

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

Your Ref : OP158365  
R00017

Case Ref : PRM-IOP-0333

IN Number : As listed

Date: 6<sup>th</sup> August 2021

**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 2<sup>nd</sup> August 2021. 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.

This authorisation applies to the following inclusive.

Operator	Class	Vehicle	Cab	V4.0 Installation Date	IN
Abellio ScotRail	158	158714	B	27/06/2021	UK/51/2020/0013
Abellio ScotRail	385	385117	A	14/07/2021	UK/51/2021/0058
Arriva Rail London	710	710257	A	16/07/2021	UK/51/2021/0049
Arriva Rail London	710	710257	B	16/07/2021	UK/51/2021/0049
Arriva Rail London	710	710258	A	09/07/2021	UK/51/2021/0049
Arriva Rail London	710	710258	B	09/07/2021	UK/51/2021/0049
Arriva Rail London	710	710265	A	12/07/2021	UK/51/2021/0049
Arriva Rail London	710	710265	B	12/07/2021	UK/51/2021/0049
Arriva Rail London	710	710377	A	29/06/2021	UK/51/2021/0049
Arriva Rail London	710	710377	B	29/06/2021	UK/51/2021/0049
Avanti West Coast	221	221103	A	20/07/2021	UK/51/2020/0062
Avanti West Coast	221	221103	B	20/07/2021	UK/51/2020/0062
Avanti West Coast	221	221107	A	21/07/2021	UK/51/2020/0062
Avanti West Coast	221	221107	B	21/07/2021	UK/51/2020/0062
Avanti West Coast	221	221110	A	16/07/2021	UK/51/2020/0062
Avanti West Coast	221	221110	B	16/07/2021	UK/51/2020/0062
Avanti West Coast	221	221142	A	20/07/2021	UK/51/2020/0062
Avanti West Coast	221	221142	B	20/07/2021	UK/51/2020/0062
c2c	357	357002	A	13/07/2021	UK/51/2021/0006
c2c	357	357002	B	13/07/2021	UK/51/2021/0006
c2c	357	357003	A	14/07/2021	UK/51/2021/0006
c2c	357	357003	B	14/07/2021	UK/51/2021/0006
c2c	357	357005	A	15/07/2021	UK/51/2021/0006
c2c	357	357005	B	15/07/2021	UK/51/2021/0006
c2c	357	357006	A	22/07/2021	UK/51/2021/0006
c2c	357	357006	B	22/07/2021	UK/51/2021/0006
c2c	357	357008	A	23/07/2021	UK/51/2021/0006
c2c	357	357046	A	16/07/2021	UK/51/2021/0006
c2c	357	357046	B	07/07/2021	UK/51/2021/0006
c2c	357	357312	A	09/07/2021	UK/51/2021/0006
c2c	357	357312	B	09/07/2021	UK/51/2021/0006
Chiltern Railways	168	168004	A	21/07/2021	UK/51/2020/0043

