

Digital Economy and Society Index¹ 2016²

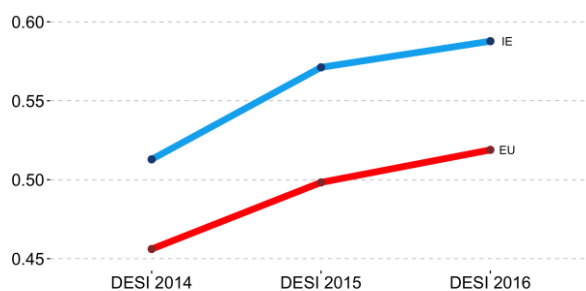
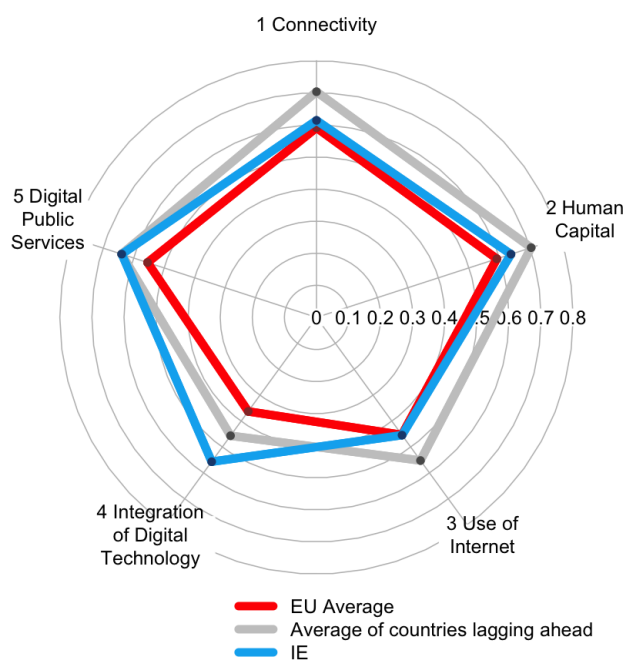
Country Profile

Ireland

Ireland has an overall score³ of **0.59** and ranks 8th in the EU. During the past year, NGA coverage (80%, +9 pp.) and take-up of fast broadband (51%, +6 pp.) has increased considerably, while use of internet services has also increased (48% News, 66% use of social networking, 63% used online shopping and 64% use online banking, while 56% of internet users use eGovernment actively). More progress is needed on increasing digital skills (only 44% of the population have sufficient digital skills to operate effectively online, compared to 55% of the EU average) and the number of skilled ICT professionals in the economy (around half of enterprises trying to employ ICT specialists report difficulties doing so), as well as in the integration of some digital technologies by enterprises (for example, 23% of businesses use electronic information sharing technologies and 4% use RFID).

Ireland performs better than the EU average but it has improved at a slower rate than the EU as a whole, which places it in the **lagging ahead**⁴ cluster of countries.

	Ireland rank	Ireland score	Cluster score	EU score	EU score
DESI 2016	8	0.59	0.62	0.52	0.52
DESI 2015	7	0.57	0.6	0.6	0.5



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. For more information about the DESI please refer to <http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard>

² The DESI 2016 is constructed from indicators referring mostly to the calendar year 2015 (except when data is not available for that calendar year, in which case the latest prior data was used).

³ DESI scores range from 0 to 1, the higher the score the better the country performance.

⁴ In the DESI 2016, Ireland is part of the lagging ahead cluster of countries: countries who score above the EU average but whose score grew slower than that of the EU as a whole (in comparison to the DESI 2015). Other lagging ahead countries are BE DK EE FI LT LU SE UK.

1 Connectivity

1 Connectivity	Ireland		Cluster	EU
	rank	score	score	score
DESI 2016	13	0.61	0.7	0.59
DESI 2015	16	0.57	0.7	0.57

With an overall score of 0.61, Ireland has significantly increased its performance in the Connectivity dimension of the DESI 2016 over that of last year and now ranks 13th among EU countries compared to 16th in 2015. This is above the average for the EU but below that for its cluster.

