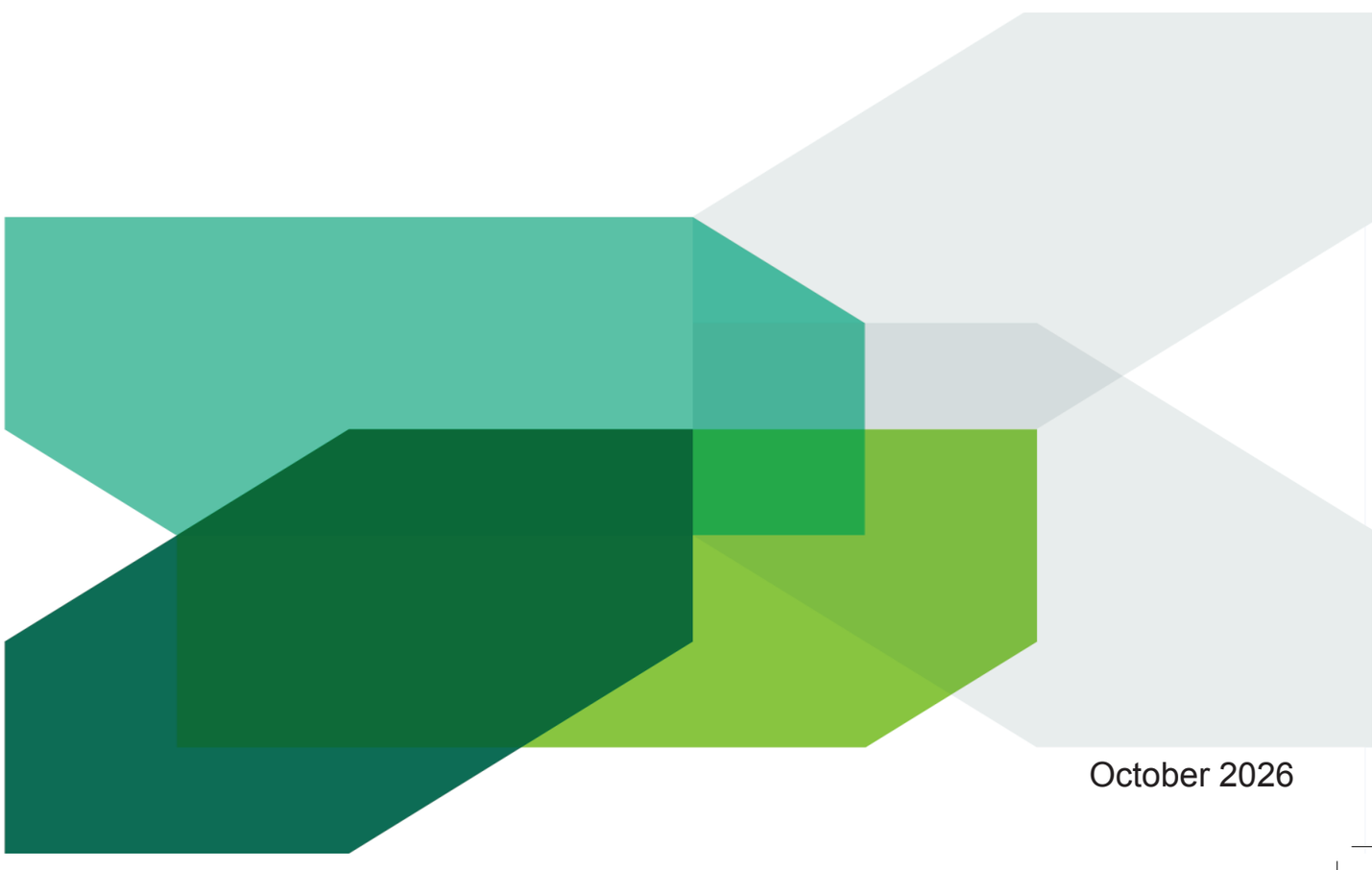
Department for Transport

Annual Report Rail Vehicle Accessibility Regulations Exemption Orders

1 January 2022 - 31 December 2022



October 2026

Department for Transport

Annual Report Rail Vehicle Accessibility Regulations Exemption Orders

1 January 2022 – 31 December 2022

Presented to Parliament pursuant to section 185 of the Equality Act 2010

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1 Introduction

1.1 This report has been laid before both Houses of Parliament by the Secretary of State for Transport in fulfilment of obligations under section 185 of the Equality Act 2010 ("EA 2010").

