

HST Connectivity, Impact and Policy studies update

European HST studies

A truly integrated High Speed Train (HST) network across North West Europe will make the area better equipped to adapt to demographic change, economic change, environmental change and globalisation.



HSTconnect: improving connections between the secondary transport network and the European HST network. (photo: Lex Broere)

Detlef Golletz and Goesta Weber, Transport and Infrastructure Team, SEEDA, UK

The HSTintegration and HSTconnect Interreg IIB programmes are currently concentrating on addressing the weakest points of the European travel chain. Both programmes led by the South East England Development Agency (SEEDA) and involve 25 partners from across South East England and North West Europe. The HSTintegration project focuses on strategic policy integration at regional, national and European level and on the implementation of

best practice investment projects associated with the high speed rail network. With 18 partners from England, France, Belgium, the Netherlands and Germany, and with a total project value of 29 million Euros and an ERDF share of 14 million Euros, this is the largest INTERREG IIB NWE project approved by the European Commission. The HSTconnect project, which is closely associated with the HSTintegration project, aims to improve connections between the secondary regional transport network and the primary trans-European high speed rail

network. The HSTconnect project also addresses the development and regeneration of station areas as social and economic crossroads in urban environments. The assumption is that with relatively low financial expenditure and better use of existing infrastructure, a higher socio-economic added value can be realised in these areas. In addition to the local investments! both the HST projects cover a number of 'transnational actions' which are jointly developed by the partners and are integral to each project. They seek to bring added

value to the projects through knowledge exchange across the partnership by providing relevant data material, identifying best practice examples and supporting a cross-regional working approach. The transnational actions are mainly studies on regional, economic, social and station development.

THREE STUDIES

In order to establish whether the joint strategic aims of the two projects can be achieved, and to meet the needs of the project partners, the projects have jointly commissioned three studies:

- The HST Connectivity Study identifies current obstacles to the European transport chain and mid- to long-term solutions for these obstacles.
- HST Impact Study demonstrates what added socio-economic and environmental impact the HST investments deliver.
- The HST Policy Study gives an overview of the political context, the implementation and community involvement mechanisms in the project partner countries.

These important studies highlight common problems and perspectives and aim to ensure that policy and delivery go hand in hand. They have complementary roles in promoting and assessing the social, economic and transportation role of high speed rail in today's society.

to partners and members of HSTintegration and HSTconnect; local, regional and European politicians and their advisers, as well as private investors. The aim of the studies is to provide decision-makers with the evidence and information to justify their investment in HST-related projects and to make it easy for them to invest again in HST-related projects in the future.

HST CONNECTIVITY STUDY

The HST Connectivity study aims to identify current obstacles and challenges to the European transport chain and to highlight opportunities to improve its quality. It is divided into three research areas, including the HST Advice Guide, the Toolkit for station integration and connectivity, and the New Technologies study.

The HST Advice Guide focuses on the current obstacles and bottlenecks for rail access to the HST Rail Network and best practice solutions for this in North West Europe and elsewhere. The Toolkit provides specific tools and possible solutions for the HST Rail Network stations and interchanges. The New Technologies study has a more long-term perspective on rail transport developments and focuses on new technologies that can enhance and promote access to the HST Rail Network.

possible solutions related to HST planning and implementation.

The Guide contains an analysis of 40 questionnaires received from experts across Europe and people involved in HST developments and an extensive review of literature, reports and studies on HST in Europe and worldwide. In the analysis of the questionnaires, a total of over 200 issues and problems were listed by the different organisations. However, these are not all unique cases as some issues are common to a number of organisations.

The key problem areas identified include:

- Interfaces – connections between HST and other modes of transport.
- Organisational aspects – for example, design and implementation of plans with different partners.
- Pricing and ticketing – different systems in each country.
- Infrastructure – for example, construction of new lines or combined use of infrastructure.

The report draws the following conclusions:

HST offers many advantages

- Fast connections between the largest economic centres in Europe.
- Potentially high capacity for passenger travel compared to other transportation modes.
- Competition to the growing, but more polluting air travel sector.
- Economic development and growth in medium-sized cities and/or economic centres.

Further expansion of HST over Europe will increase these advantages, since more cities will be connected to the network and will therefore benefit from fast travel.

