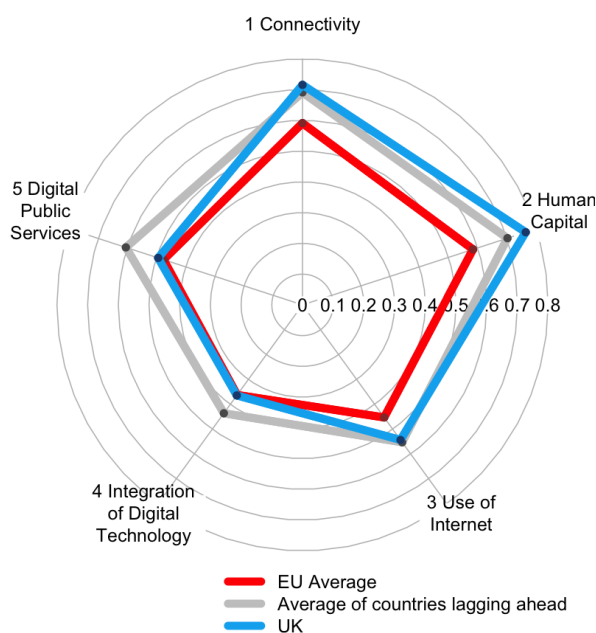


Digital Economy and Society Index¹ 2016²

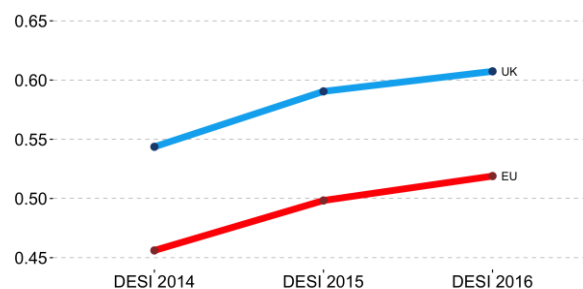
Country Profile

United Kingdom

The United Kingdom has an overall score³ of **0.61** and ranks **6th** in the EU. In the past year, it has progressed in Use of the Internet, with increases in reading online news (71%, +6 pp.), use of Video calls (43%, +10 pp.), and social networking (71% +6 pp.). The United Kingdom has also made progress in increasing the proportion of STEM graduates (23 per 1000, up 3 over last year). This is an important development as the UK has high and increasing demand for ICT professionals. Until more recently, graduate numbers had fallen for a number of years and they still remain significantly below those of a decade ago. When integrating digital technologies, UK Businesses could make more effort to exploit the possibilities offered by electronic information sharing and RFID. Additional efforts are required to bridge the gap in the availability of superfast broadband between urban and rural areas and there is a need for concrete measures and a roadmap to achieve the UK's ultrafast broadband goal.



The United Kingdom 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.



DESI	United Kingdom Cluster		EU score
	rank	score	
DESI 2016	6	0.61	0.52
DESI 2015	6	0.59 ⁵	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, the United Kingdom 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 IE LT LU SE.

⁵ The DESI 2015 was re-calculated for all countries to reflect updates and corrections to the underlying indicator data (which took place between May 2015 and January 2016). As such, country scores and rankings may have changed from the previous publication. For further information please consult the DESI methodological note.

1 Connectivity

Connectivity	United Kingdom		Cluster	EU
	rank	score	score	score
DESI 2016	6	0.72	0.7	0.59
DESI 2015	4	0.7	0.7	0.57

With an overall Connectivity score of 0.72, the United Kingdom ranks 6th among EU countries on this dimension of the DESI. While its score improved somewhat over 2015, its rank fell in comparison with other EU countries, from 4th in the previous year.

