

# Digital Economy and Society Index 2017 - Netherlands



The Netherlands ranks 4<sup>th</sup> in DESI 2017. The Netherlands ranks highest in connectivity; Dutch citizens are very active users of the Internet and have the right skills to do so. The digitisation of Public Services is among the most advanced in the EU while the country's challenge is to improve the take up of technology by business –although already above the EU average.

|                        | Nethe      | rlands | Cluster | EU    |
|------------------------|------------|--------|---------|-------|
|                        | rank score |        | score   | score |
| DESI 2017              | 4          | 0.67   | 0.63    | 0.52  |
| DESI 2016 <sup>1</sup> | 4          | 0.64   | 0.60    | 0.49  |

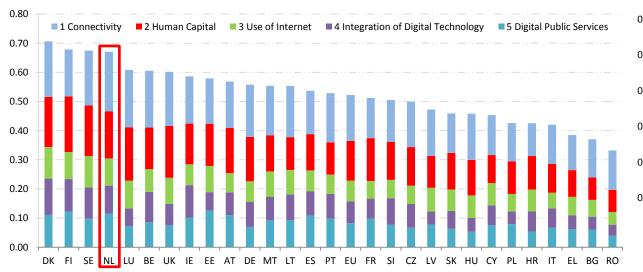
# The Digital Economy and Society Index is a composite index measuring progress in digital through five components:

| 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<br>Services        | eGovernment   |

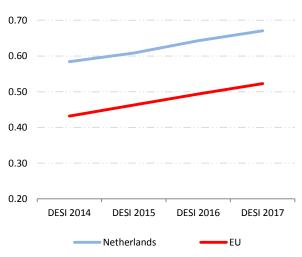
**Clustering:** The Netherlands belongs to the cluster of high performing countries.

# 

# Digital Economy and Society Index (DESI) 2017 ranking



#### DESI - evolution over time



1) Connectivity: The Netherlands is leading in Connectivity, in particular when it comes to fixed broadband. Fast broadband access (NGA) is practically available to all Dutch households and most broadband users do subscribe to fast connections.

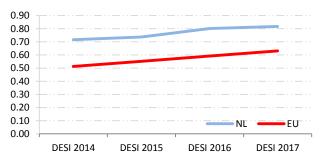
|                                     | Netherlands                |               |      |                            |           | EU                         |
|-------------------------------------|----------------------------|---------------|------|----------------------------|-----------|----------------------------|
|                                     | DESI                       | 201           | 7    | DESI 20                    | DESI 2017 |                            |
|                                     | value                      |               | rank | value                      | rank      | value                      |
| 1a1 Fixed Broadband Coverage        | 100%                       | $\rightarrow$ | 2    | 100%                       | 2         | 98%                        |
| % households                        | 2016                       |               |      | 2015                       |           | 2016                       |
| 1a2 Fixed Broadband Take-up         | 95%                        | 1             | 2    | 94%                        | 2         | 74%                        |
| % households                        | 2016                       |               |      | 2015                       |           | 2016                       |
| 1b1 Mobile Broadband Take-up        | 85                         | 1             | 12   | 80                         | 9         | 84                         |
| Subscriptions per 100 people        | June 2016                  |               |      | June 2015                  |           | June 2016                  |
| 1b2 4G coverage <sup>2</sup>        | 91%                        |               | 16   | NA                         |           | 84%                        |
| % households (average of operators) | 2016                       |               |      |                            |           | 2016                       |
| 1b3 Spectrum <sup>3</sup>           | 61%                        | $\downarrow$  | 21   | 65%                        | 19        | 68%                        |
| % of the target                     | 2016                       |               |      | 2015                       |           | 2016                       |
| 1c1 NGA Coverage                    | 98%                        | $\rightarrow$ | 3    | 98%                        | 3         | 76%                        |
| % households                        | 2016                       |               |      | 2015                       |           | 2016                       |
| 1c2 Subscriptions to Fast Broadband | 68%                        | 1             | 3    | 62%                        | 3         | 37%                        |
| % subscriptions >= 30Mbps           | June 2016                  |               |      | June 2015                  |           | June 2016                  |
| 1d1 Fixed Broadband Price4          | 1.0%                       | $\rightarrow$ | 7    | 1.0%                       | 8         | 1.2%                       |
| % income                            | price 2016,<br>income 2015 |               |      | price 2015,<br>income 2015 |           | price 2016,<br>income 2015 |

