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The Future Role of Private Capital in the GB Railway

Discussion Paper Prepared for the DfT and ORR

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1. Introduction

This short discussion paper considers the ways in which it might be possible to expand the amount of risk-bearing private capital within the GB railway.

The paper is structured into three main parts:

- section 2 considers the role of private capital in the horizontal separation, vertical alignment and vertical integration options that are currently being developed by L.E.K.;
- section 3 looks at ways of injecting new capital into Network Rail and train operators in the absence of structural reform; and
- section 4 concludes.

2. Risk-bearing Capital In Candidate Industry Structures

The work that L.E.K. is undertaking is considering three main types of structural reform:

- horizontal separation – some or all of Network Rail's regional units to be sold to new owners;
- vertical alignment – some of Network Rail's functions to be carried out by joint ventures between Network Rail and the dominant train operator in each region; and
- vertical integration – competitively tendered regional concessions for train operation and infrastructure management.

We examine the role of private capital in each of these structures in turn.

2.1 Horizontal separation

The most obvious opportunities to inject risk-bearing capital into the maintenance, renewal and enhancement of the network come from the outright break-up of Network Rail.

Insofar as this option entails Network Rail selling individual regions to third parties, the presumption must be that most – but not necessarily all – of the new owners will be conventional private-sector companies backed by a mixture of private-sector equity and private-sector debt. In the first instance, these new companies will need their shareholders and lenders to finance the purchase of Network Rail's assets. Thereafter, one would expect shareholders and lenders to take on the obligations that Network Rail's lenders currently bear with respect to the financing of ongoing infrastructure investment.

The scale of the capital injection that this type of reform brings about depends most crucially on the value of the RAB that transfers across from Network Rail and on ORR's/DfT's willingness to allow a full commercial return on the transferred RAB. All other things being equal, the value of Network Rail's assets lies only in the right that they confer on the owner to collect this return on the RAB; the remainder of any income that the owner collects from charges and grants will normally go to fund the operation, maintenance and renewal of those assets and would not be considered of value in its own right. *A priori* this would suggest that the scope for the break-up of

Network Rail to attract new risk-bearing private capital into the railway is equivalent to the current value of the RAB or around £36 billion.

It may be, however, that it is more realistic and more efficient to target lower sale prices and a lesser injection of private capital. In an accompanying paper we outline a model in which the debts that Network Rail has accumulated since its creation in 2002 are transferred to a separate company which continues to benefit from the Secretary of State's indemnity and so continues to pay very low rates of interest to lenders. A corollary is that this company also takes an equal amount of RAB from Network Rail, leaving only approximately one third of Network Rail's RAB worth around £12 billion in today's prices for 'sale' to new owners.

To our mind, this looks intuitively to be more than enough risk-bearing capital for the railway's infrastructure. With Network Rail's annual expenditure currently around £6 billion, a transferred RAB of £12 billion backed by £12 billion of private capital would cover annual costs a little less than 2 times. This compares favourably with multiples in previous GB infrastructure privatisations and ought to be more than sufficient to deal with the normal cost variations that regional companies might have to deal with in the course of their activities.

(A break-up of Network Rail should also ensure that this is genuine risk-bearing capital, insofar as horizontal separation makes it more likely that investors would believe statements from government and ORR that they are prepared to let an owner of railway infrastructure fail. The elimination of the 'halo effect' currently surrounding Network Rail may therefore be an important benefit of this model.)

There is little else to say about this option. Once the value of transferring RAB has been agreed, the sale process will naturally interest elicit from private capital so making the transition fairly straightforward.

2.2 Vertical alignment

The scale of the injection of risk-bearing capital that could be brought about through the transfer of some of Network Rail's functions to joint venture companies is less clear cut. This is for two main reasons:

- there is no hard and fast requirement for joint venture companies of this type to have a particular level of risk-bearing capital, or, indeed, any risk-bearing capital at all. The need for external finance depends primarily on the risk allocation in the works contract and the extent to which a joint venture is expected to bear cost overruns; and
- any 'equity' that the parties to these joint ventures inject will not necessarily be conventional or new private-sector capital. Network Rail, as a company limited by guarantee certainly cannot be expected to contribute normal equity financing, while franchises as currently designed do not themselves have an especially large underpinning of risk-bearing capital and may in any case simply recycle existing capital rather than bring genuinely new money to the industry.

