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RE: ADDITIONAL RE-CALIBRATED RATES

We write, as invited, to give comment on ORR/KPMG Recalibration of rail operational performance regime

Comments have been restricted to the following sections of the Report:

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1.4 Key findings

The Railtrack payment rates have increased substantially as a result of the recalibration. These rates are said to provide the financial incentive to improve performance, but there is no direct correlation between the levels of payment and an incentive to improve performance at a constant rate. There appears to have been no consideration of the effects of scaling the levels of payment over a period of time longer than the industry four weekly periods.

1.4 (Cont)

As KPMG observe, the increases have been caused by the following factors:

- the sSRA has sought to double approximately the incentive rate for all service groups in which a rate had been set originally and has introduced a societal value for service groups not previously covered (mainly off peak commuter TOCs and long distance high speed services).
- the number of passenger journeys on the rail network has increased by approximately 30% since the original calibration.

We can see no logical relationship between the levels of passenger journeys overall and the levels of payments being consulted upon. In any event the assumption of a growth level of 30% is neither constant across all TOCs (it is generally higher in former NSE TOCs and in some cases of former Regional TOCs considerably lower, to the point of non-existence) nor is the growth rate reflected in the rates of increase of values within the revised payment rates.

These factors are slightly mitigated by the lower MRE rate per passenger journey as a result of the higher generalised journey time elasticities used last time.

In view of the variance in passenger growth rates there is a case for more TOC specific MRE rates.

The total amount that must be recovered by Railtrack for TOC-on-TOC delays through the TOC rates, which are calculated using the Star model, has risen as a consequence of the apparent increased level of TOC-on-TOC delay and the approximate doubling of the Railtrack rates.

The question of rising TOC-on-TOC delay is dealt with more fully under 2.7 below:

The new regime has implications for Railtrack's revenue requirements. An access charge supplement has been estimated for each service group based on expected performance levels to ensure that Railtrack is incentivised to improve performance. The sSRA will discuss compensation arrangements with each TOC.

It is our view that, whilst seeking to establish a regime that is financially neutral, the question of access charge supplements is capable of perpetuating some of the worst faults of the regime in providing a higher degree of insulation than can be justified.

2 Methodology

2.1 Review and adjust historic performance data

In the case of existing template regimes we have used performance data for each TOC, service group and monitoring point from PEARS. This data has been signed off by both parties at the end of each 4-weekly period (or subsequently) and is therefore the most reliable source of performance data for the service groups which operate under a template performance regime. However, the accuracy and completeness of the data recorded in TRUST from which the PEARS data is derived (via PALADIN) has not been tested.

We would reasonably have expected a sample check as a minimum.

The data extracted from PEARS in respect of each service group was the daily monitoring point data. At this level there is no adjustment to reflect any days in which severe disruption adjustments were made.

No check appears to have been made for the situation where a train may change its service group whilst in transit. This is of particular relevance to Thameslink services in addition to those which cross PTE/non-PTE boundaries.

2.2 Monitoring points

The use of the new weighting factors cannot be made for new monitoring points without creating new PEARS reference data sets for these points.

No additional or new monitoring points are proposed for Thameslink service groups.

However, we have, because of the re-franchising programme, undertaken considerable work on South Central monitoring points and the Rugby-Brighton service Group in particular, which raises the following concerns:

- New monitoring points for the Rugby-Brighton service are proposed at:

Brighton, Gatwick, East Croydon, Clapham Jn (Southbound),
Watford, Milton Keynes, Rugby (Northbound),

Which would lead to this service group being amongst the most heavily monitored throughout its route.

- No attempt has been made to relate this provision to the assumptions made by the sSRA in their Operating Outputs Document (OOD) which values potential payments in this group at £2.5m.

2.2 (cont)

The Regulator wishes to ensure that all services are calibrated on the basis of a consistent methodology. The following issues have emerged:

- KPMG note that some final destinations use monitoring points nearby rather than at the stations and include appropriate berthing offsets to calculate the actual arrival time at the station.

However, the use of berthing offsets is not a function of the recording systems but of the signalling systems, a point which appears not to have been brought to KPMG's attention.

- some destinations use a proxy monitoring point at some distance from the end destination to take advantage of the nearest automatic recording location.
- some of the original service codes have been excluded as the services are no longer operated in the same service pattern.

