Digital Economy and Society Index (DESI) 2020

Ireland

About the DESI

The European Commission has been monitoring Member States' digital progress through the Digital Economy and Society Index (DESI) reports since 2014. The DESI reports include both country profiles and thematic chapters. In addition, an in-depth telecoms chapter is annexed to the reports for each Member State.

The DESI country reports combine quantitative evidence from the DESI indicators across the five dimensions of the index with country-specific policy insights and best practices.

The current COVID-19 pandemic has shown how important digital assets have become to our economies and how networks and connectivity, data, AI and supercomputing as well as basic and advanced digital skills sustain our economies and societies by allowing work to continue, tracking the spread of the virus and accelerating the search for medications and vaccines.

Member States have put in place specific measures to mitigate the impact of the pandemic. A dedicated section in each country details them. Digital will also play a key role in the economic recovery as the European Council and the Commission have undertaken to frame the support to the recovery along the twin transition to a climate neutral and resilient digital transformation. In this framework, the deployment of 5G and very high capacity networks (VHCNs), digital skills, the digitisation of companies and the public administration are crucial for a robust recovery. The DESI monitors their progress in each Member State.

As regards the thematic chapters, the DESI 2020 report includes a European-level analysis of broadband connectivity, digital skills, use of the internet, digitisation of businesses, digital public services, emerging technologies, cyber security, the ICT sector and its R&D spending and Member States' use of Horizon 2020 funds.
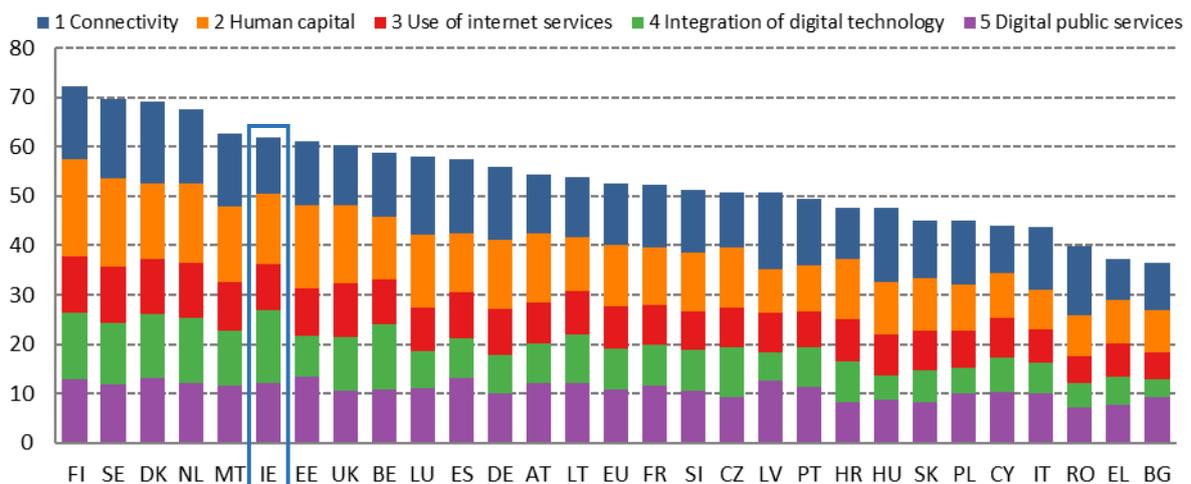
To improve the methodology of the index and take account of the latest technological developments, a number of changes were made to the 2020 edition of DESI, which now includes Fixed very high capacity network (VHCN) coverage. The DESI was re-calculated for all countries for previous years to reflect the changes in the choice of indicators and corrections made to the underlying data. Country scores and rankings may thus have changed compared with previous publications. As the figures refer to 2019, the United Kingdom is still included in the 2020 DESI, and EU averages are calculated for 28 Member States. For further information, please consult the DESI website: https://ec.europa.eu/digital-single-market/en/desi*.*

It is noted that statements regarding planned or potential State aid measures record intentions declared by Member States and do not pre-judge or pre-empt the assessment of such measures by the Commission under the relevant state aid rules. The DESI report is not meant to provide any assessment of the compliance of such measures with state aid rules and procedures.

