

Chris Binns
Chief Engineer
Crossrail Limited
5 Endeavour Square
London
E20 1JN

Your Ref CRL1-XRL-O7-
COL-CR001-50009v2

Our Ref N/A

Case Ref PRM-IOP-0399

IN Number
UK/63/2022/0001

Date 27/04/2022

Contact: Stephen Williams

ORR, 3rd Floor, Mallard House, Kings Pool,
1-2 Peasholme Green, York.
YO1 7PX

Dear Chris

**THE RAILWAYS (INTEROPERABILITY) REGULATIONS 2011, AS AMENDED
AUTHORISATION FOR THE CONTROL, COMMAND AND SIGNALLING GSMR RADIO
TRACKSIDE SUBSYSTEM FOR CROSSRAIL (ELIZABETH LINE) TO BE USED FOR
VOICE AND ASSOCIATED SMS SERVICES ONLY.**

I refer to your application for authorisation received on the 18th March 2022 and technical file reference CRL1-XRL-O7-RGN-CR001-50127 dated 17th March 2022. Following review of your application, I can confirm that ORR grants authorisation under regulation 4(1)(a) of the Railways (Interoperability) Regulations 2011, as amended. This authorisation is for the placing into service of the Control, Command and Signalling GSMR Radio trackside subsystem used for voice and associated SMS services only, located between the limits described below inclusive.

ELR	Section	Start (Km, Meters)	End (Km, Meters)
XRC	GWML to Stepney Green Junction	00, 000 Note: this is NR XRC 0 Miles datum.	11, 425
XRE	Stepney Green Junction to Pudding Mill Lane	11, 425	14, 840
XRS	Stepney Green Junction to Abbey Wood	11, 333	25, 300

The conditions of use on the structural subsystem are those listed on the UK Declaration of Verification dated 11th April 2022, contained in your technical file (CRL1-XRL-O7-RGN-CR001-50127), ApBo Technical Files, and safety assessment report (X2228-LLO-O-RGN-CR001-50163) dated 4th March 2022.



Restrictions/Limitations (RIR 2011 as amended Regulation 7(3) and 7(4)(a)):

Condition 1

The Infrastructure Manager shall make the switch to ERTMS as soon as tests confirm this is possible. As soon as final tests confirm that the switch to ERTMS, as the primary signalling system is possible, the Infrastructure Manager shall notify the Department for Transport. The agreed migration plan (C620-SIC-R2-STP-CR001-500623) must be implemented and a communications bearer capable of supporting ETCS Level 3 installed.

(This condition is included on this letter to maintain a cross reference with DfT letter dated 17/02/2012)

The requirements that must be met by a specified time are (RIR 2011 as amended Regulation 7(3) and 7(4)(b)):

Condition 2

eLDA functionality has been demonstrated in the core GSM-R network and for the Crossrail central section. However, the integration of eLDA between Crossrail and Network Rail at the boundaries requires changes to the signalling system.

This must be completed no later than 31st December 2022.

Evidence that the work is complete and suitably tested must be verified by a suitable Assessing Body. The Technical file should be updated, and notification sent to the National Safety Authority detailing how and when the condition was met.

(This condition is included on this letter as it is raised on the verification certificates.)

The infrastructure 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 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 the person who applied for the authorisation shall send particulars to the owner of the infrastructure to enable the owner of the infrastructure to enter the items on the Register of Infrastructure in accordance with Table 1 of Commission Implementing Decision 2019/777 as amended by The Railways (Interoperability) (Miscellaneous Amendments and Revocations) (EU Exit) Regulations 2020. 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. You will receive the type authorisation after providing the relevant data to the ORR.

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 infrastructure subsystem(s).

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

Yours sincerely

A handwritten signature in black ink, appearing to read 'Steve Fletcher', is positioned above the printed name.

Steve Fletcher
Deputy Director, Engineering & Asset Management

Cc

Ian Jones	Head of Interoperability, Safety and Standards DfT
Ian Prosser	ORR Director Railway Safety
Ian Maxwell	ORR Head of Signalling, Power & Comms Engineering
Pete Gracey	ORR Head of Interoperability and Rail Vehicle Engineering
ORR Interoperability	interoperability@orr.gov.uk



Catherine Hui

ORR HM Inspector of Railways

Maya Petkova

Crossrail Interoperability Manager