Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures

Issue record

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Superseded or replaced documents

The following Railway Group documents are superseded or replaced, either in whole or in part as indicated:

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Supply

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# Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures

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Part 1  Introduction

1.1 Purpose of this document

1.1.1 This document provides a standard for the development of passenger train dispatch processes and additional measures to encourage and manage the safe behaviour of passengers and the public on platforms.

1.1.2 This document sets out the operational requirements related to train dispatch and the management of behaviour on station platforms. GE/RT8060 Engineering Requirements for Dispatch of Trains from Platforms mandates the engineering requirements for the equipment used in the dispatching of passenger trains from platforms. GI/RT7016 Interface between Station Platforms, Track and Trains mandates requirements for the design and maintenance of station platforms for their safe interface with trains.

1.1.3 The document sets out factors for infrastructure managers to take into account when developing or reviewing the train dispatch process and / or identifying measures to manage passenger and public behaviour on station platforms. It defines requirements in terms of the view required to perform the train safety check. It also provides guidance on how to minimise the risk of staff error during train dispatch and how to promote good passenger behaviour on open platforms.

1.1.4 For the purpose of this RIS, an infrastructure manager refers to the person who is responsible for managing and operating that station. It does not apply to a railway undertaking unless they have this responsibility.

1.1.5 Railway undertakings who are responsible for developing their own train dispatch processes at stations operated by infrastructure managers may choose to adopt those parts of the document that apply to their operations.

1.1.6 The document is set out in the form of standard requirements followed by guidance notes. Guidance notes are marked by a grey bar in the margin with the letters GN and sequential numbering, to differentiate them from the standard requirements to which they relate.

1.2 Background

1.2.1 The platform-train interface (PTI) presents a number of hazards for station users, which can be made worse by their behaviour, such as trying to alight or board trains in a hurry or standing too close to the platform edge.

1.2.2 The key risks at the PTI consist of high frequency but low consequence events such as slips, trips and falls and low frequency but high consequence events such as dragging; falling from the platform and being struck by the train; falling from the platform onto the conductor rail and being struck by the train when standing on the platform.

1.2.3 Platform safety is therefore a key area of focus for infrastructure managers and railway undertakings. Some of this risk can be controlled through the careful development and implementation of the train dispatch process and by introducing additional measures to discourage unsafe passenger behaviour as far as possible.

1.3 Application of this document

1.3.1 A member of RSSB may choose to adopt all or part of this document in company procedures or contract conditions. Where this is the case the member of RSSB will specify the nature and extent of application.
1.3.2 Specific compliance requirements and dates have therefore not been specified since these will be the subject of the internal procedures or contract conditions of the companies which choose to adopt this standard.

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1.6 Approval and authorisation of this document

1.6.1 The content of this document was approved by Traffic Operation and Management Standards Committee on 11 December 2012.

1.6.2 This document was authorised by RSSB on 25 January 2013.
Part 2 Requirements for Infrastructure Managers

2.1 Development of the train dispatch process based on risk assessment

2.1.1 Infrastructure managers shall, in liaison with railway undertakings, carry out a risk assessment to determine the appropriate system of train dispatch for passenger trains and identify additional measures needed to manage the behaviour of people on the platform.

GN1 The system of train dispatch and any additional measures needed to manage the behaviour of people on the platform should be determined on the basis of a risk assessment.

GN2 When developing train dispatch procedures, infrastructure managers should liaise with railway undertakings whose trains stop at their stations, so that due consideration is given to the formation of trains and the likely position of on-board staff involved during the train dispatch process.

GN3 The risk assessment should consider, but not be limited to, the following factors and any credible degraded modes involving such factors:

a) Infrastructure – position of platform starting signals; other fixed signals; clearances; sub-surface stations; level crossings; barrow crossings and fixed structures.

b) Platform – platform length and layout; the gap between the platform and the train; platform height; position of stopping points; equipment available for train dispatch; position and nature of entrances / exits to / from the platform (stairways, escalators, footbridges, underpasses etc), platform curvature, level of lighting, station furniture; commercial structures, platform use and associated equipment and access points (GE/RT8060 sets out further requirements on specific factors within this section).

c) Trains (including Driver Only Operation (DOO) trains or those dispatched by a member of train crew) – lengths and types of regular service passenger trains; positions and types of doors; sensitivity of door sensors; duration and volume of door closure warning system; operation of the door obstacle detection system; use of platform by empty coaching stock, parcel trains and special trains; cab layouts and on-board system failures that affect train dispatch (requirements for contingency plans for such failures are set out in GO/RT3437 Defective On-Train Equipment).

d) Special train services – including regular charter trains or those that can be reasonably foreseen (such as steam specials) and other infrequent train services that have different train formations, rolling stock and methods of train dispatch.

e) Service - what platforms are used for what services; station dwell times; time of day; abnormal, degraded and emergency working (including staff shortage); crowd control; special events; unscheduled stops and short notice platform alterations.

f) Use of the platform - train stopping position; platform sharing by multiple trains; attachment or detachment of trains at the platform; empty trains standing with locked doors.

g) Platform users – platform user behaviour in response to any of the above factors; passengers and non-passengers; experience and knowledge of the railway; physical capability; attitudes; motivations and likely behaviours.

1 Network Rail own the Charter Planning and Communication Process. A flow chart describing each stage of the charter train planning and communication process; and copy of the generic Station Access Request document used by the Charter Operators can be found at http://opsweb.co.uk/resources-and-tool/station-safety-resource-centre.
h) Other – previous train dispatch history; features and procedures within the rest of the station; features and procedures within the route(s); adverse weather; bright sunlight; diesel exhaust; engine and other noise that may make it difficult for announcements or warnings to be heard and other environmental conditions.

GN4 The risk assessment should take into account foreseeable interactions between the various factors, such as the relationship between time of day and passenger behaviour and the influence of platform layout on the ability of staff to undertake train dispatch duties.

GN5 All hazards and risks should be considered holistically when developing the train dispatch process and identifying additional measures needed to manage the behaviour of people on the platform. This includes hazards and risks that are present:

   a) Continuously on the platform.
   b) During train arrival.
   c) During boarding and alighting.
   d) During train dispatch.
   e) During train departure.

GN6 The infrastructure manager should carry out the risk assessment jointly with the relevant railway undertaking(s) and charter operators whose trains stop regularly at their station.

GN7 The risk assessment should include input from individuals with expertise in the following subject areas:

   a) Train dispatch arrangements (from station and on train).
   b) Human factors.
   c) Risk assessment and management principles.
   d) Local knowledge of the platform being assessed.
   e) Safety.

