



# 1. Background

- Natural environment: the coast
- Economic activity 2004-2005
- Population
- Social welfare
- Public participation

Located at the south-west tip of Europe, Spain consists of 17 Autonomous Communities and 2 Autonomous Cities. Mainland Spain occupies the majority of the Iberian Peninsula and is separated from Africa by the Strait of Gibraltar. Spain's territory includes two enclaves in North Africa (Ceuta and Melilla), and two archipelagos - the Balearic Isles in the Mediterranean Sea and the Canary Isles in the Atlantic Ocean. It is characterised by the wide diversity of its geography, climate and flora and fauna, which, alongside other social, cultural, political and economic factors, make it a varied and unique country.



### TERRITORY

Total area .....	505,988 km <sup>2</sup>
Area above an altitude of 600 m .....	57.7%
Highest point (Teide) .....	3,718 m
Length of coastline .....	7,905 km

### CLIMATE

Continental on the central plateau and in the Ebro Valley  
 Temperate around the Mediterranean Arc and in the Balearic Islands  
 Atlantic in Galicia and on the Bay of Biscay  
 Sub-tropical in the Canary Islands  
 Maximum annual rainfall above 1,000 mm (>2,000 mm in the NW)  
 Minimum annual rainfall below 300 mm (<200 mm in the SE)  
 Average annual temperature between 14° and 20° C

### HYDROGRAPHICAL NETWORK

Estimated total river length .....	75,000 km
No. of reservoirs .....	1,000
No. of natural wetlands .....	2,448

### LAND COVER (%) CLC 2000

Arable land and permanent crops .....	32%
Natural grasslands and mosaic vegetation .....	18%
Forest area (wooded) .....	27%
Semi-natural vegetation .....	17%
Open spaces and exposed soil.....	2%
Rivers, reservoirs and wetlands .....	2%
Artificial surfaces .....	2%

### Population (Municipal Register as at 01/01/2006)

Inhabitants .....	44,708,964
Average population density .....	87.2 inhab/km <sup>2</sup>
Autonomous Community with highest population density .....	Madrid: 743 inhab/km <sup>2</sup>
Autonomous Community with lowest population density .....	Castile-La Mancha: 24 inhab/km <sup>2</sup>
Provincial capital with highest population density.....	Barcelona: 16,221 inhab/km <sup>2</sup>
Provincial capital with lowest population density .....	Caceres: 50 inhab/km <sup>2</sup>

### Other population figures

Population increase 2001-2006 .....	3,861,595 inhab
Total no. of municipalities .....	8,109
No. of municipalities with more than 100,000 inhabitants .....	58
No. of municipalities with more than 500,000 inhabitants .....	6
No. of municipalities with between 10,000 and 100,000 inhabitants .....	639
No. of municipalities with less than 10,000 inhabitants .....	7,412
Life expectancy (2003)	
Men .....	77.2 years
Women .....	83.7 years

### DEMOGRAPHIC DISTRIBUTION

% of population in municipalities of <1,000 inhab (4,919 municipalities) .....	4%
% of population in municipalities of >1,000 inhab (3,190 municipalities) .....	96%

## Natural environment: the coast

Spain occupies the majority of the Iberian Peninsula and its territory extends as far as the Canary Islands and Africa where the Autonomous Cities of Ceuta and Melilla are located. It is characterised by the wide diversity of its geography, climate and flora and fauna, which, alongside other socio-economic, cultural and political factors, make it a varied and unique country.

Spain's position between two continents, combined with its widely diverse relief and climate, give rise to an exceptional range of ecosystems located in four biogeographical regions - Alpine, Atlantic, Mediterranean and Macaronesian (Canary Isles). These ecosystems are home to more than 77,000 taxa<sup>(1)</sup>, representing 54% of the total number found in Europe.

### Coastline stretching almost 8,000 km

Spain's coastline<sup>(2)</sup>, which, according to data published by the Spanish National Institute of Statistics (INE - *Instituto Nacional de Estadística*), measures 7,905 km, falls within the boundaries of 10 Autonomous Communities, 2 Autonomous Cities, 25 provinces and 428 municipalities. The 10-km-wide strip of coast that stretches around Spain's perimeter covers a total area of 80,000 km<sup>2</sup>. Around 40% of the coast is developed, 7% is home to port facilities, 3% to industrial facilities and 8% is used for farming. A large proportion of the above-mentioned ecosystems are found within this extensive and highly diverse coastal strip. The continental shelf covers 100,000 km<sup>2</sup> and extends to a depth of as much as 240 m.

#### KEY FIGURES FOR SPAIN'S COASTAL PROVINCES

<p><b>GALICIA:</b> Coast length: 1,498 km Coastal pop.: 1,425,745 inhab Pop. density: 159 inhab/km<sup>2</sup></p>	<p><b>MURCIA:</b> Coast length: 274 km Coastal pop.: 1,335,792 inhab Pop. density: 118 inhab/km<sup>2</sup></p>
<p><b>ASTURIAS:</b> Coast length: 401 km Coastal pop.: 1,075,279 inhab Pop. density: 102 inhab/km<sup>2</sup></p>	<p><b>CEUTA:</b> Coast length: 20 km Coastal pop.: 75,276 inhab Pop. density: 3,864 inhab/km<sup>2</sup></p>
<p><b>CANTABRIA:</b> Coast length: 284 km Coastal pop.: 566,678 inhab Pop. density: 107 inhab/km<sup>2</sup></p>	<p><b>MELILLA:</b> Coast length: 9 km Coastal pop.: 65,488 inhab Pop. density: 4,884 inhab/km<sup>2</sup></p>
<p><b>BASQUE COUNTRY:</b> Coast length: 246 km Coastal pop.: 1,829,822 inhab Pop. density: 443 inhab/km<sup>2</sup></p>	<p><b>CANARY ISLANDS:</b> Coast length: 1,583 km Coastal pop.: 1,968,280 inhab Pop. density: 265 inhab/km<sup>2</sup></p>
<p><b>CATALONIA:</b> Coast length: 699 km Coastal pop.: 6,595,767 inhab Pop. density: 311 inhab/km<sup>2</sup></p>	<p><b>VALENCIA:</b> Coast length: 518 km Coastal pop.: 4,692,449 inhab Pop. density: 202 inhab/km<sup>2</sup></p>
<p><b>BALEARIC ISLANDS:</b> Coast length: 1,428 km Coastal pop.: 983,131 inhab Pop. density: 197 inhab/km<sup>2</sup></p>	<p><b>ANDALUSIA:</b> Coast length: 945 km Coastal pop.: 4,591,231 inhab Pop. density: 99 inhab/km<sup>2</sup></p>



Source: INE

(1) Bryophytes (1,500); Lichens (2,000); Fungi (15,000); Vascular plants (8,000); Invertebrates (50,000); and Vertebrates (635)  
(2) The map only shows the resident population in the Autonomous Communities' coastal provinces

## GENERAL FRAMEWORK

One third of the population lives on the coastal strip and, in the summer, it hosts four out of every five tourists travelling to Spain. This demographic pressure is the origin of the threats to many of the natural ecosystems that characterise the country's coasts.

