# Population





This chapter describes demographic trends across the regions of the European Union (EU): most of the data refer to 2010, while information is also presented in relation to regional population developments over recent years.

The trend in EU-27 population growth has been unbroken since 1960, but the population's growth has been at a slower pace since the 1980s. This slowdown in population growth is closely linked to the natural change of the population (total births minus total deaths), which was negative in a majority of EU-27 regions in 2010; net migration has counterbalanced these negative developments in some regions such that the overall population of the EU-27 continues to grow.

Demographic change in the EU will be of considerable importance in the coming decades as consistently low birth rates and increasing life expectancy will be reflected in an older age structure of the population, a pattern which is already apparent in several regions.

## Main statistical findings

### Population size and density

The population of the EU-27 broke through the threshold of 500 million inhabitants during 2009, and by the start of 2010 there were 501.1 million people living across the Member States. In 2010, EU-27 population density was estimated at 117 inhabitants per square kilometre (km<sup>2</sup>).

Map 2.1 shows that NUTS level 3 regions that include a capital city, as well as regions in their immediate vicinity, are among the most densely populated regions in Europe. Paris (France) was by far the most densely populated region (21258 inhabitants per km<sup>2</sup> in 2009), with more than twice as many people living on average in each km<sup>2</sup> when compared with Inner London regions (the United Kingdom). Inner London - West (10263 inhabitants per km<sup>2</sup>) and Inner London - East (9227) ranked as the second and third most densely populated regions, while in 2009 population density was also above 5000 inhabitants per km<sup>2</sup> in the following regions: Hauts-de-Seine, Seine-Saint-Denis and Val-de-Marne (all around Paris, France), Arrondissement de Bruxelles-Capitale/Arrondissement van Brussel-Hoofdstad (the capital city region of Belgium), București (the capital city region of Romania, data are for 2010), Melilla (a Spanish overseas territory, also 2010) and Portsmouth (the United Kingdom).

The least densely populated NUTS level 3 regions were generally located around the periphery of the EU in remote environments. There were 13 regions that reported a population density below 10 inhabitants per km<sup>2</sup> in 2009 or 2010: four of these regions were in Sweden, three in Finland, three in the north of the United Kingdom and two in central Spain; the other one was a French overseas region. Lappi (the most northerly region of Finland) had the lowest regional population density in the EU-27 with 2.0 inhabitants per km<sup>2</sup>.

Among the non-member countries for which data are presented in Map 2.1, the most densely populated region was Basel-Stadt (Switzerland), where the population density rose to just over 5000 inhabitants per km<sup>2</sup> in 2009, making it the 10th most densely populated region in this map. There were four other regions that reported a population density above 1000 inhabitants per km<sup>2</sup>, these were: İstanbul (Turkey), Genève (Switzerland), Oslo (Norway) and Grad Zagreb (Croatia). At the other end of the range, the least densely populated region was Landsbyggd (Iceland) with 1.2 inhabitants per km<sup>2</sup>.

### Population change

Population change for a given reference year is calculated as the difference between the population size on 1 January of the following year and on 1 January of the given reference year. Population change consists of two components: natural change and net migration including statistical adjustment (hereafter simply referred to as net migration — see below under the heading 'Data sources and availability' for more information).

Maps 2.2, 2.3 and 2.4 present total population change and its two components. Information is generally available for 2010 for NUTS level 3 regions. For comparability, all three of these measures (population change and its two components) are presented as crude rates per 1 000 inhabitants. The maps show the different patterns of population change across regions, from growth to decline (in Map 2.2), as a result of positive or negative natural change (in Map 2.3), and positive or negative net migration (in Map 2.4).

