The European Corridor
– a sustainable development project for the future of Sweden

The European Corridor region consists of all existing infrastructure in South and Central Sweden as a whole, with the addition of the new high speed railways, the European Line and the Götländ Line.
There are numerous examples of how investments in better communications, including roads, railways, ports and IT, have provided people and businesses with better accessibility. To jobs and education, to larger markets and new business opportunities.

This is how we are creating an important prerequisite for increased growth.

We are not able to influence the geographic distance. The 500 kilometres between, say, Stockholm and Gothenburg will remain 500 kilometres, whatever we do.

However, distance should be measured in time, not in kilometres. In terms of time the regions will become smaller with a modern transport system, and thereby more accessible. And as the distances shrink, cities and countries on the European continent will get closer.

Investment in a modern transport system is also a key to a lasting and sustainable society. An unchecked increase in road transport – and primarily heavy traffic – risks exacerbating the greenhouse effect and increasing the pollution of air, earth and water.

**THE EUROPEAN CORRIDOR** is the region that extends from Mälardalen and Stockholm through Jönköping and Gothenburg to Copenhagen and Hamburg.

This is where two new railways – the European Line and the Götaland Line – are going to be the arteries in a transport system that will link together Sweden, the Nordic region and continental Europe. A transport system that will shrink distances and thereby provide access to new opportunities to work and study, new markets and new preconditions for development.

At the same time the expansion entails a drastic reduction in the environmental impact of traffic – we will obtain a transport system that is also sustainable in the long-term from an environmental perspective.

High speed trains (which travel at speeds of up to 350 km/h) are of central significance for the new transport system. However, in addition the existing infrastructure must be renewed and strengthened.

In Southern Sweden it is the European Line, the Götaland Line and the Southern Main Line that will form the corridor’s backbone, facilitate efficient traffic distribution and deliver drastically reduced journey times.

Fundamentally, this concerns the competitiveness of Sweden and the rest of the Nordic countries – in a world with an increasingly internationalised economy.

The European Corridor means that towns, municipalities and regions throughout the elongated corridor will come closer to each other – as a result of the considerable time savings delivered by high speed trains and a properly integrated modern transport system.

In several places the Swedish railway system is already considerably undersized. This diminishes the opportunities for both people and businesses – and in practice moves heavy traffic from rail to road transport.

We feel that what is required now are political decisions, based on an overall perspective. A collected will to create a modern transport system for Sweden.

In the process we – in Sweden 33 municipalities, regions and counties, and in Denmark and Germany, regions and towns – have both visions and knowledge to offer.

Welcome to the European Corridor!

Göran Johansson
Chairman of European Corridor

Gunnar Sibbmark
MD of the European Corridor
A European high speed network is emerging – is Sweden going to be part of it?

New lines for high speed trains are being constructed throughout Europe that link together regions and countries and bring people closer to each other. A high speed network for speeds of 300-350 km/h is emerging, on newly built or refurbished tracks.

This is delivering substantial reductions in journey times and stronger regional integration. A bonus is improved conditions for transporting freight by train. Within the EU an ambitious programme has been adopted to expand the Trans-European Transport Network (TEN-T).

Sweden is highly dependent on close contact with the large European markets. Our geographic position, involving long transport times, argues unequivocally in favour of us being part of the European network.

However, construction of the European high speed network is already fully underway, and there are already more than 3000 kilometres of high speed track on the continent.

When is Sweden going to proceed from ambitions and high-flown words to decisions and action?

**Fehmarn Belt**

In our immediate vicinity a bridge is being prepared over Fehmarn Belt, in other words, a fixed connection between Denmark and Germany. This is going to be of crucial significance for Sweden too.

The bridge represents a fixed connection between the Nordic region and the continent. There are now no obstacles to effective cross-border international passenger and goods traffic.

Planning for the bridge is already at an advanced stage – the aim is for it to be open as early as 2016.

Several countries in Europe have already invested in high speed trains, and have achieved extremely good results, France, Germany and Spain for example.

Large sums are being invested in these and several other countries in new or upgraded railways.

**France**

France has had an extensive high speed train service since 1981, now at speeds of just over 300 km/h. The French TGV network is being continually expanded and there is cross-border traffic to Belgium, the Netherlands, Great Britain (via the channel tunnel), Germany and Switzerland.

Next on the French expansion programme is a 520 km long track eastwards from Paris. From 2007 this will bring a number of important cities closer to the capital region. Among other towns Strasbourg will be connected to the TGV network. By 2010 these TGV trains will also cross the border to Germany, stopping in Frankfurt am Main and thereby contributing yet another link to the European high speed network. The European high speed trains can also run on existing railways at lower speed, thus achieving complete compatibility between different types of trains and tracks.