Furthermore, deterioration has been exacerbated by urban development that has paid little heed to the landscape or nature and, even, by infrastructure policy subordinate to this type of development. In addition, the coastline is subject to several other impacts, such as pollution, uncontrolled waste discharge and destruction of coastal sand dunes.

### Spain's north and north-west: 2,429 km of coast

	Guipuzcoa	Biscay	Cantabria	Asturias	Lugo	Corunna	Pontevedra
Population (inhab)	691,079	1,138,743	566,678	1,075,279	356,209	1,127,564	941,972
Area (km <sup>2</sup> )	1,909.04	2,217.30	5,252.60	10,603.54	9,856.10	950.42	4,494.66
Pop. density (inhab/km <sup>2</sup> )	360.76	512.14	107.05	101.54	36.28	141.72	208.76
Length of coastline (km)	92	154	284	401	144	956	398

Source: INE. Population figures: Municipal Register as at 1 January 2005

The Galician coastline stretches for 1,498 km and is the only section of Spain's coast with numerous estuaries. The rest of the north and north-west coastline (Bay of Biscay) falls within the Basque Country (246 km), Cantabria (284 km) and Asturias (401 km). Taken as a whole, it is a landscape of outstanding natural beauty dotted with beaches, small fishing ports and characteristic Atlantic vegetation. The coastal provinces falling within this wide belt have a population of almost 6 million people and an average population density of 140 inhabitants per km<sup>2</sup>. The greatest densities are found in Biscay, where almost half of the Basque Country's population lives, and, above all, in the industrialised areas around the Bilbao estuary.

From an environmental perspective, in addition to the pressure exerted by a population that tends to be concentrated either on or close to the coast, it is also necessary to highlight the pressures exerted by industry, insufficient wastewater treatment in some areas and the potential hazards generated by maritime traffic, especially on the Galician coast (Costa da Morte). Although it is not subject to as much pressure from urban expansion as the Mediterranean coast, it is currently seeing a strong rise in property development and at present (2006) a total of 373,000 housing units are planned for construction, of which 283,600 will be built in Galicia, 40,300 in Asturias and 45,800 in the Basque Country.

Commercial fish and shellfish stocks are showing signs of exhaustion due to overfishing, a situation made patently clear by the recent ban imposed on anchovy fishing (2006).

### Andalusia's coast: strong demographic growth

	Huelva	Cadiz	Malaga	Granada	Almeria
Population (inhab)	483.792	1.180.817	1.453.409	860.898	612.315
Area (km <sup>2</sup> )	10.128,00	7.435,85	7.308,46	12.646,97	8.774,87
Pop. density (inhab/km <sup>2</sup> )	47,76	158,80	198,86	68,07	69,78
Length of coastline (km)	122	285	208	81	249

Source: INE. Population figures: Municipal Register as at 1 January 2005

Andalusia's coastline stretches for almost 1,000 km and comprises such notable differences in landscape as those seen between the sandy strip along the river Guadalquivir and the rocky Mediterranean coast. This section of coastline hosts a wide variety of natural areas, among them the Cabo de Gata volcanic landscape and the Alboran Sea.

Settlement along the coastal strip is characterised by medium-sized cities and metropolitan areas. The five coastal provinces cover an area of 46,294 km<sup>2</sup>, have a population of 4.6 million, and an average population density of 100 inhab/km<sup>2</sup>. Population concentration on the coast is evident in municipalities in the provinces of Cadiz and Malaga, where density easily exceeds 1,000 inhab/km<sup>2</sup>, reaching its highest levels in the cities of Cadiz and Fuengirola.

Over the period 2003-2005, the population of the Autonomous Community's coastal municipalities increased by 160,845 inhabitants, more than half (62%) the growth seen in all of Andalusia. These rises follow an earlier trend initially seen in the tourist resorts on the Costa del Sol and Bay of Cadiz, in Almeria and, to a lesser extent, in Huelva's western municipalities. This phenomenon is most common on the Mediterranean shore and even extends to towns in the inland strip parallel to the coast. It is also seen around Tarifa and in towns in west Huelva.

This demographic pressure, combined with the facilities required by tourism, have brought about major changes in land use<sup>(3)</sup> along the entire Andalusian coastline. Over the period 1999-2003, urban land use accounted for a notable 5.26% increase in land cover. There have also been significant changes on the Huelva coast and, to a lesser extent, on the south-east coast of Almeria, in both cases concentrated in municipalities where previously

(3) Urban use: includes built-up area, area under construction, industrial areas, green areas, golf courses and other non-agricultural artificial surfaces.

## GENERAL FRAMEWORK

a high proportion of the land was undeveloped. It is also worth highlighting the municipalities located between La Línea de la Concepción (Cadiz) and Benalmádena (Malaga), which also now have high percentages of land devoted to urban uses<sup>(4)</sup>.

### Spain's Mediterranean frontage: mainland and islands

	Murcia	Alicante	Valencia	Castellon	Tarragona	Barcelona	Girona	Balearic Is.
Population (inhab)	1,335,792	1,732,389	2,416,628	543,432	704,907	5,226,354	664,506	983,131
Area (km <sup>2</sup> )	11,311.11	5,816.50	10,806.11	6,631.88	6,302.88	7,728.38	5,909.83	4,991.67
Pop. density (inhab/km <sup>2</sup> )	118.09	297.84	223.63	81.94	111.83	676.25	112.44	196.95
Length of coastline (km)	274	244	135	139	278	161	260	1,428

Source: INE. Population figures: Municipal Register as at 1 January 2005

Excluding Andalusia, mainland Spain's Mediterranean coastline runs from Catalonia down to Valencia and Murcia, stretching for 1,491 km and consisting of mountain ranges and coastal plains, the latter being well-suited to agriculture. The entire strip enjoys a warm climate with mild winters and low rainfall. Across the Mediterranean from this coast lie the Balearic Islands, which feature 1,428 km of coastline of outstanding natural beauty and ecological value such as that found, for example in the Cabrera National Park.

The coastal provinces in this region are home to a population of 13.4 million people<sup>(5)</sup>. For decades, Spain's Mediterranean shore has been a major tourist destination with resorts concentrated in areas such as the Costa Brava (Catalonia), Benidorm (Alicante) and the Balearic Islands. The tourism industry's enormous success has led to excessive property development that is now endangering the region's resources, particularly land, and is making water supply problematic.

### Canary Islands and the autonomous cities of Ceuta and Melilla

	Sta. Cruz de Tenerife	Las Palmas	Ceuta	Melilla
Population (inhab)	956,352	1,011,928	75,276	65,488
Area (km <sup>2</sup> )	3,381.16	4,056.78	19.48	13.41
Pop. density (inhab/km <sup>2</sup> )	282.84	249.44	3,864.27	4,883.52
Length of coastline (km)	768	815	20	9

The Canary Islands are a volcanic archipelago located in the Macaronesia<sup>(6)</sup> biogeographical region, which also includes the Azores, Madeira, Salvajes and Cape Verde archipelagos.