1.2 The report contains information about the exercise of the Secretary of State's power in the reporting year to grant Exemption Orders under section 183(1) of the EA 2010 to exempt rail vehicles from the requirements of the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 20101 ("RVAR 2010"). It contains details of each order made and details of consultation carried out in connection with orders made.

1.3 The practice of previous Annual Reports is followed, in that details are included not only of the Exemption Orders made for 'light rail' vehicles from the requirements of the RVAR 2010 but also the dispensations granted under the Railways (Interoperability) Regulations 2011[2] ("RIR 2011") for main line ('heavy rail') vehicles from the requirements of the Persons with Reduced Mobility National Technical Specification Notice[3] ("PRM-NTSN"). The applicability of the RVAR 2010 and the PRM NTSN is explained in Section 3 below.

1.4 The report covers the period 1 January 2022 to 31 December 2022 and has been published on the Department for Transport's website at https://www.gov.uk/government/collections/rail-vehicle-accessibility-regulations-rvar-exemption-orders

[1] S.I. 2010/432
[2] S.I. 2011/3066
[3] PRM_NTSN

2 Summary and statistics

2.1 This section outlines the headline figures for 2022, including the number of Exemption Orders brought into force, applications received and the number of exemptions which expired during the year.

- Applications carried forward from 2021: 3 (see Section 5)
- Applications received: 3 (see Section 5)
- Applications withdrawn: 0
- Applications rejected by Ministers: 0
- Applications accepted by Ministers: 2 (see Section 5)
- Orders brought into force: 2 (see Section 5)
- Applications carried forward into 2023: 4 (see Section 5)
- Exemption Orders expiring: 1 (see Section 6)

3 Background

3.1 Section 182 of the EA 2010 empowers the Secretary of State to make rail vehicle accessibility regulations ("RVAR") to enable disabled people, including wheelchair users, to travel in safety and reasonable comfort in those vehicles to which the regulations apply. The original regulations were made in 1998 (under the Disability Discrimination Act 1995 ("DDA")) and were amended in 2000 and 2008 before the RVAR were made in their current form in 2010.

3.2 In 2008, a European Technical Specification for Interoperability for Persons with Reduced Mobility ("PRM TSI") came into effect. The PRM TSI contained requirements that were similar to the RVAR but applied only to main line, 'heavy rail', vehicles. In order to avoid having dual regulation of those vehicles under both domestic and European requirements, the scope of the RVAR was reduced to make them applicable only to light rail vehicles, including metro, underground and tramway networks, and prescribed guided transport systems. These are the RVAR 2010.

3.3 Furthermore, the EA 2010 required that regulations made by the Secretary of State under section 182 of the EA 2010 must ensure that all passenger rail vehicles would meet accessibility standards by no later than 1 January 2020 ("the 2020 end date"). The RVAR 2010 includes provisions to meet this requirement. The RIR 2011 included the 2020 end date for application to heavy rail vehicles subject to the PRM TSI. The PRM TSI ceased to apply from on 1 January 2021 and was replaced by the Persons with Reduced Mobility National Technical Specification Notice ("PRM NTSN").

4 Progress during 2022

4.1 New vehicles in service

4.1.1 The RVAR originally imposed accessibility requirements only in relation to vehicles first brought into service after 31 December 1998. For new heavy rail vehicles, PRM TSI requirements applied from 2008 to 2020, and PRM NTSN requirements have applied from 1 January 2021.

4.1.2 At the end of 2022, the number of heavy rail vehicles in service[4] was 15,153 (2021 figure: 15,878). Of these, 11,322 (74.7 per cent) had been built new in compliance with the applicable accessibility regulations (2021: 10,896, i.e. 68.6 per cent).

4.1.3 The number of light rail vehicles in service[5] was 4,994 (2021: 4,981), of which 2,173 (43.5 per cent) had been built new in compliance with the applicable accessibility regulations (2021: 2,160, 43.4 per cent).

4.2 Improved compliance of pre-1999 vehicles through refurbishment

4.2.1 In addition to the building of new compliant vehicles, progress has continued with improving the accessibility compliance of all older rail vehicles (built before 1999) as they undergo refurbishment. This is required in respect of light rail vehicles by the RVAR 2010, and in respect of heavy rail vehicles by RIR 2011.

