



BISER

IST-2000-30187

Benchmarking the Information Society:
e-Europe Indicators for European Regions

BISER – Workpackage 6: e-Europe Regions Domain Reporting

Regional Portrait of Castilla Leon

| | |
|--------------------------|---|
| Report Version: | Final Draft |
| Report Preparation Date: | January 2004 |
| Classification: | Public |
| Authors: | All project partners |
| Contract Start Date: | 1 st December 2001 |
| Duration: | 24 Months |
| Project Co-ordinator: | empirica (Germany) |
| Partners: | Danish Technological Institute (Denmark), Local Futures (United Kingdom), Salzburg Research (Austria), University of Rome - Department of Sociology (Italy), Work Research Centre (Ireland) |



Project funded by the European Community under the "Information Society Technology" Programme (1998-2002)

Table of Contents

| | |
|--|----|
| NUTS 2 Regions in Spain..... | 3 |
| 1 The NUTS nomenclature and the spatial structure of Spain..... | 3 |
| Qualitative Description of Castilla Leon..... | 4 |
| 2 Basic facts | 4 |
| 3 Map | 4 |
| 4 Regional structure..... | 4 |
| 5 BISER survey results on Castilla Leon..... | 5 |
| 5.1 Methodology..... | 5 |
| 5.2 Selected results..... | 6 |
| 5.2.1 Population | 6 |
| 5.2.2 Establishments | 9 |
| 5.2.3 Comments on BISER results for Castilla-Leon..... | 11 |

NUTS 2 Regions in Spain

1 The NUTS nomenclature and the spatial structure of Spain

The Kingdom of Spain is the main country on the Iberian Peninsula shared with Portugal and the British dependent territory Gibraltar. Its territory also includes the Balearic Islands, Canary Islands and the cities of Ceuta and Melilla (North Africa). Castilian is the official Spanish language coexisting with other regional languages that are official in their respective Autonomous Communities (art. 3 Spanish Constitution), mainly Catalan, Basque and Galician.

There is a considerable amount of devolution in terms of political and administrative self-governance. Thus the country is divided in 17 Autonomous Communities, each with its own Parliament and Government. Even though the Constitution defines Spain as unitary and indissoluble it also recognises and guarantees the principle of autonomy of nationalities and regions.

In this way, Spain has three different levels of government:

- Central Government
- Autonomous Communities Government
- Municipal Government

The capital of the State is the city of Madrid, with population of 2.938.723 in 2001 (the region of Madrid has 5.423.384. Illustrative of national structure, Madrid holds the seat of all three main levels of Administration established by the Spanish Constitution in 1978: national, regional and municipal. As the capital of Spain, Madrid is home to the different Ministries and public administrations. As the most important city within the Region of Madrid (Comunidad Autonoma de Madrid), it also holds the offices of the Regional government (Consejerías). In addition, the municipal authority (Ayuntamiento de Madrid) has its own offices distributed throughout the city.

Spain is divided into 7 regions corresponding to NUTS 1 level and 15 regions corresponding to NUTS 2 level. The division of country into NUTS 2 units fits rather well with the existing administrative structures.

Qualitative Description of Castilla Leon

2 Basic facts

| | Region (NUTS2) | Country (NUTS0) | EU |
|---|---------------------------------|-----------------|--------------------|
| | Comunidad autonoma Castile Leon | Spain | EU15 average/total |
| GDP [€ in PPP per inhabitant (2000)] EU=100 | 75.9 | 83.4 | 100 |
| Area [km ²] | 94,193 | 504,782 | 3,191,119.9 |
| Population absolute (2002) | 2,428.6 | 40,409.3 | 377,698.1 |
| Population density [inhabitants/km ² (1998)] | 26.5 | 78.2 | 117.8 |

3 Map



4 Regional structure

The region of *Castilla Leon* [Castilla y Leon] is situated inland, east of Madrid and north of the centre of the Iberian Peninsula, on the elevated plain, limited by the mountain ranges *Sistema Iberico* to the east, *Cordillera Central* to the south, *Cordillera Cantabrica* to the north and by the *Duero* river towards Portugal. It is not only the largest region in Spain, but the largest region in the EU as well. The region is comprised of nine provinces: Ávila, Burgos, León, Palencia, Salamanca, Segovia, Soria, Valladolid and Zamora. Thus while its administrative centre is Valladolid, the capitals of these provinces are also important, especially Leon, and Salamanca (the latter being the home to one of, if not the oldest university in Europe).

