Digital Economy and Society Index 2017 - Romania



Romania ranks 28th in DESI 2017. Romanians benefit from coverage of fast broadband connections in urban areas, which translates into the second highest share of subscriptions in the EU. The take-up of mobile broadband is also accelerating. However, the rate of digitisation of the economy, including for public services, and the levels of digital skills are still low.

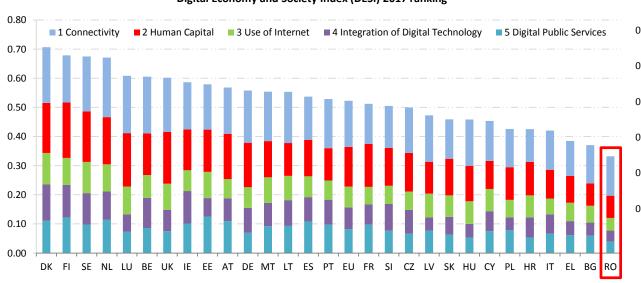
	Rom	ania	Cluster	EU
	rank	score	score	score
DESI 2017	28	0.33	0.41	0.52
DESI 2016 ¹	28	0.31	0.38	0.49

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

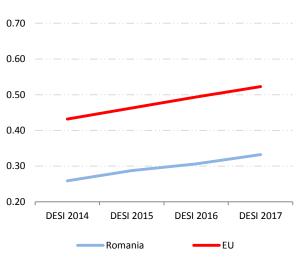
1 Connectivity	Fixed Broadband, Mobile Broadband, Broadband speed and prices
2 Human Capital	Basic Skills and Internet Use, Advanced skills and Development
3 Use of Internet	Citizens' use of Content, Communication and Online Transactions
4 Integration of Digital Technology	Business digitisation and eCommerce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

Clustering: Romania belongs to the cluster of low performing countries.

Digital Economy and Society Index (DESI) 2017 ranking



DESI - evolution over time



1) Connectivity: Romania has one of the highest shares of subscriptions to fast broadband in the EU and more people are taking up mobile broadband. More spectrum is made available, however the coverage of fixed and mobile (4G) broadband networks remains one of the lowest in the EU.

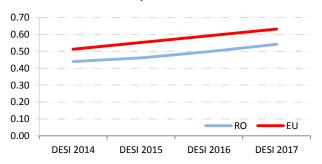
			Romania				
	DESI 2017			DESI 2016		DESI 2017	
	value		rank	value	rank	value	
1a1 Fixed Broadband Coverage	89%	\rightarrow	26	89%	25	98%	
% households	2016			2015		2016	
1a2 Fixed Broadband Take-up	63%	1	23	60%	23	74%	
% households	2016			2015		2016	
1b1 Mobile Broadband Take-up	71	1	22	59	24	84	
Subscriptions per 100 people	June 2016			June 2015		June 2016	
1b2 4G coverage ²	45%		28	NA		84%	
% households (average of operators)	2016					2016	
1b3 Spectrum ³	75%	1	9	67%	18	68%	
% of the target	2016			2015		2016	
1c1 NGA Coverage	72%	1	24	70%	22	76%	
% households	2016			2015		2016	
1c2 Subscriptions to Fast Broadband	70%	1	2	63%	2	37%	
% subscriptions >= 30Mbps	June 2016			June 2015		June 2016	
1d1 Fixed Broadband Price4	1.1%	1	10	1.2%	15	1.2%	
% income	price 2016, income 2015			price 2015, income 2015		price 2016, income 2015	

2) Human Capital: More people are online, and digital skills levels are improving but remain the second lowest in the EU. Romania can benefit from a good pool of science, technology, math and engineering graduates.

	Romania					EU
	DESI	201	7	DESI 2016		DESI 2017
	value		rank	value	rank	value
2a1 Internet Users	56%	1	28	52%	28	79%
% individuals	2016			2015		2016
2a2 At Least Basic Digital Skills	28%	1	27	26%	28	56%
% individuals	2016			2015		2016
2b1 ICT Specialists ⁵	1.9%	1	27	1.6%	27	3.5%
% individuals	2015			2014		2015
2b2 STEM Graduates	16	\downarrow	17	17	16	19
Per 1000 individuals (aged 20-29)	2014			2013		2014

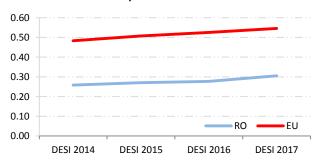
1 Connectivity	Rom	ania	Cluster	EU
1 connectivity	rank		score	score
DESI 2017	22	0.54	0.53	0.63
DESI 2016	21	0.50	0.46	0.59

1 Connectivity - evolution over time



2 Human Capital	Rom	ania	Cluster	EU
2 manuar capitar	rank	score	score	score
DESI 2017	28	0.31	0.40	0.55
DESI 2016	28	0.28	0.38	0.53

2 Human Capital - evolution over time



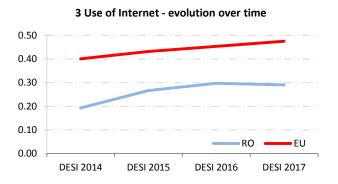
3) Use of Internet: Romanian Internet users engage in online activities much less than the EU average, in particular when it comes to eCommerce and eBanking. However, they are intensive users of social networks and online video call services.

