

Mr Steve Leigh  
Programme Manager  
Network Rail Telecoms  
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Milton Keynes  
Buckinghamshire  
MK9 1EN

Your Ref : OP158365  
R00024

Case Ref : PRM-IOP-0333

IN Number : As listed

Date: 30<sup>th</sup> November 2023

**Contact: Adam Buckland**

2 Rivergate,  
Temple Quay,  
Bristol.  
BS1 6EH:

Dear Steve,

**THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011, AS AMENDED UK TYPE AUTHORISATION OF GSM-R V4.0 FITTED TO THE VEHICLES LISTED IN THIS LETTER IN CONFORMITY WITH EUROPEAN REGISTER OF AUTHORISED TYPE REFERENCE 11-095-0001-5-001.**

I refer to your application for authorisation against an approved type, received on 15<sup>th</sup> November 2023. Following a review of your application, I can confirm that ORR grants an authorisation under regulation 9 of the Railways (Interoperability) Regulations 2011, as amended.

This authorisation is for the placing in service of V4.0 GSM-R Cab Mobile sub system fitted with an interference resistant transceiver. In addition, there is an option to replace the current GSM-R antenna with a combined GSM-R/GPS antenna and to fit and additional LTE antenna.

- GSM-R Cab Mobile Type - GSM-R V4.0 Cab Mobile SVR400+ with NR4.0 software (Build 1127) which incorporate an ETSI TS 102 933 V 2.1.1 compliant transceiver.
- GSM-R/GPS antenna (Fitment of combined GSM-R/GPS antennae is optional)
  - Huber & Suhner – SWA-0825/360/5/30/DFRX30
  - Polomarconi – BGLD1/S
- LTE antenna (Fitment of LTE antennae is optional)
  - Huber & Suhner – SWA-0825/360/5/30/MIMO
  - Panorama Antennas – TRNM-7-60-NJ
  - Polomarconi – T01811814
  - Huber & Suhner – Sencity Rail MIMO Antenna 1399.17.0222

This conforms to European Register of Authorised Types (ERATV) type 11-095-0001-5-001.

It is noted that V4.0 GSM-R cab mobile build number, 1136, is included within this application. You have confirmed with your Approved Body that the two modifications in this build do not change either the GSM-R cab mobile software or related hardware on the train. This build is, therefore, considered by Network Rail and the manufacturer as a minor change with no part of the applicable National Technical Specification Notice (NTSN) or Technical Specification for Interoperability (TSI) being impacted. Therefore, it is considered that the initial determination of type remains unchanged.

I refer to your documents V4.0 GSM-R Cab Mobile Build 1136 Significance Decision, dated the 3<sup>rd</sup> September 2021 and the Letter of Assessment of Minor Change reference ACS9244 L02 dated the 30<sup>th</sup> July 2021.

This authorisation applies to the following inclusive.

Operator	Class	Vehicle	Cab	V4.0 Installation Date	IN
Arriva Rail London	710	710375	A	14/05/2023	UK/51/2021/0049
Arriva Rail London	710	710375	B	22/05/2023	UK/51/2021/0049
DB Cargo	66	66073	A	28/07/2023	UK/51/2020/0001
DB Cargo	66	66244	A	20/03/2023	UK/51/2020/0001
DRS	47	09707	A	02/02/2023	UK/51/2020/0034
GB Railfreight	69	69010	A	28/07/2023	UK/51/2021/0008
Govia Thameslink Railway	171	171808	A	16/07/2023	UK/51/2020/0005
Great Western Railway	158	158748	A	21/05/2023	UK/51/2020/0013
Great Western Railway	158	158748	B	21/05/2023	UK/51/2020/0013
Greater Anglia	720	720107	A	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720107	B	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720108	A	15/02/2023	UK/51/2022/0006
Greater Anglia	720	720108	B	15/02/2023	UK/51/2022/0006
Greater Anglia	720	720111	A	23/02/2023	UK/51/2022/0006
Greater Anglia	720	720111	B	23/02/2023	UK/51/2022/0006
Greater Anglia	720	720116	A	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720116	B	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720119	A	12/02/2023	UK/51/2022/0006