The economy of the region is somewhat typical of the Objective one areas, with a relatively high proportion of employment in agriculture. This is also reflected in the level of regional income being below the EU average, but also below the national one, which is relevant in this case. Castilla Leon as a region has been experiencing a considerable de-population, in the last decade, the trend likely to continue in this decade too.

5 BISER survey results on Castilla Leon

5.1 Methodology

There are 211 European regions at the NUTS 2 (Nomenclature des unités territoriales statistiques) level and clearly a project like BISER can not carry out surveys in each of these regions since accuracy of the resulting metrics requires a minimum number of observations. Within the limits of budget, it was decided to select 28 out of 211. The regions cover the range of patterns of sectoral structure ("agricultural", "manufacturing" and "services", depending on the share of employment in each of the sectors) and economic power (as GDP per head) as well as Member States according to the distribution of population.

Regions which were surveyed are: Salzburg (Austria), Liège (Belgium), Fyns Amt (Denmark), Väli-Suomi (Finland), Ile de France, Bretagne, Nord-Pas-De-Calais, Languedoc-Roussillon (all France), Darmstadt, Stuttgart, Braunschweig, Magdeburg, Mecklenburg-Vorpommern (all Germany), Kentriki Makedonia (Greece), Border, Midland & Western (Ireland), Sicilia, Lazio, Toscana, Lombardia (all Italy), Friesland (Netherlands), Lisboa & Vale do Tejo (Portugal), Castilla- Leon, Cataluna (both Spain), Smaaland Med Oerna (Sweden), Berkshire, Buckinghamshire and Oxfordshire, Leicestershire, Greater Manchester, and Tees Valley and Durhams (all U.K.).

Within each region the sample was set up as a random probability sample which provides a sufficiently representative picture of the resident population (aged 15+) and of the region's business establishments. For the population survey (RPS), a minimum of 400 successful interviews were conducted in each region; in the establishment survey (RDMS) the sample was at least 300 per region.

Computer Aided Telephone Interviewing (CATI) was used. Telephone interviews offer the advantage of quick and reliable data collection from a central telephone unit. For general population surveys in former times there have been doubts about accuracy of randomisation but recent developments in sampling practices can provide for real probability samples even with rather poor list sources and the growing fractions of non-pub numbers – the shortcoming being that a very small number of households without telephone are not included. CATI also offers best field control, automated sample administration, simultaneous data entry and permits a complex branching of the interview flow depending on filter questions and thus allows to apply questions tailored e.g. to the respondent's experiences with ICT, a firm's equipment status etc.

The population survey provided a person sample (rather than a household sample) and was predominantly based on random dialling methods. Sampling in each Member States was carried out allowing for national differences regarding organisation of telephone number allocation and unlisted telephone numbers, and taking other national peculiarities into account which may require various strategies of random drawing.

The establishment sample included establishments (and thus covered also branch offices and not only autonomous enterprises) from different industries across all economic activities but excluded establishments with less than 5 employees. Sampling was managed as a stratified approach, i.e. done separately for groups of establishments conforming with certain criteria, in order to guarantee a sample representative of the industrial structure and employment size distribution in each region. The establishment sample was drawn from the best existing source lists available, either provided by public authorities or by specialised address brokers.

Readers are reminded that survey results are estimates, the accuracy of which, everything being equal, depends on the sample size and on the observed percentage. With samples of about 300 and 400 interviews respectively, the real percentages vary within the following confidence intervals:

| Observed percentages | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% |
|-------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Confidence intervals if n=300 | 6.4% - 15.4% | 14.7% - 26.6% | 23.7% - 37.2% | 33.0% - 47.4% | 42.6% - 57.4% | 52.6% - 67.0% | 62.8% - 76.3% | 73.4% - 85.3% | 84.6% - 93.6% |
| Confidence intervals if n=400 | 7.1% - 13.9% | 15.9% - 24.9% | 25.1% - 35.4% | 34.6% - 45.6% | 44.4% - 55.6% | 54.4% - 65.4% | 64.6% - 74.9% | 75.1% - 84.1% | 86.1% - 92.9% |