(4) Source: The Environment in Andalusia (*Medio Ambiente en Andalucía*), 2005. Chap. 18: "Coastline", p. 351-361

(5) Population of the Autonomous Communities of Murcia, Valencia, Catalonia (except Lerida) and the Balearic Islands

(6) European territory in this region exceeds 10,500 km<sup>2</sup>, with almost 70% belonging to Spain and the rest to Portugal

In the Canary Islands archipelago, the eastern islands of Lanzarote and Fuerteventura are the lowest and most arid. The rest have much steeper terrain, characterised by the Pico del Teide that, at 3,718 m is the highest peak in Spanish territory.

Their terrestrial ecosystems are classified as: 1) *Coastal ecosystems*, with a halophytic belt along the shoreline, groups of salt water lagoons and sand dune ecosystems; 2) *Coastal scrub*, characterised by desert-like vegetation; 3) *Thermophilic forest* (juniper, wild olive, palm, and lentiscus) in areas altered by human settlement; 4) *Green forest* (perennial laurel forest), a relic of the Tertiary period forests found around the Mediterranean, and Canarian fayal-brezal, encountered in varying degrees of conservation; 5) *Pine forest*, populated mainly by Canary Island pines; 6) *High-altitude scrub*, found above 2,000 m in harsh climatological conditions.

In 2005, the Canary Islands' population stood at almost 2 million people (1,968,280), producing a population density of 219 inhab/km<sup>2</sup>, well above the national average. This population is spread between the two provinces that make up the Autonomous Community, with 80% being concentrated on the islands of Gran Canaria and Tenerife. The Canary Islands' economy is based on the tertiary sector (75%), particularly tourism, which has also generated enormous pressure on the coast.

Due to their strategic position in North Africa and their proximity to the Strait of Gibraltar, the autonomous cities of Ceuta and Melilla act as a bridge between Spain and the African continent. Ceuta covers an area of 19.5 km<sup>2</sup> and has a registered population of 75,000 people, although 100,000 is probably a more accurate portrayal of the actual number of inhabitants. Trade with Morocco constitutes Ceuta's main economic activity and 30,000 people cross the border daily. This trade, combined with high population density, causes one of the greatest environmental problems - waste generation (42,000 tonnes per year). Ceuta's tiny coastline also includes a port used for fishing and freight.

The city of Melilla lies opposite the coast of Almeria. It is smaller (12 km<sup>2</sup>) than Ceuta and has a lower population, but shares similar problems of high population density and environmental impact. Its main economic activity is derived from administrative and trade services. Despite its short coastline, its shores are home to four Sites of Community Importance and several protected species.

### Protecting Spain's coasts

Protecting Spain's coasts is the responsibility of both the Public Administration and the Autonomous Communities. The key legislative instruments governing this protection are: the Spanish Constitution of 1978 and the Shores Act 22/1988 (*Ley 22/1988 de Costas*)

## GENERAL FRAMEWORK

implemented by Royal Decree 1471/1989 (*Real Decreto 1471/1989*) and modified by two rulings of the Constitutional Court (*Tribunal Constitucional*) granting greater powers to the Autonomous Communities as regards spatial planning, coastal planning, waste disposal, ports, public works, tourism, fishing, shellfish production, aquaculture and protection of the environment. The Public Administration's powers are exercised by the Spanish Ministry of the Environment's Directorate General for Coasts (*Dirección General de Costas*), which performs the following functions:

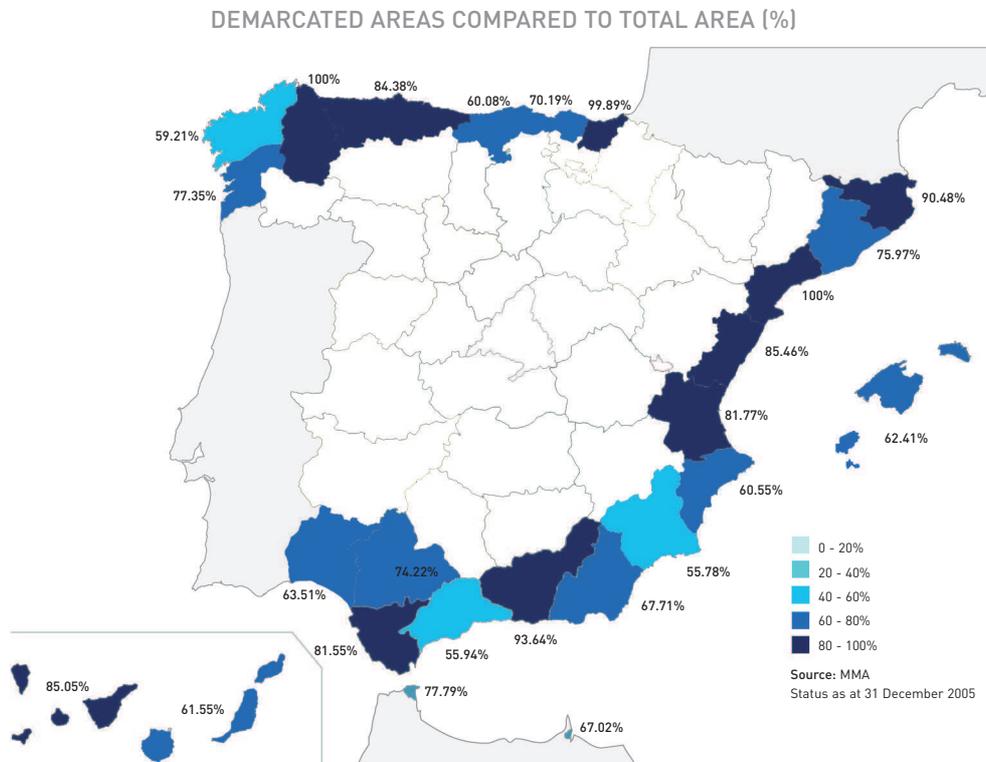
- Designation of the Publicly-owned Shore through the boundary demarcation process, as well as management and safeguarding of the same through the adoption of measures to ensure its proper conservation.
- Production, supervision and monitoring of studies, projects and other works to defend, protect and conserve the elements comprising the Publicly-owned Shore and, in particular, beaches.
- Management of the Demarcated Areas and Provincial Coast Services (*Servicios Provinciales de Costas*).

The Directorate General for Coasts' main sphere of action is the Publicly-owned Shore<sup>(7)</sup>, but the Shores Act does define other areas in which restrictions are established as regards ownership and regulations are introduced to complement those implemented by Autonomous Communities.

These restricted coastal strips are classified as a) *transit easement* (6 m strip, extendable to 20 m), which should remain permanently open to pedestrian access and transit; b) *protection easement*, a 100-m-wide strip (extendable to 200 m) in which public services and facilities are located; and c) *sea access easement*, which covers land adjacent to or contiguous with the Publicly-owned Shore and is of the length and width required to ensure public access to and use of the sea.

