

Digital Economy and Society Index¹ 2016²

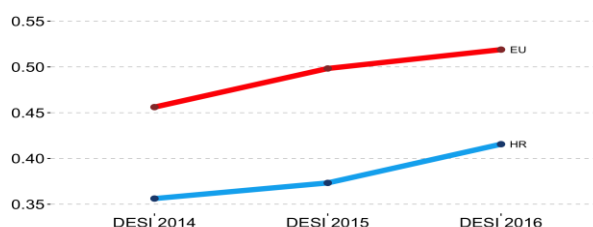
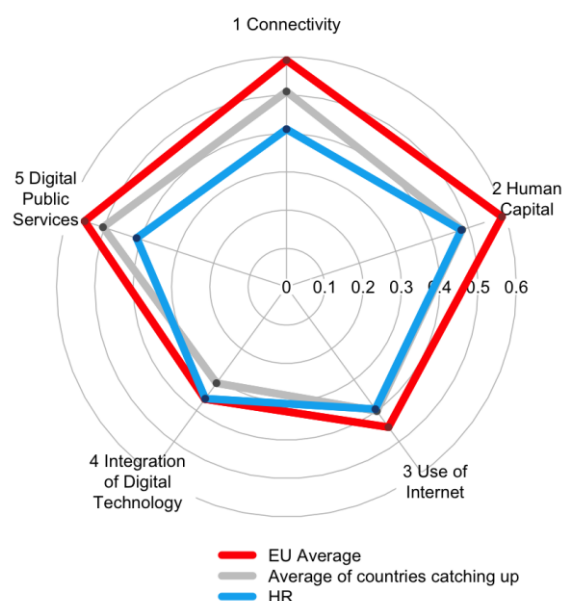
Country Profile

Croatia

In DESI 2016, Croatia has an overall score³ of **0.42** and ranks **24th** out of the 28 EU Member States. Over the last year Croatia improved its performance. 19% of SMEs in Croatia sell online - above the EU average of 16% - and 8.9% sell online across borders (against 7.5% at EU level). However, the country still lags behind on Internet use (66% of Croats go online regularly, compared to an EU average of 76%). Only 2.8% of the fixed Internet subscriptions are to high-speed connections (30% in the EU). Fixed broadband in Croatia is extremely expensive.

Croatia is part of the catching up cluster of countries because, although it still performs worse than the EU as a whole, it has developed fast over the last year and got closer to the EU average.⁴

	Croatia		Cluster	EU
	Rank	Score	score	score
DESI 2016	24	0.42	0.45	0.52
DESI 2015	25	0.37 ⁵	0.41	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, Croatia is part of the countries that are catching up: countries who score below the EU average but whose score grew faster than that of the EU as a whole (in comparison to DESI 2015). Other countries catching up are Spain, Italy, Latvia, Romania and Slovenia.

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

1 Connectivity	Croatia		Cluster score	EU score
	rank	score		
DESI 2016	28	0.41	0.51	0.59
DESI 2015	28	0.36	0.48	0.57

In terms of Connectivity Croatia performs worse than all the other EU countries. Despite the fact that fixed broadband is available to most households, 30% of them do not yet subscribe to it. Moreover, Next Generation Access is available to 52% of homes, which is below the EU average (71%) and only 2.8% of households subscribe to it, compared to 30% EU average.

	Croatia				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
1a1 Fixed BB Coverage % households	97% (June 2015) →	18	97% (December 2014)	18	97% (June 2015)
1a2 Fixed BB Take-up % households	70% (2015) ↑	13	61% (2014)	22	72% (2015)
1b1 Mobile BB Take-up Subscribers per 100 people	68 (June 2015) ↓	15	69 (December 2014)	11	75 (June 2015)
1b2 Spectrum % of the target for spectrum to be harmonised at EU level	41% (December 2015) ↑	25	38% (December 2014)	27	69% (December 2015)
1c1 NGA Coverage % households, out of all households	52% (June 2015) ↑	25	47% (December 2014)	25	71% (June 2015)
1c2 Subscriptions to Fast BB % of subscriptions >= 30Mbps, out of fixed BB subscriptions	2.8% (June 2015) ↑	28	1.1% (December 2014)	28	30% (June 2015)
1d1 Fixed BB Price % individual gross income spent for the cheapest standalone Fixed Broadband subscription (lower values are better)	2.5% (Access cost: 2015, Income: 2014) →	25	2.5% (Access cost: 2015, Income: 2014)	25	1.3% (Access cost: 2015, Income: 2014)

Croatia faces a number of challenges concerning Connectivity. Although fixed broadband is available to 97% of homes (in line with the EU), Next Generation Access capable of providing high speed internet (at least 30 Mbps) is available to only 52% of homes.