Infrastructure is the main issue in HST development

The development of HST requires new infrastructure around Europe. HST needs to be integrated into existing train schedules and has to share the scarce, available rail capacity. The construction of new and dedicated lines seems to be the best possible solution. However, this has associated planning and building issues such as noise pollution, conflicting land

HST needs to be integrated into existing train schedules

The HSTintegration and HSTconnect projects have also commissioned further research from students, including a report on the effects of HST stations on their immediate surroundings and the factors which make an HST location attractive for businesses.

The purpose of this article is to provide an update on these current studies. The findings and outputs from the studies will be of interest

ADVICE GUIDE

Sharing practical knowledge with stakeholders and giving a brief overview of all aspects involved, the Advice Guide offers the reader links to other relevant information sources, such as reports, internet sites and relevant projects in Europe and around the world. This enables the reader to search for further in-depth information about specific problems and



Multilingual passenger information is vital to attract more international passengers

HST advantage: fast connections between the largest economic centres in Europe. (photo: Lex Broere)

interests/land use and the construction of new lines in existing, densely populated areas.

Integration with other transport systems is essential

HST offers fast connections from city to city. The majority of passengers, however, need to travel from and/or to places that are not immediately located in the vicinity of an HST station. The integration of HST into other public transport systems at national, regional and local level is necessary to spread the advantages of HST to a wider geographical area.

HST stations should be an integral part of the urban area

Almost all cities with an HST station invest considerably in an attractive and functional connection between their stations and the city centre. In many cities, the station is just outside the centre (distance within 1.5 km), yet there is a lack of a clear and visible connection between them. HST stations need to be integrated with the infrastructure

of urban areas. Station areas need to be accessible by public transport, bicycle and car.

Involvement and cooperation of different partners is vital

Coordination of partners' interests and sharing of best practice is seen as the way forward.

TOOLKIT

Aiming to develop hands-on solutions for station integration and better connectivity between the primary and secondary networks, the Toolkit study involves the development of solutions which facilitate improvements to station integration from the transport, spatial, social and economic perspectives. The toolkit comprises an overview of both general principles and solutions that can be directly applied to different locations and stations.

The Toolkit study demonstrates that the development of the HST network offers economical, environmental and travel advantages. The report gives a comprehensive

overview of the work carried out concerning the development of a Toolkit for station integration and connectivity. It reports on the best and worst practices concerning station integration and connectivity in North West Europe in relation to the defined passenger needs.

However, the report notes that the integration of the new stations in their local area and the connectivity with passenger catchment areas is often still insufficient. All relevant bottlenecks affecting these stations and their integration are listed. These include infrastructure, rolling stock, interfaces, pricing and ticketing, safety and security. The findings also point to insufficient communication and cooperation between relevant partners involved in the HST development. This is particularly relevant in the development of urban and infrastructure integration and connectivity.

NEW TECHNOLOGIES UPDATE

The New Technologies study identifies medium-term solutions resulting from the use of new techniques and enhanced and efficient cooperation and administration. It includes an overview and literature review of relevant new technologies that are being used to develop high speed rail that have made or are likely to make an impact on the HST network in the future. An assessment is made of how these new technologies help to meet a number of passenger needs. The study also describes measures to stimulate the use of public transport by international passengers and suggestions on implementation methods in support of modern interchange facilities.

The report also presents the results of the questionnaire survey of rail experts across Europe on their views regarding which of the technologies discussed in the report are likely to be the most important and whether their rollout would be in the short term (1–2 years), medium term (2–5 years) or long term (above 5 years). The results show that the most important technological developments relevant to HST are those that the experts felt affected passengers the most. Modern

interchange facilities and fast connections are seen as very important developments in HST. Developments such as Maglev, Personal Rapid Transit (PRT) and alternative fuelled trains were not seen as important in the context of European HST, possibly due to the expense and their limited or lack of rollout.

A number of conclusions and recommendations are made regarding the strengths and weaknesses of the various new technologies reviewed. Examples are included of how these new developments have been applied in a wide variety of areas of high speed rail and other areas of public transport. An assessment of the measures reviewed to stimulate greater use of public transport by international passengers shows that information was a key user need being addressed. For international passengers, multilingual passenger information communicated in their own language is vital to attract more international passengers to high speed trains.