	Ireland				EU DESI 2016 value	
	DESI 2016 value		rank	DESI 2015 value		rank
1a1 Fixed BB Coverage % households	96% (June 2015)	→	19	96% (December 2014)	19	97% (June 2015)
1a2 Fixed BB Take-up % households	65% (2015)	↑	20	62% (2014)	20	72% (2015)
1b1 Mobile BB Take-up Subscribers per 100 people	87 (June 2015)	↑	6	82 (December 2014)	7	75 (June 2015)
1b2 Spectrum % of the target for spectrum to be harmonised at EU level	74% (December 2015)	↓	10	77% (December 2014)	10	69% (December 2015)
1c1 NGA Coverage % households, out of all households	80% (June 2015)	↑	14	71% (December 2014)	19	71% (June 2015)
1c2 Subscriptions to Fast BB % of subscriptions >= 30Mbps, out of fixed BB subscriptions	51% (June 2015)	↑	9	45% (December 2014)	10	30% (June 2015)
1d1 Fixed BB Price % individual gross income spent for the cheapest standalone Fixed Broadband subscription (lower values are better)	2.2% (Access cost: 2015; Income: 2014)	→	23	2.2% (Access cost: 2014; Income: 2014)	23	1.3% (Access cost: 2015; Income: 2014)

While 96% of the Irish households are covered by fixed broadband this is somewhat below the EU average. Furthermore, take-up is only at 65% of households; as such, Ireland ranks 20th in the EU on both these indicators.

Take-up of mobile broadband at 87 out every 100 people is above the EU average. Spectrum harmonisation is also above average for the EU.

NGA coverage in Ireland increase substantially over the last year to 80% of households, from 71% in 2014. This is above the average for the EU (71%). Subscriptions to fast broadband

(at least 30 Mbps) have again seen a significant increase over the last year to 51% of total fixed broadband subscriptions, from 45% in 2014. Prices for fixed broadband in Ireland are however almost double the EU average, when measured as a proportion of income, and remain unchanged since last year.

2 Human Capital

2 Human Capital	Ireland		Cluster	EU
	rank	score	score	score
DESI 2016	10	0.64	0.7	0.59
DESI 2015	8	0.68	0.67	0.58

With a Human Capital score of 0.64, Ireland ranks 10th among EU countries for this domain of the DESI, performing slightly better than the average for the EU (0.59), but below the cluster average (0.7).

	Ireland				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
2a1 Internet Users % individuals (aged 16-74)	78% (2015)	↑ 12	76% (2014)	13	76% (2015)
2a2 Basic Digital Skills % individuals (aged 16-74)	44% (2015)	- 22	n.a.	-	55% (2015)
2b1 ICT Specialists % employed individuals	4.6% (2014)	→ 9	4.6% (2013)	8	3.7% (2014)
2b2 STEM Graduates Graduates in STEM per 1000 individuals (aged 20 to 29)	22 (2013)	→ 5	22 (2012)	3	n.a.

At 78%, Ireland exhibits a rate of internet use amongst its population that is somewhat above the EU average. The digital skills of the population exhibit significant gaps, with only 44% of the population having sufficient digital skills to operate effectively online, placing it 22nd out of 28 countries for this indicator. The EU average is 55%.

While the proportion of ICT specialist in total employment, at 4.6%, is relatively high and the proportion of STEM (Science, Technology, Engineering and Mathematics) graduates is also above the average for the EU, Ireland is lacking skilled ICT professionals. Demand for skilled ICT professionals within the economy has been rising, while the supply is not keeping pace. Around half of enterprises trying to employ ICT specialist report difficulties doing so. More young people need to be attracted to ICT jobs, which provide good career opportunities, are well paid and which are key skills for deriving the benefits of ICT for the economy and society.

3 Use of Internet

3 Use of Internet	Ireland		Cluster	EU
	rank	score	score	score
DESI 2016	14	0.45	0.55	0.45
DESI 2015	15	0.44	0.54	0.43

In terms of the propensity of individuals to use Internet services, Ireland scores 0.45 (up from 0.44 last year) and ranks 14th among EU countries. In particular, use of news, social networking and banking services has increased.

	Ireland				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
3a1 News % individuals who used Internet in the last 3 months (aged 16-74)	48% (2015) ↑	28	46% (2014)	28	68% (2015)
3a2 Music, Videos and Games % individuals who used Internet in the last 3 months (aged 16-74)	43% (2014) →	23	43% (2014)	23	49% (2014)
3a3 Video on Demand % households that have a TV	68% (2014) →	5	68% (2014)	5	41% (2014)
3b1 Video Calls % individuals who used Internet in the last 3 months (aged 16-74)	36% (2015) →	21	36% (2014)	21	37% (2015)
3b2 Social Networks % individuals who used Internet in the last 3 months (aged 16-74)	66% (2015) ↑	15	63% (2014)	15	63% (2015)
3c1 Banking % individuals who used Internet in the last 3 months (aged 16-74)	64% (2015) ↑	11	60% (2014)	13	57% (2015)
3c2 Shopping % individuals who used Internet in the last year (aged 16-74)	63% (2015) ↑	13	62% (2014)	12	65% (2015)

The most popular online activities amongst Irish internet users are VoD (Video on Demand, 68%), Social Networking (66%), online shopping (63%) and online Banking (64%); and the use of these services by internet users continues to increase. However, the use of other online services, such as news, is also on the rise.

