1. DETAILS OF PARTIES

1.1 The names and addresses of the parties to the reference are as follows:-

(a) First Trenitalia West Coast Rail Limited, Company Number 10349442, whose Registered Office is at 8th Floor, The Point, 37 North Wharf Road, London, W2 1AF, and who trading name is Avanti West Coast ("the Claimant"); and

(b) Network Rail Infrastructure Limited whose Registered Office is at Network Rail, Waterloo General Office, London, SE1 8SW ("the Defendant").

2. THE CLAIMANT'S RIGHT TO BRING THIS REFERENCE

2.1 This matter is referred to a Timetabling Panel ("The Panel") for determination in accordance with Condition and Network Code Part D, Clause 4.6

3. CONTENTS OF REFERENCE

The Sole Reference includes:-

(a) The subject matter of the dispute in Section 4;

(b) A detailed explanation of the issues in dispute in Section 5;

(c) In Section 6, the decisions sought from the Chair in respect of

(i) legal entitlement, and
(ii) remedies;

(d) Appendices and other supporting material.

4. SUBJECT MATTER OF DISPUTE

4.1 Summary of Dispute

This dispute is brought on the basis that, Avanti West Coast, (trading name of First Trenitalia West Coast Rail Limited) and hereby referred to as AWC, had developed a strategy for reinstating services in line with its resourcing plan, that formed part of the December 2022 ESG timetable.

For impact services in items 1 and 2 of the dispute, paths were offered in the May 2025 timetable and access rights granted for one timetable period (3rd & 17th supplemental). These services were then included in the Prior Working Timetable for December 2025 and AWC bid for these services to continue running in the December 2025 timetable, aligned with the recommendations of the ESG timetable. Network Rail chose not to accommodate the above trains in the December 2025 timetable offer, citing capacity and performance concerns, both north of Preston and on the WCML south.

Network Rail also did not accommodate 4 additional services between London Euston and Liverpool Lime Street due to perceived power supply capacity constraints. AWC challenge NR's rejection of these services on

the basis of incorrect modelling assumptions and lack of appropriate consideration of mitigations proposed by AWC.

4.2 Reasons for Dispute

This dispute arises over the fact that AWC do not believe that Network Rail have correctly applied the Decision Criteria in part D section 4.6 of the Network Code in choosing to not accommodate AWC aspirations in the December 2025 timetable.

For item 3 below, AWC do not believe that NR have met their obligation to provide sufficient relevant information in a timely manner to enable suitable mitigations to be made.

5. EXPLANATION OF EACH ISSUE IN DISPUTE AND THE CLAIMANT'S ARGUMENTS TO SUPPORT ITS CASE

5.1 Item 1 Non accommodation of services north of Preston

Historically the service level has been a train every two hours between Birmingham New Street and Glasgow Central providing the only direct connectivity between these two important cities. This service was in the LTP timetable until December 2020, from which date the two-hourly service was temporarily diverted from Glasgow to Blackpool North to make the most efficient use of the available resources at that time, due to the COVID 19 pandemic.

It was always a key strategic goal to restore these services back to Glasgow as soon as the resourcing position allowed and suitable paths were incorporated and approved into the Dec 22 ESG timetable to this effect.

It was requested by AWC that, although they would not be a in position to run them in Dec 22, they should be retained in the timetable as QJ paths, but it is understood this request was declined by Network Rail in 2022.

However, it remained part of AWC's service recovery and uplift plan that these services would be restored in the May 25 timetable. These were then bid for in the May 25 TT, included both within the ANTC and PDNS.

During the May 25 timetable development, it became clear that the path assumed in the ESG timetable were no longer available in the southbound direction, as FOCs had taken advantage of the available white space to run additional freight services.

However, thanks to an excellent collaborative relationship with NR Capacity Planning (see appendix 5), paths were found. In the southbound direction these came with less attractive journey times than desired, but it was the understanding that once established in the timetable these paths could be improved on in the future.
The paths offered in May 2025 were:

- 9M53 0939 Glasgow Central – London Euston – resourced from 1S34 0515 Wolverhampton – Glasgow Central
- 9S47 0716 London Euston – Glasgow central, arriving 1315 – forms 9M84 on arrival at Glasgow Central
- 9M84 1336 Glasgow Central - London Euston – formed off 9S47

- 9S65 1140 London Euston – Glasgow Central – then ECS onto Polmadie

In the northbound direction paths were closer to the ESG timetable. However, noting the shorter turnround at Glasgow Central of 21 minutes between 9S47 and 9M84 (ideally 30 minutes would be required although minimum TPR value is 20 minutes), AWC made the conscious decision not to call 9S47 at Motherwell and use the time in the schedule that could have been utilised for all call as a performance buffer to protect the lower than desired turnround at Glasgow Central.

During the May 2025 timetable validation, at no point were any performance concerns raised about these services by Network Rail and it was AWC's belief that, although the southbound services had poor journey times, one advantage would mean there would be a very high chance of right time presentation at Preston. NR would only grant access rights for these services for one timetable with no expectation of rights to continue. AWC felt that this would not be an issue if it could demonstrate to Network Rail that these trains were robust as they provided a strong benefit to the railway network and formed part of the Dec 22 ESG timetable.

The re-introduction of these services has seen very strong stakeholder support. AWC have seen strong passenger loadings on these services and in part have been why AWC has seen strong revenue growth on the Anglo-Scottish route since the introduction of the May 2025 timetable.

For the Dec 2025 timetable AWC bid for these trains to continue running with the expectation of being granted access rights for them as had been done in May 25, given that paths had been identified and previously supported. AWC also bid for 9M53 and 9M84 to depart Glasgow Central later at 0955 and 1355 respectively (as per the paths in the Dec 22 ESG timetable), with the expectation of working closely with Capacity Planning and freight colleagues to see whether the freight position had changed and were there any alternative timetabling solutions that could be applied to the freight schedules, however AWC would accept the May 25 paths if no solution could be found.

During validation AWC became aware that NR would be unlikely to support the track access application for Dec 25 on performance grounds and became aware of suggestions that these trains would be rejected in the timetable offer.

This situation that these trains would be rejected was not confirmed until the timetable offer on the 13th June. No robust evidence was provided in the offer letter (see Appendix 1), other than stating it's a mixed traffic railway and did not align with future commitments for the route, which is a surprising statement noting the strategic importance of West Midlands – Glasgow links. No account was made of these trains being part of the ESG timetable, or that they formed part of the historic service level on the WCML, or that they were part of the May 2025 timetable and Prior Working Timetable for December 2025 and AWC challenged NR's use of the term 'additional services' in this instance for this reason.

AWC also challenged the decision in offer response on the basis of Decision Criteria. We believe that, if NR have used the Decision Criteria to make this decision, that while considering criteria c, no consideration has been made of b, d, e, g, or j for reasons listed below:

(b) that the spread of services reflects demand;
Services are showing strong loadings and revenue on the route has reached record high since the start of the May 2025 timetable, showing there is strong demand for these services. Withdrawing these services from the timetable will have a significant impact on this demand and see a reduction in revenue for the taxpayer, noting AWC is one of a small number of TOCs paying a premium back to Government.

(c) maintaining and improving train service performance;
While in its simplest form removing trains from the timetable might improve performance, there has been no evidence provided as to why specifically these 4 trains present such a material performance risk / or their non operation will help significantly improve WCML performance. Analysis of the paths by AWC suggest these paths do not present a significant performance risk (see appendix 6).

AWR's own performance analysis shows all diverted trains bar 9M84 perform higher than the AWC average (see appendix 9) and the majority of delays / variance in running are not occurring between Preston and Glasgow, but south of Birmingham.

NR seem prepared to accept 4 long distance passenger trains between Preston and Carstairs in some hours (2 x AWC, 1 x TPE and 1 x Lumo or 2 x AWC and 2 x TPE), with 3 trains in most standard hours (2 x AWC and 1 x TPE). However, in the hours which these services operate will only accept two (1x AWC and 1x TPE). NR have been unable to explain why the performance risk is acceptable in the hours where 4 trains operate but is unacceptable in the hours that AWC propose uplifting to the standard quantum of just 3 trains per hour.

(d) that journey times are as short as reasonably possible;
By removing these trains from the timetable passengers from Glasgow, Carlisle, Oxenholme, Penrith and Lancaster would be required to change at Preston to catch the equivalent services. For example, this would extend journey times by 47 minutes for those passengers travelling from Birmingham to Glasgow who would now have to wait at Preston for the next AWC Euston – Glasgow service.

(e) maintaining and improving an integrated system of transport for passengers and goods;
Removing trains from the timetable sees a forced decline in any integrated service for passengers, especially one with provides key direct connectivity between the West Midlands and Glasgow.

(g) the content of any relevant Long Term Plan and any relevant Development Timetable produced by an Event Steering Group
These trains were all included in the base Dec 22 ESG timetable, which AWC do not believe NR have considered. Why do these trains now no longer appear to fit in with NR strategic vision for this route? What is the purpose of an ESG timetable if the key timetable decision maker is not following its recommendations?

(j) enabling operators of trains to utilise their assets efficiently;
AWC have recruited traincrew to cover these reinstated services. Without these services running will see a reduction in overall productivity for traincrew.

AWC formally challenged NR's decision using the above reasoning in the form of a letter included within the offer response (see Appendix 3). To date Network Rail have not responded back to AWC with any evidence, as requested in the letter, and the only communication AWC have had with NR is that NR will not be changing their position on the rejection of these trains (see Appendix 4). AWC have also received verbal assurance that compliant paths can be found within the Dec 25 timetable and NR would consider adding these into the timetable as QJ paths.

In view of the above AWC do not believe NR have any legitimate grounds to reject and remove trains that were included in the Prior Working Timetable, and that have historically been part of the service offering between Birmingham and Glasgow. AWC do not believe that NR are acting within the best interests of the industry and seek that Network Rail reverse this decision and formally offer and support the operation of these trains.

5.2 Item 2 Rejection of services on the WCML south

In connection with the re-introduction of services to Glasgow (in item 1), to continue to serve Blackpool North, in the May 2025 timetable AWC introduced additional services between London Euston and Blackpool North via the Trent Valley in both directions. Not only did this provide a fast link between London and Blackpool to cater for this important leisure market, it also provided capacity relief for Warrington, Wigan NW and Preston to relieve pressure on the 0930 Euston – Glasgow and 1038 Glasgow – Euston services. Both paths were in the Dec 22 ESG timetable, although 1P92 has been modified to depart Euston at 0939, rather than the assumed ESG path of 0920.

- 1P92 0939 London Euston – Blackpool North
- 1A92 1252 Blackpool North – London Euston

In addition, AWC also introduced the final uplift of services between Euston, Chester and North Wales to restore the pre COVID service level on this route – again all services were included in the ESG timetable:

- 1A78 1932 Chester – London Euston (SX)
- 1A70 1753 Holyhead – London Euston (Sun) – previously this terminated at Crewe

Despite supporting these services in the May 25 timetable NR chose not to accommodate them in the December 2025 timetable due to performance concerns on the WCML south and stated that they would not be in a position to support additional trains on the WCML south until 'performance improves' – see Appendix 7

AWC share NR's concerns about general performance on the WCML south and have been actively exploring solutions to build resilience into the timetable by minor retiming to reduce the number of moves on minimum margins, particularly at key locations such as Milton Keynes and Rugby.

In early autumn 2024 AWC presented a solution designed to improve performance of retiming Euston – Birmingham – Scotland services and Euston – Liverpool services to depart Euston 2 minutes earlier, to improve performance on WMT's xx46 Euston – Crewe service – noting the interactions on minimum margins this service has around Stafford and Crewe.

Disappointingly Network Rail rejected this idea, with no explanation other than it deviated from the ESG timetable and used the xx36 'spare firebreak path' from Euston. Alongside being a firebreak in the timetable, NR were protecting this path for other operators' use. AWC challenged this to NR (see Appendix 5) but disappointingly received no response or explanation as to why this capacity could be used by other operators but not AWC.

AWC therefore challenge NR's inconsistent approach to the application of the ESG timetable. On one hand they rejected initiatives designed to improve performance on the WCML south citing the need to follow the ESG timetable, but then rejected trains that were included within the ESG timetable on performance grounds.