5.2 Selected results

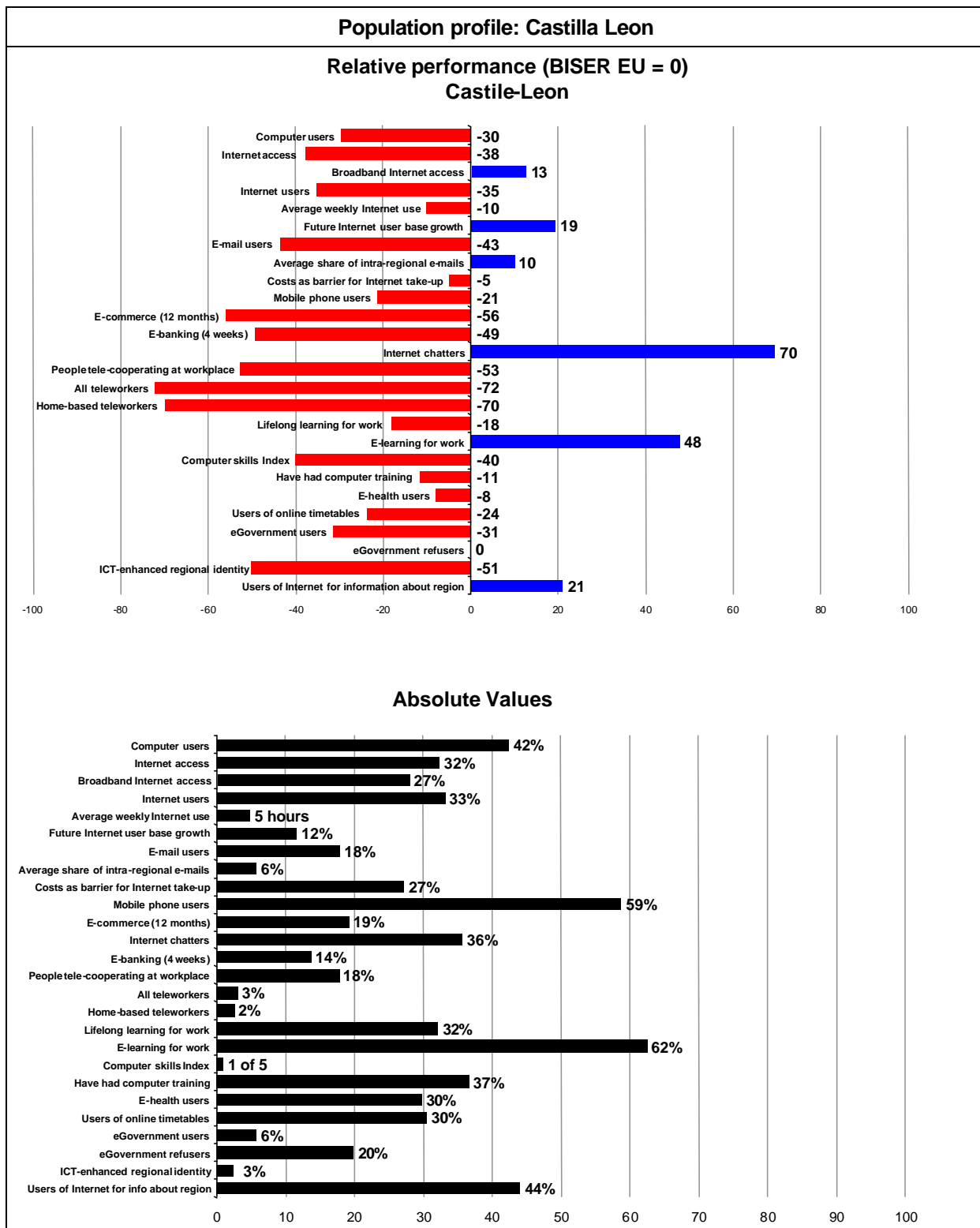
The following figure presents relative performance of Castilla Leon region compared to the average across all 28 BISER region. The BISER average is not representative for the whole of the EU territory in a statistical sense. However, it has been checked that the sample is very similar to the EU with regard to average values for key socio-demographic and business sector variables, respectively.