Between 1960 and 2010 the combined population of all the regions in the EU-27 Member States increased by 98.5 million inhabitants, which was a mean annualised growth rate of 4.4 per 1000 inhabitants. The upward path of population growth was unbroken over this period, although developments for the two components followed quite different patterns. Natural change peaked in 1964 at 3.6 million (more births than deaths) and thereafter fell at a fairly regular pace such that by 2003 the natural change was almost balanced (there were 105812 more births than deaths). There was subsequently a slight recovery and by 2010 the natural change of the EU-27's population was an increase of 514025. In contrast, net migration during the 1960s was relatively balanced in the EU-27: annual figures for that decade show that there were 6 years when a higher number of people left the EU-27 compared with the number arriving. There was a period of relatively low levels of migration within the EU-27 during the final three decades of the last century and in 1992, for the first time, net migration outweighed the natural increase in EU-27 population. This pattern was more pronounced during the period 2002-08, when net migration was particularly high (accounting for 95.1% of the total population change in 2003). However, data available for 2009 and 2010 show a diminishing share of net migration relative to population change. The EU-27's population grew by 2.7 per 1000 inhabitants in 2010, with the crude rate of net migration at 1.7 per 1000 inhabitants and the crude rate of natural increase at 1.0 per 1000 inhabitants.

Although the EU-27 population continued to increase in 2010, the population change was unevenly distributed across the Member States. The total number of inhabitants grew in 20 of the Member States, and in relation to the size of the population in each country; the highest crude rates of total population change were recorded in Luxembourg (an increase of 19.3 per 1 000 inhabitants, Belgium (10.3), Sweden (8.0) and Malta (7.8), before the United Kingdom (6.6) and France (5.5). The largest negative crude rates of total population change were in Lithuania (-25.7 per 1 000 inhabitants), Latvia (-8.4) and Bulgaria (-7.8).

Among the NUTS level 3 regions shown in Map 2.2 there was a relatively even split between EU-27 regions reporting an increase in their number of inhabitants (699 regions) and those where the population was in decline (604 regions). The population was growing at its most rapid pace in most regions in Belgium, eastern Ireland and northern Italy, and in Luxembourg as well as certain regions in Spain, France and the United Kingdom, while the crude rate of population growth was also above the EU-27 average in most regions of the Netherlands, Finland and Sweden, as well as in Malta. Rapid population decline was most apparent in east European regions, for example, in parts of Bulgaria, eastern Germany, the Baltic Member States, Hungary and Romania. Declining populations were also apparent in several regions of Spain, eastern Finland, central Austria, western Germany and inland parts of Greece and Portugal.

Within the non-member countries for which data are presented, there was a higher tendency (than within the EU-27) for population change to be positive: this was the case in 105 regions compared with 54 regions where the population declined. There was a mixed picture in Turkey with some regions among those with the highest population growth, while others had some of the largest declines. Nevertheless, the overall effect in Turkey was for a considerable increase in the crude rate of total population change (second only to Luxembourg among those countries presented in Map 2.2). In 2010, population growth was positive in Norway, Switzerland, Liechtenstein, Montenegro, Iceland and the former Yugoslav Republic of Macedonia, whereas Croatia reported a declining number of inhabitants.

Map 2.3 shows natural population change and has a similar distribution to that observed for Map 2.2. Almost all of the regions that reported negative total population change were also characterised as having negative natural population change. Broad differences can be seen in many regions in south-west France, northern Italy and south-east Germany, where there was overall population growth despite negative natural rates of change; there was a similar situation in southern Norway. In contrast, in several parts of Turkey the overall population change was negative despite positive natural change.

Some 773 EU regions (at NUTS level 3) experienced a higher number of deaths than births in 2010, while in 529 regions births outnumbered deaths; in West Cumbria (United Kingdom) births and deaths were equal. Positive crude rates of natural change could be seen in Ireland, as well as in many densely populated (built-up) areas in the Benelux countries, France and the United Kingdom. In contrast, significant negative rates of natural population change were recorded in Bulgaria, Latvia, Lithuania, south-east Hungary, eastern Germany, north-west Spain and inland Portugal. The two factors that define natural population change, namely births and deaths, are presented in more detail later in this chapter from the perspective of fertility and life expectancy.

Some 542 NUTS level 3 regions in the EU-27 had a crude rate of natural population change that was almost balanced (within the range of +/-2 per 1 000). As such, net migration can play a significant role in determining whether or not a region has overall population growth or decline. Net migration also has the potential to contribute indirectly to future natural population growth as migrants may later have children, given that a relatively high proportion of migrants are relatively young and therefore tend to be of childbearing age.

