

Supplement Notice

Information for users

The attached standard:

RT/CE/S/036

Issue 1

has essential supplementary information

Instructions for use

It is essential that you first read and understand the supplement pertaining to the standard before proceeding to the standard. You must then apply the requirements of the supplement to the standard.

Proceed to supplement ►**I have read & understand the supplement.
Proceed to standard ►**

Ref	NR/SP/TRK/036
Issue	E1
Date	April 2000

Management of Gauging and Clearances (formerly RT/CE/S/036)

This temporary front sheet facilitates change to the new Network Rail Standards referencing nomenclature.

The Ref above will be formally allocated to this standard when it is next changed in the meantime the contents, date and issue number of this Network Rail Standard are UNCHANGED and with immediate effect it should be referred to as “(new ref) formerly (old ref)”.

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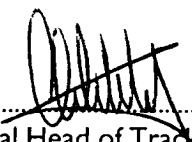
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LINE SPECIFICATION

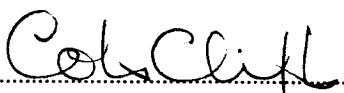
MANAGEMENT OF GAUGING AND CLEARANCES

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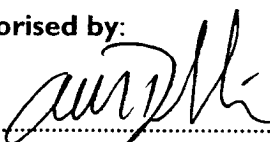
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MANAGEMENT OF GAUGING AND CLEARANCES

Summary

This specification establishes a management framework within Railtrack Line for assessing and authorising gauging clearances for new or transferred rail vehicles.

Issue record

This specification will be updated when necessary by distribution of a complete replacement.

Amended or additional parts of revised pages will be marked by a vertical black line in the margin.

Issue	Date	Comments
I	April 2000	Emergency issue responding to HSE discussions.

Responsibilities and distribution

This specification shall be complied with by all personnel involved in the procurement and acceptance of new and modified infrastructure products.

Implementation

This specification shall be implemented in full by Railtrack, including variation of all necessary contracts to incorporate its requirements by 1 April 2000.

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Supply

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1 PURPOSE

To define the Railtrack Line management arrangements for establishing and authorising clearances between rail vehicles and the infrastructure and between rail vehicles.

2 SCOPE

The specification applies to any vehicle without existing authority to operate on the Railtrack routes concerned.

The management of platform stepping distances is outside the scope of this specification.

The management of exceptional loads and freight container movements is outside the scope of this specification.

3 DEFINITIONS

Absolute Gauging	The use of a full assessment of clearances to obtain Gauging Authority.
Clearance	A calculation of the distance between moving vehicles and fixed structures or between two moving vehicles on adjacent tracks.
Comparative Gauging	The process of comparing the swept envelopes of a new or transferred vehicle with the swept envelopes of vehicle(s) already using that route.
Gauging	The process by which the various swept envelopes of a vehicle are assessed to ensure that it can run safely along a section of track without coming unacceptably close to lineside structures or vehicles on adjacent tracks.
Gauging Authority	Endorsement by Railtrack that the gauging process for a vehicle has been satisfactorily completed for a section of track.
Normal Clearance	A clearance between a structure and a vehicle or between passing vehicles which does not require specific controls on the position of the track but which does require the relative location of structures and adjacent tracks to be monitored.

Reduced Clearance	A clearance, less than normal clearance, which requires controls to ensure the safety of passing vehicles, including a requirement to record details and monitor at regular intervals.
Route Acceptance	The process leading to acceptance by Railtrack, and formalised by the issue of a Certificate of characteristics of specified vehicles and their compatibility with the infrastructure on defined routes have been examined, and that the associated risks have been reduced to a level which is as low as reasonably practicable
Special Reduced Clearance	A clearance, less than a reduced clearance, which requires a specific safety justification and the implementation of appropriate controls to demonstrate that the risks have been reduced as low as reasonably practicable
Standard Vehicle Gauge	An outline drawing or specification of a notional vehicle, which prescribes maximum vehicle/loading dimensions, certain suspension displacements and curve overthrow limitations.
Structure Gauge	A description of a line inside which fixed infrastructure does not intrude.
Swept Envelope	A cross section (at right angles to the track) which describes the bounds that a vehicle can sweep relative to infrastructure as it passes a theoretical position on the track with described parameters of curvature and cant, taking account of: its dynamic characteristics (allowing for credible failure conditions) for the speeds from zero to a nominated maximum and the various loading conditions(e.g. tare, crush); the effect on the vehicle of agreed generic track characteristics such as track roughness and cross level variation.
Track Fixity	a description of the degree to which track is restrained against horizontal or vertical movement. Paved track for example has high fixity, as its construction ensures that the position of the rails will not be changed by normal maintenance.

4 PRINCIPLES

The specification requires that any gauge clearance which is less than the normal clearance be supported by standard control measures or a risk-based safety justification.

The management controls provide for a consistent approach to the gauging method applied, the extent of reduced clearance authorised and the associated control measures.

Gauge clearance requirements at station platforms take precedence over the management of platform stepping distances.

Principles described in this document are sufficient, when completed, for gauging clearance authority to be granted. Railtrack will not require any further evidence or proving runs to be undertaken.

The specification is consistent with the Railway Group and Railtrack Line Standards for the Route Acceptance of Rail Vehicles.

5 PROCEDURE - Acceptance of rail vehicles for gauge and clearance

5.1 Gauging Strategy

The designated Rolling Stock Acceptance Manager shall, in conjunction with the Zone Gauging Engineer, ensure that the proposed gauging strategy for the new vehicle is agreed between the Train Operator (or his Agent) and Railtrack at Stage P of the Rolling Stock Acceptance.

The Railtrack Zone Gauging Engineer(s) shall, when requested, provide the Train Operator with available route-specific information on structure and passing clearances and existing vehicles authorised on the route concerned, to support the strategy development.

5.2 Gauging Procedure - Standard vehicle gauges

Route specific gauging authority is not required for vehicles conforming to the applicable standard vehicle gauge.

Route Acceptance of such vehicles shall be progressed by the designated Route Acceptance Manager (via the Route Acceptance Process) on receipt of vehicle gauge confirmation by Engineering Acceptance from the Conformance Certification Body. (The CI gauges for passenger vehicle must not be treated as standard vehicle gauges for this purpose.)