4.2.2 The Department for Transport (DfT), in conjunction with the Disabled Persons Transport Advisory Committee[6] ("DPTAC"), worked with the rail industry between 2011

[4] Heavy rail vehicle figures in this Report are drawn from the year-end data in R2 (the GB rail industry's vehicle asset management system) for vehicles 'In Working Order, In Service' - although this includes for any movements on Network Rail, including moves to or from storage or disposal sites, as well as for regular passenger-carrying services.

[5] Light rail vehicle figures are taken from operators' published data and from the Department for Transport's Light rail and tram fleet and infrastructure statistics report LRT0201: Number of stations or stops on light rail and trams and undergrounds by system: Great Britain [link: https://assets.publishing.service.gov.uk/media/688243f22b6fd60b7c16101c/lrt0202.ods]

[6] DPTAC is the Government's statutory advisor on the public passenger transport needs of disabled people.

and 2019 to ensure that rail vehicles built before 1999 complied with the required standards by the 2020 end date.

4.2.3 At the end of 2022, the accessibility compliance of 3,831 heavy rail vehicles (25.3 per cent per cent) had been improved through refurbishment (2021: 4,982, 31.4 per cent). Similarly, 1,218 light rail vehicles (24.4 per cent) had been improved through refurbishment (2021: 1,218).

4.3 Vehicles subject to exemption or dispensation

4.3.1 All of the 54 Rail Vehicle Accessibility Regulations 1998exemption orders made for heavy rail vehicles from 1999 until 2005 had expired by the end of 2019; none remain in force. All of the time-limited PRM TSI and PRM NTSN dispensations, and the temporary extensions to them beyond the 2020 end date, had expired by the end of 2021.

4.3.2 Consequently, all heavy rail vehicles in normal operation were either fully compliant or, for some pre-1999 fleets, compliant in accordance with the agreed 'targeted compliance' policy. (The policy of 'targeted compliance', agreed around 2006 for pre-1999 vehicles, targets the greatest barriers to travel for those with accessibility needs, rather than scrapping otherwise serviceable vehicles or endeavouring to undertake major structural re-engineering at prohibitive cost. The scope of targeted compliance included the mandated numbers of wheelchair spaces, audio-visual passenger information system, contrasting floors/handrails/handholds, tactile and palm-operable contrasting door controls, priority seats, an accessible toilet (on trains where toilets are fitted), and compliant boarding ramps (especially with fixing pins), and was later extended to allow the non-provision of dedicated step/threshold lighting, door control enable tones shorter than prescribed, and non-provision of a door control enable tone on fleets without door controls.)

4.3.3 Section 183 of the EA 2010 enables the Secretary of State to make an exemption order authorising specified regulated rail vehicles to be used in passenger service even though they do not conform to some or all of the requirements of the RVAR 2010. Such exemption orders may contain conditions and may apply exemptions for a set time period.

4.3.4 From 1999 to the end of 2022, 56 exemption orders were made for light rail vehicles, of which 10 have expired.

4.3.5 At the end of 2022, 1,603 light rail vehicles were the subject of exemption orders (2021 figure: 1,603). Of these, London Underground's Bakerloo line, Central line and Waterloo & City line trains, totalling 952 vehicles, are undergoing RVAR upgrade. The non-compliant features being made compliant by the upgrade work have been granted time-limited exemption for the scheduled duration of each upgrade programme, and remaining non-compliances have been granted exemption for the remaining life of the vehicles, i.e. until replaced by new trains.

4.3.6 At the end of 2022, 18,544 (92.0 per cent) of the combined total of 20,147 vehicles (heavy rail and light rail) had been built or refurbished to be accessible (2021: 20,859).

4.3.7 In addition to the above, exemption orders were in force for 17 heritage vehicles, in passenger service by ten different operators.

4.3.8 The DfT routinely publishes details of exemption applications on its website at https://www.gov.uk/government/publications/list-of-rvar-exemption-orders.

5 RVAR exemption applications considered during 2022

5.1 Southend Pier Railway new trains

5.1.1 Consideration of this application for exemption was brought forward from 2021.

5.1.2 As reported in the Annual Report for 2021, the formal request for exemption received in November 2021, on behalf of Southend Pier Railway for its two new SPR/21 trains, was subject to consultation in November 2021.

5.1.3 The application initially requested exemption from the requirements for doorway lighting, priority seat specification, and wheelchair space backrest. Following discussion with the Office of Rail and Road ("ORR"), doorway lighting was included in the design, and a revised application was made in January 2022 for the other two items only.

