



# Rule Book Briefing Leaflet

## Issue 38



December 2022

## **The following modules and handbooks will be re-issued and come into force on 03 December 2022:**

**Glossary** Glossary of Railway Terminology

**Handbook 8** IWA, COSS or PC blocking a line

**Handbook 9** IWA or COSS setting up safe systems of work within possessions

**Handbook 11** Duties of the person in charge of the possession (PICOP)

**Handbook 12** Duties of the engineering supervisor (ES) or safe work leader (SWL) in a possession

**Handbook 12 ERTMS** Duties of the engineering supervisor (ES) or safe work leader (SWL) in a possession on ERTMS lines where lineside signals are not provided

**Handbook 13** Duties of the person in charge of the siding possession (PICOS)

**Handbook 15** Duties of the machine controller (MC) and on-track plant operator

**Module P1** Single line working

**Module P2** Working single and bi-directional lines by pilot

**Module SS1** Station duties and train dispatch

**Module T3** Possession of a running line for engineering work

**Module T10** Duties of a designated person (DP) and people working on rail vehicles

**Module TS1** General signalling regulations

**Module TW1** Preparation and movement of trains

**Module TW5** Preparation and movement of trains: Defective or isolated vehicles and on-train equipment

**Module TW7** Wrong-direction movements

**The following new document will come into force on 03 December 2022**

**RS525** ERTMS Handbook

# **Glossary of Railway Terminology**

## **Introduction**

The United Kingdom has left the European Union. This means that it is no longer necessary to meet the requirements of the European Union Agency for Rail that the contents of the glossary must be presented by subject matter and in alphabetical order. However, this format has been kept for ease of use, and the introduction updated to make this clear.

## **Controlled crossing**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion.

This item has been reworded to refer to level crossings as 'manually-controlled' rather than 'manned'.

## **Level crossing**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion.

This item has been reworded to remove the reference to 'manned' level crossings which is not necessary as elsewhere in the Rule Book these crossings are included within the category of 'controlled' level crossings.

## **Manned level crossing**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion.

This item has been reworded to refer to these level crossings as 'manually-controlled' rather than 'manned'.

## **Open level crossing**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion.

This item has been reworded to remove reference to these level crossings as being 'unmanned'.

## **Pilotman**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion.

To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. In the Glossary the entries concerned have been amended, but as there may be a lapse of time before all corresponding changes can be made, an item has been included to state that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'.

## **Handbook 8 IWA, COSS or PC blocking a line**

### **KEY CHANGE**

When a line blockage is taken on an absolute block line, the block indicator is placed to 'train on line' or on a tokenless block line the acceptance switches are placed or kept at 'normal'. The current initiative to provide additional protection for line blockages to the maximum extent possible has identified that on those lines the opportunities for providing additional protection can be limited, particularly when a person is working alone. It has been agreed that the use of the block indicator or acceptance switches can be used as further methods of additional protection, as they involve co-operative action by two signallers to prevent a protecting signal being cleared during the line blockage. This provides a similar level of security to other methods of additional protection such as a disconnection or use of a T-COD.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 8 of Handbook 8.**

## **2 Blocking the line**

### **2.2 Additional protection**

This section has been amended because of the introduction of two new sections 2.10 and 2.11 describing the two additional methods of additional protection that are now permitted.

## **Handbook 9 IWA or COSS setting up safe systems of work within possessions**

### **KEY CHANGE**

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 3.11. This explains that a DP, or a machine controller in the case of on-track plant, will ask the COSS for movements to be stopped, and that the COSS must then ask the ES or SWL to prevent any movements towards the vehicle being worked on.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 7 of Handbook 9.**

## **3 Working within a work site**

### **3.11 If work is to be carried out on a rail vehicle**

This is a new section in this issue which describes how a designated person or machine controller will ask the COSS to arrange for movements to be prevented from approaching a vehicle that is to be worked on.

## **Handbook 11 Duties of the person in charge of the possession (PICOP)**

### **KEY CHANGES**

An alternative procedure has been introduced for an engineering train leaving a possession when the detonator protection is placed at a sub-standard distance from the points it is laid in relation to. Instead of the driver being authorised to proceed from the last signal within the possession for a short distance to the detonator protection, and separately authorised by the signaller to proceed from that location, a single authority for movement can be given from the last signal within the possession, which would be cleared if possible. This avoids a train possibly being detained across a junction awaiting the protection being lifted and the movement being made without the security of the interlocking. The advantages of this alternative procedure include simplification of the Rule Book process, safety benefit through removal of error potential and train performance benefit. This arrangement can only be used if it has been published in the *Weekly Operating Notice* or *Engineering Notice*.