Overview

	Ireland		EU
	rank	score	score
DESI 2020	**6**	**61.8**	**52.6**
DESI 2019	6	58.0	49.4
DESI 2018	8	53.1	46.5

Digital Economy and Society Index (DESI) 2020 ranking

■ 1 Connectivity ■ 2 Human capital ■ 3 Use of internet services ■ 4 Integration of digital technology ■ 5 Digital public services

Ireland ranks 6th out of 28 EU Member States in the Digital Economy and Society Index (DESI) 2020. Over the last five years, Ireland was the fastest growing Member State in the EU.

Based on data prior to the pandemic, Ireland continues to rank first in the Integration of digital technology dimension, and has maintained a leading position in the use of e-Commerce by SMEs. It entered the 'top 10' on the Use of internet by individuals and recorded a notable increase in the share of internet users. It maintained its top 10 position in digital public services, where it excels in open data and the provision of digital public services for businesses. There was no substantial change in Ireland`s position in the Human capital and Connectivity dimensions despite some improvement in key indicators where it has been lagging behind, such as the digital skills of the wider population.

Digital transformation continues to be one of the core economic policy issues in Ireland. This is reflected in the various policy initiatives in 2019. Following the general election in February 2020, it remains to be seen how the new government, once formed, will address digital transformation.

The Irish government set out its vision for the economy in *Future Jobs Ireland 2019*[(1)], which was intended to be the first in a series of annual reports. The document provides a pathway to make sure that Ireland suceeds in the global economy. Digitisation is addressed under the major pillars of the framework, among other things promoting innovation and embracing technology, increasing the productivity of small and medium-sized enterprises (SMEs) and strengthening and transforming the skills base. As for specific digital strategies, the Irish Industry 4.0 strategy[(2)] was launched in December 2019 and set out the key ambitions for helping the manufacturing sector embrace digital technologies. The development of both an updated national digital strategy and a new artificial intelligence strategy

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[(1)] https://dbei.gov.ie/en/Publications/Future-Jobs-Ireland-2019.html
[(2)] https://dbei.gov.ie/en/Publications/Irelands-Industry-4-Strategy-2020-2025.html

are at an advanced stage. In addition, work is underway amongst local authorities to develop local digital strategies for municipal regions. These overall strategies are complemented and followed up with specific measures and actions, for example the €300 million Human Capital Initiative to increase the supply of high-level ICT skills or €100 million for innovative technological investments under the Disruptive Technologies Fund. Ireland also made progress in critical public infrastructure investments under the National Broadband Plan: in November 2019, the government signed a contract to implement a public investment in future-proof broadband networks in rural Ireland, with an indicative budget of €2.6 billion.