2) Human Capital: The Netherlands is one of Europe's leaders in terms of number of citizens using the Internet and having the skills to do it. However the number of graduates in science and technology stagnates and many companies find it hard to recruit ICT specialists.

|                                   |      | Netherlands   |      |         |           | EU    |
|-----------------------------------|------|---------------|------|---------|-----------|-------|
|                                   | DI   | SI 201        | 7    | DESI 20 | DESI 2017 |       |
|                                   | val  | ıe            | rank | value   | rank      | value |
| 2a1 Internet Users                | 92%  | <b>1</b>      | 4    | 91%     | 3         | 79%   |
| % individuals                     | 2016 |               |      | 2015    |           | 2016  |
| 2a2 At Least Basic Digital Skills | 77%  | <b>1</b>      | 3    | 72%     | 4         | 56%   |
| % individuals                     | 2016 |               |      | 2015    |           | 2016  |
| 2b1 ICT Specialists <sup>5</sup>  | 5.0% | <b>1</b>      | 3    | 4.9%    | 4         | 3.5%  |
| % individuals                     | 2015 |               |      | 2014    |           | 2015  |
| 2b2 STEM Graduates                | 10   | $\rightarrow$ | 27   | 10      | 27        | 19    |
| Per 1000 individuals (aged 20-29) | 2014 |               |      | 2013    |           | 2014  |

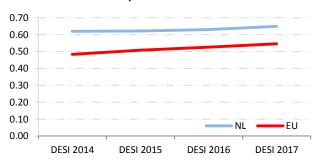
| 1 Connectivity | Nethe | rlands | Cluster | EU    |
|----------------|-------|--------|---------|-------|
|                | rank  | score  | score   | score |
| DESI 2017      | 1     | 0.82   | 0.75    | 0.63  |
| DESI 2016      | 1     | 0.80   | 0.73    | 0.59  |

# 1 Connectivity - evolution over time



| 2 Human Capital | Nethe | rlands | Cluster | EU    |
|-----------------|-------|--------|---------|-------|
| 2 Human capital | rank  | score  | score   | score |
| DESI 2017       | 6     | 0.65   | 0.68    | 0.55  |
| DESI 2016       | 6     | 0.63   | 0.66    | 0.53  |

# 2 Human Capital - evolution over time



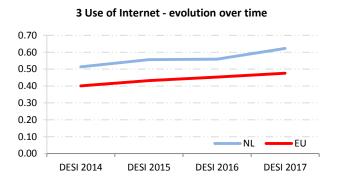
3) Use of Internet: The Netherlands scores high in the use of Internet; the number of users who read news, use social networks and perform video calls has increased over last year. Usage of online banking is the 2<sup>nd</sup> highest in the EU.

|  |       | Netherlands   |      |         |           | EU    |
|--|-------|---------------|------|---------|-----------|-------|
|  | DESI  | 201           | 7    | DESI 20 | DESI 2017 |       |
|  | value |               | rank | value   | rank      | value |
| 3a1 News   | 75%   | 1             | 16   | 59%     | 25        | 70%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      | 2015    |           | 2016  |
| 3a2 Music, Videos and Games <sup>6</sup>             | 88%   |               | 6    | NA      |           | 78%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      |         |           | 2016  |
| 3a3 Video on Demand <sup>7</sup>                     | 39%   |               | 3    | NA      |           | 21%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      |         |           | 2016  |
| 3b1 Video Calls                                      | 39%   | 1             | 20   | 34%     | 23        | 39%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      | 2015    |           | 2016  |
| 3b2 Social Networks                                  | 66%   | 1             | 19   | 64%     | 19        | 63%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      | 2015    |           | 2016  |
| 3c1 Banking  | 91%   | $\rightarrow$ | 2    | 91%     | 3         | 59%   |
| % individuals who used Internet in the last 3 months | 2016  |               |      | 2015    |           | 2016  |
| 3c2 Shopping   | 79%   | 1             | 6    | 76%     | 6         | 66%   |
| % internet users (last year)                         | 2016  |               |      | 2015    |           | 2016  |

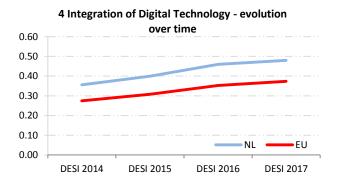
4) Integration of Digital Technology: The Netherlands is slowly progressing on business digitisation; many companies already use social media and cloud. However, online sales by SMEs is more limited, although the turnover derived from eCommerce has increased.