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 8.17. This explains that a DP, or a machine controller in the case of on-track plant, will ask the PICOP for movements to be stopped.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. Changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 9 of Handbook 11.**

### **8 Blocking the line**

#### **8.12 Movements towards the detonator protection - standard distance is not possible**

A new section 8.13 has been introduced named 'Leaving the possession - standard distance is not possible', to describe the alternative procedure when the train leaves the possession from the last signal within it.

#### **8.13 Leaving the possession at an intermediate point**

As a result of the introduction of a new section 8.13, this section has been renumbered 8.14.

#### **8.14 Leaving the possession directly into a siding under possession**

As a result of the introduction of a new section 8.13, this section has been renumbered 8.15.

#### **8.15 Leaving the possession where there is no detonator protection**

As a result of the introduction of a new section 8.13, this section has been renumbered 8.16.

#### **8.17 If work is to be carried out on a rail vehicle**

This is a new section in this issue which describes how a designated person or machine controller will ask the PICOP to arrange for movements to be prevented from approaching a vehicle that is to be worked on.

### **9 Movements over level crossings**

#### **9.8 Manned level crossings**

This section has been renamed to refer to these level crossings as 'manually-controlled' rather than 'manned'.

### **12 Giving up the possession**

#### **12.3 Removing the possession arrangements**

This section has been changed to refer to 'pilot' instead of 'pilotman'.



# **Handbook 12 Duties of the engineering supervisor (ES) or safe work leader (SWL) in a possession**

## **KEY CHANGES**

Section 3.3 of handbook 12 permits an engineering supervisor (ES) or safe work leader (SWL) to allow duties relating to isolation of AC and DC equipment to start once the person in charge of the possession (PICOP) has authorised the ES or SWL to set up the work site. This work can take place before the work-site marker boards (WSMB) have been placed. There have been cases where the instruction had been interpreted as allowing the work in connection with isolations to begin even before the possession had been granted, exposing the staff concerned to risk. As a result, a Network Rail company standard has been amended to prevent this work starting before the WSMBs have been placed, and this authority has been removed from the ES or SWL in handbook 12.

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 6.9. This explains that a COSS, DP, or a machine controller in the case of on-track plant, will ask the ES or SWL for movements to be stopped.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 8 of Handbook 12.**

### **3 Setting up the work site**

#### **3.3 Setting up the work site**

This section has been changed to remove the ability to allow duties relating to isolation of AC and DC equipment to start as soon as the person in charge of the possession (PICOP) has authorised the ES or SWL to set up the work site and reworded to make it clear that no other work can commence within the work site until the PICOP has told the ES that the work site has been granted.

## **6 Train movements**

### **6.9 If work is to be carried out on a rail vehicle**

This is a new section in this issue which describes how a COSS, designated person or machine controller will ask the ES or SWL to arrange for movements to be prevented from approaching a vehicle that is to be worked on.

## **7 Movements over level crossings**

### **7.8 Manned level crossings**

This section has been renamed to refer to these level crossings as 'manually-controlled' rather than 'manned'.

# **Handbook 12 ERTMS Duties of the engineering supervisor (ES) or safe work leader (SWL) in a possession on ERTMS lines where lineside signals are not provided**

## **KEY CHANGES**

Section 3.3 of handbook 12 ERTMS permits an engineering supervisor (ES) or safe work leader (SWL) to allow duties relating to isolation of AC and DC equipment to start once the person in charge of the possession (PICOP) has authorised the ES or SWL to set up the work site. This work can take place before the work-site marker boards (WSMB) have been placed. There have been cases where the instruction had been interpreted as allowing the work in connection with isolations to begin even before the possession had been granted, exposing the staff concerned to risk. As a result, a Network Rail company standard has been amended to prevent this work starting before the WSMBs have been placed, and this authority has been removed from the ES or SWL in handbook 12 ERTMS.

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 6.9. This explains that a COSS, DP, or a machine controller in the case of on-track plant, will ask the ES or SWL for movements to be stopped.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 2 of Handbook 12 ERTMS.**

### **3 Setting up the work site**

#### **3.3 Setting up the work site**

This section has been changed to remove the ability to allow duties relating to isolation of AC and DC equipment to start as soon as the person in charge of the possession (PICOP) has authorised the ES or SWL to set up the work site and reworded to make it clear that no other work can commence within the work site until the PICOP has told the ES that the work site has been granted.