Similar to item 1, AWC do not believe NR have correctly applied the Decision Criteria when choosing to not accommodate these services in the December 2025 timetable, having included them in the May 2025 timetable and Dec 25 PWT. AWC believe that if NR have used the Decision Criteria to make this decision, the have considered criteria c alone with no consideration to b, e, g, or j, for reasons listed below:

(b) that the spread of services reflects demand;

With the re-introduction of services between Birmingham and Glasgow it is important AWC continue to cater for the growing leisure market of Blackpool, by offering a fast off peak service between London and Blackpool. This service also provides additional connectivity for Preston, Warrington and Wigan to / from London, reliving capacity on the busy 0930 Euston – Glasgow and 1038 Glasgow - Euston.

(c) maintaining and improving train service performance;
While in its simplest form removing trains from the timetable might improve performance, these trains operate at times of the day that are away from peak services. Indeed 1P92 has consistently excellent performance on the congested WCML south section and its operation is clearly not causing any issues to other services (see appendix 9 for latest performance data). The unit for 1P92 and 1A9, if these were not to run, would also have to stable on Wembley Depot during the day resulting in more ECS movements in and out the Euston station throat.

1A78 and 1A70 also operate in the late evening at times when the service is thinning out, but before any two track possessions start, so AWC cannot understand by NR would believe this presents a material performance risk. AWC have undertaken a capacity analysis on all the impacted paths to demonstrate they generate little or no risk to the wider WCML operation (see appendix 8). If these services were not run, fully resourced ECSs would be required to run in identical or similar paths, using exactly the same capacity and have, essentially, the same performance risk.

(e) maintaining and improving an integrated system of transport for passengers and goods;
Removing trains from the timetable sees a forced decline in any integrated service for passengers, removing late evening journey opportunities from Chester and North Wales to London and a daytime fast link between Blackpool North, Preston, Wigan and Warrington and London Euston.

(g) the content of any relevant Long Term Plan and any relevant Development Timetable produced by an Event Steering Group
These trains were all included in the base Dec 22 ESG timetable. Why do these trains now no longer appear to fit in with NR strategic vision for this route? What is the purpose of an ESG timetable if the key timetable decision maker is not following its recommendations?

(j) enabling operators of trains to utilise their assets efficiently;
AWC have recruited additional traincrew with the expectation of running these services. If these services were to be removed from the timetable, it would result in reduced productivity of traincrew diagrams with regard to 1P92 and 1A92.

If 1A70 and 1A78 were not to run, they would need to run in similar paths as fully resourced ECS movements to ensure units balance into the following day and traincrew return to their home depot
It is an inefficient use of resources to run these services fully resourced without the ability to generate revenue from their operation.

AWC formally challenged NR's decision using the above reasoning in the form of a letter included within the offer response (see Appendix 3). To date Network Rail have not responded back to AWC with any evidence and the only communication AWC have had with NR is that NR will not be changing their position on the rejection of these trains (see Appendix 4).

In view of the above AWC do not believe NR have any legitimate grounds to reject and remove trains that were included in the Prior Working Timetable, and that have historically been part of the service offering between London and Chester / North Wales. AWC do not believe NR are acting within the best interests of the industry and seek that Network Rail reverse this decision and formally offer and support the operation of these trains.

5.3 *Item 3 - Non Accommodation of Trains due to Power Supply Capacity*

In summer 2022 the Dec 22 ESG timetable was agreed, which included paths for AWC to increase its service provision between London Euston and Liverpool Lime Street from 1 tph to 2 tph. In autumn 2022 access rights were granted for these additional services, being contingent on power supply capacity issues at Bushey being addressed. At this stage no mention was made of Crewe – Weaver being a potential power supply capacity issue.

AWC worked closely and collaboratively with NR to successfully mitigate the potential issues at Bushey through suggestions such as drivers managing power draw by notching back as required, as is routinely applied by AWC drivers in other areas, such as Willenhall and is as reflected in the Sectional Appendix.

AWC developed a service uplift strategy for operating the second Liverpool service in each hour through a staged introduction, starting with the June 24 timetable. By the December 2025 timetable, AWC projections indicated that it would have sufficient resources, both in terms of available units and traincrew to be able to robustly run 2tph to Liverpool all day, with approximately half these of services running by September 2025. All these services bid to operate in the June 24, December 24 and May 25 timetables were offered back by NR.

In summer 2024 NR began power modelling for the wider WCML based on operators' current service levels and known aspirations for service increase. AWC offered to be directly involved in supporting the modelling, but this request was declined. Initial outputs of the modelling were expected back in late autumn 2024 / early 2025 to help inform the development of the December 2025 timetable.

In AWC's ANTC for December 2025 submitted on 19th November 2024, AWC declared its intentions to bid for the remaining Euston – Liverpool services to operate from this timetable subject to results of power supply modelling – see appendix 10, and these trains were formally bid to Network Rail on 8th March 2025.At this stage AWC was still awaiting the results of the power supply modelling and stated its intention to work closely with Network Rail during the validation process (see appendix 11).

On completion of the modelling in April 2025 NR first informed AWC of power supply capacity issues, and on the 15th May NR wrote formally to AWC stating the non-accommodation of four trains in the Dec 25 TT on weekdays. NR stated that this was due to the modelling indicating that there were periods when projected demand would exceed safe operating limits or contract thresholds (see appendix 12). These trains were

- 1F15 0907 London Euston – Liverpool Lime Street (passes Crewe at 1045)
- 1F21 1207 London Euston – Liverpool Lime Street (passes Crewe at 1345)
- 1F35 1407 London Euston – Liverpool Lime Street (passes Crewe at 1545)
- 1A55 1508 Liverpool Lime Street – London Euston (passes Crewe at 1544)

With no unit to form next workings at Liverpool, this would also mean the following services would not be able to run, although NR offered these paths in the December 2025 timetable despite having no identified resourcing plan:

- 1A37 1208 Liverpool Lime Street – London Euston
- 1A67 1708 Liverpool Lime Street – London Euston

NR also stated in this letter that they remained committed to working with AWC to explore future mitigations or alternative options as the power supply capability is reviewed and developed.

NR suggested that AWC run the four problem trains using diesel traction, however AWC was unable to accommodate this, as paths were timed for class 390s and a such are incompatible with non-tilt 80x stock. Instead, AWC suggested that in the hours that these trains passed through Crewe, running some of the xx43 Euston – Liverpool service group (planned as class 807s so as to facilitate Liverpool South Parkway calls which require Automatic Selective Door Operation capability) could be formed of bi-mode class 805s and run on diesel power between Crewe and Runcorn. This would take one electric train out of the equation in these hours and therefore must reduce the risk. AWC identified three of these trains that could be diagrammed as a bi-mode class 805 and therefore could run on diesel power on the affected section, which were:

- 1F14 0843 London Euston – Liverpool Lime Street (1026 departing Crewe)
- 1F20 1143 London Euston – Liverpool Lime Street (1326 departing Crewe)
- 1A52 1443 Liverpool Lime Street – London Euston (1520 arriving at Crewe)

AWC remain grateful for the support NR Capacity Planning showed in developing SRTs for class 805s on diesel power between Crewe and Runcorn and general support in helping develop this plan.

It was not until 11th June (just 2 days before the Dec 25 timetable offer) that the power supply modellers offered AWC a meeting to discuss the power supply analysis and give AWC the ability to present these mitigations (and others such as notching back). The minutes for this meeting can be seen in appendix 13.

During this meeting NR appeared reluctant to share any detail, although did, for the first time, reveal the issues in the impacted hours were due to the presence of electric freight at those times.

NR also informed AWC that the critical time periods were identified at 1035-1050, 1410, 1520 and 1540 and while they could model it they did not believe the proposed mitigations identified above would have any impact on reducing the risk, as all proposed trains were either outside of the window, or in the impacted section for a short period of that window – a conclusion that AWC sought to question.

AWC undertook more analysis on this data, which generated significant concerns about the quality of modelling and assumptions made. For example, noting class 99s are still subject to formal network approval, NR had assumed the use of class 99s in the identified 1520-1540 period, which was preventing both 1A55 1508 Liverpool LS – Euston and 1F25 1407 Euston – Liverpool operating. There are 3 freights (identified below), were assumed in the modelling to be all formed of class 99s, which AWC currently believe are all operated by class 66s (see appendix 14):

- 6L48 1506 Garston – Dagenham (passes Weaver Jn at 1652 and Crewe Coal Yard at 1712, well outside the impacted time period)
- 4L62 1350 Ditton - Felixstowe (passes Weaver Jn at 1452 and Crewe Coal Yard at 1512)
- 6X43 0928 Dagenham – Garston (passes Crewe Coal Yard at 1542 and Weaver Jn at 1605)

It is notable that only one of these trains passes the impacted section at the time the rejected 1F35 and 1A55 pass through Crewe at 1545 (6X43) and it remains unclear as to why running 1A52 on diesel power (passes Weaver Jn at 1508 and arrives at Crewe at 1521) wouldn't help mitigate the risk generated by 4L62.

Class 390s are the only suitable stock AWC can diagram to the non-accommodated Liverpool services. However, bi-mode Class 99 locomotives in theory could operate on diesel power through the affected area (subject to being able to meet timetable SRTs and suitable method and location to change between electric and diesel) and is unclear whether this has been explored by Network Rail, which AWC believe is contrary to criteria (a):

(a) maintaining, developing and improving the capability of the Network;

The capability of the assumed traction on the highlighted freight services enables diesel operation – AWC believe NR should have explored this option

AWC also do not believe NR have met their obligations to share information in a timely manner to inform decisions around the timetable, or, despite stating they remained committed to working AWC to explore mitigations or alternative options, have failed to do so.

6. DECISION SOUGHT FROM THE CHAIR

6.1 AWC is seeking from the chair to rule as to whether NR have applied the Decision Criteria correctly in the non-accommodation of these trains, in view of the evidence trains in items 1 and 2 were offered and supported in the May 2025 timetable, yet not in the December 2025 timetable and no detailed information / evidence has been forthcoming from NR justifying their decision on performance grounds, despite repeated requests from AWC to NR. If this chair finds this not to be the case, that NR are then instructed to offer back the trains to AWC in both the December 2025 timetable and, subject to successful validation, in the May 2026 timetable, of which all the impacted trains have been bid for by AWC to operate in the May 2026 timetable.

If the chair determines that NR are correct in their decisions to not accommodate the services, then AWC would request NR provide a clear plan as to how they are going to get in a position to support these services and the step up (maintain for those trains in items 1 and 2) towards the full Dec 22 ESG timetable.

With regards to item 3 we would ask the chair determines at NR revisit the mitigations AWC have proposed, and in a timely manner share the full power supply outputs, not just high level summary documents, to enable AWC fully assess suitable mitigations and facilitate a plan to enable the full Dec ESG timetable to operate between London Euston and Liverpool Lime Street for the May 2026 timetable.

6.2 The Claimant is not seeking damages regardless of the Determination on the remedies sought.

6.3 The Claimant expects each party to the Dispute to bear its own costs

7. SIGNATURE

For and on behalf of First Trenitalia West Coast Rail Limited

Andy Mellors

Managing Director AWC

15th August 2025

8. APPENDICES

The Claimant confirms that it has complied with Access Dispute Resolution Rule H21.

All appendices are either bound into the submission, and consecutively page numbered or clearly identified PDF documents provided alongside the submission. To assist the Panel, quotations or references that are cited in the formal submission are highlighted so that the context of the quotation or reference is apparent. A list of appendices is incorporated in the main submission. Any information only made available after the main submission has been submitted to the Panel will be consecutively numbered, so as to follow on at the conclusion of the previous submission.

Appendix 1 Extract from offer letter from NR to AWC dated 13th June 2025, showing reasons for rejecting trains north of Preston

Non-accommodation due to Capacity and Performance Constraints north of Preston

The following services cannot be accommodated; however, Network Rail is offering alternative Blackpool–London Euston and London Euston–Blackpool services. These will maintain the same timings between Preston and London Euston in both directions.

