

RSSB

Certificate of Derogation from a Railway Group Standard

(in accordance with Section 6 of the Railway Group Standards Code issue 3)

1. Type of deviation:

Deviation Number: **08/211/DGN**

Derogation

2. Details of applicant:

Quality Manager, West Coast Railway Company Ltd, Off Jesson Way, Crag Bank, Carnforth, LA5 9UR.

3. Your reference number:

6100

4. Status of applicant:

Railway Undertaking

5. Title of certificate:

Derogation ex-LMS Railway 'Royal Scot' class steam locomotive no 6100 (TOPS 98702)

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

RGS Number:	Issue No:	Issue Date:	Title:
GM/RT2000	Two	October 2000	Engineering Acceptance of Rail Vehicles

6b. RGS clause(s):

6.6.3 & Appendix H1 (a)

The requirements against which non-compliances are sought can be found in Appendix 2 of this document.

6c. RGS clause requirements:

"6.6.3 Vehicles for heritage or special services only

Where it is proposed to introduce a non-compliant vehicle to Railtrack Controlled Infrastructure for use on Heritage or special service trains, a derogation shall be obtained, in accordance with section 6.6.1 c) above. It is permissible to submit a single request for a derogation covering all areas of NC for the complete vehicle, subject to the request outlining the principal areas of NC.

Granting of such a derogation shall be provisional upon the vehicle undergoing Engineering Acceptance, prior to registration, as defined in Appendix H, and subject to the vehicle not exceeding an annual mileage limit of 15,000 miles.

The vehicle shall comply with Mandatory Requirements that impose retrospective action.

Additional requirements for steam locomotives are contained in GM/RT2003."

"H1

Such vehicles shall satisfy the following requirements for Engineering Acceptance:

(a) A derogation shall be obtained from the Directorate in order to authorise use of the process below.

..."

7. Scope of deviation:

Operation of the following preserved Steam Locomotive on all lines, as agreed by the NRAB and subsequently by the Licensed Operator.

Ex LMS Railway 'Royal Scot' locomotive :

TOPS No.	98702
Painted No.	6100
Class / Power Classification:	7P
Wheel Arrangement	4-6-0
Maximum Speed	75 mph.

8. Impacts of complying with the current RGS requirement:

It would not be practical to revise the RGS to include steam locomotives, due to their wide diversity of design from modern traction units and the general scarcity of technical information now available to prove their compliance or otherwise. In a number of recent re-issues of RGS, specific exemptions for steam locomotives, shown in the previous issues, have been withdrawn, increasing the number of non-compliances for which derogation has now to be sought.

Steam Locomotives are in a minority group, and subject to the restrictions in GM/RT2000 for "Heritage Vehicles".

9. Proposed alternative actions:

The measures introduced to control risks are described in Appendix 3

In general, the locomotive's operation will be limited to individual charter train workings and hence its exposure to the National Rail network will be significantly lower than for a modern locomotive. When in operation, its use will be controlled through the issue of operating and engineering procedures (see Appendix 3).

The locomotive would be limited to a maximum of 15,000 miles per year.

10. Impacts of the alternative actions:

As indicated in Appendix 7 of this document.

The preserved steam locomotive is of a type that ran safely over the British Railway infrastructure since its introduction in 1927 and continued until its withdrawal from revenue service in 1962.

The procedural and operational controls applied to mitigate the risks are listed in appendix 3.

11. What other options have been considered?

The locomotive is intended for Heritage Operation only. In order to achieve compliance with RGS the cost would be prohibitive and such engineering change would also destroy the locomotive's fundamental nature and authenticity as a "heritage" vehicle. Making the locomotive compliant would, in many instances, be impractical because of the bulk and location of the locomotive boiler.

12. Consultation with affected parties

The following organisations have been identified as directly affected parties, Network Rail & EWS (DB S). No responses were received to the original consultation.

13. Additional actions/observations:

The maximum height of the locomotive will be maintained below 13'1".

Before entering service, the locomotive will be brake tested to demonstrate conformity to required stopping distances mandated in GM/RT2042.

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

Attachments:

- Appendix 1 RGS Non-Compliances; Summary List.
- Appendix 2 RGS Non Compliances; Assessment of Severity And Risk Mitigation.
- Appendix 3 Additional Risk Mitigation Measures.
- Appendix 4 Class 5 MT Locomotive Diagram and Leading dimensions.
- Appendix 5 Tyre Retention Arrangements.
- Appendix 6 Statement of compliance with GM/RT2003
- Appendix 7 Historical background of the Class, and of this specific locomotive.

14. Method of elimination:

N/A

15. Start and end date:

N/A

16. Signature of applicant:**Date of application:**

08/10/2009

17. Status in respect of National Technical Rules:

GM/RT2000 is not on the list of the proposed NNTRs under the Conventional or High Speed Rail TSIs.

18. Status in respect of National Safety Rules:

GM/RT2000 is not on the list of the proposed National Safety Rules.

19. Lead Standards Committee details:**Name of Committee:****Date of meeting****Minute reference:**

Rolling Stock

05/11/2009

09/RST/11/351

Authorised by:**Date of Authorisation:**

Signed by Cliff Cork on 17/02/2011

17/02/2011

Cliff Cork
Head of Delivery, Infrastructure and Rolling Stock