Finally, the report outlines a range of different methods to deliver modern interchange facilities, particularly in terms of the role of the private and public sectors.

HST IMPACT STUDY

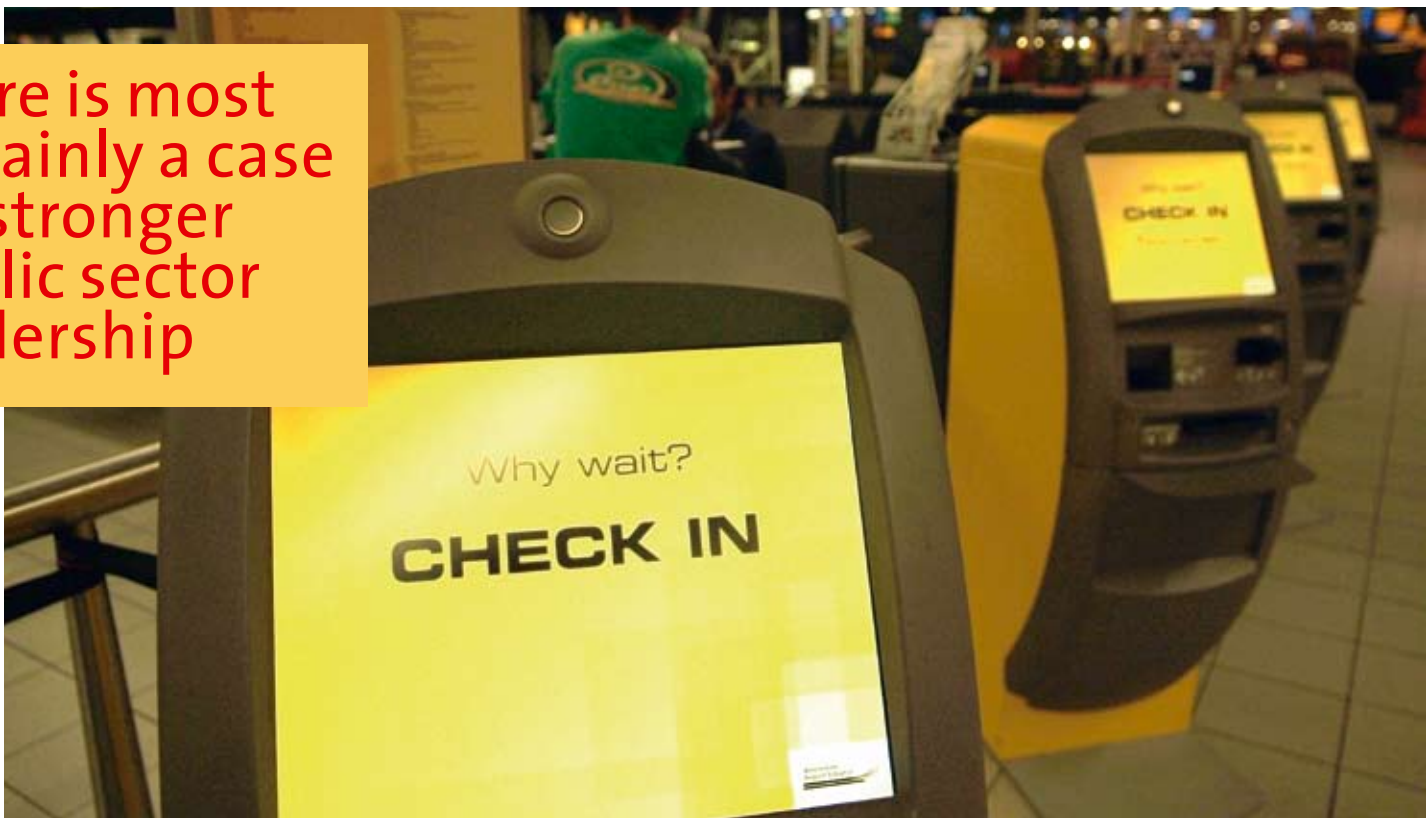
The aim of the HST Impact study is to demonstrate the ‘added value’ of the HST investments carried out by the two HST projects. For the purposes of the study, ‘added value’ is defined as the positive socioeconomic and environmental impact of HST upon investment locations. This study will run in parallel with the other HST projects until it concludes in June 2008. An Annual Report from 2007 has been produced and will be updated in the 2008 Annual Report. In line with the requirements of conducting an international study and to obtain the required details from national and regional partners, the study is driven by a consortium of partners from the Netherlands, UK, Belgium and Germany, each being responsible for the collection of specific data.