### **6 Train movements**

#### **6.9 If work is to be carried out on a rail vehicle**

This is a new section in this issue which describes how a COSS, designated person or machine controller will ask the ES or SWL to arrange for movements to be prevented from approaching a vehicle that is to be worked on.

### **7 Movements over level crossings**

#### **7.8 Manned level crossings**

This section has been renamed to refer to these level crossings as 'manually-controlled' rather than 'manned'.

## **Handbook 13 Duties of the person in charge of the siding possession (PICOS)**

### **KEY CHANGE**

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 5.5. This explains that a DP, or a machine controller in the case of on-track plant, will ask the PICOS for movements to be stopped.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 2 of Handbook 13.**

## **5 Protecting the possession**

### **5.5 If work is to be carried out on a rail vehicle**

This is a new section in this issue which describes how a designated person or machine controller will ask the PICOS to arrange for movements to be prevented from approaching a vehicle that is to be worked on.

## **Handbook 15 Duties of the ‘machine controller (MC) and on-track plant operator**

### **KEY CHANGE**

Rule Book module T10 (Duties of a designated person (DP) and people working on rail vehicles) has not previously included any instructions concerning working on vehicles, on-track machines or on-track plant (OTP) when working within a possession. This included the arrangements for arranging line protection against train movements. Those instructions have now been included in module T10 and this handbook has been changed to include a new section 10.4. This explains that a machine controller in the case of on-track plant will ask the PICOP, COSS, ES, SWL or PICOS for movements to be stopped.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 5 of Handbook 15.**

## **10 When working**

### **10.4 When work is to be carried out on OTP**

This is a new section in this issue which describes how a machine controller will ask the PICOP, COSS, ES, SWL or PICOS to arrange for movements to be prevented from approaching an item of OTP that is to be worked on.

## **Module P1 Single line working**

### **KEY CHANGE**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. All references in this module have been changed. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'. Changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 7 of module P1.**

#### **1 Principle**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **2 Setting up single line working**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **3 After the forms have been dictated**

All references in this module to 'pilotman' have been changed to 'pilot' and 'manned level crossings' to 'manually-controlled'.

#### **4 Completing the arrangements**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **5 Authority for movements**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **6 Pilotman instructing drivers**

All references in this module to 'pilotman' have been changed to 'pilot' and 'manned level crossings' to 'manually-controlled'.

#### **7 Pilotman's duties during single line working**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **8 Signaller's duties during single line working**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **9 Driver's duties during single line working**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **10 Working of trains to and from the point of obstruction**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **11 Single line working on track circuit block lines where more than one running line is available**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **12 Dealing with a failed train**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **13 Change of pilotman or signaller**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **14 Withdrawing single line working**

All references in this module to 'pilotman' have been changed to 'pilot'.



## **Module P2 Working single and bi-directional lines by pilotman**

### **KEY CHANGES**

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. All references in this module have been changed. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'.

The title of the module has been changed to 'Working single and bi-directional lines by pilot'.

When the instructions to the driver concerning non-issue of a driver's ticket when entering a one-train working line or working to and from the point of obstruction were last changed in section 3.3, the reference to a one-train working line was unnecessarily repeated, and this has now been corrected.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 6 of module P2.**

#### **1 When working by pilotman must be introduced**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **2 Setting up working by pilotman**

All references in this module to 'pilotman' have been changed to 'pilot'.

#### **3 During working by pilotman**

All references in this module to 'pilotman' have been changed to 'pilot'.

##### **3.3 Entering the single-line section**

The driver's instructions have been corrected, as the reference to entering a one-train working line was unnecessarily repeated.

#### **4 Working by pilotman to and from the point of obstruction**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **5 Dealing with a failed train**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **6 Withdrawing working by pilotman**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **7 Modified working arrangements**

All references in this module to 'pilotman' have been changed to 'pilot'.

## **Module SS1 Station duties and train dispatch**

### **KEY CHANGE**

It has been pointed out that the recessed nature of bodyside doors on some passenger vehicles causes difficulty in carrying out the requirement in section 3.8 of this module to confirm that the doors are properly closed as part of the train safety check when a DO train is being dispatched by the driver from an unstaffed platform. It was realised that the wording of this section of the module is incorrect in including this within the train safety check. The driver is required, before starting the train safety check, to make sure that the passenger doors have closed, either by seeing that the external orange hazard lights have gone out, or, where appropriate, the traction interlock light is illuminated. The wording has been changed to remove this repetition. By doing so any ambiguity is removed which allows this method of working to be applied as written with any stock with this type of door.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 7 of module SS1.**

## **3 Train dispatch**

### **3.8 Dispatching a DO train from an unstaffed platform**

The wording has been changed to remove an incorrect repetition of the requirement to check that the doors are properly closed. As already stated, this is done before the train safety check, and does not have to be repeated during the train safety check.

