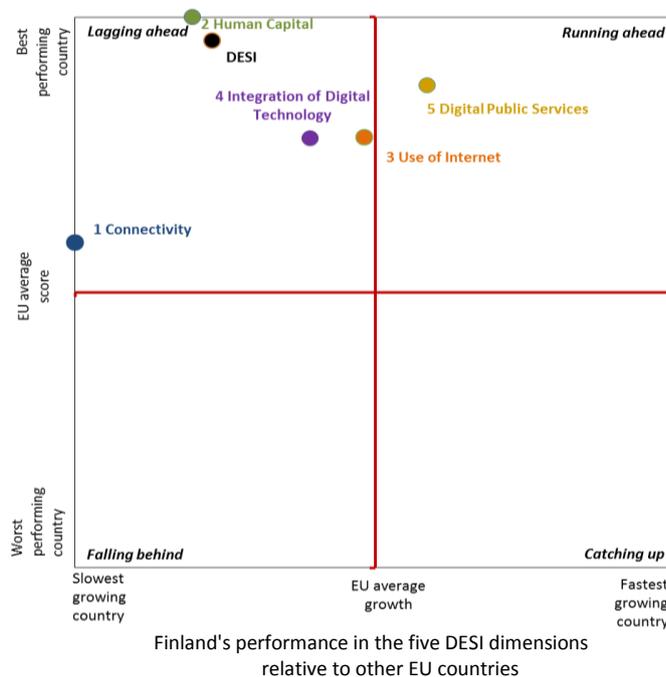


Europe's Digital Progress Report (EDPR) 2016

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

FINLAND

Finland ranks 4th out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2016² (see Annex). Finland belongs to the cluster of countries with high scores but slow improvements called **lagging ahead**³. In the Digital Public Services dimension Finland is progressing faster than average despite an already high starting level. Finland is displaying very high connectivity, but very slow fixed broadband take-up compared with other countries; however, performance in mobile broadband is excellent. Finland's comparatively slow improvement in digital skills mostly reflects the very high scores already achieved and the success of other countries in catching up. The Use of Internet and the Integration of Digital Technologies are both advancing roughly at EU average rates. All in all, Finland is a world leader in digitisation⁴.



1 – Connectivity

In Connectivity, Finland's performs relatively well. Fixed broadband is available to 97% of Finnish homes, which is remarkable given the geographical characteristics of the country. Nevertheless, fixed broadband take-up decreased and is among the lowest in the EU (59%) and NGA coverage did not progress (still at 75%), although fast broadband subscriptions increased by 4 percentage points (reaching 31%), slightly above the EU average. One of the reasons for the relatively low figures in terms of fixed broadband take up is the excellent performance in mobile broadband. Finland leads the ranking in mobile broadband take-up with quite a distance (139 subscriptions per 100 people compared with 114 for Sweden and 112 for Denmark) and is not far away from twice the EU average.

Finland has nevertheless taken action to address the gap in broadband coverage: a range of local projects have been implemented to expand coverage, with the necessary middle-mile backhaul segments, in order to ensure that every household is located within 2km from a fibre access point, in line with the Finnish broadband strategy; moreover, the state aid plan for scarcely populated areas has been prolonged until 2019 following clearance by the European Commission. Finally, an existing broadband Universal Service

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 Finland: <https://ec.europa.eu/digital-single-market/en/scoreboard/finland>

³ Other lagging ahead countries are: Belgium, Denmark, Ireland, Lithuania, Luxembourg, Sweden and the UK.

⁴ I-DESI: <https://ec.europa.eu/digital-single-market/news-redirect/31457>

Obligation has been upgraded in 2015 to ensure at least 2Mbps capacity. The take up of broadband could also benefit from finalisation of the Ministry's recent plans for measures to create an innovative business environment for digital service platforms and ecosystems and to increase the private sector's business possibilities in many sectors by promoting availability of fast broadband connections. Finland still has to fully transpose the Cost Reduction Directive,⁵ which could help to speed up broadband roll-out.

2 - Human Capital

Finland has performed very well in previous years, which helps to explain its below average progress over the last year. While Finland's score is already way above the EU average in terms of regular Internet users (91% versus 76%), basic digital skills (75% versus 55%) and STEM (Science, Technology, Engineering and Mathematics) graduates (22 versus 18 per thousand), it is the share of ICT specialists which really distinguishes Finland from all other EU Member States. With 6.7% this share is close to twice the EU average. It is unrealistic to expect this share, which is partly due to the importance which Nokia played in the Finnish economy in the past, to grow rapidly further.

Although basic ICT skills are fairly widespread in Finland, there are still people without them. Thus, reaching out to these people and ensuring ICT skills for everyone remains a priority for Finland. A new curriculum reform will take place in 2016. ICT competence is one of the seven broad-based competences defined in the new core curriculum that will enter into force in 2016. The use of ICT is systematically embedded throughout the 9 years of general basic education, in different subjects, for integrative/thematic studies, and other forms of school work.