Taking these two points together we can conclude that a role for risk-bearing capital will need to be carved deliberately into the contracts between Network Rail and the new joint venture companies rather than emerge naturally as under the previous option. It may also be necessary to make the injection of private capital into the joint venture a franchise obligation. This makes it an intrinsically more complicated model.

The benefit of this type of prescriptive approach is that it will be possible to calibrate very precisely the scale and type of private capital supporting each joint venture company. A contract will need, for example, to:

- define explicitly how cost overruns are allocated between Network Rail and the joint venture company, including percentage splits of normal cost variations, cap or collar arrangements and the treatment of exceptional variations;
- detail the payment profile for the programme of work that the joint venture is to undertake, including any requirement for the joint venture to finance investment on its own balance sheet prior to payment by Network Rail;
- specify the bank facilities or other borrowing capability that the joint venture must maintain during the life of the contract (which one might expect to fit back-to-back with the contractual risk allocation and any investment-related financing requirement);
- specify the amount of equity, performance bonds and/or parent company guarantees the owners of the joint venture most collectively stump up at the beginning of the contract; and possibly even
- specify whether the contributions coming from the train operator are to be made by the franchisee or the ultimate owner group.

There is an arguable case for regulatory intervention in all of the above areas. Left to their own devices, the parties to a joint venture might be expected to focus mainly on the ways in which their partnership brings new management or operational expertise to bear on the work that Network Rail is carrying out. Considerations around risk allocation and risk-bearing capital are likely to be secondary to this and there is no reason to assume that the parties will automatically design structures which provide for genuine risk transfer to outside investors.

This means that a licence condition (or similar arrangement) which requires ORR to approve the terms of any joint venture before it begins may be helpful. As with ORR's approval of access agreements, there would be an opportunity for the regulator to specify in advance the characteristics that it expects the joint ventures to exhibit, giving the parties adequate notice of the requirements they must meet before they can obtain approval. ORR itself might be expected to consider the value for money in different levels of risk transfer and different financing arrangements before giving its guidance.

2.3 Vertical integration

The concession model sits somewhere between the two previous options. On the one hand, a very long concession might share many of the features of an outright sale insofar as it confers very similar property rights on the concession holder. On the other hand, a very short concession might be structured via contracts that look quite similar to those that we just described as governing the relationship between Network Rail and the joint venture companies of section 2.2, with similar specification of risk allocation, borrowing facilities and upfront equity injection.

This means that contract length has a major influence on the need for and availability of new private capital. The other key determinants of the amount of capital that would sit behind a concession are:

- the amount of annual profit that the concession promises; and

- whether the concession holder is expected to make an upfront payment in return for its entitlement to those profits or whether payment is made annually.

The first of these things depends on how the concession is structured. The simplest design is probably one in which the concession holder is remunerated via farebox revenue and where the concession holder's profit is determined by the economics of the trains it is running – i.e. how far annual farebox revenue exceeds annual expenditures. Our understanding is that only some of Network Rail's regions could be expected to break even on this basis within the next 5-10 years, meaning that this design cannot be rolled out across the whole network. In less profitable parts of the country the government would therefore have the key role in determining the value of a concession through its decisions about the amount of annual subsidy its puts in (i.e. the higher the annual subsidy it promises, the more profit the concession makes and the more the concession holder will be willing to pay).[1]

The decision about whether to extract the concession's value upfront or over the life of the concession then has a major effect on the amount of private capital the concession holder must raise. In the former case, the payment of a one-off concession fee requires the concession holder to procure a large amount capital upfront for the sorts of reasons that we set out in section 2.1. In the latter case, staggered payment removes most of the need for initial capital raising, except to the extent that an upfront capital injection is a contractual requirement.

(Parallels may be drawn respectively to the HS1 concession and premium-paying franchises. The HS1 concession imposed a significant capital raising exercise on the winning bidder, whereas premium-paying franchises inject capital upfront only to the extent that the franchise requires them to.)