One individual might have expertise in several of these areas. For example, a union health and safety representative might have experience of train dispatch arrangements and safety.

GN8 The risk assessment used to support train dispatch planning should consider what (if any) alternative methods of train dispatch are permissible for use where the normal method can not be used. This should include situations where platform starting signals cannot be cleared or where a movement authority cannot be issued and drivers have to receive the signaller’s permission to proceed. How and when to use the alternative method(s) should be included in the competence management system for all staff involved in train dispatch.

GN9 Temporary changes such as the installation of temporary structures or repair and renewal work may introduce additional risks and require changes to the train dispatch process or platform safety arrangements. The potential effects should be risk assessed and any necessary additional controls put in place prior to the changes being made.

GN10 Appendix D contains a risk assessment template that can be used to assist infrastructure managers perform a qualitative risk assessment according to this guidance.
2.2 The view required for the train safety check

2.2.1 Infrastructure managers shall use the risk assessment to develop the train dispatch process and any subsequent procedures, so that the platform staff responsible for the train safety check are provided with or able to achieve a view of:

a) The dispatch corridor parallel to the train body side that encompasses:
   i) The full length of the train or the full length of the platform, whichever is the shortest distance.
   ii) The gap between the train and the platform.
   iii) At least 1500 mm of the platform measured from the platform edge.
   iv) At least the height of the doors.

b) For trains with manually closed doors (slam door), a view of every train door that passengers might use to board or alight which can be used to assess whether each door is properly closed.

GN11 There should be no blind spots within the dispatch corridor.

GN12 The primary purpose of this view is to check that nothing, or no-one, is potentially trapped on the outside of the train that might be dragged along the platform when the train departs and, in the case of trains with manually closed doors (slam doors), these are secure prior to the train being started from the platform.

GN13 The view should enable the person(s) responsible for the train safety check to reliably detect a test target object anywhere within the space required to be viewed in the typical day and night visibility conditions on the platform (see section 2.2.1). GE/GN8560 Guidance on Engineering Requirements for Dispatch of Trains from Platforms provides guidance on suitable test target objects.

GN14 The view required in section 2.2.1 should be achieved regardless of whether the train safety check is undertaken using cameras, mirrors or line of sight.

GN15 The maximum distance that should be viewed by direct line of sight is 160 metres.

GN16 The train dispatch procedure should be developed so that the member(s) of platform staff responsible for the train safety check can perform it comfortably and accurately from a suitable position identified in accordance with the formation of the train and the position of the train crew.

GN17 A risk assessment should be used to support the design of the train dispatch system for use with trains that have recessed doors, the infrastructure manager should take into account the possibility that something trapped by the doors could be partially within the recess space. The consequence would be that only part of the target would be visible within the dispatch corridor of space defined in 2.2.1. The target would therefore be smaller and more difficult to see than if the whole target was visible.

GN18 The development of equipment and processes to perform the train safety check should take into consideration any identified risks and other safety critical tasks that are required at a similar time, for example, to check the platform signal or operate train dispatch equipment, so that the member(s) of platform staff responsible can perform the train safety check and other tasks easily and reliably.

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The risk assessment should consider any variations in the view required where infrequent train services stop at a station. The risk assessment should give consideration to the length of the train, the types of rolling stock in use and the method of train dispatch.

### 2.3 Additional view for general hazard awareness

**GN20** A wider view than the minimum required in 2.2.1 should be provided to platform staff and train crew so they can monitor the movement and behaviour of passengers and respond to emerging risks from particular passenger behaviours while the train is at the platform.

**GN21** If provided, a wider view should allow the member(s) of platform staff to view entrances to the platform and a wider platform area so that people approaching and waiting can be observed while the train is at the platform.

**GN22** If an additional view is provided, the possibility that it will distract the member(s) of platform staff and decrease the accuracy and / or speed of the train safety check or distract from watching the train following train dispatch, should form part of the risk assessment.

### 2.4 Monitoring the train during train departure

**GN23** When developing the train dispatch process, consideration should be given to the level of monitoring required during train dispatch, with specific emphasis on monitoring during the door close process and during train departure. Such processes should be designed to mitigate the risk of staff involved in train dispatch failing to observe a person falling between the platform and the train, a person trapped in the doors or any other potentially dangerous occurrences taking place.

**GN24** Competence management systems should include the training, development and assessment of platform staff responsible for train dispatch which includes any required monitoring during train departure.

### 2.5 Definition and communication of staff roles and responsibilities

**2.5.1** Infrastructure managers shall clearly define the roles and responsibilities of each member of platform staff involved in the train dispatch process.

**GN25** The specific responsibilities of each member of platform staff involved in the train dispatch process should be clearly defined.

**GN26** Where multiple platform staff are involved, the train dispatch plan should clearly define lead responsibility and responsibility for giving the ‘Station Work Complete’ and ‘Ready to Start’ signals.
2.5.2 Infrastructure managers shall document and publish the train dispatch arrangements for each of their platforms in a train dispatch plan.

GN27 The train dispatch arrangements should be communicated to all members of platform staff involved in the train dispatch process.

GN28 Infrastructure managers should consider how to communicate details of the train dispatch arrangements to each group of staff involved in a form that is easily accessible and understandable.

GN29 Where the train safety checks are divided between different members of staff, infrastructure managers should clearly communicate the division of responsibility to the staff involved.

GN30 All members of platform staff involved in the process should be made aware of the responsibilities of each other member of staff involved in the process.

2.6 Developing train dispatch processes to reduce staff errors

2.6.1 Infrastructure managers shall develop the train dispatch process to minimise the likelihood of staff errors when implementing the process.

GN31 Infrastructure managers should seek consistency of train dispatch methods, where possible, so that members of platform staff are not required to execute more than one train dispatch method between stations. This applies where the train dispatcher works at multiple locations either on the same platform or over the course of a day. Similar consideration should be given to traincrew to keep to a minimum the variation between the train dispatch arrangements they will experience at stations on a line of route.

GN32 Where consistency is not possible, infrastructure managers should consider the likelihood and potential impact of platform staff and traincrew implementing the wrong dispatch procedure due to the natural tendency to use the most frequent or most recently used method and the additional workload that inconsistency places on staff.

GN33 Where an alternative train dispatch procedure is introduced at short notice (for example, due to staff illness) all platform staff should be informed of the arrangements so they know what method of train dispatch to implement before the procedure starts. Alternative train dispatch processes should only be introduced if they have been risk assessed and staff are competent in their use.

