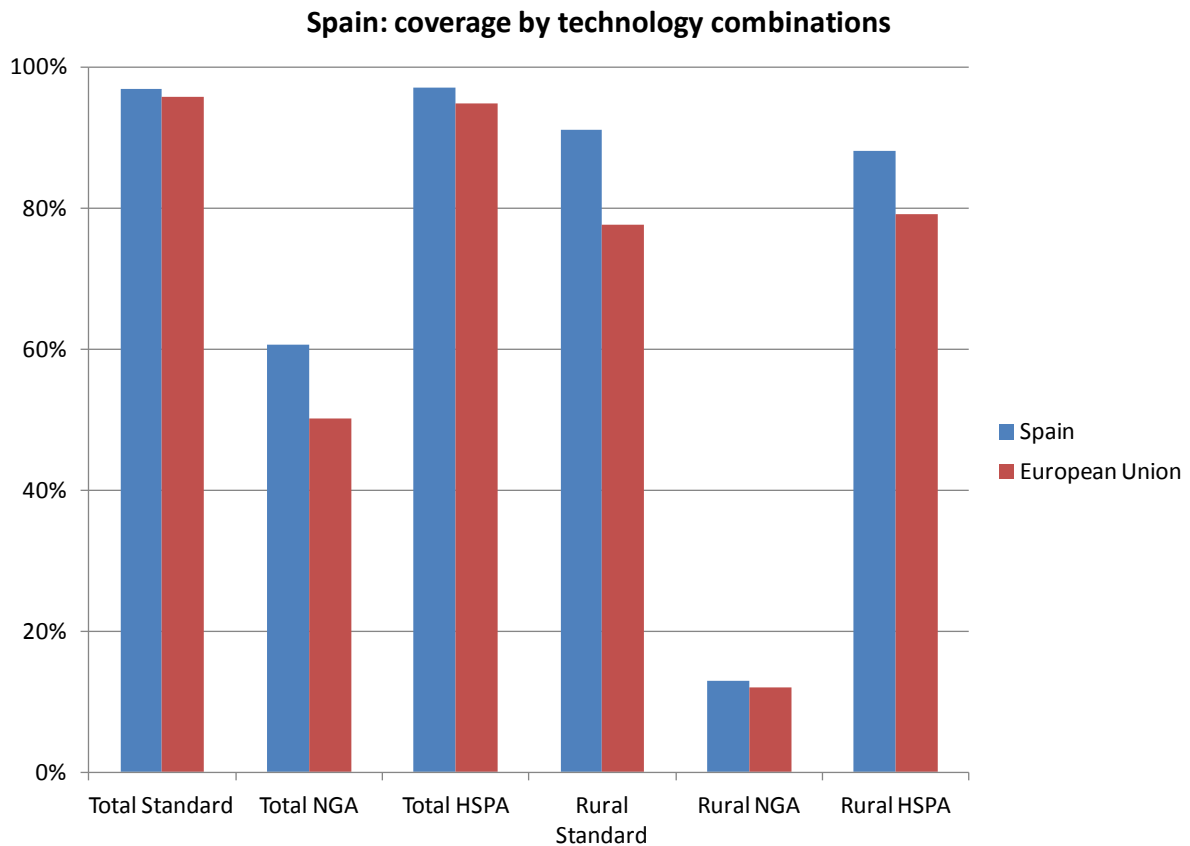


# Broadband Coverage in Europe in 2011 – Spain

## 1.1 National coverage by broadband technology

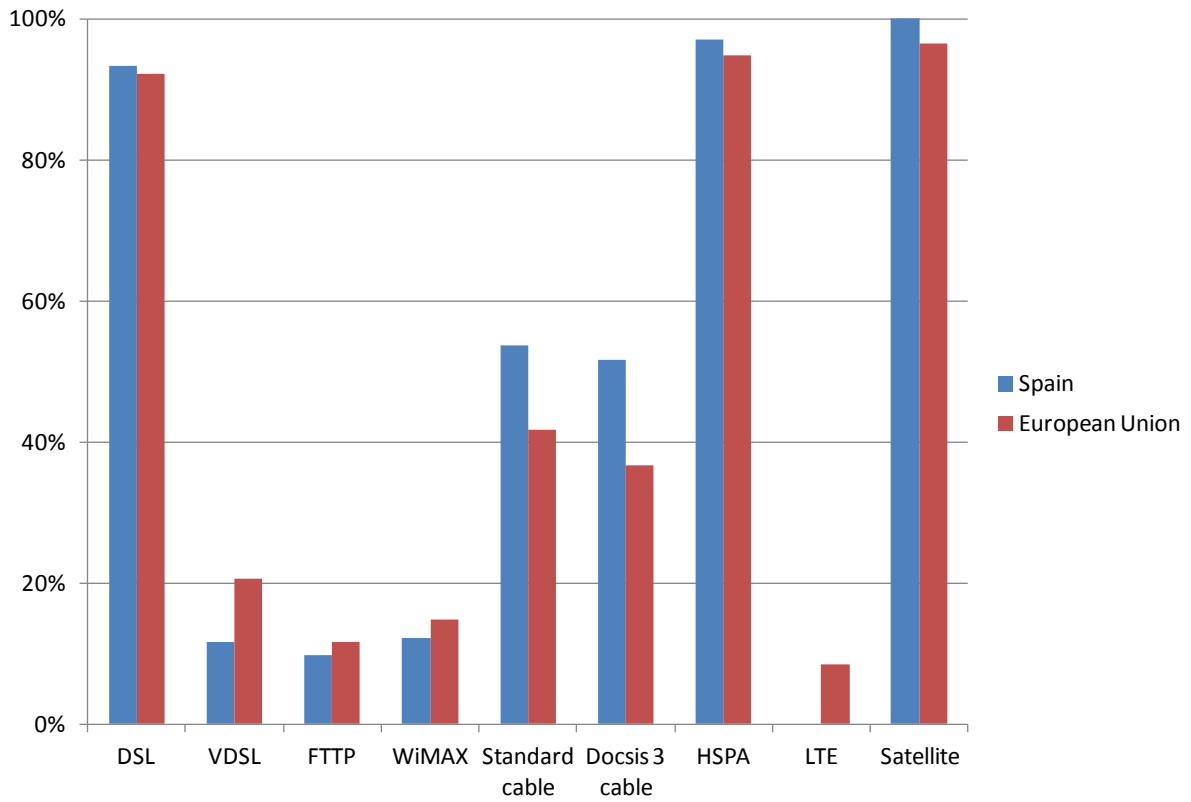


Spain has made a major commitment to developing its broadband infrastructure and it is ahead of European averages on all technology combinations. In particular it has a higher Total NGA coverage than any of the other larger