

Connectivity Scorecard 2011

Greece



Greece
4.22

	Score	Weight
Consumer Infrastructure	0.59 (0.95)*	0.17
Consumer Usage and Skills	0.26 (0.79)*	0.17
Business Infrastructure	0.49 (0.86)*	0.23
Business Usage and Skills	0.41 (0.83)*	0.34
Public sector Infrastructure	0.15 (0.79)*	0.04
Public sector Usage and Skills	0.33 (0.79)*	0.05

*The score of the leading performer for this component

Table 1: Component Scores & Weights 2011

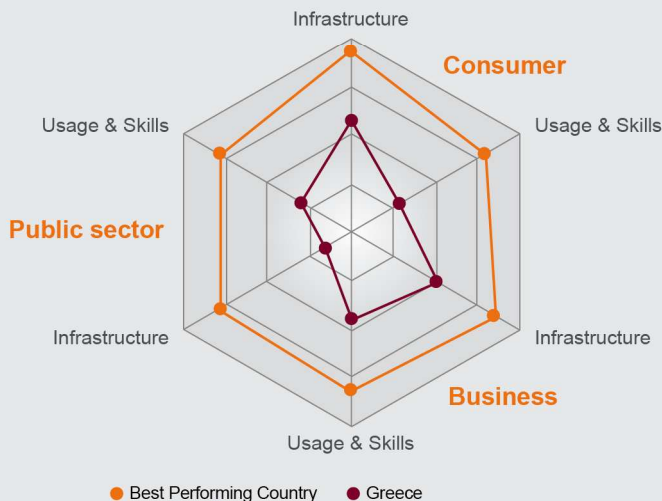


Fig 1: Component Scores 2011

Overview

Greece scores 4.22 and retains its ranking at the bottom of the 25 Innovation-driven¹ economies on the Connectivity Scorecard 2011 index.

Greece was at the same position in 2010 with a score of 3.44, thus continuing its weak performance. Despite the fact that the country enjoys a considerably higher GDP per capita than many of the transition economies of Eastern Europe, Greece performs very poorly on most metrics. In 19 out of the 40 metrics considered, the country ranks in the bottom five. Greece is particularly weak on several Internet-related measures of consumer usage and public sector infrastructure, but performs reasonably well on certain telephony-related measures. With the ongoing economic crisis, efforts to boost the country's use of Information and Communications Technology (ICT) could provide the necessary impetus for economic growth.

Strengths

Greece has few strengths and ranks in the top 10 positions on just five of the metrics considered. Though these relatively strong performances are spread across four of the Scorecard's six components, they are insufficient to materially boost Greece's performance in any one component.

Greece's fixed line penetration is relatively high—it finishes among the top 10 innovation economies. However, this increase should be put in context of those countries that have the tendency towards fixed-mobile substitution. For the consumer usage component too, Greece performs well in terms of fixed and mobile usage.

¹ As defined by The World Economic Forum www.weforum.org

From a business perspective, Greece is a relatively good performer in terms of the share of corporate data services revenue accounted for by IP VPN and Ethernet services (i.e. new data protocols instead of legacy protocols). It should be noted, however, that Greece does not have much of a legacy installed base and that corporate data services are relatively “new” to the Greek market. Business uptake of mobile data services is also reasonably high.

Additionally and somewhat surprisingly, given the country’s weak performance on all the other government and public sector metrics considered, Greece performs relatively well on the percentage of enterprises using e-government services. In fact, enterprises that use e-government services in Greece are higher in proportion compared to the ones in some advanced countries like UK or France.

Weaknesses

All six of Greece’s component scores are characterised by multiple weaknesses. From a consumer infrastructure perspective, broadband and wireless penetration along with the percentage of IP addresses above 5 Mbps is quite low. On top of these infrastructure deficiencies, consumer usage is also a major area of weakness despite relatively high scores on fixed and mobile voice usage. Just 27% of the Greek population are regular Internet users compared to 50-70% in the leading countries. As a consequence, the take-up rate of online services such as Internet banking and shopping in Greece is the lowest of all the innovation-driven economies.

In the business sector, Greece continues its dismal performance across both infrastructure and usage metrics. The country has very low personal computer penetration compared to its Mediterranean peers or even the leading economies of Western Europe. Business take-up of broadband, enterprise telephony and secure Internet server numbers are also very weak. Furthermore, per capita business spending on IT services is the lowest of all the innovation-driven economies –20% of the level observed in countries like Italy and Spain and less than 10% of the level observed in leading economies.