DESI 2020 - relative performance by dimension

DESI - evolution over time
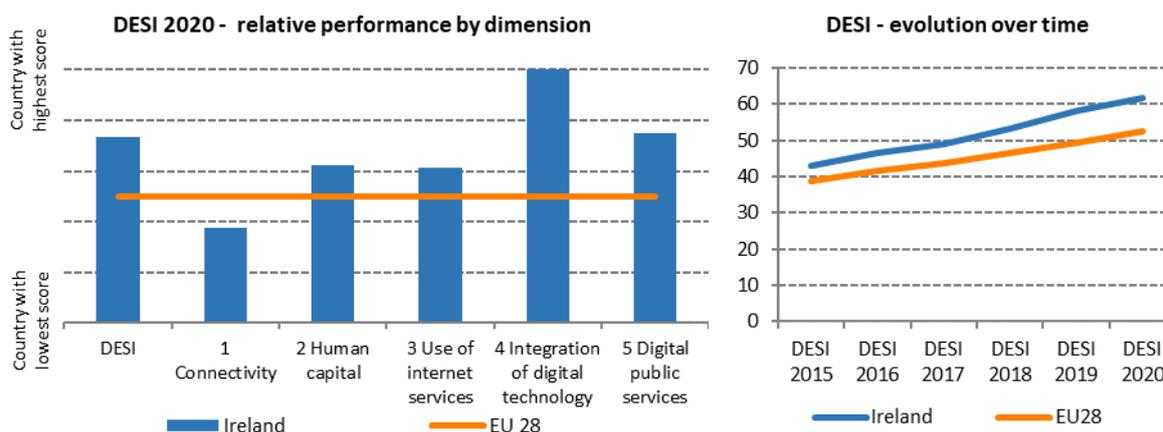
The role of digital to manage the coronavirus pandemic and to support the economic recovery
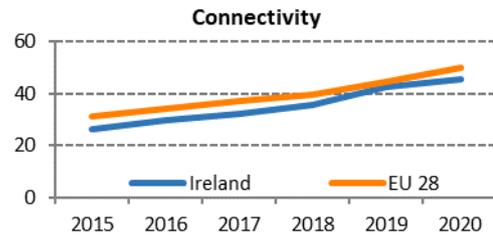
The current COVID-19 crisis is having an important impact on key societal indicators, relating to the use of internet services by citizens. This does not show in the latest 2019 official statistics as reported in DESI. Consequently, the DESI 2020 findings need to be read in conjunction with the strained demand that has been put on digital infrastructure and services during the pandemic and the immediate actions taken by the Member States. Similarly, as Europe progressively exits from the pandemic, the recovery must be planned taking into account the lessons learnt from this crisis. This means a particular attention to the indicators relevant for a stronger and more resilient digital transformation and economic recovery, notably very high capacity networks (VHCNs) and 5G, digital skills, advanced digital technologies for businesses and digital public services.

Ireland has taken a large number of targeted measures in digital to deal with the COVID-19 crisis. A joint rapid-response call was launched to fund research, development, and innovation activities to find solutions to the COVID-19 emergency, a contact tracing call-centre was set up and a contract tracing app is being developed. Besides general financial help to enterprises and startups, additional funding has been made available for two targeted existing schemes to help companies trade online. Efforts have been made to help move tertiary (including further) education online. The capacity of online service 'eCollege' has significantly been increased to make available free online courses in computer programming, data science etc. Additional rights of use for radio spectrum have been released on a temporary basis in order to help mobile network operators accommodate the increased demand on their services.

Looking forward, as regards the DESI indicators that are especially relevant for the economic recovery after the COVID-19 crisis, Ireland is below the EU average in connectivity, lagging particularly behind in the deployment of Very High Capacity Networks (VHCN). It scores very high in the digitisation of businesses. On human capital, despite doing well in high level digital skills, the overall digital skill level of the wider population is still below the EU average.

1 Connectivity

1 Connectivity	Ireland		EU
	rank	score	score
DESI 2020	**23**	**45.7**	**50.1**
DESI 2019	22	42.5	44.7
DESI 2018	23	35.9	39.9

Connectivity

	Ireland			EU
	DESI 2018 value	**DESI 2019** value	**DESI 2020** value	**DESI 2020** value
1a1 Overall fixed broadband take-up % households	**74%** 2017	**73%** 2018	**76%** 2019	**78%** 2019
1a2 At least 100 Mbps fixed broadband take-up % households	**18%** 2017	**20%** 2018	**25%** 2019	**26%** 2019
1b1 Fast broadband (NGA) coverage % households	**93%** 2017	**96%** 2018	**96%** 2019	**86%** 2019
1b2 Fixed Very High Capacity Network (VHCN) coverage % households	**8%** 2017	**13%** 2018	**21%** 2019	**44%** 2019
1c1 4G coverage % households (average of operators)	**92%** 2017	**96%** 2018	**99%** 2019	**96%** 2019
1c2 Mobile broadband take-up Subscriptions per 100 people	**101** 2017	**101** 2018	**103** 2019	**100** 2019
1c3 5G readiness Assigned spectrum as a % of total harmonised 5G spectrum	**NA**	**30%** 2019	**30%** 2020	**21%** 2020
1d1 Broadband price index Score (0 to 100)	**NA**	**NA**	**45** 2019	**64** 2019