Greater Anglia	720	720119	B	12/02/2023	UK/51/2022/0006
Greater Anglia	720	720121	A	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720121	B	14/02/2023	UK/51/2022/0006
Greater Anglia	720	720122	A	20/02/2023	UK/51/2022/0006
Greater Anglia	720	720122	B	20/02/2023	UK/51/2022/0006
Greater Anglia	720	720123	A	30/03/2023	UK/51/2022/0006
Greater Anglia	720	720123	B	30/03/2023	UK/51/2022/0006
Greater Anglia	720	720125	A	30/03/2023	UK/51/2022/0006
Greater Anglia	720	720125	B	30/03/2023	UK/51/2022/0006
Greater Anglia	720	720126	A	27/03/2023	UK/51/2022/0006
Greater Anglia	720	720126	B	27/03/2023	UK/51/2022/0006
Greater Anglia	720	720127	B	17/04/2023	UK/51/2022/0006
Greater Anglia	720	720128	A	17/03/2023	UK/51/2022/0006
Greater Anglia	720	720128	B	29/03/2023	UK/51/2022/0006
Greater Anglia	720	720129	A	02/04/2023	UK/51/2022/0006
Greater Anglia	720	720129	B	02/04/2023	UK/51/2022/0006
Greater Anglia	720	720130	A	13/04/2023	UK/51/2022/0006
Greater Anglia	720	720130	B	13/04/2023	UK/51/2022/0006
Greater Anglia	720	720131	A	26/04/2023	UK/51/2022/0006
Greater Anglia	720	720131	B	26/04/2023	UK/51/2022/0006
Greater Anglia	720	720132	A	16/05/2023	UK/51/2022/0006
Greater Anglia	720	720132	B	16/05/2023	UK/51/2022/0006
Greater Anglia	720	720133	A	24/05/2023	UK/51/2022/0006
Greater Anglia	720	720134	A	16/08/2023	UK/51/2022/0006
Greater Anglia	720	720134	B	16/08/2023	UK/51/2022/0006
Greater Anglia	720	720135	A	04/07/2023	UK/51/2022/0006
Greater Anglia	720	720135	B	04/07/2023	UK/51/2022/0006
Greater Anglia	720	720136	B	04/06/2023	UK/51/2022/0006
Greater Anglia	720	720137	A	26/07/2023	UK/51/2022/0006
Greater Anglia	720	720137	B	26/07/2023	UK/51/2022/0006
Greater Anglia	720	720502	A	20/07/2023	UK/51/2022/0006
Greater Anglia	720	720502	B	20/07/2023	UK/51/2022/0006
Greater Anglia	720	720508	A	30/01/2023	UK/51/2022/0006
Greater Anglia	720	720508	B	30/01/2023	UK/51/2022/0006
Greater Anglia	720	720518	A	29/03/2023	UK/51/2022/0006
Greater Anglia	720	720518	B	29/03/2023	UK/51/2022/0006

