THE ØRESUND BRIDGE
AND ITS REGION

ØRESUNDSBRO KONSORTIET 2009
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The figures in this report have not been audited by Øresundsbro Konsortiet’s auditors.
INTRODUCTION

The Øresund Bridge – linking a region

Nearly ten years have passed since the inauguration of the fixed link between Sweden and Denmark, and we are now setting out plans and developing projects with partners across the water without even considering the divide that Øresund once was.

Rather than a barrier, the Øresund Bridge has become a platform for new ideas: companies can expand their markets, job-seekers can take up work in the neighbouring country, families can start new lives on the other side, students can follow courses at more than one university and a day excursion with the family can just as easily go to “the other side.”

All this was part of the vision behind the decision to build the Øresund Bridge. Besides being an important link in an international north-south traffic corridor, the Øresund Bridge was conceived as the foundation of a strong, common region across Øresund with Copenhagen in Denmark and Malmö in Sweden as its centres. A concept that the local population and the business community, with some assistance from the state, would turn into reality.

Thousands of Danes and Swedes have seized the opportunity to build a new life by using the Øresund Bridge on a daily basis. For the business community, universities and other institutions of higher learning, the Øresund Region provides a framework for new opportunities and achievements. Today, the Øresund Region is, indeed, a powerful force in Scandinavian and Northern European life.

Within a broader perspective, the Øresund Bridge is also an important component in Northern Europe’s infrastructure as the railway and motorway connect Scandinavia to the European continent. Currently, this is via the Great Belt Bridge, but from 2018 also via a new bridge across Fehmarnbelt that will link Fehmarn in Germany with the southern part of the Øresund Region. This will create a future corridor Copenhagen/Malmö/Hamburg.

Every day, the Øresund Bridge carries 70,000 people between Denmark and Sweden by train or car, the equivalent of 25.7 million people a year.
The Øresund Bridge has been transformed from a project regarded by many with some scepticism to an indispensable traffic link that connects vibrant regions in the two countries.

Before the bridge, integration between Copenhagen/Zealand and Malmö/Scania was on a small scale. It was mainly driven by institutional partners such as universities or periodic commercial partnerships between businesses.

From Malmö, Copenhagen was a natural destination while Danes tended to head north to Gothenburg and Stockholm. The most popular ferry link between Zealand and Scania was not between Copenhagen and Malmö, but 35 kilometres further north between Helsingborg and Elsinore.

Where was the potential for linking Copenhagen and Malmö?

The opening of the Øresund Bridge in 2000 led to a sea change in the perception of the opportunities available to the region’s inhabitants. Since Øresund could only be crossed by ferries, the waterway represented a real barrier to developments between the two sides – in practice as well as spiritually. However, with the bridge, developments began to accelerate. The Øresund Bridge became a bridge of opportunity – for individuals as well as for the commercial sector.

In the first few years following the opening of the bridge, holiday and leisure traffic dominated. It was to take some years before the financially more stable commuting took off. Overall, the opportunities offered by the Øresund Bridge have persuaded large numbers of people to change their daily lives.

The regional population’s belief in the region

The Øresund Region Denmark

The Øresund Region Sweden

- ... is already a reality
- ... will become a reality within a year
- ... will become a reality over the next 2 – 4 years
- ... will become a reality over the next 5 – 9 years
- ... will become a reality in 10 years or more
- ... will never become a reality
- Don’t know
Danes and Swedes seek new opportunities

Who has stimulated integration by identifying new opportunities for spending part of their daily lives on the other side of Øresund – in a different country?

On both sides of Øresund, Danes and Swedes are taking advantage of the freedom that the bridge offers and are changing their lives for the better. They are taking advantage of a situation where the language spoken by neighbours or colleagues is more or less irrelevant, but where the attraction lies in a new working environment or new home on the other side of Øresund. Such factors are the main drivers behind current developments in the Øresund Region.

Private initiatives have tested the framework for the cross-border region so that Danish and Swedish legislation has often been unable to keep pace. At national level, the legal framework has, to a large extent, been insufficiently developed to take account of the plans and projects initiated by the inhabitants and business communities across Øresund, which have challenged laws and regulations regarding taxation, the health service, etc.

The bridge has enabled Danes to move to Scania while keeping their jobs in Zealand. The rise in house prices in Denmark compared to lower prices in Sweden has proved particularly attractive to Danes. An added bonus is that groceries, cars and other living costs are generally lower in Sweden. In other words, there are significant savings for those whose salaries are paid in Danish kroner – as is the case with most Danes who have chosen to relocate to Scania.

For Danes, it is no longer unusual to work alongside Swedish colleagues or hear Swedish spoken by shop personnel in Copenhagen.

By contrast, the demographic trends in the Øresund Region and the significant differences in the two countries’ labour markets have made it attractive for many Swedes to work on the Danish side of Øresund. Where the Danish labour market saw a dramatic rise in demand up to 2008, Scania had a surplus. Consequently, Swedes found it easy to find work in Denmark.

Younger, well educated Swedes have been especially attracted by the higher salaries and better career opportunities in the Danish labour market. This is seen as outweighing the loss of greater job security, a key aspect of the Swedish labour market.

The advantages further outweigh the disadvantages of working in a different country with longer commuting times, higher transport costs and often complex regulations governing tax, pensions, unemployment benefit and maternity leave. Swedes working in Denmark have, to a large extent, been able to adapt to the Danish labour market.

The number of Danish and Swedish commuters on the Øresund Bridge is increasing and commuter traffic across the bridge has risen sevenfold since the bridge opened in 2000.

Less than ten years after commissioning of the bridge, integration is therefore progressing well.
The construction of the Øresund Bridge underpinned the vision of the Øresund Region as a geographical, cultural and economic entity. To transform the bridge’s hinterland into one region would strengthen the region’s position vis-a-vis other metropolitan areas in Northern Europe.

The vision rested on the Øresund Region’s potential to develop into a cross-border Northern European powerhouse with strong international appeal. The advantages of a dynamic Øresund Region, therefore, would not only benefit the region, but all of Denmark and Sweden.

With Copenhagen and Malmö as the most important cities, the Øresund Region comprises Scania on the Swedish side and Zealand, Lolland-Falster, Møn and Bornholm on the Danish side. The population totals 3.7 million.

The Øresund Bridge’s important role as a regional traffic link notwithstanding, users’ reasons for crossing the bridge have changed since the opening in 2000.
The Øresund Region
The opening of the Øresund Bridge in July 2000 has led to a dramatic increase in traffic across Øresund as a whole. In the 1990s, between two and three million vehicles crossed the Øresund waterway per annum. By 2008, this figure had risen to 9.5 million with a total of 36.7 million travellers crossing Øresund by car, coach, train or ferry.

Following a modest fall in traffic in the early 1990s, traffic rose by some 20 per cent annually between 1995 and 1999. New routes, more departures, lower prices and economic growth in Denmark and Sweden largely drove traffic growth. The opening of the Øresund Bridge generated a further traffic increase of 43 per cent and overall traffic across Øresund rose by an average of 10 per cent each year between 2001 and 2007.

