Rail Delivery Group

National Rail   BRITAIN RUNS ON RAIL

Caitlin Scarlett
Schedule 8 recalibration lead
Rail Delivery Group
Caitlin.Scarlett@raildeliverygroup.com

Deren Olgun
Principal Economist
Office of Rail and Road
Deren.Olgun@orr.gov.uk

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Dear Deren

Schedule 8 Recalibration: Request for approval of Network Rail Payment Rates

The purpose of this letter is to seek ORR's formal approval of the finalised Schedule 8 Network Rail Payment Rates for CP6. The Network Rail Payment Rates for Govia Thameslink Railway and London and South Eastern Railway will be submitted via a separate process, as these are being calculated through a bespoke recalibration (based on the national methodology). This letter contains the following information, to support your approval process:

Annex 1: CP6 Network Rail Payment Rate results

Annex 2: A summary of bespoke changes to Network Rail Payment Rates, made by SDG as part of the national process

Annex 3: A summary of Network Rail and Train Operator approval of the CP6 Network Rail Payment Rates (those displayed in annex 1)

Annex 4: SDG's final methodology document

Annex 5: Vivacity Rail's independent audit report

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Context

The purpose of the Schedule 8 regime is to hold train operators financially neutral to the long-term impact of fluctuations in performance for which they are not directly responsible. It does this by providing compensation to operators for future lost farebox revenues as a result of disruption that they have not caused.

The industry, through RDG, is undertaking a recalibration of the Schedule 8 Appendix 1 and 3 parameters. The recalibration will ensure that the Schedule 8 regime for CP6 is up-to-date, accurate and consistent with ORR's conclusions on the structure and policy of Schedule 8. The Schedule 8 recalibration work reports to the RDG Reform Board, with the technical recalibration work being undertaken by consultants. As in previous control periods, ORR is responsible for overall approval of the recalibrated Schedule 8 parameters to be used for CP6.

Schedule 8 recalibration

The Schedule 8 recalibration work has been split into 3 phases:

Phase	Description	Indicative timeline	Consultancy selected
Phase 1 **[COMPLETE]**	Recalibration of Monitoring Point Weightings and Cancellation Minutes	June 2017 – March 2018	PricewaterhouseCoopers (PwC)
Phase 2	Audit of Phase 1 work Recalibration of Network Rail and Train Operator Benchmarks and Payment Rates, and Sustained Poor Performance thresholds	Nov 2017 – Nov 2018	Steer Davies Gleave (SDG)
Phase 3	Audit of Phase 2 work	March 2018 – Nov 2018	Vivacity Rail Consulting (VRC)

SDG has now completed the recalibration of the Network Rail Payment Rates (the first element of Phase 2) and the report is shown in Annex 4. This work has been independently audited by VRC, and the audit report is contained in Annex 5. The final Network Rail Payment Rates are shown in Annex 1 for your consideration. In some cases, the Network Rail Route and the operator has agreed a slight variation on the standard SDG approach. Where this is the case, further details are contained in annexes 6, 7 and 8.

Industry engagement process

RDG and SDG have sought engagement from train operators and Network Rail Routes throughout the recalibration of the Network Rail Payment Rates. This engagement included:

- Multiple discussions on the high-level methodology for setting Network Rail Payment Rates at the Schedule 8 recalibration working group – 25 Sept 2017, 23 Oct 2017, 20 Nov 2017, 18 Dec 2017 and 15 Jan 2018. The Schedule 8 recalibration working group delegated authority for the development of the methodology for setting Network Rail Payment Rates to the revenue sub-group on 15 Jan 2018. The revenue sub-group provided 2 updates to the Schedule 8 recalibration working group, on 12 Feb 2018 and 12 March 2018. We note that ORR is invited to attend all working groups and sub-groups.
- All industry stakeholders were invited to be part of a revenue sub-group. The revenue sub-group comprised representatives from Network Rail, Govia Thameslink Railway, Great Western Railway and South Western Railway. The revenue sub-group met on 16 Oct 2017, 11 Jan 2018 and 25 Jan 2018. The revenue sub-group made a submission to ORR on the methodology for setting Network Rail Payment Rates on 2 Feb 2017, which

ORR responded to on 16 Feb 2018[1].

