

Measure 67: Intermodality for people

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<p><i>Policy package:</i> 5: Intermodal package</p>
<p><i>Measure 69:</i> Intermodality for people: the principle of subsidiarity notwithstanding, priority should be given in the short term to at least three fields of action: i) integrated ticketing; ii) baggage handling; iii) continuity of journeys.</p>
<p><i>What is the problem being addressed ?</i> The measure concerns both intermodality of long distance passenger transport, and especially between air transport and railways, and urban intermodal transport, with the integration of different transport modes in the urban setting. With regard to the former, the Rail Air Intermodality Facilitation Forum (RAIFF) was created as a follow-up to the “Air/Rail Intermodality Study” that was supported by the Commission and the other entities of the air and rail industry. The study examined the relationship between high speed rail and air transport. Passengers need to be aware of intermodal travel options from the reservation systems and they have expectations in relation to integrating ticketing and baggage handling including a clear rules on liability and security requirements. The RAIFF, composed by airports, air carriers, rail operators, computer reservation systems operators and other consultants is coming up with practical proposals in this respect. The final document shall be available since June 2004. With regard to the latter, as already mentioned in the White Paper, many examples exist all around Europe on intermodality for people and integration of transport services at the urban level, in particular concerning:</p> <ul style="list-style-type: none">• the integrated information on routes, timetables and fares;• integrated ticketing, availability of ticket and integrated fares;• network integration, both at the planning stages and at the operational stages, but also in terms of the coordination of infrastructures and main interchanges at investment stage.
<p><i>Measure’s costs and benefits:</i> In the urban contexts, integration of services may lead to cost reduction and the provision of information of well integrated networks is far more cost effective compared to systems that are not integrated. For instance, in the case of Rotterdam, calculating monetarised impacts by assigning a value to “time savings” of passengers, total integration measures (feeder system regional buses and Metro) leads to a saving of € 29, 51 million annually.</p>
<p><i>Legislative implementation at EU level:</i> At the best of our knowledge, there are not specific proposals for a Directives or Regulation, but only initiatives supported by the Commission and other stakeholders such as the RAIFF mentioned above. The Proposal concerning public service requirements and the award of public service contracts in passenger transport (see Measure 68) includes also implicit provisions concerning integration of urban transport, when it establishes in the preamble that “competent authorities are responsible for network management; that is, activities, other than the supply of public transport to passengers, that contribute to the provision of a network of integrated public passenger transport services. These activities may include laying down general rules for public transport operation; publishing the network and providing information for users and potential users; coordinating service timetables; designing and administering integrated ticket schemes, including arrangement for reimbursement between operators; coordinating or providing security and inspection arrangements; organising services to react to short-term changes in demand or disruptions; providing or managing infrastructure; or providing rolling stock.”</p>
<p><i>What are the objectives ?</i> To achieve intermodality specific objectives must be pursued, concerning infrastructure (interchanges) and services (with the static and/or dynamic coordination of the integrated modes). Therefore, objective achievement should be monitored with a three stages approach for both long distance inter-modality (between air and rail transport) and urban transport:</p> <ul style="list-style-type: none">• A first stage will include infrastructure prerequisites to intermodality, i.e. the presence of rail stations at

the airports or of park & ride or bike & ride interchanges serving an urban area;

- A second stage will concern the static coordination between different transport services, e.g. with the offer of coordinated schedules;
- The third stage will finally concern the full integration of services, with the dynamic adaptation of service operation in order to ensure a seamless door-to-door travel to the users of combined transport modes, usually with the support of real time information services, as well as the coordinated handling of their luggage.

As it concerns in particular the air/rail intermodality, a careful assessment of the situation has been done recently by the mentioned “Air/Rail Intermodality study”. The study was concentrated on issues concerned with High Speed Rail (HSR) connections between major cities, and long distance access to/from airports by rail, but it not considered “short distance” city centre to airport access rail services (the latter has more important implications for the modal split of road/rail rather than rail/air).

According to the conclusions of the study, the evidence collected to date suggests that there is a certain air to rail “transfer potential”, and this is greatest with journey distances of 100km to 800km, taking between 1 and 3 hours by high speed rail. There is not, however, yet a clear or common perspective among either air/rail operators or passengers, about how high speed rail and air services “fit together” as part of an overall European transport network. There is not yet a seamless air/rail concept in Europe, which has been optimised from the perspective of passengers and operators. The reason for this – claims the study – is understandable. Air and rail services have developed as separate business and networks for many years. Thus a relatively new demand for integration of just one element of each of their networks to meet this intermodal need represents a challenge in multiple dimensions. Although some airports, airlines and railways have made notable progress in service integration, many different options have emerged, and some real issues still remain to be addressed. These issues extend from the basis of common information platforms or ticket distribution through pricing and schedules to transfer issues and arrival services.