## **Module T3 Possession of a running line for engineering work**

### **KEY CHANGES**

An alternative procedure has been introduced for an engineering train leaving a possession when the detonator protection is placed at a sub-standard distance from the points it is laid in relation to. Instead of the driver being authorised to proceed from the last signal within the possession for a short distance to the detonator protection, and separately authorised by the signaller to proceed from that location, a single authority for movement can be given from the last signal within the possession, which would be cleared if possible. This avoids a train possibly being detained across a junction awaiting the protection being lifted and the movement being made without the security of the interlocking. The advantages of this alternative procedure include simplification of the Rule Book process, safety benefit through removal of error potential and train performance benefit. This arrangement can only be used if it has been published in the *Weekly Operating Notice* or *Engineering Notice*.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'. Changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 10 of module T3.**

## **4 Train movements**

### **4.6 Leaving the possession**

This section has been changed. The normal arrangement when the train is authorised to leave the possession at the detonator protection is now shown as sub-section a) and there is a new sub-section b). The new sub-section b) describes an alternative arrangement that can be applied when it has been published to allow an engineering train to leave the possession direct from the last signal within the possession. This can be applied only when the detonator protection is less than the standard distance from points.

## **5 Movements over level crossings**

### **5.9 Manned level crossing**

This section has been renamed to refer to these level crossings as 'manually-controlled' rather than 'manned'.

## **7 Giving up the possession**

### **7.2 Removing the protection**

The reference in this module to 'pilotman' has been changed to 'pilot'.

## **9 Driver's duties**

### **9.9 Leaving the possession**

This is a new section to describe the alternative procedure when the train leaves the possession from the last signal within it.

## **Module T10 Duties of a designated person (DP) and people working on rail vehicles**

### **KEY CHANGES**

It has been pointed out that in section 3.6 there is a lack of clarity as to the responsibility for removing vehicle protection when the work on a rail vehicle is suspended or has been completed. To make this clearer, the last person working on a rail vehicle to remove personal identification must now ask the DP whether the vehicle protection can now be safely removed. Previously that person was required to remove the vehicle protection which might not have been the correct action.

Section 4.3 has been changed to include a requirement when working on a vehicle to inform station staff if no driver or guard is present. These staff can also influence the movement of a train.

A proposal was made to include a section on working on a train, on-track machine or on-track plant within a possession, including who is responsible for arranging line protection. A new section 8 has been introduced. Section 8.1 describes who the DP must ask to stop any approaching train movements to be stopped. If work is to take place on an item of on-track plant on a running line or siding, the DP must ask the machine controller to make this request. Section 8.1 sets out in detail who must be asked to arrange line protection in all the various situations of the vehicle being on a running line under possession, on a siding under possession, when line protection is required on an adjacent running line, or on an adjacent siding. Section 8.2 describes the DP's actions when work has been completed and the line protection is no longer required.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 5 of module T10.**

## **3 Duties of people working on rail vehicles**

### **3.6 When the work is suspended or has been completed**

This section has been changed to make the responsibility for removing vehicle protection clearer.

## **4 General duties of a DP**

### **4.3 Working on a train on a running line including at a station platform**

This section has been changed to include a new requirement to tell platform staff when present on arrival and when work has been completed.

## **8 Working on a rail vehicle on a running line or siding under possession**

This is a new section to explain the arrangements for line protection when working on a vehicle on a line or siding under possession.

### **8.1 Before allowing work to start**

This is a new section explaining how to arrange line protection in each situation.

### **8.2 When the work is suspended or has been completed**

This is a new section explaining the actions to be taken when work is completed.

## Module TS1 General signalling regulations

### KEY CHANGES

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. All references in this module have been changed. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'.

Changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'. However in the case of regulation 3.5.3 the requirement to use a reminder appliance when equipment at a manned level crossing must not be operated is incorrect as written, as this would apply to any of the types of level crossing listed as 'controlled' level crossings in module TS9 *Level crossings - signallers' regulations*, and this has been corrected.