- 9S65FU SX 11:40 London Euston Glasgow Central
- 9M53EU SX 9:38 Glasgow Central London Euston
- 9M84EU SX 13:55 Glasgow Central London Euston
- 9S47FU SX 7:16 London Euston Glasgow Central
- 9M53EV SO 9:43 Glasgow Central London Euston
- 9M84EV SO 13:46 Glasgow Central London Euston
- 9S47FV SO 7:16 London Euston Glasgow Central
- 9S65FV SO 11:40 London Euston Glasgow Central

Network Rail cannot accommodate additional Avanti West Coast services north of Preston at this time due to significant performance risks and existing network commitments. This section of the West Coast Main Line (WCML) presents operational challenges.

The infrastructure north of Preston offers minimal operational flexibility, making it highly sensitive to delays. Introducing further services would significantly reduce network resilience in an area already experiencing performance issues. The route also supports a complex mix of traffic, including passenger, freight, and cross-border services into Scotland, which increases the risk of service conflicts and operational disruption.

Delay per incident on the WCML continues to rise, particularly between Preston and the Scottish border, where infrastructure constraints often result in widespread and prolonged disruption. Additionally, Network Rail has already committed to new services on this corridor, including First Rail's Stirling introduction from December 2025, which further limits the capacity to support additional Avanti West Coast services.

Appendix 2 E-mail commentary from AWC to NR, requesting what information AWC required from NR from the offer response for the Dec 25 TT

From: Andrew James Smith
Sent: 26 June 2025 14:00
To: Emma Goodman
Cc: Andrew Bray; Robert Taylor; Ben Kelly; Fiona Rendell; Greg Steele; Chris Walpole; Andy Doyle; Sue Rhymes; Mathew Turner; David Johnson
Subject: AWC - December 2025 TT Offer Response.

Dear Emma,

Thank you for supplying the December 2025 timetable offer for Avanti West Coast on Friday 13th June. We have reviewed the offer and please find attached our response. I would firstly like to draw your attention to the document 'AWC Response to Network Rail's December 2025 Timetable Offer'. This formal letter outlines our position with regard to those services that Network Rail have chosen not to accommodate in the December 2025 timetable. It makes it clear what we expect of Network Rail as to next steps in justifying these decisions. We currently do not believe Network Rail have correctly applied the Decision Criteria with these rejections, noting all of the services were included in the December 2022 ESG timetable, of which the industry agreed to. In addition all services (baring the Saturday EBS diverts) are included within the May 2025 timetable.

There is also a train by train list of queries and challenges, of which we have prioritised into a traffic light system

- Red – Is a critical item that requires resolution ASAP – ie the timetable can't operate without this being resolved
- Amber – While wouldn't affect the operation of the timetable as such, its still a change that is required before information is released into the public domain
- Green – Not critical to the operation of the timetable, or information for public, so a lower priority to resolve

Noting the above position with rejected trains, our view is the bid December 2025 unit diagrams should still apply at this stage, pending your response and outcomes of potential next steps - hence no updated diagrams are included at this stage. However, we have included potential diagram changes which would swap 2 807 and 805 diagrams between the Liverpool and EBW routes and would facilitate three trains to run on diesel power between Crewe and Runcorn as potential mitigation measures to the power supply issues. This should be treated as 'for information only' at this stage, while discussions continue. We will of course update you with regard to implementing this plan (or not) as soon as we are in a position to do so and remain grateful for your continued support to find a solution.

F3 prints are also provided for changes AWC are asking NR to explore as part of the offer response process, where highlighted on the offer response sheet.

We look forward to working through these issues with NR in a timely manner to minimise any impact on timescales for the Dec 25 timetable.

If you do have any questions or queries, please do not hesitate to contact me

Regards

Andy

Appendix 3 - Letter to NR forming part of AWC Offer Response to the Dec 25 TT

Emma Goodman,
Network Rail,
The Quadrant MK,
Elder Gate,
Milton Keynes,
MK9 1EN

26th June 2025

AWC Response to Network Rail's December 2025 Timetable Offer

Dear Emma,

Thank you for your December 2025 timetable offer dated on Friday 13th June and letter explaining reasons for non-accommodation.

Firstly, these issues aside, it is pleasing to see the overall quality of the offer is acceptable and the Rail Trail process has once again proved invaluable, enabling AWC to keep on track of flexing requests during the validation process and reducing the amount of 'surprises' in the offer. We also appreciate the efforts undertaken by NR planners to ensure the vast majority of Euston – Liverpool services are now running in their standard ESG path and offering improved journey times for a number of services.

As usual, our detailed queries are included within file 'AWC December 2025 OFFER RESPONSE' however this letter presents AWC's response to those services which Network Rail have chosen not to include within the offer.

We look forward to working with yourself and your team in the coming weeks to resolve these issues in a timely manner, so as not to impact on timescales for the December 2025 timetable. However, should Network Rail fail to provide the information below to robustly answer AWC's concerns on or before Friday 11th July 2025, then AWC will actively consider escalating this to a formal timetable dispute.

Trains Rejected due to Power Supply Issues

AWC note the four trains rejected between Euston and Liverpool, following the detailed power supply assessment which has been recently undertaken by Network Rail.

AWC are grateful for the support of Capacity Planning and their efficient modelling of diesel class 805 SRTs between Crewe and Liverpool, which has enabled AWC to develop a contingency plan. Although it is not possible to diagram the four mentioned trains as a class 805, three alternative services in the three hours raised as a concern in the Crewe area could run between Runcorn and Crewe on diesel. Discussions are ongoing with Network Rail, so while AWC have included this plan in our offer response, along with highlighted amendments to unit diagrams that this change will require, AWC request Network Rail Capacity Planning treat this as 'for information only' at this stage. AWC will inform Capacity Planning if and when this plan is to be implemented as soon as possible.

To confidently implement this plan AWC require confirmation from Network Rail that this will address concerns and enable you to be in a position to formally offer the four remaining Euston – Liverpool services.

We will continue to work with Network Rail to progress this in a timely manner and request Network Rails support in exploring alternative options, should the above plan not prove to be viable.

Trains Rejected due to 'Performance Concerns'

AWC note the list of trains that Network Rail 'cannot' accommodate in the December 2025 timetable, due to 'significant performance risks and existing network commitments'.

As a general observation we strongly challenge the term 'additional trains' in this context as all these trains are operating in the May 2025 timetable and therefore AWC bid for these to be 'rolled over' into the December 25 timetable and they formed part of the Prior Working Timetable, therefore they should not be considered as additional trains in a timetabling context. AWC require clarification as to what has changed in December 2025, as their non-accommodation is not consistent with approaches undertaken in previous timetables.

AWC therefore require Network Rail to demonstrate, in detail, how it has used the Decision Criteria to come to these decisions, particularly focusing on clear evidence on how it has traded off the following criteria, noting that, the rejection of these trains is contrary to condition g and removing these trains from the timetable goes against conditions a,b,d,e and j:

(a) maintaining, developing and improving the capability of the Network;
(b) that the spread of services reflects demand;
(c) maintaining and improving train service performance;
(d) that journey times are as short as reasonably possible;
(e) maintaining and improving an integrated system of transport for passengers and goods;
(g) the content of any relevant Long Term Plan and any relevant Development Timetable produced by an Event Steering Group;
(j) enabling operators of trains to utilise their assets efficiently;

North of Preston

We would urgently ask for detailed information as to why the addition of these four trains north of Preston, which have always been part of the traditional service offering by Avanti West Coast and its predecessor Virgin Trains West Coast, present such an inherent performance risk that you are taking the unprecedented step of proposing to remove trains, which are already successfully operating, from the timetable.

These services provide a two-hourly service between Birmingham and Glasgow – the only regular through link between these two important cities and match the service provision between Birmingham and Edinburgh via the WCML.

Paths for the operation of these trains also formed part of the ESG timetable structure and, although at the time of implementation of this timetable AWC did not have the required resources to run these, it was a key strategic goal to reinstate these services as soon as practical. This was achieved in the May 2025 timetable.

Bringing these trains back into the timetable has had strong stakeholder support and has been warmly welcomed by all. It restores previously provided connectivity between Birmingham and Glasgow and also fills significant gaps in the service level during the afternoon at locations such as Oxenholme. The withdrawal of these services will, therefore, have a significant adverse stakeholder reaction.

AWC appreciated the collaborative work with Capacity Planning to successfully incorporate these trains into the timetable in May 2025 and, although paths in the southbound direction were not as desired - due to freight clashes, the strategy was to bring these trains into the timetable and look for opportunities for improve paths in future timetables. With the rejection of these trains all this hard work has potentially been undone.

At no point during May 2025 validation process, or during the application for access rights for these services, did Network Rail formally raise concerns about the performance of these trains. This quantum of trains is accommodated north of Preston successfully in other hours, why not in these four hours?

AWC also note First Rail Stirling's offered paths but observe that these have been accommodated in hours where already there are 2 AWC and 1 TPE service running north of Preston, so do not believe the introduction of these services should have any material bearing on the operation of these four trains north of Preston. Therefore, if Network Rail is satisfied up to 4 long distance passenger paths work in some hours, please could Network Rail confirm why, in other hours, they now only believe 2 trains are appropriate?

While on Saturdays AWC is content to remain running to Blackpool North in December 2025 as per the current timetable, it is proposing to re-bid these services to Glasgow in May 2026. However, on weekdays, AWC urge Network Rail to reconsider this decision.

At the very least we expect Network Rail to provide robust evidence as to why running these 4 trains will have a significant performance implication and, at the same time, present their plans for improving performance on the route and their plan for being in a position where it can support the operation of these services.

WCML South

AWC recognise performance on the WCML South is challenging and we are working collaboratively with Network Rail and other parties to find options to improve performance, in doing so exploring minor changes to the timetable structure by looking at alternative use of firebreaks and calling patterns and whether they may lead to a more robust solution.

Back in autumn 2024, AWC, after consultation with WMT, did propose a slightly revised use of the xx36 'firebreak' path, by proposing to depart the xx40 Euston – Birmingham - Scotland service and xx43 Euston – Liverpool service 2 minutes earlier from Euston (1 minute earlier if the xx36 path was required in that hour) to provide a more robust path for WMTs xx46 Euston – Crewe. Right time presentation at Stafford and Crewe for this service being critical to the successful wider operation on the WCML. This was disappointingly rejected by Network Rail with seemingly no level of consideration or debate and the only explanation given was not wanting to deviate from the ESG timetable structure. Given that Network Rail are now rejecting trains that formed part of the ESG timetable, due to performance concerns, we would request this option to be reconsidered to ensure all avenues are explored that could enable these services to operate.

It is worth noting that **all** the trains Network Rail have rejected were included in the ESG timetable and similar services had previously run pre COVID - forming part of AWCs original service offering. AWC are therefore unsure exactly what Network Rails concerns are about these specific services, noting that many are running away from peak periods. These rejections question the whole ESG process. The December 2022 timetable was approved by industry stakeholders via the TP HAZID process. What has changed to mean this timetable is no longer supported?

There has also been no consultation with AWC during the validation process to enable Network Rail to understand alternative resourcing plans for the rejected trains, as a number will simply have to run as an ECS in the same, or similar, path to ensure units can either form their next workings, or stabling balances into the following day. Whether these trains run in ECS or passenger service, many have critical turn arounds as they form passenger trains. ECS moves are not prioritised on the network, therefore running them in this way may actually worsen overall performance rather than improve it, which contradicts the argument used to reject the trains. As a good and efficient operator, running trains ECS where they are fully crewed is a waste of money and resource and contrary to condition j of the Decision Criteria. Consequently, it would be preferable for all parties in the industry to take the revenue on these trains and to continue running them as passenger services.

It is also not for Network Rail to determine how an operator wishes to use its access rights and to pick specific trains to reject without previously consulting an operator. On a Sunday, for instance, if Network Rail had previously consulted AWC we would have informed Network Rail that we would wish to run the 16.08 Liverpool – Euston on a Sunday and potentially not run the 18.08 Liverpool – Euston, yet Network Rail have assumed it was the 16.08 that shouldn't run. We would be interested in how you came to this decision.

Yours sincerely,

Andy Smith
Senior Permanent Planning Manager
Avanti West Coast

Appendix 4 - Request to NR as to whether they will formally respond to our offer response letter and response back from Network Rail saying they would not change their position

From: Andrew James Smith
Sent: 11 July 2025 11:51
To: Emma Goodman
Cc: Andrew Bray; Robert Taylor
Subject: Dec 25 Offer Response

Hi Em,

Just a quick one, I was wondering whether you, as in NR, are going to respond back formally to our offer response in effect saying that you are not prepared to reconsider your decision to reject those trains on performance grounds, or do we take what was said on Wednesday as NRs 'official response'? We do need a steer as to whether NR will be in a position to offer us the 1607 from Liverpool on a Sunday, rather than the 1807, which is something, with hindsight, should have talked about on Wednesday too.