	United Kingdom				EU
	DESI 2016		DESI 2015		DESI 2016
	value	rank	value	rank	value
1a1 Fixed BB Coverage % households	100% (June 2015)	→ 5	100% (December 2014)	5	97% (June 2015)
1a2 Fixed BB Take-up % households	85% (2015)	↑ 3	82% (2014)	4	72% (2015)
1b1 Mobile BB Take-up Subscribers per 100 people	87 (June 2015)	→ 7	87 (December 2014)	6	75 (June 2015)
1b2 Spectrum % of the target for spectrum to be harmonised at EU level	69% (December 2015)	↓ 15	72% (December 2014)	15	69% (December 2015)
1c1 NGA Coverage % households, out of all households	91% (June 2015)	↑ 9	89% (December 2014)	9	71% (June 2015)
1c2 Subscriptions to Fast BB % of subscriptions >= 30Mbps, out of fixed BB subscriptions	36% (June 2015)	↑ 14	32% (December 2014)	13	30% (June 2015)
1d1 Fixed BB Price % individual gross income spent for the cheapest standalone Fixed Broadband subscription (lower values are better)	1.3% (Access cost: 2015; Income: 2014)	↓ 13	1.1% (Access cost: 2014; Income: 2014)	9	1.3% (Access cost: 2015; Income: 2014)

The United Kingdom performs relatively well in terms of fixed broadband coverage and take-up, having 100% household coverage of fixed broadband and take up by households of 85%. Take-up of mobile broadband at 87 out every 100 people is significantly above the EU average. While its score on this indicator remained unchanged, its rank fell somewhat in comparison with other EU countries, to 7th from 6th in the previous year. Spectrum harmonisation and fixed BB prices are similar to the EU average.

NGA coverage in the United Kingdom, at 91% of households, is significantly above the average for the EU (71%). Subscriptions to fast broadband (at least 30 Mbps) have increased to 36% of total fixed broadband subscriptions, from 32% last year. Additional efforts are required to bridge the gap in the availability of superfast broadband between urban and rural areas and there is a need for concrete measures and a roadmap to achieve the UK's ultrafast broadband goal.

2 Human Capital

2 Human Capital	United Kingdom		Cluster	EU
	rank	score	score	score
DESI 2016	3	0.76	0.7	0.59
DESI 2015	3	0.78	0.67	0.58

With a Human Capital score of 0.76, the United Kingdom ranks 3rd among EU countries in this domain unchanged from the previous year. This score is above the average score (0.7) for the cluster and for the EU (0.59).

	United Kingdom				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
2a1 Internet Users % individuals (aged 16-74)	90% (2015) ↑	5	89% (2014)	6	76% (2015)
2a2 Basic Digital Skills % individuals (aged 16-74)	67% (2015) -	6	n.a.	-	55% (2015)
2b1 ICT Specialists % employed individuals	4.9% (2014) ↑	6	4.8% (2013)	5	3.7% (2014)
2b2 STEM Graduates Graduates in STEM per 1000 individuals (aged 20 to 29)	23 (2013) ↑	1	20 (2012)	5	18 (2013)

At 90%, the United Kingdom exhibits a high rate of internet use amongst its population. The digital skills of the population have also increased substantially over the past couple of years, with 67% of the population now having sufficient digital skills to operate effectively online.

While the proportion of ICT specialists in total employment, at 4.9%, is relatively high and the proportion of STEM (Science, Technology and Mathematics) graduates is also above the average for the EU, the United Kingdom is lacking skilled ICT professionals. Demand for skilled ICT professionals within the economy is rising rapidly, while the supply is not keeping pace. In particular, while having increased somewhat over the last couple of years; graduate numbers are significantly below those of a decade ago (around 60% of the 2003 figure).⁶ More young people need to be attracted to ICT studies and 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.

⁶ http://eskills-lead.eu/fileadmin/lead/documents/working_paper_-_supply_demand_forecast_2015_a.pdf

3 Use of Internet

3 Use of Internet	United Kingdom		Cluster	EU
	rank	score	score	score
DESI 2016	8	0.54	0.55	0.45
DESI 2015	10	0.49	0.54	0.43

In terms of the propensity of individuals to use Internet services, the United Kingdom scores 0.54 up from 0.49 the previous year, improving also its rank to 8th among EU countries.