Map 2.4 shows the crude rate of net migration in 2010 for NUTS level 3 regions. The map closely resembles that for Map 2.2, emphasising the close relationship between migratory patterns and overall population change when the rate of natural population change is close to being balanced. There were 769 NUTS level 3 regions in the EU that had positive net migration (more immigrants than emigrants) in 2010. Among these, the highest net influx of migrants was registered in Ilfov (the area around Bucharest, Romania) and in Fokida (central Greece), where crude rates of net migration were 38.6 and 27.1 per 1000 inhabitants respectively. The remaining regions that reported net migration in excess of 10 per 1000 inhabitants were mainly urban regions that included Bonn, München and Münster in Germany; Bologna, Parma and Pisa in Italy; or Bristol, Edinburgh and Sheffield in the United Kingdom. This pattern was reversed in France, where the regions with the highest crude rates of net migration were generally rural and in the south of the country (Aude, Corse, Landes and Tarn-et-Garonne).

When net migration is negative, more people have left the region than arrived; this was the case for 532 NUTS level 3 regions in the EU in 2010. These regions were spread across most parts of Germany, Austria and eastern Europe (particularly Bulgaria, Latvia, Lithuania, Hungary, Poland and Romania), north-eastern France, southern Italy, inland Portugal, much of Spain, western Ireland and eastern and northern Finland. The 10 NUTS level 3 regions contained within



**Map 2.1:** Population density, by NUTS 3 regions, 2010 (<sup>1</sup>) (inhabitants per  $km^2$ )



#### (inhabitants per km²)

EU-27 = 116.6				
	<= 50			
	50 – 100			
	100 – 135			
	135 – 170			
	170 – 500			
	> 500			
	Data not available			

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat	
Cartography: Eurostat — GISCO, 04/2012	



(<sup>1</sup>) Population density is calculated as the ratio between (annual average) population and the surface (land) area; land area is a country's total area, excluding the area under inland water; Denmark, Germany, France, Cyprus, Italy, Hungary, Poland, Portugal, Slovakia, Liechtenstein and Montenegro, total area has been used instead of land area; Belgium, Sachsen (DED), Illes Balears (ESS3), Canarias (ES7), France, the United Kingdom and Norway, 2009.

Source: Eurostat (online data code: demo\_r\_d3dens)





Map 2.2: Population change, by NUTS 3 regions, 2010 (<sup>1</sup>) (per 1 000 inhabitants)



Cartography: Eurostat — GISCO, 04/2012



(\*) EU-27, provisional; Belgium, Aachen, Kreisfreie Stadt (DEA21), Aachen, Kreis (DEA25), Sachsen (DED), Illes Balears (ES53), Canarias (ES7), France, the United Kingdom and Norway, 2009. Source: Eurostat (online data code: demo\_r\_gind3)





**Map 2.3:** Natural population change, by NUTS 3 regions, 2010 (<sup>1</sup>) (per 1 000 inhabitants)

(per 1 000 inhabitants)



0 – 2

2 - 4

4 – 8

> 8

Administrative boundaries:  $\ensuremath{\mathbb{C}}$  EuroGeographics  $\ensuremath{\mathbb{C}}$  UN-FAO  $\ensuremath{\mathbb{C}}$  Turkstat Cartography: Eurostat — GISCO, 04/2012



 (\*) EU-27, provisional; Belgium, Aachen, Kreisfreie Stadt (DEA21), Sachsen (DED), Illes Balears (ES53), Canarias (ES7), France, the Netherlands, the United Kingdom, Norway and Turkey, 2009; Aachen, Kreis (DEA25), 2008.
 Source: Eurostat (online data code: demo\_r\_gind3)





**Map 2.4:** Net migration (including statistical adjustment), by NUTS 3 regions, 2010 (<sup>1</sup>) (per 1 000 inhabitants)

### (per 1 000 inhabitants) EU-27 = 1.7 <= -3 -3 - -1



Administrative boundaries:  $\ensuremath{\mathbb{C}}$  EuroGeographics  $\ensuremath{\mathbb{C}}$  UN-FAO  $\ensuremath{\mathbb{C}}$  Turkstat Cartography: Eurostat — GISCO, 04/2012



(<sup>1</sup>) EU-27, provisional; Belgium, Aachen, Kreisfreie Stadt (DEA21), Sachsen (DED), Illes Balears (ES53), Canarias (ES7), France, the Netherlands, the United Kingdom, Norway and Turkey, 2009; Aachen, Kreis (DEA25), 2008.