Ireland scores 45.7 in connectivity, falling from 22nd to 23rd position in the ranking. Its best performance comes in fast broadband (NGA) coverage, where Ireland ranks 6th with 96%, compared to 86% the EU average. Fixed very high capacity network (VHCN) coverage has jumped from 13% in 2019 to 21% in 2020, but still lags behind the EU average of 44%. On the other hand, it slightly lags the EU average in overall fixed broadband take up (76%, compared to 78% the EU average) and in 100Mbps fixed broadband take up (25%, compared to 26% the EU average). In addition, Ireland is one of the EU's most expensive countries in terms of broadband (ranking 27th, with a broadband price index of 45, compared to the EU average of 64).

The implementation of the publicly funded scheme under the National Broadband Plan has started. Following approval by the European Commission under State aid rules (Commission Decision in Case SA.54472 (2019/N) – Ireland, National Broadband Plan), the Irish government signed a contract on 19 November 2019 with National Broadband Ireland following a competitive tendering process. This state intervention targets rural areas where there is no existing or planned commercial network that can reliably deliver at least 30 Mbps download speeds to all premises. With an indicative budget of €2.6 billion, it aims to deliver ultrafast coverage to around 540,000 premises in rural Ireland using mainly fibre. The NBP will see approximately 300 community facilities receive access to free, high speed broadband. The contract involves building, operating and maintaining a subsidised network over a 25-year term as a wholesale provider, offering passive and active wholesale products to all retail and wholesale service providers willing to provide services in the state intervention area during this period.

The scheme complements investment made by commercial operators, who have invested over €2.75 billion in upgrading and modernising their networks over the past 5 years, with further investment planned. Market players, including eir, SIRO and Virgin Media, invest heavily in very high capacity networks. The award of the contract for the National Broadband Plan in November 2019 introduces another player, National Broadband Ireland.

Ireland has been making progress in the deployment of 5G networks and services and has already awarded 5G spectrum in the 3.4-3.8 GHz band. As a result, it scored 30% in the 5G readiness indicator ([3]). Market players are eager to invest in 5G, and two mobile operators have already announced the launch of 5G services in selected sites. In parallel, Ireland is moving forward with the award of the 700 MHz band (as part of the Multiband Spectrum Award), according to the published timetable. The award process is planned to begin in Q4 2020. Access to sites and public land (and the relevant costs) remains an important challenge for the deployment of 5G networks. At the same time, there are increasing concerns about the potential impact of campaigns against the use of spectrum (especially 5G) that have induced several county councils to pass resolutions against the installation of new antenna systems.

One of the success stories in the Irish has been the establishment of the Mobile Phone and Broadband Taskforce. The Taskforce has worked to address specific issues affecting upon the delivery of mobile phone and broadband services, through committed engagement with a wide range of stakeholders.([4]) Under the Taskforce, a Broadband Officer has been appointed in every local authority around the country. Their role is to act as local contact points for operators and the public on telecoms issues. The industry recognises that they have helped resolve numerous issues. They are also expected to play a key role in developing local digital strategies as the National Broadband Plan is rolled out.
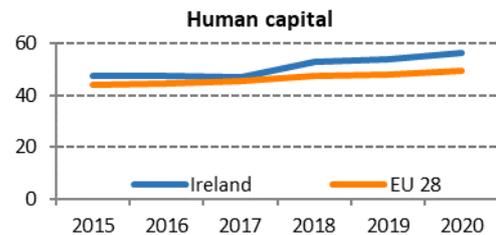
The award of the contract for implementing the National Broadband Plan is a major development for Ireland. It can help bridge the geographical divide and expand the footprint of ultrafast broadband networks in rural Ireland, helping achieve the gigabit society targets for 2025. Its successful implementation will benefit from the effective monitoring and enforcement of the relevant rules in the Irish electronic communications market. Equally important is the timely award of 5G spectrum.