Regulation 13.2 describes, from a signaller's point of view, the requesting and granting of a line blockage. It is described in terms of a blockage of one line only and the signaller only being able to grant a line blockage if the protecting signal or block marker is within that signaller's area of control. Frequently, the request is for a blockage of more than one line, with one protecting signal being controlled by another signaller. It has become an accepted practice for a signaller to treat this as one request and liaise as necessary with the other signaller. This is not compliant with the signalling regulation and the wording has been changed to allow this so that the situation is dealt with in a consistent manner.

There are other situations that are not explicitly addressed in the current rules and regulations and may therefore be dealt with by local interpretation of the correct action. Inclusion of more detailed instructions would assist in such line blockages being arranged in a way that is accepted as an industry standard process. These include the limits of a line blockage over a single or bi-directional line. It is now explained that if two signallers are involved one of them grants the line blockage from a protecting signal or block marker, having spoken to the other signaller and agreed that signaller will keep a signal protecting the line blockage at danger, or keep the route closed at a block marker.



The term 'protecting signal' has caused some confusion with other signals that must be kept at danger to protect a line blockage and a fuller explanation has been given, that the signal or block marker that controls the entry to the portion of line that is to be blocked is the signal or block marker referred to as the protecting signal or block marker on a NR3180 line blockage form. Any other signal that must be kept at danger, or block marker where the route must be closed, is referred to on the form as an 'additional signal'.

The use of block signalling equipment to keep a signal at danger is an action that is always taken when a line blockage is to be taken. The requirement to provide additional protection for line blockages to the maximum extent possible has identified that, in an absolute block section, the opportunities for providing that additional protection are limited, particularly should the request be made by a person who is to work alone. The use of the block indicator to maintain the protecting signal at danger can now be regarded as a form of additional protection. If two signallers co-operate in providing a means of preventing a protecting signal from being cleared it is equivalent to the degree of security provided by other forms of additional protection such as a disconnection or use of a track circuit operating device (T-COD). On a tokenless block line, the block instruments can also be used as a type of additional protection.

An explanation has been included of the purpose served by each of the permitted methods of additional protection.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 15 of module TS1.**

### **3 Signal box equipment**

#### **3.5 Using reminder appliances**

##### **3.5.3 On signalling equipment that must not be operated**

This regulation has been changed to refer to 'controlled' level crossings as it applies to a wider range of crossing types than just those previously described as 'manned' and which in future will be termed 'manually-controlled'.

### **4 Working signalling equipment**

#### **4.9 Clearing a subsidiary or position-light signal associated with a main signal**

This regulation has been changed to refer to 'pilot' instead of 'pilotman'.

## **13 Safety of personnel**

### **13.2 COSS, IWA, PC or SWL blocking a line**

#### **13.2.2 Agreeing the arrangements**

This regulation has been changed to explain the meaning of 'protecting signal' and 'additional signals' as referred to on the NR3180 form.

The regulation has been changed to say that a line blockage can be granted if a protecting signal or block marker is:

- within the signaller's area of control.
- within another signaller's area of control and the arrangements agreed have been explained to that other signaller.
- on a single or bi-directional line, within another signaller's area of control and that signaller has agreed to keep it at danger.

If the site of the work will be less than 200 metres from the protecting signal or block marker and it is necessary to keep a previous signal at danger, or the route closed at a previous block marker, the wording has been changed to make it clearer that it is only in this situation that the previous signal or block marker is being referred to.

#### **13.2.4 Additional protection**

This regulation has been changed to include reference to placing the block indicator to 'train on line' and keeping the acceptance switches at 'normal' which are also methods of additional protection. The instructions for using those methods have been included.

An explanation has been included of the purposes served by each method of additional protection.

#### **13.2.7 Completing or suspending the line blockage**

This regulation has been changed to include an instruction that when the block indicator had been placed to 'train on line' as a method of additional protection, absolute block regulation 3.6.14 must be carried out when the line blockage is completed or suspended.

## **20 Examining the line**

### **20.6 When a track circuit fails to clear or shows occupied for some other reason**

#### **20.6.1 Before the passage of the first train**

This regulation has been changed to refer to 'pilot' instead of 'pilotman'.

## Module TW1 Preparation and movement of trains

### KEY CHANGES

To improve the clarity of the intention of the instructions in section 1 concerning abnormal brake applications, this has been changed to say that the same arrangements should be applied when a train protection system has intervened and caused a brake application without the train being brought to a stand.