Andy

Response from NR

From: Emma Goodman
Sent: 11 July 2025 13:24
To: Andrew James Smith
Cc: Andrew Bray Robert Taylor
Subject: RE: Dec 25 Offer Response

OFFICIAL

Dear Andy,

Thanks for your email.

Just to confirm, Julian has actioned this and reinstated the 16:07 SU path (1A53) and placed the rejection on the 18:07 (1A65).

With regard to the original offer response, Network Rail's position remains that we are not prepared to reconsider the rejected services due to concerns around fast line capacity, power supply limitations, and overall performance north of Preston.

That said, we understand there is a further discussion this afternoon around the Power Supply services. Please could you advise on the next steps arising from that call? We are ready to action your offer response (today) – just let us know your position as soon as possible please.

Many thanks
Em

Appendix 5 - E-mail from Andy Smith to Andy Bray regarding rejection of proposal to improve performance on WCML South – no response received back. Also highlights collaborative approach between AWC and NR during May 2025 validation

From: Andrew James Smith
Sent: 18 October 2024 11:25
To: Andrew Bray
Cc: Emma Goodman; Robert Taylor; Ben Kelly; Fiona Rendell
Subject: May 2025 Validation Progress - Glasgow's and Concerns with ESG TT

Hi Andy

It looks like Fiona had a very productive day in MK yesterday running through various May 25 validation issues which is good and the number of issues in our issues log has declined somewhat thanks to the work being done! On the plus side, we are very grateful for the work you have done with DB Cargo, as, with removing 1M23 and 1S07 Mail Trains from the May 25 timetable, we appear to now have paths for all 4 Glasgow diverts SX. Although the southbound paths are well off standard pattern and have a notable increase in journey times and it is something we would look to continue to seek to improve in future timetables, assuming paths are formally offered and we get access right etc.

I also understand that our idea to retime the xx40 to xx38 and xx43 to xx41 departures from Euston to improve TT robustness has been rejected because of it clashes with the ‘spare’ xx36 path which in theory can be used by OA operators.

I thought it may be useful to quickly explain the logic of what we were trying to achieve with this idea. It was purely to try and reduce performance risk and help address ours and WMTs concerns about the ESG TT and how robust it would be in practice. While of course we also hope the MU speeds are finally commissioned on the WCML south for the 80x fleet before the start of the May 25 TT, it was also a useful mitigation for that on a ‘temporary’ basis, should it not be commissioned for the May 25 TT.

Both AWC and WMT are somewhat concerned about how the full ESG TT will work in practise, with WMT station dwells being reduced to the minimum on the Trent Valley to accommodate our aspirations for the second Euston - Liverpools and their xx54 arrival at Crewe with this service being critical as it’s the start of a 3-4 train sequence of trains on minimum margins at Crewe. An on-time arrival into Crewe for their Trent Valey service is therefore critical for wider WCML performance.

WMT are already concerned about the current performance of the xx46 Euston – Crewe, hence the extended dwell at Nuneaton. From discussion with them, in part I believe this is due to their service being routed into platform 5 at MK and I suspect in part because they are reliant on the xx40 and xx43 trains being on time and their service being at the back of a flight – not helped by both the xx43 and xx46 departures calling at MK.

Our concern with the ESG timetable, therefore, is the start of that Crewe ripple effect is now in effect with the xx40 departure from Euston – as there is no ‘firebreak’ / recovery in any schedules beyond the normal engineering time.

What we were hoping to do with the xx38 and xx41 departures from Euston is to increase the gap between ourselves and WMT by at least one minute and still provide a slightly extended dwell at Nuneaton for WMT. We then suggested they departed at xx45 vice xx46 and then have a 2 minute dwell at Nuneaton. It would also mean that they could use platform 6 at MK in most hours, further reducing risk of time loss. The side benefit of this was the xx41 (previous xx43) Liverpool will be increasingly formed of a class 807 in May 25 and therefore this also links to lack of MU speeds by naturally adding 2 minutes performance time between MK and Stafford if these speed upgrades are not commissioned by the May 25 TT.

We obviously totally appreciate that in effect this makes the xx36 departure invalid and may look like a ‘sneaky trick’ by AWC to try and block this path. This is not the case and, in our minds, if any operator wanted to use that xx36 path (subject to rights etc), then our xx38 and xx41 departures could be pushed back to xx39 and xx42 still maintaining the WMTs departure at xx45, but naturally with an increased performance risk in that hour.

I understand the direction of travel is now to stick with the ESG timetable, which I suspect will raise similar concerns with WMT to the above. If we are going down that road, the only thing I can think we can do, to ease a bit of pressure on Crewe, is to put our North Wales / Chester trains into platform 6 vice 11, so that if the WMT service is late arriving into Crewe then at least our xx55 departure should be able to run straight onto the Fast Lines and become less dependent on the WMT service arriving (especially if that is routed onto the Slows at Basford Hall if running late).

I hope the above though explains the logic behind our thoughts and what we were hoping to achieve by proposing this change. If you have any questions on the above, please do let me know!

Regards

Andy

Appendix 6 – Internal AWC path / capacity analysis for 9M53, 9M84, 9S47 and 9S65

9M53 09.39 Glasgow Central – Euston (considered between Glasgow and Preston)

While this service was an assumed QJ path in the Dec 22 ESG TT, the actual path being used in May 25 is quite different, due to various freight services bidding into the capacity released by the temporary withdrawal of this service in 2020.

The service departs at 0939, 3 minutes behind the 0936 Glasgow – Euston. AWC are putting suitable mitigations in place to assist with customer flow with these two similar departures. The timing of this service is to ensure it runs ahead of 6M38 0949 Ravenstruther – Carlisle Yard at Carstairs

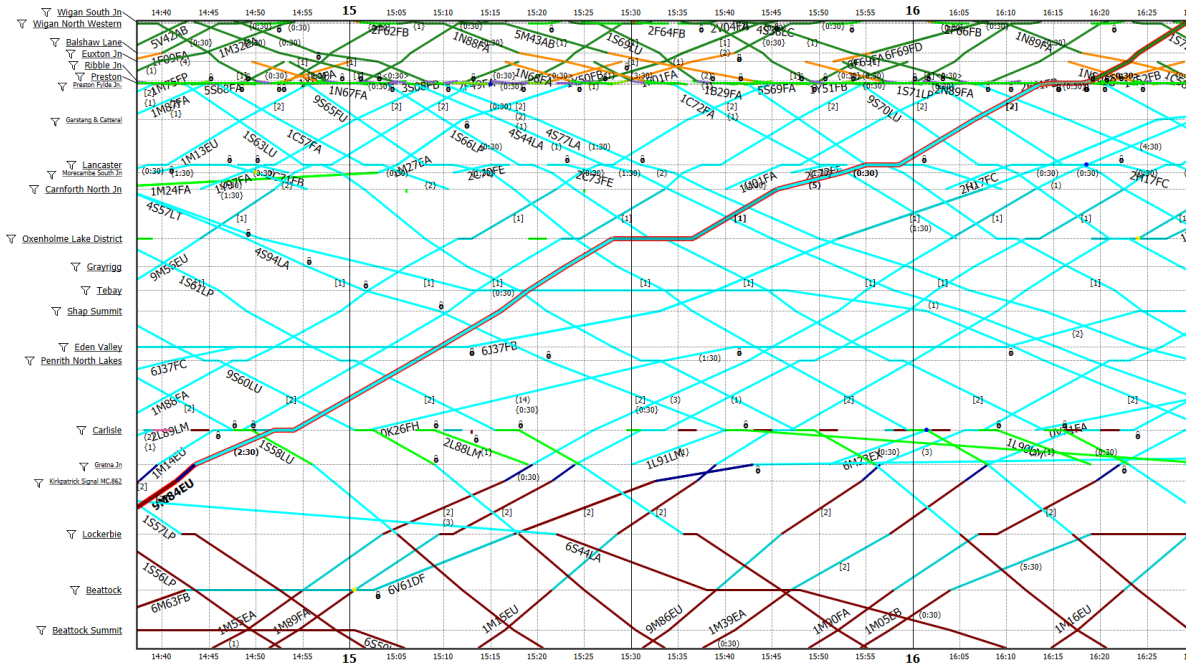
At Carlisle there is an extended dwell of 5 minutes and then with 7.5 minutes of pathing time between Carlisle and Preston and a 5-minute dwell at Preston, all will assist in helping ensure a right time departure from Preston, where it runs in the same path as the former 9A53 1151 Blackpool North – Euston, an ESG train which has been running since December 2022.

9M84 13.36 Glasgow Central – Euston (considered between Glasgow and Preston)

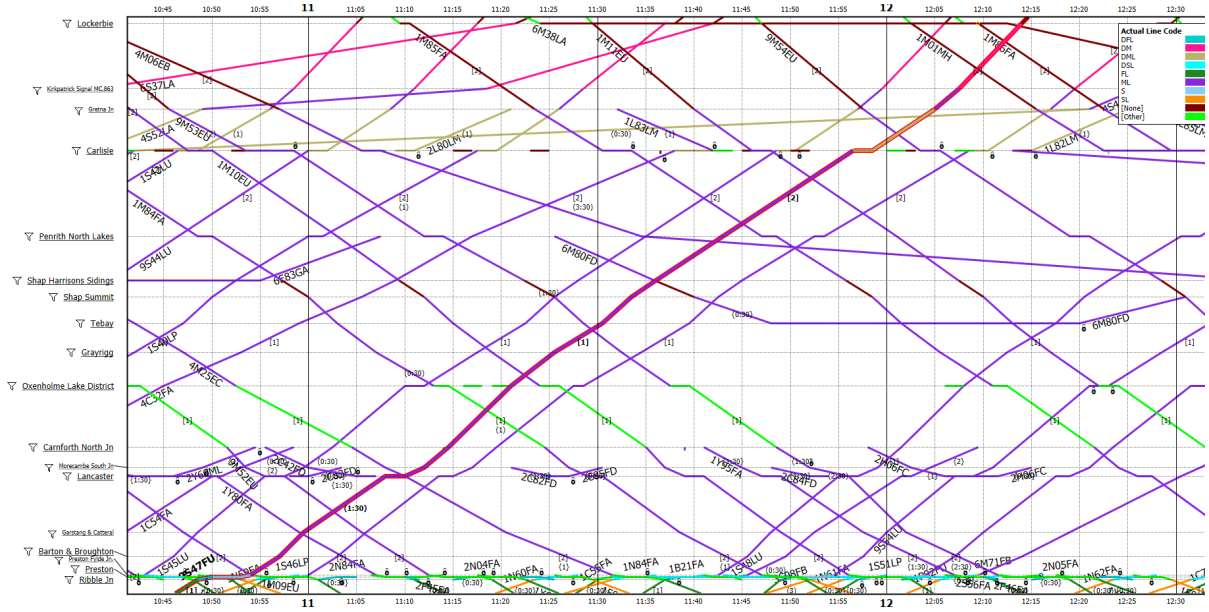
While this service was an assumed QJ path in the Dec 22 path, the actual path being used in May 25 is quite different, due to freight bidding into the capacity released by the temporary withdraw of this service since 2022

The service departs at 1336, 3 minutes behind the 1333 Glasgow – Euston. Similar to 9M53, AWC are putting suitable mitigations in place to assist with customer flow with these two similar departures. Flighting these services close together to Carlisle helps with maximize capacity for freight on this section.

9M84, however, needs to depart Carlisle earlier than the optimal departure to ensure a path for 6J37 1356 Carlisle Yard – Chirk freight service. To then link this departure time from Carlisle with its standard departure time at Preston 9M84 has an extended dwell at Oxenholme (which helps maximises connectional opportunities to the Windermere branch) – however there is no risk this will delay following trains as can be seen from the graph below. Pathing time and a slightly extended dwell at Lancaster again will help ensure a high chance of a right time departure from Preston, where it would run in the same path as the former 9A84 1551 Blackpool North – Euston service, an ESG train which has been running since December 2022.