The Act also defines an *area of influence* that extends a minimum of 500 m inland from the shoreline, within which minimum development conditions for the zone are established so as to ensure respect for the environment and protection of the coastline. Creation of the demarcation boundaries, in other words physically separating the shoreline from the surrounding environment, is fundamental to the application of coastline protection legislation.

(7) Publicly-owned Shore: comprises the shore and estuaries, including beaches, dunes, etc., as well as the shoreline (made up of the area between the low-tide mark and the furthest point inland reached by waves during heavy storms. This may also include marshes, lagoons, creeks, etc). Spain's national waters, the natural resources within the economic zone and the continental shelf also form part of the Publicly-owned Shore. Within this area, the Act guarantees free public usage for common uses in accordance with the nature of the sea and its shore.



Other coastal protection measures focus on combating erosion, improving environmental quality and quality of life (principally through reclamation of coastal ecosystems such as wetlands and dune systems), infrastructure development, fieldwork and Integrated Coastal Zone Management. In addition to these actions, the Public Administration has signed up to several international commitments (OSPAR Convention, Barcelona Convention, London Convention, etc.) to protect the sea.

### Protecting biodiversity on the Mediterranean shore

As part of the Mediterranean Action Plan under the Barcelona Convention, led by the United Nations, a Strategic Action Plan for the conservation of coastal and marine biodiversity in the Mediterranean region (SAP BIO)<sup>(8)</sup> has been proposed in view of the fact that this region is facing a growing volume of human activity and incessant alterations to its ecosystems, leading to increasing deterioration in many areas. Co-ordination of all of the agents involved in administrating and managing the activities carried out on and around the Mediterranean Sea is of vital importance to conservation of the same.

(8) [http://www.mma.es/secciones/biodiversidad/biodiversidad\\_marina/normativa\\_marina/pdf/infor\\_sapbio.pdf](http://www.mma.es/secciones/biodiversidad/biodiversidad_marina/normativa_marina/pdf/infor_sapbio.pdf)

## GENERAL FRAMEWORK

The level of threat faced by marine and coastal biodiversity in the Mediterranean region varies from area to area and country to country. Many of these threats derive from pollution and exploitation of the region's natural resources. Furthermore, the Mediterranean's biodiversity is increasingly influenced by the effects of phenomena such as global warming, the impact of which could affect current balances between species and ecosystems<sup>(9)</sup>.

Autonomous Community	Coastal and marine SCIs (Mediterranean shore)	Shore area (ha)
Andalusia	20	157,092.1
Murcia	13	196,500.7
Valencia	23	105,678.2
Catalonia	10	55,578.7
Balearic Islands	45	157,154.6
Ceuta	2	1,466.7
Melilla	2	91.6
<b>Total</b>	<b>115</b>	<b>673,562.6</b>

Source: MMA

In accordance with the Barcelona Convention, the Contracting Parties, among them Spain, will progressively take the individual and joint measures required to protect and preserve the fragile ecosystems, biodiversity and wild species of flora and fauna under threat or in danger of extinction in the areas to which the Convention is applicable. Spain submitted a National Report that listed the natural coastal and marine habitats of community interest found on the country's Mediterranean coast<sup>(10)</sup>.

### Europe's coasts: persistent ecosystem degradation

A large number of coastal areas lie within the European Union's least-developed regions. In 1996, of the 25 least-favoured EU regions, 19 of them were coastal. Development of the coastline has been based on tourism and the construction boom associated with the same, especially in the Mediterranean and Atlantic regions. In other regions, priority has been given to restructuring the fishing industry due to the drastic decline in fish stocks. Uncontrolled urban sprawl and development of ports, in addition to aquaculture, directly affect ecosystems and the repercussions extend beyond their immediate impact (pollution, sedimentation and changes in coastal dynamics). Overfishing in coastal areas, climate change and rising sea levels are also major threats to coastal habitats, wetlands and seaweed communities.

Population density in coastal regions is, on average, 10% greater than the equivalent inland and, in some countries, this figure rises to 50%. In many coastal areas, the percentage of man-made surfaces exceeds 45% of the total area along the coastal strip (up to 1 km inland from the shoreline). The areas receiving most intensive use lie on the Mediterranean coasts of France, Spain and parts of Italy. The French Atlantic coast is also densely populated, as are its Spanish counterpart and significant sections of the Portuguese coast. Since 1995, the EU has undertaken a range of initiatives based on the concept of Integrated Coastal Zone Management, endeavouring to achieve a balance between these zones' development needs and protection of the resources that sustain the economy within the same (Recommendation of the European Parliament and of the Council concerning the implementation of Integrated Coastal Zone Management in Europe 2002/413/EC).

EEA: "The changing faces of Europe's coastal areas". Report 6/2006

(9) <http://www.unepmap.org/homespa.asp>

(10) The habitats are classified as: a) coastal and halophytic habitats, b) coastal sand dunes and inland dunes, c) sclerophyllous scrub d) rocky habitats and caves, e) forests

## Economic activity 2004-2005

Whilst the European economy witnessed stagnation over the period 2004-2005, the Spanish economy recorded above-EU-average growth, although the fact that it was excessively dependent on the construction sector<sup>(11)</sup> is a cause for concern.

Demand from the private sector was also reflected in the increase in imports, creating a trade imbalance. Driven by economic growth, in December 2005 the upward trend in prices produced a year-on-year rise of 3.7%, above the 2004 rate and also above the Eurozone average.

The employment market remained dynamic, although it was associated with sectors requiring low-skilled labour, such as construction, catering and agriculture, and was characterised by a level of temporary employment well above the European average. This temporary employment is strongly linked to immigrant labour as non-Spanish employees in the private sector almost doubled the number of Spanish wage earners in 2005.

Although Spain recorded a favourable rate of growth, this rise was conditioned by several negative factors: structural deficiencies, low productivity, insufficient investment in R&D&I<sup>(12)</sup>, slow take-up of new technologies and failings in the education system. These aspects may become a burden in the medium- to long-term in the context of an increasingly globalised and competitive world economy.

MACROECONOMIC INDICATORS: SPAIN, EUROZONE AND EU25

	GDP growth		Employment growth		Inflation rate		Public deficit	
	2004	2005 (e)	2004	2005 (e)	2004	2005 (e)	2004	2005 (e)
Spain	3.1	3.4	2.6	3.1	3.1	3.4	-0.1	1.1
Eurozone	2.0	1.3	0.6	0.7	2.1	2.2	-2.8	-2.4
EU25	2.4	1.6	0.6	0.8	2.1	2.2	-2.6	-2.3

Source: Eurostat and European Commission. Spring economic forecasts. April 2006. (e): estimate.

## Productive sectors

In general, Spain's productive sectors showed positive development, the only exceptions being agriculture and fishing, which were greatly affected by rising fuel prices and unfavourable meteorological conditions.