GN34 The development of train dispatch processes should take into account human capability so that sufficient attention and time can be devoted to the train dispatch process. The overall workload on members of staff that is imposed by the train dispatch process and any other duties should be taken into consideration as part of the risk assessment.

GN35 If members of platform staff perform duties on more than one platform then sufficient time should be allowed for them to move between platforms.

GN36 Competence management systems should include the training, development and assessment of platform staff responsible for the train safety check which should emphasise the priority to be given to train dispatch procedures above other duties, such as ticket collecting or answering questions.
2.7 Performance of the train safety check

2.7.1 Infrastructure managers shall include, as part of their train dispatch procedures, clear instructions about how to perform the train safety check.

GN37 Train dispatch procedures should include the management of the dispatch corridor, especially in those circumstances where there is not a clear gap between passengers and the train.

GN38 Training and development of platform staff and traincrew responsible for the train safety check should clearly define when passengers should be treated as being potentially trapped in train doors and the action that should be taken. In the case of trains with manually closed (slam doors), this training and development should also clearly define the methods of determining that slam doors are correctly closed before the train starts away from the platform.

GN39 Members of platform staff should be trained to perform the train safety check in a systematic way so that the complete area that needs to be checked is considered every time the train safety check is performed. For example, checking the train from front to rear, checking each door portal and the dispatch corridor from front to rear, etc. If this process is interrupted, the train safety checks should be restarted.

2.8 Communication during train dispatch

2.8.1 Infrastructure managers shall clearly define the flow of information between different members of staff at each stage of the train dispatch process in terms of the purpose, meaning and permitted format of communication signals.

GN40 Where multiple platform staff are involved in the train dispatch process, communication between them should be designed to minimise the potential risk of confusion with the ‘Station Work Complete’ or ‘Ready To Start’ signals.

GN41 The purpose, meaning and permitted format of all communication signals should be included in the published train dispatch arrangements so that all platform staff are aware of the requirements.

2.8.2 The infrastructure manager shall develop the communication process to minimise the potential for communication errors.

GN42 If visual communication such as hand signals, close doors (CD) or right away (RA) indicators are used then the infrastructure manager should take into account factors that may affect the ability of platform staff to see the communication. Factors that should be considered include, but are not limited to:

a) Position of members of staff in relation to the communication to be seen.

b) Glare from the sun or other light sources.

c) Obscuration of the communication, for example, by station furniture or people on the platform.

d) Ease with which the communication can be distinguished from the background.

e) Other safety critical tasks that are required at a similar time to giving or receiving the communication.

f) The development of new dispatch equipment or processes, for example, illuminated dispatch bat.

GN43 New installations of CD / RA controls and indicators should take into consideration the dispatch procedure so that the position of this equipment does not impair the ability of platform staff to execute other parts of the train dispatch process.
If audible communications are used to pass messages between staff during the train dispatch process they should sound clearly distinct from the whistle that may be used to supplement the ‘Ready to Start’ signal.

Audible communications that mean different things should sound clearly distinct from each other. Audible signals can be distinguished by:

a) Using different types of sounds (for example, voice versus whistle).
b) Having a different uniform pitch from each other (for example, a low pitched sound versus a high pitched sound).
c) Using a pitch change within a sound.
d) Varying the temporal pattern (for example, a long slow blast versus two short blasts).

Audible examples that illustrate these principles and further guidance are provided in the RSSB Alarms and Alerts toolkit. http://www.rssb.co.uk/sitecollectiondocuments/pdf/research-toolkits/T326/index.html.

The risk of confusion with audible communications from another platform should be taken into consideration.

Training and development of platform staff responsible for the train safety check should include awareness of the possible impact on passenger behaviour when using audible alarms.

2.9 Review of risk assessment

Infrastructure managers shall review the risk assessment and train dispatch arrangements periodically, when changes are proposed or following an accident or incident occurring during train dispatch.

Changes include, but are not limited to:

a) Introduction of new trains or changes to existing trains.
b) Variations to train lengths.
c) Changes to staffing levels.
d) Introduction of new staff.
e) Increase to staff workloads.
f) Organisational changes.
g) Alterations to signalling equipment.
h) Alterations (temporary and permanent) to station infrastructure.
i) Alterations to CCTV equipment.
j) Timetable change.

2.10 Real-time monitoring and management of people / passengers

Safety on the platform can be maximised through real-time monitoring and management of passenger behaviour. This is primarily applicable where platform staff are provided but may be possible remotely where facilities exist.
The competence management system for platform staff who are responsible for monitoring the platform should include how to recognise behaviour that increases the risk of accidents. Particular behaviours that have the potential to increase the risk of accidents include:

a) Running towards the train.

b) Running along the platform edge.

c) Standing or walking very close to the train or platform edge apart from when boarding or alighting.

d) Sitting on, or leaning over, the platform edge.

e) Jumping on and off the platform.

f) Interfering with the train (for example, banging on the windows, trying to open the doors when they are already locked).

g) Using bicycles, skateboards, rollerskates or similar.

People who may be at greater risk should be monitored particularly closely. This may include, but not be limited to, people who are:

a) Under the influence of alcohol or drugs.

b) Demonstrating unusual behaviour.

c) Children.

d) Suffering from reduced mobility.

e) Disabled.

f) With pushchairs / buggies or luggage.

g) With dogs.

h) Part of a mixed group where some people are travelling and some people are not.

The competence management system for platform staff who are responsible for managing passenger behaviour should include the behaviours and circumstances that require intervention, what interventions are expected and how to effectively apply them.

2.11 Promoting safe passenger behaviour

2.11.1 Where the risk assessment has identified poor passenger / public behaviour as a hazard on a platform, infrastructure managers shall put in place appropriate measures to promote safe behaviour on the platform.

Infrastructure managers should include, as part of a crowd control plan, measures that clearly inform passengers and members of the public what behaviour is required. Measures that can be considered include (but are not limited to) safety signing, posters, announcements and platform markings.