([3]) The 5G spectrum readiness indicator is based on the amount of spectrum already assigned and available for 5G use by 2020 within the 5G pioneer bands in each EU Member State. For the 3.4-3.8 GHz band, this means that only licences aligned with the technical conditions in the Annex to Commission Decision (EU)2019/235, are considered 5G-ready. For the 26 GHz band, only assignments aligned with the technical conditions in the Annex to Commission Implementing Decision (EU) 2019/784 are taken into account. By contrast, the percentage of harmonised spectrum takes into account all assignments in all harmonised bands for electronic communications services (including 5G pioneer bands), even if this does not meet the conditions of the 5G readiness indicator.
([4]) Taskforce Report, 2016, https://www.dccae.gov.ie/documents/Taskforce%20Report.pdf

2 Human capital

2 Human capital	Ireland		EU
	rank	score	score
DESI 2020	**11**	**56.4**	**49.3**
DESI 2019	11	54.2	47.9
DESI 2018	11	53.0	47.6

		Ireland		EU
	DESI 2018 value	**DESI 2019** value	**DESI 2020** value	**DESI 2020** value
2a1 At least basic digital skills % individuals	**48%** 2017	**48%** 2017	**53%** 2019	**58%** 2019
2a2 Above basic digital skills % individuals	**28%** 2017	**28%** 2017	**34%** 2019	**33%** 2019
2a3 At least basic software skills % individuals	**49%** 2017	**49%** 2017	**55%** 2019	**61%** 2019
2b1 ICT specialists % total employment	**4.3%** 2016	**4.4%** 2017	**4.3%** 2018	**3.9%** 2018
2b2 Female ICT specialists % female employment	**1.9%** 2016	**2.0%** 2017	**1.8%** 2018	**1.4%** 2018
2b3 ICT graduates % graduates	**7.0%** 2015	**7.2%** 2016	**7.3%** 2017	**3.6%** 2017

Ireland ranks 11th in the Human capital dimension, the same as last year. It scores above the EU average thanks to its relatively high ranking in the indicators on high-level ICT skills and female ICT specialists. It has the second largest proportion (7%) of ICT graduates among all graduates. While the proportion of ICT specialists in the overall workforce (4.3%) is above the EU average (3.9%), more than half of the firms that tried to recruit such specialists continue to experience difficulties. The proportion of people with above basic digital skills is slightly above the EU average. While still below the EU average, there was an improvement in the indicators that measure the basic digital skills of the general population. Over the past 2 years, the proportion of people with at least basic digital skills increased from 48% to 53%. The growth rate is higher than the EU average over the same period (1 percentage point), which explains the improvement in the corresponding ranking (18th compared to 23rd last year).

Ireland continued its efforts to address the shortages in high-level ICT skills. In November 2018, the government launched the €300 million Human Capital Initiative under the Skills and Talent pillar of the *Future Jobs Ireland* framework. Universities can use this special fund (€60 million per year over 5 years) to adapt to the needs of the knowledge-based economy. High-level ICT skills feature prominently among the fund's main objectives. For example, the money can be spent by universities to encourage graduates to reskill in areas with skill shortages and in emerging technologies, e.g. ICT, high-end manufacturing, data analytics, robotics or AI. This would complement Ireland's flagship reskilling programme, Springboard+, which also has a substantial focus on high-level ICT skills. The initiative will also respond to the targets outlined in the National Skills Strategy[5] and Technology Skills 2022 action plan[6]. In addition to efforts to increase the supply of 'home-grown' ICT specialists through this and other initiatives, migrant ICT talent continues to play an important role in plugging gaps in the

[5] https://www.education.ie/en/Publications/Policy-Reports/pub_national_skills_strategy_2025.pdf
[6] https://www.education.ie/en/Publications/Policy-Reports/technology-skills-2022.pdf

supply of such skills (the proportion of non-Irish workers in ICT is well above the national average of 16%).