5.1.4 Consultation was undertaken with DPTAC, ORR, and Transport Focus, and with the public via ww.dft.gov.uk. The consultation period was 1 November to 25 November 2021. Comments were provided to the applicant for consideration and action as appropriate.

5.1.5 DPTAC strongly suggested that Southend Pier Railway undertake some practical testing with wheelchair users and travelling companions. This was arranged to be undertaken on 29 March 2022 on the first of the new trains to be delivered to the Railway. The visit was successful, and having considered the report of the event, DPTAC confirmed being content that its concerns had been addressed satisfactorily.

5.1.6 Ministers decided on 24 October 2022 in favour of granting the exemption order in terms of the application, i.e. for an indefinite period. As a result, the Rail Vehicle Accessibility (Non-Interoperable Rail System)(Southend Pier Railway) Exemption Order 2022 was signed on 25 October 2022, and came into force on 26 October 2022.

5.1.7 The Order exempts the two SPR/21 trains from requirements of the RVAR 2010 as listed below:

Part 1 of Schedule 1:

13(3) (specifications for priority seat, distance of 600 mm between seats);

20(4) (provision of a fitting at one end of wheelchair space to prevent tipping movement).

5.1.8 The Order was added to the exemptions list published on dft.gov.uk (link: list-of-rvar-exemption-orders), with an Explanatory Note including the consultation comments, on 14 November 2022.

5.2 Glasgow Subway new Stadler trains

5.2.1 This enquiry was brought forward from 2021.

5.2.2 Exemption was requested by Strathclyde Partnership for Transport (SPT) for the headroom above facing seats in the 17 new Stadler trains ordered in 2016 as part of the Glasgow Subway Modernisation Programme. The available headroom was non-compliant due to the interior dimensions restricted by the small diameter of the Glasgow Subway tunnels.

5.2.3 Formal application for exemption was received in August 2022. The particulars of the application were discussed with the applicant prior to consultation, and a revised application was received in October 2022.

5.2.4 The operator arranged for a viewing, on 9 December 2022, of the interior of one of the new trains at the Subway depot by Mobility and Access Committee for Scotland. A favourable response was received.

5.2.5 The application document was received in revised form on 13 December 2022, following the visit.

5.2.6 Consideration of this application was carried over to 2023.

5.3 Glasgow Subway legacy Metro-Cammell trains

5.3.1 Consideration of this application for exemption was brought forward from 2021.

5.3.2 The formal request for exemption received in December 2021 from Strathclyde Partnership for Transport (SPT) was in respect of the Metro-Cammell trains in operation on the Glasgow Subway. It sought an extension of the expiry date of the Rail Vehicle Accessibility (Non-Interoperable Rail System) (Glasgow Subway) Exemption Order 2019, from 1 July 2022 to 30 June 2024.

5.3.3 The programme for introducing new trains was reported as falling significantly behind schedule, necessitating the Metro-Cammell trains to remain in service for up to two more years. The basis and particulars of the exemption request were discussed with the applicant on a site visit to Glasgow Subway in April 2022.

5.3.4 Direct consultation was undertaken with DPTAC, ORR, Transport Focus, Transport Scotland, and Mobility and Access Committee for Scotland, and with the public via www.dft.gov.uk. The consultation period was 9 February 2022 to 9 March 2022. Comments received were provided to the applicant for consideration and action as appropriate.

5.3.5 As a result, a revised application was received on 28 April 2022. This set out the mitigations put in place to assist passengers with a disability using the Metro-Cammell trains. These included staff assistance to passengers with disabilities, public address announcements by drivers, and ensuring that all available trailer cars, which were more accessible, were in service daily.

5.3.6 Ministers decided on 8 June 2022 in favour of granting the exemption order, provided that SPT submitted regular update reports on the progress of withdrawals of the Metro-Cammell trains, and ministers were alerted to any schedule slippage. The Secretary of State's view that the seriousness of continued non-compliance be stressed to Strathclyde Partnership for Transport, noting that it had had more than a decade in which to prepare for, and adopt, the RVAR, was conveyed by letter dated 8 June 2022.

5.3.7 The Rail Vehicle Accessibility (Non-Interoperable Rail System) (Glasgow Subway) (Amendment) Exemption Order 2022 was signed on 14 June 2022. It came into force on 1 July 2022 and expires on 30 June 2024.