Colas Rail	70	70810	A	07/07/2021	UK/51/2020/0002
DB Cargo	325	325008	A	23/07/2021	UK/51/2021/0028
DB Cargo	325	325008	B	23/07/2021	UK/51/2021/0028
DB Cargo	325	325011	A	05/07/2021	UK/51/2021/0028
DB Cargo	325	325011	B	05/07/2021	UK/51/2021/0028
DB Cargo	325	325012	A	16/07/2021	UK/51/2021/0028
DB Cargo	325	325012	B	16/07/2021	UK/51/2021/0028
DB Cargo	325	325015	A	02/07/2021	UK/51/2021/0028
DB Cargo	325	325015	B	02/07/2021	UK/51/2021/0028
DB Cargo	60	60044	A	08/07/2021	UK/51/2020/0064
DB Cargo	60	60074	A	21/07/2021	UK/51/2020/0064
DB Cargo	66	66070	A	09/07/2021	UK/51/2020/0001
DB Cargo	66	66099	A	06/07/2021	UK/51/2020/0001
DB Cargo	66	66105	A	05/07/2021	UK/51/2020/0001
DB Cargo	66	66175	A	19/07/2021	UK/51/2020/0001
DB Cargo	66	66185	A	20/07/2021	UK/51/2020/0001
DB Cargo	66	66198	A	14/07/2021	UK/51/2020/0001
DB Cargo	92	92042	A	05/07/2021	UK/51/2021/0050
DRS	37	37069	A	28/06/2021	UK/51/2020/0015
DRS	37	37401	A	23/07/2021	UK/51/2020/0015
DRS	37	37422	A	23/07/2021	UK/51/2020/0015
DRS	37	37423	A	07/07/2021	UK/51/2020/0015
DRS	37	37424	A	17/07/2021	UK/51/2020/0015
DRS	37	37716	A	15/07/2021	UK/51/2020/0015
DRS	57	57002	A	01/07/2021	UK/51/2020/0071
DRS	57	57003	A	11/07/2021	UK/51/2020/0071
DRS	57	57309	A	12/07/2021	UK/51/2020/0071
DRS	66	66302	A	22/07/2021	UK/51/2020/0001
DRS	66	66303	A	06/07/2021	UK/51/2020/0001
DRS	66	66304	A	01/07/2021	UK/51/2020/0001
DRS	66	66426	A	29/06/2021	UK/51/2020/0001
DRS	66	66427	A	16/07/2021	UK/51/2020/0001
DRS	66	66431	A	22/07/2021	UK/51/2020/0001
DRS	68	68002	A	08/07/2021	UK/51/2021/0040
DRS	68	68003	A	15/07/2021	UK/51/2021/0040
DRS	68	68007	A	10/07/2021	UK/51/2021/0040
DRS	68	68010	A	05/07/2021	UK/51/2021/0040
DRS	68	68012	A	23/07/2021	UK/51/2021/0040
DRS	68	68013	A	22/07/2021	UK/51/2021/0040

DRS	68	68019	A	21/07/2021	UK/51/2021/0040
DRS	68	68020	A	06/07/2021	UK/51/2021/0040
DRS	68	68021	A	22/07/2021	UK/51/2021/0040
DRS	68	68025	A	05/07/2021	UK/51/2021/0040
DRS	88	88004	A	06/07/2021	UK/51/2021/0041
DRS	88	88006	A	09/07/2021	UK/51/2021/0041
DRS	88	88008	A	13/07/2021	UK/51/2021/0041
DRS	88	88009	A	01/07/2021	UK/51/2021/0041
DRS	88	88010	A	02/07/2021	UK/51/2021/0041
East Midlands Railway	156	156912	A	09/07/2021	UK/51/2021/0002
East Midlands Railway	156	156912	B	09/07/2021	UK/51/2021/0002
East Midlands Railway	156	156918	A	20/07/2021	UK/51/2021/0002
East Midlands Railway	156	156918	B	20/07/2021	UK/51/2021/0002
East Midlands Railway	156	156922	A	02/07/2021	UK/51/2021/0002
East Midlands Railway	156	156922	B	02/07/2021	UK/51/2021/0002
East Midlands Railway	222	222011	A	27/06/2021	UK/51/2021/0031
East Midlands Railway	222	222011	B	27/06/2021	UK/51/2021/0031
East Midlands Railway	222	222014	A	07/07/2021	UK/51/2021/0031
East Midlands Railway	222	222014	B	07/07/2021	UK/51/2021/0031
East Midlands Railway	222	222018	B	29/06/2021	UK/51/2021/0031
East Midlands Railway	222	222103	A	08/07/2021	UK/51/2021/0031
East Midlands Railway	222	222103	B	08/07/2021	UK/51/2021/0031
East Midlands Railway	360	360101	A	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360101	B	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360103	A	22/07/2021	UK/51/2021/0053
East Midlands Railway	360	360103	B	22/07/2021	UK/51/2021/0053
East Midlands Railway	360	360104	A	16/07/2021	UK/51/2021/0053
East Midlands Railway	360	360104	B	16/07/2021	UK/51/2021/0053
East Midlands Railway	360	360105	A	19/07/2021	UK/51/2021/0053
East Midlands Railway	360	360105	B	19/07/2021	UK/51/2021/0053
East Midlands Railway	360	360106	A	14/07/2021	UK/51/2021/0053
East Midlands Railway	360	360106	B	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360107	A	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360107	B	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360109	A	13/07/2021	UK/51/2021/0053
East Midlands Railway	360	360109	B	13/07/2021	UK/51/2021/0053
East Midlands Railway	360	360110	A	17/07/2021	UK/51/2021/0053
East Midlands Railway	360	360110	B	17/07/2021	UK/51/2021/0053
East Midlands Railway	360	360111	A	16/07/2021	UK/51/2021/0053