Lithuania all featured among the 13 regions with the highest negative crude rates of net migration, all below – 14 per 1 000 inhabitants. The only other regions to report such high net outflows of migrants (relative to their respective number of inhabitants) were Dublin (Ireland), Hoyerswerda, Kreisfreie Stadt (Germany) and Zuidoost-Zuid-Holland (the Netherlands).

When the two components of population change (natural change and net migration) move in the same direction they combine to produce a larger overall change. This was the case in Luxembourg and Malta, and in most of the regions in Belgium and the Netherlands, as well as in eastern and southern Spain, north-west and south-east France, and the south-east of the United Kingdom — most regions in these areas reported positive growth in terms of both natural change and net migration. Conversely, many NUTS level 3 regions in Bulgaria, Germany, Latvia, Lithuania, Hungary and Romania saw both components of population change move in a negative direction.

An analysis across the NUTS level 3 regions that contain capital cities shows that 17 regions in the EU-27 reported both components of population change moving in a positive direction — this is likely to be linked to the 'pull effect' of capital cities. For 14 out of these 17 regions, net migration accounted for a larger share of population growth, while natural growth was the main determinant of growth in the capital city regions of Estonia, Spain, Slovenia and Finland. Negative net migration was more than offset by a higher rate of natural increase in the capital city regions of Greece, France, Cyprus, Portugal and the United Kingdom (both NUTS level 3 regions for Inner London). In Ireland and Lithuania the relatively large negative crude rate of net migration was not offset by a positive rate of natural change, while in Hungary the high positive rate for net migration did offset a smaller negative rate of natural change. The capital city regions of Latvia and Romania were the only ones among the Member States where both components of population change were moving in a negative direction, therefore reinforcing the shrinking number of inhabitants in Riga and București.

Almost all of the capital city regions of non-member countries reported an increase in their respective populations, as both components of population change moved in a positive direction. The only exception was the Hofudborgarsvadi region of Iceland (which includes Reykjavik), where an overall increase in the population was due to positive natural growth, while there was a negative rate of net migration.

### Decline in the fertility rate

One major reason for the slowdown in the natural population growth is that women in the EU have fewer children than was previously the case. In developed parts of the world, a total fertility rate of around 2.1 live births per woman is currently considered to be the replacement rate, in other words the level at which the population size would remain stationary in the long run if there were no inward or outward migration.

The total fertility rate in the EU-27 declined from around 2.5 live births per woman in the early 1960s to an average close to 1.6 for the period 2007–09. The highest fertility rates across the EU Member States were recorded in Ireland (2.05) and France (2.00). Iceland (2.16) was the only EFTA or candidate country that displayed a fertility rate for 2007 to 2009 above the replacement rate of 2.1, followed by Turkey with a total fertility rate of 2.09 (average for 2008–09). A total fertility rate lower than 1.5 children per woman was observed in 17 of the EU Member States over the period 2007–09.

Map 2.5 shows the regional distribution of the total fertility rate: among the 269 NUTS level 2 regions across the whole of the EU-27, nine regions reported a total fertility rate that was above the replacement rate of 2.1 (the darkest shade in the map). The highest fertility rates were recorded in the French overseas regions of Guyane (3.59 children per woman), Réunion (2.40) and Guadeloupe (2.22), the Spanish territories of Melilla (2.30) and Ceuta (2.14), Pohjois-Suomi in northern Finland (2.29), the Border, Midland and Western region of Ireland, the West Midlands of the United Kingdom and the Pays de la Loire in France (all close to 2.1). Of the 27 regions that followed in the ranking, with a total fertility rate between 2.0 and 2.1, a high proportion were regions in either the United Kingdom (12 regions) or France (10 regions), while the other regions were in Belgium, Ireland, Denmark, the Netherlands and Sweden.

The lowest fertility rates were generally recorded in eastern and southern Europe. There were 29 NUTS level 2 regions in the EU that reported a total fertility rate equal to or below 1.3, including: six regions in Spain, five regions each in Hungary and (southern) Italy, four regions in Germany, three regions each in Portugal and Romania, and one region in each of Austria, Poland and Slovakia. The lowest fertility rates were recorded in the north-west of Spain in the Principado de Asturias and Galicia (both around 1.10 children per woman).