For these services and for the bespoke regimes the first task is to identify appropriate monitoring points. The monitoring point is used to measure the effect of lateness on all passengers using the train service and to produce an average minutes lateness weighted to reflect the number of passengers affected by a delayed service. For a complete picture of this profile there would be a monitoring point at each station at which passengers alight from a particular train service. For practical purposes of data management, in the original template regimes, approximately two to four monitoring points were selected for each service code. Passenger data was used to select a similar number of monitoring points for the new and bespoke services, taking care to include the ultimate destination.

KPMG's analysis leaves two critical questions unanswered:

1. KPMG updated or calculated weighting factors to take account of passenger movement profiles using passenger flow data for the year ended 31 March 1999. The number of passengers alighting at each station was analysed by the direction of travel by reference to the previous station of each flow. This analysis was checked to ensure that there was no significant discrepancy between the passengers travelling in each direction. Where there was no journey data for a service code, or for peak or off-peak services, the data was checked to source and followed up with the sSRA.

This does rather gloss over a fundamental point. Where was the relationship established between the number of passengers alighting and the service group code which is made use of in the responsibility matrix ?

2.2 (cont)

2. KPMG recognise that the monitoring points are an important factor in the calculation of the 'performance minute' or average lateness experienced by each passenger, the effectiveness of the selection of monitoring points in achieving a representative passenger experience can be checked by calculating the total passengers alighting at the monitoring points as a percentage of the total passengers using the service group. However, the results of this test Appendix 8, show that most service groups have a direct coverage of 40-60%. We do not believe that this is sufficiently robust.

2.3 Analyse data on current operational performance

KPMG state that no data was excluded from the calculation, ie no individual days are excluded. They calculated the historic average level of operating performance for each of two years and also calculated the average for the two year period. The data for each of the two years identifies some very large changes in performance from one year to the next by both Railtrack and the TOCs. The changes are not uniformly in one direction or the other either at service group, TOC or Railtrack zonal level, and there does not appear to be a direct correlation between growth and either TOC or Railtrack performance at service group level. This contradicts the view that growth impacts on performance.

KPMG claim that this is because the increase in delay as a result of capacity congestion arises at certain points of the network but the service groups cover the entire route of a train service, ie the correlation between growth and delay is more location specific than route specific. This claim is unproven and means that the taking of the average for the two years to August 1999 as the historic average level of operating performance is arguably a flawed methodology.

2.4 Recommend performance points for the next control period

The report suggests that the Regulator has provisionally concluded that a single payment rate provides a more effective incentive. With this single rate the point at which the payments become receipts does not change the incentive to improve performance. As the Regulator is seeking to incentivise improved operational performance and in order to send a clear message in this respect to all service groups the performance point has been set lower than the historic average level of performance for all service groups. By setting the performance point below current performance levels a compensatory payment will need to be made to Railtrack through the access charges for the difference between the level of performance that could be expected currently and the performance point set. If Railtrack's future operational performance matches the performance projected from its network it will therefore have a net revenue of zero from the performance regime.

2.4 (cont)

The incentive remains for movements on either side of the projected performance levels. Having decided to lower the performance points below the level of the historic average level of operating performance to encourage improvements, the only remaining question is the quantum.

This seems to be a weakly argued case stemming from an unchallenged conclusion, particularly when taken in association with the financial implications for TOCs in regard to the additional access charges which are implied (they are not supplementary as they remain a mandatory part of the regime), as a corollary of changing the “performance point” to a substantially lower base than that of historic performance levels. If it is the case that “Railtrack’s future operational performance matches the performance projected from its network it will therefore have a net revenue of zero from the performance regime” it will have no incentive for improvement over and above that of very marginal changes to which it has already signed up and in some cases it may well be that it reaps the benefit of rewards accruing from the investment arising from Project Development Boards or TOC investment.

2.5 Calculate MRE rates

One of the elements of the payment between Railtrack and the TOC is the Marginal Revenue Effect of unscheduled delay on the farebox of the operator. In this way Railtrack compensates the operator for passenger revenue that the TOC is deemed to have lost from unreliability caused by Railtrack and is rewarded by the TOC for an improvement in the farebox which is deemed to arise as a result of its improved route reliability.