Interactions with other WP measures:

Provisions for the coordinated handling of luggage and dynamic coordination of the operation of interconnected services may help to ensure enforcement of user rights in that “nowhere” land which is today the interface between two different transport modes, as for instance in the case of delays of trains serving airports which cause the passengers to loose their flights. Another key aspect would be to coordinate ticketing information and booking of flights and high speed trains, which presupposes achieving an easier access to computerised reservation systems in the rail sector, which an objective of Measure 13 – Quality of international rail passenger services. Indeed, while about 80% of all air travel worldwide is sold through travel agents who rely on information from their Computer Reservation System (CRS), rail distribution systems have been developed by each national rail company and are hardly compatible. Therefore it is not surprising that rail companies face difficulties in selling their services through the CRS’s which were initially conceived to sell the airline product only (by having their services shown on the first screen of the CRS, rail operators could compete directly with airlines on certain city pairs).

Another important interaction has been assumed in the White Paper between this measure and the management of airport capacity, when it states: “Intermodality with rail must produce significant capacity gains by transforming competition between rail and air into complementarity between the two modes, with high-speed connections between cities. We can no longer think of maintaining air links to destinations for where there no high-speed rail service exists. More efficient, more rational use of airports will not obviate the need for increases in capacity. The fact is that new airport projects are few in numbers”. The Air/Transport intermodality study has assessed this assumption, making a detailed analysis of the airport slot opportunities (Measure 21 of this report) that would be generated due to the impact of HSR development. In contrast to the Commission’s view many transport operators do believe that:

- the impact of high speed rail connections will free up a limited number of slots at key airports. A range of estimate exists and suggests this could be “one or two years traffic growth”;
- although some airlines are currently conducting joint ventures with railways, these are limited experiences, which do not support the Commission’s general conclusion that we can no longer think of maintaining air links to destinations for which there a HSR competitive alternative. The handful of routes eligible for air/rail modal shift could not produce the significant capacity gains expected by the Commission (AEA – Association of European Airlines).

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Output indicators:

In order to appraise intermodality, we suggest a three levels indicator as follows:

0 = lack of prerequisite for integration (interchange infrastructure);

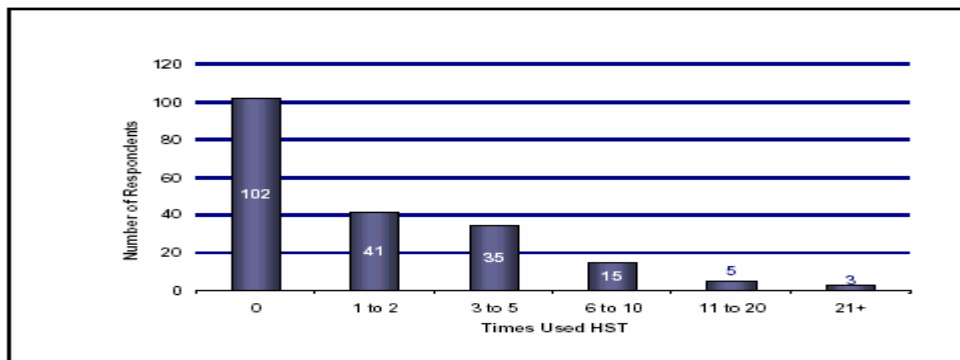
1 = static integration (e.g. coordination of schedules);

2 = full dynamic integration of the interconnected services.

The level 0 of integration can be ascertained using statistical data about the presence of train connections at the airports (source DGTREN-Eurostat data) or of urban interchanges in the main cities of the Member States. Levels 1 and 2 will be more typically ascertained with the help of surveys.

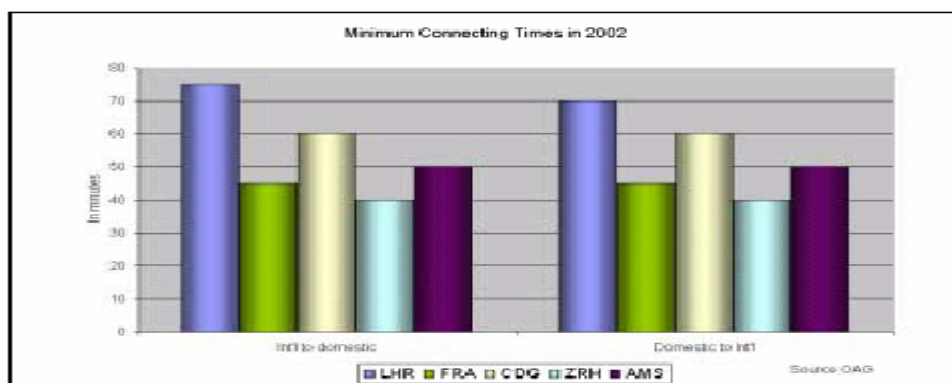
With regard to long-distance transport between city pairs, the Air/Rail Intermodality study show a plenty of representative implementation indicators. A first and simple indicator of HSR/air connection is based on customer surveys, and it is provided by the answer to the question about the:

“Number of times HSR has been used before/after flying in the last 12 months”:



In addition to *ad hoc* customer surveys, there are other suitable data sources. IATA has developed over the years a useful airport-benchmarking tool: the **Global Airport Monitor**. It analyses the perceptions of over 80.000 passengers across 52 major international airports for a wide range of customer service attributes (see GAM web-site). A key attribute of air/rail connection that can be taken from this source is:

“Minimum Connecting Times at major European Airports for both air to air and air to rail connections”



While using these connection indicators it is very important indeed to segment the market as business or leisure passengers do not have the same requirements, or the same willingness to pay for the services offered.