The HST Impact study will chart and measure the tangible improvements that have been made possible by investments in rail infrastructure, connections and station environments. This will provide decision-makers with further evidence and information to enable them to justify their decision to invest in this and other HST-related projects in the future. Interim findings show that the HST projects not only contribute to the



Modern interchange facilities are seen as very important developments in HST. (photo: Paul van Riel / Hollandse Hoogte)

There is most certainly a case for stronger public sector leadership



economic importance of cities and/or regions but also to regional economic growth. This applies not only to cities that are directly connected by high speed rail networks, but also to the cities that lie just off the main high speed rail network that have made targeted investments to improve their links to the main high speed network.

Of the 13 investment location case studies in the report, the partners in each believe that direct or close connections to the HST network have contributed to the economic growth of their regions in the short term. The impact does, however, depend on the scale of the project and the accompanying development profile. For example, Ashford and Ebbsfleet were already experiencing economic growth so it is difficult to determine the specific input from the projects. In contrast, investments such as Hastings show us that the link to the HST projects and associated investments have clearly initiated the economic (re)development of the city and region.

increase awareness and understanding of the barriers to and opportunities for the development of the High Speed Train network on a transnational basis. The study draws on the practical experience of the organisations in the HST Partnership, as well as drawing on evidence gathered from other organisations with relevant experience.

The study focuses on four key aspects of the process associated with the identification and development of investment proposals and their subsequent implementation: the policy context that exists at a European, national, regional and local level; the planning framework within which specific proposals are brought forward; the implementation mechanisms available to secure delivery of specific proposals; and the community involvement mechanisms used in parallel with the fiscal and legislative mechanisms used to gain community endorsement for specific proposals.

The HST Policy study contains an overview and analysis of the different systems of infrastructure and spatial planning in five countries in North West Europe. Although the national planning systems and policies do have similarities, the detailed description of the various procedures leads to the conclusion that there are also substantial differences between the various spatial and infrastructure planning systems of the countries studied. These differences are mainly caused by the different political structures of the countries. The structure of Belgium, for example, means that the country needs no less than three planning systems, which are considerably different.

In Germany, each federal state has its own structure of ministries. Another important reason for the differences between the systems is the different political culture in the countries studied. Whereas in France and Germany hierarchical systems and centralised procedures prevail, this is much less the case in for example the United Kingdom. Cultural differences (e.g. between North and South) lead to different planning systems and therefore to different approaches.

Once we look beyond these differences, though, we encounter problems and successes that are surprisingly similar from country to country. The hypothesis that countries should to a large extent be able to learn from each other and to copy successful procedures and formats has not been confirmed to the extent that was expected. Instead, a number of issues can be discerned that need to be overcome or improved in almost every country. The main problems include financing, duration and involvement of public and other parties.

The report concludes that there is currently no successful model which creates incentives to privatised companies to expand the overall market. For example, local authorities may have greater long-term vision than franchised train operators, and national government may seek to direct major infrastructure investment plans. It could be said, therefore, that there is most certainly a case for stronger public sector leadership.

This theme is being addressed within a proposal for a successor project to HST, which seeks to harness the potential of partnership between the key stakeholders while developing models which provide the leadership and vision required of major infrastructure development. In order to maintain global competitiveness, it is no longer possible to plan in terms of national economies; we must look at a wider transnational approach to develop major transport initiatives.

Reactions to: lucas@novaterra.net

Note

- 1 Some of these investments are detailed in the article 'High speed investments' by Detlef Golletz and Goesta Weber in the Nova Terra special issue on the EU Connected Cities project, February 2007.

We must look at a wider transnational approach to develop major transport initiatives

The report also states that the HST investments act as a catalyst for other elements of the investment packages and have bought forward improvements in the transport infrastructure that would otherwise have taken much longer to deliver.

HST POLICY STUDY

This study examines the existing legislative framework and fiscal mechanisms within which proposals that support and develop the HST network are developed. It aims to

