

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

Your Ref : OP158365

R00005

Case Ref: PRM-IOP-0333

EIN Number: As listed

Date: 11th June 2020

Contact: Stephen Williams
3rd 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 3rd June 2020. 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
 - o 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
 - o Polomarconi T01811814



 $_{\odot}$ 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	EIN
				Date	
Crossrail	345	345002	Α	20/05/2020	UK/51/2020/0020
Crossrail	345	345002	В	20/05/2020	UK/51/2020/0020
Crossrail	345	345005	Α	05/05/2020	UK/51/2020/0020
Crossrail	345	345005	В	05/05/2020	UK/51/2020/0020
Crossrail	345	345007	Α	21/05/2020	UK/51/2020/0020
Crossrail	345	345007	В	21/05/2020	UK/51/2020/0020
Crossrail	345	345008	Α	29/05/2020	UK/51/2020/0020
Crossrail	345	345008	В	29/05/2020	UK/51/2020/0020
Crossrail	345	345023	Α	14/05/2020	UK/51/2020/0020
Crossrail	345	345023	В	14/05/2020	UK/51/2020/0020
Crossrail	345	345029	Α	29/05/2020	UK/51/2020/0020
Crossrail	345	345029	В	29/05/2020	UK/51/2020/0020
Crossrail	345	345031	Α	14/05/2020	UK/51/2020/0020
Crossrail	345	345031	В	14/05/2020	UK/51/2020/0020
Crossrail	345	345033	Α	13/05/2020	UK/51/2020/0020
Crossrail	345	345033	В	13/05/2020	UK/51/2020/0020
Crossrail	345	345037	Α	06/05/2020	UK/51/2020/0020
Crossrail	345	345037	В	06/05/2020	UK/51/2020/0020
Crossrail	345	345040	Α	19/05/2020	UK/51/2020/0020
Crossrail	345	345040	В	19/05/2020	UK/51/2020/0020
Crossrail	345	345043	Α	20/05/2020	UK/51/2020/0020
Crossrail	345	345043	В	20/05/2020	UK/51/2020/0020
Crossrail	345	345044	Α	28/05/2020	UK/51/2020/0020
Crossrail	345	345044	В	28/05/2020	UK/51/2020/0020
Crossrail	345	345055	Α	07/05/2020	UK/51/2020/0020
Crossrail	345	345055	В	07/05/2020	UK/51/2020/0020
Crossrail	345	345057	Α	21/05/2020	UK/51/2020/0020
Crossrail	345	345057	В	21/05/2020	UK/51/2020/0020
Crossrail	345	345058	Α	22/05/2020	UK/51/2020/0020
Crossrail	345	345058	В	22/05/2020	UK/51/2020/0020
Crossrail	345	345061	Α	20/05/2020	UK/51/2020/0020
Crossrail	345	345061	В	20/05/2020	UK/51/2020/0020

