



Emyl Lewicki
Track Access Manager
Office of Rail and Road

Gianmaria Cutrupi
Aspirant Open Access Operators
Manager
Network Rail Infrastructure Limited
By email only

25 January 2024

Dear Emyl,

Application for directions: proposed track access contract between Network Rail Infrastructure Limited and Grand Union Trains Limited

This letter provides the representations of Network Rail regarding the Section 17 application for directions for a proposed track access contract between Network Rail Infrastructure Limited (we) and Grand Union Trains Limited (Grand Union). Grand Union aspire to run four trains per day in each direction between London Euston and Stirling from SCD 2025 to SCD 2035 in this application.

We previously worked in collaboration with Grand Union when they shared their first Section 17 application to run services between London Euston and Stirling, which was submitted in 2019. We provided our representations for the previous version of this application in our letters of 27 May 2022, 28 November 2022 and 06 January 2023. The previous application was withdrawn by Grand Union on 01 September 2023. We responded to the new version of the application in our letter of 01 December 2023.

Grand Union are now proposing to use Class 22x rolling stock, which is a different rolling stock class from what Grand Union stated in their previous applications.¹ Therefore, this new specified equipment represents a change to the information we based our assessments on. We have now revisited our timetable assessments to understand the potential impact of the proposed access rights.

Network Rail are willing to support Grand Union's application, however with an expiry of PCD 2030 due to the interaction with High Speed Two (HS2). In addition, considering that the services are due to start in SCD 2025 and driver training and testing is also required (which from industry experience can last a minimum of six months) and the rolling stock has not yet been confirmed (Class 221 or 222), our support of a direction to that effect assumes that Grand Union have been able to assure you that they can indeed

¹ Class 91 with 7 Mark 4 coaches and a DVT trailer; Class 93 with 9 Mark 4 coaches and a DVT trailer.



meet the aspired commencement date of SCD 2025. Network Rail would expect this to be taken into consideration by the ORR when making their decision on the application.

Introduction

The West Coast Main Line (WCML) runs between London Euston and the Scottish border and is the busiest mixed-use railway in Europe. It supports major British cities outside of London and it is central to the business of many UK and international passenger and freight operators.

The southern section of the WCML plays a crucial role in providing commuter rail services into London, whilst the North West section provides vital connections between major cities and towns such as Manchester, Liverpool, Preston and further beyond. Over the coming years, HS2 works at Euston and in other places will be a major factor on the WCML.

In early 2020, our analysis demonstrated that there was no available capacity on the WCML fast lines without impacting performance and reducing the resilience of our timetable. In May 2020, we declared the WCML fast lines between Camden Junction and Ledburn Junction as Congested Infrastructure.

Following the declaration of Congested Infrastructure, we set up an Industry Planning Group (IPG) to explore whether a timetable recast would have the potential to deliver further capacity and/or improved performance and also an Event Steering Group (ESG) to rewrite the December 2022 WCML timetable.

We have worked with Grand Union within the IPG and ESG frameworks to identify capacity for potential paths and evaluate their performance impact across the WCML.

We previously completed, shared and discussed with the ORR a comprehensive range of analyses (re-attached to this letter) to evaluate previous iterations of this application and justify our decision, including:

1. Grand Union Trains Euston Stirling Autumn 2021 Path Analysis
2. Simulation Modelling for Dec 22 WCML ESG, Performance Subgroup of Dec 22 WCML ESG
3. Simulation Modelling for Dec 22 WCML Timetable Re-write – Carlisle to Stirling
4. Tracsis NW&C Rail Sys Performance Modelling
5. Euston - Timetable Performance Assessment Technical Note²

We also conducted a refresh of our previous assumptions due to Grand Union's proposed rolling stock change from a Class 91 locomotive to a Class 22x. Our refresh also ensured the validity of the current application against the December 2023 timetable.

We considered that the rights previously sought by Grand Union may present capacity issues in the December 2023 timetable with potential flexing of rights required. We have refreshed our timetable work to confirm the level of flexing that may be required and whether access rights can be accommodated. As

² We also completed the following analyses on power supply and previous electric rolling stock proposed by Grand Union supply to evaluate previous versions of this application: *Grand Union Class 93 Analysis*, *Bushey PSU Neutral Section – Traction Power Modelling Report*, *Dec '22 Traction Power Modelling Results*, *Rolling Programme of Decarbonisation – Scotland, West & South 2022 Memorandum*. Having Grand Union changed their specified equipment to a Class 22x with diesel traction, these studies are no longer relevant for this current application.

a result of our refresh, we have now produced the following new documents (attached to this letter):

6. Assessment of proposed Grand Union Train Paths against a December 2023 base
7. Grand Union Trains: London Euston <> Stirling, Performance Intelligence for Section 17
8. Review of the Grand Union Trains Stirling Track Access Contract with our comments and suggested amendments

The Specified Equipment

Grand Union stated in their Form P that they would like to use off-lease Class 22x rolling stock (diesel traction). We would like to reiterate the importance of using diesel traction not to aggravate the current power supply constraints on the WCML.

