

**THE RAIL VEHICLE ACCESSIBILITY (NON-INTEROPERABLE RAIL SYSTEM)
(TYNE AND WEAR METRO SPECIALIST METROCAR) EXEMPTION ORDER
2019**

Explanatory Note

What does the Order do?

1. The Order exempts four vehicles operated by Tyne and Wear Metro (trading as 'Nexus') from standards under the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010 ('RVAR 2010'). The vehicles were built as prototypes and are used to provide additional capacity at peak times on the network only.
2. The exemptions will apply to the vehicles from 1 January 2020 until 2am on 1 July 2026.
3. A copy of the application form can be found at Annex A.

Why has the Order been made?

4. Current rolling stock entered into service in 1980. The fleet received an overhaul between 2010 and 2015 to refurbish the trains to meet RVAR 2010 standards and to prolong their operational life to the mid-2020s. The 4 prototype Metrocars (4001, 4002, 4040 and 4083) did not undergo this upgrade programme. This decision was based on the ability to meet passenger demand without the need to operate the older prototype vehicles. They were retained as spare vehicles, to support day to day running of the network when other vehicles were out of service.
5. However, passenger numbers have grown and the use of the vehicles has become a regular occurrence in the morning and evening peak times to relieve crowding.
6. In 2017, Nexus received a funding settlement from the Department for Transport for the provision of an entire new fleet of Metrocars to replace the existing ageing fleet. The specification for the new vehicles is well advanced and includes a requirement on the manufacturer to comply with RVAR 2010. The fleet of new cars will be fully in operation by December 2025.
7. With the deadline for compliance for pre-1999 vehicles set at 31 December 2019, Nexus has applied for an exemption to continue to use the 4 original Metrocars until they can be replaced by the new fleet in 2025.
8. The vehicles will undergo some refurbishment work to improve the passenger interior – this includes revisions to the wheelchair space, provision of a call for aid and improvements to interior colour contrast and signage. The exemption request reflects the fact that existing fittings meet some but not all of the requirements of RVAR 2010 and that there are technical limitations on the

possibility for upgrade (this particularly applies to the doors and door controls which are of the original 1970s design).

Are there any conditions for the operator to meet during the period of exemption?

9. Exemptions granted in respect of the following paragraphs of Schedule 1 to RVAR 2010 are subject to the requirement to maintain at least the existing levels of accessibility provision in the prototype Metrocars for the life of the exemption:

Part 1 General Requirements

- 1(1) – boarding devices at wheelchair-compatible doorways
- 3(3) – audible warning devices at passenger doorways
- 3(5)(a) – audible sound when doors become openable by passengers
- 3(5)(b) – audible warning before door closes
- 4(2) – control devices for doors
- 10 (1)(a) – positions of handrails close to passenger doorways on the inside of rail vehicles
- 20(1) - wheelchair space specifications

Part 2 Additional requirements

- 3 – illumination on floor of passenger doorway

Applicable to cars 4001 and 4002 only

Part 1 General Requirements

- 4(1)(b) - force from palm to operate control device of power operated door
- 4(1)(c) - illumination of control device of power operated door
- 4(1)(e) - control device identifiable by touch

10. The Order expires at 2am on 1 July 2026. The request in the application was for the exemption to be in force until 31 December 2025, whilst new trains are introduced. The additional 6-month duration of the exemption makes provision for delays to the delivery and introduction schedule of these vehicles.

Why has the exemption been made without a Statutory Instrument being laid before Parliament?

11. Following amendment of section 183 of the Equality Act 2010 by the Deregulation Act 2015, exemptions can now be made by administrative orders, rather than by statutory instruments. The Orders will, however, be notified to Parliament in the Annual Report which the Secretary of State is required to lay before Parliament by section 185 of the Equality Act 2010.

Who has been consulted and what did they say?

12. We consulted the Disabled Persons Transport Advisory Committee (DPTAC), the Office of Rail and Road and Transport Focus on the exemption request. Responses were received from each of these bodies but no objections were raised.
13. We also carried out a public consultation via our website between 16 November 2018 and 14 December 2018. No responses were received.
14. Consultation responses can be found at Annex B.

Is there an impact assessment?

15. An impact assessment is not required for a deregulatory measure applied to a public sector body.

Contact

16. Julia Christie at the Department of Transport: Tel: 07920 504300 or e-mail: julia.christie@dft.gov.uk can answer any queries regarding this Order.

