

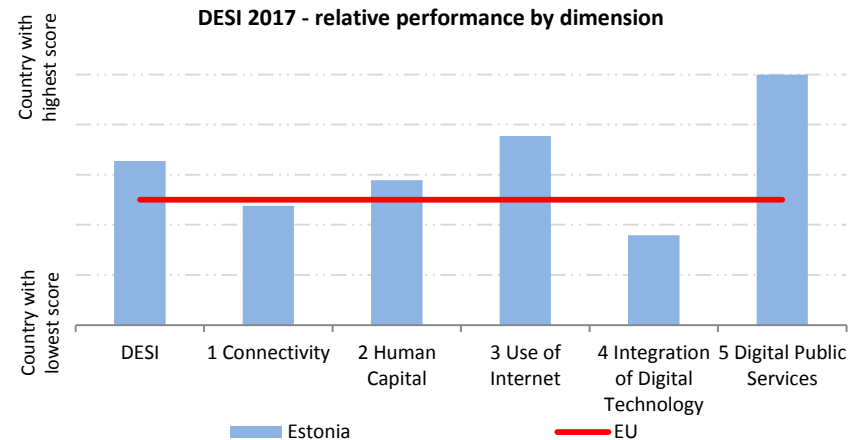
Estonia ranks 9th in DESI 2017. Estonia is the champion in Europe in the online provision of public services and scores above EU average in digital skills and the Use of Internet by citizens. As for broadband, it is strong on mobile but has low fixed broadband coverage despite progress over the past year. The key challenge in Estonia is the digitisation of companies.

| | Estonia | | Cluster | EU |
|------------------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 9 | 0.58 | 0.63 | 0.52 |
| DESI 2016 ¹ | 9 | 0.55 | 0.60 | 0.49 |

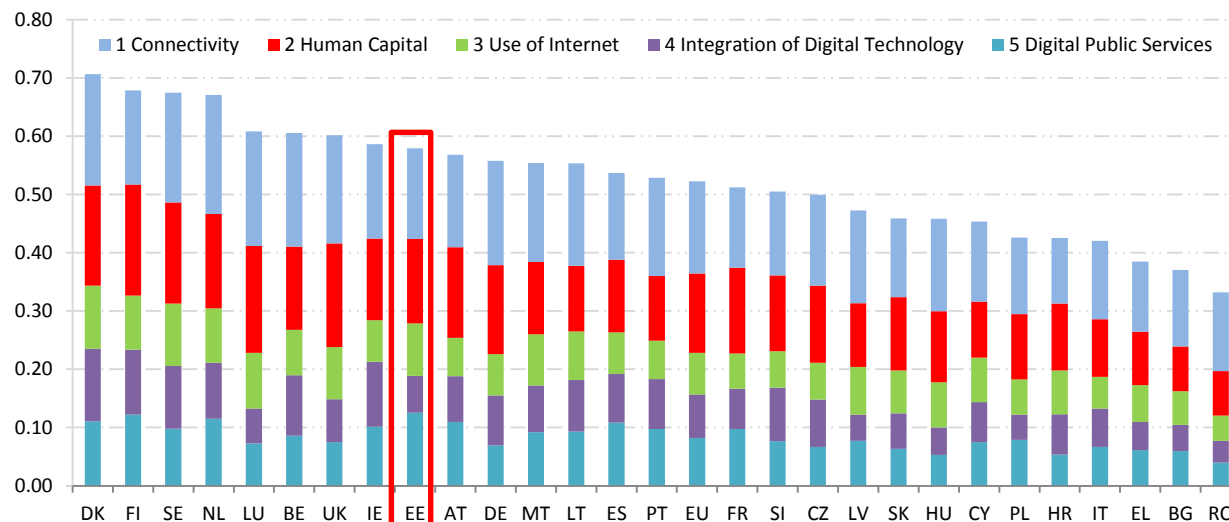
The Digital Economy and Society Index is a composite index measuring progress in digital through five components:

| | |
|-------------------------------------|---|
| 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 |