The Class 221 is cleared between Stirling and London Euston via the route mentioned in the National Electronic Sectional Appendix (NESA). The Class 222 is not cleared as it only operates East Midlands Railway services. The Class 221 has operated to Edinburgh and Glasgow with Avanti until December 2023 and onto Aberdeen with CrossCountry, but not via Stirling. To clear the Class 222s would require a full gauging study, from a recognized gauging company, in the first instance for the complete route which could take a few months – depending on the availability of external suppliers – and then a complete compatibility analysis. The Class 221 would need to be checked on routes that they are not routinely used on (i.e. Motherwell to Stirling).

We would require Grand Union to engage with us on commissioning works to deliver the required capability and to undertake the Route Clearance processes.

Network Rail requests that Grand Union is required to put the correct Specified Equipment in the Track Access Contract i.e. either Class 221 or Class 222 (not Class 22x) prior to the signing of the contract. This request has been reflected in the comments in the proposed Track Access Contract attached to this letter.

Form P Application

The Form P shared by Grand Union in their industry consultation of 11 September 2023 states they intend to run 'four trains per day each way' between Stirling and London Euston.³ However, their draft Track Access Contract specifies four return passenger train slots between Stirling and Euston with the inclusion of one additional return service between Preston and London Euston, increasing the passenger train slot weekday total to five trains per day.⁴ We have proceeded on the basis of our wider understanding that 'four trains per day each way' is correct. Clarity is required from Grand Union which quantum specified is correct, the Form P or Table 2.1 of Schedule 5 of the Track Access Contract.

Investment Conditions

We note Grand Union did not include a detailed investment plan in line with the current Access and Management Regulations, which we might expect to accompany an Open Access application seeking rights for a duration of ten years. The Form P submitted by Grand Union references investments at

³ Grand Union Trains, *Form P, Application to the Office of Rail and Road for a Passenger Track Access Contract, or an Amendment to an Existing Contract*, p. 2, p. 3, p.6, 11 September 2023.

⁴ Grand Union Trains, *Track Access Contract (Non Franchised Passenger Services)*, p. 56, 11 September 2023.

Larbert, Greenfaulds, Whifflet and Lockerbie to upgrade the stations and local facilities. We would be interested in understanding the specific investments being proposed by Grand Union, the timescales involved and funding requirements.

Track Access Contract

The Track Access Contract provided for in this application by Grand Union has been reviewed by the Regulatory Reform Manager in Network Rail. A tracked change version including comments of this review is attached to this letter and Network Rail requests that the ORR takes note in its decision of the amendments and comments.

Key findings from that review which the ORR and Grand Union need to take into consideration and are as follows:

- It is evident from the review of the contract that The Model Clause Contract for Passenger Services dated April 2023 (currently on the ORR's website) has not been used as the template to draft the proposed contract. Our reviewed Contract clearly shows which paragraphs are affected by this. Network Rail requests that as part of the ORR's decision a request for the correct Model Clause template is used noting that variances apply due to this being an Open Access Contract (this was taken into account in the review of the Contract).
- *Contract commencement vs Service Commencement*
 - Network Rail notes that Grand Union mention in their Form P that they plan to undertake driver training and testing before the services commence in May 2025. However, there is no indication in the Form P how long the driver training / testing will take and therefore no indication from Grand Union when the Contract will need to commence from as a minimum, in order to allow this testing / training to be undertaken. While we are supportive of the application for the period as outlined at the beginning of the letter, the ORR may wish to seek assurances from Grand Union as to whether the proposed commencement date of the services of May 2025 are realistic considering the rolling stock has not yet been confirmed, driver training / testing will need to commence by the end of this year and the necessary vehicle and route acceptance to be obtained in time.
 - Conditions Precedent to Clause 5 added, a date of when the driver training and testing needs to be provided by Grand Union to add to the Conditions Precedent as noted in our commented version of the draft Contract.
- The Expiry Date has been added of SCD 2030 in line with Network Rail's view in this letter.
- *Schedule 5*
 - A footnote has been added to table 2.1 for the Passenger Train slots to commence SCD 2025.
 - There is no reference to a service group number and clarity is needed that the Train Service Code number provided is one that has been allocated to Grand Union for this proposed Contract.

