

# Connectivity Scorecard 2011

## Belgium



**Belgium**  
**6.31**

	Score	Weight
<b>Consumer</b> Infrastructure	0.67 (0.95)*	0.10
<b>Consumer</b> Usage and Skills	0.57 (0.79)*	0.10
<b>Business</b> Infrastructure	0.65 (0.86)*	0.38
<b>Business</b> Usage and Skills	0.66 (0.83)*	0.32
<b>Public sector</b> Infrastructure	0.45 (0.79)*	0.05
<b>Public sector</b> Usage and Skills	0.48 (0.79)*	0.04

\*The score of the leading performer for this component

Table 1: Component Scores & Weights 2011

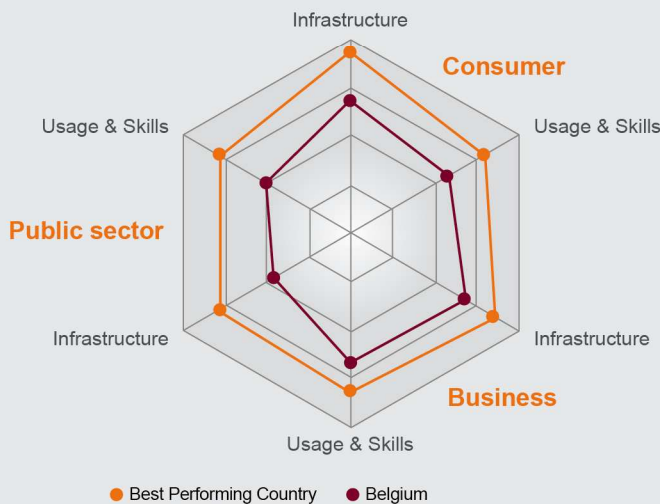


Fig 1: Component Scores 2011

### Overview

Belgium scores 6.31 and climbs four places to rank 11<sup>th</sup> among the innovation-driven<sup>1</sup> economies on the Connectivity Scorecard 2011 index. In 2010, Belgium held the 15<sup>th</sup> rank with a score of 6.08.

To be fair, Belgium's performance is that of a moderately strong performer, but more similar to the "continental" European nations of France, Germany and Austria than to the Northern European fringe of the Netherlands, Sweden, Norway, Denmark and Finland. Belgium's strength lies in its extensive cable broadband infrastructure, ICT investments in the business sector, and the share of workforce employed in science and technology streams. On the other side, its weaknesses include low 3G penetration, and inadequate ICT spending by government, educational institutions and healthcare organizations. Within the broad grouping of countries into which Belgium can be classified, one can expect to see some interchanging of positions (ranks) from year-to-year, but there is no indication that Belgium will fundamentally alter its performance and challenge the top few European countries.

### Strengths

On the consumer front, broadband coverage in Belgium is about as high as anywhere else in the world (although this is hardly surprising given Belgium's very high population density). Further, although average broadband speeds are well below the levels of Japan and Korea, they are significantly higher than in much of the rest of Europe, owing to a near-ubiquitous cable broadband infrastructure. Belgium scores highly on the proportion of population that uses the Internet, and also on the frequency of Internet usage. Belgium is also a strong performer on text messaging. In the business component

<sup>1</sup> As defined by The World Economic Forum [www.weforum.org](http://www.weforum.org)

of the Scorecard, the country has some strengths in terms of business uptake of broadband, mobile data services and the share of new data protocols (Ethernet and IP) in the mix of corporate-facing data infrastructure. ICT investment by businesses is respectably strong too. On the business usage front, Belgium performs well in terms of the proportion of businesses that have websites. It also performs well in terms of the share of employment in science and technology, and in terms of the proportion of the workforce that has tertiary educational qualification. On the public sector or “government” components of the Scorecard, however, Belgium has no notable areas of strength.

### Weaknesses

There are several areas where Belgium can improve. For instance, despite extensive network coverage, 3G penetration measured as a share of overall mobile subscriptions is rather low. Also, fixed and mobile voice usage is much lower as compared to the usage in the United States and some other countries. On the business front, rather puzzlingly, the data for Belgium continues to show a low penetration rate of personal computers and secure internet servers (on the latter it is possible that servers located in France or the Netherlands serve Belgian consumers). On the business usage side, Belgium’s performance in spending on IT services by businesses is moderate. Further, despite a high score in having a workforce with tertiary educational qualifications, Belgium is not a strong performer in the production of science and engineering doctorates. On the government or “public sector” front, Belgium gets persistently moderate scores (0.3 to 0.5) on many measures of ICT spending by government, educational institutions and healthcare organizations. Further, Belgium is not a strong performer in terms of the proportion of the population that uses e-Governance services.

### Conclusions

Belgium is a moderately strong ICT performer. However, this performance is marked with interesting discrepancies that warrant further study. For instance, it is quite puzzling that Belgium’s performance differs so much from that of the neighbouring Netherlands. In fact, it is more comparable to that of France and Germany. While GDP per capita in Belgium is lower than in the Netherlands, and broadband adoption too is weaker, on some other parameters it is very similar. For example, Belgium features the same widespread competition between cable and DSL platforms that the Netherlands

Rank [*)	Country	Connectivity Score
1 [1]	Sweden	7.84
2 [2]	United States	7.82
3 [4]	Denmark	7.47
4 [5]	Netherlands	7.45
5 [3]	Norway	7.09
6 [8]	United Kingdom	7.06
7 [7]	Australia	6.93
8 [9]	Canada	6.88
9 [6]	Finland	6.78
10 [11]	Singapore	6.40
11 [15]	Belgium	6.31
12 [n/a]	Austria	6.27
13 [17]	Germany	6.27
14 [12]	Ireland	6.08
15 [18]	France	6.06
16 [10]	Japan	5.89
17 [16]	New Zealand	5.84
18 [13]	Korea	5.80
19 [20]	Spain	5.09
20 [19]	Czech Republic	4.93
21 [21]	Portugal	4.80
22 [22]	Italy	4.79
23 [23]	Hungary	4.50
24 [24]	Poland	4.26
25 [25]	Greece	4.22