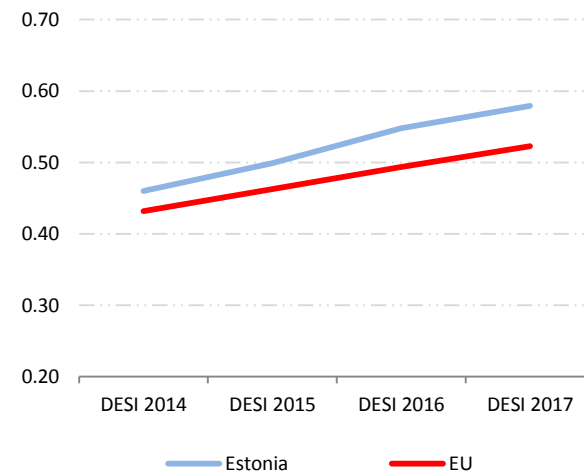
Clustering: Estonia belongs to the cluster of high performing countries.



Digital Economy and Society Index (DESI) 2017 ranking



DESI - evolution over time

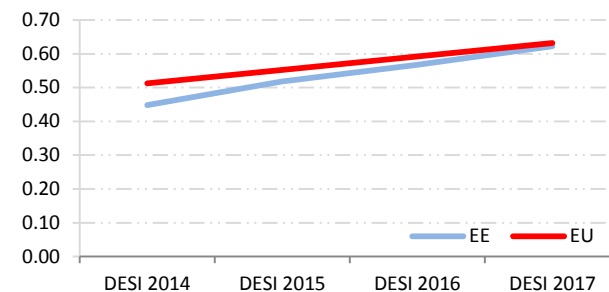


1) Connectivity: In Estonia 4G is widely available and the take-up of mobile broadband is very high. Basic fixed broadband coverage has increased but remains well below EU average. The availability of NGA is slightly above average, and fast broadband take-up is growing.

| | Estonia | | | | EU | |
|---|----------------------------|------|----------------------------|------|----------------------------|--|
| | DESI 2017 | | DESI 2016 | | DESI 2017 | |
| | value | rank | value | rank | value | |
| 1a1 Fixed Broadband Coverage % households | 91% ↑ | 25 | 87% | 26 | 98% | |
| | 2016 | | 2015 | | 2016 | |
| 1a2 Fixed Broadband Take-up % households | 77% → | 8 | 77% | 7 | 74% | |
| | 2016 | | 2015 | | 2016 | |
| 1b1 Mobile Broadband Take-up Subscriptions per 100 people | 116 ↑ | 4 | 105 | 4 | 84 | |
| | June 2016 | | June 2015 | | June 2016 | |
| 1b2 4G coverage² % households (average of operators) | 94% | 8 | NA | | 84% | |
| | 2016 | | | | 2016 | |
| 1b3 Spectrum³ % of the target | 80% ↓ | 7 | 84% | 6 | 68% | |
| | 2016 | | 2015 | | 2016 | |
| 1c1 NGA Coverage % households | 79% ↑ | 18 | 78% | 16 | 76% | |
| | 2016 | | 2015 | | 2016 | |
| 1c2 Subscriptions to Fast Broadband % subscriptions >= 30Mbps | 31% ↑ | 20 | 27% | 20 | 37% | |
| | June 2016 | | June 2015 | | June 2016 | |
| 1d1 Fixed Broadband Price⁴ % income | 1.2% → | 14 | 1.2% | 14 | 1.2% | |
| | price 2016, income 2015 | | price 2015, income 2015 | | price 2016, income 2015 | |

| 1 Connectivity | Estonia | | Cluster | EU |
|----------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 17 | 0.62 | 0.75 | 0.63 |
| DESI 2016 | 17 | 0.57 | 0.73 | 0.59 |

1 Connectivity - evolution over time

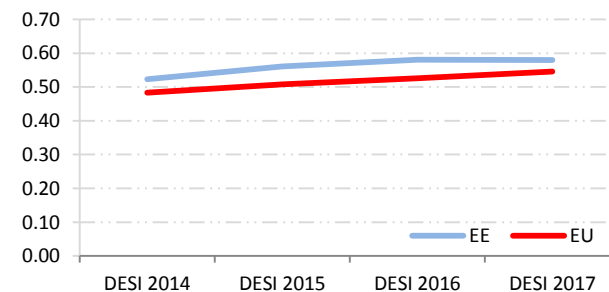


2) Human Capital: Estonia scores well in terms of Internet users, basic digital skills levels as well as in the share of ICT specialists in the workforce. At the same time, the number of graduates in science, technology, engineering and mathematics is low.

