



## Briefing Note

### New and revised documents

<b>Document title:</b>	Audibility Requirements for Trains	
<b>Document No:</b>	GM/RT2484	<b>Issue:</b> Two
<b>Standards Committee(s):</b>	Rolling Stock	
<b>Issue date:</b>	07 April 2007	
<b>Document come(s) into force:</b>	02 June 2007	

---

### BACKGROUND

The revision of Railway Group Standard GM/RT2484 has been initiated in response to a significant increase in public complaints received about the noise nuisance caused by the new louder horns fitted to trains more recently introduced onto the system. The revision is just one of a number of responses to these complaints co-ordinated on behalf of the rail industry by the Train Horns Steering Group. This group includes representatives of all major industry duty holders.

Railway Group Standard GM/RT2484 issue 1 was the subject of proposal 05/125, to amend the standard so as to mandate maximum permitted warning horn sound pressure levels – currently the standard merely contains guidance on a maximum acceptable sound pressure level for train horns. This proposal was approved by Rolling Stock Standards Committee (the lead Standards Committee for GM/RT2484) on 13 January 2006.

Rolling Stock Standards Committee then approved a revised draft of GM/RT2484, incorporating the amendment proposed, on 09 June 2006. However, RSSB delayed authorisation of this revision, at the request of the Train Horns Steering Group, who were sponsoring a further review of sound pressure levels that might propose further changes to GM/RT2484.

As a result of the review, a paper was submitted to Rolling Stock Standards Committee on 24 November 2006, on behalf of the Train Horns Steering Group. The paper proposed reducing the minimum permitted warning horn sound pressure levels to those typically in use prior to the introduction of a common BR procurement specification.

This proposal was approved by Rolling Stock Standards Committee for development by RSSB. Typical sound pressure levels have now been established on the basis of measurements of sound pressure levels produced by warning horns fitted to types of rolling stock introduced prior to the introduction of a common BR procurement specification for warning horns. These values have been used as the basis for revised minimum sound pressure levels in GM/RT2484.

Note that separately, the revised draft of GM/RT2484 approved by Rolling Stock Standards Committee on 09 June 2006 included an amendment that mandated that sound pressure level when measured 5 m from the side of the train to be at least 5 dB lower than the level measured in front of the train. This amendment has not been retained in the current version of GM/RT2484 Issue 2, as it has subsequently been found to be technically not feasible.

### SCOPE

The requirements of this document are applicable to railway undertakings. The requirements of this document apply to all work that affects train warning horns, whether new or modified.



**KEY CHANGES**

1. The minimum sound pressure level for warning horns in the speed range 30 km/h to 80 km/h has been reduced from 105 dB to 101 dB.
2. The minimum sound pressure level for warning horns in the speed range 80 km/h to 160 km/h has been reduced from 112 dB to 101 dB.

As a result the two speed ranges 30 km/h to 80 km/h and 80 km/h to 160 km/h have been merged in to one speed range, 30 km/h to 160 km/h.

3. A mandatory maximum limit of 5 dB above all specified minimum sound pressure levels has been introduced.
4. Associated guidance on varying sound pressure levels with speed, and on the provision of independent warning devices with lower sound pressure outputs for use in depots and shunting sidings, has been clarified.

**COMPLIANCE REQUIREMENTS**

The requirements of the document come into force on 02 June 2007 as follows:

- a) The requirements of this document apply to all warning horns fitted to new rail vehicles.
- b) The requirements of this document also apply to modifications to existing rail vehicles that provide an opportunity to bring the warning horns into conformity with the requirements of this document.

**DEVIATIONS AUTHORISED BY RSSB**

There are no authorised deviations against this document.