2008, however, differed in that traffic growth across Øresund amounted to just 3 per cent – an increase of 5.1 per cent on the Øresund Bridge and a decline of 2.6 per cent in ferry traffic between Elsinore and Helsingborg.

The explanation for higher growth on the bridge is that traffic on the ferries differs from the bridge. While regional traffic, i.e. commuters, commercial traffic and regional leisure traffic dominate on the bridge, the ferries continue to be dominated by holiday and shopping traffic.
Journeys across the Øresund Bridge in 2008

25.7 million people travelled across the bridge, including:
- 15 million car passengers
- 10.7 million rail passengers

An average of 19,400 vehicles crossed the bridge every day

95 per cent of all vehicles on the bridge were passenger cars

70,000 people crossed the bridge by car or train every day

41,000 people a day crossed the bridge by passenger car, coach or lorry

Trains carried an average of 29,000 persons across the bridge every day

The number of rail travellers across the Øresund Bridge rose by 11 per cent

Road traffic across the Øresund Bridge rose by 5.1 per cent
Rail traffic

In 2008, 10.7 million passengers crossed the Øresund Bridge by train, i.e. an increase of 11 per cent on 2007. 49,520 passenger trains crossed the bridge as well as 7,406 freight trains and 3,004 service trains, which equates to 164 trains per day or an average of 3.4 trains per hour in each direction in the daytime.

The Øresund trains are primarily a means of regional transport and account for 90 per cent of all passenger journeys. Four out of five rail passengers are resident in Sweden while one out of five live in Denmark. A very small number are foreigners.

Commuting also drives traffic on the railway where around 60 per cent of travellers use the Øresund trains for travelling to work or university/college. The remaining 40 per cent are largely accounted for by leisure traffic while a small proportion are business or holiday travellers.

Passenger traffic on the railway is mainly operated by DSBFirst, which took over the operation of the Øresund trains in January 2009. Freight traffic on the Øresund Bridge's rail line is divided between several operators, including private companies.

Trains across the Øresund Bridge

DSBFirst is responsible for operating the region's Øresund trains that cross the bridge three to six times per hour. The Øresund trains link large parts of Scania with North Zealand running between Gothenburg, Kalmar and Karlskrona, Malmö, Copenhagen Airport and Copenhagen to Elsinore.

SJ operates the long-distance X2000 trains that link Stockholm and Gothenburg with Copenhagen via the Øresund Bridge. The X2000 crosses the Øresund Bridge 12 times every day.

DSB, SJ and private operators operate freight trains across the Øresund Bridge.
Coach traffic

More than half the coach traffic to and from the Scandinavian peninsula uses the Øresund Bridge. This traffic is evenly divided between scheduled traffic and tourist buses.

The scheduled services consist of connections between the Northern European capitals and larger cities and towns in Scania as well as regional routes between Copenhagen, Malmö, Lund, Malmö Airport and Ystad/Bornholm.

Lorry traffic

Cross-border freight transport is rising in line with globalization while, at the same time, more distribution transport between, in the main, Copenhagen and Malmö, has resulted in more lorry traffic across the Øresund Bridge. For example, a substantial proportion of the imports of passenger cars to the Danish market is unloaded and transported to Danish dealers by trailers via the Øresund Bridge.

In recent years, the Øresund Bridge has focused on strengthening its position in the lorry traffic segment and, in 2008, had a 16 per cent share of the traffic to and from the Scandinavian peninsula.

The Øresund Bridge carried 930 lorries a day in 2008, i.e. more than double the number in 2001 when the corresponding figure was 495. The economic slowdown in 2008 has, however, also impacted on lorry traffic across the Øresund Bridge which was on a par with 2007.
2008 was characterized by a rapid slowdown in economic growth in Denmark and Sweden following the financial crisis and the subsequent downturn in economic trends. This led to particularly weak traffic growth across the Øresund Bridge in the autumn of 2008. At the same time, interest expenses rose as a result of high inter-bank rates and high inflation figures over the summer and autumn.

Over the past four years, traffic on the Øresund Bridge has grown by between 14 and 17 per cent per year. During this period, high business activity and low inter-bank rates benefited the Øresund Bridge’s financial position so that in 2004, the Øresund Bridge could begin to repay its debts of EUR 4 billion. The initial DKK 1 billion (EUR 130 million) of the debt was repaid between 2004 and 2008.

In the longer term, the basic growth factors – i.e. trends in the labour and housing markets and in demographics – will not be affected by the crisis. In the short term, however, the Øresund Bridge expects to see a slowdown in integration-driven traffic as the region’s population and its businesses adopt a more cautious approach and avoid the risks involved in changing jobs, selling homes or investing in new markets.
With its scenic and accessible natural areas, high quality attractions and numerous opportunities for overnight stays, the Øresund Region is an ideal destination for holiday and leisure breaks. Moreover, shopping, entertainment, sport, weekend breaks and holiday opportunities are many and varied throughout the region. Consequently, traffic across the bridge for such purposes is a significant source of revenue for the region’s tourist industry and retail sector.

For some considerable time after the opening of the bridge, holiday traffic accounted for most of the traffic across the bridge. In 2001, 66 per cent of car traffic related to holidays, short-breaks, etc. By 2008, this had fallen to 39 per cent of car traffic.
On the Danish side, Copenhagen, with its shopping, cultural attractions and entertainment, is particularly attractive for Swedish leisure travellers although the Swedes are also regular visitors to events at the region’s museums and other cultural institutions. Danes visit Scania for shopping, culture and the outdoors, e.g. fishing, golf and skiing.

Tourists from other countries accounted for 24 per cent of holiday traffic by car in 2008 and for 6 per cent of short-break traffic. For most European tourists using the Øresund Bridge, Scania is their final destination followed by the rest of Sweden, Norway and Finland. Of the total passenger car traffic on the Øresund Bridge, passenger cars from other countries only accounted for 3 per cent, which highlights the bridge’s strong position as a regional traffic link.

<table>
<thead>
<tr>
<th>Flow of passenger car traffic across the Øresund Bridge 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origin</strong></td>
</tr>
<tr>
<td>Copenhagen</td>
</tr>
<tr>
<td>Zealand</td>
</tr>
<tr>
<td>Funen/Jutland</td>
</tr>
<tr>
<td>Europe</td>
</tr>
<tr>
<td>Scania</td>
</tr>
<tr>
<td>Rest of Sweden</td>
</tr>
<tr>
<td>Bornholm</td>
</tr>
<tr>
<td>Norway/Finland</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
Since the opening of the bridge, the Øresund Bridge has become the daily route to work for thousands of Danish and Swedish commuters who account for most of the traffic growth. Owing to the difference in property prices between the two countries, a large number of Danes have decided to move to Malmö. Conversely, a large number of Swedes have chosen to work for companies in Copenhagen. Up to 94 per cent of commuters, therefore, live in Scania.