The use of communications media should be part of a consistent and integrated strategy for promoting desirable behaviour that takes into account the goals, attitudes and motivations of passengers / public and uses multiple formats to communicate the message.
### Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures

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<th>GN55</th>
<th>Communications media should be used to communicate bye-laws and to emphasise to passengers their responsibilities when on railway property.</th>
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<tr>
<td>GN56</td>
<td>The use of a yellow line to control the risk from the aerodynamic effects of passing trains is mandatory and is specified in Gi/RT7016.</td>
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<tr>
<td>GN57</td>
<td>Where a yellow line is not required according to Gi/RT7016, a yellow line can be used to delineate the area at the platform edge where it is not safe to wait or walk. This can assist with the management of passenger / public behaviour by providing a clear indication of the safe platform area. The use of a yellow line for this purpose may be relevant on platforms that tend to get crowded or where passengers are still waiting after a train has departed.</td>
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<tr>
<td>GN58</td>
<td>If used solely to delineate the edge of the waiting area and not to control aerodynamic risk, the yellow line may be positioned closer to the platform edge than specified in Gi/RT7016 so that the space available for waiting is maximised and in crowded situations, passengers are less tempted to use the clear space between the line and the platform edge as a path.</td>
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| GN59 | The position of a yellow line used to delineate the safe waiting area should be determined on the basis of a risk assessment that takes into account, but is not limited to the following:  
   a) The size of the area at the platform edge that is considered to be an unsafe waiting area.  
   b) The platform width and the amount of space that will be available for waiting.  
   c) Areas where the platform width is reduced.  
   d) The expected density of people using the platform.  
   e) The impact of the platform marking on movement on the platform.  
   f) Consistency with other platform markings within the station.  
   g) Platform length.  
   h) Features that will concentrate people in certain areas such as entrances and exits, platform canopy and retail outlets.  
   i) Position of the tactile strip (if provided) – guidance on the design of accessible stations is provided in the DfT’s Accessible Train Station Design for Disabled People: A Code of Practice (2010). |
| GN60 | The position of the yellow line used to delineate the safe waiting area should not be less than 500 mm from the platform edge. |
| GN61 | The position of the yellow line used to delineate the safe waiting area from the platform edge will be most effective if passengers are made aware of its meaning and if it is referred to in associated announcements, signs and posters. |
| GN62 | Consideration should be given to how best to use platform Customer Information Screens to encourage safe passenger and public behaviour, for example by indicating train length / formation details, clearing of information on specific departures in a timely manner (ie so as not to encourage inappropriate rushing of passengers), or use of explicit messages (for example, ‘please stand behind the yellow line’). |
| GN63 | Appendix A includes guidance on the design and placement of effective posters. |
GN64 Appendix B includes guidance on the design and placement of effective safety signs and platform markings.

GN65 Appendix C includes guidance on the design of effective announcements.

GN66 Appendix D includes a platform and train dispatch risk assessment template.
Appendix A Design of effective safety posters for passengers

A.1 Purpose
A.1.1 Posters are appropriate for use to convey simple direct messages about the risks present on the platform, to discourage inappropriate behaviours and to encourage appropriate behaviours.

A.2 General design principles
A.2.1 Posters have to compete with other advertising and eye catching features of the station and therefore need to stand out. The input of relevant specialists or professionals might be beneficial to create really effective posters.

A.2.2 Tailor the message and tone (for example, is the message conveyed using humour or in a serious way) of the poster to appeal to the attitudes and motivations of the target group of passengers. For example, some passengers value speed of journey more than other factors so messages that refer to delay as a potential consequence can be targeted towards them. Different groups of passengers will respond favourably to different messages (for example, regular travellers; commuters; leisure travellers; children; inexperienced travellers etc) and need to be targeted accordingly.

A.3 Text
A.3.1 Use brief, direct messages and avoid small text or long explanations. In the platform context, examples of messages that could be conveyed using posters are:

a) Stay away from the platform edge.

b) Stay behind the yellow line while waiting.

c) Do not run on the platform.

d) Arrive in good time for your train.

e) Move along the platform away from the entrance.

A.3.2 Use large and clear text that can be easily read from a distance. The colour of the text should contrast strongly with the background of the poster.

A.4 Graphics
A.4.1 The graphics on a poster have the twin purposes of conveying the message, or part of the message, and making the poster eye catching.

A.4.2 Graphics should be simple illustrations that can be seen from a distance.

A.4.3 In the platform safety context, graphics are the ideal means to illustrate the nature of the hazard and the potential consequences of unsafe behaviours.

A.4.4 Common symbols can be used to quickly and clearly convey some messages without the need for text. For example, a red circle with a diagonal line through it is universally used to denote prohibited behaviours.

A.4.5 Vibrant colour should be used to make the poster eye catching. However, the use of too many different colours can make posters more difficult to read.
A.5 Position

A.5.1 Position posters in the normal line of sight of people waiting on the platform or walking a typical route through the station. Position posters in a prominent place where station users are likely to be waiting and have time to read and digest the messages on the posters.

A.5.2 Posters should not be positioned so that they would cause a distraction to the driver of a train approaching the station.

A.6 Other

A.6.1 Change posters regularly so that they continue to catch the attention of regular station users.
Appendix B  Design of effective safety signs and platform markings

The guidance in this appendix applies to non-mandatory safety signs and platform markings that infrastructure managers may choose to install to help promote safe behaviour of people on the platform. Requirements for mandatory signs are contained in GI/RT7016 Interface between Station Platforms, Tracks and Trains and GI/RT7033 Lineside Operational Safety Signs.

B.1  Purpose

B.1.1 Safety signs and platform markings should be used to alert people to hazards that are not controlled by any means except for sensible passenger behaviour and caution, such as the platform edge and the gap between the train and the platform.

B.1.2 Safety signs are best used to present specific authoritative and instructional messages that relate to specific hazards.

B.2  Position

B.2.1 Safety signs and platform markings should be positioned so that they are:

a) Associated with the hazard the sign refers to.

b) Conspicuous.

c) Far enough from the hazard to allow enough time to take any action needed to avoid the hazard.

d) In the natural line of sight of a person waiting in a typical position or walking a typical route on the platform.

e) Not obscured, for example, when the platform gets busy.

f) Not positioned so that they cause obscuration of signalling equipment or impair the view of dispatch staff.

g) Not in a position where they will impede passenger flow.

B.2.2 GI/RT7016 Interface between Station Platforms, Tracks and Trains contains mandatory requirements regarding the location of isolated columns used to mount signs and other constraints that need to be taken into consideration when choosing the position of safety signs.

B.3  Visual design

B.3.1 To be effective, safety signs and platform markings need to be eye catching and readable from the distance they are intended to be viewed. Following the principles in BS 5499-1:2002 (Graphical symbols and signs. Safety signs, including fire safety signs. Specification for geometric shapes, colours and layout) will ensure that safety signs meet these criteria and are consistent with other mandatory signs provided within the station environment. BS 5499-1:2002 covers how to use shapes, colours and symbols to create signs with specific meanings. It specifies the use of supplementary signs, including arrows, and the combination of signs. It provides information on the selection of sign sizes.