9S47 07.16 London Euston - Glasgow Central (considered between Preston and Glasgow)
This path between Euston and Preston is well established, having been used by 9P47 07.16 Euston-Blackpool since the Dec 22 ESG. Beyond Preston, this service runs in its assumed Dec 22 ESG path (where it was considered as a QJ path) and departs Preston 6 minutes in front of 1S46 1004 Manchester Airport - Edinburgh.
After Lancaster, 9S47 only calls at Carlisle, so by Carlisle the gap between the two service is around 14 minutes. The ESG path included a call at Penrith, omitting this call helps to mitigate any performance risk to the following TPE service.
Arrival into Glasgow Central is at 1315, which does only give a 21-minute turnround to form 9M84 (the minimum turnround in the TPRs is 20 minutes at Glasgow Central). However, to minimise the risk of this short turnround AWC chose not to call 9S47 at Motherwell and in its place, there is 6 minutes pathing time between Carstairs and Glasgow Central and 1 minute performance time, which will minimise any risk of late arrival into Glasgow and subsequent late departure for 9M84.



9S65 11.40 London Euston - Glasgow Central (considered between Preston and Glasgow)
This path between Euston and Preston is well established, having been used by 9P65 11.40 Euston-Blackpool since the Dec 22 ESG. Beyond Preston, the path of 9S65 follows the same basic pattern as 9S47, with 8 ½ minutes gap between this departing Preston and 1S66 1404 Manchester Airport – Edinburgh, but with 9S65 only calling at Lancaster the gap between the two services is increased to 14 minutes at Carlisle.
9S65 does call at Motherwell, as it has no working back south and runs onto Polmadie Depot after its arrival into Glasgow Central. However, it does still have 3 ½ minutes pathing time and 1 minute performance time approaching Glasgow Central to help with right time arrivals into Glasgow Central.

Appendix 7 – Extract from NR offer letter for Dec 25 TT referring to non accommodation on the WCML south (NB AWC are not disputing 1A53 and 1F37, nor Saturday trains as these are not currently in operation)

Non-accommodation due to Capacity and Performance Constraints West Coast Main Line (South)

Network Rail believes adding more fast line services on the WCML South would worsen performance, as the current quantum of traffic already cause significant challenges and underperformance.

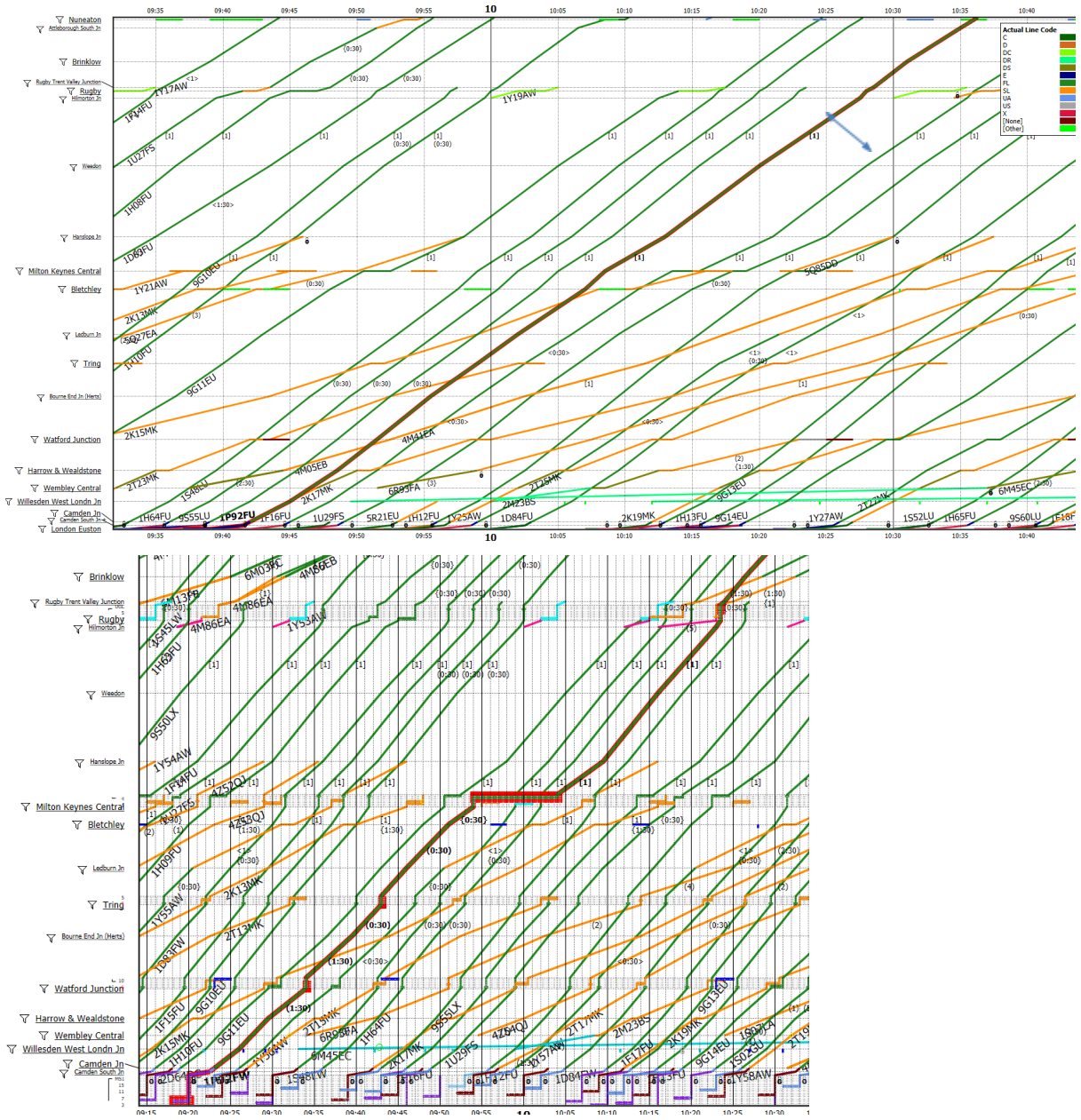
Due to the likely impact of adding more services on the WCML South Fast Lines, Network Rail does not currently support any additional train slots. Network Rail believes that, for the benefit of passengers and freight, overall performance on WCML South must first improve and remain consistently high before considering any new services without existing rights.

- 1A92EU SX 12:52 Blackpool North – London Euston
- 1A78EU SX 19:29 Chester – London Euston
- 1P92FU SX 9:39 London Euston – Blackpool North
- 1A92EV SO 12:52 Blackpool North – London Euston
- 1P92FV SO 9:36 London Euston – Blackpool North
- 1A53EW Su 16:08 Liverpool Lime Street – London Euston
- 1F37FW Su 20:06 London Euston - Liverpool Lime Street
- 1A70EQ Su 17:53 Holyhead – London Euston

Appendix 8 – Internal AWC path / capacity analysis for 1P92, 1A92, 1A78 and 1A70

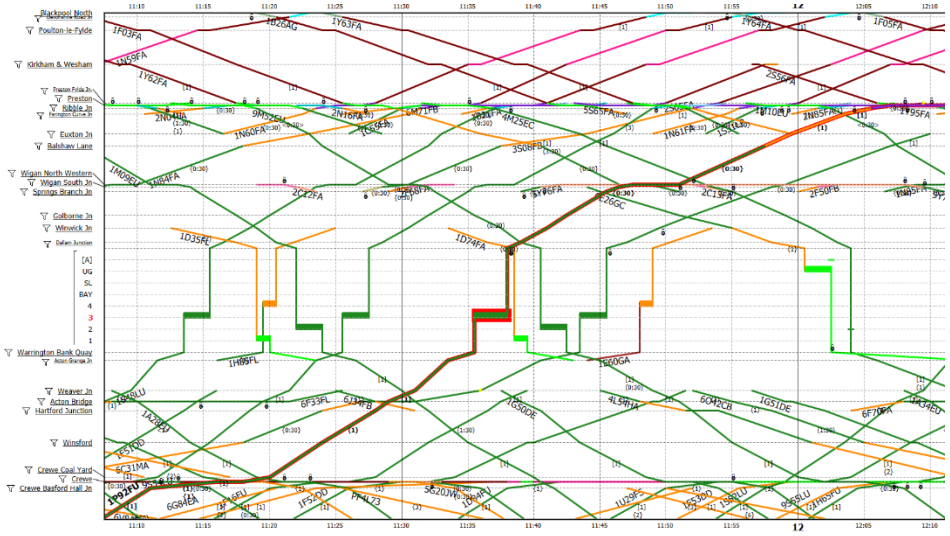
1P92 0939 London Euston - Blackpool North

This path, although assumed to operate in the Dec 22 ESG has been timed into a different path between Euston and Rugby. In the ESG TT it was assumed to leave Euston at 0920 and wait at Milton Keynes. However, AWC made the decision that, to improve journey times from London to the North-west, it would be a more commercially attractive solution to depart Euston at 0939. This means the EBS service needs to run at 0936 instead if its normal xx40 path and 1P92 does use the natural firebreak path in this hour (or potential Open Access path as identified in the ESG) between Euston and MK. But, even with this service, there is still a 1 minute 'firebreak' out of Euston before the xx43 Liverpool departs. This Liverpool service also calls at MK, so by Rugby there is significant gap between the two services and the firebreak is restored.



It is perhaps worth noting though that the ESG solution (as shown in the graph above) is arguably a worse solution as it uses the firebreak path north of MK and has the train held in platform 5 at MK for around 10 minutes, noting platform 5 is useful to regulate trains in both the up and down direction if needed

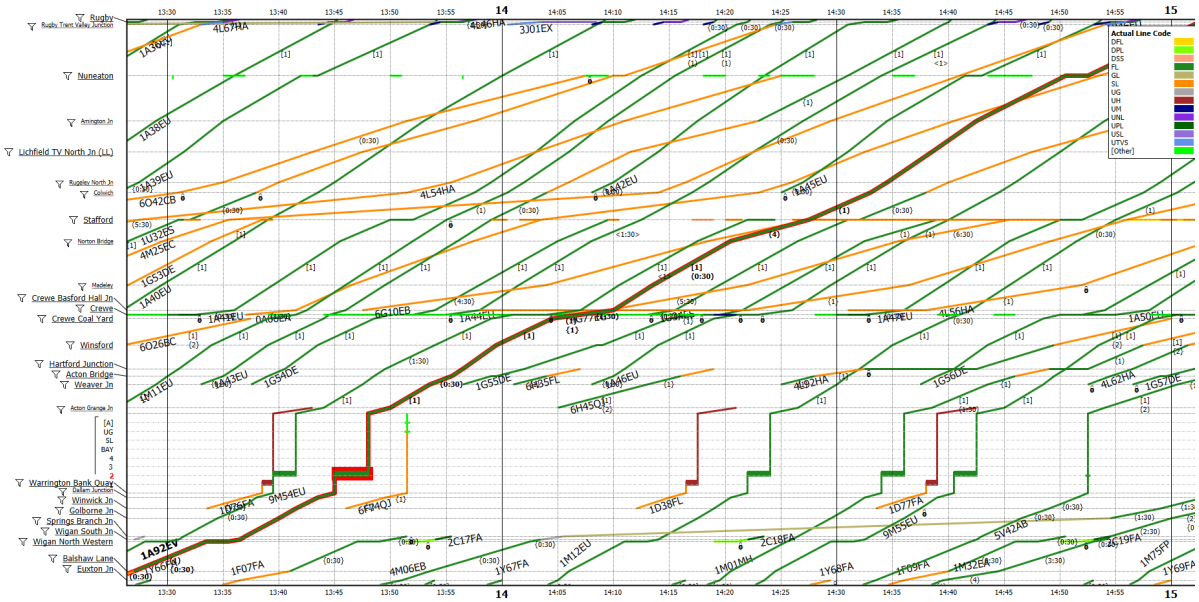
North of Rugby the path is as per the ESG timetable and is well spaced with other traffic, with no conflicting traffic at Winwick, Golborne or Euxton Junctions to generate any performance risk. This service is planned to run on the Slow Lines from Balshaw Lane into Preston, again minimising conflicting moves in the Preston station throat.