Although the current economic slowdown has impeded growth in commuter traffic, in the longer term, the positive trend will continue because both Copenhagen and the rest of Zealand will see a notable shortage of labour owing to an ageing population, which Scania will be able to meet because of its positive population development.

In general, commuters are well educated and belong to the 30-39 age group. They represent a wide variety of professions although many work within telecommunications, IT and the health service.

A total of 19,300 people commute across the Øresund Bridge to work or study every day.

94 per cent of commuters live in Scania.

Commuters account for 41 per cent of passenger car traffic on the Øresund Bridge.

Commuting by car rose by 19 per cent in 2008.

62 per cent of Øresund commuters prefer the train.

Danish commuters living in Scania prefer to take their car. 62 per cent of car users are Danish against 38 per cent of rail commuters.

Number of commuters across Øresund Bridge

Source: Øresundsbro Konsortiet
The housing market

As the price of residential properties has rocketed in Zealand and especially in Copenhagen, first-time buyers have often found it difficult to buy a home in the capital. Consequently, many have moved across the bridge to Malmö and Scania where apartments and houses are significantly cheaper and because of the bridge, they are still close enough to continue to work on the Danish side.

Lower housing costs are the main reason for Danes to relocate to Scania, followed by a wish for better housing standards, lower car prices, lower prices for groceries and lower living costs in general. Altogether, this means that young Danes can set up home significantly cheaper than if they had stayed in Denmark. Broadly speaking, it is the younger Danes who are relocating to Scania. 55 per cent are between the ages of 20 and 34 and more than half are young single men or childless couples from Copenhagen or Frederiksberg.

However, it is not all about financial considerations. This is demonstrated by the fact that some Danish immigrants also value the nature and outdoor pursuits on the Swedish side. Moreover, better public services and better facilities for bringing up children also play a role – as does the excitement of moving from one country to another.

The majority relocate to South Western Scania with Malmö as the centre. In 2008, Danes accounted for no less than 15 per cent of the net foreign influx into the highly multi-cultural Malmö. One residential district, the new Annestad south of Malmö, has, in fact, become known as a “Danish” town.

Although families account for a smaller proportion of the newcomers, they integrate faster as their children attend Swedish institutions and schools and make Swedish friends.

In 2008 ... 

3,300 people moved from Zealand to Scania

2,200 moved from Scania to Zealand

Danes accounted for 77 per cent of immigration from Denmark to Scania and 68 per cent of the relocations from Scania to Denmark

The net influx from Zealand to Scania peaked in 2006 when 4,300 people moved from Zealand to Scania with 1,500 moving in the opposite direction
The cost of a 140 square metre house in EUR

<table>
<thead>
<tr>
<th>City</th>
<th>Cost (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Øresund</td>
<td>436,056</td>
</tr>
<tr>
<td>Fehmarn</td>
<td>324,506</td>
</tr>
<tr>
<td>Great Belt</td>
<td>259,767</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>355,540</td>
</tr>
<tr>
<td>Malmö</td>
<td>259,767</td>
</tr>
<tr>
<td>Lund</td>
<td>324,483</td>
</tr>
<tr>
<td>Ystad</td>
<td>190,401</td>
</tr>
<tr>
<td>Vellinge</td>
<td>372,005</td>
</tr>
<tr>
<td>Tårnby</td>
<td>367,407</td>
</tr>
<tr>
<td>Frederiksberg</td>
<td>355,540</td>
</tr>
<tr>
<td>Roskilde</td>
<td>364,403</td>
</tr>
<tr>
<td>Elsinore</td>
<td>364,403</td>
</tr>
<tr>
<td>Halsnæs</td>
<td>231,932</td>
</tr>
<tr>
<td>Frederikssund</td>
<td>242,917</td>
</tr>
<tr>
<td>Hørsholm</td>
<td>499,465</td>
</tr>
<tr>
<td>Køge</td>
<td>312,710</td>
</tr>
<tr>
<td>Hillerød</td>
<td>355,785</td>
</tr>
<tr>
<td>Helsingborg</td>
<td>259,767</td>
</tr>
<tr>
<td>Landskrona</td>
<td>175,575</td>
</tr>
<tr>
<td>Møn</td>
<td>231,932</td>
</tr>
<tr>
<td>Næstved</td>
<td>231,932</td>
</tr>
<tr>
<td>Holbæk</td>
<td>279,419</td>
</tr>
<tr>
<td>Bornholm</td>
<td>177,309</td>
</tr>
<tr>
<td>Trelleborg</td>
<td>177,309</td>
</tr>
<tr>
<td>Eslöv</td>
<td>174,326</td>
</tr>
<tr>
<td>Svedala</td>
<td>234,179</td>
</tr>
<tr>
<td>Simrishamn</td>
<td>177,309</td>
</tr>
<tr>
<td>Amager</td>
<td>228,207</td>
</tr>
<tr>
<td>Kristianstad</td>
<td>129,438</td>
</tr>
</tbody>
</table>

Source: Värderingsdata AB and Realkreditrådet
In Sweden, owner-occupied housing is almost always one family properties. Apartments are either rented or co-operative homes where the buyer buys a share in the houseowners’ association but does not own the apartment itself. In addition to the purchase price, a monthly fee is paid to the housing association. 50 per cent of all Danes who move to Scania buy a co-operatively owned apartment which is typically priced at 50 per cent below an equivalent owner-occupied apartment in Copenhagen.

The number of Danish immigrants moving to Scania is highly dependent on economic trends and on property prices in Copenhagen and Malmö. A significant rise in property prices in Southern Sweden and a corresponding fall in Danish property prices will inevitably impact on the market and the attraction of moving to Sweden.
Danish property prices peaked in the third quarter of 2006. Price falls first occurred in the Copenhagen area and subsequently spread to the rest of Zealand. On the Swedish side, property prices did not begin to decline until until the third quarter of 2007, i.e. one year after the decline in Denmark. Despite the weakening Danish property market, property remains substantially cheaper in Malmö than in Copenhagen. At the end of 2008, a detached house in Malmö was 26 per cent cheaper than in Copenhagen.
Labour market

The metropolis of the Øresund Region, Copenhagen, attracts both manpower and companies. The Øresund Bridge made it obvious for many Scanians to seek jobs in Copenhagen because Danish salary levels are higher than those in Sweden.

The Danish boom and record low unemployment prompted Danish companies to look for employees on the other side of Øresund during the period 2005 – 2007. The largest single effect of the Øresund Bridge with regard to the labour market are the many Swedes who are willing to take the train or the car across the bridge to work for a Danish company, particularly people with a higher education. These do not see the language and cultural differences as a problem and many consider it a plus to work with Danes.

Despite the Scandinavian welfare model, there are significant differences between the labour markets in the two countries. Swedish labour market regulations give employees greater job security. Nevertheless, Swedish employees prioritize the challenges, the excitement and higher salaries above job security and the excellent opportunities for paternity/maternity leave when applying for jobs in Denmark.