- SDG held one-on-one engagement sessions jointly with each train operator and Network Rail Route between January and May 2018. The purpose of these sessions was to discuss the methodology used in the recalibration of the Network Rail Payment Rates and to understand any local issues that needed to be accounted for in the recalibration.
- SDG attended all Schedule 8 recalibration working groups since starting the project (Nov 2017), to provide updates on the progress of the recalibration and seek stakeholder's input into methodological issues[2].
- SDG shared the methodology document on numerous occasions through the revenue sub group (23 Feb 2018), the recalibration working group (6 March 2018), the one-on-one engagement sessions and formal correspondence in April and May 2018 (with circulation of the initial and final drafts of the Network Rail Payment Rates).
- SDG shared two sets of draft results with train operators and Network Rail in April and May 2018. As part of this, the full model used in the recalibration was shared with train operators. We note that Network Rail Routes have been unable to review the full models using to produce the Network Rail Payment Rates unless train operators have shared these directly, due to the commercial sensitivity of the train operators' revenue data. Where Network Rail Routes have requested more detail on the modelling process (in particular, the impact of the Oxera methodology on Peak and Off-Peak Payment Rates), SDG provided a model that shows how the parameters affect the results for an indicative sample flow.
- SDG provided a Version Control and TOC-specific notes for each train operator and corresponding Network Rail Route for each version of the Network Rail Payment Rates results. This provided the TOC-specific methodology that was carried out and any other uplifts/adjustments that were made.
- Subsequent to the engagement sessions SDG had many follow-up discussions with the train operators and Network Rail Routes to work through issues that are particular to the train operator's characteristics.

We also note that SDG and Arup have discussed the methodology and assumptions on multiple occasions to ensure alignment between the national and the bespoke recalibrations.

In addition to this, on 29 May RDG also provided train operators and Network Rail routes with a final opportunity to express views on the Network Rail Payment Rates via a formal letter seeking approval. The feedback from industry parties on this letter is summarised in Annex 3.

In some cases, the train operator has not provided a response to the RDG letter. As set out above, there has been an extensive industry engagement process for the recalibration of the Network Rail Payment Rates, and so we are confident that where train operators have wanted to engage, they have been able to do so.

[1] The industry submission to ORR is available at: https://www.raildeliverygroup.com/about-us/governance/strategic-boards/reform-board/schedule-8-wg.html

[2] Specifically, SDG drew the working group's attention to the definition of London and South East flows, and the methodology for calculating the Marginal Revenue Effect (MRE).

Some operators and/or Network Rail Routes have proposed alternative Network Rail Payment Rates to the ones developed by SDG as part of the national process. The operators impacted by this are:

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New approach to recalibrating Network Rail Payment Rates for CP6

The industry has decided to use an alternative approach to recalibrating the Schedule 8 Network Rail Payment Rates, compared to the typical default position of using the latest version of the Passenger Demand Forecasting Handbook (PDFH v6). The industry found that PDFH v6 was not appropriate for the recalibration of the Network Rail Payment Rates, and that the approach set out in PDFH v5.1 should be used instead, for the following reasons:

1. Both PDFH v5.1 and PDFH v6 estimate elasticities for a given level of GJT[3] (in PDFH v5.1) or APM[4] (in PDFH v6). This is important for Schedule 8, as otherwise the Network Rail Payment Rate would vary continuously, for differing levels of GJT and APM. A requirement for the Network rail Payment Rates is therefore that there are no large changes from the base level of GJT or APM, as this would mean that the elasticity was no longer appropriate. The industry referred to this as the "<u>no large changes</u>" condition.

   As PDFH v6 uses APM, this condition does not hold. Where the base level of APM is quite small, even small changes in APM would have a large impact as these would represent a high proportional difference from the base APM. However, this condition does hold for PDFH 5.1, as changes in APM are a relatively small compared to the total level of GJT (which is much larger than APM).

2. The recalibration requires that the level of GJT (used in the PDFH v5.1 calculation) or APM (used in the PDFH v6 calculation) do not change significantly from their base over the control period on a permanent basis. This would allow for the same elasticity to be used throughout the control period, without having to recalibrate very frequently which would be impractical. The industry referred to this as the "<u>no large drift</u>" condition. This is

[3] Generalised Journey Time
[4] Average Performance Minutes

different from the condition above, as it refers to a permanent change rather than large, one-off changes.