www.orr.gov.uk



Crossrail	345	345064	Α	22/05/2020	UK/51/2020/0020
Crossrail	345	345064	В	22/05/2020	UK/51/2020/0020
Freightliner	47	47830	Α	26/05/2020	UK/51/2020/0034
Freightliner	59	59102	Α	13/05/2020	UK/51/2020/0021
Freightliner	59	59201	Α	16/05/2020	UK/51/2020/0021
Freightliner	66	66501	Α	22/05/2020	UK/51/2020/0001
Freightliner	66	66503	Α	11/05/2020	UK/51/2020/0001
Freightliner	66	66510	Α	06/05/2020	UK/51/2020/0001
Freightliner	66	66523	Α	18/05/2020	UK/51/2020/0001
Freightliner	66	66534	Α	10/05/2020	UK/51/2020/0001
Freightliner	66	66546	Α	22/05/2020	UK/51/2020/0001
Freightliner	66	66562	Α	07/05/2020	UK/51/2020/0001
Freightliner	66	66567	Α	07/05/2020	UK/51/2020/0001
Freightliner	66	66592	Α	14/05/2020	UK/51/2020/0001
Freightliner	66	66598	Α	06/05/2020	UK/51/2020/0001
Freightliner	66	66603	Α	06/05/2020	UK/51/2020/0001
Freightliner	66	66616	Α	17/05/2020	UK/51/2020/0001
Freightliner	66	66620	Α	17/05/2020	UK/51/2020/0001
Freightliner	66	66622	Α	25/05/2020	UK/51/2020/0001
Freightliner	66	66623	Α	28/05/2020	UK/51/2020/0001
Freightliner	70	70003	Α	07/05/2020	UK/51/2020/0002
Freightliner	70	70008	Α	16/05/2020	UK/51/2020/0002
Freightliner	70	70009	Α	15/05/2020	UK/51/2020/0002
Freightliner	70	70013	Α	15/05/2020	UK/51/2020/0002
Freightliner	70	70017	Α	14/05/2020	UK/51/2020/0002
Freightliner	70	70018	Α	14/05/2020	UK/51/2020/0002
Freightliner	70	70019	Α	14/05/2020	UK/51/2020/0002
Freightliner	86	86608	Α	08/05/2020	UK/51/2020/0003
Freightliner	86	86608	В	08/05/2020	UK/51/2020/0003
Freightliner	86	86610	Α	06/05/2020	UK/51/2020/0003
Freightliner	86	86610	В	06/05/2020	UK/51/2020/0003
Freightliner	86	86612	Α	15/05/2020	UK/51/2020/0003
Freightliner	86	86612	В	15/05/2020	UK/51/2020/0003
Freightliner	86	86639	Α	03/05/2020	UK/51/2020/0003
Freightliner	86	86639	В	03/05/2020	UK/51/2020/0003
Freightliner	90	90003	Α	26/05/2020	UK/51/2020/0004
Freightliner	90	90004	Α	25/05/2020	UK/51/2020/0004
Freightliner	90	90007	Α	27/05/2020	UK/51/2020/0004
Freightliner	90	90009	Α	26/05/2020	UK/51/2020/0004
Freightliner	90	90010	Α	27/05/2020	UK/51/2020/0004



Freightliner	90	90011	Α	26/05/2020	UK/51/2020/0004
Freightliner	90	90012	Α	26/05/2020	UK/51/2020/0004
Freightliner	90	90013	Α	25/05/2020	UK/51/2020/0004
Freightliner	90	90015	Α	26/05/2020	UK/51/2020/0004
Freightliner	90	90041	Α	13/05/2020	UK/51/2020/0004
Freightliner	90	90045	Α	09/05/2020	UK/51/2020/0004
Govia Thameslink Railway	171	171402	Α	15/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171402	В	15/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171724	Α	19/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171724	В	19/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171727	Α	07/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171727	В	07/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171730	Α	04/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171730	В	04/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171802	Α	22/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171802	В	22/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171804	Α	26/05/2020	UK/51/2020/0005
Govia Thameslink Railway	171	171804	В	26/05/2020	UK/51/2020/0005
Govia Thameslink Railway	377	377105	Α	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377105	В	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377110	Α	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377110	В	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377116	Α	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377116	В	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377118	Α	06/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377118	В	06/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377121	Α	12/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377121	В	12/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377123	Α	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377123	В	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377124	Α	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377124	В	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377134	В	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377135	Α	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377135	В	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377139	Α	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377139	В	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377153	Α	30/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377153	В	30/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377157	Α	22/05/2020	UK/51/2020/0008



l	1	l		1	l
Govia Thameslink Railway	377	377157	В	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377160	Α	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377160	В	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377162	Α	18/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377162	В	18/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377204	Α	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377204	В	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377210	Α	08/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377210	В	08/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377211	Α	26/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377211	В	26/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377213	Α	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377213	В	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377304	Α	17/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377304	В	17/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377319	Α	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377319	В	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377320	Α	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377320	В	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377322	Α	23/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377322	В	23/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377323	Α	19/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377323	В	19/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377326	Α	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377326	В	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377401	Α	18/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377401	В	18/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377406	Α	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377406	В	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377407	Α	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377407	В	07/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377410	Α	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377410	В	20/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377414	Α	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377414	В	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377416	Α	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377416	В	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377417	Α	12/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377417	В	12/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377429	Α	06/05/2020	UK/51/2020/0008