The Danish language represents a challenge for Swedes who work in a Danish company although, in general, this is not regarded as an impediment. By far the majority regard it as a positive challenge to learn Danish for work reasons.

![New Swedes in the Danish labour market](chart)

Source: SkatØresund 2008
However, commuters encounter problems in the form of more complex tax and pension regulations across the border, money transfers between the two national banking systems and expensive charges for mobile phone calls and texting between the two countries. Many Swedish commuters also believe that it takes too long to travel between their home in Scania and their job in Copenhagen and that the costs of doing so are too high. In reality, however, the added costs are outweighed, at least in part, by tax advantages and transport allowances.

Despite the current economic downturn, Copenhagen and the rest of the Zealand will, within a number of years, suffer a massive shortage of labour, which will create salary pressures in Denmark. Since labour shortages and, therefore, salary pressures are less on the Swedish side of Øresund, this will further strengthen the economic incentive to work in Copenhagen for people living in Southern Sweden.

The number of Danes or Swedes living in Denmark and commuting to jobs in Sweden is very low and primarily concerns specialists.

Between 2005 and 2007, the influx of “new” Swedes into the Danish labour market rose from 1,391 to 6,667 individuals. In 2008, the figure was 5,798

88 per cent of Swedes who took part in a survey by the Øresund Bridge’s regional panel and who work for a Danish employer have a “good” or “very good” knowledge of Danish

79 per cent of respondents believe that learning Danish has been a positive challenge

84 per cent of respondents believe that their careers will benefit from having learnt Danish
Commercial life

Business structure

In line with other parts of the western world, the Øresund Region is experiencing a transformation in its business structure. The number of employees in the private service sector is rising while the number of people working in manufacturing and agriculture is declining. There are, however, significant internal variations concerning the extent of these structural changes.

In the capital region, manufacturing industry (including the construction sector) accounted for approximately 15 per cent of the total workforce in 2005 while in Region Zealand and Scania, manufacturing accounted for 22 and 23 per cent of the workforce respectively. Although manufacturing has been in decline in all three areas, the fall is most marked in the capital region. By contrast, the capital region is characterized by a high proportion of employees in the private service sector: 47 per cent.

In Zealand and Scania, the private service sector accounts for 34 and 36 per cent of employment respectively. Common for the three parts of the Øresund Region is that the dominant sectors are business services and the wholesale and retail trades. Within industry, the construction industry as well as the chemicals and plastics industry account for the major share of the workforce.

Increasing numbers of Scanian companies are Danish owned

Increasing Danish and Swedish ownership of companies on the other side of Øresund is an expression of internationalization, but also indicates the ongoing structural integration of business between the two sides of the region. A number of studies reveals that the most frequent reason for companies investing in the other country is to gain access to larger, growing markets. Close proximity to customers is especially important for companies in the service sector. Statistics from the Swedish Institute for Growth Policy Studies (ITPS) shows that Denmark holds a prominent position in Scanian industry in terms of business ownership.

Danish companies hold second place as foreign owners of Scanian companies and workplaces. In the rest of Sweden, Denmark ranks fourth in terms of ownership of Swedish companies and workplaces. The number of Danish companies is also increasing more in Scania than in the rest of Sweden. The majority of Scanian workplaces with Danish owners are in the service sector.

Danish influence has been particularly noticeable in Malmö where 3,900 people currently work for Danish-owned companies. According to a report by the municipality of Malmö, 276 companies, or 22 per cent of foreign-owned businesses in Malmö, are owned by Danes. This is twice as many as number two on the list, German-owned companies. Among the largest Danish-owned companies are Netto, DFDS Transport, Egmont, Rambøll, Novo Nordisk, Iiva, and Jysk.

Regional business traffic rose 26 per cent in the period 2003 – 2008.
Regional business traffic accounts for 20 per cent of passenger car traffic across the Øresund Bridge.
Danish-owned workplaces in Scania 1990 – 2005

Number of workplaces

Source: Øresund Trends 2008 and ITPS
Denmark and Sweden both rank highly on the OECD’s index of the time spent in education. Higher education is a crucial factor in the Øresund Region’s position as a knowledge-based region in Europe and the 12 universities and institutions of higher learning in the region, which co-operate under the auspices of the Øresund University, represent more than 150,000 students and 12,000 scientists. For the region and its industries, it is, therefore, important to have a constant flow of well-educated and flexible employees at all levels.

With the opening of the Øresund Bridge, students at the Øresund Region universities have better opportunities to study in the neighbouring country and thus enhance their education. Since the opening of the bridge, Lund’s University and Malmö High School have received more Danish students. The students are generally positive with regard to the integration of the Øresund Region and are open to job and housing opportunities on the other side. This is particularly the case with Swedish students of whom 27 per cent consider working in Denmark after their graduation.

Although young people have a positive attitude, the number of student commuters remains low because of the remaining barriers.

The number of Swedish students in Copenhagen has fallen in recent years, partly owing to the fact that access to Danish study programmes has been restricted for Swedish students. As the conversion of the Swedish marking system to the Danish system has been changed, it has become more difficult for Swedish students to get into further education programmes in Denmark.

Transport time and ticket prices are also barriers for young people living on student grants as season tickets for the Øresund trains represent a considerable expense.

A large number of students also see transport time between universities as a disadvantage. Danish students, in particular, believe that cost and time are a problem. Consequently, many would prefer to live in the country where they study rather than commute across Øresund.

Nevertheless, young people are attracted by the experience of studying abroad and getting to know another culture. However, the neighbouring country’s status as “abroad” in a study context is also an impediment since Copenhagen, Roskilde, Lund and Malmö compete with perhaps more exciting countries like France and the US.
Future-proof infrastructure

The Øresund Bridge is an important component in a modern, efficient infrastructure in Northern Europe. With a highly educated population, a stable political situation and modern infrastructure, the Øresund Region is well placed to attract international companies looking for access to markets in Scandinavia, the Baltic countries and Eastern Europe. The bridge now functions as an efficient gateway to Copenhagen Airport for both Danish and Swedish passengers.

The construction of the Øresund Bridge was supported by the EU and despite the bridge’s current position as a predominantly regional traffic link, other projects are in the pipeline that will strengthen the Øresund Bridge’s international importance.

From a regional point of view, one important project is the construction of Citytunnelen in Malmö, a new 17 km rail link between Malmö Central Station and the Øresund Bridge. Citytunnelen will service Malmö city through a number of new stations that will result in a more flexible traffic flow for regional and long-distance trains through Malmö to Copenhagen, Trelleborg and Ystad. Citytunnelen will be commissioned at the end of 2010.

In Copenhagen, the city ring, an expansion of the current metro system, will significantly improve public transport in the capital. When the city ring is commissioned in 2018, five metro stations will serve the Øresund trains.