		Romania				EU
	DESI	201	7	DESI 20	DESI 2017	
	value		rank	value	rank	value
3a1 News	63%	4	25	67%	22	70%
% individuals who used Internet in the last 3 months	2016			2015		2016
3a2 Music, Videos and Games ⁶	67%		27	NA		78%
% individuals who used Internet in the last 3 months	2016					2016
3a3 Video on Demand ⁷	6%		27	NA		21%
% individuals who used Internet in the last 3 months	2016					2016
3b1 Video Calls	45%	1	15	42%	15	39%
% individuals who used Internet in the last 3 months	2016			2015		2016
3b2 Social Networks	74%	$\mathbf{\downarrow}$	8	78%	3	63%
% individuals who used Internet in the last 3 months	2016			2015		2016
3c1 Banking	8%	$\mathbf{\downarrow}$	27	10%	27	59%
% individuals who used Internet in the last 3 months	2016			2015		2016
3c2 Shopping	18%	\rightarrow	28	18%	28	66%
% internet users (last year)	2016			2015		2016

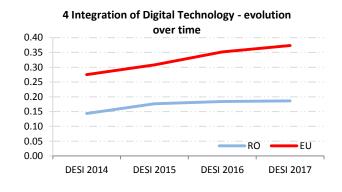
4) Integration of Digital Technology: Romania is not closing the gap with the EU on business digitisation, particularly regarding the use of cloud computing or online trade channels. The turnover from online sales slightly decreased.

		Romania			
	DESI 20	17	DESI 2	DESI 2017	
	value	rank	value	rank	value
4a1 Electronic Information Sharing	22%	24	22%	24	36%
% enterprises	2015		2015		2015
4a2 RFID	4.0%	14	4.0%	14	3.9%
% enterprises	2014		2014		2014
4a3 Social Media	8%	28	6%	28	20%
% enterprises	2016		2015		2016
4a4 elnvoices	9%	24	NA		18%
% enterprises	2016		2015		2016
4a5 Cloud	5%	26	6%	26	13%
% enterprises	2016		2015		2016
4b1 SMEs Selling Online	7% -	≥ 27	7%	24	17%
% SMEs	2016		2015		2016
4b2 eCommerce Turnover	4.3%	26	4.9%	24	9.4%
% SME turnover	2016		2015		2016
4b3 Selling Online Cross-border	1.9%	28	1.9%	28	7.5%
% SMEs	2015		2015		2015

3 Use of Internet	Rom	ania	Cluster	EU
	rank	rank score		score
DESI 2017	28	0.29	0.39	0.48
DESI 2016	28	0.30	0.37	0.45



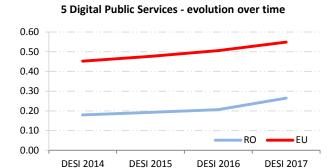
4 Integration of Digital	Rom	ania	Cluster	EU
Technology	rank	rank score		score
DESI 2017	28	0.19	0.27	0.37
DESI 2016	28	0.18	0.25	0.35



5) Digital Public Services: Romania made significant progress in the availability of Open Data but the supply and use of eGovernment services remain low.

	Romania					EU
	DES	201	7	DESI 20)16	DESI 2017
	value		rank	value	rank	value
5a1 eGovernment Users	6%	\downarrow	28	8%	28	34%
% internet users (last year)	2016			2015		2016
5a2 Pre-filled Forms	12	1	27	6	28	49
Score (0 to 100)	2016			2015		2016
5a3 Online Service Completion	55	1	28	54	28	82
Score (0 to 100)	2016			2015		2016
5a4 Open Data ⁸	63%	1	11	44%	17	59%
% of maximum score	2016			2015		2016

5 Digital Public Services	Rom	ania	Cluster	EU
5 Digital I ublic Services	rank	rank score		score
DESI 2017	28	0.27	0.43	0.55
DESI 2016	28	0.21	0.42	0.51



Methodological note

- ¹ **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.
- ² **4G coverage**: This is a new DESI indicator measuring the average coverage of telecom operators' 4G networks.
- ³ 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.
- ⁴ **Fixed Broadband Price**: Due to a slight methodological change, historical data was re-calculated.
- ⁵ **ICT Specialists**: Historical data have been revised by Eurostat.
- ⁶ Music, Videos and Games: Break in series due to a change in the Eurostat survey.
- ⁷ **Video on Demand**: Break in series due to a change of data source. New source is Eurostat.
- 8 Open Data: Change of data source. The historical data have also been restated. The new source is the European Data Portal.

