

**GERT8000-P2  
Rule Book**



Working single and bi-  
directional lines by pilot



Issue 7



Module P2

September 2022  
Comes into force 03 December 2022

## Conventions used in the Rule Book

	Example
A black line in the margin indicates a change to that rule when published for the first time, and will then appear until the module is reissued.	
Green text in the margin indicates who is responsible for carrying out the rule.	<code>driver</code>
A white i in a blue box indicates that there is information provided at the bottom of the page.	
A rule printed inside a red box is considered to be critical and is therefore emphasised in this way.	

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You will need this module if you carry out the duties of a:

- driver
- pilot
- signaller.

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# 1

## When working by pilot must be introduced

### 1.1 Circumstances

Except as shown in section 1.2, working by pilot must be introduced when any of the following applies.

- a) **The token has been lost.**
- b) **Trains have to work to and from the point of obstruction.**
- c) **The signal controlling the entrance to a single or bi-directional line cannot be cleared or a movement authority (MA) cannot be received by a train for any of the following reasons**
  - 1 The signal or ERTMS signalling equipment has failed or has been disconnected.
  - 2 A track circuit or other signalling equipment has failed.
  - 3 Level-crossing equipment has failed.
  - 4 The token instrument has failed.

### 1.2 Exceptions

#### 1.2.1 Modified working

Working by pilot is not needed in any of the circumstances listed in sections 1.1 a) and 1.1 c) if modified working arrangements are authorised.

#### 1.2.2 Other exceptions

The exception to section 1.1 b) is as follows.

Working by pilot is not needed on one side of the obstruction on a line worked with a token if a token is available and trains can be worked under the instructions for a single line with a train staff.

The exceptions to section 1.1 c) are as follows.

### **1. The signal or ERTMS signalling equipment has failed or has been disconnected**

Working by pilot is not needed on:

- lines where a token is provided and the driver has the token
- track circuit block lines or ERTMS lines if all the track circuits relating to the affected portion of single line are clear.

### **2. A track circuit or other signalling equipment has failed**

Working by pilot is not needed:

- on lines where a token is provided and the driver has the token
- on bi-directional lines if trains are allowed to proceed in one direction only
- on track circuit block or ERTMS lines if authorised in the *Sectional Appendix*.

### **3. Level-crossing equipment has failed**

Working by pilot is not needed:

- on lines where a token is provided and the driver has the token
- on track circuit block or ERTMS lines if authorised in the *Sectional Appendix*
- on track circuit block or ERTMS lines if all track circuits relating to the affected portion of single line are clear.

### **4. The token instrument has failed**

Working by pilot is not needed on a line worked with a token if a token is available and trains can be worked under the instructions for a single line with a train staff.

# 2 | Setting up working by pilot

*The people responsible: pilot, signaller*

## 2.1 Appointment and identification of the pilot

**pilot** You will be appointed by the Network Rail area operations manager.

You must wear on your left arm a red armband with PILOT in white letters.

## 2.2 Agreeing the arrangements

**pilot, signaller** Before introducing working by pilot, you must reach a clear understanding with each other and any other signaller concerned about:

- the arrangements which will apply
- the time when the Pilot's Form for Working Single and Bi-directional Lines by Pilot (RT3154 or RT3154 ERTMS) will be completed
- which signals will need to be passed at danger
- which signals must be obeyed
- which ends of authority (EoA) will need to be passed without an MA
- the EOAs at which an MA must be received
- any instructions about level crossings
- any other relevant instructions.



## 2.3 Completing the pilot's and signaller's forms

### a) Pilot's form

At the agreed time, and only when the line is clear, you must:

- complete and sign your pilot's form
- dictate it to each signaller who controls an entrance to the single-line section
- enter the name of each signaller on your form.

pilot

### b) Signaller's form

You must complete your Signaller's Form for Working of Single and Bi-directional Lines by Pilot (RT3155 or RT3155 ERTMS), as dictated by the pilot.

signaller

## 2.4 Where there is no communication between signal boxes

Where another signal box is involved and there is no means of communicating with it, you must tell the pilot.

signaller

You must go to each signal box to dictate the pilot's form. You must not use a train for this purpose.

pilot

After the forms for working by pilot have been dictated at one end of the single-line section, normal working must not resume until these forms have been cancelled by the pilot. This applies even if the equipment has been repaired or found to be in working order.

pilot,  
signaller

## 2.5 Putting the token out of use

Where the line is worked with a token, you must get an assurance from the signallers at both ends of the section that the token has been restored to the token instrument.

pilot

You must get the token from the signaller if it is needed to operate a ground frame.