	United Kingdom				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)	71% (2015)	↑	17	65% (2014)	23	68% (2015)
3a2 Music, Videos and Games % individuals who used Internet in the last 3 months (aged 16-74)	38% (2014)	→	26	38% (2014)	26	49% (2014)
3a3 Video on Demand % households that have a TV	57% (2014)	→	7	57% (2014)	7	41% (2014)
3b1 Video Calls % individuals who used Internet in the last 3 months (aged 16-74)	43% (2015)	↑	13	33% (2014)	23	37% (2015)
3b2 Social Networks % individuals who used Internet in the last 3 months (aged 16-74)	71% (2015)	↑	8	65% (2014)	11	63% (2015)
3c1 Banking % individuals who used Internet in the last 3 months (aged 16-74)	63% (2015)	↑	12	62% (2014)	11	57% (2015)
3c2 Shopping % individuals who used Internet in the last year (aged 16-74)	87% (2015)	↑	1	85% (2014)	1	65% (2015)

As mentioned above, most UK citizens are now online. By far the most popular online activity in the UK is shopping. 87% of UK internet users buy online. As such, the UK ranks first in terms of online shopping amongst Internet users. This position is unchanged over the last year. Social networking (71%), reading online news (71%) and online banking (63%) are also activities undertaken by the majority of internet users. Use of VoD (Video on Demand) is also relatively widespread. Use of music, video and games online is below the EU average and the UK ranks 26th in the EU for this indicator.

4 Integration of Digital Technology

4 Integration of Digital Technology	United Kingdom		Cluster	EU
	rank	score	score	score
DESI 2016	15	0.36	0.44	0.36
DESI 2015	15	0.33	0.42	0.33

In Integration of Digital Technology by businesses, the United Kingdom scores 0.36, its worst score among the five DESI 2016 dimensions. In particular, businesses in the United Kingdom could better exploit the possibilities offered by electronic information sharing and RFID.

	United Kingdom				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
4a1 Electronic Information Sharing % enterprises (no financial sector, 10+ employees)	17% (2015) ↑	26	12% (2014)	27	36% (2015)
4a2 RFID % enterprises (no financial sector, 10+ employees)	1.6% (2014) →	27	1.6% (2014)	27	3.8% (2014)
4a3 Social Media % enterprises (no financial sector, 10+ employees)	34% (2015) -	3	n.a.	-	18% (2015)
4a4 eInvoices % enterprises (no financial sector, 10+ employees)	n.a. -	-	11% (2014)	10	n.a.
4a5 Cloud % enterprises (no financial sector, 10+ employees)	n.a. -	-	15% (2014)	8	n.a.
4b1 SMEs Selling Online % SMEs (no financial sector, 10+ employees)	20% (2015) ↑	7	19% (2014)	8	16% (2015)
4b2 eCommerce Turnover % turnover of SMEs (no financial sector, 10-249 employees)	8% (2015) ↓	17	8.4% (2014)	13	9.4% (2015)
4b3 Selling Online Cross-border % SMEs (no financial sector, 10+ employees)	9% (2015) ↑	12	8.3% (2013)	12	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. Businesses in the United Kingdom 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 – 17%) and RFID (1.6%), are very low and the UK ranks third to last and second to last in the EU for these two indicators. However, take-up of Social Media, at 34% of enterprises, is advanced. Domestic eCommerce by SMEs is also somewhat more widespread in the UK than in other EU countries. However, turnover from eCommerce is somewhat below the EU average. While the percentage of SMEs that sell online cross-border is somewhat higher.

5 Digital Public Services

5 Digital Public Services	United Kingdom		Cluster	EU
	rank	score	score	score
DESI 2016	16	0.55	0.64	0.55
DESI 2015	15	0.54	0.62	0.54

With a Digital Public Services score of 0.55, the United Kingdom ranks 16th among EU countries, slightly lower than last year.

	United Kingdom				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)	34% (2015)	↓	16	37% (2014)	13	32% (2015)
5a2 Pre-filled Forms Score (0 to 100)	17 (2015)	↑	26	8.6 (2014)	25	49 (2015)
5a3 Online Service Completion Score (0 to 100)	77 (2015)	→	20	77 (2014)	16	81 (2015)
5a4 Open Data Score (0 to 700)	585 (2015)	→	1	585 (2014)	1	351 (2015)

Modern public services offered online in an efficient manner are a vehicle for efficiency gains for enterprises, citizens, and the public administration itself. While active eGovernment use is somewhat above the EU average, online service completion⁷ and in particular the sophistication of provisioned services could be improved: availability of pre-filled forms⁸ is very low (17 out of 100), and where the UK ranks 26th out of 28 countries. Conversely the UK performs best in the EU with respect to Open Data.

⁷ 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.

⁸ 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.