5.3.8 The Order extends for two years the exemptions for the Metro-Cammel trains from requirements of the RVAR 2010 as listed below:

Part 1 of Schedule 1:

3(1) (contrast between passenger doorway door and exterior of vehicle);

3(3) (external passenger doorway audible warning devices);

3(5) (audible warning before door closes);

6(1)-(4) (exterior doorways and through routes, wheelchair-compatible);

7(1)(2) (interior doorways, wheelchair-compatible);

8(2) (contrast between vestibule and adjoining floor of passenger saloon);

10(1)(a) (handrail on the inside close to, and on either side of, the passenger doorways);

10(4)(a) (Handrail diameter not less than 30 mm and not more than 40 mm);

10(4)(c) (Handrail must have a slip-resistant surface);

10(4)(d) (Handrail must contrast with the parts of the vehicle adjacent to the handrail);

10(6)(a) (Handrail width, at major axis, not less than 30 mm and not more than 40 mm);

10(6)(b) (Handrail minimum width, at minor axis, of not less than 20 mm);

10(6)(c) (Handrail must provide not less than 40 mm clearance for a passenger’s hand);

11(1) (public address system for audible and visual information announcements);

11(10) (percentage of passengers able to view information display from seated position);

13(3) (priority seats and space available must comply with the specification in C1);

13(6) (mandatory sign marking priority seats for disabled persons);

18 (minimum number of wheelchair spaces);

19 (wheelchair spaces (obstructions));

20 (wheelchair spaces (specifications));

21 (wheelchair spaces (tables and trays));

Part 2 of Schedule 1:

1 (audible warning before door closes);

3 (illumination on floor of external passenger doorway).

5.3.9 The Order was added on 17 June 2022 to the exemptions list published on dft.gov.uk (link: list-of-rvar-exemption-orders). It is published with an Explanatory Note, which includes consultation comments.

5.4 Croydon Tramlink[7] Stadler vehicles

5.4.1 Following the making of the Rail Vehicle Accessibility (Non-Interoperable Rail System) (Croydon Tramlink) (Amendment) Exemption Order 2021 that came into force on 31 December 2021, as reported in the Annual Report for 2021, Transport for London (TFL) reported in April 2022 significant delays in the procurement process. The delays were anticipated to jeopardise the extended expiry dates of 31 December 2022 for passenger information displays and 31 December 2026 for audible door warning.

5.4.2 The non-compliance of the passenger information displays concerned the minimum character height of the Passenger Information Display units inside the 12 Stadler trams. The character height was brought into compliance successfully by the end of 2022, by modifying the software for the display units.

5.4.3 However, the RVAR 2010 also has specific requirements for the height of the ascenders and descenders for lower case letters, such as g and h, to be not less than 20% of the height of upper-case letters. The display units fitted have eight rows of LEDs, but nine rows are needed to achieve the 20% ratio for the descenders (g, j, p, q and y), which would necessitate new display units.

5.4.4 A draft request for exemption for the display units' non-compliant descenders was received from Croydon Tramlink in September 2022. The scope and basis of the request was discussed with the applicant on a site visit in November 2022.

[7] The Croydon tram network is owned by Tramtrack Croydon Limited, branded as London Trams, which is a subsidiary company of, and is wholly owned by Transport for London (TfL), and is operated by Tram Operations Ltd (TOL), a subsidiary of FirstGroup.

5.4.5 Consideration of this application was carried over to 2023 pending a formal request for exemption.

5.5 Docklands Light Railway

5.5.1 An enquiry was received in January 2022 from Docklands Light Railway (DLR).

5.5.2 This concerned the exemption expiry dates approaching in 2024 and 2025 for its B90, B92 and B2007 trains and exemption for the new B23 trains on order and anticipated to enter service from the end of 2023.

5.5.3 The expiry dates were in The Rail Vehicle Accessibility (B2007 Vehicles) Exemption Order 2015, The Rail Vehicle Accessibility (non-interoperable rail system) (B92 and B2007 vehicles) exemption (miscellaneous provisions) order 2018, and The Rail Vehicle Accessibility (Non-Interoperable Rail System) (Docklands Light Railway) Exemption Order 2019.

5.5.4 The proposed request was discussed with the applicant on a site visit to DLR in June 2022.

5.5.5 Consideration of this application was carried over to 2023, pending receipt of a revised application.

5.6 London Underground Bakerloo line 1972 Tube stock

5.6.1 London Underground's progress with its RVAR upgrade programme for the 1972 Tube stock, which commenced in 2018/19, was reviewed on a site visit in December 2022. The programme reported an anticipated overrun of the planned schedule, caused by technical, economic and operational reasons arising from Covid 19 and the associated significant fall in revenue.

