



Network Rail
Hudson House
Station Rise
York
YO1 6HP

7 February 2005

Dear,

Re: Proposed Vehicle Change: New Class 185 Rolling Stock Route Clearance, Operation and Deployment

TransPennine Express have submitted to Network Rail a Vehicle Change proposal in respect of the route clearance, operation and deployment of Class 185 Diesel Hydraulic Multiple units on the routes detailed below. Network Rail is obliged under Access Condition F1 to consult with all other operators of railway assets who are likely to be materially affected. In accordance with the procedure laid down in the Track Access Conditions, Network Rail, on behalf of TransPennine Express wish to give formal notice of proposals for Vehicle Change under Condition F1.

Description of Proposal

Introduction

In accordance with Track Access Condition F, TransPennine Express wishes to initiate the Vehicle Change Procedure in respect of the proposed introduction of Class 185 Diesel Hydraulic Multiple Units.

A supplemental to the track access agreement, adding Class 185 units to TransPennine Express Specified Equipment, is being developed by TransPennine Express and Network Rail and will be consulted through the industry.

The new units will replace the following fleet of trains currently in operation on TransPennine Express services:

- 45 Class 158 Units, formed by 107 vehicles that will be reformed into 42 Units in December 2004
- 11 Class 175 3-car Units

Vehicles

A total of 51 3-car units are being supplied to TransPennine Express by Siemens Transportation for HSBC as the owners and leased to TransPennine Express. The Class 185 has a maximum service speed of 100mph (160km/h)

The new Class 185 will have a higher performance and reliability characteristics than the current fleet of Class 158s and 175s. A programme of reliability performance will be maintained by Siemens Transportation, and any safety defects will be notified in accordance with RGS GM/RT2250.

The DMU comprises 3 cars with the capability of future strengthening to 4, 5 or 6 cars. Each 3 car unit is made up of 2 driving motor vehicles with 1 intermediate motor vehicle. Class 185's can be run in multiple up to a maximum of 12 cars.

The vehicles comply with the Rail Vehicle Accessibility Regulations (RVAR) 1998 and RVAR (Amendment) 2000 Rights for Disabled Persons Transport.

Principal features

Configuration	DMOSB – MOSL – DMOCLW
Maximum operational speed	100mph (160kph)
Acceleration	0 – 100mph in 217 seconds
Brakes	Wheel mounted brake discs Pneumatic with blended hydrodynamic service brake Pneumatic emergency brake 9% Service brake with enhanced 12% in Emergency in accordance with GM/RT2044
Engine	Cummins QSK19R. 560kw (750hp) per vehicle meeting Euro 2 Exhaust gas emission level
Transmission	Voith T312bre including hydrodynamic retarder
Cooler Group	Voith designed Water and Combustion Air cooling system
Final Drive	2 driven axles per car through master and

Bogie	slave gearboxes
Construction	Siemens SF5000 UK
Doors	Integral welded aluminium body shell
Windows	Power operated electro-pneumatic bi-parting plugs doors at 1/3 & 2/3 positions
CET	Double glazes units with emergency windows
HVAC	Each Unit has one standard toilet and one universal toilet with wheelchair access. Both toilets are of the controlled emission type
Sanding	Drivers cab and saloon are fully air-conditioned
Range	Sanders activated under high service brake and emergency brake if slide detected. Driver can manually sand in motoring.
Horns	1560 miles (2500km)
Coupling Facilities	High and Low Pitch with soft tone at low speed
Automatic Coupler	Dellner Type 12
Height	925mm ARL
Tension Strength	1000kN
Compression Strength	1500kN
Vertical Swing	$\pm 8^\circ$
Horizontal Swing	$\pm 23^\circ$
Rescue Facilities	BSI and drawhook adaptor couplers are on board
Tail and marker lights	Combines white and red LED type
Shore Supplies	400V 125Amp 3 phase connection 400V 16Amp 3 phase connection (For engine preheater only)
Ambient Conditions	Temperatures -17°C to $+35^\circ\text{C}$ Floodwater up to 100mm above rail level (at 5kmh)
Compatible Vehicles	Fresh snow up to 100mm above rail level Details of compatible vehicles will be described on the RSAB certificate

