Consultation Response

System Operation Consultation

Office of Rail and Road

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1. Introduction

1.1. ***pteg*** represents the six English Passenger Transport Executives[1] (PTEs), and successor bodies such as Combined Authorities, which, between them, serve more than eleven million people in Tyne and Wear, West Yorkshire, South Yorkshire, Greater Manchester, Merseyside and the West Midlands. Nottingham City Council, Transport for London (TfL), the West England Partnership and Strathclyde Partnership for Transport (SPT) are associate members of ***pteg***, though this response does not represent their views.

1.2. PTEs and Combined Authorities are the main strategic transport planning bodies outside London. They plan, procure, provide and promote public transport in some of Britain's largest city regions, with the aim of delivering integrated public transport networks accessible to all.

1.3. This response has been written in parallel with our response to the Network Rail consultation on the same topic; a copy is appended.

2. Response

Question one:

As discussed in section 2, to deliver good system operation, we think system operation involves these functions:

- **Developing proposals for changes to the network;**
- **Choosing projects for changes to the network;**
- **Determining capacity from the physical network;**
- **Allocating capacity (including to possessions) and performance; and**
- **Operating the system (including at the route level) enabling services to run.**

2.1. The five functions suggested by ORR are a broadly reasonable framework for thinking about system operation from the perspective of the infrastructure manager.

2.2. However, we believe there is a case for thinking about system operation also from the perspective of passengers and funders.

2.3. It may be possible to have an excellently-run infrastructure network, measured in isolation against the above functions, but which does not necessarily deliver the outcomes which society expects of it.

2.4. We would therefore suggest including a reference to other functions, such as service planning, fares policy or rolling-stock procurement, which, though not entirely under the influence of Network Rail, can have an impact on good railway system operation.

What are your views on the functions we have mapped out, and their ability to facilitate delivery of the system operation outcomes? Do you think we have missed any key functions of system operation?

2.5. While the functions set out by the ORR represent a sensible framework, we think that it is important to also consider the overall objectives which the railways are trying to meet and how the performance of system operation functions contribute to these.

2.6. In our view, the railways perform a key economic and social role. Seen from this perspective, a well-operating system will, for example:

- Achieve a high modal share;
- Support economic development;
- Provide travel opportunities that are superior to competing modes and/or that may not be otherwise available.

2.7. From a system operations perspective, meeting these objectives could require, for example, the following outcomes:

- Trains that operate at the times they are needed and between the locations they are needed; that connect well with one another; and that are reliable;
- A network that is comprehensive (both geographically and in terms of the hours and days of operation) and well integrated with other modes of public transport;
- Stations that are well located, inviting, easy to use, and easy to access for all members of the community and by a variety of modes;
- A journey experience that is pleasant from door to door: this covers station access, use of connecting transport, the quality of the station, the ambience on, and capacity of, the train;
- Good recovery from disturbances, including support for those affected;
- Affordable fares that are competitive with alternative modes.

2.8. It is worth using the example of a regular interval timetable (which is something we suggest passengers have a preference for) to illustrate our point. In order to deliver this, it is necessary to achieve certain target journey times between key nodes, and these nodes need to offer sufficient capacity to hold trains for the required length of time. In turn, this would dictate both infrastructure design, timetabling and rolling stock requirements.

Question 2: As discussed in section 3, through our work on system operation we want to improve how the railway meets the current and future needs of passengers, freight customers and funders. We think a greater focus on system operation can improve outcomes in six areas:

- **Continued safe operation;**
- **Choosing the right investment**
- **Making the right trade-offs;**
- **The right services using the network; and**
- **Helping train operators to deliver**

What are your views on the outcomes of good system operation that we have set out in this consultation?

2.9. As we set out earlier, it is important to think about outcomes relating to system operation in the context of the wider economic and social objectives which the railways are expected to contribute to. In light of that point, below are our thoughts on the five outcomes set out in the consultation response.

Continued safe operation

2.10. While we agree that safety should continue to be a key over-riding concern for the railways, it is equally important to understand the trade-offs between improved safety and other outcomes.

Getting more from the network

2.11. We agree that greater capacity and output is an important outcome for the railways. However, we would suggest that there does not always need to be a trade-off between capacity and reliability. Improvements in system reliability can almost by definition contribute to higher system capacity through more efficient use of available resources.

Making the right trade-offs

2.12. We would suggest that this is not necessarily an outcome in itself but rather inherent in all decisions relating to system operations.

The right services using the network

2.13. This is a critical question on Britain's congested railway network. In our view, it is essential that this issue is considered in the context of the wider social and economic objectives of the railway.

2.14. In particular, we would emphasise that judgements on capacity allocation must not be made solely on the basis of narrow criteria such as individual trains' revenue-earning power (which is often arbitrary[1], not necessarily accurately measured, and potentially bears little

[1] See in this regard ***pteg***'s earlier work on costs allocation in regional rail, *A heavy load to bear* (***pteg***, 2014)

relationship with the true economic value of each train movement), or the value placed on that train solely by those who use it. Neither of these criteria fully account for the wider social and economic contribution that railway services make and would therefore lead to sub-optimal outcomes in terms of those objectives.

Helping train operators to deliver

2.15. We assume that this relates to improving train operator performance in the sense of punctuality and reliability.

2.16. This is a legitimate outcome, although we would point out that performance needs to be measured in a way which accurately reflects the reality of passengers' and freight shippers' experience. PPM, for example, is not entirely satisfactory in this sense because (a) it only considers train arrival at the ultimate destination, and can therefore prevent operators from examining systemic late-running where this is masked by performance allowances before the arrival at the ultimate destination; (b) it includes arbitrary thresholds (5 or 10 minutes for passengers, other measures for freight); and (c) it makes no allowance for the effect on connecting passengers.

