

Error in freight operator and charter operator Schedule 8 payment rate calculations

6 February 2014

Summary

- Since publishing our final determination on 31 October 2013, we have identified an error in the calculation of the freight operator and charter operator payment rates presented in our final determination. The error was a result of an error in version control by Network Rail. We have decided not make a change to what we determined in our final determination. Our reasons for this are explained below.
- In our final determination, the freight operator payment rate is £43.44 per delay minute. If the error is corrected for, the freight operator payment rate would be £44.18 per delay minute.
- Likewise, in our final determination, the charter operator payment rate is £59.35 per delay minute. If the error were corrected for, the charter operator payment rate would be £60.54 per delay minute.
- Since Schedule 8 is intended to be financially neutral if performance of freight and charter operators is in line with our expectations, we expect the financial impact of this to be zero across all operators.
- However, if performance deviates from benchmarks, it means the overall level of compensation paid (or bonuses received) by freight and charter operators will not correctly reflect the overall level of compensation paid (or bonuses received) by Network Rail in relation to the impact of freight and charter operator performance on the lateness of services run by third party train operators. For example, if freight operator performance is on average 10% worse than benchmark in a given year, we estimate Network Rail will be under-compensated by around £43k. Likewise, if freight operator performance is on average 10% better than benchmark, they would be under-rewarded by around £43k, total across all freight operators.
- We did not correct this error (as part of the implementation phase of PR13) on the following grounds:
 - a. The overall impact is expected to be zero across all freight and charter operators, and even if the performance of a freight or charter operator is not at benchmark during CP5, the impact of the error is unlikely to be very material. Based on 2014-15 traffic forecasts, the performance of freight operators would have to deviate more than 23% from the benchmark in a given year for the impact across all operators to be greater than £100k.

- b. It was a result of a version control error of Network Rail's, which we unfortunately did not pick up in time for the final determination, and we believe the use of the final determination freight operator and charter operator payment rates, rather than the corrected ones, would be preferred by freight and charter operators. This is on the basis that consultation responses from freight operators highlighted the fact that a high freight operator payment rate increases their exposure to risk. The same principle applies to the charter operator payment rate.

Background

- We and Network Rail jointly commissioned Halcrow to calculate a set of passenger Schedule 8 CP5 Network Rail payment rates in 2011-12 prices. Halcrow also provided a set of the CP4 Network Rail payment rates in 2011-12 prices for comparative purposes. Halcrow based these on CP4 Network Rail payment rates in 2012-13 prices from Network Rail's PEARS¹ system but applied an incorrect inflation adjustment of 3.0% to convert them from 2012-13 prices into 2011-12 prices. Network Rail identified this error, and we asked Halcrow to carry out the calculation with the correct adjustment of 5.2%. Halcrow provided a corrected version on 19 Sept 2013.
- Network Rail's calculation of the freight operator and charter operator payment rates used the CP5 and CP4 passenger Schedule 8 Network Rail payment rates calculated by Halcrow as inputs. We commissioned the reporters, Arup, to review this calculation, including verifying that the inputs were correct.
- On 4 Oct 2013, we advised Network Rail that it had not updated the CP4 passenger Schedule 8 Network Rail payment rates input in its freight operator and charter operator payment rates calculations with the corrected Halcrow CP4 Network Rail payment rates. We updated the calculation ourselves, sent it to Network Rail, and asked it to replicate the calculation using the corrected figures Halcrow had provided to ensure we had carried out the calculation correctly.
- On 7 Oct 2013, Network Rail confirmed that it had replicated the results of the freight operator and charter operator payment rate calculations using the corrected figures Halcrow provided on 19 Sept 2013, and sent us a spreadsheet containing the corrected calculation.
- On 10 Oct 2013, in a meeting between Network Rail and Arup, it was spotted that Network Rail had applied an inflation uplift to get from 2011-12 prices to 2012-13 prices (elsewhere in the spreadsheet) in two places. Network Rail said it would correct this.
- On 11 Oct 2013, Network Rail provided us with the spreadsheet correcting the error identified by the reporters.
- As part of the process for finalising all numbers for the Final Determination, we checked the CP5 Network Rail payment rate input to make sure it was consistent with our final set of CP5 Network Rail payment rates. On 17 Oct 2013 we advised

¹ This translates delay attribution data into Schedule 8 payments

Network Rail of some changes to these as a result of some decisions we made in relation to Tyne and Wear Metro and Heathrow Connect services, updated the spreadsheet Network Rail had submitted on 11 Oct 2013 accordingly and shared this with Network Rail.