**Spain**

Spain is similar to Sweden in a number of ways: There is a relatively low population base and urban areas are spread out. The large distances and long journey times by train meant that domestic flights had long enjoyed an advantage. The arrival of high speed trains consequently produced a springboard effect, raising the profile of both the railway and Spain.

Services on the 470 km long stretch between Madrid – Seville commenced as long ago as 1992. The research report “The European Corridor – A broadband for physical transportation”, published by the KTH Railway Group in 2003, reveals that travel on the route has been continuously increasing. After all this time the increase in demand has still not declined.

Thanks to the rapid connections the railway has increased its share of the market. The aim of the major Spanish investments in high speed railways is to achieve positive regional development, to increase the railway's competitive strength in relation to road and air, and in the long-term to become closer to Europe.

The extension of the railway between Madrid and Barcelona is in progress. A 600 km long stretch is currently under construction for high speed trains to travel at 350 km/h. The conditions for this forthcoming high speed line are very similar to those that prevail for the European Line between Stockholm and Copenhagen.

There are both strong terminal markets and a number of larger towns all along the route that create a substantial market for regional travel. The distance between the two lines' terminal points is almost the same.

In common with Sweden, Spain is located on the fringes of Europe and it has a similar handicap in the form of long distances to important destinations in Central Europe. There are also major similarities in the population base and traffic structure, with large distances between the population centres.

In the long-term the Spanish network will be linked to the French one and thereby to the rest of the high speed network in Europe. The European Corridor could be connected to Hamburg in the same way.
Fast communications are a means – not an end in themselves.

Speed creates proximity. Fast trains offer us the possibility of shaping the future society we are all going to live and work in. A society that corresponds to people’s requirements for work, housing, quality of life and mobility within Sweden and in the world around us. A society that generates the conditions for sustainable and lasting growth.

Sweden does not lack positive, up-to-date experiences of what better communications can deliver:

The Mälar Line and the Svealand Line have expanded employment and educational prospects in the entire Stockholm-Mälar region. Traffic increased on the Svealand Line by 700% compared with the situation on the old line.

In Västra Götaland the three counties that have amalgamated have become more closely linked to each other through an expansion in regional train services.

In Skåne, travelling is steadily increasing with the Pågatågen and Oresund trains. Train services over the Oresund Channel are bringing two regions (Skåne and Själland) and two countries closer to each other.

In Småland, traffic on the Krösatågen train is increasing. In Östergötland, Norrköping and Linköping are cooperating to deliver improved communications and working in collaboration as the fourth metropolitan area in Sweden.

Better possibilities for commuting produce better conditions for development and growth. Studies by the International Business School show that it is towns and villages that are situated within an hour’s commuting distance from high speed railways that benefit the most. This insight provides a basis for the idea of the European Corridor as a region.

Size and density are significant in creating the best possible conditions for growth and regional development. Approximately 65% of Sweden’s population live in the European Corridor through Sweden – precisely the area that can be reached within an hour from the Göta Land Line and the European Line – and approximately 65% of Sweden’s GNP is produced there.

**An expansion of the European Corridor entails an overall conception**

New railways are being surveyed, planned and built in Sweden. Naturally this is positive. E.g. extensions within the European Corridor are being surveyed and planned in a number of different sub-sections – according to the investment plan ratified by the Government and Parliament for 2004-2015. Examples of some important stages are – Stockholm – Linköping (the Eastern Link) – Gothenburg – Landvetter – Borås (part of the Göta Land Line)

Municipalities, regions and the European Corridor AB, in conjunction with the National Rail Administration and the Ministry of Sustainable Development have started to work on coordinated social planning and traffic planning for the Borås – Jönköping – Linköping stretch of the Göta Land Line. A study of ideas and proposals was submitted to the National Rail Administration in 2007.

However, to achieve the major benefits a coherent railway system is required – a sustainable development perspective and an overall conception.

For it is namely the case that railways have a key role to play in future sustainable development.

In the European Corridor we want to systematically bolster the positive development by building two new tracks for high speed trains and by reinforcing and upgrading the Southern Main Line.

