Conclusions Round Table 135

“Transport Infrastructure Charges and Capacity Choice”

Paris, 29-30 September 2005

The event was chaired by Werner Rothengatter (Technical University of Karlsruhe and Chairman of the Council of Advisers to the German Ministry of Transport, Construction and Urban Affairs). The background papers were prepared and presented by Georgina Santos (Oxford University), Erik Verhoef (Free University of Amsterdam), Barry Potter (Director, Office of Budget and Planning, International Monetary Fund) and Kenneth Gwilliam (formerly World Bank, now consultant to the Department of Transportation, Florida).

The Round Table discussed the possibilities of increasing the availability for financing transport infrastructure investment and maintenance by implementing a quasi-market for transport infrastructure services. The combination of infrastructure charging as a fee for service with criteria to expand the infrastructure capacity is expected to correct the impression by parts of the general public that charges are a hidden tax increase and therefore improve the political acceptability of infrastructure pricing.

A first part of the discussion clarified the self-financing possibilities of the provision of infrastructure services. The difficulty of establishing such a quasi-market of infrastructure services for a self-financing fee lies in the lumpiness of infrastructure facilities. This lumpiness implies that with increasing demand the cost per user decreases. Per-km charges which would cover the full cost of the infrastructure facility would therefore imply that infrastructure is underused. In general this means that cost coverage should be achieved by a lower per-km charge, equal to the additional infrastructure costs brought about by the extra users plus a fixed access charge (such as a vignette or a vehicle tax).

The pricing problems resulting from the lumpiness of infrastructure facilities do not occur if there is congestion. If the per-km charge includes the extra infrastructure costs and the congestion costs caused by the last user, the revenues cover the full cost of the facility without requiring a fixed charge. With this pricing rule, revenues in excess of the full infrastructure costs indicate net benefits from the expansion of the infrastructure capacity.

The second part of the Round Table discussion had raised the issue of the desirability and sustainability of transport infrastructure funds. It discussed the controversy which had existed between the International Monetary Fund and the World Bank on this topic. The IMF had opposed setting up investment funds, arguing that it would distort the budget process by limiting the programming possibilities of finance ministries. Moreover, there were doubts about the commitment to not use infrastructure funds for conspicuous projects. The World Bank, on the other hand, had emphasized that infrastructure funds were needed to counter the endemic shortage of resources for transport infrastructure investment and in particular maintenance in countries with weak fiscal structures. The Round Table discussed the institutional design of road funds which both institutions support as “Second Generation Road Funds”.

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The need for implementing a self-financing charging system might result from discrepancies between physical transport infrastructure planning and support by budget allocations. In particular the underfunding of the maintenance of transport infrastructure could be remedied by cost recovery mechanisms. An efficient mechanism to provide infrastructure services requires the implementation of a two-part charging system, based on a unit of service charge which is based on the extra costs resulting from increases of usage and a fixed access charge which might be required to cover the full costs of facilities which are not congested.