70% of the households have a broadband subscription, a significant improvement compared to last year's 61%. However, only 2.8% of the fixed Internet subscriptions are to high-speed connections (30% in the EU), the lowest in Europe. One of the possible reasons for the low take-up (subscriptions) might be affordability, since the standalone fixed broadband subscription in Croatia costs as much as 2.5% of the average gross income, more than the overall EU average of 1.3%.

2 Human Capital

2 Human Capital	Croatia		Cluster score	EU score
	rank	score		
DESI 2016	21	0.48	0.48	0.59
DESI 2015	21	0.46	0.44	0.58

With a Human Capital score of 0.48, Croatia ranks 21st among EU countries. The country needs to improve its citizens' digital skills and engage them to use the Internet in order to further develop its digital economy.

	Croatia				EU DESI 2016 value
	DESI 2016		DESI 2015		
	value	rank	value	rank	
2a1 Internet Users % individuals (aged 16-74)	66% (2015) ↑	22	65% (2014)	21	76% (2015)
2a2 Basic Digital Skills % individuals (aged 16-74)	51% (2015)	17	n.a.	-	55% (2015)
2b1 ICT Specialists % employed individuals	2.9% (2014) ↑	20	2.6% (2013)	20	3.7% (2014)
2b2 STEM Graduates Graduates in STEM per 1000 individuals (aged 20 to 29)	16 (2013) ↓	17	17 (2012)	12	18 (2013)

Croatia's percentage of regular Internet users is 66% and, despite a slight increase from the previous year, the figure is still below the European average of 76%. Croatia is also behind the EU average in digital skills, since only 51% of Croatians have basic digital skills, compared to an European average of 55%. Together, these two figures show that Croatia needs to work on bringing its citizens up to speed in digital skills and use of the internet in order to fully take advantage of the digital economy.

With a rate of 16 per 1000 individuals (between 20 and 29 years old) with a STEM (science, technology and mathematics) graduate degree, Croatia ranks 17th among the EU Member States in terms of high-level training in these scientific disciplines. There are 2.9% ICT specialist employed, a slight increase compared to the previous year.

3 Use of Internet

3 Use of Internet	Croatia		Cluster score	EU score
	rank	score		
DESI 2016	23	0.39	0.4	0.45
DESI 2015	27	0.32	0.39	0.43

In terms of the propensity of individuals to use Internet services, Croatia scores 0.39 and ranks 23rd among EU countries, compared to 27th last year. Croatians appear to slowly gain trust in using the Internet when they need to make transactions. Croatians are frequently reading the news online.

	Croatia				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)	89% (2015) ↑	4	79% (2014)	11	68% (2015)
3a2 Music, Videos and Games % individuals who used Internet in the last 3 months (aged 16-74)	34% (2014)	28	34% (2014)	28	49% (2014)
3a3 Video on Demand % households that have a TV	n.a.	-	n.a.	-	41% (2014)
3b1 Video Calls % individuals who used Internet in the last 3 months (aged 16-74)	42% (2015) ↑	14	38% (2014)	19	37% (2015)
3b2 Social Networks % individuals who used Internet in the last 3 months (aged 16-74)	64% (2015) ↑	19	59% (2014)	21	63% (2015)
3c1 Banking % individuals who used Internet in the last 3 months (aged 16-74)	47% (2015) ↑	19	28% (2014)	25	57% (2015)
3c2 Shopping % individuals who used Internet in the last year (aged 16-74)	44% (2015) ↑	23	40% (2013)	22	65% (2014)

Croatian Internet users engage in a broad range of online activities. They read news online (89%), use the Internet to communicate via voice or video calls (42%) or through social networks (64%). While for most of these activities engagement among Internet users in Croatia is in line and higher than overall in the EU, they appear less eager than in other countries to use Internet for transactions. However, the share of Croatian Internet users that use online banking has increased over 19% last year. Yet only 44% of Internet users shop online, against an EU average of 65%. Internet use by citizens continues to be a challenge for Croatia, because a digital economy is partly fuelled by its citizens' consumption in the online channel.