European countries except Germany, and despite its thinly populated countryside it is well ahead of the average for Rural Standard Coverage.

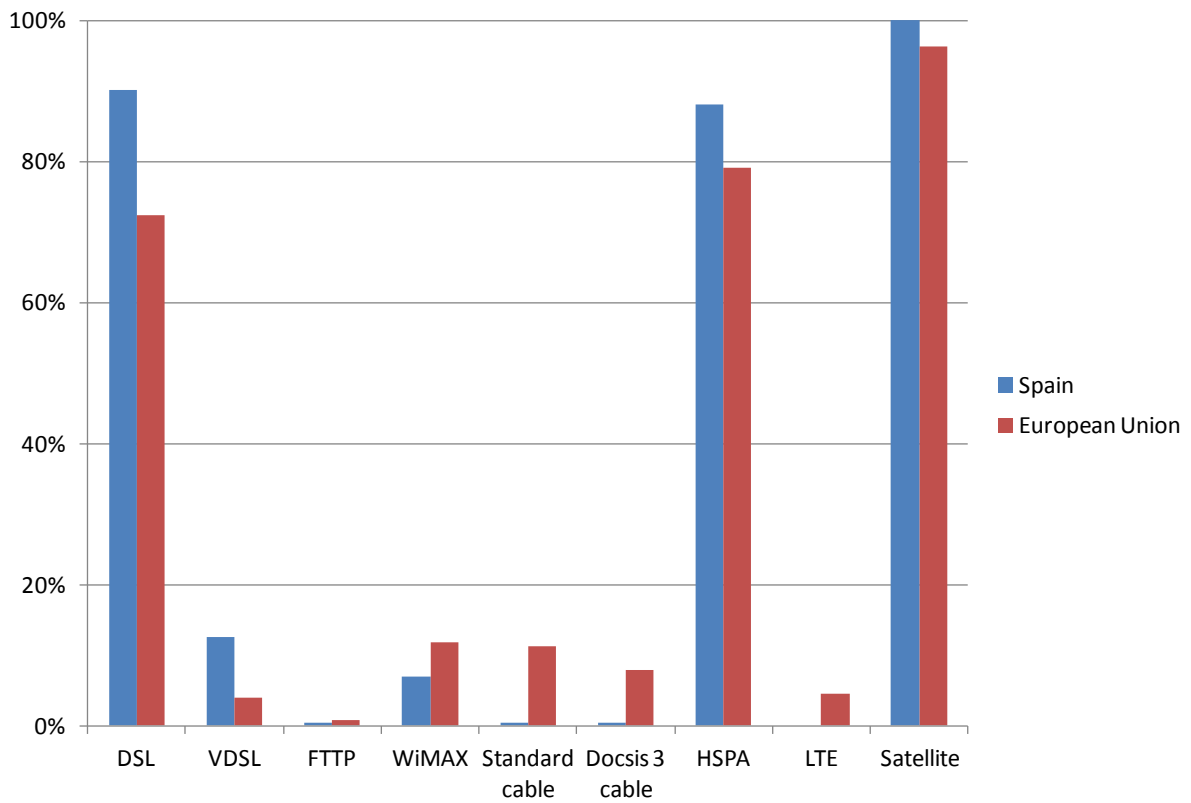
The backbone of Spain’s NGA coverage is provided by an extensive cable network, covering 54% of the population and mostly upgraded to Docsis 3. VDSL and FTTP make a contribution as well, although slightly below average.

