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# INTERNATIONAL MOBILITY OBSERVATORY

## INNOVATION FACT SHEET

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STRATEGY: **INTERMODAL ISSUES**

No. 9.1.1

CONCEPT: Airport Access

PROJECT NAME:

LOCATION:

Around the world, there is growing interest in improving the intermodal connection with major airports. An outstanding expression of this trend are the efforts of many European countries to integrate their major airports into the national intercity rail systems. Last year, the French TGV (high speed rail) service was extended to the Charles de Gaulle Airport, placing Lyons, Bordeaux, Lille and other cities on the TGV network within a 2-3 hour ground access time of international flights. Similarly, the Zurich, Frankfurt, Amsterdam, Brussels and Stockholm airports have been integrated into their countries' intercity rail networks. At the Zurich airport, about two-thirds of passengers who arrive by rail are not coming from the Zurich area but rather from other cities in Switzerland. The same is true of the Frankfurt airport, where the "Lufthansa Express" provides direct connections to the airport from Cologne, Bonn, Stuttgart and other German cities. Plans are underway for an entirely new high-speed rail network that would enable travelers from most German cities to catch international flights from the Frankfurt airport within a 3 hour train ride.

In the United States, there are no plans to integrate airports with intercity rail systems. Rather the emphasis is on making the airport more accessible to the immediately adjacent metropolitan region. Washington DC, Boston, Philadelphia, Chicago, Cleveland and St Louis already have their airports connected to metropolitan rail transit systems, soon to be joined by San Francisco and New York City. Other cities are improving their rubber-tired public modes such as express buses, shared-ride vans and specialty limousines.

# INTERNATIONAL MOBILITY OBSERVATORY

## INNOVATION FACT SHEET

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STRATEGY: **INTERMODAL ISSUES**

No. 9.2.1

CONCEPT: Intercity High-Speed Rail Access

PROJECT NAME:

LOCATION: Europe

High speed trains that travel at speeds of 250-350 km/hr (150-210 mph) on dedicated trackage, and penetrate into city centers where they connect with metropolitan transit systems, are in routine revenue service in a number of countries around the world. The pioneers have been the Japanese Shinkansen and French TGV (Train a Grande Vitesse) which came into revenue service in 1964 and 1981 respectively. Since then, intercity high speed rail service has been introduced in Germany, Great Britain, Italy, Spain, and Sweden. Many other countries — Australia, Brazil, Canada, Finland, Korea, Norway, Russia and Taiwan — have high speed rail systems under construction or at least on the drawing board.

France leads Europe in the density of its high speed rail network. TGV service now extends over four long distance lines radiating from Paris to Lyons, Bordeaux, LeMans/Tours and Lille. A fifth line, extending east to Nancy, is under construction. Other European high speed rail services include:

- *Eurostar-TransManche TGV*, operating from Paris to London and Brussels to London through the Channel Tunnel at speeds 200-300 km/hr.
- *TGV-PBKA* - a Y-shaped network of high speed rail service connecting Paris, Brussels, Cologne (Koln) and Amsterdam, to come into service between 1996 and 1998
- *AVE (Alta Velocidad Espanola)* - a Madrid-Cordoba-Seville route in Spain, inaugurated in 1992. Near-term expansions include completion of a Madrid-Barcelona link with an extension to the French border, and construction of a Madrid-Lisbon line.
- *InterCity Express (ICE)* - a network of high speed trains (280 km/hr) operating in Germany, initially between Hannover-Mannheim-Stuttgart. German Infrastructure Plan eventually calls for a 4,500 km network of high speed lines.
- *Rome-Florence Directissima* - operating a tilt-body train (*Pendolino*) at speeds of 250km/hr. Future high-speed lines include Milan-Rome-Naples and Turin-Milan-Venice.

A later stage (Year 2005 and beyond) envisions a truly continental network of high speed rail services connecting all principal cities of Western Europe.