Annex A – Application forms

RVAR 2010 – Application for Accessibility Standards Exemption

This application form sets out the minimum required information in support of applications for exemption from the accessibility standards prescribed in the schedule to the **Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010** as prescribed by the **Rail Vehicle Accessibility (Applications for Exemption Orders) Regulations 2010 SI 427/2010: Schedule 1 - Particulars to be provided with applications for exemption orders for rail vehicles**

| | | |
|---|--|---|
| 1 | Full name of the applicant | Tyne and Wear Passenger Transport Executive (Trading as “Nexus”) |
| 2 | The address of the applicant which, in the case of a company, must be the address of its registered or principal office | Nexus House St James Boulevard, Newcastle upon Tyne, NE1 4AX |
| 3 | A description of the rail vehicle to which the application relates, including the— (i)class number; (ii)unit number; (iii)vehicle number; (iv)name of the manufacturer; (v)place of manufacture; and (vi)date the vehicle first brought into use, (unless not yet brought into use); | Class 599 Metrocar Units 4001, 4002, 4040 and 4083 As above Metro Cammell Birmingham UK 11th August 1980 |
| 4 | A general description of the services which the rail vehicle is likely to be used to | The vehicles are currently used to carry passengers on the Nexus owned Tyne and Wear Metro network and on |

| | | |
|----------|---|--|
| | <p>provide and the routes on which it is likely to be operated;</p> | <p>Network Rail managed infrastructure between Pelaw Station and South Hylton Station. No other routes are proposed.</p> |
| <p>5</p> | <p>The provisions of RVAR from which exemption is sought</p> | <p>The relevant provisions are detailed below. Further information is given in the attached Appendix 1.</p> <p>Applicable to cars 4001,4002,4040 and 4083</p> <p><u>Part 1 General Requirements</u></p> <p>3(3)</p> <p>3(5)(a)</p> <p>3(5)(b)</p> <p>4(2)</p> <p>10(1)(a)</p> <p>13(3)</p> <p>20(1)(a)</p> <p>20(1)(b)</p> <p>20(4)</p> <p><u>Part 2 Additional Requirements</u></p> <p>3</p> <p><u>Applicable to cars 4001 and 4002 only</u></p> <p><u>Part 1 General Requirements</u></p> <p>4(1)(b)</p> <p>4(1)(c)</p> <p>4(1)(e)</p> |

| | | |
|----------|---|--|
| <p>6</p> | <p>The technical, economic and operational reasons for the application;</p> <p>(Please attach any relevant documentation)</p> | <p>The Metro car was built in the late 1970's and entered service on the 11th August 1980, and has continued to operate to this present time.</p> <p>The fleet underwent a half life refurbishment between 1996 and 2000. This included the cars which are the subject of this application. The remainder of the fleet (i.e excluding the four cars detailed in this application) underwent a further ¾ Life refurbishment between 2011 and 2015. This brought the remainder of the fleet into RVAR compliance but excluded cars 4001, 4002, 4040 and 4083.</p> <p>The reasons for this were mainly financial constraint but there were some additional technical reasons, particularly with regard to cars 4001 and 4002 which were the original test trains and were constructed slightly differently from the rest of the fleet, particularly in relation to doors.</p> <p>As the fleet has aged, reliability has suffered to the extent that Nexus is concerned that unless the four un-refurbished cars are kept in service it will not be possible to meet the service timetable, especially at peak times.</p> <p>In the last year peak availability averaged 25% against a target of 100%. This is due to the unreliability of the fleet which is now approaching 40 years old and suffering from fatigue related problems as well as obsolescence, making spare parts very difficult to source.</p> <p>The cars listed in this application are currently in service, performing reasonably well and are not attracting adverse comments from passengers.</p> <p>They have had some accessibility improvements added along with the rest of the fleet, particularly passenger information displays and automated announcements ("next station is..." etc.). The physical dimensions of the vehicles has not changed and the step/gap distances are the same as the rest of the fleet.</p> |
|----------|---|--|