(11) GDP at market prices recorded a year-on-year rise of 3.5% in 2005. Accumulated over the year's four quarters, GDP growth in 2006 stood at 3.9%, 4 tenths of a percentage point higher than 2005 (INE)

(12) According to the INE, domestic expenditure on Research and Development in 2004 stood at over 8,945 million euros (1.07% of GDP), representing a 9% increase on 2003. In 2005, the 10,000 million-euro mark was exceeded for the first time (10,197 million), showing an increase of 14% on 2004 and representing 1.13% of GDP. According to forecasts under the INGENIO 2010 Programme, this is expected to rise to 1.6% of GDP by 2008 and 2% by 2010, which would position Spain among the top 10 EU countries in this field which, in that year, are expected to invest 3% of GDP in R&D&I, thereby narrowing the current gap.

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Industry expanded slightly in 2005, although the growth rate was very moderate (0.6%) due to low demand from European countries, the main clients for Spanish products. The most affected industries included automobile manufacture, which registered an 8.6% drop in 2005 in comparison with the previous year, and the textile industry, which suffered the effects of deregulation in the sector.

Meanwhile, the energy sector grew by 4.4% compared with 2% in 2004 due to rising demand for electricity which led to all-time peaks in daily demand and average hourly power consumption. It is also worth highlighting the increase in energy production by combined cycle plants (22.6%) compared with hydroelectric power generation. Also of note is the still limited amount of energy produced from renewable sources despite an increase in absolute terms over 2005.

The construction industry was, once again, the most dynamic sector, recording GVA growth of 5.5% due to demand from both the private and public sectors. A record number of housing unit building permits were granted in 2005 in a context characterised by low interest rates and demographic pressure due, in part, to immigration, but also to non-Spanish residents acquiring second homes in this country. According to the Spanish Institute of Architects (*Consejo Superior de Colegios de Arquitectos de España*), the number of building permits (1,574,089) issued for new housing units in the period 2004-2005 reached an all-time high. In absolute terms, Andalusia, Catalonia and Valencia led the ranking of Autonomous Communities in this regard.

GVA in service industries rose by 3.9%, sustained largely by favourable development in the telecommunications and tourism sectors, although this latter industry recorded a lower surplus than the year before.

### Growth in Spain's Autonomous Communities

According to the INE, real growth across the entire Spanish economy in 2005 stood at 3.4%. By region, Madrid recorded greatest growth (4%), whilst Extremadura, Murcia, the Basque Country, Aragon and Andalusia were all above the national average. The Canary Islands, Balearic Islands and Asturias all came at the other end of the scale.

Nonetheless, all of Spain's Autonomous Communities exceeded the average rate of GDP growth seen in the EU25, which stood at 1.7%. The source of this regional growth lies in two main sectors: industry (Murcia and the Basque Country), and construction (Madrid). Meanwhile, lower growth in the service industry and, in particular, tourism, explains why the Balearic Islands are at the foot of the list.

## GDP GROWTH RATE IN REAL TERMS AND NOMINAL GDP PER CAPITA

Autonomous Community	GDP growth rate 2004-2005	Nominal GDP per capita 2005
Madrid	4.0	27,279
Extremadura	3.8	14,051
Murcia	3.8	17,322
Basque Country	3.7	26,515
Aragon	3.5	22,403
Andalusia	3.5	16,100
Castile-La Mancha	3.5	16,314
<b>SPAIN</b>	<b>3.4</b>	<b>20,838</b>
Ceuta	3.4	18,860
Castile-Leon	3.3	19,782
Catalonia	3.3	24,858
Galicia	3.3	16,870
Melilla	3.1	18,304
Navarre	3.1	26,489
Valencia	3.0	19,057
Rioja	3.0	22,548
Cantabria	3.0	20,554
Canary Islands	2.9	18,879
Asturias	2.9	18,533
Balearic Islands	2.4	22,947
<b>EU25</b>	<b>1.7</b>	<b>23,400</b>

Source: INE. Spanish Quarterly Accounts. Eurostat. EU25

## Population

### Growth scenarios to 2030

According to the Municipal Register as at 1 January 2006 (provisional), Spain's population stood at 44,395,286 people, representing an increase of 0.65% on the previous year and of 8.68% on the figures recorded in the Census of Population and Housing 2001 (*Censo de población y vivienda 2001*).

This demographic growth suggests two possible situations or scenarios for Spain's population in the first third of the 21<sup>st</sup> century.

DEMOGRAPHIC GROWTH IN THE FIRST THIRD OF THE 21<sup>ST</sup> CENTURY

	2010	2015	2020	2025	2030
<b>Scenario 1</b>	45,311,954	47,118,532	48,664,652	49,868,535	50,878,142
<b>Scenario 2</b>	44,709,428	45,548,790	46,052,741	46,167,832	46,072,770

Source: INE. Forecasts based on the Census of Population and Housing 2001

## GENERAL FRAMEWORK

Scenario 1 predicts that the net number of non-Spanish immigrants entering Spain will rise until 2010, from which point it will then remain steady, suggesting that Spain's population will exceed 50 million by 2030.

Scenario 2 assumes that in the medium term there will be a decrease in the net number of immigrants, which will remain at figures similar to those predicted in scenario 1 until 2006 before, from this point on, showing a downward trend.

Whatever the case, and looking at the first third of the 21st century, it is clear that there will be a considerable increase that will leave Spain's population somewhere between 46 and 51 million people. If these forecasts are met, pressure on the environment and natural resources will also grow.

According to Eurostat, the EU25 is also likely to see similar moderate growth to start with followed by a subsequent downturn through to 2050. Another scenario envisages continual growth until that date, at which point the population will stand at 529 million. Finally, a third hypothesis suggests that Europe's population will fall, dropping from 459.6 million people today to 338 by 2050.

## Demographic structure

POPULATION STRUCTURE BY AGE BRACKET (%)

Year	0-14	15-64	65 or older	Old-age ratio
2001	14,56	68,55	16,89	116
2005	14,20	69,17	16,62	117
2006	14,20	68,95	16,84	118

Source: INE. Census of Population and Housing, 2001. Municipal Register as at 1 January 2005 and 2006 [provisional]<sup>(13)</sup>

As the table above shows, Spain's population structure has not changed much since 2001. There is a downward trend in the youngest group (0-14 years old) and a rise in the working-age population, a situation explained by the entry of immigrants seeking jobs.

As regards the 65-years-old-and-over age group, the ratio to the youngest age bracket (old-age ratio<sup>(13)</sup>) shows a rise of two percentage points on 2001. In absolute terms, the population of people 65 years old and over now stands at 7.4 million, a figure that has increased by more than half a million since 2001.

(13) Note: The "old-age ratio" is the number of people 65 years old and over for every 100 people under 15 years old.

This progressive ageing of the population has been a source of debate due to its potentially negative socio-economic impact, especially as regards the difficulties that it creates in maintaining Spain's Social Security system as the number of people at the base of the population pyramid diminishes.