Finland appears to be very well placed to face the rapid technological change which makes occupation-specific knowledge and skills quickly obsolete. It is proactively deploying a policy to combine foundation skills like literacy, numeracy and digital skills with generic skills like the ability to cooperate and structure one's time.

3 - Use of Internet

Using the Internet to get news and manage bank accounts is nearly universal in Finland, indicating a high level of trust in the online environment. Three quarters of Finns also use it to shop and to get music, videos or games, as one would expect in a digitally very advanced country like Finland. However, when it comes to video on demand or video calls, Finland is at low in the EU ranking.

4 - Integration of Digital Technology

In Integration of digital technologies by businesses, Finland performs relatively well, with average progress. Internationally it is behind only to the US. While Finnish enterprises are enthusiastic users of cloud computing and fairly strong in the use of RFID and social media, they are surprisingly reluctant to sell online, even less motivated to sell cross-border, which is counterintuitive for a small country.

Following the decline of Nokia, the government took new measures to diversify the economy, notably through the promotion of innovation and investment in digitisation, biotechnology and clean technologies. One instrument is through research and development and measures aimed at helping new companies; for example, a package of €1.6 billion to fund key projects in 2016-18 will contribute to encourage innovation. Much of the focus has recently been on investing in clean technology products and better use of ICT in manufacturing processes. Other objectives of the current government term are to promote the Internet of Things and to identify promising areas of the platform economy from the Finnish perspective.

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)

In recent years, Finland has increasingly responded to the challenge of encouraging the creation of new companies. Start-up rates have been very low, both before and during the downturn. The share of young companies among small businesses is among the lowest in the EU and the OECD. Furthermore, young firms' growth has been fairly slow on average. This is of particular concern for the ICT services industry, where much of the growth typically comes from newer companies. One way of helping SMEs would be by encouraging them to internationalise further.

5 – Digital Public Services

In Digital public services, Finland performs very well and is still progressing faster than the EU average. On the availability side, Finland now stands at around 90% for re-using information (amount of data that is pre-filled in public services' online forms) and for allowing online service completion, while close to two-thirds of Internet users actually filled in forms online. Digital Public Services are thus one of the strong points of Finland's digital landscape. This reflects partly the high priority which has been given to eGovernment by successive governments. According to the eGovernment Benchmarking report 2015, Finland is also amongst the leading EU countries in the transparency of public organisations⁶.

Indeed, digitisation is high on the agenda of the government appointed in May 2015. In the Programme of the Government⁷, the goal for the next ten years is that Finland will make a productivity leap in public services and the private sector by grasping the opportunities offered by digitisation, dismantling unnecessary regulation and cutting red tape. According to the Programme, public services are to be primarily digital. As a part of the implementation of the programme, the Prime Minister and the Minister of Local Government and Public Reforms issued an open letter requesting proposals on how to contribute to digitisation. By early August 2015 over 260 proposals from public administration, businesses, NGOs and citizens were submitted as a response to the letter. Some of the proposals will receive funding. Moreover, the Public Sector ICT Department has launched a process for renewing legislation to meet the demands required⁸.

With the help of new operating practices, public services will thus become user-oriented and primarily digital. In order to achieve this, a one-stop-shop service model will be developed and the information management legislation reformed. Finally, to make e-government services more widely available, the government is also building a National Digital Services Infrastructure, which will facilitate the introduction of a national common digital identification solution⁹.

The policy focus placed by the government on digital public services combined with the widespread availability of network access and the high level of skills in the population make Finland an ideal case for proving the benefits of digitisation for public services. Finland's experiences will be of great interest to the other Member States.

⁶ Cappemini et al. for the European Commission, *Future-proofing eGovernment for the Digital Single Market*, eGovernment Benchmarking report, 2015 [available at: <https://ec.europa.eu/digital-single-market/news/eu-egovernment-report-2015-shows-online-public-services-europe-are-smart-could-be-smarter>]

⁷ Available at: <http://valtioneuvosto.fi/en/sipila/government-programme>

⁸ European Commission, National Interoperability Framework Observatory, eGovernment Factsheets 2015 (published in 2016), Finland [https://joinup.ec.europa.eu/community/nifo/og_page/egovernment-factsheets]

⁹ European Commission, Staff Working Document SWD(2015) 45, Country Report Finland 2015.

Highlight: ePrescriptions without borders¹⁰

ePrescriptions now make up over 90% of all prescription services in public and private health care in Finland as well as in Sweden. Joining the Finnish ePrescription Centre is mandatory and, from 2017, ePrescriptions will be the only option available for dispensing medication. A pilot project in the Tornio valley established a functioning cross-border ePrescription service between Finland and Sweden. The pilot project implemented cross-border ePrescription services in four pharmacies in Sweden and three in Finland. The challenges encountered in the project were primarily legal and organisational in nature, though these were overcome by implementing specific amendments to the existing ePrescription laws in both countries

¹⁰ FROM INNOVATION TO IMPLEMENTATION, eHealth in the WHO European Region (World Health Organization) http://www.euro.who.int/__data/assets/pdf_file/0012/302331/From-Innovation-to-Implementation-eHealth-Report-EU.pdf?ua=1