The benefits of using the full range of technologies are seen in rural areas, where VDSL accounts for almost all the NGA coverage. DSL accounts for most of the RSC. Although WiMAX is available its coverage seems to be patchy.

Spain: total coverage by technology

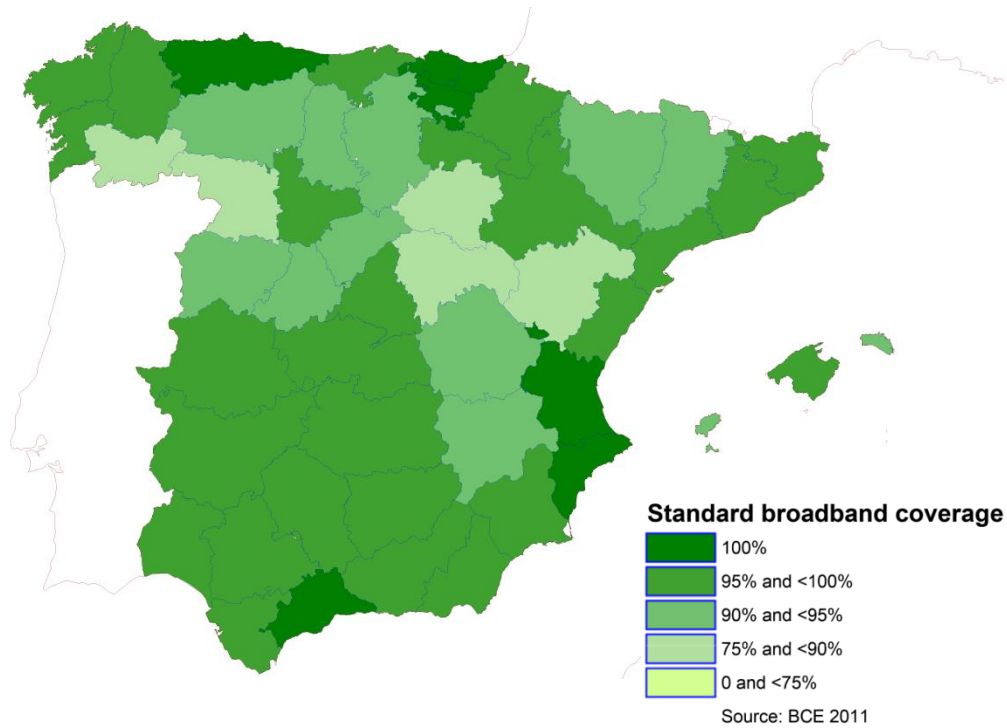


Spain: rural coverage by technology

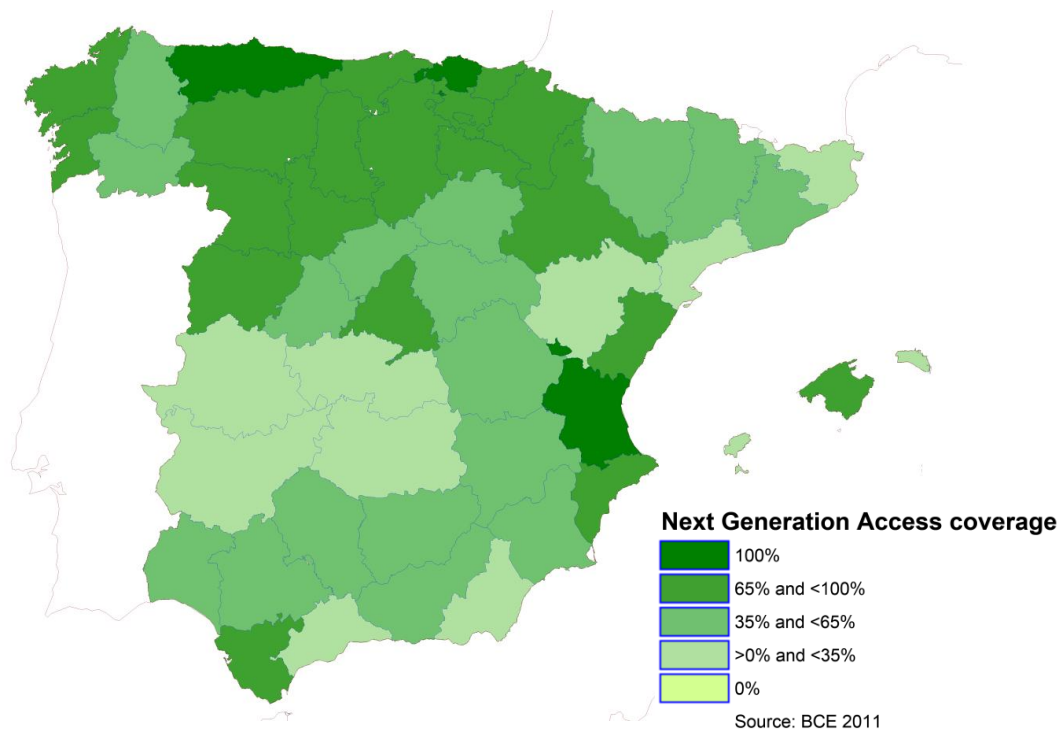


## 1.2 Regional coverage by technology combinations

Map: Spain Standard broadband coverage



Map: Spain Next Generation Access coverage



The pattern of broadband coverage in Spain shows a picture of decentralised regional development. Seven NUTS 3 areas in Spain show 100% standard broadband coverage but they include neither of the two major cities, Madrid and Barcelona. Like most of the other major city regions in Spain they

are both in the 98% to 95% range. Most other regions have at least 90%. Only eight of Spain's 59 NUTS 3 areas have less than 90% coverage, including much of the central uplands in the north of the country and some of the more remote Canary Islands.

