

# Connectivity Scorecard 2011

## Spain



	Score	Weight
<b>Consumer</b> Infrastructure	0.61 (0.95)*	0.13
<b>Consumer</b> Usage and Skills	0.38 (0.79)*	0.13
<b>Business</b> Infrastructure	0.59 (0.86)*	0.34
<b>Business</b> Usage and Skills	0.47 (0.83)*	0.31
<b>Public sector</b> Infrastructure	0.36 (0.79)*	0.05
<b>Public sector</b> Usage and Skills	0.45 (0.79)*	0.05

\*The score of the leading performer for this component

Table 1: Component Scores & Weights 2011

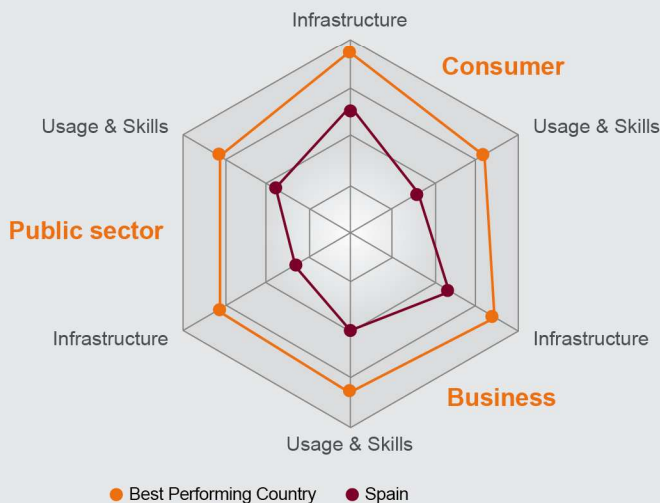


Fig 1: Component Scores 2011

### Overview

Spain scores 5.09 and climbs one place to finish in 19<sup>th</sup> place amongst the Innovation-driven<sup>1</sup> economies on the Connectivity Scorecard 2011. Although Spain outperforms other southern European states like Italy, Greece and Portugal, it still lags well behind countries such as France, Germany and the UK which are appropriate benchmarks given their relative GDP per capita.

Spain performs reasonably well in terms of consumer and business infrastructure components, but weaker scores in the government sector and on many usage measures suggest that there is still significant room for improvement.

### Strengths

Though Spain is not a particularly strong performer on most consumer metrics, it performs best in terms of fixed line and 3G penetration. From a business perspective, Spain ranks among the top performers on two measures of business infrastructure, namely business uptake of broadband and enterprise telephony. However, these measures are highly concentrated in the sense that there is limited dispersion between the best and worst countries on these measures. Spain also performs well on the UN's e-government services and e-participation indices.

### Weaknesses

Spain performs poorly on a number of measures concerning internet usage. Just 39% of Spain's population are regular internet users compared to 50-60% in the leading countries. Average speeds and speed distribution in Spain are among the worst of all the innovation-driven economies. Internet banking, for example, appears to be around half the adoption rate of the UK, France, Germany and the UK and a third of that in the Scandinavian countries.

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

Spain also has low personal computer penetration, which is approximately half the level observed in many of Spain's "competitors" or at least those countries within Europe with which it aspires to compete. Additionally, average connection speeds and the percentage of IP addresses above 5 Mbps in Spain are substantially lower than the top tier of all the innovation-driven economies.

Spain's performance on most measures of government and public sector infrastructure and usage is another area of weakness. Per capita government spending on IT hardware, software and particularly services is well below the level observed across much of northern Europe. The uptake of e-government services by both individuals and business enterprises is at acceptable levels, however.

### Conclusions

The outlook for Spain is largely unchanged from a year ago. Spain still lags well behind France, Germany, the UK and the Scandinavian nations. It does perform slightly better than Portugal, Greece, Italy and the transition economies of Central Europe, but this is due to the poor performance of those countries rather than any accomplishment on the part of Spain.

Given its level of GDP per capita, Spain's performance on most measures of internet adoption is very weak. These findings suggest that there are significant opportunities for Spain to improve its broadband infrastructure and boost the usage of value-enhancing online services. Additionally, there is room for the Spanish government to boost spending on IT hardware, software and services and catch up with the rest of western Europe.

Just a few years ago, Spain had ambitions of catching up with the major western European nations in terms of per capita GDP. The economic crisis in Spain had dented those ambitions. However, Spain still has some major companies and important centres of learning and research. The short-term crisis should not stop Spain from continuing down the path of increasing ICT adoption, fostering greater innovation, and improving the quality of its human capital.

### 2011 vs. 2010

Spain's scores 5.09 and ranks 19<sup>th</sup> this year, compared to 4.79 in 2010, when it ranked 20<sup>th</sup>. Spain's score was unaffected by the change in weights this year<sup>2</sup>. The change two factors: a considerable improvement in

Rank [2010]	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

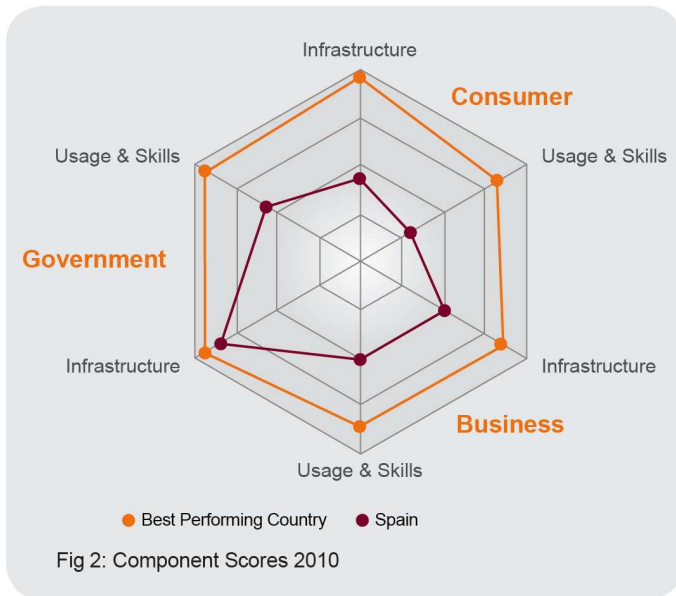
\*last year's rank in parenthesis

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

consumer infrastructure and a decline in its government infrastructure score.

The improvement in consumer infrastructure is primarily the result of the inclusion of three indicators which tend to equalize countries' performance namely fixed broadband coverage, 3G coverage and unique user mobile penetration. The majority of "innovation" nations have at least 80% to 85% of their population covered by wireless and fixed-line broadband networks which means that there is limited variation among countries on these measures. In terms of unique mobile users, in the majority of countries covered by the Scorecard, 80 to 90 percent of their population that owns a mobile device. Thus this indicator shows only limited variation. Had the report 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"

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



metric as some countries have SIM card penetration rates of 150 per 100 population or more.

The inclusion of additional metrics in the 2011 scorecard has had the opposite effect on government infrastructure scores. The new metrics have created additional dispersion in country scores, with some country scores on the “public” or “government” components falling substantially as a result. Spain is one of the countries most affected by this change as Spanish government spending on IT hardware, software and services on a per capita basis is particularly low. However, the more generous methodology used for the consumer infrastructure category allowed Spain to increase its score relative to last year.

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 difficult 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)

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