



## Certificate of Temporary Non-compliance with a Railway Group Standard

(in accordance with part 6 of the Railway Group Standards Code)

### 1. Type of deviation

Deviation Number: **12/225/TNC**

Temporary non-compliance

### 2. Details of applicant:

Head of Engineering, First Great Western, MH6 Milford House, 1 Milford Street, Swindon SN1 1HL

### 3. Your reference number:

N/A

### 4. Status of applicant:

Railway Undertaking, RSSB Member

### 5. Title of certificate:

Positioning of Temporary Portable Cab Secure Radio System (CSR) for Class 150/0 DMU.

### 6a. Details of Railway Group Standard (RGS):

| RGS Number: | Issue No: | Issue Date: | Title:  |
|-------------|-----------|-------------|---|
| GM/RT2161   | One       | August 2001 | Requirements for Driving Cabs of Railway Vehicles |

### 6b. RGS clause(s):

5.2

### 6c. RGS clause requirements:

“5.2 From the driving position, the driver shall be able to readily operate all primary controls and easily read all primary instrumentation, as defined in Section 7, whilst maintaining the vision requirements of Section 6.1.”

### 7. Scope of deviation:

Temporary installation of portable CSR equipment to the driving cabs of two Class 150/0 units operated by First Great Western (FGW).

The two unit numbers are 150001 and 150002.

### 8. Impacts of complying with the current RGS requirement:

In order to comply with the standard, extensive modification would potentially be required to the cab, including modification or repositioning of existing structure, fittings, controls and instruments. With the portable CSR due to be removed in Spring 2013, it is clearly evident that costs and impracticality rule out carrying out such modifications.

## 9. Proposed alternative actions:

The purpose of fitting the CSR equipment is to allow the 150/0 units to operate on Network Rail infrastructure until GSM-R driver training is completed (expected to be Spring 2013). GSM-R driver training has been postponed due to the need to prioritise training of the new signalling system being introduced in the Reading area.

A modular CSR 'pod' is readily available (designed and manufactured for previous fitment to Class 379), and is suitable for installation to the Class 150/0 cab. The temporary Class 379 installation also required a temporary non-compliance against GM/RT2161 Clause 5.2, which was granted by the Rolling Stock Standards Committee as 10/186/TNC.

The pod contains the radio head, loudspeaker and handset. Interface with the antenna and power supply is via electrical connectors and harnesses. The CSR pod is fitted with a hinged cover to protect the electronics from water coming in through an opened droplight. The cover has a window to enable the radio head to be seen with the cover down, and there is a latch to retain the cover in the open position.

The proposed position of the CSR 'pod' is to the left hand side of the driver's seat, against the cab wall structure, and below the droplight – see attached drawing ATC-C0-2214032 Issue P1.

This position alleviates the need to carry out any significant modifications to the existing cab and driver's desk. Consideration of all positions where the radio could be sited has been made, with consultation of the relevant interested parties (see Section 12 – Consultation with affected parties). The installation is non-permanent and the risks introduced by non-compliance are minimised by existing Rule Book procedures that warn against use of the radio when the train is moving.

## 10. Impacts of the alternative actions:

GM/RT2161 Clause 5.2 (and 6.1 referenced therein) stipulates driver's sightlines through the windscreen, and requirements for use of primary controls and instrumentation. There is potential for the driver's eyes to deviate from the positional requirements of 6.1.1 in order to see the radio, use the controls and pick up the handset. However, it is stated in the Rule Book (GE/RT8000/TW1 'Preparation and Movement of Trains – General' Section 3.3 Train Radio Equipment – General; Clause (a) 'Using the train radio system safely') that "You must not use the radio when the train is moving if you might become distracted and put the train in danger". This instruction is also contained in the First Great Western driver policy.

In the event of a radio call being made or received on the move then, given the above, the driver's attention through the windscreen will be interrupted and there are potential additional distractions in opening the radio cover and using the equipment. However, it must also be factored into the assessment that drivers are trained and competent individuals, familiar with CSR equipment and its use. When the train is moving, they are required by the Rule Book to make a reasoned judgement of whether it is safe to use the radio in a particular situation.

There are only two units within the Class 150/0 fleet – 4 cabs – so use of the CSR 'pod' will be limited, and will gradually diminish as drivers complete the GSM-R training programme.

## 11. What other options have been considered?

Possible locations in the cab for the CSR pod are limited given the constraints of driver access into the cab, and to/from the driving position; ergonomic access to the radio controls and handset (e.g. visibility and reach); and technical difficulties (e.g. space, interference with other existing equipment and controls). The cab end of the Class 150/0 is not gangwayed, nor does it have separate cab doors. Access to the cab is from a partition door on the vestibule side. These factors all ruled out alternative positions for the CSR pod.

Another alternative is to take the units out of service until GSM-R training completed. This would have a negative impact on service to passengers.

## 12. Consultation with affected parties

Consultations have involved discussions between the FGW Project Operations Strategy Manager, and (following request from the ASLEF Driver's Divisional Council) the Health & Safety representative at Reading. The design proposal has met with approval and acceptance from all these parties. See attached emails confirming acceptance by these parties.

## 13. Additional actions/observations:

Upon receipt, the applicant is required to identify affected, interfacing parties and copy this certificate, together with supporting information, to those parties.

**Attachments:**

- General assembly drawing, ATC-C0-2214032 Issue P1.
- Consultation responses (emails).

**14. Method of elimination:**

When GSM-R training has been completed for FGW drivers, and change over to GSM-R radio has been carried out, then CSR in this area will become redundant and the CSR 'pod' on Class 150/0 units can be removed.

**15. Start and end date:**

From 17/12/2012 to 31/05/2013.

**16. Signature of applicant:**

Head of Engineering

**Date of application:**

12/12/2012

**17. Lead Standards Committee details:****Name of Committee:**

Rolling Stock

**Date of meeting**

N/A

**Minute reference:**

Agreed by the Principal Rolling Stock Engineer outside of Standards Committee, to be noted at the next Standards Committee meeting.

**Authorised by:**

Signed by Cliff Cork on 14/12/2012

**Date of Authorisation:**

14/12/2012

Cliff Cork

Head of Delivery, Infrastructure and Rolling Stock