Towards the south, yet another and larger construction project is underway, the Fehmarnbelt link between Rødby in Denmark and Fehmarn in Germany. Expected to be commissioned in 2018 as a combined motorway and rail link, the Fehmarnbelt link will shorten travel time between Eastern Denmark and Germany by around one hour compared to the current ferry route.
THE BRIDGE IN A GLOBAL CONTEXT

Between Scandinavia and Europe

The opening of the Øresund Bridge in 2000 significantly improved the infrastructure between the Scandinavian peninsula and the continent. Indeed, its modern infrastructure is one of the Øresund Region's main assets. Today, Copenhagen and Malmö are connected by a modern motorway and railway and the motorway network around both cities is of a high standard compared to most other major cities. Copenhagen Airport in Kastrup has become more accessible from Sweden while Malmö Airport is also easier to reach from Denmark. The ports of Copenhagen and Malmö have been merged into one company, which is now the Nordic area’s largest import port for cars.

All four forms of transport have been well integrated into the Øresund Region which, compared to similar conurbations elsewhere in Europe, benefits from a low level of congestion. The Øresund Region's geographical location and its well developed infrastructure are ideal pre-requisites in terms of the distribution of goods to and from Scandinavia and the Baltic countries. Many large companies, therefore, have decided to locate their Nordic distribution centres in the region.

When the fixed link across Fehmarnbelt is completed around 2018 – 2020, it will connect 10 million people in Southern Scandinavia and Northern Germany in that this new traffic corridor will link the Øresund Region (including Copenhagen and Malmö) with Hamburg. This will create new opportunities for exploiting the synergies arising from bringing two main conurbations closer together. This, in particular, applies within the fields of research and education, logistics, bio and medical technology, the food industry and tourism.

As a result, Copenhagen/Malmö-Hamburg will have the logistical pre-requisites in place to compete with dynamic city centres in Northern Europe such as Liverpool/Manchester, Amsterdam/Rotterdam and Dortmund/Frankfurt.

Network platforms

Among the Øresund Region’s strengths are the network platforms for marketing, research and production across borders and institutional barriers. The Øresund Science Region is an umbrella organization for six different platforms which each reflects the region’s strengths: Medicon Valley Academy, Øresund IT, Øresund Food Network, Øresund Environment Academy, Øresund Design, and Øresund Logistics.

In 2008, Øresund Science Region was awarded the EU’s RegioStars Award for its unique model for the development of sustainable regional projects based on close co-operation between research institutions, private companies and the public sector.

The Øresund University is yet another network in which 12 universities and institutions of higher education in the region work together to strengthen research and education in the Øresund Region.
Measured by scientific output, Copenhagen – Malmö – Lund ranks 5th in Europe.

Measured by overall life quality, the Øresund Region also scores highly – 8th after cities in Southern Germany, Austria and Switzerland.


The Øresund Region's position among major European conurbations:

- Measured by population, the region ranks 23rd.
- Measured in economic terms, the region ranks 10th alongside cities like Milan, Hamburg, Berlin, Madrid, Rome and Stuttgart.
- Measured by the total number of flight passengers (e.g. tourists as well as transfer- and transit passengers), the Øresund Region ranks 8th in Europe alongside other cities such as Manchester-Liverpool, Milan, Madrid, Munich and Rome.

A new region is born?

![Map of Europe with marked regions and cities](image-url)
Demographic developments in Scania and in Zealand are the main reason why traffic on the Øresund Bridge is expected to rise further in the years ahead. The uneven distribution of labour between the two parts of the region is set to increase which will result in further commuting.

In Zealand, the number of people above the age of 64 will increase while the number of people active in the workforce between the ages of 25 and 64 will decline significantly over the next 20 years. As a result, the labour markets in Copenhagen and Zealand will require an additional 324,000 persons between the ages of 25 and 64 up until 2027 if the current balance between young and old is to be maintained.

In Scania, the outlook is more positive. Here the number of 25 to 64 year-olds will increase by 98,000 up to 2027 owing to relocation and immigration. Many of these will find work on the Danish side where salary levels are generally higher. Although growth expectations in the region are currently lower because of the economic crisis, the imbalance in population developments will again make commuting the driving force behind traffic increases across the Øresund Bridge, both on the motorway and on the railway. In 2015, commuting traffic, therefore, is expected to constitute approximately half of all passenger car traffic across the Øresund Bridge.

Population changes apportioned across age groups for the period 2007 – 2027 in Zealand

Source: Region Skåne and Danmarks Statistik, 2007
Population changes apportioned across age groups for the period 2007 – 2027 in Scania

Source: Region Skåne and Danmarks Statistik, 2007
Øresundsbro Konsortiet draws up an annual traffic forecast. Over the past few years, three scenarios for road traffic have been prepared: a growth scenario, a stagnation scenario and middle scenario.

The current forecast allows for the economic slowdown in 2008 which will continue to affect Denmark and Sweden for some time. In the longer term, the fundamental growth factors, e.g. developments in the labour and housing markets and in demographic trends, are not affected by the financial crisis. However, in the short term, Øresundsbro Konsortiet expects to see a downturn in integration-driven traffic as residents and companies adopt a cautious approach and avoid the risks involved in changing jobs, selling homes or investing in new markets.

The middle scenario, the most likely outcome, is based on road revenue and forms the basis of Øresundsbro Konsortiet's budget planning. The middle scenario is also often known or referred to as the traffic forecast. When no specific scenario is referred to, the middle scenario applies.

The middle scenario is based on expectations for positive regional development, with the economic differences between Malmö and Copenhagen in terms of salaries and housing costs assumed to remain largely unchanged.

The middle scenario envisages that daily traffic across the bridge (currently 19,400 vehicles) will increase to 32,200 vehicles per day by 2018. By 2028, this figure is expected to increase to 42,500 cars a day.

Annual traffic growth is expected to fall from approximately 5 per cent in 2008 to 2 per cent in 2028. Subsequently, annual traffic growth of 2 per cent is expected up to 2043 when commuter traffic reaches its capacity limit. Growth, however, will continue in the other traffic segments. The Øresund Bridge expects to carry around 53,000 commuters between Malmö and Denmark in 2028 – or roughly more than twice today’s figures.

The growth scenario is the most positive of the bridge’s three scenarios. This scenario primarily differs from the middle scenario by assuming faster integration of the Øresund Region. Over an extended period, positive economic trends in Europe will further contribute to the realization of this scenario.

Under the growth scenario, traffic on the bridge will rise from 19,400 vehicles in 2008 to 37,600 vehicles per day in 2018 and 55,800 vehicles per day in 2028. In 2034, 60,000 cars will cross the bridge per day which is the capacity limit under this model. In practice, however, traffic can exceed this limit as long as growth occurs outside peak periods.

The stagnation scenario, the worst case scenario, assumes development in regional integration to fall within the next few years. A prolonged economic crisis or public restrictions on car traffic could also contribute to this scenario.