East Midlands Railway	360	360111	B	16/07/2021	UK/51/2021/0053
East Midlands Railway	360	360112	A	24/07/2021	UK/51/2021/0053
East Midlands Railway	360	360112	B	24/07/2021	UK/51/2021/0053
East Midlands Railway	360	360113	A	13/07/2021	UK/51/2021/0053
East Midlands Railway	360	360113	B	13/07/2021	UK/51/2021/0053
East Midlands Railway	360	360114	A	24/07/2021	UK/51/2021/0053
East Midlands Railway	360	360114	B	24/07/2021	UK/51/2021/0053
East Midlands Railway	360	360115	A	20/07/2021	UK/51/2021/0053
East Midlands Railway	360	360115	B	20/07/2021	UK/51/2021/0053
East Midlands Railway	360	360116	A	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360116	B	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360117	A	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360117	B	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360118	A	22/07/2021	UK/51/2021/0053
East Midlands Railway	360	360118	B	22/07/2021	UK/51/2021/0053
East Midlands Railway	360	360119	A	21/07/2021	UK/51/2021/0053
East Midlands Railway	360	360119	B	21/07/2021	UK/51/2021/0053
East Midlands Railway	360	360120	A	15/07/2021	UK/51/2021/0053
East Midlands Railway	360	360120	B	15/07/2021	UK/51/2021/0053
GB Railfreight	66	66704	A	21/07/2021	UK/51/2020/0001
GB Railfreight	66	66708	A	10/07/2021	UK/51/2020/0001
GB Railfreight	66	66711	A	21/07/2021	UK/51/2020/0001
GB Railfreight	66	66713	A	08/07/2021	UK/51/2020/0001
GB Railfreight	66	66715	A	09/07/2021	UK/51/2020/0001
GB Railfreight	66	66721	A	29/06/2021	UK/51/2020/0001
GB Railfreight	66	66728	A	02/07/2021	UK/51/2020/0001
GB Railfreight	66	66730	A	14/07/2021	UK/51/2020/0001
GB Railfreight	66	66731	A	29/06/2021	UK/51/2020/0001
GB Railfreight	66	66733	A	30/06/2021	UK/51/2020/0001
GB Railfreight	66	66748	A	01/07/2021	UK/51/2020/0001
GB Railfreight	66	66753	A	05/07/2021	UK/51/2020/0001
GB Railfreight	66	66757	A	11/07/2021	UK/51/2020/0001
GB Railfreight	66	66759	A	10/07/2021	UK/51/2020/0001
GB Railfreight	66	66764	A	30/06/2021	UK/51/2020/0001
GB Railfreight	66	66769	A	10/07/2021	UK/51/2020/0001
GB Railfreight	66	66784	A	12/07/2021	UK/51/2020/0001
GB Railfreight	66	66795	A	06/07/2021	UK/51/2020/0001
GB Railfreight	69	69002	A	04/07/2021	UK/51/2021/0008
Great Western Railway	165	165123	A	30/06/2021	UK/51/2020/0042

