



Luxembourg ranks 5<sup>th</sup> in DESI 2017. Luxembourg is one of the leading countries for connectivity, digital skills and Internet usage while the integration of digital technologies by companies and digital public services are its relative weakness.

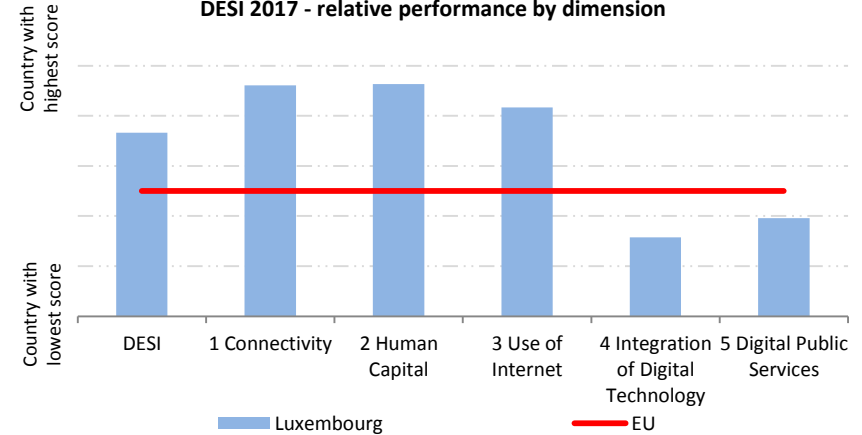
	Luxembourg rank	Luxembourg score	Cluster score	EU score
DESI 2017	5	0.61	0.63	0.52
DESI 2016 <sup>1</sup>	7	0.57	0.60	0.49

The Digital Economy and Society Index is a composite index measuring progress in digital through five components:

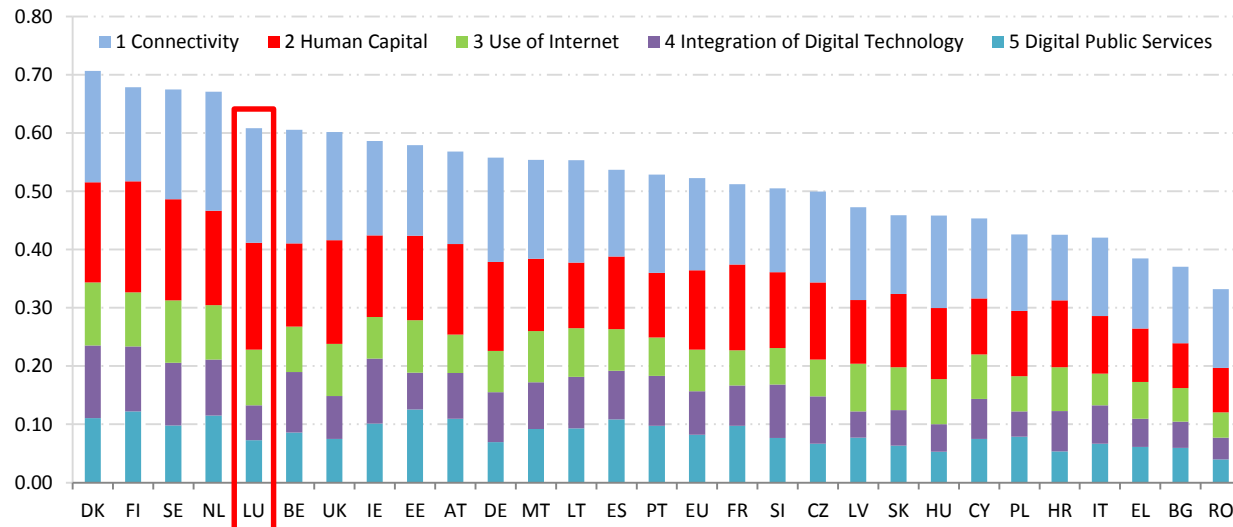
1 Connectivity	Fixed Broadband, Mobile Broadband, Broadband speed and prices
2 Human Capital	Basic Skills and Internet Use, Advanced skills and Development
3 Use of Internet	Citizens' use of Content, Communication and Online Transactions
4 Integration of Digital Technology	Business digitisation and eCommerce
5 Digital Public Services	eGovernment