	ı	I I	İ	1	1
Govia Thameslink Railway	377	377429	В	06/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377430	Α	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377430	В	16/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377434	Α	06/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377434	В	06/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377440	Α	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377440	В	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377441	Α	15/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377441	В	15/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377449	Α	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377449	В	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377452	Α	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377452	В	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377459	Α	30/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377459	В	30/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377470	Α	15/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377470	В	15/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377601	Α	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377601	В	22/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377615	Α	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377615	В	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377616	Α	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377616	В	05/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377617	Α	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377617	В	27/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377625	Α	08/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377625	В	08/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377626	Α	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377626	В	04/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377705	Α	21/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377705	В	21/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377708	Α	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	377	377708	В	11/05/2020	UK/51/2020/0008
Govia Thameslink Railway	387	387203	Α	19/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387203	В	19/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387209	Α	16/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387209	В	16/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387211	Α	20/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387211	В	20/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387219	Α	30/05/2020	UK/51/2020/0009



ı	Ī	i i		1	
Govia Thameslink Railway	387	387219	В	30/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387221	Α	29/05/2020	UK/51/2020/0009
Govia Thameslink Railway	387	387221	В	29/05/2020	UK/51/2020/0009
Govia Thameslink Railway	455	455802	Α	13/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455802	В	13/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455803	Α	22/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455803	В	22/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455807	Α	08/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455807	В	08/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455808	Α	04/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455808	В	04/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455814	Α	23/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455814	В	23/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455815	Α	20/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455815	В	20/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455816	Α	28/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455816	В	28/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455818	Α	07/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455818	В	07/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455819	Α	06/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455819	В	06/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455820	Α	06/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455820	В	06/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455822	Α	29/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455822	В	29/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455832	Α	30/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455832	В	30/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455833	Α	16/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455833	В	16/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455839	Α	21/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455839	В	21/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455842	Α	16/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455842	В	16/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455843	Α	17/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455843	В	17/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455845	Α	14/05/2020	UK/51/2020/0010
Govia Thameslink Railway	455	455845	В	14/05/2020	UK/51/2020/0010
Southeastern	375	375707	Α	21/05/2020	UK/51/2020/0035
Southeastern	375	375707	В	21/05/2020	UK/51/2020/0035
Southeastern	375	375807	Α	21/05/2020	UK/51/2020/0035