- Driver training and testing sub paragraphs have been added to paragraph 2.7 to allow for driver training and testing noting that the Firm Rights are dated to commence in SCD 2025.
 - Grand Union have not listed the calling patterns description number for each of the Passenger Train Slots and have also not listed what the calling patterns are in table 4.1 for London Euston <> Preston.
 - In Specified Equipment 5.1 Grand Union have put Class 22x as the specified equipment. This is not a Rolling Stock Number so Network Rail would like Grand Union to add either Class 221 or 222 once they know what rolling stock they will be operating but prior to the Contract commencing.
- *Schedules 4 & 8*
 - In the Track Access Contract Review Document, Network Rail has proposed the inclusion of a Schedule 11 which will be a 'Relevant Schedule 4 and 8 Modifications'. This is to allow Network Rail and Grand Union to capture the required data once the services commence and then undertake a Schedule 8 recalibration. Network Rail invites Grand Union to agree a 'Start Date' and 'Backstop Date' as required in this schedule.

As stated, these are the high-level points made in the review of the Track Access Contract and therefore Network Rail invites ORR and Grand Union to review and take into consideration this document as part of Network Rail's representations.

Capacity

During the December 2022 Event Steering Group (ESG) paths were developed for Grand Union between London Euston and Stirling. The paths were compliant within the ESG timetable and, at the time, Grand Union planned to use Class 91 locomotives.

Grand Union paths have been subject to widescale erosion due to new and amended paths that have been added and changed in the identified 'whitespace' during the timetable production periods since the December 2022 timetable was developed. For example, additional and altered freight services, altered mail services, multiple adjustments to passenger services across the route and changes to the timetable due to remodelled Carstairs. In addition to this since the ESG, Timetable Planning Rules (TPR) have changed in some places possibly either positively or negatively affecting the planned paths.

Due to the erosion of the planned paths, changes in TPR on the route and the change of rolling stock (Class 22x), we decided to undertake some analysis to inform our view on these paths in light of the reapplication to the ORR. The full technical note has been attached to this letter.

Method

To conduct the analysis, the GUT paths were overlaid onto a December 2023 base timetable. An initial check was done highlighting that all the paths had been eroded in the timetable.



Using the December 2022 ESG timetable as a base for resolving the conflicts in the GUT paths, the paths were then validated with the conflicting trains mostly being moved into the paths they occupy in the Dec 22 ESG timetable with these flexes being documented.

Findings

In validation, all SX and Su Grand Union Trains paths identified in the December 2022 timetable could be planned compliantly within the December 2023 timetable by flexing other services. SO services were looked at and conflicts between them and the December 2023 timetable were noted, however time constraints meant that full validation could not be undertaken.

The paths themselves although running as a Class 221 on West Coast South have had pathing added to align them with the paths found for the Class 91 in the Dec 2022 Timetable. This still allows the option for either 221 or 222 as the 222 will be limited on the West Coast to non EPS speeds due to its inability to tilt. It should be noted however that a 222 will benefit from the line speed improvement program on West Coast South.

From a capacity point of view, the validation work so far undertaken suggests that these rights can still be accommodated.

High Speed Two (HS2)

We believe this application will interact with the DfT's proposals, developed with West Coast Partnership Development (WCPD), for HS2 operation if this application is progressed.

A captive HS2 service between Old Oak Common and Curzon Street (Birmingham) is planned to commence in June 2030. The current plan is that HS2 services will then begin running on the existing WCML from December 2030, joining the WCML at Handsacre Junction (near Lichfield). Some existing services will be withdrawn at this point.

On 04 October 2023, the Government cancelled the Northern leg between Birmingham and Manchester. At the time of writing, there is an expectation that HS2 services will still go to the North of England and Scotland using the existing WCML.

An indicative TSS for this end-state has been supported by DfT and the industry and a revised business case is due in summer 2024. Interim solutions between 2030 and the end state are yet to be finalised, decisions about which will be based on ongoing work between HS2 Ltd and West Coast Partnership Development (WCPD).

We therefore request an expiry date of PCD 2030 if this application is progressed.

