

Mr Steve Leigh  
Program Manager  
Network Rail Telecoms  
The Quadrant, Level 2 Caldecotte,  
Eldergate  
Milton Keynes  
Buckinghamshire  
MK9 1HA

Your Ref : OP158365  
R00002

Case Ref : PRM-IOP-0333

EIN Number : As listed

Date: 13<sup>th</sup> March 2020

**Contact: Stephen Williams**  
3<sup>rd</sup> Floor, Mallard House, Kings Pool,  
1-2 Peasholme Green,  
York.  
YO1 7PX.

Dear Steve,

**THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011, AS AMENDED  
TYPE AUTHORISATION OF GSMR 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 type authorisation, received on 3<sup>rd</sup> March 2020. Following 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

This authorisation applies to the following inclusive.

Operator	Class	Vehicle	Cab	V4.0 Installation Date	EIN
Colas Rail	075	075011	A	24/02/2020	UK/51/2020/0016
Colas Rail	075	075011	B	24/02/2020	UK/51/2020/0016
Freightliner	66	66416	A	13/02/2020	UK/51/2020/0001
Freightliner	66	66419	A	17/02/2020	UK/51/2020/0001
Freightliner	66	66516	A	13/02/2020	UK/51/2020/0001
Freightliner	66	66517	A	13/02/2020	UK/51/2020/0001
Freightliner	66	66528	A	11/02/2020	UK/51/2020/0001
Freightliner	66	66531	A	17/02/2020	UK/51/2020/0001
Freightliner	66	66536	A	06/02/2020	UK/51/2020/0001
Freightliner	66	66538	A	05/02/2020	UK/51/2020/0001
Freightliner	66	66541	A	17/02/2020	UK/51/2020/0001
Freightliner	66	66545	A	13/02/2020	UK/51/2020/0001
Freightliner	66	66551	A	13/02/2020	UK/51/2020/0001
Freightliner	66	66556	A	06/02/2020	UK/51/2020/0001
Freightliner	66	66563	A	04/02/2020	UK/51/2020/0001
Freightliner	66	66568	A	05/02/2020	UK/51/2020/0001
Freightliner	66	66590	A	05/02/2020	UK/51/2020/0001
Freightliner	66	66597	A	25/02/2020	UK/51/2020/0001
Freightliner	86	86605	A	14/02/2020	UK/51/2020/0003
Freightliner	86	86605	B	14/02/2020	UK/51/2020/0003
Freightliner	86	86614	A	14/02/2020	UK/51/2020/0003
Freightliner	86	86614	B	14/02/2020	UK/51/2020/0003
GB Railfreight	66	66714	A	04/02/2020	UK/51/2020/0001
GB Railfreight	66	66791	A	28/02/2020	UK/51/2020/0001
Govia Thameslink Railway	313	313206	A	10/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313206	B	10/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313207	A	04/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313207	B	04/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313215	A	07/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313215	B	07/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313216	A	11/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313216	B	11/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313217	A	13/02/2020	UK/51/2020/0006
Govia Thameslink Railway	313	313217	B	13/02/2020	UK/51/2020/0006
Govia Thameslink Railway	365	365510	A	18/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365510	B	18/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365518	A	13/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365518	B	13/02/2020	UK/51/2020/0007

Govia Thameslink Railway	365	365520	A	27/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365522	A	18/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365522	B	18/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365524	A	19/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365524	B	19/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365528	A	05/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365539	A	07/02/2020	UK/51/2020/0007
Govia Thameslink Railway	365	365539	B	07/02/2020	UK/51/2020/0007
Govia Thameslink Railway	377	377114	A	06/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377114	B	06/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377134	A	18/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377134	B	18/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377140	A	03/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377140	B	03/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377142	A	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377142	B	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377147	A	03/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377147	B	03/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377158	A	19/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377158	B	19/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377159	A	27/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377159	B	27/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377307	A	11/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377307	B	11/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377311	A	13/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377311	B	13/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377312	A	12/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377312	B	19/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377313	A	21/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377313	B	21/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377314	A	24/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377314	B	24/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377318	B	03/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377321	A	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377321	B	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377324	A	28/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377324	B	28/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377328	A	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377328	B	17/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377402	A	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377402	B	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377428	A	12/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377428	B	12/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377447	A	07/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377447	B	07/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377450	A	20/02/2020	UK/51/2020/0008

Govia Thameslink Railway	377	377461	A	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377461	B	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377467	A	27/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377467	B	27/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377473	A	28/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377473	B	28/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377610	A	05/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377610	B	05/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377612	A	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377612	B	20/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377614	A	06/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377614	B	06/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377620	A	12/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377620	B	12/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377703	A	04/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377703	B	04/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377706	A	19/02/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377706	B	19/02/2020	UK/51/2020/0008
Govia Thameslink Railway	387	387101	A	17/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387101	B	17/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387103	A	17/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387103	B	17/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387109	A	06/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387109	B	06/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387111	A	24/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387111	B	24/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387115	A	22/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387115	B	22/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387117	A	19/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387117	B	19/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387120	B	12/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387126	A	22/02/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387126	B	22/02/2020	UK/51/2020/0009
Govia Thameslink Railway	455	455801	A	03/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455801	B	03/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455813	A	14/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455813	B	14/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455828	A	22/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455828	B	22/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455837	A	20/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455837	B	20/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455838	B	22/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455840	A	25/02/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455840	B	25/02/2020	UK/51/2020/0010
Transport for Wales	158	158831	A	20/02/2020	UK/51/2020/0013
Transport for Wales	158	158831	B	21/02/2020	UK/51/2020/0013

Transport for Wales	158	158840	A	19/02/2020	UK/51/2020/0013
Transport for Wales	158	158840	B	19/02/2020	UK/51/2020/0013
Transport for Wales	230	230006	A	27/02/2020	UK/51/2020/0014
Transport for Wales	230	230006	B	27/02/2020	UK/51/2020/0014
UK Rail Leasing	37	37510	A	04/02/2020	UK/51/2020/0015

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

A handwritten signature in black ink, appearing to read 'Steve Fletcher', with a stylized, cursive script.

Steve Fletcher - ORR Deputy Director, Railway Planning and Performance.

Cc

Ian Jones, Head of Interoperability, Safety and Standards DfT

Ian Prosser Director, Railway Safety

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

David Galloway Head of Vehicle Compatibility, Network Rail.

Giles Turner Interoperability Manager ORR.