The Class 185 units will utilise the following safety systems:

- Automatic Warning System (AWS)
- Train Protection Warning System (TPWS)
- DSD/Vigilance (DSD)
- Track Circuit Actuator (TCA)

- Active Drivers Reminder Appliance (DRA)
- Train Data Recorder (OTMR)
- National Radio Network (NRN)
- Provision for future fitment of ATP/ERTMS level 2 systems

The train designed to Railway Group Standards Requirements

Operation

Class 185 is intended to operate throughout TransPennine Express franchised routes and gauging for the following routes is being carried out:

1. Newcastle – York via King Edward Bridge or High Level Bridge and Darlington
2. Newcastle (via either bridge) – Bowesfield Jn (Middlesbrough) via Sunderland
3. York – Scarborough
4. Seamer – Filey
5. York – Leeds
6. Middlesbrough – Northallerton
7. Darlington – Eaglescliffe
8. Micklefield – Hull
9. Leeds – Manchester Piccadilly via Dewsbury, Huddersfield and Guide Bridge
10. Manchester Picc – Liverpool Lime St via Warrington Central
11. Ardwick Jn – Manchester Airport
12. Slade Lane Jn (Manchester) – Sheffield
13. Ardwick Jn – New Mills South Jn via Bredbury
14. Doncaster – Sheffield via Swinton Jn
15. Holmes jn – Arwarke Jn via Rotherham Central
16. Cleethorpes – Doncaster
17. Habrough – Barton on Humber
18. Deansgate Jn (Manchester) – Barrow via Bolton and Chorley
19. Barrow – Millom
20. Carnforth North Jn – Windermere
21. Morecambe South Jn – Morecambe (via DUM and DUH)
22. Bare Lane – Hest Bank
23. Preston – Blackpool North
24. Church Fenton – Leeds via Castleford and Methley Jn
25. Whitwood Jn and Methley Jn – Thornhill LNW Jn
26. Leeds – Wakefield Kirkgate
27. Wakefield Westgate – Doncaster
28. Leeds – Manchester Victoria via Bradford Interchange

29. Heaton Lodge Jn - Milner Royd Jn
30. Bradley Jn - Bradley Wood Jn
31. Stalybridge - Miles Platting
32. Manchester Victoria - Edge Hill via Earlestown
33. Salford Crescent - Deal St Jn
34. Guide Bridge - Romiley
35. Edgeley Jn - Alderley Edge
36. Wilmslow - Heald Green West Jn
37. Sheffield - Barnetby via Retford
38. Salford Crescent - Euxton Jn via Atherton & Wigan NW
39. Lostock Jn - Crow Nest JN
40. Parkside Jn - Wigan NW

Driver training will commence in the autumn of 2005 and the new fleet will be phased into revenue service during 2006. The testing program is currently being finalised with UK testing anticipated to take place over TransPennine Express franchised routes.

Class 185 will be primarily maintained at new depot facilities to be located in Manchester and York. Fuelling and outstabling will also take place at other locations on TransPennine Express franchised routes under rights that exist for the current fleet or under rights under supplemental agreements that will be consulted at the time.

It is not currently known what, if any, infrastructure works will be required to accommodate the Class 185 units. If any works are deemed necessary, these will be consulted under a separate Network Change proposal.

In accordance with Condition F1.3 Network Rail are seeking comments from yourselves and the persons listed overleaf as to whether you are content for the change to be implemented. Would you please, therefore, inform me of the time it will take you to analyse this change and the amount of compensation you may be seeking.

You have the opportunity to request from TransPennine Express reimbursement of any costs that you might incur as a consequence of this change. If a formal response is not received within 28 days of the date of this letter, it will be deemed that this proposal is accepted by you without compensation.

Should you require any further information regarding this proposal, please do not hesitate to contact me. If you believe that only TransPennine Express may be able to answer your questions please

contact them directly; I would appreciate copies of any correspondence entered into.

I look forward to receiving your response to enable me to progress this proposal.

Yours sincerely

Diane Harryman
Network Change Co-ordinator LNE