| | Estonia | | | | EU | |
|--|-----------|------|-----------|------|-----------|--|
| | DESI 2017 | | DESI 2016 | | DESI 2017 | |
| | value | rank | value | rank | value | |
| 2a1 Internet Users % individuals | 85% ↓ | 8 | 86% | 7 | 79% | |
| | 2016 | | 2015 | | 2016 | |
| 2a2 At Least Basic Digital Skills % individuals | 60% ↓ | 10 | 65% | 8 | 56% | |
| | 2016 | | 2015 | | 2016 | |
| 2b1 ICT Specialists⁵ % individuals | 4.4% ↑ | 6 | 3.9% | 8 | 3.5% | |
| | 2015 | | 2014 | | 2015 | |
| 2b2 STEM Graduates Per 1000 individuals (aged 20-29) | 14 → | 24 | 14 | 21 | 19 | |
| | 2014 | | 2013 | | 2014 | |

| 2 Human Capital | Estonia | | Cluster | EU |
|-----------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 10 | 0.58 | 0.68 | 0.55 |
| DESI 2016 | 9 | 0.58 | 0.66 | 0.53 |

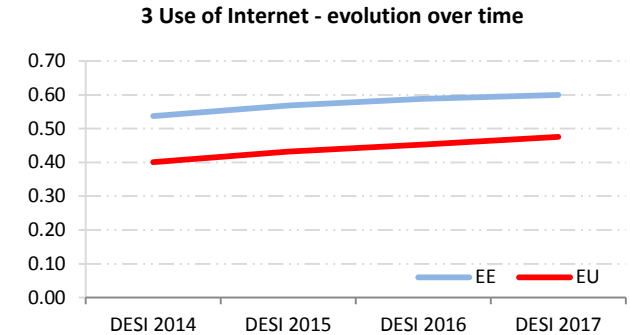
2 Human Capital - evolution over time



3) Use of Internet: Estonian Internet users engage in online activities more than the EU average does. Take-up of eBanking is one of the highest in the EU, at 90% of internet users.

| | Estonia | | | | EU |
|--|-----------|------|-----------|------|-----------|
| | DESI 2017 | | DESI 2016 | | DESI 2017 |
| | value | rank | value | rank | value |
| 3a1 News | 89% | ↓ 3 | 91% | 2 | 70% |
| % individuals who used Internet in the last 3 months | 2016 | | 2015 | | 2016 |
| 3a2 Music, Videos and Games⁶ | 84% | 9 | NA | | 78% |
| % individuals who used Internet in the last 3 months | 2016 | | 2016 | | 2016 |
| 3a3 Video on Demand⁷ | 24% | 9 | NA | | 21% |
| % individuals who used Internet in the last 3 months | 2016 | | 2016 | | 2016 |
| 3b1 Video Calls | 47% | ↑ 12 | 46% | 8 | 39% |
| % individuals who used Internet in the last 3 months | 2016 | | 2015 | | 2016 |
| 3b2 Social Networks | 66% | ↑ 20 | 63% | 20 | 63% |
| % individuals who used Internet in the last 3 months | 2016 | | 2015 | | 2016 |
| 3c1 Banking | 90% | ↓ 4 | 91% | 2 | 59% |
| % individuals who used Internet in the last 3 months | 2016 | | 2015 | | 2016 |
| 3c2 Shopping | 64% | ↓ 13 | 66% | 10 | 66% |
| % internet users (last year) | 2016 | | 2015 | | 2016 |

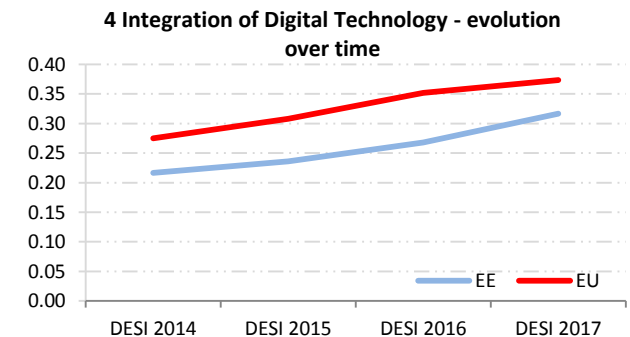
| 3 Use of Internet | Estonia | | Cluster | EU |
|-------------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 6 | 0.60 | 0.60 | 0.48 |
| DESI 2016 | 5 | 0.59 | 0.57 | 0.45 |