**pilot** If the token is at the signal box at the other end of the section, you must get an assurance from the signaller at that end that the token has been secured in a safe place. You must get the token as soon as you arrive.

If you have the token, you must keep it with you until one of the following applies:

- you are relieved by another pilot
- the signalling technician needs it
- normal working is resumed.

## 2.6 Working of ground frames

### a) Ground frames released by the token

**pilot** You must get the token from the signaller if it is needed to operate a ground frame.

If a token is not available, the signaller will arrange for the signalling technician to attend to release it. You must show the signalling technician your pilot's form.

You must keep the token until normal working is to be resumed or the signalling technician needs it.

### b) Other ground frames

**pilot** If a ground frame needs to be released, the signaller will arrange for the signalling technician to unlock it.

You must be present at the ground frame when it is unlocked and stay at the ground frame until the signalling technician has locked it.

## 2.7 Completing the arrangements

**pilot** You must make sure all of the requirements of this section have been completed before authorising the first train to travel over the single-line section.

**signaller** You must make a suitable entry in the Train Register.

You may then start working by pilot.

pilot,  
signaller

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# 3 | During working by pilot

*The people responsible: driver, pilot, signaller*

## 3.1 Authority for movements

### a) Pilot's authority

pilot

You must:

- be present and personally authorise movements which will enter or foul the single-line section (except as shown in section 3.1 b)
- before authorising the movement, get permission from the signaller who controls the entrance to the single-line section
- get the signaller's permission before authorising a driver to pass any signal at danger or any EoA without an MA.

### b) Signaller's authority

signaller

As long as you have the permission of the pilot, you may authorise a movement of an assisting train to enter an occupied single-line section without the pilot being present.

## 3.2 Pilot instructing drivers

pilot

When the signaller has given permission for the train to enter the single-line section, you must:

- tell the driver why working by pilot has been introduced
- give the driver any necessary instructions
- give the driver a completed Driver's Ticket for Working of Single and Bi-directional lines by Pilot (RT3156 or RT3156 ERTMS)
- instruct the driver to pass at danger the signal controlling the entrance to the single-line section, or to pass an EoA at the entrance to the single-line section without an MA.

You do not need to complete a driver's ticket if the train is to enter a one-train working line, or is to enter the single-line section to:

pilot

- assist a failed train
- evacuate passengers from a failed train
- remove a portion of a divided train
- remove a train or vehicles that have proceeded without authority.

### 3.3 Entering the single-line section

#### a) Before entering the single-line section

Before entering the single-line section, you must make sure:

driver

- you can properly identify the pilot who will wear the PILOT armband
- you clearly understand all the instructions the pilot has given to you
- you have the personal authority of the pilot to enter the single-line section
- the pilot has given you a Driver's Ticket for Working Single and Bi-directional Lines by Pilot (RT3156 or RT3156 ERTMS), except as shown in section 3.3 b).

#### b) Entering the single-line section without a driver's ticket

You do not need a driver's ticket if your train is to enter a one-train working line, or is to enter the single-line section to:

- assist a failed train
- evacuate passengers from a failed train
- remove a portion of a divided train
- remove a train or vehicles that have proceeded without authority
- work to and from a point of obstruction.

The signaller will authorise you to enter the occupied single-line section if the pilot is not present.

### 3.4 Train worked by more than one locomotive at the front

- pilot** If the train is worked by more than one locomotive at the front, you must:
- give the necessary instructions to each driver
  - show the driver's ticket to each driver
  - give the driver's ticket to the driver of the leading locomotive.

### 3.5 Pilot travelling with the driver

- pilot** You must ride with the driver in the leading cab, unless you are to travel on a following train.

If you need the train to stop at the end of the single-line section, you must instruct the driver to do so.

You must accompany every train:

- during a complete block failure if there is no communication between signal boxes
- on a one-train working line
- where you are told that the signaller cannot make sure that the single-line section is clear after the passage of each train.

### 3.6 Travelling over the single line

- driver** You must carry out the instructions shown on your driver's ticket.

You may travel at the permissible speed except when the driver's ticket states otherwise.

The arrangements for working by pilot must continue to apply until the train reaches the end of the pilot working section even if you receive an MA during the movement.

### 3.7 Arriving at the other end of the single line

When you reach the other end of the single-line section, you must cancel your driver's ticket by writing 'CANCELLED' across it and then hand it to the pilot.

driver

If the pilot is not with you, you do not have to stop unless the pilot has instructed you to do so. If you have been instructed to stop, you must tell the signaller that your train has arrived complete with tail lamp.

