

Paul Carter  
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Litchurch Lane  
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DE24 8AD

Case Ref PRM-IOP-0277

EIN UK/51/2020/0048

13 August 2020

**Contact: Giles Turner**

Dear Mr Carter

## **THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011, AS AMENDED**

### **AUTHORISATION OF UPGRADE OF CLASS 710/2 DUAL VOLTAGE ELECTRIC MULTIPLE UNITS 710256-710279 FOR OPERATION OF TWO FOUR-CAR UNITS IN MULTIPLE**

I refer to your application for authorisation, received on 3 August 2020. Following review of your application, I can confirm that ORR grants authorisation under regulation 4(1)(a) of the Railways (Interoperability) Regulations 2011, as amended. This authorisation is for the placing in service for operation with two four-car units in multiple of the upgraded Class 710/2 dual voltage Electric Multiple Units numbered in accordance with appendix 1. The units have been upgraded to operate with two four-car units in multiple from operation limited to single units.

Document 3EER400030-4552\_B, referred to by the declaration of verification dated 30 Jul 2020 and contained in your technical file reference 3EER400027-4839\_C, identifies two outstanding conditions and constraints in addition to the permanent constraints inherent in the vehicle design for the operation of Class 710/2 dual voltage units:

Ref 10: The Class 710/2 units cannot operate in 5-car single unit or 2x5-car multiple units configuration.

Ref 11: The unit's interface with Energy TSI compliant wayside energy metering equipment is not demonstrated.

Your document *Significance Assessment Single Unit to Multiple Unit DV CL710* reference 3EER400031-6509 revision\_ concludes that the change is not significant, and no new control measures are introduced following this upgrade. However conditions relating to single unit operation (as recorded in the letters of authorisation dated 14 August 2019 with EIN references UK/51/2019/0013 and UK/51/2019/0014) equally apply to multiple unit operation.

The upgraded rolling stock subsystem authorised by this letter must be operated and maintained in accordance with Regulation 20.

You should be aware that any future modifications to the authorised subsystem may constitute a further 'renewal' or an 'upgrade' as defined in Regulation 2. If a project entity, in relation to the project, considers that the modification meets either of these definitions they may apply, in accordance with the provisions of Regulation 13, to the Department for Transport (DfT) for a decision on whether a new authorisation will be required. Should DfT decide that an authorisation is not required they must consult with ORR whether authorisation is required on safety grounds.

As the project entity you are responsible for retaining the technical file, keeping it up to date and making it available to the ORR in accordance with Regulations 18 and 19.

If you are not the owner of the authorised subsystem you shall within 60 days, in accordance with Regulation 19(3), transfer the technical file, certificate of verification and verification declaration to the owner of the subsystem and the owner shall then be regarded as the project entity. If the owner, in accordance with Regulation 19(4), disposes of his interest in the authorised subsystem, he shall within 60 days of the disposal transfer the technical file, certificate of verification and verification declaration to the person acquiring that interest and that person shall be regarded as the project entity.

Please note that, under Regulation 36, the person who applied for the authorisation shall send particulars to the Registration Entity to enable the registration entity to update the information on the National Vehicle Register. This will include such further information as the registration entity may reasonably require set out in the relevant standard.

The person who applied for the authorisation to place in service may apply to ORR for a determination of type in accordance with Commission Implementing Decision 2011/665/EC. The person who applied for the type authorisation will receive it after providing the data to the Registration Entity in accordance with Annex II of Commission Implementing Decision 2011/665/EC.

If you are the operator, may I remind you of the need to have adequate arrangements within your Safety Management System to control the risks associated with this upgraded rolling stock subsystem.

Yours sincerely



**Steve Fletcher**  
**Deputy Director, Enhancements, Engineering & Asset Management**

cc

Ian Jones	Head of Interoperability, Safety and Standards DfT
Ian Prosser	ORR Director Railway Safety
Matt Raine	ORR HM Inspector of Railways
Pete Gracey	ORR Head of Interoperability and Rail Vehicles
Gary Taylor	ORR Interoperability and Standards
David Galloway	Head of System Compatibility, Network Rail
National Vehicle Register	<a href="mailto:nvr@networkrail.co.uk">nvr@networkrail.co.uk</a>

**Appendix 1: vehicle numbers**

<b>Configuration</b>	<b>Previous Single unit Authorisation letter ref (for easy identification)</b>	<b>UNIT</b>	<b>DMS1</b>	<b>PMS</b>	<b>MS1</b>	<b>DMS2</b>
<b>DV - 4 car units requested to be running in MU (2X4 car) operation</b>	<b>Case Ref PRM-IOP-0277 EIN UK/51/2019/0013 dated 14 aug 2019</b>	710256	432156	432356	432256	432556
		710257	432157	432357	432257	432557
		710258	432158	432358	432258	432558
		710259	432159	432359	432259	432559
		710260	432160	432360	432260	432560
		710261	432161	432361	432261	432561
		710262	432162	432362	432262	432562
		710263	432163	432363	432263	432563
		710264	432164	432364	432264	432564
		710265	432165	432365	432265	432565
		710266	432166	432366	432266	432566
		710267	432167	432367	432267	432567
		710268	432168	432368	432268	432568
		710269	432169	432369	432269	432569
		710270	432170	432370	432270	432570
		710271	432171	432371	432271	432571
710272	432172	432372	432272	432572		
710273	432173	432373	432273	432573		
<b>DV - 5 car units but requested to be running in MU as 4 car units without MS2 vehicle</b>	<b>Case Ref PRM-IOP-0277 EIN UK/51/2019/0014 dated 14 aug 2019</b>	710274	432174	432374	432274	432574
		710275	432175	432375	432275	432575
		710276	432176	432376	432276	432576
		710277	432177	432377	432277	432577
		710278	432178	432378	432278	432578
		710279	432179	432379	432279	432579