Under the stagnation scenario, 24,500 cars per day will cross the bridge in 2018 and 29,400 cars in 2028. Although the stagnation scenario represents the most pessimistic outcome, traffic under this scenario will still exceed the forecast from before the opening of the bridge. At that time, the bridge was expected to carry a maximum of 22,250 vehicles per day in 2020. Under the stagnation scenario, annual traffic growth will fall from 5 per cent in 2008 to 1.3 per cent around 2028. Over
a relatively short span of years, development in regional integration will diminish and traffic growth on the Øresund Bridge will correspond to growth in traffic on similar sections in Northern Europe. In general, traffic growth on cross border roads and ferry routes has, over the past 20 years, exceeded that of national roads.

The middle scenario is most realistic

Øresundsbros Konsortiet expects that the assumptions for meeting the middle scenario are most realistic in the longer term. The growth and stagnation scenarios show the likely ranges for developments. There may be, for instance, years when growth exceeds the growth scenario but, in the longer term, developments are most likely to be between the stagnation and growth scenarios.

Traffic scenarios – daily traffic across the Øresund Bridge

<table>
<thead>
<tr>
<th>Year</th>
<th>Stagnation scenario</th>
<th>Middle scenario</th>
<th>Growth scenario</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>0</td>
<td>20,000</td>
<td>60,000</td>
</tr>
<tr>
<td>2010</td>
<td>10,000</td>
<td>40,000</td>
<td>80,000</td>
</tr>
<tr>
<td>2015</td>
<td>20,000</td>
<td>60,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2020</td>
<td>30,000</td>
<td>80,000</td>
<td>120,000</td>
</tr>
<tr>
<td>2025</td>
<td>50,000</td>
<td>100,000</td>
<td>140,000</td>
</tr>
</tbody>
</table>

Number of vehicles

- Actual traffic
- Growth scenario
- Middle scenario
- Stagnation scenario
The Øresund Bridge motorway has a capacity of approximately 4,000 cars per hour in each direction. The morning rush hour from Sweden to Denmark presents the greatest demands on capacity in the tunnel, limiting traffic on the link. Currently, approximately 2,000 vehicles pass through the toll station at Lernacken between 8 and 9 am towards Denmark. In 2018, this traffic is expected to reach the capacity limit of 4,000 cars.

However, before critical congestion occurs on the link itself, capacity problems will arise on the adjoining road network. In particular, there will be a need to extend the Amager motorway from two to three lanes in both directions. A project involving the extension of the section between Tårnby and Copenhagen is being planned by A/S Øresund. In addition, there will also be a need to extend the motorway between Tårnby and Copenhagen Airport.
Free rail capacity

Rail traffic across the Øresund Bridge is divided between high frequency passenger traffic and international freight trains running at regular intervals during the day, long-distance trains and goods trains.

The Øresund Bridge rail line still has substantial free capacity. The number of Øresund trains can be trebled while the number of freight trains and long-distance trains can be increased by 80 and 120 per cent respectively without causing problems. This corresponds to a passenger capacity of 326,000 rail travellers per day against the current passenger capacity of 92,200.

As is the case with car traffic, this, however, will require improvements to the adjoining infrastructure, i.e. the rail network in and around Copenhagen and Malmö. Otherwise it will be difficult to run this number of trains across the Øresund Bridge.

According to Øresundsbro Konsortiet’s most recent commuting forecast, by 2025, 25,000 people will commute by train across Øresund every day, i.e. more than twice today’s numbers. This will require more trains, such as double decked trains, or restrictions on the number of freight trains heading for Denmark in the morning rush hour.

During the first half of 2009, 212 trains will run on the link every day. Of these, at least 128 will be regional trains, 37 will be long-distance trains, 34 freight trains and 13 goods trains.
Øresundsbro Konsortiet is a Danish-Swedish company formed on the basis of the government agreement of March 23, 1991, between Denmark and Sweden. The agreement sets out the framework for Øresundsbro Konsortiet’s activities, including the fact that Øresundsbro Konsortiet owns and operates the Øresund Bridge.

Ownership of Øresundsbro Konsortiet and the partnership between the two parent companies is governed by an agreement approved by both governments. The two owners are jointly and severally responsible for Øresundsbro Konsortiet’s liabilities.

Øresundsbro Konsortiet’s main task is to offer fast, safe and reliable passage across Øresund and repay the debts from construction of the link, including the landworks. Øresundsbro Konsortiet administers the railway infrastructure while the rail operators are responsible for rail traffic.

Øresundsbro Konsortiet is responsible for a wide range of daily operational and maintenance tasks, including financial administration, marketing, sales, customer and payment services, road and rail operations, maintenance, development, and administration.
Øresundsbro Konsortiet's vision is to establish the Øresund Region as a powerhouse which will make the region more attractive to visit, live and work in.

Øresundsbro Konsortiet's business concept is to build more bridges – financially, culturally and spiritually.

The bridge should be the preferred way of travelling across Øresund.

Øresundsbro Konsortiet's values are “bridge building” and “helpfulness”.

Vision and business concept
The construction of the Øresund link was financed by loans raised in national and international capital markets based on the joint and several state guarantees from the two countries. Revenues must cover ongoing financing expenses and ensure the long-term repayment of the loans.

Charges for using the fixed link across Øresund are determined on the basis of the following criteria:

1. The Øresund Bridge must be self-financing, which means that the charges paid by users to travel across the link must cover all construction and operating expenses, including maintenance, reinvestments and new investments.

2. Øresundsbro Konsortiet determines the toll charges for crossing the bridge with the long-term objective of achieving financial stability. VAT is payable to the two countries.

3. Increased traffic leading to rising road revenue is an important element in achieving the long-term financial targets. Consequently, the charging structure is designed to promote regional integration and, therefore, more traffic.

4. Both the railway and ferries are necessary for increasing regional integration with a resultant increase in traffic. Charges for the road link are, therefore, structured in order not to jeopardize the other services and in accordance with the terms of competition legislation.

5. The national railway agencies in the two countries pay a fixed index-regulated amount for the right to use the link’s railway. This is set at DKK 300 million in 1991 prices, corresponding to approximately DKK 441 million (EUR 59 million) in 2008 – or approximately 30 per cent of Øresundsbro Konsortiet’s revenue. The national railway agencies sell capacity on to rail operators.

### Prices for the Øresund Bridge 2009

<table>
<thead>
<tr>
<th>Prices, incl. VAT</th>
<th>Standard price</th>
<th>BroPas 1)</th>
<th>Weekend price with BroPas 1)</th>
<th>10-trip card</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
</tr>
<tr>
<td>Passenger cars up to 6 metres</td>
<td>38</td>
<td>19</td>
<td>14</td>
<td>27.4</td>
</tr>
<tr>
<td>– with trailer/van/caravan</td>
<td>75</td>
<td>38</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td>21</td>
<td>8</td>
<td>6</td>
<td>15.2</td>
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</table>

<table>
<thead>
<tr>
<th>Prices, excl. VAT</th>
<th>EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorries 9 – 20 metres</td>
<td>87.2</td>
</tr>
<tr>
<td>Coaches over 9 metres</td>
<td>125.6</td>
</tr>
</tbody>
</table>

*Note: All prices are per passage

1) Annual charge for the BroPas is EUR 32

For further information and prices, see www.oresundsbron.com

All rates and fees in EUR are approximate and will be converted from DKK to EUR at the card issuer’s current rate of exchange.
The Øresund Bridge’s pricing strategy aims at securing financial stability and ensuring that regular customers benefit from the lowest prices. Customers can either take out a contract with Øresundsbro Konsortiet or pay by cash or credit card at the toll station. Customers with contracts qualify for reduced charges and fast passage through the toll station’s automatic lanes by using a BroBizz (an electronic transponder).