Among the non-member countries shown in Map 2.5, Turkey and Iceland each had statistical regions with total fertility rates above the replacement level, while in Norway there was one region with a total fertility rate equal to the replacement level. The highest total fertility rates (above the 3.0 live births per woman) were recorded in the four Turkish regions of: Mardin, Batman, Şırnak, Siirt (3.77); Şanlıurfa, Diyarbakır (3.75); Van, Muş, Bitlis, Hakkari (3.66); and Ağrı, Kars, Iğdır, Ardahan (3.31).

# Life expectancy gaps between men and women

Over the last 50 years, life expectancy at birth has increased by about 10 years on average across the EU, due in large part to improved socioeconomic and environmental conditions





# **Map 2.5:** Total fertility rate, by NUTS 2 regions, average 2008–10 (<sup>1</sup>) (live births per woman)

#### (live births per woman)

EU-27 =	1.58
	<= 1.3
	1.3 – 1.5
	1.5 – 1.8
	1.8 – 2.1
	> 2.1
	Data not available





(\*) Ireland, 2010; Turkey, 2009–10; Eastern Scotland (UKM2) and South Western Scotland (UKM3), 2008–09; EU-27, Spain, France, Cyprus, the Netherlands, the United Kingdom (other than UKM2 and UKM3) and Norway, 2007–09; Belgium and Sachsen (DED), 2006–08; Brandenburg (DE4), by NUTS 1 region.
Source: Eurostat (online data code: demo\_r\_frate2)



and better medical treatment and care. Maps 2.6 and 2.7 present average male and female life expectancy at birth for NUTS level 2 regions; these maps are directly comparable thanks to the common colour patterns used.

Map 2.6 shows that male life expectancy at birth was 74 years or less in all of the regions covered by the Baltic Member States, Poland, Slovakia, Hungary, Romania and Bulgaria; while the only other EU regions that recorded values for life expectancy at birth for males that were below 74 years were Severozápad, Střední Morava and Moravskoslezsko in the Czech Republic, and the two island regions of Açores and Madeira in Portugal. Relatively low male life expectancy at birth was also apparent in the former Yugoslav Republic of Macedonia and in Montenegro, as well as in the Croatian regions of Sredisnja i Istocna (Panonska) Hrvatska and Sjeverozapadna Hrvatska.

The highest levels of male life expectancy at birth (equal to or greater than 78 years) were spread across a wide range of countries: 11 of the top 40 NUTS level 2 regions were located in the United Kingdom, while eight were in Italy, five each in Germany and Sweden (out of a total of eight), four in Spain, two each in Greece, France and the Netherlands, and one in Finland. The highest value of male life expectancy at birth was registered in Åland (Finland) with an average of 80.8 years for the period 2008–10.

Map 2.7 depicts the regional distribution of female life expectancy at birth. The lowest values were (as for men) recorded in eastern Europe (Romania, Bulgaria and Hungary, as well as in the former Yugoslav Republic of Macedonia). The Bulgarian regions of Severozapaden and Yugoiztochen recorded the lowest values for female life expectancy at birth, at 76.5 years for the period 2008–10. The highest value for life expectancy at birth among women was recorded in the Comunidad Foral de Navarra (Spain), averaging 86.1 years for the period 2007–09; in Ticino (Switzerland), this ratio averaged 86.2 years over the period 2008–10. The top 40 NUTS level 2 regions in the EU with the highest levels of female life expectancy at birth were almost all located in either France (17 regions), Italy (11 regions) or Spain (10 regions), other than Ipeiros in Greece and Vorarlberg in Austria.

In all regions of the EU-27, EFTA and candidate countries, women could expect to live longer than men. For the EU-27 as a whole, life expectancy at birth averaged 82.2 years for women and 76.1 for men during the period 2006–08. The biggest gaps in life expectancy at birth between women and men were recorded for the Baltic Member States, where women could expect to live between 11.1 (Lithuania) and 10.2 (Latvia) years longer than men. There were also relatively wide gender gaps, more than 8 years, for a number of regions in Poland, Hungary, France, Romania and Slovakia. The lowest gender gap was recorded for the islands of Åland (Finland), where female life expectancy at birth of 83.4 years was 2.6 years higher than the corresponding figure for male life expectancy. Many of the regions with small gender gaps, less than or equal to 4 years' difference between the sexes, were found in the Netherlands, Sweden or the United Kingdom.