5.2.1 Population

| Indicator description (RPS) | | | |
|-----------------------------|--------------------------------------|--|--|
| Area | Indicators | Definition | Base |
| Access and basic usage | Computer users | Persons who have used a computer in the last four weeks | Total population 15+ |
| | Internet access | Persons who have access to the Internet in their home | Total population 15+ |
| | Broadband Internet access | Persons who have access to the Internet at home via DSL or cable. | Persons with access to the Internet at home |
| | Internet users | Persons who have used the Internet in the last four weeks | Total population 15+ |
| | Average weekly Internet use | Average time spent using the Internet (hours per week) | Internet users (4 weeks), excluding DK |
| | Future Internet user base growth | Non-users who think it is likely they will use the Internet in the future | Total population 15+ |
| | E-mail users | Persons who have sent at least one e-mail (for private purposes) in the week prior to survey | Total population 15+ |
| | Average share of regional mails | Average percentage of e-mail partners located in the same NUTS 2 region | E-mail users (last week, for private purposes) |
| | Costs a barrier to Internet take-up* | Involved non-users who agree completely that the Internet is too expensive to use | Involved Internet non-users |
| | Mobile phone users | Persons who have a mobile phone for their own personal use | Total population 15+ |
| Standard applications | E-commerce (12 months) | Persons who have used the Internet to order products or services in the last 12 months | Internet users (12 months) |
| | E-banking (4 weeks) | Persons who have used the Internet to conduct on line banking in the last 4 weeks | Internet users (12 months) |
| | Internet chatters | Persons who have used the Internet to conduct online forum in the last 4 weeks | Internet users (12 months) |

| Indicator description (RPS) | | | |
|------------------------------|--|--|---|
| Area | Indicators | Definition | Base |
| Work organisation | People tele-cooperating at workplace | Use of e-mail or other electronic data transfer for co-operation with clients, customers, suppliers or other working partners at other locations | Total employment |
| | All teleworkers | Multi-locational workers who spend paid working time doing home-based telework or mobile telework | Total employment |
| | Home-based teleworkers | Persons who spend paid working time working at home or on the same grounds or buildings as their home, and are using a connection to the Internet or their company's computer system while doing so | Total employment |
| Learning and skills | Lifelong learning for work | Persons in paid employment who have been involved either work related training by their company or by training organisation or in self-directed work related learning in the 4 weeks prior to the survey | Total labour force incl. temporarily not working (unemployed) |
| | E-learning for work | Persons engaged in lifelong learning who have used e-learning | All respondents engaged in lifelong learning in the 4 weeks prior to the survey |
| | Computer skills index | Average number of computer skills (out of a list of 5 of increasing sophistication) in the population | Total population 15+ |
| | Have had computer training | Persons who have once attended a computer training course lasting at least half a day in total | Total population 15+ |
| Special applications | E-health users | Internet users who have searched for any health-related information on the Internet in the 12 months prior to the interview | Internet users (12 months) |
| | Users of online timetables | Percentage of Internet users who have used the Internet to get any timetable information in the 4 weeks prior to the survey | Internet users (12 months) |
| | eGovernment users | Persons who have used the Internet for receiving at least one of three typical services provided by government/ public administration in the 12 months prior to the survey | All persons who have carried out at least one of these three typical services provided by government/ public administration in the 12 months prior to the survey. Non Internet-users excluded. |
| | eGovernment refusers* | Persons who agree completely that eGovernment is nothing they are interested in | Internet users (12 months) |
| Region-specific usage | ICT-enhanced regional identity | Percentage of respondents who state that the Internet and e-mail have given them a greater sense of identity with the region in which they live | Total population 15+ |
| | Users of Internet for information about region | Percentage of Internet users who have got news about region from the Internet | Internet users (12 months) |

