THE SEPARATION OF OPERATIONS FROM INFRASTRUCTURE IN THE PROVISION OF RAILWAY SERVICES

Conclusions of Round Table 103, Paris, 13-14 June 1996

ECMT Round Table 103 was chaired by Mr. Dr. J.D.C.A. Prideaux, (*Angel Train Contracts Ltd, London)* and began with reports from Messrs. W. Schwanhäusser (*Rheinish-Westfälischen Technischen Hochschule Aachen),* C. Nash (*University of Leeds),* B.Hylén (*VTI, Linköping),* P. Reistrup *(Parsons Brinckerhoff International Inc., Washington D.C.)* et T. Suga *(East Japan Railway Culture Foundation, Tokyo).*

For the Round Table participants, the idea implicit in the separation between infrastructure manager and providers of transport services in the rail sector is actually to end another form of separation, namely that between the railways and the transport market. Many experts think that a single national railway undertaking is far too rigid to be able to develop a full range of products capable of appealing to all segments of the customer base. The public authorities can no longer really leave things the way they are and a transformation or radical reform of the way the railways are organised is in many respects inevitable, notably if a solution is to be found to the financial difficulties currently paralysing most railways as a result of their lack of commercial dynamism and low productivity. Against this background, the separation of infrastructure from operations is to be seen as a way of developing the rail mode, since it enables individual railway undertakings to compete with each other and to operate a wide range of services over the same infrastructure. One of the consequences of separating infrastructure and operations is the changeover from railways based on an integrated hierarchical structure to railways with a fragmented structure based on contractual agreements between complementary companies (e.g. between the track operator and service providers). This aspect was discussed by the Round Table experts and the consequences analysed (1. Advantages and disadvantages of a fragmented railway structure). The example which immediately springs to mind is that of the road sector, where there is complete separation. Railway infrastructure cannot be compared with the motorways, however, in that, for one reason, traffic in the rail sector depends on the allocation of timetable slots, which cannot be left to chance. Pricing is bound to play a role in capacity management and will be based on a system of infrastructure user fees which, according to the experts who took part in the Round Table, will be of considerable strategic importance (2. Infrastructure user fees).

ADVANTAGES AND DISADVANTAGES OF A FRAGMENTED RAILWAY SYSTEM

The Round Table experts stressed that an organisational structure based on a succession of contracts can be nothing but beneficial in the long run even if appearing highly complex at first. Admittedly, it takes time for relations based on trust to be built up between companies. It may usefully be observed that the whole of economic life is characterised by contractual arrangements which, although they may sometimes be a source of major conflict, have never prevented a sector from being dynamic. Basically, the tendency for firms to specialise in their own particular field, contracting out other functions or tasks to the most efficient company on the market, opens up possibilities for major productivity gains. Competition between firms ought also to stimulate technical, organisational and commercial innovation and, in this way, bring railway services more into line with customer requirements.

On the other hand, there is good reason to be concerned about the effects of such a fragmentation of responsibilities on operating safety. An overall view of the different factors which play a part in safety and the way in which they are implemented is probably easier to obtain in an integrated railway company than in an environment where each player is confined to a more limited field of activity and where interdependence between players is managed on a contractual basis. This is equally true for staff who, in an integrated company, find it easier to acquire all the knowledge and skills needed to implement safety measures. It should still be possible to guarantee safety in the event of a separation between infrastructure and operations, although a different approach is probably required. It would be a mistake to think that the changes brought about by separation are only minor when in actual fact they are the harbingers of a radically different conceptual approach and operating rules in the rail sector compared to those we have known until now. To take another example, if, in the event of separation, capacity management (in other words, the allocation of timetable slots) is based on negotiation, settlement of conflicts (i.e. if a train is late or if traffic is disrupted for various reasons) may prove to be extremely complicated. Whereas, in an integrated company, difficult situations are resolved in accordance with a clearly defined hierarchical procedure, in a context involving several undertakings, some of whom are in competition with each other but all of which have a contractual arrangement with the infrastructure manager, settlement of conflicts may mean having to study the clauses of the contract agreed between the companies. In dealing, for example, with situations when there are delays, high-speed trains may enjoy priority against payment of a specific charge. In unforeseen situations, however, the solution to a conflict may be difficult to establish in a fragmented railway system, particularly if the network is saturated, and in all probability will be interpreted differently by the various parties involved.

These considerations show that while there are potential benefits to be gained from separation, there are also disadvantages. In the United States, for example, separation is being reconsidered in light of the difficulty of clearly identifying the respective responsibilities of the parties (if a train is late, for example, both the infrastructure manager and the operator can be held responsible, depending on the circumstances). Another disadvantage the authorities will have to try to minimise is the effect separation can have on staff who, for example, lose the opportunity for promotion between all the tasks likely to be performed in an integrated company. Instead, they become members of highly specialised firms whose range of activities is more limited (track or rolling stock maintenance, etc.).

In addition to these aspects, the Round Table placed particular emphasis on the economic risks arising from the fact that the infrastructure manager has a monopoly. The result may be poor economic performance. For example, if the infrastructure manager maintains links with the public authorities, infrastructure losses will be covered and there will be no incentive to adopt a more dynamic management system. In the absence of competition, other than indirect competition from the roads, it is possible that the infrastructure manager will charge the highest possible price when "selling" timetable slots, thereby concealing inefficiencies. Moreover, if links are maintained with a government regulator, there will always be a tendency for the infrastructure manager to overestimate his investment requirements, which will have to be submitted to the authorities for approval. When contemplating separation, it pays to bear in mind that, as a general rule, all monopolies must be monitored, and that proper supervision is only possible in an atmosphere of considerable transparency -- and the need for a high degree of transparency was constantly reiterated during the Round Table -- in terms of companies' costs, approaches, transactions, etc., not to protect the competing undertakings, but rather to preserve competition in the sector, which is naturally the most important objective.