**Clustering:** Luxembourg belongs to the cluster of high performing countries.

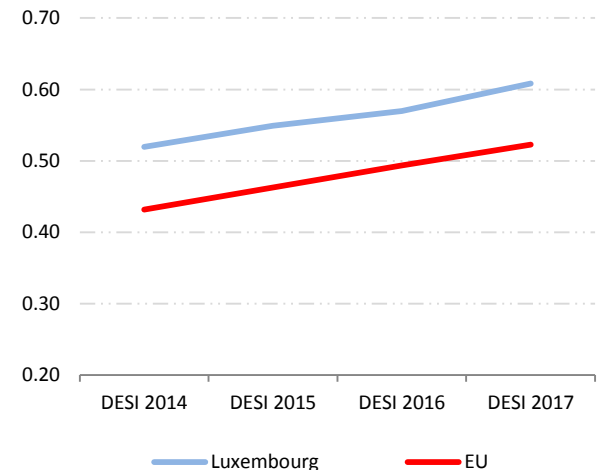
DESI 2017 - relative performance by dimension



Digital Economy and Society Index (DESI) 2017 ranking



DESI - evolution over time

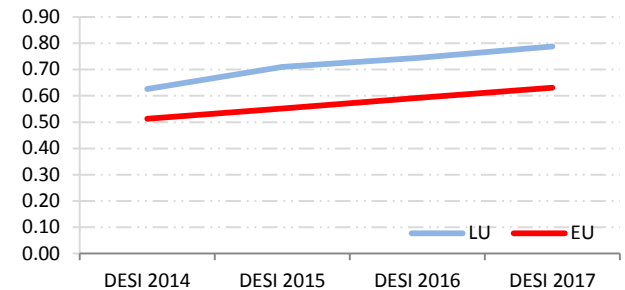


1) Connectivity: Luxembourg has reached a very high or even full degree of coverage both for fixed and fast broadband, and for mobile 4G broadband. Spectrum was not entirely assigned because of lack of demand.

	Luxembourg				EU	
	DESI 2017		DESI 2016		DESI 2017	
	value	rank	value	rank	value	
<b>1a1 Fixed Broadband Coverage</b>	<b>99.98%</b>	<b>→ 4</b>	<b>99.98%</b>	<b>4</b>	<b>98%</b>	
% households	2016		2015		2016	
<b>1a2 Fixed Broadband Take-up</b>	<b>96%</b>	<b>↑ 1</b>	<b>94%</b>	<b>1</b>	<b>74%</b>	
% households	2016		2015		2016	
<b>1b1 Mobile Broadband Take-up</b>	<b>116</b>	<b>↑ 5</b>	<b>73</b>	<b>12</b>	<b>84</b>	
Subscriptions per 100 people	June 2016		June 2015		June 2016	
<b>1b2 4G coverage<sup>2</sup></b>	<b>95%</b>	<b>5</b>	<b>NA</b>		<b>84%</b>	
% households (average of operators)	2016				2016	
<b>1b3 Spectrum<sup>3</sup></b>	<b>50%</b>	<b>↓ 24</b>	<b>53%</b>	<b>24</b>	<b>68%</b>	
% of the target	2016		2015		2016	
<b>1c1 NGA Coverage</b>	<b>94%</b>	<b>→ 6</b>	<b>94%</b>	<b>5</b>	<b>76%</b>	
% households	2016		2015		2016	
<b>1c2 Subscriptions to Fast Broadband</b>	<b>49%</b>	<b>↑ 12</b>	<b>40%</b>	<b>13</b>	<b>37%</b>	
% subscriptions >= 30Mbps	June 2016		June 2015		June 2016	
<b>1d1 Fixed Broadband Price<sup>4</sup></b>	<b>NA</b>		<b>NA</b>		<b>1.2%</b>	
% income	price 2016, income 2015		price 2015, income 2015		price 2016, income 2015	

1 Connectivity	Luxembourg		Cluster	EU
	rank	score	score	score
DESI 2017	2	0.79	0.75	0.63
DESI 2016	3	0.74	0.73	0.59

1 Connectivity - evolution over time

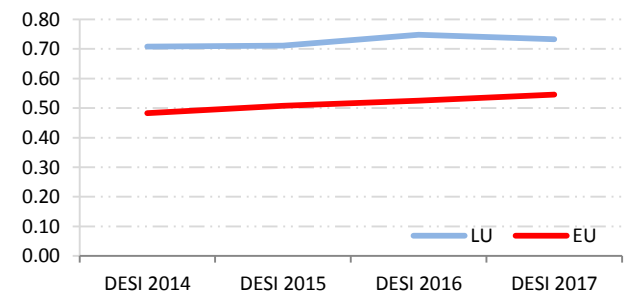


2) Human Capital: Luxembourg has a high level of digital skills, reaching pole position in terms of Internet users and individuals with at least basic digital skills and a very good position in terms of ICT specialists.

