Mbps are available to 91% of them (well above the 71% EU average). Besides the upgrade of cable networks and the network sharing agreement complementing the individual plans of the two operators deploying fibre to the home (FTTH), an important facilitator of the fast NGA deployment is Portugal's policy on access to passive infrastructure: Portugal was one of the first countries to introduce this type of measure. However, there are still differences between regions, and in rural areas networks capable of providing at least 30 Mbps are available to less than half of the households. Over the course of last year, several fixed broadband operators announced significant investment in fibre to the premises, aiming to cover over 5 million houses (of the existing 6 million) by 2020, which shows that Portugal has a vibrant market that nurtures private investment. Hence, it is important that competition is maintained and enhanced, including through adequate regulatory tools, as Portugal seeks to bridge the remaining gaps in NGA deployment. Portugal also performs above EU-average in mobile coverage: over 94% of households enjoy 4G coverage.

Portugal's main challenge continues to be fixed and mobile broadband take-up. Although subscriptions to broadband grew significantly during previous years, only about 61% of Portuguese households subscribe to fixed broadband, and less than half of citizens subscribe to mobile

[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/desi

[2] DESI Country Profile for Portugal: https://ec.europa.eu/digital-single-market/scoreboard/portugal

[3] Running ahead countries are Austria, Germany, Estonia, Malta, the Netherlands and Portugal.

broadband. Low take-up may be in part due to affordability - the country has the fifth most expensive entry-level broadband price in the EU - but also to lack of interest or knowledge of the benefits of the internet, which is in turn a probable consequence of the country's significant digital skills gap.

In April 2015 Portugal undertook an extensive revision of the Portuguese Digital Agenda Strategy (APD – "Agenda Portugal Digital", first launched in 2012) and updated the strategy's objectives and measures. The strategy includes two targets for broadband coverage by 2020: Internet access at speeds greater or equal to 30 Mbps available to all citizens, and access at speeds greater or equal to 100 Mbps available to 50% of households. It also comprises objectives to improve access to broadband at speeds higher than 40Mbps to citizens in rural areas, to improve coverage of fast mobile broadband in 480 civil parishes currently not covered (and in 588 more parishes as of 2018), and to further release spectrum bands for mobile broadband use in line with European decisions. The broadband deployment targets initially included in the APD in 2012 were important steps to improve the country's deployment of fast broadband, leading to significant private and public investment that allowed the country to attain its current well-developed networks. However, in order to achieve the 100% fast broadband coverage target, Portugal will need significant investment in rural areas. The transposition of the Cost Reduction Directive could help to speed up broadband roll-out[4]. The target of having 50% of households with 100 Mbps broadband coverage by 2020 is of questionable usefulness, given that, by June 2015, 88% of households in Portugal already had such coverage.

2 – Human Capital

Portugal's performance is below par in Human Capital, but the country is rapidly developing this dimension. Only 65% of Portuguese citizens use the Internet on a regular basis, the 6th lowest value in the EU, and 28% of the population have never used the Internet (The EU average is 16%). Only 48% of the Portuguese population have at least basic digital skills (8th lowest in the EU), and only 2.5% of employed people are ICT specialists (6th lowest in the EU). Only in STEM graduates does Portugal perform above the EU average (in 7th place) with 2.1% of people in their twenties holding a STEM degree. Nevertheless, Portugal improved its performance relative to last year in all fields considered.
The APD includes a target to reduce to 23% the percentage of people that have never used the Internet by 2020. It includes a section dedicated to digital literacy, qualifications and inclusion ("Área de intervenção 3"), as well as measures to promote ICT R&D&I, focusing on ICT specialist skills and on ICT-based innovation. In 2015, Portugal launched the Digital Inclusion and Literacy National Strategy ("Estratégia Nacional para a Inclusão e Literacia Digitais") to improve digital skills in the workforce and overall population (including citizens with low education, elderly, and with special needs) via a lifelong learning approach. The Portuguese Coalition for Digital Employability ("Coligação Portuguesa para a Empregabilidade Digital", set up under the Grand Coalition for Digital Jobs[5]) and the Digital Employability Strategy and Action Plan ("Estratégia e Plano de Ação para a Empregabilidade Digital") also started in 2015. The plan seeks to reduce the deficit of ICT professionals in the economy, improve ICT skills in the public and private sectors, and in the population at large, and increase the number of companies using digital technology. The country is also setting-up a platform with polytechnic institutes to act at regional and local levels aiming to provide re-qualification through vocational training to respond to ICT-related job opportunities.

Portugal has the greatest lag compared with the EU in human capital, but there is an important nuance: digital skills attainment in Portugal depends very much on age, income bracket and education level. 91% of Portuguese aged 16 to 24 have at least basic digital skills, as do 76% of those

[4] 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)
[5] https://ec.europa.eu/digital-single-market/grand-coalition-digital-jobs

aged 25 to 34, both above the EU average (81% and 73% respectively). Portugal is 3rd in the EU in digital skills among citizens with high formal education (ISCED 5+) and 2nd among citizens with medium formal education (ISCED 3-4). Wealthier citizens (4th income quartile) also have better digital skills than their EU counterparts; so Portugal has a quintessential digital divide problem on its hands, where the most vulnerable groups are the less digitally-skilled: older, lower income and low education.