Issue

- Since the final determination was published, we identified that the revised spreadsheet Network Rail sent to us on 11 Oct 2013 included the incorrect set of CP4 Network Rail payment rates, which were based on the incorrect inflation adjustment of 3.0%. We advised Network Rail of this error on 15 November 2013 and the Variable Track Access Charges (VTAC) developments meeting, which contains representatives from freight and charter operators, on 20 November 2013.
- We had not re-checked the CP4 Network Rail payment rates input as part of our quality assurance process for our final determination as we had already advised Network Rail of this and Network Rail had confirmed that it has updated its calculation and produced matching results.
- The reporters, Arup, did not check this input.
- Our opinion is that the inflation error in the CP4 Schedule 8 passenger Network Rail payment rates input into Network Rail’s model arose ultimately as a result of an error in version control by Network Rail.
- In our final determination, the freight operator payment rate is £43.44 per delay minute. If the error had been corrected for, the freight operator payment rate would have been £44.18 per delay minute.
- Likewise, in our final determination, the charter operator payment rate is £59.35 per delay minute. If the error is corrected for, the charter operator payment rate would have been £60.54 per delay minute.

Impact

- If performance deviates from benchmark, it means the level of compensation paid (or bonuses received) by freight operators (or charter operators) will not correctly reflect the level of compensation paid (or bonuses received) by Network Rail in relation to the impact of freight operator (or charter operator) performance on the lateness of services run by third party operators.
- During CP4, freight operator performance in relation to benchmark was as follows:

	Benchmark	Actual	Size of difference	% difference
2009-10	2.63	2.46	-0.17	-6.5%
2010-11	2.89	2.26	-0.63	-21.8%
2011-12	2.89	2.32	-0.57	-19.7%
2012-13	3.05	2.56	-0.49	-16.1%

- In each year, on average, freight operators caused fewer delay minutes per 100 miles than benchmark, and therefore earned bonuses.

- The CP5 freight operator and charter operator benchmarks are based on freight operator and charter operator performance during 2010-11 and 2011-12. We expect the freight and charter Schedule 8s will broadly to remain financially neutral in CP5, rather than result in a net compensation or bonus payment, but the table above gives an indication of the rough % that performance has in the past varied from benchmark.
- Based on 2014-15 traffic forecasts, we have calculated that the total financial impact in a given year of setting the freight operator payment rate at £43.44 instead of £44.18 to be as follows:

Performance of freight operators	Financial impact per year
20% fewer delay minutes per 100 miles than benchmark	Freight operators £86k worse off
10% fewer delay minutes per 100 miles than benchmark	Freight operators £43k worse off
At benchmark	£0
10% more delay minutes per 100 miles than benchmark	Freight operators £43k better off
20% more delay minutes per 100 miles than benchmark	Freight operators £86k better off

- The performance of freight operators would have to deviate more than 23% from the benchmark in a given year for the impact to be greater than £100k across all operators. In the first 4 years of CP4, the performance of freight operators has been relatively stable, with a 13% variation in delay minutes per 100 miles between the best year and worst year. We therefore think it is unlikely performance in a given year would be as much as 23% different to the benchmark.
- The overall financial impact in relation to the charter operator Schedule 8 will be much smaller if performance deviates from benchmark, due to there being a much lower mileage run by charter operators.
- We do not think freight operators would support us increasing the freight operator payment rate from £43.44 per delay minute to £44.18 per delay minute. In their consultation responses to our draft determination, three of four freight operators said they did not support the increase in the freight operator payment rate compared to CP4 (the other did not comment on this at all). The reason given was that a higher freight operator payment rate increases the risk freight operators face around their performance.
- We do not expect charter operators would support us increasing the charter operator payment rate from £59.35 per delay minute to £60.54 per delay minute for the same reason.
- A similar note to this was circulated to the 20 November 2013 VTAC developments meeting. No comments were made in this meeting to cause us to reconsider our approach.