Operational Details

We have not been able to fully assess this application due to the lack of operational detail we would expect to receive, including for example details about stabling, maintenance plans, ancillary moves, driver training and contingency plans. Should this application be approved, we are keen to continue working with Grand Union to agree dates, timescales and data requirements to support them with the timetable bidding process and their operational requirements.

Performance

Most services within the WCML South originate or terminate at London Euston. This makes London Euston the key location during times of perturbation for managing service recovery through the cancellation of services. As a terminus location, platform capacity is vital when managing perturbation as services must depart before arriving services can terminate. Moreover, not having the flexibility to move stock in either direction reduces the ability to free up capacity, resulting in the station becoming congested quickly. Reducing the number of services in the base timetable increases the ability to recover the service offering to passengers faster, as there is more capacity operationally to absorb perturbation.

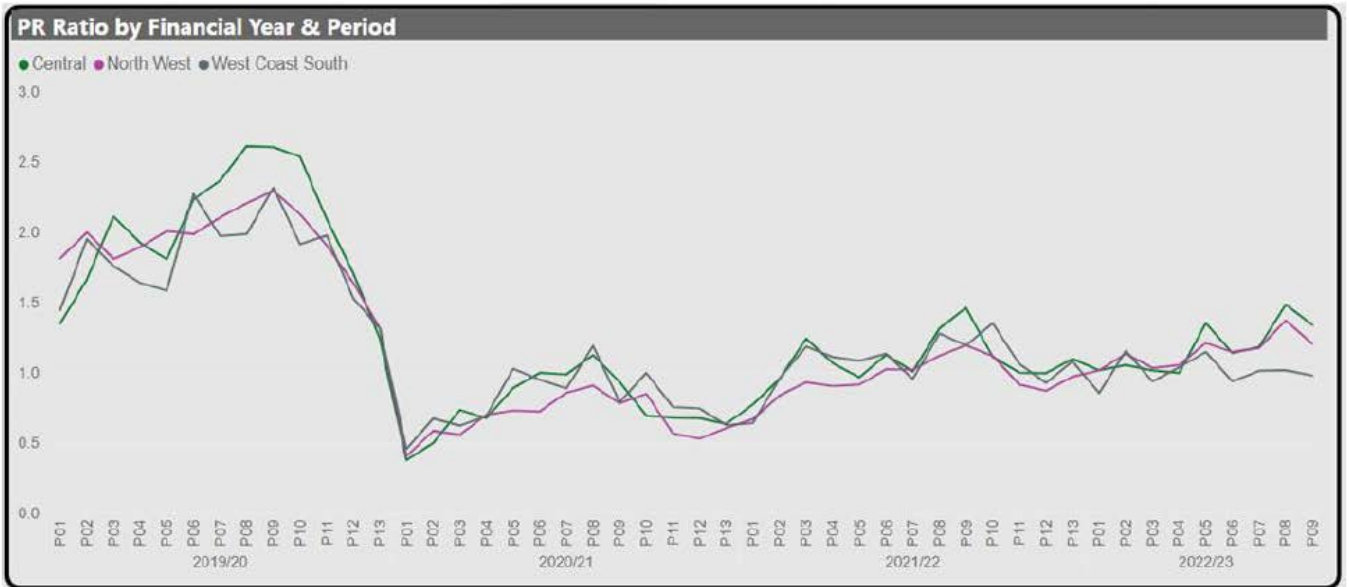
It is vital for us to balance performance with the expected rise in passenger demand. It is also important that an emphasis remains on performance improvement to ensure we get the best economic use of the railway and give passengers and users the best value for money.

The Performance Challenge

Traditional timetable modelling has the drawback of comparing two timetables on days with good to average performance. It has limitations in modelling the impact of disruption. The reality of operating the railway will always be different from theoretical modelling which struggles to comprehensively portray all operational requirements and decisions on the day. Further, the financial constraints which the railway now faces are not only leading to uncertainty around key longer-term decisions but will inevitably place further pressure on day-to-day operational delivery.

Temporary Speed Restrictions are often necessary to ensure the safe running of the railway between the identification of a defect and applying a repair. For example a current temporary speed restriction between Primrose Hill Tunnel and Queen's Park on the down slow, reducing the normal passenger speed from 105mph to 50 mph for a one-mile stretch of track has a 71 second impact on each Avanti Service and 69 second impact on each West Midland Trains Service. It has an 8% impact on T-3 for both operators.