**BroPas**
To simplify procedures for private customers, the Øresund Bridge launched the BroPas product in 2005. By paying an annual fee of EUR 32, BroPas customers can cross the bridge at a fixed low price every time, i.e. EUR 19. During weekends and during the period January 1 to May 10, the charges are even lower: EUR 14. BroPas is the most attractive product for private customers who cross the bridge at least once a year.

**Commuters**
A commuter contract will always be the most advantageous for customers who commute across the bridge.

Consisting of an annual fee combined with payment per trip, the commuter contract allows commuters who cross the bridge 40 times a month to pay only EUR 403 per month, i.e. EUR 10 on average per passage. The exact price depends on the number of trips within a calendar month. The price follows a charging scale where, for the first 16 trips per month, the commuter pays EUR 19 per trip. The charge then falls to EUR 4 per trip up to a total of 50 trip, after which the charge reverts to EUR 19 per trip until the “clock” is reset and a new month begins.

Commuters resident in Sweden but working in Denmark and travelling to work by car or motorcycle will, in addition to the standard transport allowance governed by personal taxation regulations, obtain a special Øresund allowance of EUR 6.71 per passage.

**ØresundBusiness**
Business customers who cross the bridge by passenger car, van, coach or lorry can benefit from a special business product. A certain traffic volume is agreed in advance between the customer and the Øresund Bridge, after which the customer can cross the bridge at a reduced price for the full year. At year end, the final price is calculated on the basis of the actual number of trips undertaken for each vehicle category. The customer receives a final invoice for the full calendar year.

**Cash and 10-trip cards**
Customers who do not wish to take out a contract can either buy 10-trip cards at a discount of approximately 30 per cent on the standard price or a single ticket with no discount at the toll station.

The Øresund Bridge price list is available to the public and is identical for all customers. As a result, all customers are treated equally and price differentiation is based solely on customers’ actual use. Read more about prices and products at www.oresundsbron.com.
Debts of EUR 4 billion

When the Øresund Bridge was completed in 2000, Øresundsbro Konsortiet had net debts of EUR 2.6 billion and the two parent companies, A/S Øresund and SVEDAB AB, had debts totalling EUR 1.4 billion. By the end of 2008, Øresundsbro Konsortiet’s net debt stood at EUR 2.5 billion.

By and large, revenue from the road traffic and the railway is the only source of revenue out of which Øresundsbro Konsortiet and the two parent companies’ debts will be repaid. The most recent forecast from 2009 expects construction costs to be repaid after approximately 34 years with the landworks repaid some years later. The first dividend payments from Øresundsbro Konsortiet to the parent companies are expected to take place approximately 18 years after the bridge’s opening in July 2000.

The three factors with the greatest impact on the repayment date are traffic development, toll charges and financing costs (the interest rate level). Øresundsbro Konsortiet’s revenue from rail traffic is fixed and index-regulated every year while fluctuations in operating expenses are minor.

2008 was characterized by declining economic growth in Denmark and Sweden as a result of the financial crisis. This led to particularly weak growth in traffic across the Øresund Bridge during the autumn. At the same time, interest expenses rose.

In 2007, traffic increased so strongly that it exceeded the forecast from 2000 with commuter traffic, in particular, exceeding all expectations. As a result of lower charges for commuters, however, the Øresund Bridge revenues did not rise at the same rate. Revenue will exceed the original revenue forecast from 2000 in 2035 at the earliest.

### Total construction costs for the Øresund Bridge and the landworks in 2000 prices

<table>
<thead>
<tr>
<th></th>
<th>EUR billion</th>
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<tbody>
<tr>
<td>The Øresund Bridge (Øresundsbro Konsortiet)</td>
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<tr>
<td>Danish landworks (A/S Øresund)</td>
<td>1.1</td>
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<tr>
<td>Swedish landworks (SVEDAB AB)</td>
<td>0.3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>4.0</strong></td>
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*Note: Construction costs are shown as net debt in 2000 prices*

### Repayment time for Øresundsbro Konsortiet

<table>
<thead>
<tr>
<th>Real interest rate</th>
<th>2.5 %</th>
<th>3.0 %</th>
<th>3.5 %</th>
<th>4.0 %</th>
<th>4.5 %</th>
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<tr>
<td>Growth scenario</td>
<td>2029</td>
<td>2029</td>
<td>2029</td>
<td>2029</td>
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<tr>
<td>Middle scenario</td>
<td>2033</td>
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<tr>
<td>Stagnation scenario</td>
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<td>2043</td>
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In the past four years, traffic across the Øresund Bridge has increased by between 14 and 17 per cent. In 2008, growth slowed to 5.1 per cent and, according to the Øresund Bridge's traffic forecast (the middle scenario), annual growth of 2 per cent is expected in 2009 and 2010. The reason for the rapid downturn is the financial crisis and the uncertainty that this has caused.

In the longer term, the basic growth factors – e.g. developments in the labour and housing markets and population trends – are not affected by the crisis. In the short term, however, the Øresund Bridge expects a downturn in integration-driven traffic as people and businesses adopt a cautious approach and avoid unnecessary risks involved in jobs, selling homes or focusing on new markets.
The Øresund Bridge is subject to the environmental legislation of the two countries. When these differ, the more stringent regulations apply. A key requirement is that Øresundsbro Konsortiet must have a full overview of the bridge’s environmental impact and publish annual environmental reports. Moreover, specific requirements relating to noise monitoring, waste water from the bridge, discharge of drainage water from the tunnel and the calculation of traffic emissions of greenhouse gases are in force.

With the opening of the Øresund Bridge and the discontinuation of ferry services in the southern part of Øresund, the emission of greenhouse gases from the ferries across Øresund was significantly reduced. Greenhouse gases from rail and road traffic have increased since the opening of the bridge in 2000, primarily as a result of an increase in car traffic between 2004 and 2007 when commuting increased significantly. Emission levels, however, remain well below what would have been the case had the ferry services still been in existence.

As a result of increased use of catalytic converters and particle filters, emissions of hydrocarbons, carbon monoxide and nitrogen oxide have not risen in line with traffic. In 2004, diesel powered trains ceased to operate on the Øresund Bridge, which reduced emissions of nitrogen oxide until 2007 when the increase in car traffic caused this to rise once more.