| | | |
|---|--|---|
| | | <p>Attached to this application is a spreadsheet showing where the cars do not meet Rail Vehicle Accessibility Regulations and providing some additional information as to reasons why an exemption should be considered.</p> |
| 7 | <p>The effect which non-compliance with the provisions referred to in subparagraph (e) (box 5) would have on a disabled person's ability to use the rail vehicle;</p> | <p>The Metro is a step free system and is used by passengers with a wide range of disabilities. The main effects of non-compliance are a substandard wheelchair space (although one does exist) and non-compliant door warning tones.</p> <p>Nevertheless there is no evidence to suggest that disabled passengers avoid using these cars and wait for the next one (almost certainly a refurbished one) to arrive.</p> |
| 8 | <p>The measures proposed, if the application is granted, to enable a disabled person to use the rail vehicle;</p> | <p>Disabled passengers can and still do access the vehicles.</p> <p>There is no evidence to suggest that disabled passengers avoid using these cars and wait for the next one (almost certainly a refurbished one) to arrive.</p> <p>Metro has published a Disabled Persons Protection Policy (DPPP) which details numerous features of both the infrastructure and the vehicles. This is a public document approved by ORR and the details will not be reproduced here.</p> <p>If specific assistance is required, this can be booked in advance and will be provided as necessary at any Metro station on the network.</p> <p>Beyond December 31st 2019 these four vehicles will not be used routinely during "off peak" times when demand on the fleet is less.</p> |

| | | |
|----|---|---|
| | | <p>Whilst it is too early to be sure, serious consideration will be given to removing these cars from the fleet as early as possible during the arrival of a new fleet of cars which is in the procurement stage (see below)</p> |
| 9 | <p>The period for which the exemption order is requested to be in force;</p> | <p>It is anticipated (though not certain) that a new RVAR compliant fleet will be in place by 31st December 2025 therefore it is proposed that the exemption be in force until that date.</p> |
| 10 | <p>Unless an exemption order is sought for an indefinite period, the proposed timetable of action, before it would cease to be in force, to render the rail vehicle compliant with any RVAR provisions from which it had been exempt;</p> | <p>Nexus has secured funding from central government to replace the existing fleet of Metrocars which will be RVAR compliant. The specification for the new vehicles is complete and the current programme is:-</p> <p>June 2018 – Final approval of Specification (Done)</p> <p>January 2018 – Issue Pre –Information Notice (Done)</p> <p>June 2018 – OJEU Pre- qualification Notice issued (Done)</p> <p>September 2018 – Invitation to Negotiate issued (Done)</p> <p>January 2020 – Complete Full Business Case</p> <p>March 2020 – Contract award</p> <p>March 2020 – Contract start date</p> <p>December 2025 – New fleet fully operational</p> <p>All the above currently on programme.</p> |

| | | |
|----|--|---|
| 11 | Where prior consultation with the operator of the rail vehicle is required by regulation 3(2) of the Rail Vehicle Accessibility (Applications for Exemption Orders) Regulations 2010, please set out the response of the operator to the consultation | Nexus is the owner and operator of the Rail Vehicles therefore there are no consultation responses to report. |
|----|--|---|

Annex B – Consultation responses

DPTAC

Thank you for your e-mail.

After reviewing the information you sent I'm ok to approve this exemption request on the basis that this is a temporary exemption until the 4 vehicles in this fleet are replaced.

I note that no adverse comments have been received from passengers in relation to this rolling stock, and disabled passengers 'can and still do' access the vehicles. I also note that there is no evidence to suggest that disabled passengers avoid using these cars and wait for the next one (almost certainly a refurbished one) to arrive, and that if specific assistance is required, this can be booked in advance and will be provided as necessary at any Metro station on the TWM network.

ORR

Please see my attached report [reproduced below] following a visit I made to Nexus in November. As you are aware, these cars are “less developed” than the rest of the fleet but considerable resource is being applied to make these 4 cars serviceable including improving the interface for persons of reduced mobility. I am of the opinion that “reasonable adjustments” are being made and that in fact the non-availability of these 4 metro cars would impact negatively on passengers with reduced mobility due to the inevitable crowding on the remaining fleet and increased waiting times on platforms. The operator has actively consulted with the local disability groups about the provision of additional metro cars and to my knowledge has not received any objections. In comparison with heavy rail the T&W Metro is already an accessible transport system with near level access on the majority of stations.