If you do not have to stop, you must cancel your driver's ticket at the first opportunity, and hand it in as shown in your company instructions.

You must collect the cancelled driver's ticket from the driver and immediately tell the signaller that you have arrived.

pilot

On a one-train working line where it is not normally necessary to ask the signaller's permission to start the return journey, you do not need to tell the signaller that you have arrived.

### 3.8 Recording in the Train Register

You must record the time that the train enters and leaves the single-line section in the Train Register, even if you do not normally record these times.

signaller

### 3.9 Change of pilot or signaller

#### a) Change of pilot

When you are relieved, you must:

- make sure the new pilot understands the arrangements for working by pilot
- tell each signaller the name of the new pilot
- not ride in the driving cab of any train over the single-line section.

pilot

**pilot**  
**signaller**

If you are the new pilot, you must sign the pilot's form.

You must record the name of the new pilot and the time on your signaller's form.

**b) Change of signaller**

When you are relieved, you must make sure the new signaller understands the arrangements for working by pilot and signs the signaller's form in your presence.

If you are the new signaller, you must tell the pilot your name as soon as possible.

**pilot**

You must record the new signaller's name and the time on your pilot's form.

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# 4 Working by pilot to and from the point of obstruction

*The person responsible: pilot*

If you are required to introduce working by pilot to and from the point of obstruction, you must do so between the obstruction and the nearest appropriate:

- signal box, or
- junction, or
- other place.

You must make sure one of the following is provided at the place where trains will have to stop on the approach to the obstruction.

- A signal kept at danger.
- An EoA at which the signaller has closed the route.
- Emergency protection as described in module M1 *Dealing with a train accident or train evacuation* or in handbook 2 *Instructions for track workers who use emergency protection equipment*.
- Possession protection as described in module T3 *Possession of a running line for engineering work* or module T3 ERTMS *Possession of an ERTMS running line for engineering work where line side signals are not provided*.

If the emergency protection or possession protection has already been placed, you must, if necessary, arrange for that protection to be moved to a more suitable location so that trains can reach the place where they are required to stop.

You must tell the signaller controlling the entrance to the single-line section on the other side of the obstruction when working by pilot has been introduced and withdrawn.

You do not need to give the driver a driver's ticket.

You must accompany every train over the single-line section.

pilot

pilot

**pilot** These arrangements may be introduced on both sides of the obstruction, but separate pilots will need to be appointed on each side.

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# 5

## Dealing with a failed train

*The people responsible: pilot, signaller*

### 5.1 If the pilot is on the failed train

You must tell the signaller about the circumstances, giving the location of the failed train.

pilot

If assistance is required, you must arrange with the signaller for this to be provided. If the driver asks you to do so, you may carry out the appropriate protection as shown in module M2 *Train stopped by train failure*.

You must get the signaller's permission before making any movement if the train is to return to the same end of the single-line section from which it entered.

### 5.2 If the pilot is not on the failed train

You must travel with the assisting train if:

- the assistance is to come from the rear, and
- the failed train is to be withdrawn to the rear.

pilot

### 5.3 Getting permission from the pilot

You must get permission from the pilot before authorising an assisting train to proceed into the occupied single-line section.

signaller

# 6 | **Withdrawing working by pilot**

*The people responsible: pilot, signaller*

## **6.1 Pilot's actions**

**pilot**

Only you can authorise the withdrawal of working by pilot.

When the last train is clear of the single-line section, you must tell each signaller that working by pilot has been withdrawn and then:

- cancel your pilot's form
- instruct each signaller to cancel their signaller's form
- get an assurance from each signaller that this has been done.

If you have a token, you must hand it to the signalling technician who will take it away or restore it to the token instrument.

You must hand in the cancelled pilot's form and any driver's tickets as shown in company instructions.

## **6.2 Signaller's actions**

**signaller**

When instructed to do so by the pilot, you must cancel your signaller's form, and tell the pilot when this has been done.

You must make a suitable entry in the Train Register.

Where working by pilot had been introduced on both sides of an obstruction, you must not resume normal working until you have been told by the pilots on either side of the obstruction that working by pilot is withdrawn.

You must hand in the cancelled signaller's form as shown in company instructions.

# 7 Modified working arrangements

*The people responsible: driver, signaller*

## 7.1 Where modified working can be used

Modified working arrangements may be used to allow a train to pass through a single-line section without introducing working by pilot.

signaller

You may only use modified working arrangements where it is authorised in the *Sectional Appendix* and *Signal Box Special Instructions*.

