

Mr Paul Simmons
 Head of UK Approvals and Safety
 CAF – Construcciones y Auxiliar de Ferrocarriles
 CAF Rolling Stock UK Ltd
 Techno Centre, Puma Way
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 UK

Your Ref: CAF-UK-CI197-TF_COV002

Case Ref: PRM-IOP-0459

IN Number: UK/51/2022/0009

23rd November 2022

Contact: Adam Buckland

2 Rivergate
 Temple Quay
 Bristol
 BS1 6EH

Dear Mr Simmons,

**THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011, AS AMENDED
 AUTHORISATION OF CLASS 197 ETCS VARIANT INCLUDING THE ONBOARD USE
 OF ETCS LEVEL NTC, ETCS LEVEL 2 AND BELOW.**

I refer to your application for authorisation, received on the 21st October 2022. Following review of your application, I can confirm that ORR grants a first authorisation under regulation 4(1)(a) of the Railways (Interoperability) Regulations 2011, as amended. This authorisation is for the placing in service of Class 197 Diesel Multiple Unit (DMU) ETCS Variant vehicles as per Appendix 1.

These units are fitted with the Control, Command and Signalling On-Board System identified as item SA.21.91.0001 Version 2.0, comprising the Interoperability Constituents shown in Table 1.

N	Interoperability Constituent	OBU item	Manufacturer
IC1	ETCS on-board	AURIGA OBS, version 03.00 Item ID SD.22.51.2001	CAF SIGNALLING S.L.U
IC2	Odometry equipment		
IC3	Interface of External STM	The interface with the National System AWS/TPWS is a non-standardized interface, which implementation is out of the scope of the CCS TSI specifications, and therefore out of the scope of the EC verification.	
IC4	GSM-R voice cab radio	GSM-R Cab Mobile SVR400+ w/ NR 4.0 software (build 1127)	Siemens Mobility Ltd.
IC5	GSM-R ETCS data only radio	RIU-ETCS EDOR-5E	Funkwerk Systems GmbH
IC6	GSM-R SIM card	Network Rail EDOR SIM Cards	Network Rail Ltd

Table 1: Interoperability Constituents of SA.21.91.0001 Version 2.0



It is noted that the ETCS structural subsystem has been assessed against Set of Specifications #3 (ETCS Baseline 3 Release 2 and GSM-R Baseline 1).

The restrictions or limitations of use on the structural subsystems are those contained on the UK Declaration of Verification, reference C.K9.96.731.01 Issue B and in your Technical File report, reference RTV-SN0182108-R013 Issue 2, both dated 22nd November 2022. These are related to the Rolling Stock and Control, Command and Signalling structural subsystems.

ETCS System Compatibility (ESC) tests and Radio System Compatibility (RSC) must be completed prior to these vehicles being put into use and the Technical File updated. These checks are a requirement of this authorisation.

I refer to your Declaration according to Article 16 (EU) 402/2013 as amended, reference C.K9.96.999.01 dated 20th October 2022. The UK Declaration of Verification refers to four items identified in the Safety Assessment Report RTV-SN0182108-R009 Issue 2.1, dated 19th October 2022 to be considered by the Operator when putting into use

The Rolling Stock and Control, Command and Signalling subsystem(s) 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 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 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.

The person who applied for the authorisation to place in service may apply to the ORR for a



determination of type in accordance with Commission Implementing Decision 2018/1614 as amended by Regulation 20 of The Railways (Interoperability) (Miscellaneous Amendments and Revocations) (EU Exit) Regulations 2020.

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(s).

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

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Fletcher', written in a cursive style.

Steve Fletcher
Deputy Director, Engineering & Asset Management

Cc

James Le Grice	Head of Interoperability, Safety and Standards DfT
David Galloway	Head of System Compatibility, Network Rail
Giles Turner	ORR Head of Interoperability & Rail Vehicle Engineering
ORR Interoperability	interoperability@orr.gov.uk
Richard Byrne	ORR HM Inspector of Railways
National Vehicle Register	nvr@networkrail.co.uk



Appendix 1: Authorised Vehicle Numbers and Configuration

Unit Number	DMSL	DMS
197003	131003	133003
197022	131022	133022
197023	131023	133023
197024	131024	133024
197025	131025	133025
197026	131026	133026
197027	131027	133027
197028	131028	133028
197029	131029	133029
197030	131030	133030
197031	131031	133031
197032	131032	133032
197033	131033	133033
197034	131034	133034
197035	131035	133035
197036	131036	133036
197037	131037	133037
197038	131038	133038
197039	131039	133039
197040	131040	133040
197041	131041	133041