B.3.2 The design of safety signs and platform markings for use on the platform should be consistent with the design of other safety signs used within the station environment to maximise familiarity and comprehension.
B.3.3 As far as possible, safety signs and platform markings should be capable of being understood without the need to read text so that people who do not have a full comprehension of English still benefit from them. RSSB (2003) Engineering - Improvements to Safety Signage on Passenger Trains: Guidelines for Symbol Design and Testing contains information on how to design and test new symbols for use on safety signs that is applicable to the platform context:

http://www.rssb.co.uk/SiteCollectionDocuments/pdf/reports/Research/T052a_rpt3_final.pdf

B.4 Content and wording

B.4.1 Safety signs and platform markings should include three components:

a) Explicit illustration of the hazard.
b) Description of illustration of the severity of potential consequences.
c) Instructions about how to avoid the consequences.

B.4.2 An alert word such as ‘danger’, ‘warning’, or ‘caution’ should be used to attract attention to the sign and to give an indication of the severity of the hazard. Examples of alert words that might be used on platform safety signs are ‘Danger’, ‘Warning’, ‘Caution’ and ‘Notice’. ‘Danger’ is perceived to be stronger than ‘Warning’ and ‘Caution’. ‘Notice’ has the lowest perceived strength of these examples.

B.4.3 Readability

a) Use short, concise expressions.
b) Use active sentences, for example ‘Stand behind the yellow line’, rather than ‘Standing too close to the edge is dangerous’.
c) Avoid statements which rely on punctuation.
d) Avoid informal or humorous expressions.
e) Be consistent in word order and use.
f) Where a statement describes a sequence of events, present words in the order of required actions.

B.4.4 Negatives

a) Avoid negative statements.
b) Avoid double or multiple negatives.
c) Avoid qualifying negatives, for example, ‘except’.

B.4.5 Modifiers

a) Avoid vague modifiers, for example ‘many’.
b) Avoid redundant modifiers, for example ‘sufficient’, ‘enough’.
c) Avoid contradictory modifiers, for example ‘quite extreme’.
d) Avoid weak modifiers, for example ‘quite’, ‘rather’, ‘well’, ‘fairly’.

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B.4.6 Confusions

a) Avoid phonetic confusions, for example ‘hear’ versus ‘here’.

b) Avoid common semantic confusions, for example ‘continuously’ versus ‘continually’.

c) Avoid jargon and use plain English where possible.

d) Use simple, short words where possible.
Appendix C Design and delivery of verbal announcements

The guidance in this appendix applies to non-mandatory verbal announcements or warnings, which generally are more effective at influencing behaviour than pictorial warnings with the same content.

C.1 Purpose - Recorded and live messages

C.1.1 Recorded announcements are suitable to provide information and give instructions but might have limited influence on the behaviour of regular passengers due to the repetitive nature of the messages and the influence of other factors on their behaviour. Recorded announcements are best used as a means to provide routine information and instructions aimed at inexperienced passengers. The exception to this is announcement of information that passengers find useful for the completion of their journey and are therefore listening out for (for example, platform information). Recorded announcements are also suitable as a means to reinforce messages through repetition or to provide a timely reminder of hazards and required behaviour.

C.1.2 Live announcements are more likely to be complied with than recorded announcements and are most effective when used in real time to target specific behaviours, situations and people (ie delivered by a person who can see the platform at the time when the instruction is required to be followed).

C.1.3 The visible presence of the announcer on the platform is likely to provide the greatest compliance because people on the platform will know that someone is watching, whether they comply or not, and is able to take further action if they do not.

C.1.4 Targeted announcements, identifying a specific individual, will generally achieve a greater compliance.

C.2 Timing of announcements

C.2.1 Safety announcements should be delivered at the time of the behaviour or where increased awareness is required. For example, messages designed to encourage people to keep away from the platform edge would be best delivered when people are actually too close to the edge and when it is especially important to keep away from the edge, such as when the train is arriving or about to leave.

C.2.2 Verbal announcements that are delivered too frequently may annoy passengers and are unlikely to have a positive effect on behaviour.

C.3 Content of announcements

C.3.1 Verbal announcements on the platform might be used to provide a warning or information. In both cases, an instruction might also be necessary to inform passengers what to do in response.

C.3.2 Warning messages delivered as verbal announcements should include three components:

a) Explicit description of the hazard.

b) Severity of potential consequences.

c) Instructions about how to avoid the consequences.

C.3.3 Alert words can be used at the beginning of an announcement to attract attention and communicate the importance of the announcement. More important announcements can be identified with stronger alert words so that they will be attended to more than less important announcements. Examples of alert words that might be used in verbal announcements on the platform are ‘Danger’, ‘Warning’, ‘Caution’ and ‘Notice’. ‘Danger’ is perceived to be stronger than ‘Warning’ and ‘Caution’. ‘Notice’ has the lowest perceived strength of these examples.
C.3.4 Passengers should be provided with information that allows them to wait in the right place in good time for the arrival of the train. If passengers do not have necessary information in time then they will be inclined to rush and this will increase the chance of accident and slow down the boarding process. Verbal announcements are one method to deliver this information. As well as basic information, such as the platform number, it can be beneficial to give information that informs passengers what part of the platform to wait on.

C.3.5 Guidance on the wording of safety signs provided in Appendix B is also applicable to the wording of verbal announcements.
Appendix D  Platform and Train Dispatch Risk Assessment Template

This risk assessment template can be used to assist infrastructure managers perform a qualitative risk assessment. It does not constitute an exhaustive list of things to consider.

<table>
<thead>
<tr>
<th>Station name:</th>
<th>Platform number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction of trains:</td>
<td>Bi-directional:</td>
</tr>
<tr>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td>Date of assessment:</td>
<td>Time of assessment:</td>
</tr>
</tbody>
</table>

Responsible manager's name:

When developing train dispatch procedures, infrastructure managers should liaise with railway undertakings whose trains stop at their stations, so that due consideration is given to the formation of trains and the likely position of on-board staff involved during the train dispatch process.