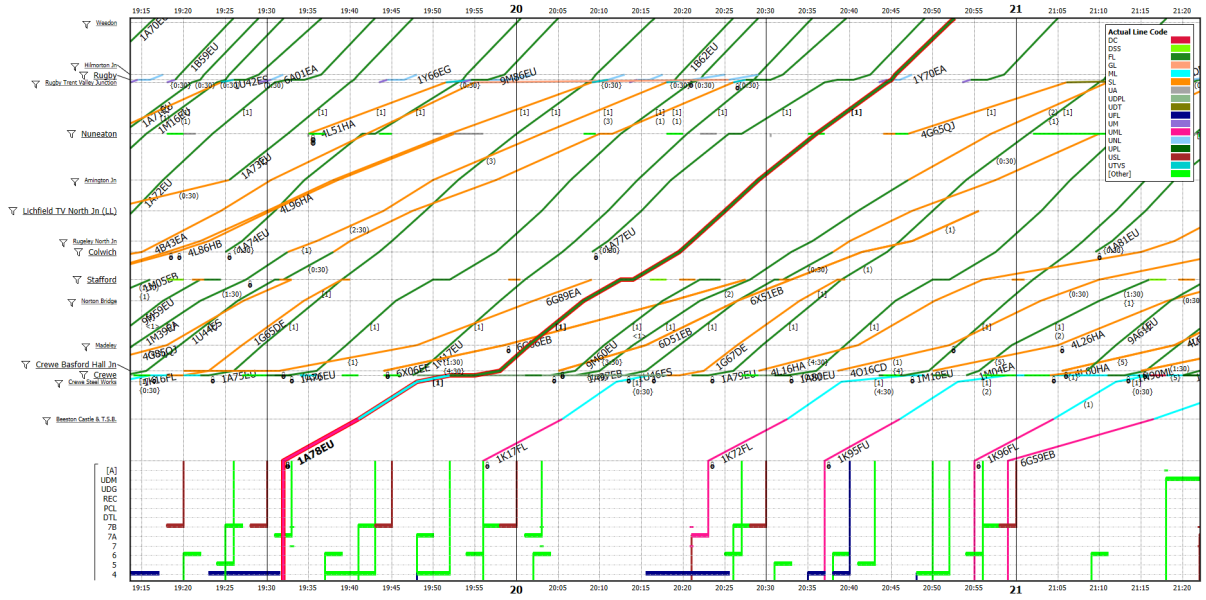
1A92 1252 London Euston - Blackpool North

Similar to 1P92 this path is as per that assumed in the Dec 22 ESG, although timed as a 80x rather than a class 390. It uses the slow lines at Preston, minimising conflicts with other traffic and crossing onto the fasts at Balshaw Lane in a robust 9-minute gap in down traffic (a 6-minute margin is required as a minimum).

There is a 3-minute dwell at Warrington BQ, over the minimum requirement 120 seconds which will help with right time presentation at Weaver Jn. There is also a significant amount of pathing time in this service south of Crewe, to ensure it is timetabled into the spare path south of Rugby, again significantly improving its chances of right time presentation at Rugby and into Euston.



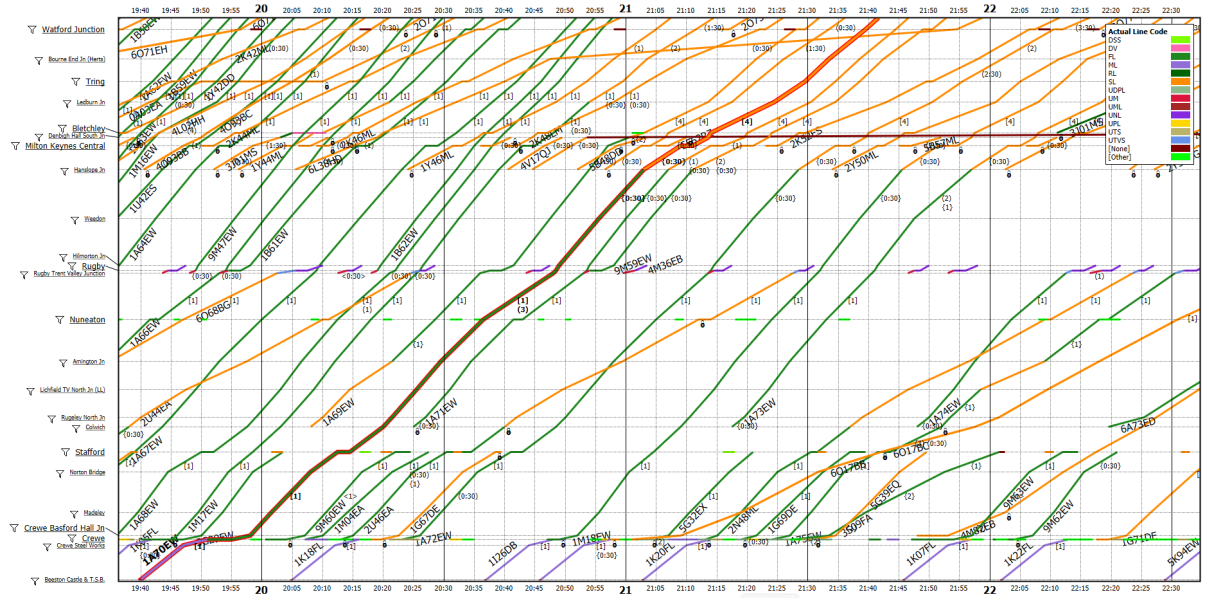
1A78 1932 Chester – London Euston



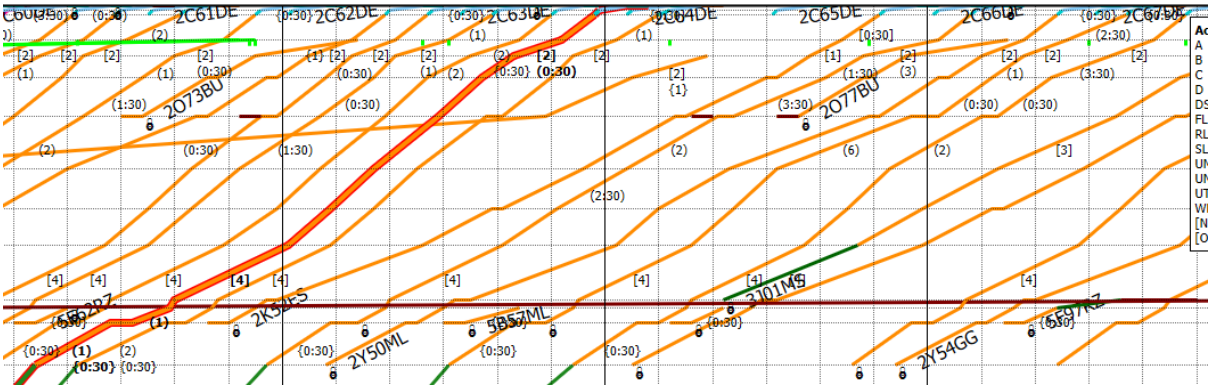
This service runs in the standard hourly path for Chester – London Euston between Chester and Milton Keynes. It runs at a time of day when other service groups are naturally reducing their frequency, so there are less trains overall on the WCML south. This does also mean this service calls at Milton Keynes, unlike other trains in this service group. However, with less trains in the WCML south, there are no trains interacting with this service on ‘minimum margins’. The closest being 1Y68 1936 Birmingham NS – London Euston, which crosses onto the fast lines at Ledburn Junction 6 minutes behind it.

1A70 1753 Holyhead – London Euston

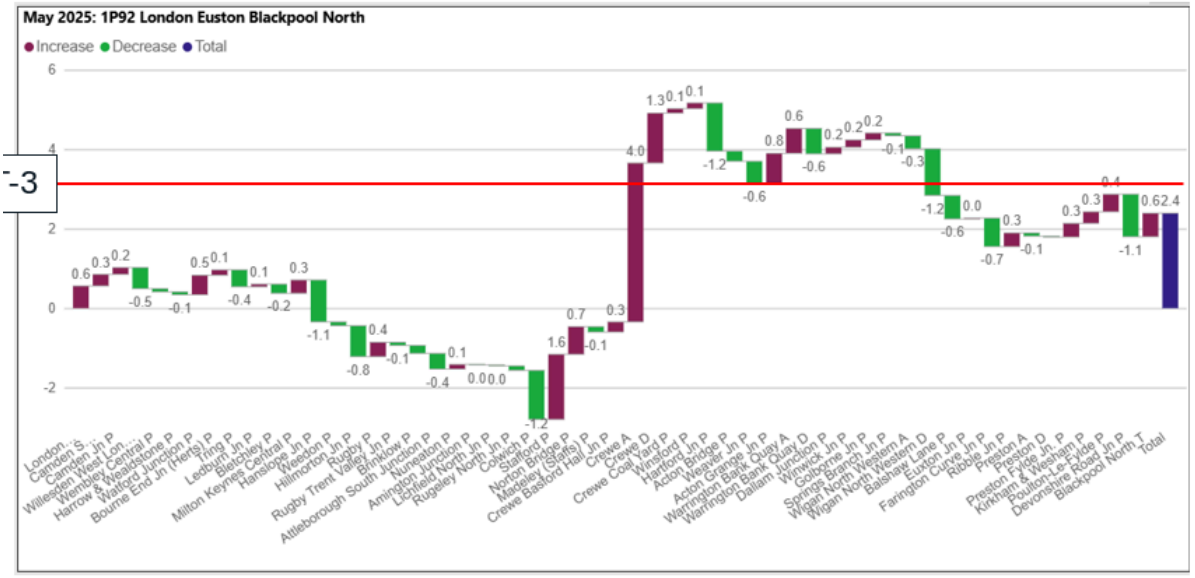
This service is an extension of the 1753 Holyhead- Crewe, and runs in the standard path from Crewe to Rugby. At Hanslope Junction is planned to divert onto the slow lines, as part of the two track railway plan as published in the EAS. It has no services on minimum margin behind it throughout its journey, the closest being 1A71 1935 Manchester Picc – Euston, which is 5 minutes behind 1A70



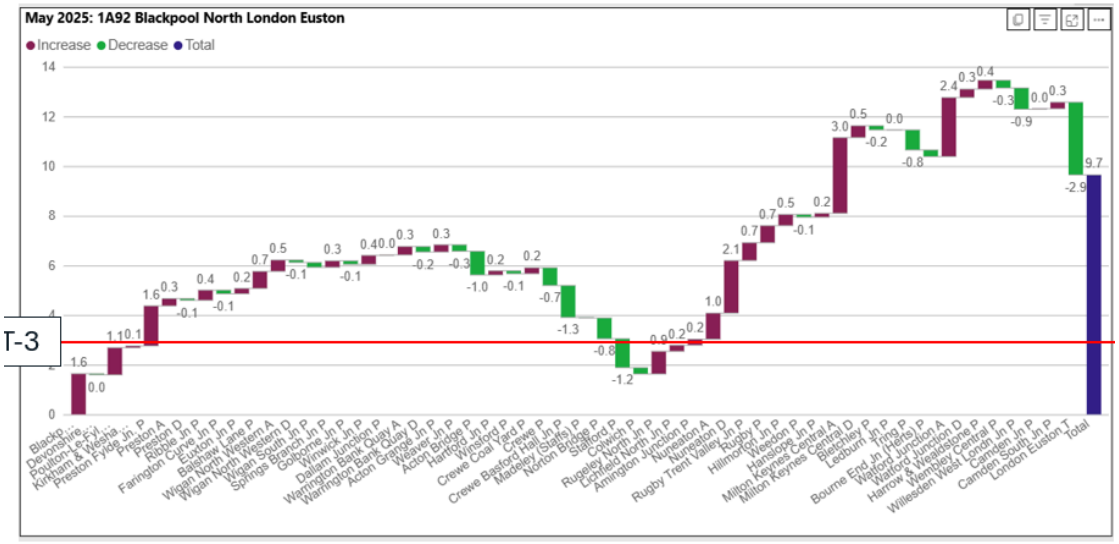
If this didn’t run as a passenger service it would need to run as an ECS from Crewe to Wembley via Euston, with an extended dwell in Crewe station while the set is brought out of passenger service.
This would require a different path for this movement approx. 15-20 minutes later from Crewe, during which there would be interactions with stopping services and other AWC services on the two track railway. This would requiring a further increase in moves on minimum margins that already exist in this part of the hour and, arguably, lead to a larger performance risk than if 1A70 ran as a passenger services throughout , both in terms of the two track railway and occupying platforms at Crewe for longer.