Greece also performs poorly on government and public sector infrastructure and usage metrics. Government spending on hardware, software and services is amongst the lowest in Europe on a per capita basis. The UN ranks Greece towards the bottom of the list (among the innovation economies) on its e-government service and participation

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

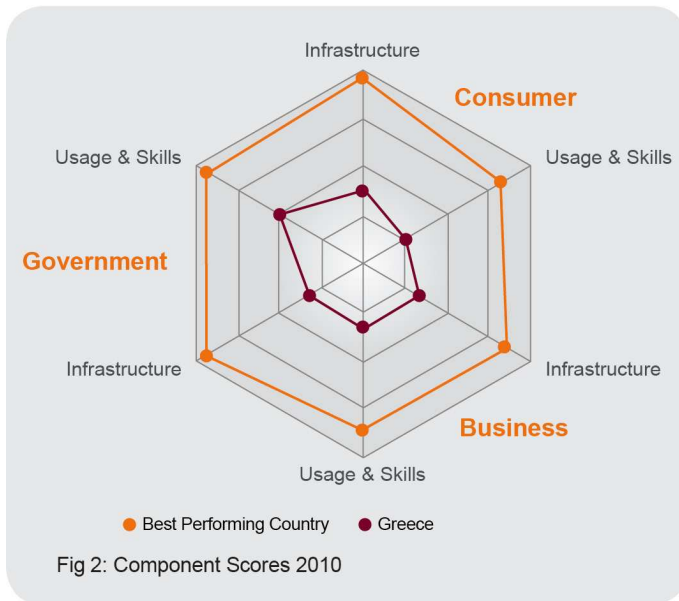
Table 2: Connectivity Scorecard 2011 Results – Innovation-driven Economies

indices, with just over a tenth of the population using e-government services.

Conclusions

Though Greece has shown improvement in its overall scoring, its performance compared to the other innovation-driven economies since 2010 has not been impressive enough. The country remains the weakest performer particularly in the areas of infrastructure deployment, ICT investment and ICT utilisation.

There are multiple areas in which Greece could improve its deployment and usage of ICT. From a consumer perspective, Greece could improve broadband infrastructure and encourage take-up of commercial and government online services. The business and government sectors have significant scope to boost their deployment of IT hardware. Increased investment in ICT could provide the impetus for much needed growth in a country struggling to emerge from a period of economic turmoil.



2011 vs. 2010

Greece's score of 4.22 in 2011 compares with 3.44 in 2010. While there is a notable improvement in scores, this is mainly due to the change in weights, and the country continues to be the worst performing within its peer group. If the same weights were used as in 2010, Greece's total score would have been 4.21 and moved fractionally ahead of Poland. A significant change to be noted here is the change in component scores in terms of consumer, business and government infrastructure as well as government usage.

The change in most countries' consumer infrastructure performance this year² 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, most nations have at least 60 percent of their population that owns a mobile device, but the proportion seldom if ever exceeds 95 percent. Thus this indicator shows only limited variation. If a more conventional but less merited indicator of "SIM cards per 100 population" (which is how many agencies measure mobile penetration) were used, the "mobile penetration" metrics would have shown some more variation. The reason being that some countries have SIM card penetration rates of 150 per 100 population or more. Greece would have benefitted somewhat had the report used the SIM card penetration measure, given that it

² For more information download the Connectivity Scorecard 2011 Report from www.connectivityscorecard.org

has about 145 subscribers per 100 population. However, this measure would not have just included multiple SIM usage, but also poor practices with respect to recording inactive subscribers.

In terms of business infrastructure, Greece's score has been boosted by the inclusion of indicators such as business uptake of mobile data services and the use of new data protocols such as IP VPN and Ethernet on which Greece performs relatively well.

From a government perspective, the inclusion of additional metrics on public sector or quasi-public-sector investments in IT hardware, software and IT services had the effect of creating additional dispersion in country scores, with some country scores within the "public" or "government" subcategories falling substantially as a result. Greece's performance was very weak on several of these metrics such as government spending on IT hardware, software and services and this resulted in reduced government infrastructure and usage scores.

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

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