As for the general digital skills of the overall population, the Future Jobs Ireland 2019 framework set the target for Ireland to catch up with the EU by 2025. In practice, this would mean that the proportion of people with at least basic digital skills would be equal to or higher than the EU average. Further education and training will pay a key role in this: *Future Jobs Ireland 2019* targets the doubling of participation in lifelong learning by 2025. Ireland has not so far published a detailed plan on how to achieve the specific digital skills objective, and no new major policy initiatives have been launched in the past year. When looking at the number of beneficiaries of various further education and training initiatives in 2019, digital skills have not been too prominent. When it comes to transversal core digital skills[6] only 9,293 people received training in this out of a total of 177,221[7][8]. As in the previous year, €2.2 million was also allocated to third party organisations under the Digital Skills for Citizens Grant Scheme to provide free basic digital literacy training. Finally, digital skills gaps of the workforce continue to be addressed through the skills infrastructure which includes the National Skills Council, the Regional Skills Fora, the Expert Group on Future Skills Needs and the Skills and Labour Market Research Unit, who have identified programmes such as *Explore* and *Skills to Advance* as being crucial to support low skilled employees upskill and reskill.

Ireland continues to address high-level ICT skill shortages through dedicated schemes supported by funding for universities. At the same time, it recognises the need to improve the general digital skills of the wider population, especially the workforce.

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[7] https://www.solas.ie/f/70398/x/f94d9b8147/15083_solas_fet_services_plan_2019_data_sheet_web.PDF
[8] As regards specific labour market skills, the ICT sector accounted for only 8042 of the 152 072 beneficiaries.

3 Use of internet services

3 Use of internet services	Ireland		EU
	rank	score	score
DESI 2020	**8**	**62.1**	**58.0**
DESI 2019	12	55.4	55.0
DESI 2018	14	50.0	51.8

Use of internet services
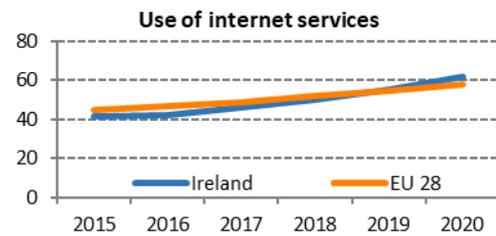
	Ireland			EU
	DESI 2018 value	DESI 2019 value	DESI 2020 value	DESI 2020 value
3a1 People who have never used the internet % individuals	**16%** 2017	**16%** 2018	**9%** 2019	**9%** 2019
3a2 Internet users % individuals	**79%** 2017	**80%** 2018	**88%** 2019	**85%** 2019
3b1 News % internet users	**65%** 2017	**65%** 2017	**74%** 2019	**72%** 2019
3b2 Music, videos and games % internet users	**73%** 2016	**80%** 2018	**80%** 2018	**81%** 2018
3b3 Video on demand % internet users	**24%** 2016	**48%** 2018	**48%** 2018	**31%** 2018
3b4 Video calls % internet users	**48%** 2017	**46%** 2018	**50%** 2019	**60%** 2019
3b5 Social networks % internet users	**72%** 2017	**73%** 2018	**70%** 2019	**65%** 2019
3b6 Doing an online course % internet users	**5%** 2017	**5%** 2017	**14%** 2019	**11%** 2019
3c1 Banking % internet users	**71%** 2017	**70%** 2018	**75%** 2019	**66%** 2019
3c2 Shopping % internet users	**64%** 2017	**70%** 2018	**73%** 2019	**71%** 2019
3c3 Selling online % internet users	**22%** 2017	**29%** 2018	**21%** 2019	**23%** 2019

Ireland ranks 8th in the Use of Internet services dimension, up four places from last year with an overall score comfortably above the EU average. The number of internet users increased significantly (from 80% to 88%) and exceeds the EU average. As in other EU countries, Irish internet users engage in a variety of activities online. The most popular online activities are entertainment (music, videos, games), followed by the news, banking and social networks. Online courses are also becoming more and more popular: 14% of internet users did an online course in 2019 compared to only 5% 2 years ago. This is above the EU average (11%).