|                                    |       | Netherlands  |      |         |           | EU    |
|------------------------------------|-------|--------------|------|---------|-----------|-------|
|                                    | DESI  | 201          | 7    | DESI 20 | DESI 2017 |       |
|                                    | value |              | rank | value   | rank      | value |
| 4a1 Electronic Information Sharing | 45%   |              | 4    | 45%     | 4         | 36%   |
| % enterprises                      | 2015  |              |      | 2015    |           | 2015  |
| 4a2 RFID                           | 3.1%  |              | 19   | 3.1%    | 19        | 3.9%  |
| % enterprises                      | 2014  |              |      | 2014    |           | 2014  |
| 4a3 Social Media                   | 38%   | 1            | 2    | 37%     | 1         | 20%   |
| % enterprises                      | 2016  |              |      | 2015    |           | 2016  |
| 4a4 elnvoices                      | 19%   | 1            | 11   | 15%     | 8         | 18%   |
| % enterprises                      | 2016  |              |      | 2015    |           | 2016  |
| 4a5 Cloud                          | 29%   |              | 4    | NA      |           | 13%   |
| % enterprises                      | 2016  |              |      | 2015    |           | 2016  |
| 4b1 SMEs Selling Online            | 16%   | $\downarrow$ | 14   | 17%     | 11        | 17%   |
| % SMEs                             | 2016  |              |      | 2015    |           | 2016  |
| 4b2 eCommerce Turnover             | 9.2%  | 个            | 14   | 8.3%    | 13        | 9.4%  |
| % SME turnover                     | 2016  |              |      | 2015    |           | 2016  |
| 4b3 Selling Online Cross-border    | 10.3% |              | 7    | 10.3%   | 7         | 7.5%  |
| % SMEs                             | 2015  |              |      | 2015    |           | 2015  |

| 3 Use of Internet | Nethe | rlands | Cluster     | EU   |
|-------------------|-------|--------|-------------|------|
|                   | rank  | score  | score score |      |
| DESI 2017         | 4     | 0.62   | 0.60        | 0.48 |
| DESI 2016         | 8     | 0.56   | 0.57        | 0.45 |



| 4 Integration of Digital | Nethe | rlands | Cluster | EU    |
|--------------------------|-------|--------|---------|-------|
| Technology rank          | rank  | score  | score   | score |
| DESI 2017                | 6     | 0.48   | 0.44    | 0.37  |
| DESI 2016                | 6     | 0.46   | 0.41    | 0.35  |

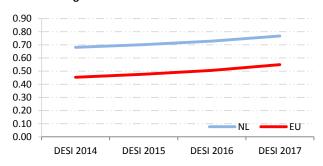


5) Digital Public Services: The Netherlands ranks 3<sup>rd</sup> in EU for the online provision of public services. Its advanced performance concerns all indicators, from the quality of public services to the provision of open data.

|                               | Netherlands |                       |      |         | EU        |       |
|-------------------------------|-------------|-----------------------|------|---------|-----------|-------|
|                               | DESI        | 201                   | 7    | DESI 20 | DESI 2017 |       |
|                               | value       |                       | rank | value   | rank      | value |
| 5a1 eGovernment Users         | 58%         | 个                     | 4    | 56%     | 5         | 34%   |
| % internet users (last year)  | 2016        |                       |      | 2015    |           | 2016  |
| 5a2 Pre-filled Forms          | 74          | $\downarrow$          | 5    | 76      | 6         | 49    |
| Score (0 to 100)              | 2016        |                       |      | 2015    |           | 2016  |
| 5a3 Online Service Completion | 89          | $\mathbf{\downarrow}$ | 11   | 91      | 8         | 82    |
| Score (0 to 100)              | 2016        |                       |      | 2015    |           | 2016  |
| 5a4 Open Data <sup>8</sup>    | 79%         | ↑                     | 4    | 60%     | 7         | 59%   |
| % of maximum score            | 2016        |                       |      | 2015    |           | 2016  |

| 5 Digital Public Services                     | Nethe | rlands | Cluster | EU    |
|---|-------|--------|---------|-------|
| 5 2 18 14 11 11 11 11 11 11 11 11 11 11 11 11 | rank  | score  | score   | score |
| DESI 2017                                     | 3     | 0.77   | 0.59    | 0.55  |
| DESI 2016                                     | 4     | 0.73   | 0.57    | 0.51  |

### 5 Digital Public Services - evolution over time



# 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.
- 8 Open Data: Change of data source. The historical data have also been restated. The new source is the European Data Portal.