The same areas tend to lead with NGA coverage. Three provinces show 100% NGA – all among the seven leaders in standard broadband - and those with at least 65% are well spread throughout the country. Most of the other mainland provinces have at least 32% NGA coverage or more. Of the 15 provinces with less than 28% coverage, many are either overseas provinces or Mediterranean islands.

### Coverage in Spanish NUTS 3 areas outside mainland Europe

Country	NUTS code	NUTS area name	Standard coverage	NGA coverage
Spain	ES630	Ceuta	92.2%	0.9%
Spain	ES640	Melilla	96.6%	0.0%
Spain	ES703	El Hierro	81.5%	24.2%
Spain	ES704	Fuerteventura	87.8%	14.4%
Spain	ES705	Gran Canaria	96.7%	14.8%
Spain	ES706	La Gomera	85.0%	35.3%
Spain	ES707	La Palma	90.5%	13.4%
Spain	ES708	Lanzarote	94.7%	12.2%
Spain	ES709	Tenerife	95.5%	9.7%

## 1.3 Data tables for Spain

### Demographics

Statistic	National
Population	45,283,259
Persons per household	2.7
Rural proportion	20.0%

### Coverage by technology

Technology	Total	Rural
DSL	93.3%	90.1%
VDSL	11.6%	12.6%
FTTP	9.7%	0.4%
WiMAX	12.2%	7.0%
Standard cable	53.8%	0.4%
Docsis 3 cable	51.7%	0.4%
HSPA	97.1%	88.0%
LTE	0.0%	0.0%
Satellite	100.0%	100.0%
Standard Combination	96.9%	91.1%
NGA Combination	60.7%	13.0%