	Luxembourg				EU	
	DESI 2017		DESI 2016		DESI 2017	
	value	rank	value	rank	value	
<b>2a1 Internet Users</b>	<b>97%</b>	<b>→ 1</b>	<b>97%</b>	<b>1</b>	<b>79%</b>	
% individuals	2016		2015		2016	
<b>2a2 At Least Basic Digital Skills</b>	<b>86%</b>	<b>→ 1</b>	<b>86%</b>	<b>1</b>	<b>56%</b>	
% individuals	2016		2015		2016	
<b>2b1 ICT Specialists<sup>5</sup></b>	<b>4.6%</b>	<b>↓ 5</b>	<b>5.1%</b>	<b>3</b>	<b>3.5%</b>	
% individuals	2015		2014		2015	
<b>2b2 STEM Graduates</b>	<b>NA</b>		<b>NA</b>		<b>19</b>	
Per 1000 individuals (aged 20-29)	2014		2013		2014	

2 Human Capital	Luxembourg		Cluster	EU
	rank	score	score	score
DESI 2017	2	0.73	0.68	0.55
DESI 2016	2	0.75	0.66	0.53

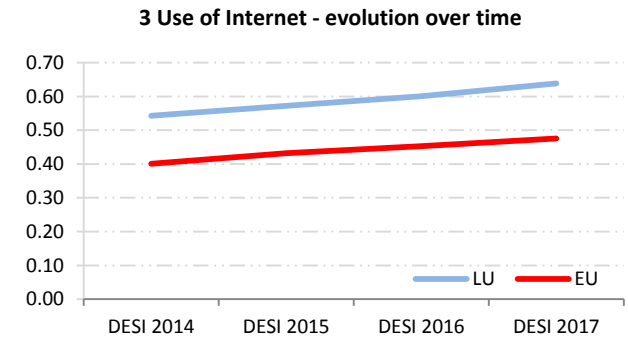
2 Human Capital - evolution over time



3) Use of Internet: Internet users in Luxembourg consult a wide variety of contents (news, music, and video) and carry out many transactions (banking, shopping) online. However, they engage less in social networks.

	Luxembourg				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
<b>3a1 News</b>	89%	↑ 4	85%	9	70%
% individuals who used Internet in the last 3 months	2016		2015		2016
<b>3a2 Music, Videos and Games<sup>6</sup></b>	89%	5	NA		78%
% individuals who used Internet in the last 3 months	2016				2016
<b>3a3 Video on Demand<sup>7</sup></b>	29%	6	NA		21%
% individuals who used Internet in the last 3 months	2016				2016
<b>3b1 Video Calls</b>	54%	↑ 6	47%	7	39%
% individuals who used Internet in the last 3 months	2016		2015		2016
<b>3b2 Social Networks</b>	69%	↓ 15	70%	9	63%
% individuals who used Internet in the last 3 months	2016		2015		2016
<b>3c1 Banking</b>	73%	↑ 9	67%	10	59%
% individuals who used Internet in the last 3 months	2016		2015		2016
<b>3c2 Shopping</b>	80%	→ 4	80%	4	66%
% internet users (last year)	2016		2015		2016

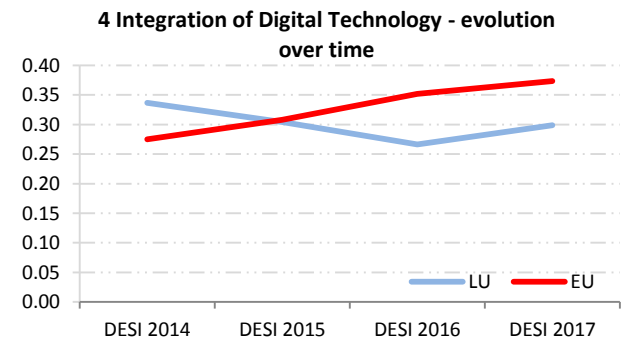
3 Use of Internet	Luxembourg		Cluster	EU
	rank	score	score	score
DESI 2017	3	0.64	0.60	0.48
DESI 2016	4	0.60	0.57	0.45



4) Integration of Digital Technology: Companies in Luxembourg have an average level of integration of digital technologies (information sharing, eInvoices and cloud). However, SMEs do not engage much in online commerce, including cross-border.