This option therefore affords the most flexibility of the three. Past experience – notably the LU PPP arrangements, where Metronet's collapse revealed the folly of asking owners with invested capital of just £250m to manage contracts with an annual value of three times this amount, and the DfT's own experience with franchising, where an owning group like National Express was able to walk away from promises to pay the DfT over 1 billion pounds and take just a £55m hit – indicates that there is a definite risk of under-capitalising new concessions. The lesson this provides is that careful consideration should given in advance to the risks that the concession holder is expected to bear and the capital it requires in order to absorb downside shocks before any attempt is made to fix the concession terms.

3. Risk-bearing Capital in the Base Case

The introduction of risk-bearing capital in the options considered in sections 2.1 to 2.3 are dependent on significant structural reforms. In this section we look at the role that private capital can play in a base case of no industry restructuring.

3.1 Network Rail

3.1.1 Unsupported debt

The case for restricting the use of the FIM has been considered by ORR and the DfT on a number of occasions during the last three years. We have nothing to add to this analysis, except to highlight again the merits of our proposed RABco structure. Specifically, we would suggest

[1] Note that there is an alternative concession model in which the concessionaire specifies upfront the capital that the concession holder is to raise and asks interested parties to bid the revenue that they require to deliver a given set of outputs while servicing that capital. This was the model that was used to award the LU PPP agreements and allows for very precise prescription of capital injections.

that the value for money in Network Rail issuing unsupported debt is maximised if it is agreed in advance that some of the unsupported debt that Network Rail would have to raise in the next 10-15 years to support its investment programme is refinanced by supported debt once the risks around the construction of new assets have crystallised. We would be pleased to develop this further for ORR if appropriate.

3.1.2 Equity

A somewhat different proposition is that ownership of Network Rail Infrastructure Limited should pass from a company limited by guarantee to a new shareholder-owned company. We understand that Network Rail has itself been recommending this course and that the change in ownership would be voluntary.

We have written a separate note for ORR explaining why we think that converting Network Rail as is to an equity-owned company is inferior to reforms which introduce equity via a break-up of the company as per section 2.1. Leaving these concerns aside and assuming momentarily that there is no appetite for industry restructuring in the short- to medium-term, we would also suggest to ORR and the DfT that consideration should be given not just to the size and timing of Network Rail's proposed equity raising but also to the identity of Network Rail's new owner(s). There are three main base case options:

- the sale of shares to retail and institutional investors via an IPO;
- the placement of shares with selected institutional investors, infrastructure funds or providers of private equity; and
- a trade sale to one or more partner companies.

We expect that the first of these options is out of the question politically. Of the two remaining options, there is much more to recommend in the third option than the second. This is because the benefits of a placement of shares with institutional investors is limited to the injection of risk-bearing capital and improvements in corporate governance, while a trade sale allows additionally for the injection of new management expertise into the company. This new expertise could conceivably come from a variety of partners, most obviously specialist infrastructure contractors, asset management companies or overseas railways.

(A useful parallel can be drawn here to the planned privatisation of Royal Mail. This is not intended to be a simple conversion from public to private ownership; rather, the whole rationale for the privatisation is built around the innovation, new ways of working and improvements in efficiency that an experienced partner will be able to bring to the postal system. Given the similarity in the companies' respective starting positions, such arguments would seem to hold equally well in the case of Network Rail.)

In any case, the sizing of any equity raising exercise will need to be considered carefully. It may well be that selling a stake in a single company attracts less investor interest than selling multiple companies, in which case there is a distinct possibility that the government would be left with majority ownership of Network Rail. This not only means less risk-bearing capital for the railway but also poorer governance if the minority private-sector owners see less reason to exert active control over the Network Rail board.

3.2 Train operators

The need to bring more risk-bearing capital into franchises has been a prominent theme in the DfT's ongoing review of franchising arrangements. The focus to date has been on the performance bonds that operators must post with the DfT prior to the start of a franchise and the scope to increase the size of these bonds from what are currently relatively small amounts. There are, however, other ways in which the franchising authorities can significantly increase the capitalisation of train operating companies, as set out below.