Great Western Railway	165	165123	B	30/06/2021	UK/51/2020/0042
Great Western Railway	769	769922	A	06/07/2021	UK/51/2021/0010
Great Western Railway	769	769922	B	06/07/2021	UK/51/2021/0010
Great Western Railway	769	769925	A	29/06/2021	UK/51/2021/0010
Great Western Railway	769	769925	B	29/06/2021	UK/51/2021/0010
Great Western Railway	769	769928	A	01/07/2021	UK/51/2021/0010
Great Western Railway	769	769928	B	01/07/2021	UK/51/2021/0010
Great Western Railway	769	769932	A	08/07/2021	UK/51/2021/0010
Great Western Railway	769	769932	B	08/07/2021	UK/51/2021/0010
Great Western Railway	769	769938	A	09/07/2021	UK/51/2021/0010
Great Western Railway	769	769938	B	09/07/2021	UK/51/2021/0010
Great Western Railway	769	769939	A	05/07/2021	UK/51/2021/0010
Great Western Railway	769	769939	B	05/07/2021	UK/51/2021/0010
Great Western Railway	769	769944	A	01/07/2021	UK/51/2021/0010
Great Western Railway	769	769944	B	01/07/2021	UK/51/2021/0010
Great Western Railway	769	769947	A	09/07/2021	UK/51/2021/0010
Great Western Railway	769	769947	B	09/07/2021	UK/51/2021/0010
Great Western Railway	769	769949	A	30/06/2021	UK/51/2021/0010
Great Western Railway	769	769949	B	30/06/2021	UK/51/2021/0010
Great Western Railway	769	769959	A	01/07/2021	UK/51/2021/0010
Great Western Railway	769	769959	B	01/07/2021	UK/51/2021/0010
Great Western Railway	800	800013	A	23/07/2021	UK/51/2021/0013
Great Western Railway	800	800013	B	23/07/2021	UK/51/2021/0013
Great Western Railway	800	800020	A	17/07/2021	UK/51/2021/0013
Great Western Railway	800	800020	B	17/07/2021	UK/51/2021/0013
Great Western Railway	800	800026	A	30/06/2021	UK/51/2021/0013
Great Western Railway	800	800026	B	30/06/2021	UK/51/2021/0013
Great Western Railway	802	802005	A	29/06/2021	UK/51/2021/0007
Great Western Railway	802	802005	B	29/06/2021	UK/51/2021/0007
Great Western Railway	802	802012	A	17/07/2021	UK/51/2021/0007
Great Western Railway	802	802012	B	17/07/2021	UK/51/2021/0007
Great Western Railway	802	802105	A	09/07/2021	UK/51/2021/0007
Great Western Railway	802	802105	B	09/07/2021	UK/51/2021/0007
Great Western Railway	802	802110	A	13/07/2021	UK/51/2021/0007
Great Western Railway	802	802110	B	13/07/2021	UK/51/2021/0007
Great Western Railway	802	802112	A	06/07/2021	UK/51/2021/0007
Great Western Railway	802	802112	B	06/07/2021	UK/51/2021/0007
Greater Anglia	321	321421	B	11/07/2021	UK/51/2020/0068
Greater Anglia	379	379004	A	29/06/2021	UK/51/2021/0032