An incident involving isolating the brake on one vehicle of a four-car electric multiple unit (EMU), led to debate as to the correct instructions to be applied from those contained in modules TW1 and TW5 *Preparation and movement of trains: Defective or isolated vehicles and on-train equipment* and whether the term 'coaching stock' included multiple-unit vehicles. It was suggested that the instructions in section 4.4 be reviewed and reissued in a combined form or repeated completely in both modules. The wording in this module has been changed to explain that coaching stock applies to both locomotive-hauled and multiple-unit stock, that the instructions would also apply during a journey, and to make reference to instructions in module TW5 that must also be taken into account.

A freight operator wished to allow a single freight train to operate in a formation which, at a later stage en route, can be uncoupled to form two separate forward services. A dead diesel locomotive is therefore conveyed within the consist at the head of what will constitute the second train. This avoids additional resource requirements such as shunt movements, employee time, pathing time, and fuel usage. Benefits claimed include improved system safety by avoiding shunting operations and that the improved efficiency of the method of working makes rail more attractive leading to societal benefits. As this method of operation could be applied to other air-braked freight trains, section 7.4 has been changed to permit this on a general basis, subject to company instructions allowing it. This would depend on the ability to achieve similar train braking characteristics to those which would be the case if a dead locomotive is not marshalled within the train consist. The rule states a dead locomotive can be formed anywhere in the train except immediately behind the hauling locomotive or at the extreme rear, only if the train operating company instructions allow this and if any other instructions they contain are carried out.

The existing instructions concerning use of the driver's reminder appliance (DRA) in section 10 have been changed so that the instructions would be applied on a European Rail Traffic Management System (ERTMS) line in the situations corresponding to those on a conventional line. The DRA is not a standard fitment of ERTMS-fitted traction units, so that the rules only apply if a DRA is provided.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. All references in section 32 of this module have been changed. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 17 of module TW1.**

### **1 Abnormal brake applications**

This section has been changed to include both a train being brought to a stand, or its speed reduced, by a brake application which the driver did not make.

### **4 Brake system requirements**

#### **4.4 Coaching stock vehicles with isolated brakes**

This section has been changed to explain the instructions more clearly. The following changes have been made:

- An explanation that the instructions apply to any type of coaching stock, both locomotive-hauled and multiple unit.
- The same instructions apply when a brake is isolated during a journey as well as when starting one.
- Reference is made to instructions in module TW5 which may have to be carried out at the same time.

### **7 Dead locomotives**

#### **7.4 In a freight train**

This section has been changed to explain that train operating company instructions can allow a dead locomotive to be conveyed in a freight train somewhere other than immediately behind the hauling locomotive or on the rear of the train.

### **10 Driver's reminder appliance (DRA)**

The 'Note' has been changed to explain that on a train on which ERTMS is in operation, use of the DRA only applies if it is provided.

#### **10.1 When entering or leaving the driving cab**

This section has been changed to say how the DRA is used on an ERTMS line in situations that correspond to those where it is used on a line with conventional signalling.

**10.2 When stopping at a station platform or at a signal at danger**

This section has been changed to say how the DRA is used on an ERTMS line in situations that correspond to those where it is used on a line with conventional signalling.

**10.3 When stopping at a station platform where no signal is provided**

This section has been changed to say how the DRA is used on an ERTMS line in situations that correspond to those where it is used on a line with conventional signalling.

**32 Single lines worked with a token, or with or without a train staff****32.2 Entering or fouling a single line worked with a token or train staff**

This section has been changed to refer to 'pilot' instead of 'pilotman'.

**32.4 One-train working without a train staff**

This section has been changed to refer to 'pilot' instead of 'pilotman'.

# **Module TW5 Preparation and movement of trains: Defective or isolated vehicles and on-train equipment**

## **KEY CHANGES**

A number of sections of the module have been changed to provide further clarity in areas known to be causing confusion, improve consistency in the application of rules or to clarify terminology.

Details of the changes have been included in the 'detailed changes' for each section.

## **DETAIL OF CHANGES**

**Section headings in bold relate to issue 11 of module TW5**

### **1 Reporting defective or isolated on-train equipment**

#### **1.1 General**

A new paragraph and instructions have been added to remind the driver that they must have permission from the signaller to make a movement if they have been in direct contact with rolling stock technicians or their operations control via the GSM-R radio to discuss a defect. The associated signaller instructions have also been added.

These changes are intended to close the gap in communication in case of the driver making alternative use of their GSM-R radio in case of defect. They establish a clear line of communication between driver, signaller, operations control and the train operator's control.