For the municipalities and regions in the European Corridor an overall conception would be of crucial significance for growth and employment. The municipalities and regions would become even more strongly integrated, and trade and industry would have a broader composition – which would create preconditions for an increased number of employment opportunities.
The European Corridor is promoting the implementation of pilot studies for the European Line equivalent to those that were carried out for the Göta Land Line, i.e. for the section southwards from Stockholm via Jönköping down to Helsingborg. Other sections might be relevant as well and must be studied before a final location for the European Line can be determined. We are also working for realising the tunnel between Helsingborg and Helsingör (the HH tunnel). This is needed both for Sweden’s international transports and for regional traffic in the Öresund region and, depending on the extent of the European Line, might also be a part of it.

This work makes it possible to plan and build for the overall project, with a common speed standard for the different sub-sections. The European Corridor from Stockholm and Mälardalen via Helsingör and Copenhagen to Hamburg can then become part of a European high speed network.

Substantially reduced journey times

The extended European Corridor will make it possible to complete longer journeys and freight movements in a considerably shorter time.

A large number of regions and towns will obtain substantially reduced journey times with the Göta Land Line and the European Line.

The illustration below is taken from *The European Corridor – A broadband for physical transports*, the KTH Railways Group 2003.

<table>
<thead>
<tr>
<th>Route</th>
<th>Today</th>
<th>Med Europa-/Götalandsbanan</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Köpenhamn-Stockholm</td>
<td>5:00</td>
<td>2:35</td>
<td>-48%</td>
</tr>
<tr>
<td>Hamburg-Stockholm</td>
<td>9:30</td>
<td>4:15</td>
<td>-56%</td>
</tr>
<tr>
<td>Hamburg-Köpenhamn</td>
<td>4:31</td>
<td>1:40</td>
<td>-63%</td>
</tr>
<tr>
<td>Jönköping-Malmö</td>
<td>2:28</td>
<td>1:20</td>
<td>-46%</td>
</tr>
<tr>
<td>Göteborg-Jönköping</td>
<td>1:54</td>
<td>0:39</td>
<td>-67%</td>
</tr>
<tr>
<td>Linköping-Göteborg</td>
<td>3:54</td>
<td>1:19</td>
<td>-60%</td>
</tr>
<tr>
<td>Köpenhamn-Göteborg</td>
<td>3:52</td>
<td>1:55</td>
<td>-52%</td>
</tr>
<tr>
<td>Helsingborg-Göteborg</td>
<td>4:40</td>
<td>2:11</td>
<td>-53%</td>
</tr>
<tr>
<td>Hamburg-Köpenhamn</td>
<td>9:30</td>
<td>4:15</td>
<td>-56%</td>
</tr>
<tr>
<td>Jönköping-Malmö</td>
<td>4:31</td>
<td>1:40</td>
<td>-63%</td>
</tr>
<tr>
<td>Göteborg-Jönköping</td>
<td>2:28</td>
<td>1:20</td>
<td>-46%</td>
</tr>
<tr>
<td>Linköping-Göteborg</td>
<td>1:54</td>
<td>0:39</td>
<td>-67%</td>
</tr>
<tr>
<td>Köpenhamn-Göteborg</td>
<td>3:54</td>
<td>1:19</td>
<td>-60%</td>
</tr>
<tr>
<td>Helsingborg-Göteborg</td>
<td>3:52</td>
<td>1:55</td>
<td>-52%</td>
</tr>
<tr>
<td>Helsingborg-Stockholm</td>
<td>4:40</td>
<td>2:11</td>
<td>-53%</td>
</tr>
</tbody>
</table>
The transport sector is responsible for approx. 30% of Swedish emissions of greenhouse gases. Furthermore, these emissions have gradually increased and in 2004 amounted to approx. 20.1 million tonnes – which is approx. 9% more than in 1990. This increase consists almost exclusively of increased emissions from heavy lorries.

This development is unsustainable. Here too an overall conception is required to break the trend and ensure a positive development.

An expansion of the European Corridor represents a significant step towards a transport system that is sustainable in the long-term. Capacity will increase, which will mean that Swedish railways will be able to deal with both an increase in passengers and freight. There are substantial environmental gains: Less eutrophication and acidification of land and water and lower emissions of carbon dioxide.

Issues pertaining to far-reaching, long-term climate goals and measures for adapting to climate changes are highly topical. The parliament has set the bar high for reducing emissions of carbon dioxide from the transport sector.

This places demands on structural changes. Integrated investments are now needed in new transport systems with long-term environmental considerations.

The European Corridor’s environmental effects have been thoroughly analyzed. We know that new high speed lines are highly important in terms of enabling the transport sector to achieve the high level of environmental targets that have been set.

More than 80% of the Swedish transport sector’s emissions of greenhouse gases are derived from road traffic.