Greater Anglia	379	379004	B	29/06/2021	UK/51/2021/0032
Greater Anglia	745	745001	A	30/06/2021	UK/51/2021/0054
Greater Anglia	745	745001	B	30/06/2021	UK/51/2021/0054
Greater Anglia	745	745002	A	12/07/2021	UK/51/2021/0054
Greater Anglia	745	745002	B	12/07/2021	UK/51/2021/0054
Greater Anglia	745	745003	A	20/07/2021	UK/51/2021/0054
Greater Anglia	745	745003	B	20/07/2021	UK/51/2021/0054
Greater Anglia	745	745004	A	29/06/2021	UK/51/2021/0054
Greater Anglia	745	745004	B	29/06/2021	UK/51/2021/0054
Greater Anglia	745	745007	A	13/07/2021	UK/51/2021/0054
Greater Anglia	745	745007	B	13/07/2021	UK/51/2021/0054
Greater Anglia	745	745008	A	06/07/2021	UK/51/2021/0054
Greater Anglia	745	745008	B	06/07/2021	UK/51/2021/0054
Greater Anglia	745	745009	A	15/07/2021	UK/51/2021/0054
Greater Anglia	745	745009	B	15/07/2021	UK/51/2021/0054
Greater Anglia	745	745102	A	12/07/2021	UK/51/2021/0054
Greater Anglia	745	745102	B	12/07/2021	UK/51/2021/0054
Greater Anglia	745	745103	A	22/07/2021	UK/51/2021/0054
Greater Anglia	745	745103	B	22/07/2021	UK/51/2021/0054
Greater Anglia	745	745106	A	21/07/2021	UK/51/2021/0054
Greater Anglia	745	745106	B	21/07/2021	UK/51/2021/0054
Greater Anglia	745	745109	A	08/07/2021	UK/51/2021/0054
Greater Anglia	745	745109	B	08/07/2021	UK/51/2021/0054
Greater Anglia	755	755325	A	08/07/2021	UK/51/2021/0012
Greater Anglia	755	755325	B	08/07/2021	UK/51/2021/0012
Greater Anglia	755	755330	A	15/07/2021	UK/51/2021/0012
Greater Anglia	755	755330	B	15/07/2021	UK/51/2021/0012
Greater Anglia	755	755332	A	21/07/2021	UK/51/2021/0012
Greater Anglia	755	755332	B	21/07/2021	UK/51/2021/0012
Greater Anglia	755	755335	A	14/07/2021	UK/51/2021/0012
Greater Anglia	755	755335	B	14/07/2021	UK/51/2021/0012
Greater Anglia	755	755336	A	15/07/2021	UK/51/2021/0012
Greater Anglia	755	755336	B	15/07/2021	UK/51/2021/0012
Greater Anglia	755	755338	A	12/07/2021	UK/51/2021/0012
Greater Anglia	755	755338	B	12/07/2021	UK/51/2021/0012
Greater Anglia	755	755401	A	13/07/2021	UK/51/2021/0012
Greater Anglia	755	755401	B	13/07/2021	UK/51/2021/0012
Greater Anglia	755	755402	A	05/07/2021	UK/51/2021/0012
Greater Anglia	755	755402	B	05/07/2021	UK/51/2021/0012

Greater Anglia	755	755404	A	07/07/2021	UK/51/2021/0012
Greater Anglia	755	755404	B	07/07/2021	UK/51/2021/0012
Greater Anglia	755	755405	A	19/07/2021	UK/51/2021/0012
Greater Anglia	755	755405	B	19/07/2021	UK/51/2021/0012
Greater Anglia	755	755406	A	22/07/2021	UK/51/2021/0012
Greater Anglia	755	755406	B	22/07/2021	UK/51/2021/0012
Greater Anglia	755	755407	A	20/07/2021	UK/51/2021/0012
Greater Anglia	755	755407	B	20/07/2021	UK/51/2021/0012
Greater Anglia	755	755408	A	02/07/2021	UK/51/2021/0012
Greater Anglia	755	755408	B	02/07/2021	UK/51/2021/0012
Greater Anglia	755	755409	A	29/06/2021	UK/51/2021/0012
Greater Anglia	755	755409	B	29/06/2021	UK/51/2021/0012
Greater Anglia	755	755410	A	21/07/2021	UK/51/2021/0012
Greater Anglia	755	755410	B	21/07/2021	UK/51/2021/0012
Greater Anglia	755	755412	A	19/07/2021	UK/51/2021/0012
Greater Anglia	755	755412	B	19/07/2021	UK/51/2021/0012
Greater Anglia	755	755416	A	14/07/2021	UK/51/2021/0012
Greater Anglia	755	755416	B	14/07/2021	UK/51/2021/0012
Greater Anglia	755	755417	A	07/07/2021	UK/51/2021/0012
Greater Anglia	755	755417	B	07/07/2021	UK/51/2021/0012
Greater Anglia	755	755422	A	06/07/2021	UK/51/2021/0012
Greater Anglia	755	755422	B	06/07/2021	UK/51/2021/0012
Greater Anglia	755	755424	A	16/07/2021	UK/51/2021/0012
Greater Anglia	755	755424	B	16/07/2021	UK/51/2021/0012
Harry Needle Railroad Company	20	20132	A	09/07/2021	UK/51/2021/0027
LNER	800	800202	A	20/07/2021	UK/51/2021/0013
LNER	800	800202	B	20/07/2021	UK/51/2021/0013
LNER	800	800204	A	20/07/2021	UK/51/2021/0013
LNER	800	800204	B	20/07/2021	UK/51/2021/0013
LNER	801	801103	A	06/07/2021	UK/51/2021/0014
LNER	801	801103	B	06/07/2021	UK/51/2021/0014
LNER	801	801107	A	09/07/2021	UK/51/2021/0014
LNER	801	801107	B	09/07/2021	UK/51/2021/0014
LNER	801	801207	A	23/07/2021	UK/51/2021/0014
LNER	801	801207	B	23/07/2021	UK/51/2021/0014
LNER	801	801209	A	22/07/2021	UK/51/2021/0014
LNER	801	801209	B	22/07/2021	UK/51/2021/0014
LNER	801	801210	A	28/06/2021	UK/51/2021/0014
LNER	801	801210	B	28/06/2021	UK/51/2021/0014