1	l	l I		1	
Southeastern	375	375807	В	21/05/2020	UK/51/2020/0035
Southeastern	376	376028	Α	20/05/2020	UK/51/2020/0036
Southeastern	376	376028	В	20/05/2020	UK/51/2020/0036
Southeastern	377	377502	Α	20/05/2020	UK/51/2020/0008
Southeastern	377	377502	В	20/05/2020	UK/51/2020/0008
Southeastern	377	377504	Α	06/05/2020	UK/51/2020/0008
Southeastern	377	377504	В	06/05/2020	UK/51/2020/0008
Southeastern	377	377506	Α	22/05/2020	UK/51/2020/0008
Southeastern	377	377506	В	22/05/2020	UK/51/2020/0008
Southeastern	377	377510	Α	17/05/2020	UK/51/2020/0008
Southeastern	377	377510	В	17/05/2020	UK/51/2020/0008
Southeastern	377	377511	Α	29/05/2020	UK/51/2020/0008
Southeastern	377	377511	В	29/05/2020	UK/51/2020/0008
Southeastern	377	377512	Α	20/05/2020	UK/51/2020/0008
Southeastern	377	377512	В	20/05/2020	UK/51/2020/0008
Southeastern	377	377516	Α	15/05/2020	UK/51/2020/0008
Southeastern	377	377516	В	15/05/2020	UK/51/2020/0008
Southeastern	377	377520	Α	07/05/2020	UK/51/2020/0008
Southeastern	377	377520	В	07/05/2020	UK/51/2020/0008
Southeastern	377	377521	Α	08/05/2020	UK/51/2020/0008
Southeastern	377	377521	В	08/05/2020	UK/51/2020/0008
Southeastern	465	465151	Α	19/05/2020	UK/51/2020/0037
Southeastern	465	465151	В	19/05/2020	UK/51/2020/0037
Southeastern	465	465247	Α	20/05/2020	UK/51/2020/0037
Southeastern	465	465247	В	20/05/2020	UK/51/2020/0037
Southeastern	465	465923	Α	17/05/2020	UK/51/2020/0037
Southeastern	465	465923	В	17/05/2020	UK/51/2020/0037
West Midlands Trains	172	172001	Α	05/05/2020	UK/51/2020/0029
West Midlands Trains	172	172001	В	05/05/2020	UK/51/2020/0029
West Midlands Trains	172	172213	Α	04/05/2020	UK/51/2020/0029
West Midlands Trains	172	172213	В	04/05/2020	UK/51/2020/0029
West Midlands Trains	172	172333	Α	30/05/2020	UK/51/2020/0029
West Midlands Trains	172	172333	В	30/05/2020	UK/51/2020/0029
West Midlands Trains	172	172338	Α	05/05/2020	UK/51/2020/0029
West Midlands Trains	172	172338	В	05/05/2020	UK/51/2020/0029
West Midlands Trains	196	196101	Α	11/05/2020	UK/51/2020/0038
West Midlands Trains	196	196101	В	11/05/2020	UK/51/2020/0038
West Midlands Trains	323	323208	Α	16/05/2020	UK/51/2020/0025
West Midlands Trains	323	323208	В	16/05/2020	UK/51/2020/0025
West Midlands Trains	323	323210	Α	06/05/2020	UK/51/2020/0025



West Midlands Trains	323	323210	В	07/05/2020	UK/51/2020/0025
West Midlands Trains	323	323215	Α	19/05/2020	UK/51/2020/0025
West Midlands Trains	323	323215	В	19/05/2020	UK/51/2020/0025
West Midlands Trains	323	323221	Α	20/05/2020	UK/51/2020/0025
West Midlands Trains	323	323221	В	20/05/2020	UK/51/2020/0025
West Midlands Trains	350	350128	Α	16/05/2020	UK/51/2020/0026
West Midlands Trains	350	350128	В	17/05/2020	UK/51/2020/0026
West Midlands Trains	350	350266	Α	09/05/2020	UK/51/2020/0026
West Midlands Trains	350	350266	В	09/05/2020	UK/51/2020/0026
West Midlands Trains	350	350267	Α	16/05/2020	UK/51/2020/0026
West Midlands Trains	350	350267	В	16/05/2020	UK/51/2020/0026
West Midlands Trains	350	350370	Α	18/05/2020	UK/51/2020/0026
West Midlands Trains	350	350370	В	18/05/2020	UK/51/2020/0026
West Midlands Trains	350	350401	Α	07/05/2020	UK/51/2020/0026
West Midlands Trains	350	350401	В	07/05/2020	UK/51/2020/0026
West Midlands Trains	350	350402	Α	17/05/2020	UK/51/2020/0026
West Midlands Trains	350	350402	В	17/05/2020	UK/51/2020/0026

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

National Vehicle Register nvr@networkrail.co.uk

David Galloway Head of Vehicle Compatibility, Network Rail.



Pete Gracey Head of Interoperability and Rail Vehicle Engineering,

ORR.

Ian Maxwell Head of Train Control Systems, ORR.