KPMG used multipliers calculated in a recent study dated February 2000 ‘The Investigation of Punctuality and Reliability’ by John Bates Services, the University of Westminster and Imperial College into the effect of unscheduled delay.

We are not altogether happy with this methodology .It appears to average an average of a very low sample basis and the academic work has not been provided in the report.

The study covered five TOCs and we have used the findings and classified other TOC services into similar bands as shown below. For the purpose of the recalibration GNER’s services were categorised into the same group as Virgin West Coast. Anglia and Midland Mainline were grouped with First Great Western. The more urban networks of Manchester, Liverpool and Cardiff were grouped with Central Trains’ services and ScotRail and Wales & West used the same multipliers as Northern Spirit. Adjustments were made to increase the multipliers used for service groups which had a significant amount of airport traffic for Manchester, Luton, Stansted, Gatwick and Birmingham International Airports.

2.5 (cont)

We believe that this is merely compounding the base error. We now have a 20% sample with no relationship to revenue spread being used as the basis for an arbitrary allocation of other TOCs with varying service groups to similar bands. The revenue split of Scotrail urban (PTE) sponsored services would certainly be much closer to that of Manchester, Liverpool and (possibly) Cardiff than Wales and West or Northern Spirit. No basis for the adjustments regarding airport traffic are given.

According to KPMG, MRE calculation differs from the methodology applied for the 1995 calibration as follows:

- the use of data on 50 flows per CAPRI service code which KPMG were informed is considerably more extensive
- the use of differential GJT elasticities by journey length has been made possible by the recent PDFC study. In the original calibration an elasticity of -0.9 was used for all calculations. The latest research suggests that short journeys are less sensitive to GJT.

As far as we are aware studies going back to at least 1975 have always indicated this, and it is difficult to see why KPMG believes the 1995 logic to be flawed.

Probably the only factor likely to have been understated arises from the level of predatory ORCATS raiding (e.g. additional unregulated station stops at Leighton Buzzard by the Rugby - Gatwick service), which has been prevalent. In particular the proliferation of differential London Gatwick fares will have distorted the CAPRI data markedly.

2.6 Calculate Railtrack payment rates

The Regulator set out in his April 2000 periodic review document the reasons behind the policy decision to set a single payment rate across all levels of performance. The Railtrack payment rate includes both the MRE and the societal value of delay. The societal rate is set by the sSRA and is effectively the payment which flows through to or from the sSRA under the Franchise Agreement.

We note that, for the purposes of the original calibration, the societal rate was calculated as the value of time to the passenger and was set at a rate of 0p, 7.5p or 15p per passenger minute depending on the assumed profile of the majority of travellers in each service group. The sSRA has determined to double the incentive to further encourage TOCs to achieve a modal switch. The rates for societal values set by the sSRA are calculated to achieve a doubling of the incentive rates. For long distance, high speed TOCs, the sSRA has selected a societal rate value of 38 pence per passenger-minute. For new service groups, the sSRA has doubled the new MRE rate. We calculate that to be the equivalent of a 140% increase not mere doubling.

2.7 Calculate TOC payment rates

The TOC payment rates are intended to compensate Railtrack for the effect of delays caused by one TOC which cause consequential delay to another TOC. As the contractual arrangements are between individual TOCs and Railtrack, Railtrack acts as a clearing house for the compensation of the delays caused by one (passenger or freight) TOC on another (passenger or freight) TOC (TOC-on-TOC delays).

KPMG state that the calculation of the amount that it is appropriate to pay in order to balance the amounts paid by Railtrack to affected TOCs with the amount that it collects from the TOCs responsible for the delays can only ever be made for a given level of performance, a given level of delays and a given set of consequential TOC-on-TOC delays. The TOC payment rate is calculated such that at the level of national performance across all service groups during the calibration period, Railtrack could expect to be compensated in full by the responsible TOCs for the payments it makes to the affected TOCs.

We believe that the apportionment of TOC-on-TOC delay should be more specifically calculated. The Go-Ahead Group has developed a model for forecasting punctuality, the further development of which would enable the production of such specific allocations. This would mean tht Railtrack need only be concerned with allocation of delays to “self” or “TOC”. Such a removal of the Star Model principle from the Performance Regime would eradicate the suspicions held by many TOCs tht Railtrack:

1. use TOC-caused delays as a “dumping bucket” for subsequent disruptions.
2. Have no incentive to improve the proportion of total delay caused by “TOC-on-TOC” which has led to the inexorable rise in its quantum in the last year.

