

GE/RT8000/P2
Rule Book

Module P2

Working single and bi-directional lines by pilotman

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For information regarding the Rule Book, contact:

enquirydesk@rssb.co.uk

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

- pilotman
- signaller
- driver.

Contents

Section

1 Circumstances

- 1.1 When working by pilotman must be introduced
- 1.2 Exceptions

2 Before starting work

- 2.1 Appointment and identification of the pilotman
- 2.2 Agreeing the requirements
- 2.3 Completing the pilotman's and signaller's forms
- 2.4 Putting the token out of use
- 2.5 Working of ground frames and points
- 2.6 Completing the arrangements

3 During working by pilotman

- 3.1 Authorising a movement
- 3.2 Instructing the driver
- 3.3 Entering the single line
- 3.4 Travelling over the single line
- 3.5 Arriving at the end of the single line
- 3.6 Dealing with a failed train
- 3.7 Change of pilotman or signaller
- 3.8 Working by pilotman to and from the point of obstruction

4 Withdrawal of working by pilotman

- 4.1 Pilotman's actions
- 4.2 Signaller's actions

Section

5 Modified working arrangements

- 5.1 General requirement
- 5.2 Signaller's instructions to the driver

1

Circumstances

The people responsible: pilotman, signaller, driver

1.1 When working by pilotman must be introduced

pilotman,
signaller

Except as shown in section 1.2, working by pilotman 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 for any of the following reasons:
 1. The signal has failed or has been disconnected.
 2. A track circuit or signalling equipment has failed.
 3. Level-crossing equipment has failed.
 4. The token instrument has failed or a token is damaged.

1.2 Exceptions

pilotman,
signaller

There are some exceptions to 1.1 c) when working by pilotman is not necessary. These are as follows:

1. The signal has failed or has been disconnected

Working by pilotman is **not** needed on:

- all lines where a token is provided and the driver is in possession of the token, or
- track circuit block lines if all the track circuits relating to the signal are clear and the signaller has told the driver about the circumstances.

2. A track circuit or signalling equipment has failed

Working by pilotman is **not** needed:

- on track circuit block lines if authorised in the *Sectional Appendix*
- if modified working arrangements are authorised in the *Sectional Appendix*. See section 5 of this module.

pilotman,
signaller

3. Level-crossing equipment has failed

Working by pilotman is **not** needed on all lines where a token is provided and the driver is in possession of the token.

Working by pilotman is also not needed:

- on track circuit block lines (if authorised in the *Sectional Appendix*)
- on track circuit block lines if all track circuits relating to the signal are clear and the signaller has told the driver about the circumstances
- if modified working arrangements are authorised in the *Sectional Appendix*. See section 5 of this module.

4. The token instrument has failed or a token is damaged

Working by pilotman is **not** needed on no-signaller token lines if a token is available and trains can be worked under the instructions in section 1 of module TW6 *Working single lines with or without a train staff or token*. Under these circumstances, you must not:

- work any points which are released by the token
- pass the token through the token instrument.

signaller,
pilotman,
driver,

2 Before starting work

The people responsible: signaller, pilotman

2.1 Appointment and identification of the pilotman

pilotman,
driver
(awareness)

The pilotman will be appointed by the infrastructure controller.

You must wear on your left arm a red armband with 'PILOTMAN' in white letters, or if this is not immediately available, a red flag until an armband is provided.



PILOTMAN

2.2 Agreeing the requirements

signaller,
pilotman

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

- the arrangements which will apply
- the time when pilotman's form (RT3154 Pilotman's form for Working Single and Bi-directional Lines by Pilotman, see example on pages 8 and 9) will be completed
- which signals will need to be passed at danger
- which signals must be obeyed
- any instructions about level crossings
- any other relevant instructions.

pilotman

You must ask the signaller what time the signaller changes duty.

2.3 Completing the pilotman's and signaller's forms

a) Pilotman's duties

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

- complete and sign your pilotman's form (RT3154), and
- dictate it to each signaller who controls an entrance signal onto the single line.

pilotman

If there is no other means of communication, you must go to each signal box to dictate the pilotman's form (RT3154). You must not use a train for this purpose.

b) Signaller's duties

You must:

- complete your signaller's form (RT3155 Signaller's form for Working of Single and Bi-directional Lines by Pilotman, see example on pages 10 and 11) as dictated by the pilotman
- read the completed signaller's form (RT3155) back to the pilotman
- record the details in the Train Register.

signaller

c) When the signallers have completed their forms

When the signallers have completed their signaller's forms (RT3155), you must enter the name of each signaller on your pilotman's form (RT3154).

pilotman

Working single and bi-directional lines by pilotman

2 section

Example of pilotman's form RT3154 (side 1)

RT3154
December 2003 (Side 1 of 2)

PILOTMAN'S FORM FOR WORKING OF SINGLE AND BI-DIRECTIONAL LINES BY PILOTMAN
(Form referred to in Rule Book module P2)

Location Date 20

In connection with *(a) a failure of the signalling equipment
 *(b) working of trains to and from the point of obstruction

(delete as required)*

I have been appointed by to act as Pilotman
between and

The Rule Book module P2 instructions WORKING OF SINGLE AND BI-DIRECTIONAL LINES BY PILOTMAN will apply.