However, from a positive perspective, the existence of a significant population of elderly is a social achievement, the result of universal access to healthcare and progressive economic growth. Today, the elderly enjoy a quality and standard of living greatly superior to that of previous generations. Moreover, current average life expectancy stands at 78.71 years, one of the highest in Europe.

Another trait that is highlighted in the debate about Spain's demographics is the falling birth-rate. Positive observations may also be made about this trend, as it is the result of widespread family planning characteristic of developed societies. These circumstances, in addition to enabling a historic change to be made in the role attributed to women, mean that children now receive higher quality education over a longer period of time. In parallel to the low birth-rate, it is also worth underlining the low infant mortality rate which, in 2004, stood at 3.99 deaths of children under 1 year old for every 1,000 births, a figure close to that seen in Norway (4 per 1,000), the country with the lowest infant mortality rate in the world.

### Non-Spanish population: 8.7% of the total

The number of non-Spanish citizens resident in Spain rose to 3,884,573 in 2006, representing 8.7% of the population and a 4.13% increase on the previous year.

The Autonomous Communities with the highest percentages of non-Spanish residents were: Balearic Islands (15.6%), Valencia (13.4%), Murcia (13.3%), Catalonia (12.2%), Madrid (11.8%), the Canary Islands (11.4%), Rioja (11.3%) and Navarre (9.1%). The remaining Autonomous Communities were below the national average, with Galicia, Asturias and Extremadura having the lowest percentages. In year-on-year terms, Catalonia, Valencia and Andalusia witnessed the greatest increases in number of non-Spanish residents.

According to Eurostat<sup>(14)</sup>, the EU continues to attract people from outside of the region due to its economic prosperity and political stability. Although the figures are not fully comparable, the net number of immigrants entering the EU in 2003 was just over 2 million. All of the EU15 Member States reported a positive migration balance that year.

(14) Europe in figures. Eurostat Yearbook 2005.

## GENERAL FRAMEWORK

Between them, Spain, Italy, Germany and the United Kingdom received 83% of immigrants entering Europe in 2003, whilst Latvia, Lithuania and Poland recorded negative migration balances.

The same source indicates that in 2004, 19.4 million foreign nationals resided in the EU15, constituting 5% of the total population. With the exception of Luxembourg, where foreign nationals make up 38.6% of the population, the other EU15 countries fall between 8.9% (Germany) and 2% (Finland), with Spain being positioned in the middle of the range (6.6%) for that year.

## Social welfare

### Women in the education system: an indicator of equality and social welfare

In Spain, education is governed by Organic Law 2/2006 (*Ley Orgánica 2/2006*) of 3 May and is structured into a series of stages, cycles and levels<sup>(15)</sup>. One of this Law's objectives is to adapt the system to the goals established by the EU, thereby facilitating convergence between education systems within Member States. To achieve this, in addition to providing widespread access to education, it is necessary to improve quality and effectiveness and promote mechanisms that provide citizens with a greater international perspective in the context of an increasingly globalised society that is making a firm commitment to information and knowledge.

Because of its value as an indicator of the results achieved to date by the Spanish education system and of its capacity to promote equal opportunities and non-discrimination between sexes, the statistics showing the level of education attained by women in Spain are shown below.

PERCENTAGE OF WOMEN (COMPARED WITH POPULATION OVER 16 YEARS OLD)  
BY LEVEL OF EDUCATION

	2000	2001	2002	2003	2004	2005
Illiterate	69.63	68.06	68.40	68.03	67.96	69.29
Primary education	54.05	54.28	54.12	54.13	54.32	54.87
Secondary education (stage 1)	47.38	48.86	47.09	47.19	46.98	46.55
Secondary education (stage 2)	50.36	50.04	49.97	50.19	49.61	50.19
Secondary education (stage 2*)	24.85	41.16	44.20	44.38	43.94	58.73
Higher education (excluding doctorate)	48.68	49.38	49.72	49.73	50.18	50.26
Doctorate	35.86	35.25	32.41	37.20	35.15	34.47

Source: EPA 2005. Produced by: Spanish Institute for Women's Affairs. Note [\*]: completed education and entered employment

(15) Basic education, which is provided for 10 years and is free, comprises primary education and compulsory secondary education. Non-compulsory secondary education comprises: further secondary education, vocational training and intermediate level study of plastic arts and design and physical education. Higher education comprises university study and higher level study of professional fields, plastic arts and physical education.

In Spain, almost 70% of people of working age considered illiterate are women. This proportion remained constant over the period 2000-2005. In absolute terms, 770,700 women did not know how to read and write in 2000, the majority of them women whose age means that they never received an education due to social inequalities and the role expected of them by society at the time. By 2005, this figure had fallen to 536,304, although it is being driven up again by immigration.

Of the number of people in 2005 who had not been educated beyond primary level, 54.87% were women (6.1 million) and the rest were men. The percentage difference in this category is due to the fact that a greater number of men continued their education to secondary level. As regards secondary education (stage 1 and stage 2), 7.9 million women were educated to this level and, on reaching stage 2, they drew level with men (50.19%).

The next category (completed secondary education and entered job market) shows the most significant advance, rising from 24.5% in 2000 to 58.73% in 2005, although in absolute figures this percentage only represents 18,794 women. This low figure may be explained by the difficulties encountered by women in entering the job market, a situation that provides them with an incentive to continue on to university education.

As regards higher education, women exceed the number of men who have completed university studies, rising from 48.68% in 2000 to 50.26% in 2005. In absolute terms, there are just over 4 million women in Spain with university-level qualifications. Finally, the proportion of women holding doctorates is highly unfavourable in comparison with the number of men with this qualification. Furthermore, the proportion remains fairly stable at around 35%, although in absolute terms the number has risen from 25,461 (2000) to 58,599 (2005).

In summary, the greatest inequalities between men and women appear at either end of the scale (either no education or doctorates). Illiteracy among women in Spain is a legacy of previous generations, when it was not usual for women to receive elementary education.

### Healthcare system: infrastructure, human resources and expenditure

The Spanish National Health System (SNS - *Sistema Nacional de Salud*), governed by the provisions of Act 14/1986 (*Ley 14/1986*), guarantees Spain's citizens the right to healthcare as set out in the Spanish Constitution. The system was designed to integrate the range of health services provided by Spain's Autonomous Communities, which assume all responsibility for the same, whilst the State assumes responsibility for foreign health-related matters. Key figures for the SNS are shown in the table below:

## GENERAL FRAMEWORK

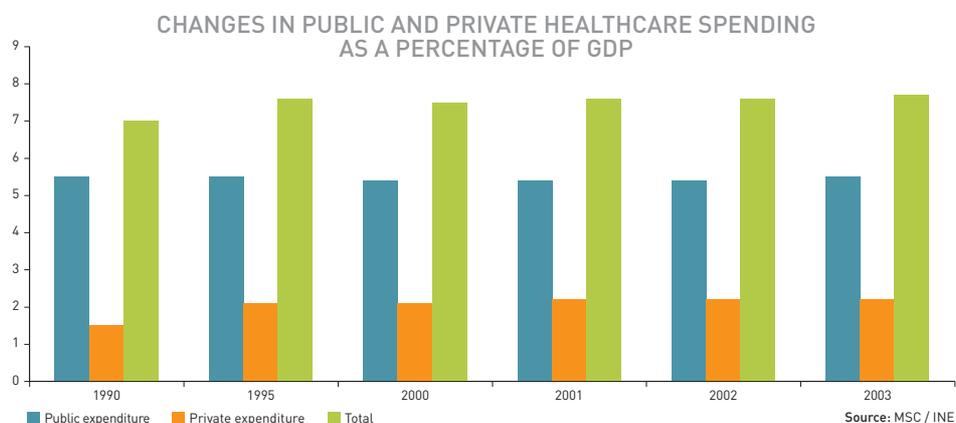
SPANISH NATIONAL HEALTH SYSTEM. 2005

Facilities	No. of units	No. per 100,000 inhab.	Publicly-owned facilities [%]
Health centres	2,700	6.3	100.0
Hospitals	779	1.8	38.6
Beds	157,926	367.8	66.5
Pharmacies	20,348	47.6	—

Sources: Spanish Ministry of Health and Consumer Affairs. Pharmacies: Spanish Institute of Pharmacists  
 Note: figures for Health Centres and Pharmacies for 2004

As regards healthcare staff, the number of qualified doctors in 2004 stood at 194,668, of which number 41.4% were women. These figures represent a ratio of 4.7 doctors per 1,000 inhabitants. The nursing sector consists of 225,487 staff, 81.6% of which are women, producing a ratio of 5.5 nurses per 1,000 inhabitants. Of the total number of qualified doctors, approximately 30,000 worked in Health Centres in 2003. Almost 55,000 doctors worked in public hospitals, offering a wide range of specialisations, among which surgery accounted for 18.2%, obstetrics and gynaecology for 6.4% and traumatology for 5.8%.

Among the social indicators relating to public health, one that stands out particularly is total healthcare expenditure as a percentage of GDP, which shows the sum of public and private expenditure. As the graph shows, healthcare spending in relation to GDP remained highly stable over the period 1990-2003.



The indicator showing total healthcare expenditure per capita is not favourable for Spain (1,853 international dollars<sup>(16)</sup> per capita) when compared with the rest of the EU. However, if we consider public healthcare expenditure as a percentage of total healthcare expenditure then Spain, at 71.4% in 2003, was ranked fifth in the EU15 according to the OECD (Health Data 2005).

(16) The international dollar is a common unit of measurement used by the WHO and takes into account differences in purchasing power in different countries.

Primary healthcare in the Spanish National Health system in 2003 provided over 300 million patient consultations, representing a rate of 5.4 consultations per inhabitant per year. As regards specialist healthcare financed by the Spanish National Health System, there were 68.1 million consultations in 2003 and 23.2 million emergency cases were treated. The majority of this healthcare was provided in public centres (88.1% of consultations and 78.8% of emergency treatment) whilst the rest was attended to by private centres.

### Smoke-free public places

In Spain, as in other countries with similar development models, smoking is the greatest single cause of death and preventable ill health. According to the WHO, smoking is responsible for 90% of deaths due to lung cancer and 30% of deaths due to all other cancers, without examining its impact on other illnesses.

According to the Spanish Ministry of Health and Consumer Affairs (*Ministerio de Sanidad y Consumo*), the number of cases of hospitalisation in the SNS due to respiratory diseases stood at 378,735 in 2003, representing around 12% of all hospitalisations. As regards the number of deaths in the same year, according to the INE, these stood at 18,780 due to lung cancer and 17,081 due to chronic respiratory tract diseases. Overall, these account for 9.31% of all deaths occurring in 2003.

The following table shows changes in smoking habits. Smoking among men decreased notably from 44% in 1993 to 34.2% in 2003, while smoking among women remains fairly stable and, in fact, rose slightly, increasing from 20.8% in 1993 to 22.4% in 2003.

**TOBACCO CONSUMPTION**  
Breakdown by sex among population 16 years old and over (%)

	1993		1995		1997		2001		2003	
	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Daily smoker	44,0	20,8	43,5	24,5	42,1	24,8	39,2	24,6	34,2	22,4
Ex-smoker	20,5	6,7	22,7	7,0	7,8	24,8	24,8	9,4	24,7	10,4

Source: Spanish Ministry of Health and Consumer Affairs. Spanish National Health Survey. ♂: men. ♀: women

Legislation in Spain has become progressively stricter, starting in 1988 with Royal Decree 192/1988 (*RD 192/1988*) and running through to Act 28/2005 relating to healthcare measures to combat smoking (*Ley 28/2005, de medidas sanitarias frente al tabaquismo*) which, among other areas, regulates smoke-free public places.

## GENERAL FRAMEWORK

### Access to Information and Communication Technologies

In 2005, more than half of Spanish households (51.9%) owned a computer, with desktop PCs being the most common equipment. By Autonomous Community, Madrid (62.2%) led the ranking by number of households owning computer equipment, followed by Catalonia, the Basque Country and Navarre. A further five Autonomous Communities also registered rates above 50%: Aragon, Asturias, the Balearic Islands, Canary Islands and Cantabria.

Almost 18 million people in Spain use a computer, of which number close to half (48.6%) are over 15 years old. In addition, 72% of children between the ages of 10 and 14 use a computer. Analysis by user type reveals that computer use is more frequent among men than women and is more common among students in higher education.

HOUSEHOLDS WITH INTERNET ACCESS AT HOME (%)

Tipo de equipamiento	2004	2005	Increase [%]
EU25	43%	48%	5
EU15	46%	53%	7
Eurozone	44%	50%	6
Spain (Eurostat)	34%	36%	2
Spain (INE)	32,6%	34%	1.4

Source: Eurostat (data gathered from the INE website)

According to the INE<sup>(17)</sup>, one in three households in Spain had access to the Internet in 2005, a proportion similar to that seen in other Mediterranean countries. These figures help to position Spain in line with the rest of Europe, where one in two households now have access to this equipment. Denmark is the country with greatest home access to the Internet (75%), whilst Lithuania has the lowest proportion (16%).

Of the 5.2 million households in Spain with Internet access, 66% have broadband access (3.5 million), whilst the rest use dial-up connections. By Autonomous Community, Madrid and Catalonia once again head the list and a further six Autonomous Communities have a proportion above the national average. The Internet is used at home, at work, at education centres and at public facilities.

As regards electronic commerce over the Internet, 8% of Spain's population has made a purchase at some time, whilst for the EU this figure already stands at 17%. In relation to ICT use, 92.7% of Spanish companies with more than 10 employees were connected to the Internet at the beginning of 2006 compared with 89.9% the year before. This figure is similar to that recorded by Eurostat for European companies in 2003.

(17) "Encuesta sobre equipamiento y uso de tecnologías de información y comunicación en los hogares. Segundo semestre de 2005". Datos recogidos en nota de prensa 6/04/2006.