Appendix 9 – Performance Analysis of 1A92, 1P92, 9M53, 9M84, 9S47 and 9S47
The following waterfall graphs show general variance in running during the May 2025 timetable. All dates are included, so some services are skewed by major incidents. However, they give a guide as to general variance in the running of schedules.
Brown shows an increase in delay at that point green shows a decrease.



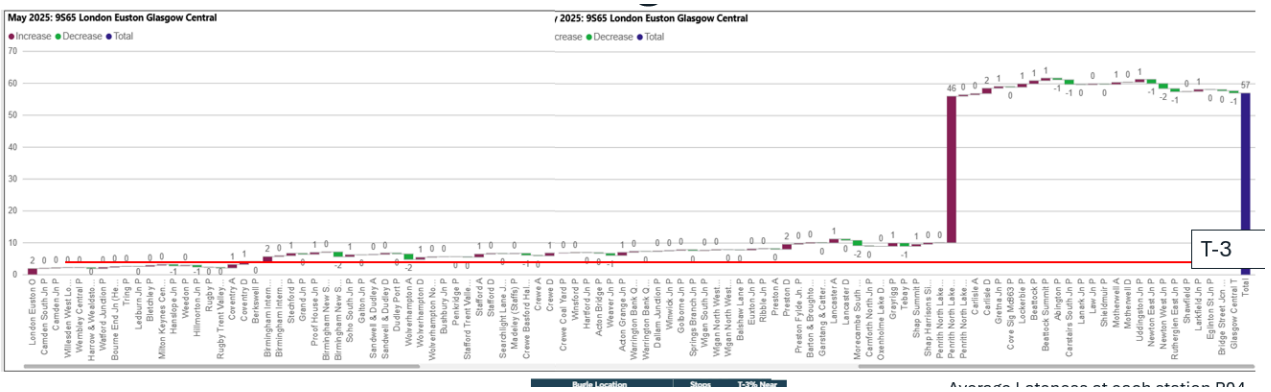
1P92 performs well on the WCML (south) the section NR are concerned about and is not causing any noticeable reactionary delay to other services. This is assisted as its currently diagrammed as a class 390 but timed as an 80x. The service is regularly running on time or early to Crewe. At Crewe it is often held outside the station waiting a platform, but then recovers time by Preston.



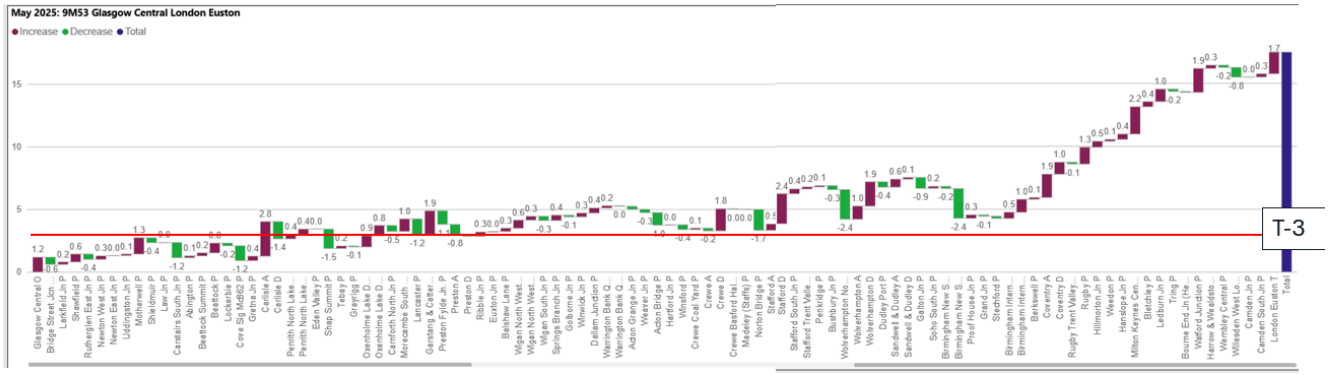
1A92 1252 Blackpool – Euston performs well until Rugby, when it has a lot of variable running on the WCML. It is suggested this maybe calling pattern related as it calls at MK, behind ither services with similar calling patterns. AWC would review this calling pattern in Dec 25 if the train was offered

9S47 0716 Euston – Glasgow Cen performs well as far as Beattock, where the variance in running starts. This has been due to some infrastructure and network disruption related issues, but variance then starts to recover on the approach to Glasgow Central

9S65 1140 Euston – Glasgow Central shows fairly minimal variability in running until Penrith, when it is heavily skewed by delay caused by OLE damage

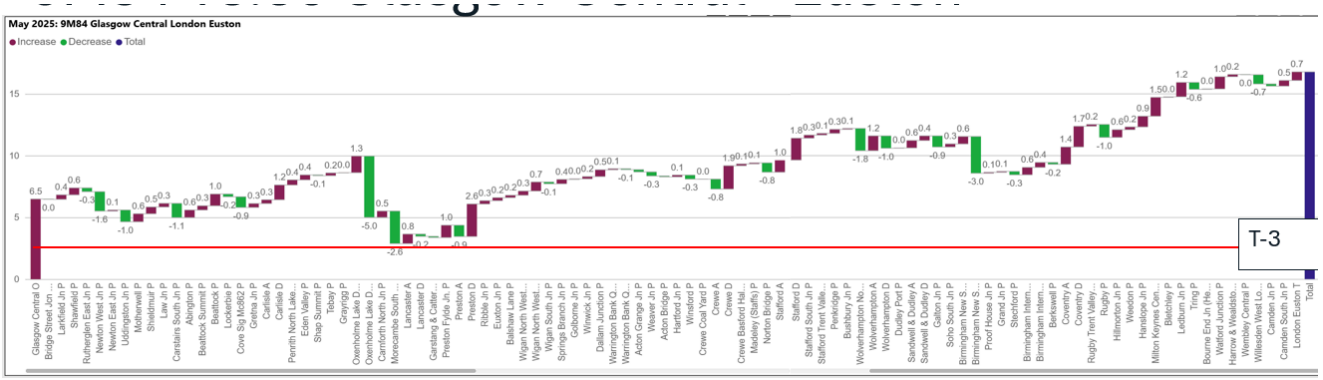


9M53 0939 Glasgow Cen – Euston is a good performer as far as Preston, with regular on time arrivals and departures and performance issues with this service only start south of Preston and in particularly on the WCML south of Rugby. Note NR have offered this train to start from Blackpool so we would expect to see the same pattern.



9M84 1339 Glasgow Central – Euston does show a fairly high level of variance in running from Glasgow to Oxenholme, but thanks to an extended dwell at Oxenholme and pathing

time in the Lancaster area this is recovered to ensure a high level of right time arrivals / departures from Preston. Similar to 9M53 performance issues are notable further south, but NR have offered this train to start from Blackpool so we would expect to see the same pattern.



Appendix 10 - Extract from AWC's ANTC for Dec 25 submitted on 19th November 2024

In accordance with Part D of the Network Code, section 2.3, please find below our 'Advanced Notification of Timetable Change' in respect of the December 2025 timetable change. A summary of the new and changed services that Avanti propose to operate during the December 2025 timetable are detailed in the attached document. These services are listed in comparison to the May 2025 timetable bid, submitted on 9th August 2024.

It is AWCs aspiration to operate two Euston – Liverpool's an hour throughout the day on all days of the week, together with a full hourly service in the Euston – Chester / North Wales route from the December 2025 timetable, subject to the results of power supply modelling currently being undertaken by Network Rail.

From the December 2025 timetable therefore AWC expect to be running the full '10tph' timetable out of Euston, with the exception of a small number of Birmingham – Euston services in the late evening, which AWC expect to start operation in May 2026.

Appendix 11- Extract from AWC Dec 2025 Timetable Strategy Commentary, submitted as part of the Dec 2025 formal bid

AWC recognise the potential power supply issues at Bushey and north of Crewe, in connection with these additional services, and wish to work closely with Network Rail to better understand the power supply situation and explore potential solutions to achieve this service uplift during the validation process.

Appendix 12 - Letter sent from NR to AWC on 15th May informing AWC of the non accommodation for the four Liverpool services due to power supply issues

System Operator

NetworkRail

Avanti West Coast
Andy Smith
Victoria Square House
Victoria Square
Birmingham
B2 4DN

Network Rail
Emma Goodman
Quadrant:MK
Elder Gate
Milton Keynes
MK9 1EN

15th May 2025

Subject: Notification of non-accommodation of train slot in the New Working Timetable (December 2025)

Schedules: 1F15 SX 09.07 Euston – Liverpool, 1F21 SX 12.07 Euston – Liverpool, 1F25 SX 14.07 Euston – Liverpool, 1A55 SX 15.08 Liverpool - Euston

Dear Andy,

In accordance with Network Code Condition D2.4.6, we are writing to formally notify you that your Access Proposal for the four Train Slots, as submitted for inclusion in the December 2025 New Working Timetable, cannot be accommodated. The decision is based on the outcomes of the Power Supply Assessment undertaken through the T-CRAG process, which has identified these services as posing a high risk to the safe carriage of passengers and the reliable operation of the railway.

Network Rail has undertaken an extensive power supply modelling exercise in 2024/25 to assess the capacity and resilience of the traction power system within the North West & Central Region. The traction power system is already known to be operating at or near capacity in several key areas, including Crewe, Bushey and Willenhall.

Network Rail will continue to carefully manage power draw to ensure the safe, resilient, and reliable operation of the railway, particularly on the West Coast Main Line where sections of the power system are under significant stress.

The power supply assessment focused on identifying Power Loading Peaks, these are periods where predicted demand would exceed safe operating limits or contract thresholds.

Two key scenarios were modelled:

1. Full Timetable Scenario: All proposed and aspirational services (including Open Access and Freight proposals).
2. Rationalised Timetable Scenario: Only services with confirmed (Firm and Contingent) access rights for December 2025.

Both scenarios were assessed under:

- Maximum train formations.
- Realistic daily train formations (reflecting May 2025 diagrams).

This comprehensive approach allowed Network Rail to understand both the worst-case and more typical operational conditions. However, even under the Rationalised timetable scenario, the modelling has identified significant power loading peaks within the Crewe–Weaver feeder station area, including the time periods when the four proposed services would operate. Adding these services would overload the power system, especially in the Crewe – Weaver area, creating a serious safety risk if part of the system fails, including the risk of equipment overheating and fire. Even in normal running, trains would experience slower acceleration and delays, increasing the chance of disruption and damage to the power system over time.

Given the high risk to safety, system integrity, and performance as evidenced by the outcomes of the power supply modelling, Network Rail cannot accommodate the requested Train Slots for the December 2025 New Working Timetable. These services would contribute to power demand during known peak risk periods and currently hold contingent rights only.

We recognise this is a disappointing outcome for you and the passengers, and we remain committed to working with you to explore any future mitigations or alternative options as the power system capability is reviewed and developed.

Network Rail will also require a new set of rolling stock diagrams or confirmation of the alterations Avanti West Coast intend to make to the rolling stock diagrams submitted at D-40.

Yours Sincerely,

Emma Goodman
Operational Planning Manager - NWC
On Behalf of Network Rail

Appendix 13 – Minutes of meeting held with Power Supply Modellers on 11th June

NR / AWC Power Supply Modelling meeting

Baskerville House (Rm 2.3), 11th June 2025

Present

Network Rail: James Carter (JC), Paul Harris (PH), Jade Perry (JP), Chris Winfield (CW), Warren Blewitt (WB), Felix Murphy (FM)
Avanti: Rob Taylor (RT), Andy Smith (AS), Ben Kelly (BK), Sam Storey (SS)

Purpose of meeting

JC explained that the purpose of the meeting was to go through the details of power supply modelling undertaken for December 2025, explaining the methodology behind the modelling and the rationale as to why specific Avanti services have been rejected for December 2025. JC acknowledged that the modelling undertaken by Network Rail had taken far longer than expected, but this was due to the initial complexity and number of modelling iterations undertaken.
RT advised that from an Avanti perspective they were really keen to get the aforementioned info but also to try and think of solutions and work in good faith to explore alternatives. To summarise, Avanti had three broad questions to present:

1. Is there a way AWC can run these trains in Dec 25?
2. Is there a better solution in future timetables?
3. A view of the longer term lookahead; ie. What can we do strategically beyond Dec 2025? Is there infrastructure required, business cases required etc. What are the timescales?