An authority to use modified working arrangements applies to one train movement only.

## 7.2 Before introducing modified working

Where it is authorised, you may only use modified working arrangements if all the following conditions are met.

signaller

- Direct communication is available with any other signaller concerned and you both reach a clear understanding of what is to happen.
- You have made sure the single-line section is clear.
- The responsible person as shown in the *Signal Box Special Instructions* has personally given you and any other signaller concerned authority to use the modified working arrangement for that train.

You must record the name of the responsible person and the time authority is received in the Train Register.

## 7.3 If more than one signaller is involved

The responsible person will speak to any other signaller involved before speaking to you again to authorise modified working.

signaller

**signaller**

After you receive the authority from the responsible person, you must get permission from any other signaller involved for the train to pass through the single-line section.

If you are the other signaller involved, you may give permission for the train to approach as long as:

- the responsible person has told you that the modified working arrangement has been authorised for this train, and
- the line is clear as shown in the relevant train signalling regulations.

You must pass messages by telephone as follows.

'From \_\_\_\_\_ signal box to \_\_\_\_\_ signal box: Is line clear for train \_\_\_\_\_ to pass through the single-line section from \_\_\_\_\_ to \_\_\_\_\_ under modified working arrangements?'

'From \_\_\_\_\_ signal box to \_\_\_\_\_ signal box: Line is clear for train \_\_\_\_\_ to pass through the single-line section from \_\_\_\_\_ to \_\_\_\_\_ under modified working arrangements.'

## 7.4 Signaller instructing the driver

**signaller**

When you have the authority of the responsible person and where necessary, the permission of another signaller, for a train to enter the single-line section, you must:

- tell the driver what is happening
- dictate or give to the driver a completed Modified Working Arrangements Driver's Ticket (RT3177)
- instruct the driver to stop at the end of the single-line section, if necessary
- instruct the driver to pass at danger the signal controlling the entrance to the single-line section, or to pass the EoA at the entrance to the single-line section without an MA.

## 7.5 Completing a driver's ticket

You must complete a driver's ticket, if necessary, at the signaller's dictation.

driver

If the train is worked by more than one locomotive at the front, you must show the completed driver's ticket to each other driver.

You must not enter the single-line section until you have a completed modified working arrangements driver's ticket.

You do not need a driver's ticket if your train is to enter the single-line section to:

- assist a failed train
- evacuate passengers from a failed train
- remove a portion of a divided train
- remove a train or vehicles that have proceeded without authority.

## 7.6 When the train enters the single line

You must record in the Train Register the time the train enters the single-line section, even if you do not normally record these times.

signaller

If there is more than one signaller involved, you must tell the other signaller when the train enters the section. Where block bells are provided, you must send **train entering section**.

## 7.7 Travelling over the single line

You must carry out the instructions on your driver's ticket.

driver

You must not exceed 50 mph (80 km/h), or the permissible speed if lower.

## 7.8 Train failure on the single line

signaller

You must get the permission of the responsible person before allowing an assisting train to enter an occupied single-line section.

You must not dictate or give a driver's ticket to the driver of the assisting train.

## 7.9 Arriving at the other end of the single line

driver

When the train arrives at the other end of the single-line section, you must stop if the signaller has instructed you to do so. You must cancel your driver's ticket by writing 'CANCELLED' across it. You must then tell the signaller that the train has arrived complete with tail lamp.

If you do not have to stop, you must cancel your driver's ticket at the first opportunity.

driver

You must hand in the ticket as shown in company instructions.

On a one-train working line where it is not normally necessary to ask the signaller's permission to start the return journey, you do not need to tell the signaller that your train has arrived.

signaller

You must record in the Train Register the time the train leaves the single-line section, even if you do not normally record these times.

If there is more than one signaller involved, you must tell the other signaller when the train leaves the section. If block bells are provided, you must send **train out of section**.

## 7.10 When another train is to pass

signaller

You must get another authority from the responsible person each time a train is to pass through the single-line section under modified working arrangements.



## 7.11 Intermediate signal boxes or sidings

You must not:

- allow an intermediate signal box to switch in until the train carrying a modified working arrangements ticket has arrived at the other end of the single-line section, complete with tail lamp
- give permission for an intermediate siding to be used.

signaller

## 7.12 Changing to working by pilot

You must get authority from the responsible person to change from modified working arrangements to working by pilot.

signaller

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