This information has been dictated to the following Signallers:-

Signal Box	Name of Signaller	Time Form Dictated
.....
.....
.....

ALL SIGNALLERS ADVISED THAT WORKING BY PILOTMAN STARTED
at (time/date)
Signed (Pilotman)
(Continued)

Example of pilotman's form RT3154 (side 2)

RT3154 <small>December 2003 (Side 2 of 2)</small>		
Change of Signallers:		
Signal box: -----		
Name	Time/Date	Name Time/Date Name Time/Date
1st Changeover -----		
2nd Changeover -----		
3rd Changeover -----		
Change of Pilotman:		
This form noted by ----- at ----- (time/date)		
----- at ----- (time/date)		
----- at ----- (time/date)		
Cancellation of Working by Pilotman:		
Cancellation of Working by Pilotman dictated to:-		
Signal Box	Name of Signaller	Time Form Cancelled

This form cancelled at ----- (time/date)		
Signed ----- (Pilotman)		

Working single and bi-directional lines by pilotman

2 section

Example of signaller's form RT3155 (side 1)

RT3155
December 2003 (Side 1 of 2)

SIGNALLER'S FORM FOR WORKING OF SINGLE AND BI-DIRECTIONAL LINES BY PILOTMAN
(Form referred to in Rule Book module P2)

Signal Box: Date 20

I have been instructed that because of:-

- *(a) a failure of the signalling equipment
- *(b) working of trains to and from the point of obstruction

the Rule Book module P2 instructions WORKING OF SINGLE AND BI-DIRECTIONAL LINES BY PILOTMAN will apply

between and

This form is being completed at the dictation of who will act as Pilotman and who is present/speaking* from at (time)

Signed (Signaller)

Change of Signaller:
This form noted by

.	at (time/date)
.	at (time/date)
.	at (time/date)

(* delete as required) (Continued)

Example of signaller's form RT3155 (side 2)

RT3155		
<small>December 2003 (Side 2 of 2)</small>		
Change of Pilotman:		
Name of new Pilotman	Noted by Signaller (name) at	Time/Date
-----	-----	-----
-----	-----	-----
-----	-----	-----
Cancellation of Working by Pilotman:		
This form cancelled at the dictation of -----		
who is present/speaking* from -----		
at -----		
		(time/date)
Signed	-----	(Signaller)
(* delete as required)		

2.4 Putting the token out of use

pilotman

You must get an assurance from the signallers at both ends of the section that the token has been restored to the token instrument.

You must get the token from the signaller if:

- it is needed to operate a ground frame
- it is damaged and cannot be restored to the token instrument.

If the token is at the signal box at the other end of the section, you must instruct the signaller at that end to lock away the token in a safe place (but not in the token instrument). You must take possession of the token immediately you arrive.

If you are in possession of the token, you must keep it with you until one of the following applies:

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

2.5 Working of ground frames and points

If you need a token to operate a ground frame and a token is not available, you must arrange for a signalling technician to attend, and show the signalling technician your pilotman's form (RT3154). You must then:

- ask the signalling technician to release the token, and
- keep the token until normal working resumes or the signalling technician needs it.

On a one-train working line, whether or not a train staff is provided, you must ask the signalling technician to unlock the ground frame while the work takes place.

You must stay with the signalling technician until the ground frame has been locked.

On a no-signaller token line which is being operated under the instructions in section 1 of module TW6 *Working single lines with or without a train staff or token*, you must **not**:

- work any points which are released by the token, or
- pass the token through the token instrument.

2.6 Completing the arrangements

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.

You must make the following entry in the Train Register:

"Working by pilotman started at.....(time)"

You may then start working by pilotman.

pilotman

signaller

pilotman

signaller

signaller,
pilotman

3

During working by pilotman

The people responsible: pilotman, signaller, driver

3.1 Authorising a movement

signaller

You must not give the pilotman permission to authorise a movement onto the single line unless the line is clear. The only exception is when an assisting train is to enter the section.

In this case you may authorise a movement onto the single line without the pilotman being present at the entrance to the section but you must first have permission from the pilotman.

pilotman

You must:

- be present to authorise all movements which enter or foul the single line
- get permission from the signaller controlling the entrance to the single line before authorising the movement
- tell the driver why working by pilotman has been introduced
- complete a driver's ticket (RT3156 Driver's Ticket for Working of Single and Bi-directional Lines by Pilotman, see example on page 16).