### **5 Brake defects**

#### **5.4 Brake no longer operating on the leading vehicle of a passenger train**

Where reference was made to 'to the next vehicle on which the brake is operating', this has been changed to 'to the next vehicle, and the brake is operating normally on that vehicle'. This was because although these instructions are intended to mean the vehicle immediately next to the one with the brake defect, in some cases this was being interpreted as the next vehicle with an operative brake.

## **5.5 Brake no longer operating on the last vehicle**

Where reference was made to 'to the next vehicle on which the brake is operating', this has been changed to 'to the next vehicle, and the brake is operating normally on that vehicle'. This was because although these instructions are intended to mean the vehicle immediately next to the one with the brake defect, in some cases this was being interpreted as the next vehicle with an operative brake.

## **6 Door defects on passenger vehicles**

### **6.3 Vehicles which passengers must not travel in**

The table that contained specific instructions depending on the location of the defective door has been removed. The instructions have been updated for the driver to contact their train operator's control to seek instruction. This is because there are now trains in operation with different types of configuration, for example, full-width gangways, so the instructions will be operator-specific.

## **8 Driver's safety device (DSD) and driver's vigilance equipment**

### **8.2 Starting a journey from somewhere other than a maintenance depot**

The restrictions to only travel to a maintenance depot not carrying passengers have been removed. A train can start a journey from other than a maintenance depot and continue normally if certain conditions are met (conditions in section 8.4).

### **8.4 During a journey**

The table that specifies the conditions for continuing a journey with a defective DSD has been updated and simplified, as it contained conditions for simultaneous failures. The table now only contains conditions applicable to a DSD defect and a paragraph has been added to clarify the instructions in case of other defects (AWS, TPWS or ERTMS) happening at the same time.

## **15 Hot axle boxes and activation of lineside hot axle box detectors**

### **15.1 Starting a journey**

The instructions have been updated to incorporate defective built-in hot axle box detectors. This is because a train with a defective hot axle box detector will not provide any automatic warning of a hot axle box.

### **15.7 Activation of a built-in hot axle box detector**

Paragraph updated to state that the instructions also apply if the built-in hot axle box detector becomes defective, as well as to an activation.

### **15.8 No evidence of overheating after a built-in hot axle box detector activation**

A new section has been added that contains drivers' instructions when examination does not find any evidence of overheating. This may be due to a failure of an in-cab display. If there is no evidence of overheating, the train can continue normally. However, further instructions apply if a second activation from the same detector takes place or if a lineside activation occurs.

## **17 On-train data recorder (OTDR)**

The content is separated into two new sections 17.1 'Starting a journey from a maintenance depot' and 17.2 'Starting a journey from somewhere other than a maintenance depot or during a journey', as the requirements are different.

- 17.1 Starting a journey from a maintenance depot. It is a requirement for a train to have a working OTDR that records the activity of the leading cab, wherever this may be located. Since an OTDR may not be checked before all journeys from a maintenance depot, the instructions apply 'if you are aware'.
- 17.2 Starting a journey from somewhere other than a maintenance depot or during a journey. These instructions now apply to starting a journey from other than a maintenance depot, as well as to an OTDR becoming defective during a journey.

## **19 Sanding equipment to assist train braking**

### **19.1 Starting a journey from a maintenance depot**

This section has been changed, as the sanding equipment that is required to be in operation is any that will be closest to the leading end of the train at any time during its planned workings. This is because, on some trains, the leading set may not be located in the first vehicle.

The instructions have also been updated to incorporate trains with multiple sanders. Where this is the case, it may be possible for the train with some defective sanders to leave a maintenance depot. However, due to the variety of types and configurations, the driver or train preparer will be required to seek instructions from the train operator's control.

### **19.2 Starting a journey from somewhere other than a maintenance depot or during a journey**

The instructions have been updated to reflect that the leading set of installed sanders must be in operation for a train to continue. When this is not the case, the driver must seek instructions from the train operator's control at the first convenient opportunity.



## **26 Vehicles with locked wheels, wheel flats, shifted tyres or dragging brakes**

### **26.1 Starting a journey**

The instructions have been updated to say that a train must not be allowed to start a journey if the driver or train preparer becomes aware of any of these defects.

The wording has been changed to 'obvious' damage to the wheels, in line with the wording used in section 26.2.

### **26.2 During a journey**

As section 26.2 a) tells the driver to check for evidence of damage to the wheels, the heading of 26.2 c) has been changed to 'Checking for damage to the wheels' to clearly indicate these are the actions to follow.