4 Integration of Digital Technology

4 Integration of Digital Technology	Ireland		Cluster	EU
	rank	score	score	score
DESI 2016	1	0.56	0.46	0.36
DESI 2015	3	0.47	0.42	0.33

In Integration of Digital Technology by businesses, Ireland scores 0.56, increasing its score on this DESI dimension from 0.47 from last year and increasing its rank to first among all EU countries. Nevertheless, businesses in Ireland could better exploit the possibilities offered by electronic information sharing and RFID.

	Ireland				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
4a1 Electronic Information Sharing % enterprises (no financial sector, 10+ employees)	25% (2015)	↑ 21	23% (2014)	22	36% (2015)
4a2 RFID % enterprises (no financial sector, 10+ employees)	4% (2014)	→ 13	4% (2014)	13	3.8% (2014)
4a3 Social Media % enterprises (no financial sector, 10+ employees)	35% (2015)	↑ 2	31% (2014)	2	18% (2015)
4a4 eInvoices % enterprises (no financial sector, 10+ employees)	n.a.	- -	14% (2014)	5	n.a.
4a5 Cloud % enterprises (no financial sector, 10+ employees)	21% (2015)	↑ 5	16% (2014)	7	n.a.
4b1 SMEs Selling Online % SMEs (no financial sector, 10+ employees)	32% (2015)	↑ 1	26% (2014)	1	16% (2015)
4b2 eCommerce Turnover % turnover of SMEs (no financial sector, 10-249 employees)	19% (2015)	↑ 1	17% (2014)	2	9.4% (2015)
4b3 Selling Online Cross-border % SMEs (no financial sector, 10+ employees)	16% (2015)	↑ 1	11% (2013)	6	7.5% (2015)

A true digital economy is one where businesses take full advantage of the possibilities and benefits offered by digital technologies; both to improve their efficiency and productivity, as well as to reach customers and realise sales. While businesses in Ireland perform above average in some areas they are not fully taking advantage of these possibilities.

The adoption of digital technologies is an important driver of labour productivity growth and needs to be strengthened. The percentage of businesses using technologies such as electronic information sharing (ERP – 25%) and RFID (4%), are relatively low and Ireland ranks 21st and 13th, respectively, in the EU for these two indicators. On all other indicators Irish businesses perform better than the EU average. Take-up of Social Media, at 35% of

enterprises, is advanced; and Ireland ranks 2nd in the EU with respect to this indicator. Irish SMEs have taken to eCommerce relatively more readily than those in most other EU countries. 32% of Irish SMEs sell online, significantly above the average for the EU of 26%. 19% of their turnover comes from this source. On average in the EU it is 17%. 16% of Irish SMEs sell cross-border.

5 Digital Public Services

Digital Public Services	Ireland		Cluster score	EU score
	rank	score		
DESI 2016	9	0.64	0.64	0.55
DESI 2015	8	0.66	0.62	0.54

With a score of 0.64, Ireland ranks 9th among EU countries in the Digital Public Services domain of the DESI 2016, a slight deterioration in both score and rank from the previous year.

	Ireland				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
5a1 eGovernment Users % individuals returning filled forms, out of Internet users in the last year (aged 16-74)	56% (2015) →	4	56% (2014)	4	32% (2015)
5a2 Pre-filled Forms Score (0 to 100)	35 (2015) ↑	17	32 (2014)	18	49 (2015)
5a3 Online Service Completion Score (0 to 100)	90 (2015) →	9	90 (2014)	5	81 (2015)
5a4 Open Data Score (0 to 700)	405 (2015) ↓	10	485 (2014)	8	351 (2015)

Modern public services offered online in an efficient manner are a vehicle for reduction of public administration expenditure as well as for efficiency gains for both enterprises and citizens. While active eGovernment use at 56% is above the EU average (32%), provision of pre-filled forms⁵ in online services is relatively low (35 out of 100), and where Ireland ranks 17th out of 28 countries. Conversely Ireland performs relatively well in the EU with respect to online service completion⁶ (ranked 9th) and Open Data (ranked 10th), though its rank on both of these has fallen over last year.

⁵ The Pre-filled Forms indicator measures 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.

⁶ The Online Service Completion indicator measures the extent to which the various steps in an interaction with the public administration – life event – can be performed completely online.