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**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

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agenda item 11(d))

**TRANSPORT TRENDS AND ECONOMICS**

**Studies on transport economics and track costs undertaken by other organizations**

**Transmitted by the European Conference of Ministers of Transport (ECMT)**

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**CONCLUSIONS ON ROUND TABLE 126:**

**“AIRPORTS AS MULTIMODAL INTERCHANGE NODES”**

1. The ECMT held its 126th Round Table on Transport Economics -- *Airports as multimodal interchange nodes* -- on 20 and 21 March 2003. The Round Table was chaired by J. Viegas (P) and introductory reports were presented by S. Barrett (IRL), K. Button (USA), A. Duff (UK) and R. Picardi (I). The main conclusions of the Round Table are outlined below.
2. What makes it difficult to discuss the role of airports as multimodal interchange nodes is the fact that it depends on a large array of interdependent determinants.

3. What dominates current discussions on airport policies are the dramatic changes in the market for air transport and their impact on the form and the intensity of airline competition. To a major extent, these changes were triggered by changes in air transport regulation.

4. The fact that airport and associated investments have long duration periods and are, to a large extent, irreversible implies that the changing role of airports is crucially dependent on records of past airport planning and implementation, be it by private developers or by public authorities. As the connectivity of an airport provides network economies, the size and volume of past investments are a major determinant of its function as a node of multimodal interchange.

5. The future of airports depends on technical *opportunities* to cope with congestion. This concerns the airports themselves as well as the infrastructure of the interconnected modes, in particular road infrastructure.

6. Last but not least, an airport's role as a node of multimodal interchange is exogenously determined by geography. Closeness to major agglomerations, possibly changing the settlement patterns of firms and households, influences to what extent airports provide connectivity to other modes.

7. The recent changes in airline competition have led to a differentiation of the market for air transport services and to a corresponding segmentation of the market for airport services. Deregulation has led to the emergence and/or the reinforcement of a hub-and-spoke system, with the consequence of strong alliances between individual airlines and airports. The peculiar functions of hubs imply that connections to other modes are less important relative to the flight turnover than for other airports. Shorter geographic distances to final destinations have had the consequence that hub-and-spoke systems have been less pronounced in Europe. Moreover, the existence of hubs in Europe has been more due to past national policies on "national carriers" and a planned hierarchy of airports on the national level than the endogenous interaction of airlines and airport management. The relative importance of hub-and-spoke systems is not expected to increase in Europe, due to recent changes in the quality differentiation of the market for passenger air travel.

8. These changes concern the strong increase in operations of "low-cost" carriers. These carriers renounce the provision of services which are complementary to the core air travel functions and have different, usually lower demands for some of the airport services. It is expected that these carriers will expand mainly by supplying more point-to-point services. The low-cost carriers have the comparative advantage of basing their traffic in smaller airports and, by maintaining smaller-scale own facilities, have lower transaction costs to relocate to other airports, to exploit differences in airport charges. The increase in competition between airports serving the operations of low-cost carriers may induce a relatively high volatility in the airport

industry. This in turn might negatively impact on infrastructure investment decisions related to other modes of transport, as planners and investors will ask for (imputed) risk premiums.

9. The cost pressure on airports will strengthen incentives to adopt cost-cutting innovations and to rationalise organisation. This will feed back to the tendency towards a relative increase in point-to-point services. Smaller airports, therefore, more often have easier check-in and luggage reclaim procedures.

10. All these determinants of the functioning of airports lead to many possible types of airport with different limits and opportunities to serve intermodal exchange purposes. Size and road congestion are the most important determinants of the profitability of rail connections. Large airports which have hub functions of continental and intercontinental dimensions and which are multi-product airports, will be those which justify high investments in rail connections. The railway links should be integrated with the regional and national railway system in order to reap network economies to the largest possible extent, and should not just consist of a cul-de-sac line.

11. High-speed rail can substitute for flight connections if they provide transport opportunities between a small number of major agglomerations at relatively short distances. The necessity for a large number of stops limits the potential to broaden the catchment areas of individual airports. Regulatory measures to achieve a substitution of national connecting flights by rail travel tend to enhance the competitive position of other (foreign) airports.

12. A sometimes overlooked aspect of railway connections to major airports is the transport demand by employees. Providing rail connections for commuters can significantly reduce congestion problems around airports, particularly if the start and end of working shifts coincide with the peak hours of departures and arrivals. Depending on the distance from major city centres, the reduction in land area requirements for parking lots may provide opportunities to cut airport costs. Smaller airports, the development of regional clusters of airports, the relatively low levels of road congestion and the high investment costs of railways will imply a competitive advantage for road connections. The provision of facilities for (privileged) bus and taxi connections should then help to avoid the high costs of "kiss-and-fly" traffic: the latter generates twice the number of trips of other private car use and generates almost no parking revenue.

13. There has been very little success so far in giving railways a more important role by providing freight connections from producers to airports and from airports to customers. General cargo is concentrated in only a few hubs in Europe. Volumes of express cargo point-to-point services do not justify the high investments in rail facilities. For all rail freight, transport distances between the airport and customers are too short for rail to be competitive in comparison with road transport.

14. Investment decisions to expand road infrastructure should take account of the fact that they may induce traffic beyond the more common hypothesis that road users overestimate the

true cost reduction following the alleviation of congestion: in some cases, firms have relocated close to airports, independent of transport cost arguments, because of the prestigious, upmarket image of such locations.

15. A major obstacle to the functioning of airports as intermodal interchange nodes is the fragmentation of infrastructure planning and investment. This fragmentation concerns lack of co-ordination between private airport developers and management as well between different public authority departments, often involving bodies at more than one jurisdictional level. Planning committees should act as intermodal (club) managers by trying to maximise the joint net surplus to be generated by the package of infrastructure facilities and jointly exploiting the possible network economies.

16. The latter also holds true for internal management. Integrated ticketing and advance reservations across modes should be checked with respect to their joint economic viability.

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