The wording in the table has been changed to make it easier to report in a way that a driver can describe by visual observation.

- 'No evidence of damage' and instructions for the driver to report 'at the first convenient opportunity'. If a driver has to stop the train to check for damage and no evidence of damage is found, the train may still need to be checked at the end of the day. This is because a rolling stock technician may identify damage that was not clearly visible to the driver.
- 'Obvious damage' is damage that will be obvious to the driver when inspecting. The size of flats is now defined as 'approximately 60-100mm'. The 'actions to be taken' have been updated and allow a higher speed than 20 mph (30 km/h) if a rolling stock technician gives permission for this. This is because a rolling stock technician will be able to apply their expert knowledge and may have more equipment available to perform the examination.
- 'Serious damage' is now defined as including a flat over 100mm.

The wording of the heading in section 26.2 e) has been aligned to 'obvious' damage.

## **Module TW7 Wrong-direction movements**

### **KEY CHANGES**

This module has been changed following an incident in which a train was authorised to make a wrong-direction movement of some 20 minutes duration in darkness and to stop opposite a signal on an adjacent opposite line. The driver misunderstood the intended limit of the movement and ran through points onto a portion of line open to traffic. The Rule Book now states that if the wrong direction movement is to a location that might be difficult to identify it should be authorised as far as a clearly identifiable location, similar to the rules for Emergency Special Working. On reaching that location, the driver will ask the signaller for further instructions. This should mitigate against miscommunication or misunderstanding and also help in the event of darkness or poor visibility.

The Rule Book has been reviewed to remove cases of gender-specific language which can be taken as an assumption that only males are involved. This may deter applications for employment or promotion. To overcome this, the term 'pilotman' is being changed to 'pilot' throughout the Rule Book. All references in this module have been changed. As there may be a lapse of time before all corresponding changes can be made, it should be noted that the former term 'pilotman' might still be used, but is to be taken as having the same meaning as 'pilot'. Changes have been made to remove any references to level crossings as being 'manned' and replace these with the term 'manually-controlled'.

### **DETAIL OF CHANGES**

**Section headings in bold relate to issue 8 of module TW7.**

## **1 When a wrong-direction movement can be made**

### **1.2 Driver getting authority**

This section has been changed to refer to 'pilot' instead of 'pilotman'.

If a wrong-direction movement is being made towards a location that might be difficult to identify, the signaller must authorise this as far as a location that can easily be recognised and the driver will get further instructions at that point.

## **3 Signaller instructing the driver**

If a wrong-direction movement is being made towards a location that might be difficult to identify, the signaller must authorise this as far as a location that can easily be recognised and the driver will get further instructions at that point.

## **4 During the movement**

### **4.1 Points and crossings**

This section has been changed to refer to 'pilot' instead of 'pilotman'.

### **4.2 Level crossings**

This section has been changed to refer to 'pilot' instead of 'pilotman' and to 'manually-controlled level crossing' rather than 'manned level crossing'.

## **RS525 ERTMS Handbook**

### **KEY CHANGE**

This is a new handbook intended for use by anyone who needs to understand how the European Rail Traffic Management System (ERTMS) operates on the GB network.

It explains the basic concepts and operating principles of ERTMS to front line staff. It provides specific reference material and guidance relating to ERTMS principles and operation. It is designed to complement formal training by providing additional guidance and information beyond the rules contained within the Rule Book.

By giving front line staff the underpinning knowledge needed to understand ERTMS operation, the handbook will enable them to make safe decisions in degraded working, and help them to operate the system correctly and effectively. This will improve safety and reliability and operational performance, as decisions will be made quickly, safely and efficiently under ERTMS.

Uncontrolled when printed

Supersedes GERT8000-RBBL Iss 37 with effect from 03/09/2022 and comes into force on 03/12/2022

Uncontrolled when printed

Supersedes GERT8000-RBBL Iss 37 with effect from 03/09/2022 and comes into force on 03/12/2022

Uncontrolled when printed

Supersedes GERT8000-RBBL Iss 37 with effect from 03/09/2022 and comes into force on 03/12/2022



Contact <https://customer-portal.rssb.co.uk>

Tel +44 (0) 20 3142 5300

Twitter @RSSB\_rail

Web [www.rssb.co.uk](http://www.rssb.co.uk)

Rail Safety and Standards Board  
Limited

The Helicon

One South Place

London

EC2M 2RB

Corporate member of  
Plain English Campaign

Committed to clearer  
communication

172