Process review

FM explained the modelling process undertaken by NR – including the use of the Vison Oslo model for which we plug in the timetable info and then test both normal feeding and N-1. The modelling process relies on (and is very sensitive to) a number of timetable assumptions including routes, stopping patterns, timings, fleet assumptions etc. In terms of outputs we test Voltage, Current, NPS, OLE current and voltage profile and pantograph voltage/ current. We assess against asset ratings and standards - for all services and NG/NR. We then identify the problem areas and can pinpoint all the trains in the problem area at the critical times.

The modelling outputs initially highlighted problems at a number of NW&C locations:

- Heald Green (NR has delivered some changes as to how this area is fed enhance capacity)
- Kidsgrove (NR has engaged with National Grid to check assumptions)
- Washwood Heath (a particular issue arising in the evening peak)
- Willenhall (already a problem during diversions, issues arising in AM peak)
- Crewe - Weaver Jn (key problem – and primary focus of today's meeting)

In terms of the problematic Crewe-Weaver area, FM explained that the assets in this location consisted of 1950s equipment which are working far beyond their asset life and never designed for today's loads. There are no spares and a low ability to make spares either.

FM explained that we had tested what happens in the event of NR losing a circuit breaker as a scenario, this is a realistic N-1 scenario (ie. where a single power supply is lost from service and neighbouring supply points cover the power requirements). RT asked how often we ended up in an

N-1 situation? WB said that it was frequent, but the impact depended on the specific piece of infrastructure that had failed. In Dec 2022 - we saw 1 break of the 300AMP asset rating and now we are getting 10-11 breaches a day and this is led by service growth.
FM explained the difference between Voltage and Current issues. Voltage is the power quality and needs to be as high as possible and if that dips it leads to low acceleration. Current looks at a 10min average - thermal rating are the assets going to set on fire / degrade this is set in the standards for asset assessment.
The meeting then turned to the technical questions AWC had submitted in advance (covered below). JC asked if there were any further questions on the power modelling before we moved on to timetable issues (none raised).

Timetable assumptions and impact

JC explained the long process it has taken to arrive at conclusions for the Dec 2025 offer. This has been complicated by the ORR's 'interacting aspirations' workstream, which involved a number of applications for new services (both passenger and freight) often without even indicative paths to support, so it had taken a significant amount of time in 2024 to develop a draft timetable to power model. Initial modelling was undertaken based on a 'Full' timetable scenario, which included all services (both those with existing rights and also those without rights that had been declared as part of the ORR's workstream. The conclusions were produced in November 2024 and showed numerous power supply problems across the NW&C Region, and across the day.

NR then undertook further modelling involving a 'Rationalised' timetable scenario, firstly having removed all services with no access rights at all, and with the remaining services assumed to be operating at maximum feasible length. This model also included freight services which have access rights and we have been specifically advised by the relevant FOC that they intend to convert to electric traction within the next 2 years. The reason that these services are currently in the model as electric traction is because it currently represents an uncontrolled risk to NR (although NR are working with the FOCs to try and manage the new fleet deployment risks). However this model still showed the power supply issues occurring at Crewe-Weaver, so an additional modelling test was undertaken with exactly the same services but with rolling stock diagram assumptions based on the May 2025 timetable (PH raised point that 3 x WMT B'ham-Liv services had been contractually limited in length as part the process for negotiating new rights, which would be explored each time an operator TAC came up for renewal). Based on this last scenario, NR had got to a conclusion whereby most of the second Liverpool services could be accommodated but would need to be restricted in a limited number of hours.

The detail then turned to the observed power supply peaks (known as 'Power Loading Peaks') and what can be done to solve the issues. AS mentioned that the irregularity of the peaks was confusing given that most of the timetable was fairly regular, so what was causing it? JC confirmed that two early morning observed peaks at 03:50 and 08:20 are largely being driven by electric freight (DRS/GBRF). Smaller peaks are then observed at 10:35 - 10:50, 14:10 and 15:20/15:40 which would need to be managed. Given that as part of the process we had prioritised services based on access rights, and that these times correlate with the planned operation of 4 additional Euston-Liverpool services for which Avanti held Contingent rights only, then these specific services had been rejected, however JC confirmed that there had been a clear steer from the NW&C Regional Managing Director to try and run these services if possible - which led to the diesel north of Crewe suggestion.

Avanti proposal (Dec '25)

RT outlined AWC's counter proposal for Dec 2025, which they will seek to propose to Network Rail as part of the offer response. The challenge with running diesel north of Crewe is firstly that the xx:08/xx.07 Liv-Eus/Eus-Liv services are timed in Cl 390 paths, for which the Cl 807s cannot meet

the timings (a Cl 807 path vs Cl 390 is about 6 mins slower, even more so with a diesel Cl 805). Also only one Liverpool service per hour (the xx.43 path) calls at Liverpool South Parkway, which needs to be a Cl 807 due to platform length issues. Additionally there is a further issue as the xx.08/xx.07 paths don't generally call at Crewe, so without adjusting the stopping patterns they would need to run diesel from Lichfield to Runcorn.
There are 3 trains which could be swapped onto a Diesel 8Cl 05 (xx.43 paths) between Runcorn and Crewe subject to AWC not calling at Liverpool South Parkway:

- 1F14 08:43 EUS-LIV
- 1F20 11:43 EUS-LIV
- 1A52 14:43 LIV-EUS.

Given that two rejected services are operating in the same problem hour, RT asked whether the 15:20/15:40 problem could be solved by running just one of the two as 805 Diesel?

RT confirmed that AWC will send the Cl 805 alterations across as offer response to capacity planning next week. If there is a way to solve this or come up with any other solutions, this would be appreciated.

Longer-term solutions

JP talked through the enhancement plans for Crewe-Weaver. The main issue relates to K11 switchgear which needs replacing. CP7 funding is available, and we are looking at late 2027 / 28 for potential renewal works, but noting that a simple like-for-like renewal doesn't necessarily add any additional capacity. Plan is to spend money between Weaver and Winsford which will allow NR to resolve immediate capacity issues but still leaves issues between Winsford and Crewe. A case has therefore been made for additional funding for Winsford to Crewe, and there is a question about whether this will occur before March 2029, or in 2030.
The additional capacity created by these works will accommodate all additional contingent services and those of other TOC and FOC's.

- Phase 1 Winsford to Weaver will occur late 2027/early 2028 already funded
- Phase 2 Winsford to Crewe will be dependent on funding.

Specific Questions / Actions (pre and during meeting)

1) Would notching-back between Crewe and Weaver Jn in an N-1 scenario (i.e. max 100mph and notch 3) across all AWC trains in the area (not just the four rejected) be a suitable alternative mitigation? For example this could work via a GSMR update for all AWC trains in the given area to reduce to notch 3 if there is power problem, noting that N-1 notching currently works in Euston area and used currently on occasions around Willenhall during Trent Valley diversions.
   a) WB asked how this works with Avanti drivers currently (noting that this has raised some challenges from WMT drivers). Is this something they have agreed to? RT confirmed that there have been no issues surrounding N-1 notching with drivers over recent use.

      WB mentioned that it may not offer many benefits in this location depending on the stop / start characteristics but the impact could be reviewed (Action NR to assess).

2) Referenced in the report, 22.5kV is Mean Useful Voltage under EN50388 and not voltages under EN50163
   a) 19kv is an allowable permanent voltage. MUV is a useful indication of quality.
3) If we use MUV, it is 22kV for Classic lines not 22.5 kV (for HS lines) which would make most of the reported breaches disappear, it would be good to understand if this would help the power supply position if modelling took account of this difference.

a) This is an indication of the quality of supply we are providing.

4) Is there evidence that trains will not operate below 17.5kV (Project T1331 under way with RSSB should assist in understanding this)? NR could ask operators for the voltage sensitivity of their trains to inform these decisions (we'd be happy to support). The current limiting characteristics of most trains (but not class 90s) mean that as voltage drops so does current, which also limits energy throughput in the system.
   a) Yes, AWC trains have a higher tolerance. It might not affect AWC but it will affect WMT trains which are more sensitive.
5) The document suggests that the 300A represents the asset capability – this is also the standards limit for Current draw by a single train. It is not clear whether this is a manufacturers' asset rating for the equipment, or another value being adopted to protect the equipment, it would be good to get some further clarity on this point.
   a) 300AMP is the asset rating. The link with the current draw is just a coincidence.
6) JC asked about the possible benefits from the monitoring equipment due to be installed at Crewe?
   a) JP advised that monitoring equipment is potentially being funded for the Crewe area, and is hoping that it will be in place at the back end of July (2025). JC asked whether having this monitoring equipment in place would help in terms of decisions for May 2026? Is there an opportunity to potentially test some of the trains on electric using bi-mode trains to help with future assessments?

      JP confirmed that it is something that can be looked at whether it is feasible but also warned that having realtime data could show that the actual risks were worse than those shown in the model, in which case there may then be a requirement to remove these services from the timetable. (Action NR to assess).

7) Could we agree to run one of the Class 805 services through the area for a fixed period under electric power as an agreed test?
   a) This should be explored as part of an agreed plan of action for May 2026. (Action NR)
8) Will the double peak at 15:20/15:40 be solved by running just one of the two services as 805 Diesel?
   a) To be picked up in the scope of future power modelling (Action NR)

b) RT suggested a follow-up meeting for the very near future.
   a) A second review meeting pencilled in for late next week (Action AWC).

Appendix 14 - Extract from slide pack NR presented on 11th June

OFFICIAL

Crewe-Weaver Problem hours:

Rationalised scenario consists of May 25 base (LTP) overlaid / including services with rights only (Firm and Contingent)

15:20 / 15:40:

Table shows trains that are within the modelled area during the peak period.

Headcode	Dep	Origin	Dest	Operator	Consist	Notes
1F59	14:04:00	BHAMNWS	LVRPLSH	LM	Class 350 4 Car AW1	
1F60	14:34:00	BHAMNWS	LVRPLSH	LM	Class 350 4 Car AW1	
1G57	14:33:00	LVRPLSH	BHAMNWS	LM	Class 350 4 Car AW1	
1G58	15:08:00	LVRPLSH	BHAMNWS	LM	Class 350 4 Car AW1	
1G59	15:33:00	LVRPLSH	BHAMNWS	LM	Class 350 4 Car AW1	
9M55	11:56:00	GLGC	EUSTON	VT	Class 390 11 Car AW1	
1M13	12:40:00	GLGC	EUSTON	VT	Class 390 11 Car AW1	*Non-stop*
9M56	12:52:00	EDINBUR	EUSTON	VT	Class 390 11 Car AW1	
1S69	13:30:00	EUSTON	GLGC	VT	Class 390 11 Car AW1	*Non-stop*
9S70	12:40:00	EUSTON	EDINBUR	VT	Class 390 11 Car AW1	
1S72	14:30:00	EUSTON	GLGC	VT	Class 390 11 Car AW1	*Non-stop*
9S77	13:40:00	EUSTON	GLGC	VT	Class 390 11 Car AW1	
1A52	14:43:00	LVRPLSH	EUSTON	VT	Class 807 7 Car AW1	
1F23	13:07:00	EUSTON	LVRPLSH	VT	Class 390 11 Car AW1	*Non-stop*
1F24	13:43:00	EUSTON	LVRPLSH	VT	Class 807 7 Car AW1	
1A55	15:08:00	LVRPLSH	EUSTON	VT	Class 390 11 Car AW1	*Non-stop*
1A58	15:43:00	LVRPLSH	EUSTON	VT	Class 807 7 Car AW1	
1F25	14:07:00	EUSTON	LVRPLSH	VT	Class 390 11 Car AW1	*Non-stop*
6L48	15:06:00	SPEKE	DAGENHA	ZZ	Class99 Cl6	*GBRf*
4L62	13:50:00	DITTON	FLXSTW	ZZ	Class99 Cl4	*GBRf*
6X43	09:28:00	DAGNHM	SPEKE	ZZ	Class99 Cl6	*GBRf*

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