Among the non-member countries, Iceland had the smallest gender gap, equal to 3.9 years, while the largest gap was 7.1 years, as recorded for the two Croatian regions of Sjeverozapadna Hrvatska and Sredisnja i Istocna (Panonska) Hrvatska.

It is also interesting to look at life expectancy figures at age 65: as with the data for life expectancy at birth, there were no NUTS level 2 regions where male life expectancy was higher than female life expectancy at age 65. Across the EU-27 regions the highest gender gap at age 65 was recorded in Estonia, at 5.2 years for the period 2008–10. There were 10 Greek regions at the other end of the ranking with the lowest gender gaps, within the range of 2.0 to 1.5 years' difference. Among the non-member countries, the range among the regions for life expectancy at age 65 was from 2.0 years in the former Yugoslav Republic of Macedonia up to 4.0 years for the Swiss region of Ticino.

Data for the infant mortality rate show that the NUTS level 2 regions with the highest infant mortality rates were in Bulgaria and Romania; these two Member States had a combined total of seven regions with infant mortality rates (number of deaths per 1 000 live births) in double figures.

### Demographic ageing

The EU-27's population is getting progressively older. This change has resulted from a significant and continuous increase in life expectancy at birth, combined with low fertility rates and the entry into retirement of the post-Second World War baby-boom generation. One means of illustrating this structural change in the EU-27's population is through the old-age dependency ratio, which analyses the relationship between the number of elderly persons (aged 65 and above) and the working-age population (aged 15 to 64). The elderly population aged 65 or over was equivalent to 25.9% of the working-age population in the EU-27 at the beginning of 2010.

Map 2.8 shows the old-age dependency ratio calculated for NUTS level 3 regions on 1 January 2011. There were 125 EU-27 regions that had old-age dependency ratios equal to or below the level of 20%, 45 from Poland, 19 from the United Kingdom, 13 from Romania, 11 from Spain, nine from France, eight each from Ireland and Slovakia, five from Portugal, two from the Netherlands and one each from the Czech Republic, Denmark, Cyprus, Malta and Finland. The lowest old-age dependency ratio was recorded in Guyane (6.8%). Two regions reported old-age dependency ratios that were above 50% (in other words, there were less than two persons of working-age supporting an elderly person aged 65 or over), namely, Hoyerswerda, Kreisfreie Stadt in Germany and Pinhal Interior Sul in Portugal.



The pattern of demographic ageing was less evident in the regions of the EFTA and candidate countries. There were three NUTS level 3 regions, all in Croatia, where the old-age dependency ratio was above 30 %. At the other end of the scale, there were 89 regions that reported old-age dependency ratios equal to or below 20 %; these were almost exclusively Turkish regions (76), while the remainder were regions from the former Yugoslav Republic of Macedonia (seven), Iceland and Norway (two each), Liechtenstein and Montenegro (one each). The lowest old-age dependency ratio in the EFTA and candidate countries was recorded in the region of Van, Muş, Bitlis and Hakkari in Turkey (4.9 % on 1 January 2011).

## Data sources and availability

Eurostat provides a wide range of demographic data: these include statistics on national and regional populations, as well as data for various demographic events (births, deaths, marriages, divorces, immigration and emigration) which influence the population's size, structure and specific characteristics.

Population density is the ratio of the (annual average) population of a territory to the surface (land) area of the territory. Land area is a country's total area, excluding the area under inland water.

Population change is the difference between the sizes of population at the end and at the beginning of the period. A positive population change is referred to as population growth. A negative population change is referred to as population decline. Population change consists of two components.

- Natural change, which is calculated by the difference between the number of live births and the number of deaths. Positive natural change, also known as natural increase, occurs when live births outnumber deaths. Negative natural change, also known as natural decrease, occurs when live births are less numerous than deaths.
- Net migration including statistical adjustment, which is calculated by the difference between the total change in the population and natural change; the statistics on net migration are therefore affected by all the statistical inaccuracies in the two components of this equation, especially population change. In different countries net migration including statistical adjustment may cover, besides the difference between inward and outward migration, other changes observed in the population figures between 1 January for two consecutive years which cannot be attributed to births, deaths, immigration or emigration.