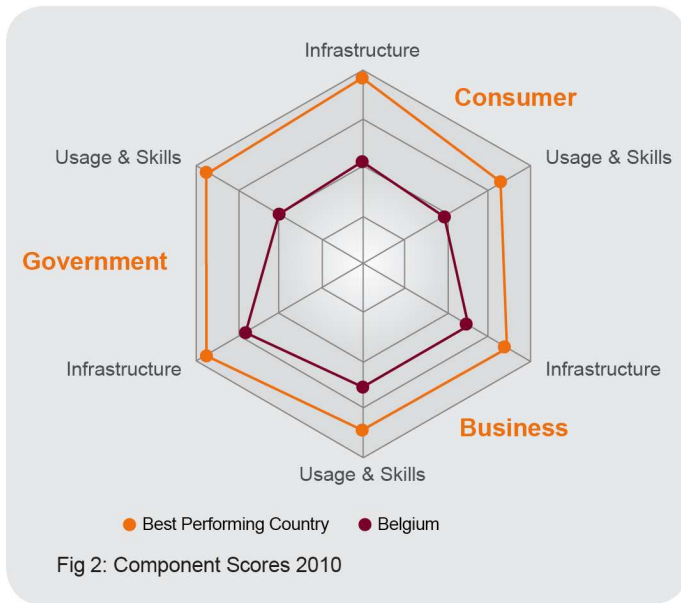
\*last year’s rank in parenthesis

Table 2: Connectivity Scorecard 2011 Results – Innovation-driven Economies

also does. Again, on the business front, Belgium ranks poorly in terms of personal computer penetration which is surprising too. ICT investment per capita is quite strong, but this strength does not seem to extend to spending on IT services and corporate data services. Overall, the result is a mixed but respectably strong performance for Belgium. An investigation into the somewhat intriguing inconsistencies in various aspects of Belgium’s performance as narrated above, might throw up some useful clues as to what the country is doing right and what it is doing wrong. Such an investigation would also shed light on the benefits of any policy intervention to make matters better.

### 2011 vs. 2010

Belgium scores 6.31/11<sup>th</sup> place in 2011, compared to 6.08/15<sup>th</sup> place in 2010. Had the report used 2010 weights and applied them to this year’s data, Belgium would have finished 11th, but with a tiny increase in its score to 6.33. The new weights, then, do not explain the difference in Belgium’s



performance between this year and last year, and the improvement is down to the use of new indicators. In particular, like many other countries, Belgium was able to appreciably improve its consumer infrastructure score. Whereas Belgium scored 0.53 on this component of the Scorecard last year, it scored 0.67 this year.

The change in most countries' consumer infrastructure performance this year<sup>2</sup> is owed to the inclusion of three indicators which equalized the countries' performance. These three indicators are (a) fixed broadband coverage, (b) 3G coverage, and (c) unique user mobile penetration. On the first two indicators, most "innovation driven" economies have at least 80% to 85% of their population covered by wireless and fixed-line broadband networks. On the third metric, in most nations at least 60% of the population owns a mobile device, but the proportion seldom, if ever, exceeds 95%. Thus this indicator shows only a limited variation. Had the study used the more conventional, but less merited, indicator of "SIM cards per 100 population" (which is how many agencies measure mobile penetration) there would be some more variation on the "mobile penetration" metric as some countries have SIM card penetration rates of 150 per 100 population or more. Further, Belgium also increased its consumer usage score. Newly available data on text messaging usage reported by Belgian operators played a role in this, as did the re-insertion of data on Internet users in the dataset, as Belgium did well on this measure (last year, the report had only used data on "frequent"

Internet users, and on this measure Belgium has actually improved its relative position somewhat).

The decrease in many countries' government sector scores is due to the inclusion of additional metrics on public sector or quasi-public-sector investments in IT hardware, software and IT services. These new metrics had the effect of creating additional differences in country scores, with some country scores on the "public" or "government" subcategories falling substantially as a result. The U.S. and some other countries did not experience this decline, whereas many countries like Belgium experienced some decline. The decline however was concentrated in the "public sector infrastructure" component which measures investment or spending in tangible assets by public sector segments of the economy.

The Connectivity Scorecard is based on comparative scores between countries, and, therefore, each country's performance is measured in relation to the best performing nation in each component at a given point of time. As with other indices of relative rankings, it is therefore hard to interpret the Scorecard in terms of absolute "improvements" or "deteriorations" and to make comparisons of scores over time.

### About Connectivity Scorecard

The Connectivity Scorecard is a global ICT index which, unlike other available research, is the first of its kind to rank countries in terms of "useful connectivity". That is, not only on the deployment of ICT infrastructure but also to measure the extent to which consumers, businesses and the public sector "make use" of connectivity technologies to enhance social and economic prosperity. This "useful connectivity" is defined as the bundle of infrastructure, complementary skills, software and informed usage that makes ICT the key driver of productivity and economic growth.

Commissioned by Nokia Siemens Networks, the study was created by Professor Leonard Waverman, Dean, Haskayne School of Business, University of Calgary, and Fellow, London Business School. The study was conducted by the consulting firms Berkeley Research Group and Communicea.

For more information on the Connectivity Scorecard, visit [www.connectivityscorecard.org](http://www.connectivityscorecard.org)

<sup>2</sup> For more information download the Connectivity Scorecard 2011 Report from [www.connectivityscorecard.org](http://www.connectivityscorecard.org)

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