4 Integration of digital technology

4 Integration of digital technology	Ireland		EU
	rank	score	score
DESI 2020	**1**	**74.3**	**41.4**
DESI 2019	1	69.1	39.8
DESI 2018	1	63.4	37.8

Integration of digital technology
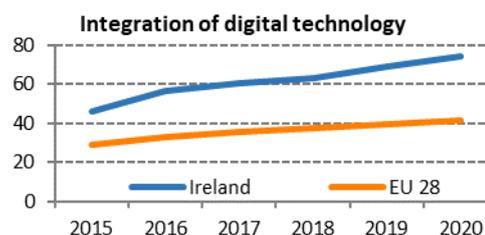
	Ireland			EU
	DESI 2018 value	DESI 2019 value	DESI 2020 value	DESI 2020 value
4a1 Electronic information sharing	**28%**	**28%**	**28%**	**34%**
% enterprises	2017	2017	2019	2019
4a2 Social media	**36%**	**36%**	**44%**	**25%**
% enterprises	2017	2017	2019	2019
4a3 Big data	**NA**	**20%**	**20%**	**12%**
% enterprises	2016	2018	2018	2018
4a4 Cloud	**NA**	**33%**	**33%**	**18%**
% enterprises	2017	2018	2018	2018
4b1 SMEs selling online	**30%**	**30%**	**35%**	**18%**
% SMEs	2017	2018	2019	2019
4b2 e-Commerce turnover	**23%**	**26%**	**29%**	**11%**
% SME turnover	2017	2018	2019	2019
4b3 Selling online cross-border	**17%**	**17%**	**18%**	**8%**
% SMEs	2017	2017	2019	2019

Ireland maintained its top position in the Integration of digital technology dimension. SMEs in Ireland continue to excel in e-commerce: 35% of them sell online and 18% sell to other EU countries, well above the EU averages of 18% and 8% respectively. 29% of their total turnover comes from online sales, almost three times the EU average of 11%. Irish companies also rank relatively high on the use of big data (20%), cloud services (33%) and social media (44%).

In its March 2019 report, the European Investment Bank said there was scope to improve financing for SMEs looking to adopt digital technologies and/or to develop and supply digital products and technologies. It has subsequently been concluded that existing financing channels were currently sufficient, but there was scope for making better use of them. The government therefore intends to help SMEs make better use of existing financing channels such as the EU COSME pilot scheme launched in October 2019.

While recognising various government initiatives to support the digitisation of businesses[9] in Ireland, the European Investment Bank also noted the lack of overall policy coordination and strategies. The Irish Industry 4.0 strategy was launched in December 2019 (see 'Highlight 2020' below) and work is at an advanced stage to adopt a new national digital strategy and an artificial intelligence strategy.

Ireland's ambition to stay at the forefront of technological developments was also reiterated in the *Future Jobs Ireland* framework. €100 million has since been made available to support innovative and transformative technology investments under the Disruptive Technologies Fund. The fund is a key policy initiative to achieve this goal, and one of its priority areas is ICT. Only projects that involve

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[9] For example, the long-running Trading Online Voucher Scheme to help SMEs trade online.

collaboration between businesses, SMEs and researchers are eligible for funding. This is consistent with Ireland's other initiatives to forge a close relationship between companies and research institutes and to help SMEs profit from such relationships. Technology Centre and Technology Gateway programmes and Knowledge Transfer Ireland[10] continue to drive this forward. Furthermore, the European Commission selected CeADAR, Ireland's national centre for applied data analytics and AI, as one of 30 digital innovation hubs to create a network for cross-border cooperation on AI. Helping SMEs benefit from the use of AI is a key aim of this initiative.

The digitisation of SMEs and the development of a vibrant local tech sector continues to be a priority for Ireland. The government recognises the critical role of targeted public funding as well as the need to exploit the considerable synergies between innovation-friendly policies that support both the business sector and the research and education sector.