The use of APM in PDFH v6 means that this condition does not hold. It is possible (and likely) that APM will change significantly over the control period on a permanent basis. Conversely, the use of GJT in PDFH v5.1 means that this condition is likely to hold, as changes in APM are only a small proportion of GJT, and so even permanent shifts in APM are likely to not have a significant impact on total GJT.

3. As the Marginal Revenue Effects (a key impact into the Network Rail Payment Rates) are calculated at a flow level, it is important that elasticities and delay minutes, which are calculated at a sector level, are broadly representative at the flow level. The industry referred to this as the "homogeneity" condition. Practically, this means that if the GJTs (or APMs) at the sector level are significantly different from the flow level, then the sector level elasticities will not be appropriate at the flow level.

   The industry found that GJTs are generally similar for flows within a sector, and so PDFH v5.1 meets this condition. However, APMs can vary significantly across flows within a sector, so PDFH v6 violates this condition.

4. PDFH requires the calculation of APM at a flow level. This is difficult to calculate, as the information required is not readily available.

Following an industry submission[5], ORR approved the decision to used PDFH v5.1 on 16 February 2018 and determined that the PDFH v5.1 delay multipliers should also be used in the recalibration.

In addition to the above, the industry also agreed that a new approach, based on a PDFC study (undertaken by Oxera) on "The impact of unplanned disruption on train operator revenue", should be adopted for London and South East flows only. The reasons for this are as follows:

1. The Oxera study is very recent, being undertaken less than a year ago with up-to-date data.
2. It focusses specifically on London and South East flows. During PR13, these were identified as an area of concern for the industry and consequently ORR had to make an arbitrary 10% adjustment to the Payment Rates for these flows. We commissioned the work so that the industry would have some evidence to inform this type of decision for CP6.
3. The Oxera study has been independently audited by SDG. The audit confirmed that the Oxera findings were sound, and that the approach suggested in the Oxera study was appropriate for London and South East commuter flows.
4. The industry has discussed this at length (ORR was largely present and involved in these conversations), and the industry has agreed that the Oxera study should be used for London and South East flows.

[5] Available here: https://www.raildeliverygroup.com/files/Publications/NRPaymentRates.SubmissiontoORRfromtherevenuesub-group.pdf

5. Finally, we note that it seems likely that the next iteration of PDFH may include the findings from the Oxera study, which is further evidence that this study is considered to be robust by a wide range of stakeholders.

ORR's approval of Network Rail Payment Rates

RDG requires formal approval of the proposed CP6 Network Rail Payment Rates from ORR. ORR is requested to review the Network Rail Payment Rate results and accompanying information, and respond **by 10 July 2018** setting out:

1. Whether ORR formally approves the Network Rail Payment Rates set out in Annex 1 (determining between the Network Rail Route and operator proposals REDACTED); and
2. If ORR does not formally approve the Network Rail Payment Rates, ORR's determination of the Network Rail Payment Rates that should apply for CP6.

As discussed in the RDG letter to ORR seeking approval of the Phase 1 parameters, ORR's approval of the Schedule 8 parameters in a timely manner is critical to the success of the Schedule 8 recalibration. RDG has allowed ORR 4 weeks to consider the information presented in this letter before providing its formal approval (or otherwise) of the Network Rail Payment Rates. We consider that 4 weeks should be sufficient, due to ORR's involvement in the recalibration of the Network Rail Payment Rates to date through the Schedule 8 recalibration working group, and also ORR's one-on-one meeting with the consultants to discuss the methodology adopted for the Network Rail Payment Rates in detail (on 29 April 2018).

Next steps

RDG will continue to engage with ORR throughout Phases 2 and 3 of the Schedule 8 recalibration. Over the coming months, RDG will write to ORR to seek ORR's sign-off of each of the remaining Schedule 8 parameters (Network Rail Benchmarks, Train Operator Payment Rates and Benchmarks, and Sustained Poor Performance thresholds).

Should you need any further clarification on any of the information set out above, or the accompanying annexes, please do not hesitate to contact me.

Yours sincerely,

Caitlin Scarlett