* = scale inverted in figure below

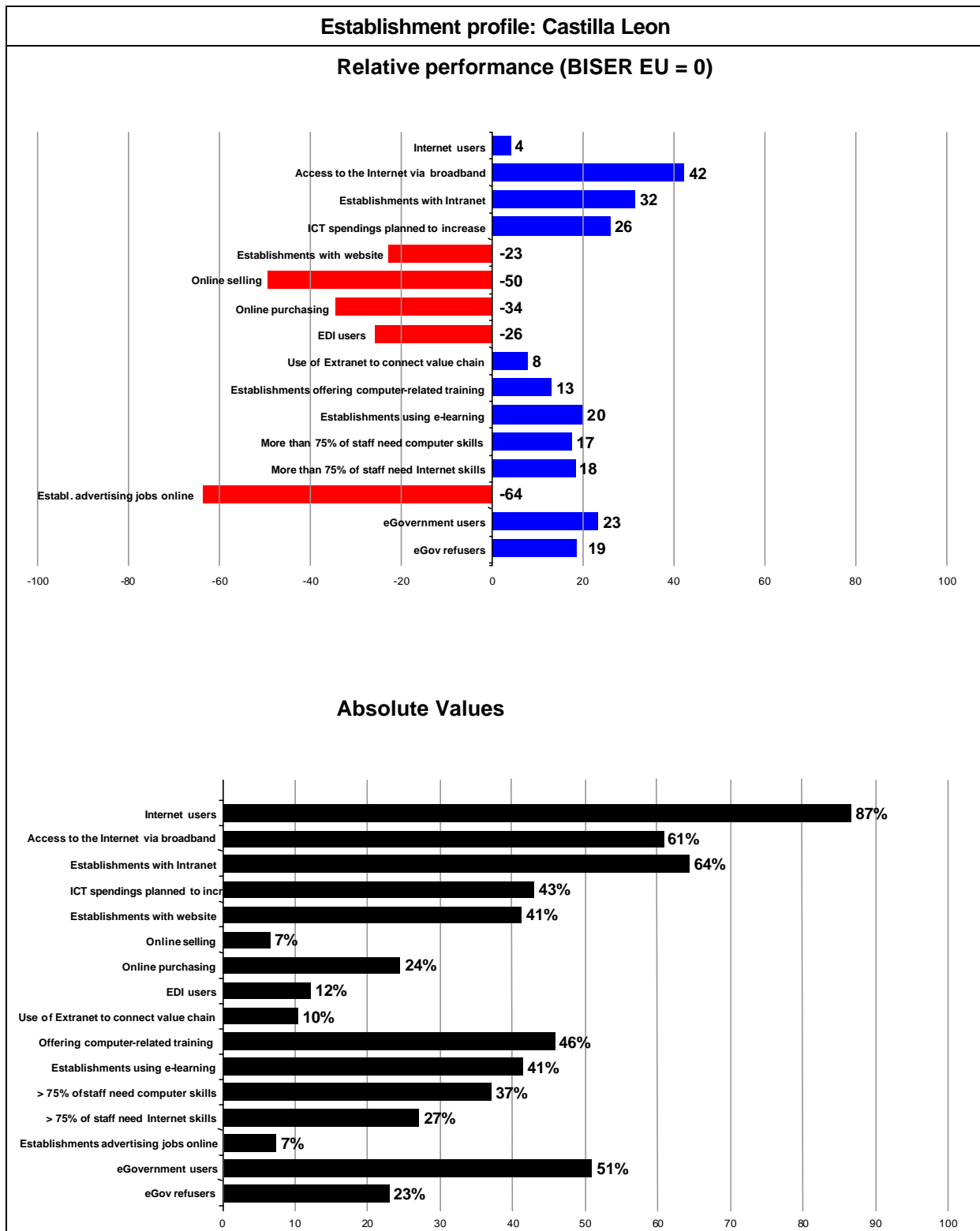


Note: In the upper figure (relative performance), the scale has been inverted for indicators where high values are considered negative (see table). This means that if the bar is blue and pointing towards the right for "costs as a barrier for Internet take-up", for example, this means that in this region below average shares of respondents were affected by costs as a barrier.