Include details of name, position, company and contact details:

Method of operation:

The train type and method of dispatch needs to be considered when undertaking the platform and train dispatch risk assessment. Record all foreseeable train types, staff combinations and methods of operation for this platform below:

<table>
<thead>
<tr>
<th>Type of train assessed</th>
<th>Method of dispatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver Only Operation</td>
<td>Driver &amp; guard</td>
</tr>
<tr>
<td>Dispatcher &amp; guard</td>
<td>Dispatcher &amp; driver</td>
</tr>
</tbody>
</table>

Dispatch history:

The assessment must consider historical safety data relating to accidents and incidents that have occurred as a result of train dispatch activity at the location concerned.

Number of train dispatch incidents in the last 3 years:

Note the details of the train dispatch incidents that have occurred on this platform in the last 3 years:
Guidance upon assessment methodology:

The system of train dispatch and any additional measures needed to manage the behaviour of people on the platform should be determined by a risk assessment.

The risk assessment needs to consider foreseeable interactions between the various factors associated with dispatch of passenger trains from platforms – for example the relationship between time of day and passenger behaviour; and the influence of platform layout on the ability of staff to undertake train dispatch duties.

Hazards and risks:

All hazards and risks need to be considered holistically when developing the train dispatch process and identifying additional measures needed to manage the behaviour of people on the platform. This includes hazards and risks that are present:

a) Continuously on the platform.
b) During train arrival.
c) During boarding and alighting.
d) During train dispatch.
e) During train departure.

Risk assessment team:

The risk assessment should include input from individuals with expertise in the following subject areas:

a) Train dispatch arrangements (from station and on-train).
b) Human Factors.
c) Risk assessment and management principles.
d) Local knowledge of the platform being assessed.
e) Operational safety management techniques.

One individual may have expertise in several of these areas. For example, a Health and Safety Representative might have experience of train dispatch arrangements and local knowledge of the platform being assessed.

Dispatch plans:

This risk assessment should be used to support train dispatch planning. Mandatory arrangements, along with any alternative methods of train dispatch needed to ensure the safe dispatch of trains when the normal method cannot be used should be specified in the dispatch plan.

Competence Management Systems:

How and when to use alternative methods should be included in the competence management system for all staff involved in train dispatch.

Railway Group Standards:

Where the symbol is shown, further information is contained within Railway Group Standards.
### Section 1: Infrastructure considerations

<table>
<thead>
<tr>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position of platform starting signals and other signals controlling train movements.</td>
<td>Are there any other fixed signals that affect train dispatch?</td>
</tr>
<tr>
<td>Is the minimum usable platform width sufficient in relation to line speed (GI/RT7016)?</td>
<td>Maximum permissible line speed over 100 mph = 3000 mm, all other lines = 2500 mm</td>
</tr>
<tr>
<td>Are people protected from the aerodynamic effects of passing trains (GI/RT7016)?</td>
<td>Air turbulence from passenger trains over 100 mph and freight trains over 60 mph.</td>
</tr>
<tr>
<td>Are yellow and white lines provided and in good condition (GI/RT7016)?</td>
<td>White line denotes the platform edge; yellow line denotes safe distance from platform edge.</td>
</tr>
<tr>
<td>Is the station sub-surface (or adjoined by a sub-surface station)?</td>
<td>For example; an Underground Station.</td>
</tr>
<tr>
<td>Does the position of fixed structures create any pinch points (GI/RT7016)?</td>
<td>Maximum permissible line speed over 100 mph = 3000 mm, all other lines = 2500 mm</td>
</tr>
<tr>
<td>Are there any level crossings adjacent to the station?</td>
<td>What protection is in place for pedestrian and vehicle crossing users?</td>
</tr>
<tr>
<td>Are there any barrow crossings at platform ends?</td>
<td>What protection is in place for crossing users – are alternative crossing methods available?</td>
</tr>
</tbody>
</table>

*Note any further relevant comments or controls here:*
<table>
<thead>
<tr>
<th>Section 2: Platform layout and usage</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the platform capable of fully accommodating all train formations?</td>
<td></td>
<td>What controls exist for any coaches not accommodated within the platform?</td>
</tr>
</tbody>
</table>
| Platform curvature (state whether curvature is predominantly convex or concave). | | Convex – train bends towards platform.  
Concave – train bends away from platform. |
| Is the platform fully covered by a canopy? | | Does the change from light to dark affect visibility? Is the platform fully or partially exposed? |
| Train formations and indication of stopping points to drivers. | | Are train stopping positions clearly marked? |
| Position and clarity of DOO Platform Monitors. | | Can drivers of DOO trains clearly see dispatch monitors from the designated stopping position? |
| Platform Stepping Distance (mm GI/RT7016). See comments box for further information. | Horizontal = ( mm)  
Vertical = ( mm)  
Diagonal = ( mm) | |
| Availability of Train Ready to Start equipment, Right Away Indicators and OFF Indicators). | | Note who has responsibility for operating equipment. |
| Platform access points. | | Are platform access points obscured? Is there a potential for late running passengers to reach moving train? |
| Fixed structures that could affect visibility (mm GI/RT7016). | | Do any fixed structures impinge upon the dispatch corridor? |
| Station furniture (hoardings, signage, customer information screens, monitors etc.). | | Does station furniture impinge upon the dispatch corridor? |
| Position and number of commercial structures. | | Do commercial structures impinge upon the dispatch corridor? |
| Are areas of limited clearance clearly signed? | | Good practice includes clear signage and use of yellow cross hatching on floor surfaces. |
| Time of day (when assistance may be required). | | Does passenger volume increase significantly at the location during peak hours? |
| Adequacy of platform lighting (mm GE/GN8560). | | Can a test target object be reliably detected in all lighting conditions? |
| How is the platform used? | | Consider who the main platform users are and what activities take place. |
### Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures

<table>
<thead>
<tr>
<th>What type of equipment is used on the platform – tow tractors, powered cleaning equipment etc?</th>
<th>Are pedestrians and vehicles separated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degraded working arrangements – what station equipment failures could affect train dispatch?</td>
<td>What arrangements exist to manage the risk associated with these conditions?</td>
</tr>
</tbody>
</table>

**Note any further relevant comments or controls here:**

*If the stepping distance between platform and train exceeds: Horizontal 275 mm, Vertical 250 mm or Diagonal 350 mm you **must** specify what additional controls have been put in place to mitigate platform-train interface risk.*
### Section 3: Train type and operation