Outcome indicators: intermediate impacts on transport markets

Integration should determine an increased number of transported passengers. In particular, the opening of international passenger services (see Measure 12) will contribute to improve the complementarity of high-speed rail and air transport on some key city pairs. The figure hereunder shows the level of complementarity

air-rail expected in the future.

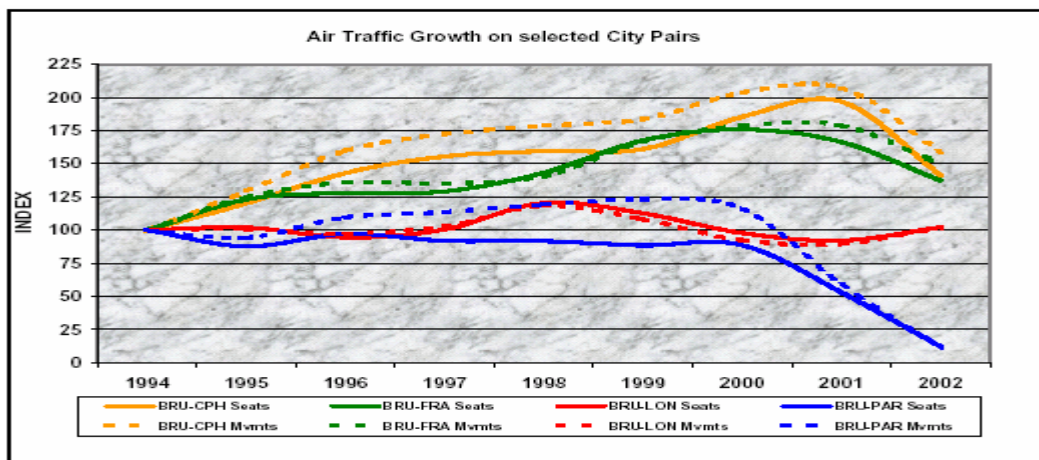


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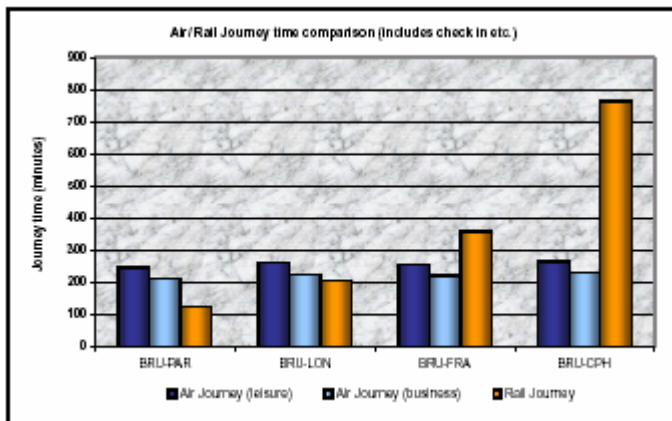
One of most recent development in this direction is the code-shared trains with airlines (Air France, Lufthansa, American Airlines, United Airlines). They offer luggage facilities, and pre- or post-connection with long-distance flights. For instance, the preferred transport mode used by passengers to reach Frankfurt airport in the 15 next years, is expected to be long-distance trains, including international trains. The advantage of free slot for intercontinental flights is also leading some airports to consider running their own high-speed services in order to replace short national flights.

In order to monitor these market developments, a key data source is the IATA ATCS interactive database capable of analysing air capacity trends combined with HSR offer when existing on a city pair level. This database is illustrated in the mentioned “Air/Rail Intermodality study”. The database considers 128 city pairs in Europe with a total number of more than air + HSR seats offered per annum and in a range of distance below 850km without any natural obstacle such as sea crossing. The city pairs are divided in two segments: markets with existing or planned rail infrastructure (55 city pairs) and markets without existing or planned rail infrastructure (73 city pairs). The 128 city pairs account for a total of 155 million aircraft seats and 1,3 million aircraft movements within Europe in 2002, which represent 34% of the intra-European air seats offered. 15% are concerned by direct competition with HST service. The following are examples of key indicators that can be extracted from the database and are useful to monitor market developments on selected city pairs:

“Air Traffic Growth on selected city pairs”



“Door-to-door journey times on selected city pairs”



Outcome indicators: final impacts on transport users and non users

Airlines are high consumers of energy and if airlines eliminated 10 daily flights, this would eliminate the rejection in the air of 6700 tons of CO₂. Furthermore, when taking into consideration the fact that most air traffic substitution pursued with Measure 67 is done using rail, the energy saved becomes important because HSR is a highly efficient transportation mode. So, this measure should have a significant positive influence on total transport emissions.