RVAR exemption application: Tyne and Wear Metro – Un-refurbished cars

A request of an exemption to the following Metro cars from the listed requirements of the Rail Vehicle Accessibility Regulations 2010 was received by the ORR (via DfT) on 7th November 2018;

Applicable to cars 4001, 4002, 4040 and 4083

Schedule 1 Part 1 General Requirements:

- 1(1) - Boarding devices
- 3(3) - External door sounding devices
- 3(5)(a) - Door enabled tones
- 3(5)(b) - Timing of audio warning when power doors close
- 4(2) - Timing of visual warning when power doors close

10(1)(a) - Location of interior door handrail

13(3) - Priority seat dimensions

20(1)(a) - Dimensions of wheelchair space

20(1)(b) - Dimensions of wheelchair space

20(4) - Wheelchair tipping screen

Schedule 1 Part 2 Additional Requirements:

3 - Provision of step lighting

Applicable to cars 4001 and 4002 only

Part 1 General Requirements

4(1)(b) - Palm operable control devices

4(1)(c) - Door control button illuminated surrounds

4(1)(e) - Door control button (identifiable by touch)

By prior arrangement a visit was made to the South Gosforth depot on 29th November to discuss the refurbishment works being undertaken in order to bring the 4 Metro back in to service. During the discussions on site it became apparent that further accommodations for persons of reduced mobility were possible during the refurbishment of these Metro cars. Specifically it has been possible to provide extra space for wheel chairs by removing two rather than one passenger seat thus increasing the width of the space to accommodate wheel chairs from 790mm to 120mm. I agreed with the opinion of the Nexus rolling stock engineer Mr D Mee, that it is not possible to provide any further space due to presence of the pneumatic equipment to operate the passenger doors which cannot be located any further away from the doors. This equipment together with an electrical supply has to be accessible for drivers in order for them to be able to fault find and lock the doors out of service in the event of a fault.

I also questioned the request for exemption to cars 4001 and 4002 in respect of the palm operable door buttons. These two cars were the first built of the fleet and were provided with a completely different type of door control system. Nexus have been unable to source a compliant button anywhere on the market.

I was shown a sample of the new floor covering which is to be fitted in to the vestibule areas of the Metro cars. I am advised that this offers a 38% level of contrast with the rest of the car floors whilst also contrasting with the door strip.

I advised Nexus that they should update their exemption documentation, to reflect the above.



Figure 1 Extra wheel chair space created by removal of double seat



Figure 2 Electrical and pneumatic equipment that cannot be moved



Figure 3 Contrasting floor covering for vestibule areas

Having made the above improvements, and taking into account the exemptions previously granted to the rest of the fleet, I am of the opinion that all reasonable adjustments will have been made to allow the Metro cars 4001, 4002, 4040 and 4083 to enter passenger service under an exemption to RVAR 2010, pending arrival of the first of the new fleet in 2025.

[Redacted]

HM Principal Inspector of Railways

18th December 2018.

Transport Focus

**Exemption application:
Tyne and Wear Metro – Four specialist cars**

Thank you for referring this matter to Transport Focus. We welcome the opportunity to consider this application for exemption and have done so at several levels.

The vehicles in question here are unique. We note that they underwent half-life refurbishment some twenty years ago, though unlike the remainder of the fleet, did not benefit from $\frac{3}{4}$ -life refurbishment between 2011 and 2015.

We understand that the age of the remainder of the fleet is such that it now affects reliability and that obsolescence is causing difficulty in obtaining vital spare parts to keep the cars running and that maintaining the current level of reliability is reliant on the use of these specialist cars if the timetable is to be maintained, especially during peak hours.

Despite them not having been refurbished since half-life, we appreciate that these vehicles remain in service and perform reasonably well, evidently without adverse comment from users. Additional accessibility improvements (aural and visual information systems) were made during their last refurbishment. The vehicles' physical dimensions are identical with the rest of the fleet as are the step/gap distances.

We welcome the upgrades made to the provision of ramps for boarding/alighting in the DPPP together with improvements to assistance-booking horizons.

Several aspects remain non-compliant, principally audible warnings of door opening and closure. We note that it is considered that the electrical and structural work to enable compliance is excessive given the remaining anticipated working life of the stock.

Having taken these matters in to consideration Transport Focus is minded to agree to the exemption on the basis that:

- the four vehicles will not be used routinely outside peak times after December 2019;
- that the new fleet is expected to enter service by December 2025;
- meanwhile, disabled passengers continue to be able to use the vehicles and, if specific assistance is required, this can be arranged at any Metro station;
- the frequency of service means that a following train will not involve a long wait and will almost certainly be made up of 'standard' vehicles.

It is always disappointing if the fullest accessibility is not achieved but for the very limited use which these cars will see over the next few years it seems that additional work to make them compliant will be costly. Moreover, such work will take the vehicles out of service thereby threatening current timetable reliability. If vehicles are withdrawn for whatever reason, all passengers, not only disabled people, will be inconvenienced.

As ever, we should be pleased to discuss any of the foregoing with you.