<table>
<thead>
<tr>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of door operation considered.</td>
<td>Power operated doors, slam door fitted with Central Door Locking (CDL) and slam doors not fitted with CDL.</td>
</tr>
<tr>
<td>Who is responsible for undertaking the train safety check?</td>
<td>Driver, Train Dispatcher or Guard.</td>
</tr>
<tr>
<td>Is there variation in the length and type of train using this platform?</td>
<td>How does this affect platform duties – for example: do staff carry out different tasks for each train type?</td>
</tr>
<tr>
<td>Does the position of any train door adversely impact upon platform-train interface risk?</td>
<td>When combined, does vehicle design and platform curvature increase stepping distance?</td>
</tr>
<tr>
<td>Door type and sensitivity.</td>
<td>What type of train doors are in operation at this location (interlocked, centrally locked, slam etc.).</td>
</tr>
<tr>
<td>Duration and volume of door closure warning system.</td>
<td>Are trains fitted with door closure warning systems – if not, how are passengers alerted?</td>
</tr>
<tr>
<td>Operation of door obstacle detection system.</td>
<td>Are trains fitted with door obstacle detection systems – if not, who checks for obstructions?</td>
</tr>
<tr>
<td>Where provided, can staff clearly view train body side indicator lights?</td>
<td>Are train body side indicator lights obscured by station lighting, reflections, crowding etc.</td>
</tr>
<tr>
<td>Is the platform used by Empty Coaching Stock?</td>
<td>If yes, who is responsible for checking, locking and dispatching the empty coaches?</td>
</tr>
<tr>
<td>Is the platform used by parcel trains or engineers trains?</td>
<td>Identify who is responsible for dispatching parcel trains and engineers trains.</td>
</tr>
<tr>
<td>Does cab design affect the driver’s ability to perform the train safety check?</td>
<td>Can the drivers of DOO trains clearly see dispatch monitors from their driving position?</td>
</tr>
<tr>
<td>Does train design affect the driver or guard’s ability to observe the train clear of the platform?</td>
<td>Are cabs and train doors fitted with drop light windows or CCTV cameras and on board monitors?</td>
</tr>
<tr>
<td>Degraded working arrangements – what train equipment failures could affect train dispatch?</td>
<td>Requirements for contingency plans are set out in GO/RT3437 Defective On-Train Equipment.</td>
</tr>
</tbody>
</table>

**Note any further relevant comments or controls here:**
### Section 4: Special train services

<table>
<thead>
<tr>
<th>Section 4: Special train services</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the platform used by special and charter trains requiring a unique method of dispatch?</td>
<td></td>
<td>How are special train and charter operator’s staff made aware of risk control measures?</td>
</tr>
<tr>
<td>Do special and charter trains present passengers with increased stepping distance?</td>
<td></td>
<td>Platform stepping distance. See Section 2 for further information (GI/RT7016).</td>
</tr>
<tr>
<td>Are special and charter trains fully accommodated within the platform?</td>
<td></td>
<td>Confirm what controls exist to manage any coaches not accommodated within the platform.</td>
</tr>
<tr>
<td>What arrangements exist to manage the passengers and spectators associated with special and / or charter trains?</td>
<td></td>
<td>Remember special and charter trains attract enthusiasts who will want to take photo etc.</td>
</tr>
</tbody>
</table>

**Note any further relevant comments or controls here:**
<table>
<thead>
<tr>
<th>Section 5: Service frequency</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform usage – how are timetable conflicts managed?</td>
<td></td>
<td>Do staff prioritise train-side attendance – for example to one particular direction?</td>
</tr>
<tr>
<td>Station dwell time.</td>
<td></td>
<td>Is station dwell time sufficient to accommodate passenger and staff needs – boarding, alighting and conducting the train safety check etc.</td>
</tr>
<tr>
<td>Train stopping position.</td>
<td></td>
<td>Does the train stopping position cause overcrowding at pinch points, or people to rush from waiting areas etc?</td>
</tr>
<tr>
<td>Time of day.</td>
<td></td>
<td>Does service frequency create risk at certain times of day – too many passengers alighting, not enough trains to cope with customer demand?</td>
</tr>
<tr>
<td>Abnormal, degraded and emergency working (including staff shortage).</td>
<td></td>
<td>Outline the contingency measures used by front line staff to cope with abnormal events – for example staff shortages, lighting failure etc.</td>
</tr>
<tr>
<td>Does permissive working take place at this location (two trains on any single platform)?</td>
<td></td>
<td>What arrangements exist (or are required) to prevent train crew from misinterpreting signals or hand signals meant for others?</td>
</tr>
<tr>
<td>Use of the platform - train stopping position; platform sharing by multiple trains; attachment or detachment of trains at the platform; empty trains standing with locked doors.</td>
<td></td>
<td>What controls exist for managing passengers at platforms where coupling / uncoupling operations take place or where trains share platforms?</td>
</tr>
<tr>
<td>Do trains require simultaneous attention on either side on island platforms?</td>
<td></td>
<td>How is the dispatch of simultaneous trains managed by staff?</td>
</tr>
<tr>
<td>Are train formations strengthened during peak travel periods?</td>
<td></td>
<td>If yes, are additional staff needed to adequately perform the train safety check, or manage increased passenger numbers?</td>
</tr>
<tr>
<td>Crowd control.</td>
<td></td>
<td>What controls are in place to manage the effects of crowding on the platform?</td>
</tr>
<tr>
<td>Special events.</td>
<td></td>
<td>Does the location’s Event Management Plan refer to any ‘special’ train dispatch arrangements? If not, does it need to?</td>
</tr>
<tr>
<td>Unscheduled stops.</td>
<td></td>
<td>What provisions exist for trains making unscheduled stops?</td>
</tr>
<tr>
<td>Short notice platform alterations.</td>
<td></td>
<td>What arrangements are in place to manage short notice platform alterations?</td>
</tr>
</tbody>
</table>
Note any further relevant comments or controls here:
## Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures

### Section 6: Human factors

<table>
<thead>
<tr>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are any conditions likely to increase or induce staff error present?</td>
<td>For example, distraction from mobile phones, advertising displays, visual media etc.</td>
</tr>
<tr>
<td>Staff workload.</td>
<td>Is staff workload such that is likely to lead to fatigue – are suitable breaks provided?</td>
</tr>
<tr>
<td>Distractions (including from mobile phones).</td>
<td>Are staff members required to perform any other duties, such as managing passenger behaviour, that may lead to distraction?</td>
</tr>
<tr>
<td>Managing conflicts.</td>
<td>Conflict situations may lead to staff becoming distracted; what support is needed to preserve the integrity of the train safety check?</td>
</tr>
<tr>
<td>Train crew changeovers / changing ends.</td>
<td>Is this location designated as a train crew changeover point or a location where staff change ends?</td>
</tr>
<tr>
<td>Handover procedures.</td>
<td>How are staff briefed on relevant safety and operational issues that exist during handovers?</td>
</tr>
<tr>
<td>Platform management.</td>
<td>Note the platform management arrangements during arrival and departure of trains on the dispatch plan.</td>
</tr>
<tr>
<td>Communication equipment and procedures.</td>
<td>Note the communication equipment available and method of communication on the dispatch plan.</td>
</tr>
<tr>
<td>Use of other infrastructure managers staff in the dispatch process.</td>
<td>How are other infrastructure managers staff members made aware of the hazards that exist at this location and how they are controlled?</td>
</tr>
</tbody>
</table>