Greater Anglia	720	720533	A	17/02/2023	UK/51/2022/0006
Greater Anglia	720	720533	B	17/02/2023	UK/51/2022/0006
Greater Anglia	720	720541	A	25/04/2023	UK/51/2022/0006
Greater Anglia	720	720541	B	25/04/2023	UK/51/2022/0006
Merseyrail	777	777011	A	04/08/2023	UK/51/2022/0005
Merseyrail	777	777011	B	04/08/2023	UK/51/2022/0005
Merseyrail	777	777017	A	03/08/2023	UK/51/2022/0005
Merseyrail	777	777017	B	03/08/2023	UK/51/2022/0005
Merseyrail	777	777036	A	29/06/2023	UK/51/2022/0005
Merseyrail	777	777036	B	29/06/2023	UK/51/2022/0005
Merseyrail	777	777140	A	27/01/2023	UK/51/2022/0005
Merseyrail	777	777140	B	27/01/2023	UK/51/2022/0005
Merseyrail	777	777142	A	28/03/2023	UK/51/2022/0005
Merseyrail	777	777142	B	28/03/2023	UK/51/2022/0005
Merseyrail	777	777144	A	03/06/2023	UK/51/2022/0005
Merseyrail	777	777144	B	03/06/2023	UK/51/2022/0005
Merseyrail	777	777146	A	15/06/2023	UK/51/2022/0005
Merseyrail	777	777146	B	16/06/2023	UK/51/2022/0005
Merseyrail	777	777148	A	29/06/2023	UK/51/2022/0005
Merseyrail	777	777148	B	29/06/2023	UK/51/2022/0005
Merseyrail	777	777150	A	03/08/2023	UK/51/2022/0005
Merseyrail	777	777150	B	03/08/2023	UK/51/2022/0005
Northern Trains Ltd	156	156422	A	25/07/2023	UK/51/2021/0002
Northern Trains Ltd	156	156422	B	25/07/2023	UK/51/2021/0002
Preservation	142	142090	A	23/04/2023	UK/51/2021/0061
Preservation	142	142090	B	23/04/2023	UK/51/2021/0061
South Western Railway	701	701015	A	08/02/2023	UK/51/2020/0060
South Western Railway	701	701032	B	14/02/2023	UK/51/2020/0060
South Western Railway	701	701053	A	23/04/2023	UK/51/2020/0060
South Western Railway	701	701053	B	04/04/2023	UK/51/2020/0060
South Western Railway	701	701054	A	24/05/2023	UK/51/2020/0060
South Western Railway	701	701054	B	16/05/2023	UK/51/2020/0060
South Western Railway	701	701055	A	03/07/2023	UK/51/2020/0060
South Western Railway	701	701055	B	27/06/2023	UK/51/2020/0060
South Western Railway	701	701056	A	15/06/2023	UK/51/2020/0060
South Western Railway	701	701056	B	07/06/2023	UK/51/2020/0060

South Western Railway	701	701057	B	14/07/2023	UK/51/2020/0060
South Western Railway	701	701508	A	22/06/2023	UK/51/2020/0060
South Western Railway	701	701508	B	20/06/2023	UK/51/2020/0060
South Western Railway	701	701510	A	19/06/2023	UK/51/2020/0060
South Western Railway	701	701513	A	15/08/2023	UK/51/2020/0060
South Western Railway	701	701513	B	15/08/2023	UK/51/2020/0060
South Western Railway	701	701514	A	18/08/2023	UK/51/2020/0060
South Western Railway	701	701514	B	18/08/2023	UK/51/2020/0060
Swanage Railway	121	977860	A	30/03/2023	UK/51/2021/0055

The restrictions or limitations of use on the structural subsystem are those referenced in the Determination of Type.

The 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 '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 declaration of conformity to an authorised type of railway vehicle, documentation recording any alterations, and maintenance manuals in relation to the subsystem, keeping them up to date and making them available to the ORR in accordance with Regulation 19.

If you are not the owner of the authorised subsystem you shall within 60 days, in accordance with Regulation 19(3), transfer the declaration of conformity to an authorised type of railway vehicle, documentation recording any alterations, and maintenance manuals in relation to the subsystem 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 declaration of conformity to an authorised type of railway vehicle, documentation recording any alterations, and maintenance manuals in relation to the subsystem 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

enter 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.

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 rolling stock subsystem.

This decision letter will be published on ORR's website.

Yours sincerely

Steve Fletcher      ORR Deputy Director, Railway Planning and Performance

Cc

James Le Grice      Head of Interoperability, Safety and Standards DfT.

Ian Prosser          Director, Railway Safety, ORR.

National Vehicle Register [nvr@networkrail.co.uk](mailto:nvr@networkrail.co.uk)

David Galloway      Head of Vehicle Compatibility, Network Rail.

Giles Turner          Head of Interoperability and Rail Vehicle Engineering, ORR.

Ian Maxwell          Head of Train Control Systems, ORR.