**Rare flora and fauna at Peberholm**

On the island of Peberholm, flora and fauna are allowed to develop without human interference and, so far, over 500 different types of plants have been identified on the island. The island also has an exciting bird life, including endangered species such as avocets, little tern and arctic tern which have bred here since 2002. In 2008, breeding sandwich terns and little ringed plovers were also found here. Moreover, barnacle goose have started to breed on the island. In 2008, a study of the protected and endangered green toad revealed that Peberholm now

<table>
<thead>
<tr>
<th>Emissions (tons)</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>90</td>
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<td>131</td>
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<td>120</td>
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<tr>
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<td>18,700</td>
<td>20,000</td>
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has one of Denmark's largest populations comprising some 2,500 individuals. The island is also home to rare spiders and insects.

In recognition of its responsibility for the global environment and, not least, the climate, the Øresund Bridge drew up an environmental policy in 2008, which can be summarized as follows:

- We must continually reduce the environmental impact from daily operations and the administration of the link.
- We must consider the environment whenever technical systems are installed and maintained.
- We must follow environmental legislation, protect our natural values and pay attention to the surrounding environment.
- We must contribute towards reducing environmental impact from traffic on the link.
- We must be open and informative about our environmental considerations.
Safety

Focus on safety

Much effort has been invested into making the trip across the Øresund as safe as possible. A large number of safety measures, including surveillance cameras, matrix signs, barriers and speed limits in the tunnel as well as a ban on overtaking by lorries across the entire link and a 24 hour manned traffic centre, aim at preventing accidents to the greatest possible extent. Daily operations also place high priority on safety and contingency, based on a preventative approach. In addition, there are also clear targets aimed at minimizing the number of safety-related incidents.

Accessibility on the Øresund Bridge is high. The bridge has been closed to traffic for a few hours a year because of incidents such as traffic accidents, high winds or ice falling on the carriageway from cables. Planned safety exercises also involve closures. In 2008, the Øresund Bridge motorway was closed for a total of 13 hours and 25 minutes primarily due to accidents and a contingency exercise.

The joint Danish/Swedish contingency plan and other contingency aspects, including training, exercises and evaluation of accidents on the bridge, are continually updated and handled in a comprehensive partnership between the Danish and Swedish contingency and emergency services. All this ensures maximum intervention when such accidents occur – as they inevitably will.

For contingency planning purposes, accidents are divided into categories, where category 1 involves intervention from either the Swedish or the Danish side depending on the location of the accident. With regard to accidents at categories 2 and 3 intervention is from both the Danish and the Swedish sides. The agreement for double intervention proved its worth in November 2007 when goods on a lorry stationary on the Swedish side caught fire. The goods were offloaded on the carriageway, but a strong westerly wind exacerbated the fire and hampered intervention from the Swedish side. As a result, Tårnby fire service arrived from the opposite side and successfully extinguished the fire.

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<td>Accidents</td>
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<td>Involving injury</td>
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</table>
Risks cannot be completely eliminated and a number of incidents of a more or less serious nature have occurred since July 2000. Fortunately, none of these has involved loss of life although five accidents resulted in serious personal injury.

Some of the accidents were caused by careless driving although excessive speed has also been responsible for serious accidents.
Before its inauguration in 2000, a fixed link across Øresund had been on the agenda for more than a century in both Denmark and Sweden. In the 1930s and 1950s, specific proposals for a link across the island of Saltholm were tabled, but not until 1973 did the Danish and Swedish governments sign a preparatory agreement for a fixed link. This, however, was rejected in 1978 when Denmark decided against relocating the airport at Kastrup to the isle of Saltholm. In the 1980s, a number of solutions were discussed, but it was not until 1991 that the two governments finally signed an agreement for a fixed link between Copenhagen and Malmö.

In the late 1980s and early 1990s, a clear need for revitalizing growth in Southern Scania and Copenhagen emerged. At the time, Malmö was experiencing high unemployment following the closure of several large industrial companies while in Denmark, a large proportion of the country’s economic development was centred in Jutland. At the same time, the construction industry in Copenhagen was stagnating.

Consequently, the Øresund Bridge became a crucial part of the revitalization of the area. Other projects followed when the economic trends recovered in the mid 1990s. On the Danish side, Copenhagen Airport was significantly expanded and the construction of a new metro providing Copenhagen with flexible and fast transport was begun. At the same time, an entirely new urban district, Ørestad, began to take shape on Amager.

In Malmö, large areas of the old port were renovated as new housing and commercial areas replaced the former shipyard. Today, further expansion is taking place around Hyllie in the southern part of Malmö, including a new multi-functional arena, Malmö Arena. Plans are progressing for new major commercial and housing areas and a station for Citytunnelen, the new railway that will shorten travel time between Malmö and Copenhagen.

![Diagram of the Øresund Bridge](image-url)
The fixed link

1. The artificial peninsula 430 m
2. Tunnel 4,050 m
3. Peberholm 4,055 m
4. Western approach bridge 3,014 m
5. High bridge 1,092 m
6. Eastern approach bridge 3,739 m

The artificial peninsula 430 m
Cable distance 30.5 m
The Øresund Bridge between Lernacken, south of Malmö, and Kastrup on the isle of Amager, south of Copenhagen, consists of a cable-stayed bridge and a tunnel linked by an artificial island. Traffic on the 16 km link runs across a four-lane motorway and a double track railway.

The reason why part of the Øresund Bridge link is a tunnel is its proximity to Copenhagen Airport: a bridge too close to the airport might have interfered with air traffic.

The world’s longest cable-stayed bridge for both road and rail traffic, the bridge has a free span across the navigation channel of 1,092 metres between the pylons that carry the heavy steel cables.

The tunnel is constructed as an immersed tunnel with two rail tubes, two motorway tubes and one service and escape tube and totals four km in length. The tunnel leads the motorway and the railway under the Drogden Channel, Øresund’s busiest navigation channel. At its deepest point, the tunnel is 20 metres below the surface of the sea.

The artificial island that links the tunnel and the bridge is known as Peberholm owing to its proximity to the isle of Saltholm. Peberholm has been built from materials from the excavation of the tunnel trench for the immersed tunnel.

Read more at the Øresund Bridge’s website www.oresundsbron.com or download the publication “Crossing the Øresund” here www.oresundsbron.com/library
This report has been prepared by the Øresundsbro Konsortiet's Analysis Department. Questions about the publication can be addressed to:

Britt Andresen, Head of Analysis Department
ban@oresundsbron.com

Michael Bisgaard, Analyst
mbi@oresundsbron.com

The Analysis Department can be contacted on +45 33 41 60 00 or at analyse@oresundsbron.com

Reports and analyses

Øresundsbro Konsortiet has prepared a number of reports and analyses about the Øresund Region, which can be found at www.oresundsbron.com under "publications". You are welcome to download them and quote from them providing the source is credited.

However, please note that most of the reports and analyses are available in Danish and Swedish, only.