One option is to make owning groups pay franchise premia upfront at the point when the franchise is awarded rather than collect premia annually over the life of the franchise. This monetisation of future franchise payments would force train companies to go to investors to finance the initial franchise fee with the promise that they will be paid back as the franchise generates profits. In most premium-paying franchises it ought to be possible to bring in via this route a range of active investors to partner with existing owner groups, including the sorts of infrastructure funds and private equity investors that have been conspicuously absent from previous franchise competitions.

An obvious extension to this model involves fully privatising premium-paying train operators at the point when they operate on a genuinely commercial basis rather than franchising them out repeatedly. This is a reform that First Economics has been advocating for a variety of reasons (see www.first-economics.com/franchisereform.pdf), but in the context of this paper it offers the opportunity to attract greater risk-bearing capital to the industry than even long-term franchises (for the same reason that a break-up and sale of Network Rail will attract more private capital than the award of concessions, i.e. because the discounted value of future profits is higher in a permanent sale than in a time-limited franchise).

A further extension would be for ownership of rolling stock to transfer to train operators or to ask train operators to commit themselves to buying new trains. Again, this would require train operators to go to investors in search of funds for their acquisitions, bring in new debt and equity with a subsequent long-term interest in the successful operation of the train company.

Under all of these options one might expect owners also to invest in their businesses over time as profit-making opportunities emerge. This undoubtedly adds to the private capital coming into the railway, but in what are quite asset-light companies it is not the main avenue for expanding significantly private capital's involvement in the provision of train services. For the avoidance of doubt, the prize here lies in getting investors to make an enduring commitment to train companies upfront in return for a share of the profits that future train services are expected to generate over time.

4. Conclusion

The common theme running through this paper is the idea the amount of risk-bearing capital that the railway is capable of attracting depends on companies' expectations of earning a return on that capital in future. In particular, injections of private capital with or without industry restructuring will be dependent on:

- the absolute amount of profit that companies expect to make from their activities; and
- the extent to which companies pay for their entitlement to collect that profit upfront or over time as profits are realised.

The first of these points introduces a certain amount of circularity in an industry dependent on subsidy, in that the ability of many railway companies to make a profit depends – and will continue to depend – on the government paying for services. Put very crudely, the selling of future profits to the private sector can in these instances be thought of as the government taking money now in order to pay that money back over time in subsidy. By contrast, in parts of the country where the railway is profitable in its own right, the scope to sell those rents to the private sector creates a more conventional and very straightforward way of introducing private capital to the industry.

On the second point, as rules of thumb:

- outright privatisation is likely to bring in more private capital than time-limited contracts or concessions, although longer concessions are capable of attracting more capital than shorter contracts (in each case because a successively fewer number of years of profit are being sold to the private sector);
- in concession arrangements, making the concession holder pay their franchise fee upfront brings in more private capital than a system which allows for franchise fees to be paid on a pay-as-you-go basis; and
- if payment of franchisee fees is staggered over time, or for very short contracts with the private-sector, it may be necessary to specify injection of risk-bearing capital as part of the contract itself.

The conclusion that we draw from this analysis is that the DfT and/or ORR have sufficient levers to pull if they wish to see more private capital come in to the industry.

In the case of train operators, relatively simple changes to the timing of the payment of franchise premia can ensure that franchisees begin life with far deeper capital bases. Full privatisation of profit-making train operators would grow the sector's capital base still further.

As far as Network Rail is concerned, the sale of the portion of the RAB not currently financed by debt can instantly bring billions of pounds of risk-bearing capital into the industry provided that ORR and the DfT are willing to pay a commercial return on the transferred RAB. This remains the case whether the associated profit is transferred to the private sector by Network Rail intact, through a break-up and sale of the company or through a concession arrangement.

The *quid pro quo* in all of these scenarios is that it will be necessary for customers and funders to pay more in the short term so that revenues can increase to accommodate the giving of a return on new capital to outside investors. It is not in the scope of this paper to show where and when this represents value for money, but we can conclude by noting that the identification of the benefits that come from greater participation in the railway by risk-bearing private capital is an important part of the story.