KPMG state that they have used the operational data for the 13 accounting periods ended September 1999 to calculate the amount recoverable by Railtrack from each passenger TOC service group and calculated the TOC payment rate per minute by reference to the average historic performance level of each service group across those 13 periods.

The key assumption made in the calculation relates to the way in which delays caused to an affected TOC are allocated to the responsible TOC service group. The existing IT systems (TRUST and PALADIN) record the responsible TOC causing an incident which leads to a TOC-on-TOC delay, but do not record the responsible TOC service group.

This is illogical. The only way in which a TOC can be implicated in causing a delay is through identifying an originating train delay associated with the incident. This gives rise to delay minutes which are subsequently accumulated to incidents but all the affected trains have an individual train identification.

2.7 (cont)

Within the train file the train id associates with a service group. It is a simple matter to construct look-up tables within either TRUST/TOPS or PALADIN to enable service group attribution.

KPMG have developed a responsibility matrix to allocate responsibility for delays from TOC to TOC service group based on the amount of joint running between service groups on the section of route and the amount of traffic on that section of route and the amount of traffic on that section of route.

The shortcomings of this matrix arise where there is no joint running between two TOCs which either interface at stations only, or are victims of consequential delay from an incident where the responsible TOC may be remote from the affected TOC. This accounts for 3% of delay minutes. Where there is no joint running data between the responsible TOC service group data between the responsible TOC and the affected TOC, these delays have been allocated to responsible TOC service group in proportion to the amount of the joint running attributed data.

In order to achieve greater accuracy in this area in the future we recommend that a system enhancement be made to enable the responsible TOC service group to be recorded.

This is entirely consistent with the planned changes in the method of fault attribution envisaged in the Regulator's April 2000 periodic review document.

We fully support such a change. However we would not support the existing proposal for a responsibility matrix as we believe a better developmental proposal would arise from the use of the forecasting model such as the one described above.

2.8 Determine level of projected future operating performance

KPMG suggest a thorough examination of the PfPI data prepared by Railtrack to manage its own performance levels. As these plans are, they say, in early development stages only for one zone, this option is not available for this calibration period, although an alternative approach may be provided in the future.

It is our understanding that Railtrack do actually have the necessary data available, and indeed we have been able to use it in developing our forecasts for South Central in the re-franchising process.

We believe it is absolutely essential that PfPI data should form the basis for projecting future operating performance.

2.8 (Cont)

Similarly, KPMG have calculated the access charge supplements for each of the five years of the next control period for each service group, based on a 2.5% annual national improvement by Railtrack. The annual percentage improvement is calculated from a base position which reflects the 10% improvement achieved in 1999/2000 and assumes a 7.6% improvement in 2000/01. These improvements have been assumed uniformly to all service groups.

This is far too “broad brush” an assumption to make when forecasts at service group level are perfectly possible, and highly desirable.

As a clearer indication of the outcome of the current assumptions by the Regulator, the following comparison between the detail shown in Appendix 4 –Projected Payments/(Receipts) by TOCs to Railtrack has been prepared. The comparison is for Thameslink only.

Service Group	Y.E 03/99	Y.E 03/00	2001/02 ORR Projection
Bedford ML Off Peak	370.3	114.2	351.7
Bedford ML Peak	650.1	214	75.2
Brighton Off Peak	147.6	743	273
Brighton Peak	410.6	(967.7)	33.5
South London Off Peak	31.1	97.9	20.9
South London Peak	97.9	91.3	2.0

These variations are far too great to give confidence that an adequate methodology has been employed.

Summary

We believe there is a great deal more work to be done before the KPMG report can be accepted as an adequate basis on which to build changes to the performance regime. The existing flaws in the structure are not challenged but appear designed to provide a methodology to support the sSRA approach of merely using a “bigger hammer”. If we believed that the “bigger hammer” would alone, drive performance improvement we would heartily endorse it. As it is, we believe that the causes of poor performance, and the impacts that all industry parties can have in performance improvement, need to be much more deeply understood, with any new incentive regime built upon that understanding.

KEN WATSON
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