Road traffic causes more fatalities and personal injuries than other types of transport. Heavy vehicles are involved in about a third of all fatal accidents on our public roads.

If the current development continues and nothing is done, transportation by heavy lorries will increase substantially. A forecast carried out by the Swedish Institute for Transport and Communications Analysis, SIKA, reveals that both passenger and freight transport will increase substantially between 2001 and 2020. Passenger journeys are estimated to increase by 28% by 2020, measured in passenger kilometres.

The only alternative which has a significant impact is to offer a more energy-efficient infrastructure, expanded in order to cope with the high level of requirements placed on efficiency and capacity.

Both the environment and traffic safety are arguments in favour of the railway meeting a considerably larger proportion of transport requirements. Not least in terms of freight.
The investments that have been made in improving communications in various regions – to enhance accessibility and integration of local job markets – have been successful. They have led to an increase in train travel, particularly within and between adjacent regions.

The railway can reduce commuting times through a combination of increased capacity and increased average speed, thus making it possible to commute to work and studies over increasingly long distances.

Both passenger and freight movements are currently on the increase. This is leading to more traffic, more regional journeys and more freight moving by rail, which is positive from an environmental and traffic safety perspective.

However, particularly in the metropolitan areas, but also in other areas, this development has led to an increasingly troublesome lack of track capacity at peak hours. Different types of train services with different speeds have to share existing tracks, e.g. the X2000 and InterCity trains, regional trains, commuter trains, goods trains and international services.

This is already the grim reality. For example, for the 2006 summer timetable SJ (the Swedish State Railways) was forced to increase journey times for regional train services on the Mälar Line due to a shortage of track capacity. New tracks and increased capacity on existing tracks is therefore a must. Otherwise the attraction and competitive edge of trains as a means of transport will be impaired.

High speed trains increase the capacity of goods traffic

Quality, assured delivery and level of service are crucial factors when deciding on mode of transport.

An investment in high speed trains within the European Corridor will free up capacity on the existing main lines for goods traffic and regional trains, thus enabling the economy’s need for efficient transport of goods to be dealt with in a considerably better fashion than it is today.

Moreover, a separate railway network for fast trains creates the preconditions required to meet transport policy objectives for a satisfactory environment, safety, accessibility, mobility and positive regional development. It is satisfying the needs of individuals and the economy for increased mobility.

The Southern Main Line is one of Sweden’s most overburdened railways. Here the lack of capacity is becoming an increasingly serious problem. Distributing the fast passenger services over more tracks will create room for more regional and freight services – and a sustainable long-term solution to the capacity problems on the tracks.

"Both passenger- and freight transport by rail increased during 2005.”

Press information from SIKA, the Swedish Institute for Transport and Communications Analysis 08-05-2006
The study undertaken by the KTH Railway group makes an economic calculation that shows that the European Line/Götaland Line produce almost three times as much benefit to the national economy as the investment in tracks costs.

Fully completed, the European Line/the Götaland Line will produce substantial increases in traffic. The project is commercially viable and has a large passenger base. This, along with the time savings will generate sufficient revenues to produce very favourable conditions for financing the expansion through alternative and supplementary forms of financing. E.g. as a collaboration between private investors, the Government and interested regional parties.

The Götaland Line and the European Line should therefore be brought forward and moved up the National Rail Administration’s investment plan and financed by special decree with a normal depreciation period.

It involves the financing, regeneration and development of national capital (the Swedish railway network) in order to satisfy today’s demands on travel and freight transportation. People, trade and industry and society will be the beneficiaries for many years to come.

The benefit to the national economy: Three times the cost

The European Corridor is backed by a large number of municipalities, associations of local authorities, county councils, regions and businesses – in Sweden, but also in Denmark and Germany.

In Sweden far-sighted national politicians – not least member of parliaments – have also become involved.

It is easy to understand:

The European Corridor is based on the conviction that properly functioning communications between Swedish regions and the European continent are crucial for Sweden.

Crucial for continued development and growth. Crucial for our future in Europe.

The European Corridor is a sustainable development project for the future of Sweden.
If you would like more information:

Visit www.europakorridoren.se where you can subscribe to our newsletter, order or download reports and publications and read more about our different activities.

For further information contact:
Gunnar Sibbmark, MD and vice chairman
Tel. +46 (0)472 – 205 84, +46 (0)70 – 562 94 33
gunnar.sibbmark@pp.varnamo.net

Sylvia Blomby, project secretary
Tel. +46 (0)372 – 78 93 55, +46 (0)70 – 598 93 55
Fax +46 (0)372 – 120 88
sylvia.blomby@kommun.ljungby.se