4 Integration of Digital Technology

4 Integration of Digital Technology	Croatia		Cluster score	EU score
	rank	score		
DESI 2016	16	0.36	0.31	0.36
DESI 2015	9	0.39	0.27	0.33

In terms of Integration of Digital Technology, Croatia scores 0.36 and ranks 16th among the EU countries, compared to 9th in the previous year. Croatian SMEs are keen to sell online, also when it comes to cross-border transactions.

	Croatia				EU DESI 2016 value
	DESI 2016 value	rank	DESI 2015 value	rank	
4a1 Electronic Information Sharing % enterprises (no financial sector, 10+ employees)	29% (2015)	20	n.a.	-	36% (2015)
4a2 RFID % enterprises (no financial sector, 10+ employees)	4.7% (2014)	11	4.7% (2014)	11	3.8% (2014)
4a3 Social Media % enterprises (no financial sector, 10+ employees)	15% (2015) ↓	17	15% (2014)	13	18% (2015)
4a4 eInvoices % enterprises (no financial sector, 10+ employees)	10% (2015) →	17	10% (2014)	15	n.a.
4a5 Cloud % enterprises (no financial sector, 10+ employees)	15% (2015) ↓	8	16% (2014)	6	n.a.
4b1 SMEs Selling Online % SMEs (no financial sector, 10+ employees)	19% (2015)	8	n.a.	-	16% (2015)
4b2 eCommerce Turnover % turnover of SMEs (no financial sector, 10-249 employees)	7.1% (2015) ↓	22	11% (2014)	6	9.4% (2015)
4b3 Selling Online Cross-border % SMEs (no financial sector, 10+ employees)	8.9% (2015) ↑	13	8.4% (2013)	11	7.5% (2015)

The percentage of businesses using technologies such as RFID (4.7%), e-Invoices (10%), cloud services (15%) and social media (15%) in Croatia is in line or higher than the European Union average.

Croatian businesses appear to be eager to take advantage of the possibilities offered by on-line commerce. Nearly one fifth of SMEs in Croatia sell online –above the EU average of 16% - and 8.9% sell online to other EU member states (against 7.5% at European level). However, their turnover from these sales significantly decreased over the last year.

5 Digital Public Services

5 Digital Public Services	Croatia		Cluster score	EU score
	rank	score		
DESI 2016	23	0.41	0.5	0.55
DESI 2015	27	0.29	0.45	0.54

With a score of 0.41, Croatia ranks 23rd among EU countries in the Digital Public Services dimension, Croatia improved its rank position as compared to last year and the development of online public services is advancing.

	Croatia				EU DESI 2016 value
	DESI 2016 value	Rank	DESI 2015 value	rank	
5a1 eGovernment Users % individuals returning filled forms, out of Internet users in the last year (aged 16-74)	21% (2015) ↑	22	18% (2014)	24	32% (2015)
5a2 Pre-filled Forms Score (0 to 100)	21 (2015) ↑	22	2 (2014)	28	49 (2015)
5a3 Online Service Completion Score (0 to 100)	61 (2015) ↑	24	54 (2014)	24	81 (2015)
5a4 Open Data Score (0 to 700)	380 (2015) ↑	14	230 (2014)	27	351 (2015)

In terms of Digital Public Services Croatia made significant progress since last year. This might be partly due to the e-citizens web portal, introduced back in 2014 to tackle the very low online interaction between the public administration and citizens. An e-business module has only recently been introduced and is still being supplemented by additional features.

Provision of pre-filled forms⁶ and Online Service Completion⁷ are still below the EU average, but increased over the last year. On the other hand Open Data nearly doubled and Croatia improved its position from rank 27 last year to rank 14, now exceeding the EU average. Better online public services will likely further improve Croatia's percentage of eGovernment users: only 21% of Internet users (against 32% in the EU average) interact online and send filled-in forms to public authorities.

⁶ It 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.

⁷ It measures the extent to which the various steps in an interaction with the public administration – life event – can be performed completely online.