Locomotive Services	121	121034	A	19/07/2021	UK/51/2021/0055
Locomotive Services	47	47501	A	15/07/2021	UK/51/2020/0034
Locomotive Services	89	89500	A	14/07/2021	UK/51/2021/0056
North Yorkshire Moors Railway	98	98564	A	22/07/2021	UK/51/2020/0017
North Yorkshire Moors Railway	98	98625	A	21/07/2021	UK/51/2020/0017
Northern Trains Ltd	150	150106	A	13/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150106	B	21/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150120	A	19/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150120	B	19/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150126	A	28/06/2021	UK/51/2021/0009
Northern Trains Ltd	150	150126	B	28/06/2021	UK/51/2021/0009
Northern Trains Ltd	150	150133	A	23/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150133	B	23/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150140	A	09/07/2021	UK/51/2021/0009
Northern Trains Ltd	150	150140	B	09/07/2021	UK/51/2021/0009
Northern Trains Ltd	153	153307	A	28/06/2021	UK/51/2021/0024
Northern Trains Ltd	153	153331	A	28/06/2021	UK/51/2021/0024
Northern Trains Ltd	156	156425	A	29/06/2021	UK/51/2021/0002
Northern Trains Ltd	156	156425	B	29/06/2021	UK/51/2021/0002
Northern Trains Ltd	156	156452	A	18/07/2021	UK/51/2021/0002
Northern Trains Ltd	156	156464	A	09/07/2021	UK/51/2021/0002
Northern Trains Ltd	156	156464	B	09/07/2021	UK/51/2021/0002
Northern Trains Ltd	195	195025	A	01/07/2021	UK/51/2021/0019
Northern Trains Ltd	195	195025	B	01/07/2021	UK/51/2021/0019
Northern Trains Ltd	195	195103	A	02/07/2021	UK/51/2021/0019
Northern Trains Ltd	195	195103	B	02/07/2021	UK/51/2021/0019
Northern Trains Ltd	195	195124	A	08/07/2021	UK/51/2021/0019
Northern Trains Ltd	195	195124	B	14/07/2021	UK/51/2021/0019
Northern Trains Ltd	333	333002	A	01/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333002	B	01/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333003	A	08/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333003	B	08/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333007	A	16/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333007	B	16/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333008	A	02/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333008	B	02/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333015	A	08/07/2021	UK/51/2021/0036
Northern Trains Ltd	333	333015	B	08/07/2021	UK/51/2021/0036