The reality of operating the railway is that incidents unfortunately take place and impact the operation of the train service. The initial service which experiences the delay will, in most cases, cause knock-on delay to other services. The graph below details the amount of reactionary delay for each minute of prime delay.



The above helps demonstrate how reactionary delay rises in correlation to the number of services running. Reactionary delay increased after the significant changes introduced as part of the May 2019 timetable change which took place in Period 02 FY19/20. Reactionary delay greatly reduced in Period 1 20/21 when Covid saw the timetable greatly reduced from 23 March 2020 as a response to the introduction of Covid restrictions. Since then, the trend has seen reactionary delay increasing again as the quantum of services has increased.

It will be vital for the industry to commit to work together to mitigate the impact of the additional quantum of services.

WCML Performance Partnership

Our key objective is to deliver the passenger benefits of connectivity and reliability associated with the additional services without increasing overall delay.

In order to achieve this, and enable our support for the additional services, our proposal is the establishment of a full WCML performance partnership, to involve all fast Line operators and Network Rail. We expect there to be a particular focus on incident / service recovery and the causes of disruptive events. Potential scope includes activities such as: measures to deliver adherence to turnround times; traincrew and catering resourcing; the access regime for maintenance; measures to tackle trespass / fatalities; driving practices; linespeed coasting. Reliable performance requires clear and unequivocal commitment by all parties to an agreed performance improvement programme. It is likely mitigations will be identified with a resource requirement for operators contracted to the Department for Transport; the approval of the Department may be required to enable their delivery.

Network Rail, will commence the timetable, performance and safety risk assurance process at the earliest opportunity in order to effectively manage the risks highlighted within the letter, assess progress and secure delivery of a reliable train service.

Performance Refresh

We have refreshed our previous performance assumptions to ensure the validity of the Grand Union proposal against the December 2023 timetable. There are no material performance concerns following a review of the performance intelligence available within the timescales available that would lead us to raise objections against the introduction of Grand Union Trains. The full performance report has been attached to this letter.

Findings

Grand Union Trains have a large amount of pathing allowances across their planned journeys. Typically, the result of this sees the network running at sub optimal speeds as trains are unnaturally pathed. Where Grand Union trains have been pathed out behind a freight train, this causes further performance concern as the services then run behind a service running at reduced speed.

Congestion / Reactionary delay is likely to hotspot in areas in-and-around highly pathed areas as trains wait for the Working Timetable (WTT) slot under minor perturbation. Due to the journey length involved with Grand Union services, it is plausible delay will be transported around the UK – as we see with other long-distance operators. Mitigations for such scenarios are typically found in longer dwells at strategic stations – such as Birmingham New Street for Cross Country or Avanti West Coast services, where the timetable can be ‘reset’, i.e. recovered back to the WTT.

The timetable structure is built on minimum margins in critical areas of the network for performance. Whilst this is compliant, it is recommended a detailed assessment of to-the-second running for timings loads is undertaken to ensure the planning values are achievable, and any ‘white space’ that is visible now, isn’t being used.

Punctuality during the May 2023 timetable was poor. Key junctions on the WCML are achieving between 43-49% On Time; whilst T-3 is ~66%. This indicates that one in three trains is roughly out of path, given a standard three-minute headway. A deep understanding of the performance and potential mitigations is recommended.

Pathing

Grand Union trains have significant pathing applications at Attleborough South Jn in the Down direction, and Stafford in the Up direction.

In the down direction there is a notable amount of pathing applied through the North West, particularly south of Preston towards Wigan and Warrington.

Whilst this level of pathing aids in making the planned journey compliant, it has the effect of continually slowing the network down as Grand Union trains are waiting for their path.

Given the rights sought by Grand Union are quantum only and not hard wired to the timings, we would like to work with Grand Union and the industry to keep improving the paths during the validation process.

Conclusion

We acknowledge the demand for additional WCML long-distance services and we have sought to strike a balance between the aspirations for growth and overall train performance.



Therefore, we are willing to support Grand Union's application with an expiry of PCD 2030 due to interaction with HS2. We invite the ORR to take the ongoing uncertainty surrounding the HS2 project into consideration.

Network Rail, as previously stated, would like the Review of the proposed Track Access Contract to be considered in any decision made on this application.

Our support is based on Grand Union and the wider industry working with us to mitigate the impact of the additional services on the WCML performance before they can be accommodated within the timetable.

Please do not hesitate to contact me if there is any further information you require.

Yours sincerely,

Gianmaria Cutrupi
Aspirant Open Access Operators Manager
System Operator