4) Integration of Digital Technology: Several Estonian companies make use of eInvoices and cloud services. However, overall Estonia stands below EU average in digitising businesses, mainly because of low scores in electronic information sharing, social media and RFID.

| | Estonia | | | | EU |
|---|-----------|------|-----------|------|-----------|
| | DESI 2017 | | DESI 2016 | | DESI 2017 |
| | value | rank | value | rank | value |
| 4a1 Electronic Information Sharing | 22% | 23 | 22% | 23 | 36% |
| % enterprises | 2015 | | 2015 | | 2015 |
| 4a2 RFID | 2.7% | 25 | 2.7% | 25 | 3.9% |
| % enterprises | 2014 | | 2014 | | 2014 |
| 4a3 Social Media | 12% | ↑ 23 | 9% | 25 | 20% |
| % enterprises | 2016 | | 2015 | | 2016 |
| 4a4 eInvoices | 19% | ↑ 12 | 14% | 11 | 18% |
| % enterprises | 2016 | | 2015 | | 2016 |
| 4a5 Cloud | 17% | 8 | NA | | 13% |
| % enterprises | 2016 | | 2015 | | 2016 |
| 4b1 SMEs Selling Online | 15% | ↑ 16 | 12% | 19 | 17% |
| % SMEs | 2016 | | 2015 | | 2016 |
| 4b2 eCommerce Turnover | 10.7% | ↑ 8 | 8.1% | 15 | 9.4% |
| % SME turnover | 2016 | | 2015 | | 2016 |
| 4b3 Selling Online Cross-border | 6.1% | 19 | 6.1% | 19 | 7.5% |
| % SMEs | 2015 | | 2015 | | 2015 |

| 4 Integration of Digital Technology | Estonia | | Cluster | EU |
|-------------------------------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 20 | 0.32 | 0.44 | 0.37 |
| DESI 2016 | 21 | 0.27 | 0.41 | 0.35 |

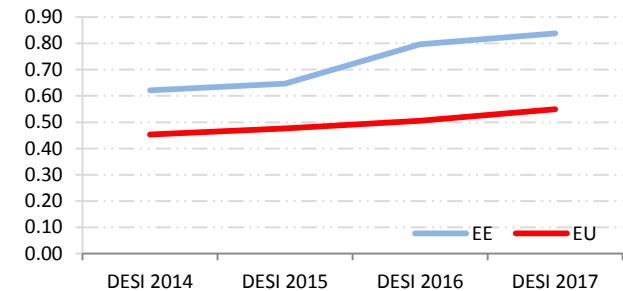


5) Digital Public Services: Estonia is the European champion in eGovernment use. In addition, it ranks 2nd on the quality of digital public services. Estonia's performance in open data has improved significantly but still stands slightly below EU average.

| | Estonia | | | | EU |
|--|-----------------|------|-----------------|------|-----------------|
| | DESI 2017 value | rank | DESI 2016 value | rank | DESI 2017 value |
| 5a1 eGovernment Users % internet users (last year) | 78% ↓ | 1 | 80% | 1 | 34% |
| 5a2 Pre-filled Forms Score (0 to 100) | 89 ↓ | 2 | 95 | 1 | 49 |
| 5a3 Online Service Completion Score (0 to 100) | 97 ↑ | 2 | 96 | 4 | 82 |
| 5a4 Open Data⁸ % of maximum score | 55% ↑ | 17 | 29% | 23 | 59% |

| 5 Digital Public Services | Estonia | | Cluster | EU |
|---------------------------|---------|-------|---------|-------|
| | rank | score | score | score |
| DESI 2017 | 1 | 0.84 | 0.59 | 0.55 |
| DESI 2016 | 2 | 0.80 | 0.57 | 0.51 |

5 Digital Public Services - evolution over time



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.