	Luxembourg				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
<b>4a1 Electronic Information Sharing</b>	39%	11	39%	11	36%
% enterprises	2015		2015		2015
<b>4a2 RFID</b>	4.9%	10	4.9%	10	3.9%
% enterprises	2014		2014		2014
<b>4a3 Social Media</b>	19%	↑ 12	15%	15	20%
% enterprises	2016		2015		2016
<b>4a4 eInvoices</b>	11%	20	NA		18%
% enterprises	2016		2015		2016
<b>4a5 Cloud</b>	12%	14	NA		13%
% enterprises	2016		2015		2016
<b>4b1 SMEs Selling Online</b>	9%	↑ 24	6%	26	17%
% SMEs	2016		2015		2016
<b>4b2 eCommerce Turnover</b>	NA		2.6%	27	9.4%
% SME turnover	2016		2015		2016
<b>4b3 Selling Online Cross-border</b>	6.3%	18	6.3%	18	7.5%
% SMEs	2015		2015		2015

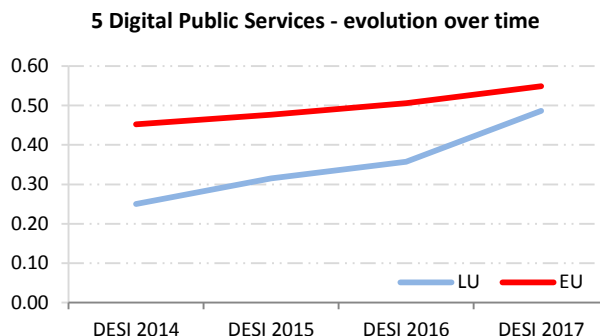
4 Integration of Digital Technology	Luxembourg		Cluster	EU
	rank	score	score	score
DESI 2017	22	0.30	0.44	0.37
DESI 2016	22	0.27	0.41	0.35



5) Digital Public Services: Luxembourg has made progress compared to last year, particularly in terms of open data and in the provision of pre-filled forms. However, numbers of eGovernment users and the delivery of services have flattened.

	Luxembourg				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
5a1 eGovernment Users	36%	→	15	36%	15
% internet users (last year)	2016			2015	2016
5a2 Pre-filled Forms	30	↑	20	20	23
Score (0 to 100)	2016			2015	2016
5a3 Online Service Completion	77	↓	19	78	19
Score (0 to 100)	2016			2015	2016
5a4 Open Data <sup>8</sup>	57%	↑	14	15%	26
% of maximum score	2016			2015	2016

5 Digital Public Services	Luxembourg		Cluster	EU
	rank	score	score	score
DESI 2017	19	0.49	0.59	0.55
DESI 2016	21	0.36	0.57	0.51



### Methodological note

<sup>1</sup> **DESI 2016** was re-calculated for all countries to reflect slight changes in the choice of indicators and corrections to the underlying indicator data. As a result, country scores and rankings may have changed from the previous publication.

<sup>2</sup> **4G coverage:** This is a new DESI indicator measuring the average coverage of telecom operators' 4G networks.

<sup>3</sup> **Spectrum:** There is a decrease in most of the Member States due to the additional EU harmonisation of the 700 MHz band in April 2016.

<sup>4</sup> **Fixed Broadband Price:** Due to a slight methodological change, historical data was re-calculated.

<sup>5</sup> **ICT Specialists:** Historical data have been revised by Eurostat.

<sup>6</sup> **Music, Videos and Games:** Break in series due to a change in the Eurostat survey.

<sup>7</sup> **Video on Demand:** Break in series due to a change of data source. New source is Eurostat.

<sup>8</sup> **Open Data:** Change of data source. The historical data have also been restated. The new source is the European Data Portal.