2.17. A linked issue is the perverse incentives that the PPM regime creates, in particular its impact on the decision to hold back connecting trains in the event of delays.

Choosing the right investment

2.18. The point we previously made on wider objectives applies also in this case.

2.19. We would take this one step further and argue also that the question of the right investment needs to be answered from a whole-system perspective and shouldn't be restricted exclusively to decisions made by the infrastructure manager or to operational decisions.

Question 3: Can you give us any examples, based on your experience, where these functions improve outcomes?

This could include examples of when system operation has helped you in running your business and delivering for your customers. Please also feel free to highlight any areas where you think system operation could help you in the future.

2.20. There is evidence that where alliances or similar have been adopted between train operators and Network Rail, better results have been achieved, where both parties work cooperatively to a shared and agreed set of outcomes rather than to the letter of their respective contracts.

2.21. The success of the Merseyrail Electrics network, for example, could be attributed in part to the decision by British Rail, with support from Merseytravel to co-locate operations, signalling, maintenance and electric power supply control at Sandhills in 1994, an arrangement which was retained after privatisation. This has helped Merseyrail deliver a regular interval, high frequency, timetable with a high degree of reliability and passenger satisfaction.

2.22. The use of satisfaction scores (based on the National Rail Passenger Survey), and related targets, could be said to be a form of outcome-led systems operation approach. Although this approach can play an important role in encouraging high quality of service for high subsidy franchises, we are not convinced that the NRPS is itself the right measurement framework.

For example, in the case of the Northern franchise, it was felt necessary to establish a more complex quality audit regime, independent of NRPS.

2.23. It could be said that an outcomes-led planning approach has also been followed in the context of the development of city region smart ticketing systems, in complex multi-stakeholder environments. It is difficult to say with certainty whether an outcomes-led approach has led to improved results, although it is difficult to imagine how any progress would have been made without such a framework.

2.24. On the other hand, we would point out that there are examples of where a KPI-compliance-led or outcomes-led approach has created the wrong incentives and unnecessary complexity, for example in the case of schedule 4 and schedule 8 (see our earlier comments on PPM).

Question 4

To regulate and incentivise Network Rail, we use a range of tools, such as regulating and monitoring Network Rail against certain outcomes and providing for a charging regime that should encourage economic and efficient behaviour by all users.

Do you have any views on what the desired outcomes and functions associated with system operation might mean for the regulation and incentivisation of network system operation?

Please highlight any particular areas where you think a different approach to regulation or incentivisation of system operation could help you better run your business in the future, and why.

2.25. We have concerns that some of the regulatory and incentive regimes currently in place can create perverse incentives and lead to sub-optimal outcomes.

2.26. As noted earlier, PPM is not entirely successful in incentivising right-time running and operational discipline, and provides a disincentive to mitigating the delays experienced by passengers. It can also give rise to train regulation decisions (i.e. by signallers) that do not give the best outcomes in terms of efficiency or journey experience.

2.27. On the other hand, any incentive/penalty or similar regime should clearly add value and not be imposed for its own sake; we would argue that Schedule 8 has done the latter and may do little to improve outcomes beyond what could be achieved by cooperation between operators and Network Rail, in the context of the franchise commitments of the former and the licence conditions of the latter.

2.28. Equally, schedule 4 does not encourage industry stakeholders to collectively minimise both possessions and the disruption to passengers when possessions take place. Train operators do not, as a result of knowing they will receive Schedule 4 payments from Network Rail, always have sufficient direct financial incentive to adopt best practice, such as by pressing for single-line working rather than a full possession, or by diverting trains around a possession rather than by withdrawing rails services. Schedule 4 also adds to the capital cost of enhancements; we have argued in the past that there is limited or no benefit in having Network Rail compensate operators for delivering an enhancement which will benefit those operators or their passengers in future.

2.29. In terms of the efficient allocation of existing and planned future capacity, it is not clear to us that the over-arching social and economic objectives of the railway, or some of the practical outcomes that follow from that, play a significant enough role in decision-making. It could be that this is because the railway as a whole lacks a clear set of policy objectives. A concrete example of this is Network Rail's new policy on track access conditions (introduced after a brief consultation in summer 2015 which ***pteg*** responded to), under which it indicated that in general it would only grant track access in terms of quantum, rather than service intervals and journey times. On the face of it, this would allow Network Rail to provide a train operator with a given number of paths per hour or day which may not be in a clock-face pattern, may not be at even intervals, may not coincide with time-critical flows (such as schools or shift-changes at a major plant), and may not provide connections between services.

2.30. A linked issue is the definition of what is an efficient outcome. In our view, this is best defined with reference to the stated policy objectives.

2.31. Take the example of a regular interval timetable which requires that connecting-node stations have a relatively high train capacity which will be fully utilised only part of the time (i.e., during those time windows during which trains serving different routes overlap). From a narrow view of systems operations, such utilisation could be criticised as inefficient because the same number of trains could be accommodated using less capacity if they were not timetabled to connect. However, this would deliver a lower quality of service to passengers and hence a less effective railway from that perspective.

2.32. Take another example: the choice of delivering 4 trains per hour (tph) on a given corridor as two sets of two paths clustered (i.e. flighted) around each half-hour or evenly spread at 15 minute intervals. While the first option might potentially offer additional paths, it would provide a lower quality of service to passengers.

2.33. In summary, expressing performance in terms of the number of trains is not the whole story. It is important to take into account how that performance is provided to the passenger

2.34. At a more fundamental level, the ORR should ensure that the regulatory framework which it sets for Network Rail incentivises and/or requires that NR works with operators, funders and other key stakeholders to ensure that its policies and behaviour are aligned with wider policy objectives.