5.2.2 Establishments

| Indicator description (RDMS) | | | |
|-------------------------------|---|---|---|
| Area | Indicators | Definition | Base |
| Access and basic usage | Internet users | Percentage of establishments using the WWW | All establishments |
| | Access to the Internet via broadband | Percentage of establishments that access the Internet via DSL, cable, or leased line | All establishments that use the Internet |
| | Establishments with Intranet | Percentage of establishments that have an Intranet | All establishments |
| | ICT spendings planned to increase | Percentage of establishments which are planning to increase spendings on ICT in the next 12 months | All establishments |
| | Establishments with website | Percentage of establishments that have a website on the Internet | All establishments |
| eCommerce | Online selling | Percentage of establishments that sell online or distribute digital products online | All establishments |
| | Online purchasing | Percentage of establishments that purchase online | All establishments |
| | EDI users | Percentage of establishments that use EDI | All establishments |
| | Use of Extranet to connect value chain | Percentage of establishments that have an Extranet | All establishments |
| Training and skills | Establishments offering computer-related training | Percentage of establishments that offer computer-related training courses to their staff | All establishments |
| | Establishments using e-learning | Percentage of establishments that use e-learning tools (online or offline) for training their staff | All establishments |
| | More than 75% of staff need computer skills | Need for any computer skills in the establishment: More than 75% of staff | All establishments, excluding DK |
| | More than 75% of staff need Internet skills | Need for Internet skills in the establishment: More than 75% of staff | All establishments, excluding DK |
| | Establishments advertising jobs online | Percentage of establishments that have published job adverts on the Internet | All establishments |
| eGovernment | eGovernment users | Establishments that have used the Internet for receiving at least one of four typical services provided by government/ public administration in the 12 months prior to the survey | All establishments that have carried out at least one of these four typical services provided by government/ public administration in the 12 months prior to the survey |
| | eGovernment refusers* | Percentage of respondents who agree completely that they do not need any eGovernment services | All establishments |

* = scale inverted in figure below



Note: In the upper figure (relative performance), the scale has been inverted for indicators where high values are considered negative (see table). This means that if the bar is blue and pointing towards the right for “eGov refusers”, for example, this means that in this region below average shares of establishments are classified as eGov refusers.

5.2.3 Comments on BISER results for Castilla-Leon

Population

Overall, amongst the 28 regions surveyed in BISER, the Castilla-Leon region shows a lower than average penetration of ICTs and the Internet. However, the expected growth of the Internet penetration is above average.

The region had a somewhat better than average profile in relation to reported levels of broadband access to the Internet at home, although another source, focusing on the supply side of ADSL to the residential market, albeit collating data on national level only would, suggests somewhat lower levels. A part of explanation for this is likely to be the rise of cable TV in Spain, which has broadband like properties. Although e-mail usage is lower than average, usage of interactive chatting facilities (online discussion fora or chat rooms) is higher than average. While BISER data on the Internet chatters is somewhat higher than suggested by comparable sources it has to be borne in mind that the latter is based on the national sample (EGM, 2003). Having taken into account BISER's broad definition of 'chatting', it fits well with the regional population's general approach to the Internet, which tends to be more socially oriented. Amongst e-mail users, communications with others within the region is higher than the average across all the regions. Equally, Internet users within the region are more likely than the average to have got news about region from the Internet. Therefore, local social uses seem to be relevant.

The region also scores relatively well on the usage of e-Learning, although the local view was that the BISER results might be somewhat on the high side because of the rather broad definition of e learning (including both online and offline modes, as well as audio and video tapes).

Establishments

The most notable aspect of data on region's enterprises is the underdevelopment of the business side of e-commerce. In comparison to the BISER average, the establishments from this region are less likely to have a website, to begin with, and subsequently, less likely to conduct e-commerce business transactions online, such as selling and purchasing. This is consistent with the prevailing structure of the region's business sector, with a relatively high share of agricultural activities.

Establishments in the region are generally unlikely to turn to the Internet for obtaining new recruits – online job advertising is also considerably behind the average. Somewhat ironically though, there is some anecdotal evidence that the region is losing some of its brightest workers through this channel.

However, on the positive side, there is apparently a higher than average propensity to invest in company ICT infrastructure. It is also worth noting that establishments in the region are likely to expect relatively high proportion of their workforce to have ICT skills, and they are also equally more likely to provide training to this aim, which is encouraging. Furthermore, there seem to be some basic preconditions in place for the growth of business side of e-commerce, with above average share of online enterprises having a broadband access but also internal ICT infrastructure, such as Intranet.

Castilla-Leon figures for establishment-side indicators can be expected to be influenced by the sampling frames used which excluded (for technical reasons¹) all businesses with less than 5 employees. Such micro firms play an important role especially in the south European countries of Greece, Portugal, Spain and also Italy, where they are estimated to account for as much as one third of total employment. Because diffusion of ICTs has been found to positively correlate with establishment size (Empirica 2001), this means that indicator values for Castilla-Leon might let us overestimate the real spread of ICTs in the region.

¹ See BISER Deliverable 6.2, methodology chapter.