

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

Your Ref : OP158365 00008

Case Ref : PRM-IOP-0269

EIN Number : UK/51/2018/0007

Date: 4th March 2019

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 11-073-0001-2-001.

I refer to your application for type authorisation, received on 4<sup>th</sup> March 2019. 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 a Triorail 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+ Part Number 668/1/03201/016 Issue 6 with NR 3.99.23 software) which incorporates a Triorail ETSI TS 102 933 V 2.1.1 compliant transceiver.
- GSM-R/GPS antenna (Fitment of combined GSM-R/GPS antennae is optional)
  - o Huber & Suhner SWA-0825/360/5/30/DFRX30
  - Polomarconi BGLD1/S
- LTE antenna (Fitment of LTE antennae is optional)
  - o Huber & Suhner SWA-0825/360/5/30/MIMO
  - Panorama Antennas TRNM-7-60-NJ
  - o Polomarconi T01811814
  - o Huber & Suhner Sencity Rail MIMO Antenna 1399.17.0222

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This conforms to European Register of Authorised Types (ERATV) type 11-073-0001-2-001

This authorisation applies to the following inclusive.

| Operator at the time of submission    | Class | Vehicle | Cab A / B | V4.0 Installation<br>Date | V4.0 Serial Number | Transceiver |
|---------------------------------------|-------|---------|-----------|---------------------------|--------------------|-------------|
| · · · · · · · · · · · · · · · · · · · | *     | *       | *         | ¥                         | -                  | *           |
| London South Eastern Railway          | 465   | 465923  | A         | 27/02/2019                | 06848215           | Triorail    |
| London South Eastern Railway          | 465   | 465923  | В         | 27/02/2019                | 06731902           | Triorail    |

The restrictions or limitations of use on the structural subsystem are those applicable to the 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.

Yours sincerely



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

Cc

| lan Jones,                | Head of Interoperability, Safety and Standards DfT |  |
|---------------------------|--|--|
| lan Prosser               | Director, Railway Safety                           |  |
| National Vehicle Register | nvr@networkrail.co.uk                              |  |
| David Galloway            | Head of Vehicle Compatibility, Network Rail.       |  |
| Paul Hooper               | Interoperability Manager ORR.                      |  |

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