Highlight 2020: Industry 4.0 strategy

In December 2019, Ireland adopted a comprehensive five-year strategy to support the digital transformation of the manufacturing sector and its supply chain. Besides outlining an overall vision for such a transformation, the strategy also outlines actions to help companies implement complex digital technologies in their manufacturing processes. These include help with technological know-how, including access to 'demonstrators' to allow firms to experiment with individual Industry 4.0 technologies, as well as help with funding. The strategy also outlines actions to ensure that companies have the necessary skills base to adopt digital technologies. In addition, the strategy focuses on maximising the benefits from EU initiatives to help digitise industry.

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[10] See the Ireland DESI country profile 2019, available at https://ec.europa.eu/digital-single-market/en/scoreboard/ireland

5 Digital public services

5 Digital public services	Ireland		EU
	rank	score	score
DESI 2020	**9**	**80.6**	**72.0**
DESI 2019	8	78.1	67.0
DESI 2018	11	71.2	61.8

Digital public services
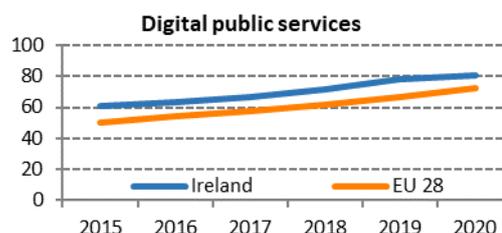
	Ireland			EU
	DESI 2018 value	**DESI 2019** value	**DESI 2020** value	**DESI 2020** value
5a1 e-Government users	**77%**	**72%**	**76%**	**67%**
% internet users needing to submit forms	2017	2018	2019	2019
5a2 Pre-filled forms	**39**	**67**	**57**	**59**
Score (0 to 100)	2017	2018	2019	2019
5a3 Online service completion	**89**	**88**	**88**	**90**
Score (0 to 100)	2017	2018	2019	2019
5a4 Digital public services for businesses	**99**	**99**	**99**	**88**
Score (0 to 100) - including domestic and cross-border	2017	2018	2019	2019
5a5 Open data	**NA**	**NA**	**91%**	**66%**
% of maximum score			2019	2019

Ireland ranks 9th among EU countries in digital public services, dropping one place since last year, but still well above the EU average. It continues to score very high in open data and kept its almost perfect score for digital public services for businesses. 76% of internet users who had to submit forms to public services did this online, which is above the EU average of 67%. This shows a healthy demand for digital public services. However, Ireland's performance in indicators measuring the quality of services for the public (pre-filled forms, online service completion) is average.

The implementation of mid-term strategies continued over the past year. An important step in achieving the goals of these strategies was the adoption of the Data Sharing and Governance Act 2019 in March 2019. It aims to provide the legal basis for public bodies to share data while also setting out appropriate safeguards (in compliance with the General Data Protection Regulation). Effective data sharing is particularly important to make sure that users do not have to provide the same information over and over again for different purposes. This Act and the associated Data Strategy will therefore make it easier to make services more user-friendly and should help improve Ireland's score in the relevant indicators (e.g. on pre-filled forms). Moreover, the planned MyData portal will ensure that the data Government holds and how it is used will be made totally transparent to the citizen.

Progress has also been made on the Digital Services Gateway (gov.ie), a future one-stop shop for all digital public services: over half of the government departments have fully migrated to the platform, with the remaining migrations scheduled for 2020 completion. Customer research and web-site analytics are showing that this approach is working; with more people visiting the portal, staying on its pages for longer, and finding the overall process easier and more satisfying. A new initiative announced in May 2019 aims to create a digital post box service so individuals can receive government letters digitally in a secure electronic mailbox. This would also result in significant cost savings. Making services more user-friendly is also behind the consultation launched by the Office of the Government Chief Information Officer (OGCIO) to identify individuals' difficulties when trying to interact digitally with public bodies. OGCIO have also developed a partnership with Trinity Business School in which

120 postgraduate Digital Marketing Strategy students navigate "life events" online and provide constructive criticism to the client departments.

Ireland recognises the need to make its digital public services more user-friendly and is making progress on this. This may improve its average scores in the indicators over time, which measure the experience of not only businesses but also the public.