Lastly, in view of the major public service dimension of railway services, the interests of users have to be taken into consideration or safeguarded. There is no denying that a great many examples can be given of instances where the introduction of competition between companies can have undesirable results (connections no longer available, biased passenger information, tickets not interchangeable between companies, etc.). All of which means that the authorities have to remain alert and, possibly, lay down a number of general principles regarding service quality.

INFRASTRUCTURE USER FEES

The Round Table identified two different approaches with regard to infrastructure user fees. The first is based on the premise that user fees will be calculated on the basis of **purely economic factors** which take no account of policy considerations. Some experts believe that it is precisely because of the many different goals assigned to the railways (public service obligation, territorial development, social policy, development of combined transport, etc.) that the latter have become detached from the transport market. Infrastructure user fees need to reflect the true cost of rail services in order to ensure that resources are not wasted. For example, if the price charged for using railway infrastructure is not set at the cost of developing such infrastructure, then the "demand" for new infrastructure will automatically be higher than the optimum demand level since the railway undertakings asking for new infrastructure will not have to pay the full cost of building it. In this respect, it is true that the railways have lost touch with the market economy. Observance of economic principles could be established as a basic requirement, in which case the tendency would be for separation between infrastructure and operations to be based on the British model, according to which even the infrastructure manager, Railtrack, has been privatised with a view to making a profit. Nevertheless, it may prove extremely complicated to apply economic principles where infrastructure user fees are concerned, as account may have to be taken of not only short-term costs, but also long-term costs, avoidable costs (e.g., costs linked only to freight traffic), joint costs, marginal costs, etc.

The Round Table opted for caution in this context, insofar as some solutions to charging for infrastructure use, however ideal in theory, cannot be put into practice owing to the eminently "unstable" nature of certain calculation agreements which are nevertheless a necessary feature of any pricing system. In concrete terms, this probably means that even if we try to meet the objective of economic efficiency criteria, we shall at best only move part of the way to achieving that goal (which does not necessarily mean to say that we should dismiss such an approach out of hand).

The other approach, which the Round Table participants felt was much more realistic, is to acknowledge that infrastructure user fees in the rail sector will remain an **instrument of transport policy**. The level and structure of such fees can be adjusted in such a way as to promote the social benefits of the railways or their contribution to environmental protection, or to reduce the level of unproductive deficits borne by taxpayers. It would also be possible to imitate the Netherlands and seek to promote the railways' ability to compete by abandoning the idea of user fees. It is in any event undeniable that high fees will not enhance the competitiveness of railway services as long as charges for using the road infrastructure only partially cover the costs of roads. So it is difficult to separate the question of rail infrastructure fees from the overall framework of transport policy. Even the experts who advocate an approach based more on economic reasoning concede that user fees might be lowered, on environmental grounds, by means of infrastructure subsidies, provided, however, that such subsidies do not mask inefficient use of resources on the part of either the infrastructure manager or the service operators. Inefficiency on the part of operating companies is actually not very likely given that the aim of separating infrastructure from operations is to encourage competition between operators, and competition rarely results in wasted resources.

If user fees are adjusted according to transport policy criteria, there can be no universal solution, in terms of the level and structure of such fees, which can be applied to all countries irrespective of their specific national attributes (historical, sociological, geographical, or other). Nonetheless, it should be borne in mind that efficient use of resources is only possible if prices accurately reflect the costs involved. Only specific transport policy objectives can justify the existence of different user charges for services of which the cost to the operator is the same.

The argument in favour of using fees as an instrument of transport policy is strengthened by the appreciable differences that are already starting to emerge between those European countries which have decided upon rapid implementation of Directive 91/440. Any international approach has therefore, of necessity, to respect national differences as regards transport policy. So instead of trying to have uniform fees, which would in any case not be very sensible since infrastructure costs cannot be the same in different places in Europe, the aim above all will be to adopt common principles so as to ensure that there is a real chance of new international services coming into being. In this respect the Round Table experts stressed that there were no obstacles which could not be overcome, provided that economic relations were based on transparency and equal treatment (non-discrimination). There is no real reason why new services should not emerge, provided that the undertaking or undertakings wishing to propose such services are in a position to assess, clearly and without ambiguity, the level of user fees, the division of responsibilities, the commitment that each party has made to achieving a result, the requirements that have to be met and the penalties that apply in the event of failure. Of equal importance is the fact that all the undertakings should be guaranteed equitable treatment.

CONCLUSIONS

Separation of railway infrastructure and operations may have long-term benefits, such as a more dynamic marketing approach, greater control over costs, clearer objectives, etc., but there are also potential disadvantages involved. It can only work if there is a system of infrastructure user fees in operation. It would seem that it is not possible to impose any solution at the moment. The choice is between fees calculated in accordance with economic principles (very difficult to apply) and fees which are based on transport policy goals (such as environmental protection) and which would help to improve the railways' ability to compete on prices. However, whichever solution is adopted, there are a number of principles which need to be respected if separation is to be a success, namely: non-discrimination between operators, supervision of positions of monopoly (with respect to infrastructure), transparency at the level of commercial relations, stability of framework conditions, regulatory clarity (regarding safety and quality of service, etc.), staff motivation, etc. Although a fairly difficult transition period would appear to be inevitable, it should be possible to limit its negative consequences by taking careful note of the foregoing basic requirements.