The crude rate of population change is the ratio of the total population change during the year to the average population of the area in question in the same year; this value is expressed per 1 000 inhabitants.

The crude rate of natural population change is the ratio of natural population change over a period to the average population of the area in question during the same period; this value is also expressed per 1 000 inhabitants.

The crude rate of net migration (including statistical adjustment) is the ratio of net migration (including statistical adjustment) during the year to the average population in the same year; this value is expressed per 1 000 inhabitants. As stated above, the crude rate of net migration is equal to the difference between the crude rate of population change and the crude rate of natural population change (in other words, net migration is considered to be the part of population change not attributable to births or deaths).

The total fertility rate is defined as the average number of children that would be born to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates that have been measured in a given year.

Life expectancy at birth is the mean number of years that a newborn child can expect to live if subjected throughout his or her life to current mortality conditions.

The old-age dependency ratio is the ratio of the number of elderly persons of an age when they are generally economically inactive (aged 65 and over in this publication) to the number of persons of working age (conventionally 15–64 years old).

### **Further information**

For further information about population statistics please consult Eurostat's website at http://epp.eurostat.ec.europa.eu/portal/page/portal/population/introduction.

### Context

Consistently low fertility levels, combined with extended longevity and the fact that the baby-boomers are reaching retirement age, are resulting in the ageing of the EU's population. The number of people who are of working age is decreasing, while the number of older people is on the rise.

The social and economic changes associated with population ageing are likely to have profound implications for the EU, at both national and regional levels. They stretch across a wide range of policy areas, with an impact on the schoolage population, healthcare, participation in the labour force, social protection, social security issues and government finances among others.

Statistics on population change and the structure of population are increasingly used to support policymaking and to provide the opportunity to monitor demographic behaviour within political, economic, social and cultural contexts.



**Map 2.6:** Life expectancy at birth, males, by NUTS 2 regions, average 2008–10 (<sup>1</sup>) (years)



### (years) EU-27 = 76.1

<= 74						
74 – 76	-	_	_	_	=	
76 – 78	0	200	400	600	800 km	
78 – 80						
> 80						
Data not available						

(<sup>1</sup>) Ireland, 2008 and 2010; Belgium, Spain (other than Ciudad Autónoma de Melilla (ES64)), France (other than Guadeloupe (FR91) and Guyane (FR93)), Cyprus, the Netherlands, the United Kingdom and Norway, 2007–09; Turkey, 2009; EU-27, Sachsen (DED) and Italy, 2006–08; Guyane (FR93), 2008; Ciudad Autónoma de Melilla (ES64) and Guadeloupe (FR91), 2007; Brandenburg (DE4), by NUTS 1 region; Turkey, national level.

Source: Eurostat (online data code: demo\_r\_mlifexp)

Cartography: Eurostat — GISCO, 04/2012





Map 2.7: Life expectancy at birth, females, by NUTS 2 regions, average 2008–10 (<sup>1</sup>) (years)

### (years)



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat Cartography: Eurostat — GISCO, 04/2012



(\*) Ireland, 2008 and 2010; Belgium, Spain (other than Ciudad Autónoma de Melilla (E564)), France (other than Guadeloupe (FR91) and Guyane (FR93)), Cyprus, the Netherlands, the United Kingdom and Norway, 2007–09; Turkey, 2009; EU-27, Sachsen (DED) and Italy, 2006–08; Guyane (FR93), 2008; Ciudad Autónoma de Melilla (E564) and Guadeloupe (FR91), 2007; Branden-burg (DE4), by NUTS 1 region; Turkey, national level.
Source: Eurostat (online data code: demo\_r\_mlifexp)









Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 04/2012



(1) EU-27, Belgium, Aachen, Kreisfreie Stadt (DEA21), Aachen, Kreis (DEA25), Sachsen (DED), Illes Balears (ES53) and Canarias (ES7), France, Cyprus, the United Kingdom and Norway, 1 January 2010.
 Source: Eurostat (online data code: demo\_r\_pjanaggr3)