Rail Operations Group	319	319373	A	02/07/2021	UK/51/2020/0053
Rail Operations Group	319	319373	B	02/07/2021	UK/51/2020/0053
RAIL OPERATIONS GROUP	768	768001	A	02/07/2021	UK/51/2021/0057
RAIL OPERATIONS GROUP	768	768001	B	02/07/2021	UK/51/2021/0057
South Western Railway	701	701007	A	08/07/2021	UK/51/2020/0060
South Western Railway	701	701036	A	28/06/2021	UK/51/2020/0060
South Western Railway	701	701037	B	13/07/2021	UK/51/2020/0060
South Western Railway	701	701038	B	07/07/2021	UK/51/2020/0060
Steam Loco	98	98696	A	21/07/2021	UK/51/2020/0017
TransPennine Express	185	185107	A	21/07/2021	UK/51/2021/0043
TransPennine Express	185	185109	A	27/06/2021	UK/51/2021/0043
TransPennine Express	185	185109	B	27/06/2021	UK/51/2021/0043
TransPennine Express	185	185111	A	21/07/2021	UK/51/2021/0043
TransPennine Express	185	185111	B	20/07/2021	UK/51/2021/0043
TransPennine Express	185	185117	A	13/07/2021	UK/51/2021/0043
TransPennine Express	185	185117	B	13/07/2021	UK/51/2021/0043
TransPennine Express	185	185119	A	06/07/2021	UK/51/2021/0043
TransPennine Express	185	185119	B	06/07/2021	UK/51/2021/0043
TransPennine Express	185	185120	A	09/07/2021	UK/51/2021/0043
TransPennine Express	185	185120	B	09/07/2021	UK/51/2021/0043
TransPennine Express	185	185121	A	24/07/2021	UK/51/2021/0043
TransPennine Express	185	185121	B	24/07/2021	UK/51/2021/0043
TransPennine Express	185	185122	A	22/07/2021	UK/51/2021/0043
TransPennine Express	185	185122	B	22/07/2021	UK/51/2021/0043
TransPennine Express	185	185127	A	04/07/2021	UK/51/2021/0043
TransPennine Express	185	185127	B	04/07/2021	UK/51/2021/0043
TransPennine Express	185	185131	A	24/07/2021	UK/51/2021/0043
TransPennine Express	185	185131	B	24/07/2021	UK/51/2021/0043
TransPennine Express	185	185132	A	30/06/2021	UK/51/2021/0043
TransPennine Express	185	185132	B	30/06/2021	UK/51/2021/0043
TransPennine Express	185	185137	A	15/07/2021	UK/51/2021/0043
TransPennine Express	185	185137	B	15/07/2021	UK/51/2021/0043
TransPennine Express	185	185140	A	29/06/2021	UK/51/2021/0043
TransPennine Express	185	185140	B	29/06/2021	UK/51/2021/0043
TransPennine Express	185	185144	A	14/07/2021	UK/51/2021/0043
TransPennine Express	185	185144	B	14/07/2021	UK/51/2021/0043
TransPennine Express	185	185146	A	21/07/2021	UK/51/2021/0043
TransPennine Express	185	185146	B	21/07/2021	UK/51/2021/0043
TransPennine Express	185	185147	A	01/07/2021	UK/51/2021/0043

TransPennine Express	185	185147	B	01/07/2021	UK/51/2021/0043
TransPennine Express	185	185151	B	29/06/2021	UK/51/2021/0043
West Coast Railways	33	33029	A	30/06/2021	UK/51/2021/0048
West Coast Railways	37	37516	A	05/07/2021	UK/51/2020/0015
West Coast Railways	37	37668	A	05/07/2021	UK/51/2020/0015
West Coast Railways	37	37676	A	05/07/2021	UK/51/2020/0015
West Coast Railways	47	47237	A	06/07/2021	UK/51/2020/0034
West Coast Railways	47	47804	A	06/07/2021	UK/51/2020/0034
West Coast Railways	47	47815	A	06/07/2021	UK/51/2020/0034
West Coast Railways	47	47851	A	30/06/2021	UK/51/2020/0034
West Coast Railways	57	57315	A	01/07/2021	UK/51/2020/0071
West Coast Railways	98	98690	A	06/07/2021	UK/51/2020/0017
West Midlands Trains	196	196007	A	20/07/2021	UK/51/2020/0038
West Midlands Trains	196	196007	B	20/07/2021	UK/51/2020/0038

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

Ian Jones      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)

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Pete Gracey      Head of Interoperability and Rail Vehicle Engineering, ORR.

Ian Maxwell      Head of Train Control Systems, ORR.