It is important to enact differentiated policies to target the digital divide, while at the same time keeping up successful efforts to educate the younger generations; hence the importance of planned digital literacy and inclusion measures that target vulnerable groups, which should be put in place and appropriately funded and followed-up. The same should happen to the various initiatives proposed to develop ICT specialist skills, which will stimulate the already high propensity of younger generations of Portuguese to acquire digital skills and to take up scientific and technological education. Such policies can be partly funded by EU structural funds, for instance using the Human Capital Operational Programme ("Programa Operacional Temático Capital Humano: PO CH" – 3.1 billion EUR for the period 2014-2020) already in place, or by means of the Youth Guarantee, which could help offer ICT vocational training to unemployed youths.

3 – Use of Internet

Portugal has average performance but its progress is below the EU average in Use of Internet. Portuguese Internet users engage in a broad range of online activities, and depending on the activity, engagement among the Portuguese is at par or higher than overall in the EU. However, Portuguese Internet users are very reluctant to perform online transactions such as online banking (41%, the 5th lowest value in the EU) or online shopping (44%, the 7th lowest value in the EU).

Citizens' reluctance to undertake transactions online may reflect lack of trust caused by perceived lack of security. The APD includes one measure seeking to improve trust and security of networks and services. Furthermore, there have been initiatives seeking to simplify online authentication and payments in order to increase trust in online services, such as MBNet for online payments and Chave Móvel Digital for simplified authentication in public or private websites.

4 – Integration of Digital Technology

Portugal is performing well and making good progress in Integration of Digital Technology. It ranks 2nd among EU countries in the use of RFID and 5th in use of ERP, but there's room for improvement, particularly in the use of social media (8th lowest in the EU). Portuguese businesses made great progress in online commerce: the share of SMEs selling online increased significantly (from 14% to 19%) as did the percentage of SMEs that sell online to other EU member states (from 5.4% to 7.9%) and the overall turnover obtained from online sales (from 11% to 13% of SMEs' total turnover).

The APD has a 2020 target to increase by 55% (baseline 2011) the number of companies using e-commerce, paired with measures to increase SMEs' participation in the digital economy. Digitisation of businesses, especially SMEs, is under the spotlight in the distribution of European structural and investment funds under the Portugal 2020 partnership agreement. The agreement includes actions to increase companies' competitiveness and promote their internationalisation, seeking to help them integrate digital technologies, develop an online presence and engage in online sales.

Incentives for digitisation and internationalisation of Portuguese companies (SMEs in particular) are starting to bear fruit as shown by the improved performance in the aforementioned eCommerce indicators. Portugal 2020 sub-programmes have available budgets in the 2014-2020 period of €4.4 Billion for the Competitiveness and Internationalisation programme and €2.1 Billion for Social

Inclusion and Employment programme (plus specific regional funds). Such funds can be put to use in further contributing to the digitisation of Portuguese businesses.

5 – Digital Public Services

Portugal is performing well in Digital Public Services but its progress is still below the EU average. Portugal has seen slightly fewer of its internet users engaging with public administration online (41% vs. 43% last year), despite the fact that it has among the most sophisticated online public services in the EU: Portugal ranks 3rd in services offered fully online and 4th in reuse of user data in online forms. Over the past year, the country's commitment to open data seems to have weakened.

Portugal has developed concerted efforts to rationalise, simplify and digitise its public administration for years, mostly under the Global Strategic Plan for Rationalisation and Cost Reduction in ICT in the Public Administration ("Plano global estratégico de racionalização e redução de custos nas TIC, na Administração Pública"). The plan seeks, among others, to improve governance mechanisms for ICT in public administration, reduce costs, modernise the administration using ICT, and develop common ICT solutions for different administration sectors. The APD includes a demand-side target to have the use of online public services by the Portuguese converge to the EU average by 2020. Furthermore, it includes a comprehensive set of measures to further improve digital public services dealing with various branches of the administration, namely employment services, justice services, eHealth and smart mobility.

Portugal is one of the leaders in this area and the country's continued investments have borne fruits. Portugal is in a positive path towards public sector modernisation and digitisation by setting itself ambitious objectives and putting forward relevant measures, which should be appropriately funded and followed-up. One of the country's main obstacles to realising the potential of its digital public services is the relatively low usage by citizens; this is partly due to the digital divide in the population. Portugal is however trying to put in place creative solutions to reach out to the disadvantaged (e.g., Citizen's Spot) so that they can also benefit from the country's comprehensive online service offer.

Highlight: Espaços Cidadão (Citizen Spots)

Citizen Spots are locations where services from different administrations are made available at a single point using an internet-connected computer. Each spot has a worker assisting citizens, to show them how to use the online public services at their disposal. In June 2015, 1000 spots were co-located in post offices, municipality halls and other similar places. One goal is to deliver assisted digital services to citizens unfamiliar with eGovernment, or lacking in digital skills, so that they can use eGovernment, and thereby contribute to their own digital inclusion. Another goal is that citizens learn from the assisted experience and become autonomous users of these services.