5.6.2 This made unavoidable an overrun of the January 2024 expiry date of The Rail Vehicle Accessibility (Non-Interoperable Rail System) (London Underground Bakerloo Line 72 Tube Stock) Exemption Order 2019. Furthermore, an additional exemption had been found to be necessary concerning the floor area of the two new wheelchair spaces, a small part of which necessitated a slight slope due to the underframe structure beneath it. LUL undertook to prepare a formal application, to include this exemption and extended expiry date.

5.6.3 Consideration of this matter was carried over to 2023.

6 Exemptions expiring during 2022

6.1 Glasgow Subway

6.1.1 In The Rail Vehicle Accessibility (Non-Interoperable Rail System) (Glasgow Subway) Exemption Order 2019, Article 5 stated that:

> The exemptions in articles 3 and 4 expire at 2 a.m. on 1 July 2022.

6.1.2 Strathclyde Partnership for Transport requested a two-year extension of the expiry date, to 1 July 2024, as recorded in paragraph 5.3 above.

7 PRM NTSN dispensations applications considered in 2022

7.1 PRM NTSN dispensations since the 2020 End Date

7.1.1 As stated in 1.3, this document reports on the dispensations granted to heavy rail vehicles under regulation 46 of RIR 2011.

7.1.2 Since 1 January 2021, these dispensations have been granted in respect of the PRM NTSN, for the reason explained in 3.4.

7.1.3 As reported in 4.3.6, by the end of 2021 (two years after the 2020 End Date) there were no time-limited dispensations still in force.

7.1.4 The RVAR_1998_Guidance stated that operators of vehicles brought into use before 1 January 1999 who propose to refurbish the vehicles are required to comply with the RVAR or seek a dispensation. This principle remains unchanged for compliance with the current regulation applicable for heavy rail vehicles, which is the PRM NTSN.

7.1.5 PRM NTSN dispensation requests considered in 2022 are recorded below.

7.2 TfW Class 230s

7.2.1 The dispensation for five 3-car Class 230 units, numbered 230006 - 230010, dated 12 November 2020 in respect of height of door controls and platform/train gap and step had been granted to Vivarail, the vehicle owners, prior to entry into passenger service.

7.2.2 A request for dispensation was received in January 2022 from Transport for Wales Rail Limited (TFWRL), the new owner (and operator) of the five units, in respect of the contrast of toilet seat and lid with background surface, in addition to the other two non-compliances.

7.2.3 DPTAC was consulted, and a vehicle was viewed at Birkenhead North Traction Maintenance Depot on 5 April 2022 by partially sighted representatives of a user group. The representatives considered the contrast adequate.

7.2.4 The dispensation was granted on 3 May 2022. It came into effect on the date of the dispensation letter, 3 May 2022, without conditions or time limit.

7.3 Angel 'Active Travel' Class 153s (cycle cars) operated by ScotRail

7.3.1 The dispensation granted to Abellio ScotRail ('ScotRail') in July 2021 for its five Class 153 single-vehicle units being converted to 'Active Travel' cycle car configuration had been granted with an expiry date 365 calendar days after entry into passenger service. (The vehicles were 153305, 153370, 153373, 153377 and 53380, and the dispensation was granted in respect of provision of a wheelchair area and Universal Accessible Toilet, wheelchair accessible exterior doorway, clearways - wheelchair accessible areas, signage, pictograms and tactile information - wheelchair accessible areas, dynamic visual information - external bodyside passenger information system displays, egress steps, and interface of the call for aid device.)

7.3.2 ScotRail requested a dispensation, for an indefinite period, to follow on from the expiry in July 2022.

7.3.3 The dispensation was granted on 28 July 2022, conditional upon operation of the vehicles by ScotRail only for the purposes of cycle carriage when coupled to a compliant unit, and on ScotRail undertaking a review of the dispensation after five years, for submitting to the DfT, to determine if the dispensation remains necessary after that date (i.e. beyond 28 July 2027).

8 Other statistics

8.1 DfT publishes other documents and statistics relating to the rail vehicle accessibility regime including:

- List of all Exemption Orders made to date;
- List of all rail vehicles built or fully refurbished to RVAR, PRM TSI or PRM NTSN;
- Most recent Annual Exemption reports.

8.2 All lists are available from: https://www.gov.uk/government/collections/rail-vehicle-accessibility-regulations-rvar-exemption-orders.

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