## Public participation

### Campaigns to raise public awareness and introduce permanent measures to facilitate mobility and reduce traffic levels

Growth of the national vehicle fleet and traffic levels, combined with imprecisely controlled urban sprawl, has led to an increase in air pollution, noise, traffic jams and accidents. To combat these effects it is essential that the public become involved by changing their lifestyle choices and transport modes.

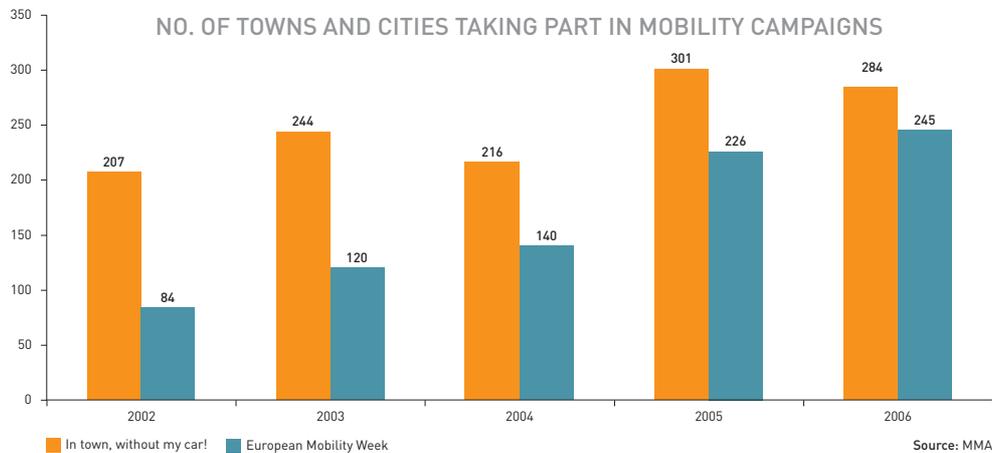
This situation makes it necessary to take measures to reduce, as far as possible, traffic in Spain's major cities, the goal of campaigns such as "Car-Free Day" and "European Mobility Week". The first initiative was launched in France in 1998 (and complemented by the second) with the aim of maintaining the message over time and implementing permanent measures. Currently, these two campaigns also take place in 1,341 towns and cities in 38 countries outside of the EU, among them Canada and Brazil. These campaigns aim to:

- Influence citizens' long-term mobility habits
- Increase public transport use
- Improve citizens' health
- Achieve a better quality of life for European citizens living in towns and cities

The central theme of Mobility Week 2006 was climate change and was linked to other urban transport policies and campaigns to raise citizens' awareness about this global challenge. In Europe, a total of 31 countries took part, with participation being particularly high in Holland (323 towns and cities), Spain (245), France (135) and Germany (40).

In Spain, participation increased by 8.4% in 2005 in comparison with the previous year. By Autonomous Community, greatest participation was seen in Catalonia (96 towns and cities) and the Basque Country (85), which between them accounted for 75% of the total. In Andalusia, the Canary Islands, Valencia and Extremadura 14 towns and cities participated in each, respectively. It is also worth pointing out that 15.2 million people took part in this campaign, among them those living in Spain's 8 biggest cities. Taking into account the population that participated in both campaigns, this figure rises to 17 million.

## GENERAL FRAMEWORK



As regards permanent measures introduced during the campaigns, which were an indispensable requisite for participation, these rose to 1,130 in 2006. Of particular note were, in this order: road safety and mobility campaigns aimed at pupils in education centres; cycle parks; traffic-calming measures; shared car use; awareness-raising campaigns; employee incentives; cycle lanes; and many others. The table above shows the number of Spanish towns and cities that have taken part in the two campaigns over the last five years.

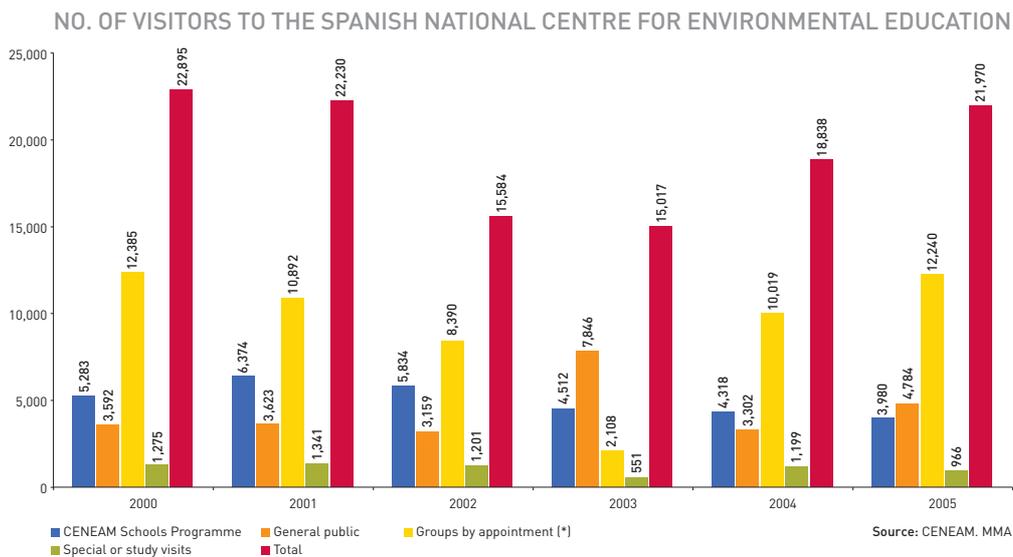
### CENEAM: Spain's Environmental Education Reference Centre

Concern about environmental education reflects a growing trend in Spain, with three characteristics in evidence: a) it is urban, linked to greater levels of economic development b) it is linked to higher levels of education found in some Spanish regions, which are reflected in environmentally-friendly behaviour c) environmental education's intensity varies across the Autonomous Communities.

The overriding aim of the Spanish National Centre for Environmental Education (CENEAM - *Centro Nacional de Educación Ambiental*) which reports to the Ministry of the Environment, is to increase citizens' sense of environmental responsibility through a series of educational strategies. It also works in partnership with other organisations, such as the National Parks Agency (*Organismo Autónomo Parques Nacionales*). To achieve its goals, the CENEAM works on several different areas:

- Environmental documentation centre
- Environmental education and interpretation

- Environmental training programmes
- Touring exhibitions
- Environmental Education Resource Guide (*Guía de Recursos para la Educación Ambiental*)
- Abandoned Village Recovery and Use Programme (*Programa de Recuperación y utilización de Pueblos Abandonados*)
- Working Groups and permanent seminars
- Partnership: Natura 2000 Network, Green Households and From My School for My Town (*De mi escuela para mi ciudad*)



Through these activities, the CENEAM reaches a wide selection of the public: environment professionals, students, and anyone else interested in a huge variety of issues. As may be seen in the graph, the centre received 21,970 visitors in 2005, 16.6% more than the previous year, representing a monthly average of 1,830 visitors.