**Note any further relevant comments or controls here:**
## Section 7: Platform users

<table>
<thead>
<tr>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger and non-passenger experience and knowledge of the railway.</td>
<td>Consider what additional hazards may be imported by lack of familiarity (or over familiarity) with the system.</td>
</tr>
<tr>
<td>Mental and physical capabilities of users.</td>
<td>Is assistance available to users with impaired mental and physical capabilities? For example use of station staff or companion programmes?</td>
</tr>
<tr>
<td>Attitudes.</td>
<td>Consider foreseeable variances in personal attitudes – for example taking a shortcut due to poor perception of risk.</td>
</tr>
<tr>
<td>Motivations and likely behaviours.</td>
<td>Consider user motivations and likely behaviours – for example; commuters, infrequent travellers, leisure travellers or tourists and persons with a limited understanding of English.</td>
</tr>
</tbody>
</table>

*Note any further relevant comments or controls here:*
### Section 8: Other factors

<table>
<thead>
<tr>
<th>Features and procedures within the rest of the station.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider how the features and procedures within the rest of the station affects train dispatch.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Features and procedures within the route(s).</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider how the features and procedures within the route affects train dispatch – for example company policy upon the train guard’s position.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adverse weather.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider how adverse weather will affect staff and customer behaviour – for example will platform users wait in different areas.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bright / low sunlight.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could the effectiveness of the train safety check be affected by bright / low sunlight – are signal canopies or PPE required to ensure clear vision?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diesel exhaust fumes.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do exhaust fumes gather under canopies, obscure signals, affect air quality etc?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diesel engine noise.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the noise from diesel engines make it difficult for staff and platform users to hear station announcements, radio messages etc?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background noise.</th>
<th>Assessed (Y, N or N/A)</th>
<th>Location specific comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the background noise make it difficult for staff and platform users to hear station announcements, radio messages etc?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note any further relevant comments or controls here:**
Dispatch Plan

Specify staff operating positions and describe the arrangements necessary to control the risks associated with dispatching trains from the platform concerned. Photographs should be included to aid understanding wherever possible.
<table>
<thead>
<tr>
<th>Hazard ID No</th>
<th>Recommended additional control measures</th>
<th>Owner</th>
<th>Target date</th>
<th>Sign-off initials and date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard action</td>
<td>Brief relevant staff on risk assessment findings and any associated safe system of work.</td>
<td>Line manager</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part 3  I agree that the additional controls proposed are reasonable and will arrange implementation.

<table>
<thead>
<tr>
<th>Part 4 Responsible Manager's Name:</th>
<th>Part 5 Title:</th>
<th>Part 6 Signature:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Definitions

Alert word
A word presented at the beginning of a verbal warning to indicate the level of priority or hazardous nature of the event. Alert words include words such as ‘Danger’, ‘Warning’ and ‘Caution’.

Dispatch corridor
The corridor of space set out in section 2.2.1 that must be visible in order to perform the train safety check.

Infrastructure manager
Infrastructure manager means a person who:

a) In relation to infrastructure other than a station, is responsible for developing and maintaining that infrastructure or, in relation to a station, the person who is responsible for managing and operating that station, except that it shall not include any person solely on the basis that he carries out the construction of that infrastructure or station or its maintenance, repair or alteration; and

b) Manages and uses that infrastructure or station, or permits it to be used, for the operation of a vehicle.

(Note: This definition is sourced from The Railways and Other Guided Transport Systems (Safety) Regulations 2006)

Monitoring
To enable the detection and response to any emerging risks from particular passenger behaviours or dangerous situations while the train is at the platform.

Platform–Train Interface (PTI)
For the purpose of this document, the platform-train interface relates to the full length of the train or the full length of the platform, whichever is the shortest distance and applies from the platform edge up to, and including, the area defined as the ‘dispatch corridor’.

Railway undertaking
A transport undertaking, as defined in the Railways and Other Guided Systems Regulations 2006, whose safety certification covers operation of trains on the managed infrastructure, as defined in the Railway Group Standards Code.

Test target object
An object used for simulating incidents when testing the train dispatch system or process. Test target objects should be the same as or similar to (and no more difficult than) those that would be expected to be seen during train dispatch. GE/GN8560 Guidance on Engineering Requirements for Dispatch of Trains from Platforms provides guidance on suitable test target objects.

Train safety check
The process carried out before giving the ‘Ready to Start’ signal to the member of train-crew, or starting the train to check that nothing is potentially trapped on the outside of the train and it is safe to start the train. In the case of manually closed doors, the train safety check also checks whether the doors are properly closed.
References

The Catalogue of Railway Group Standards gives the current issue number and status of documents published by RSSB. This information is also available from www.rgsonline.co.uk.

Documents referenced in the text

Railway Group Standards

GE/RT8060 Engineering Requirements for Dispatch of Trains from Platforms
GI/RT7033 Lineside Operational Safety Signs
GO/RT3437 Defective On-Train Equipment

RSSB documents

GE/GN8560 Guidance on Engineering Requirements for Dispatch of Trains from Platforms
GE/RT8000-SS1 Station duties and train dispatch

RSSB Alarms and Alerts Guidance and Evaluation Tool
http://www.rssb.co.uk/sitecollectiondocuments/pdf/research-toolkits/T326/index.html

RSSB (2003) Engineering - Improvements to safety signage on passenger trains: Guidelines for symbol design and testing
http://www.rssb.co.uk/SiteCollectionDocuments/pdf/reports/Research/T052a_rpt3_final.pdf

http://www.rgsonline.co.uk/Related_Documents/ITLGN0001%20Iss%201.pdf

RSSB research project T764 - Evaluation of the benefits of yellow lines on non-high-speed platforms

Other References

BS 5499-1:2002 Graphical symbols and signs. Safety signs, including fire safety signs. Specification for geometric shapes, colours and layout.