3.2 Instructing the driver

pilotman

When these instructions have been completed you must:

- hand the driver a completed driver's ticket (RT3156), when necessary, and
- instruct the driver to pass the signal controlling the entrance to the single line at danger.

When a train is worked by more than one locomotive, you must:

pilotman

- give the driver of each locomotive at the leading end of the train the necessary instructions
- show the completed driver's ticket (RT3156) to each driver at the leading end of the train
- hand the completed ticket to the driver of the leading locomotive.

You must **not** complete a driver's ticket (RT3156) if:

- the train to enter an obstructed line is an assisting train, or
- the line is a one train working line.

On a tokenless block line, if there is a ground frame in the section, you must get an assurance that it is working correctly or the points have been secured. If you cannot get this assurance, you must instruct the driver to stop at each ground frame, and only proceed if the points are set correctly.

pilotman,
driver
(awareness)

Working single and bi-directional lines by pilotman

3 section

Example of driver's ticket RT3156

RT3156
December 2003 (Side 1 of 1)

DRIVER'S TICKET FOR WORKING OF SINGLE AND BI-DIRECTIONAL LINES BY PILOTMAN
(Form referred to in Rule Book module P2)

Working by Pilotman applies over the
line between Signal No. at
and Signal No. at

When authorised to proceed, you must:-

- Pass Signal No. at Danger
- Ignore Signal No(s)
- Approach cautiously and check that it is safe to pass over level crossings at:-
.....
- **NOT EXCEED 15 mph OVER ANY FACING POINTS**
- observe the following additional instructions:-
.....
- Obey Signal No. and cancel this ticket by writing the word 'CANCELLED' across it

AUTHORITY

Authority for train No.
Given by Pilotman (name)
At time/date

3.3 Entering the single line

You must:

- tell the guard and any driver at the rear of the train (where provided) that working by pilotman is in operation
- carry out the instructions in module S5 *Passing a signal at danger*, before passing the signal controlling the entrance to the single line at danger
- not enter the single line unless authorised by the pilotman
- carry out the instructions on the driver's ticket (RT3156).

If your train is to enter an obstructed section as an assisting train, you do not need a driver's ticket (RT3156). In this case the signaller will authorise you to enter the single line if the pilotman is not present.

You must record the details and the time the train enters the single line in the Train Register. You must do this even if recording the time is not the normal practice in your signal box.

3.4 Travelling over the single line

When you have given all the necessary instructions to the driver, you must ride with the driver in the leading cab unless you are to travel on a following train.

If you are travelling on a following train but need this train to stop at the end of a single line, you must instruct the driver to do so.

However, you must accompany every train:

- when working to and from the point of obstruction applies
- during a complete block failure if there is no communication between signal boxes
- on a one-train working line.

driver

signaller

pilotman

driver You must obey the instructions shown on the driver's ticket (RT3156). You may travel at the permissible speed except when the driver's ticket (RT3156) states otherwise, or your train is an assisting train.

3.5 Arriving at the end of the single line

pilotman You must:

- immediately report your arrival to the signaller, and
- collect the cancelled driver's ticket (RT3156) from the driver.

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 you have arrived.

driver When you reach the end of the single line, you must:

- cancel your driver's ticket (RT3156) by writing CANCELLED across it, and
- hand it to the pilotman.

You do not need to stop if the pilotman is not with you unless the pilotman has instructed you to do so.

If the pilotman is not with you and you do not have to stop, you must at the first opportunity:

- cancel your driver's ticket (RT3156) by writing CANCELLED across it, and
- dispose of the driver's ticket (RT3156) in line with instructions.

signaller You must record the time the train leaves the single line in the Train Register. You must do this even if recording the time is not the normal practice at your signal box.

3.6 Dealing with a failed train

a) When the pilotman is on the failed train

You must:

- arrange with the signaller for assistance to be provided to the failed train
- get the signaller's permission before making any movement if the train is to return to the same end of the single line from which it entered.

pilotman

b) When the pilotman 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.

pilotman

You must get permission from the pilotman before authorising an assisting train onto the single line.

signaller

3.7 Change of pilotman or signaller

a) Change of pilotman

pilotman

You must:

- make sure the new pilotman fully understands the arrangements for working by pilotman
- give the new pilotman your pilotman's form (RT3154) and pilotman's armlet
- tell each signaller the name of the new pilotman.

You must not ride in the driving cab of any train over the single-line section.

new pilotman

You must sign the pilotman's form (RT3154).

signaller

When the pilotman is relieved from duty, you must write on your signaller's form (RT3155):

- the name of the new pilotman, and
- the time and date.

b) Change of signaller

You must make sure the new signaller:

- understands the arrangements, and
- signs the signaller's form (RT3155) in your presence.

new signaller

You must, as soon as possible, tell the pilotman your name and that you have taken duty.

pilotman

When the signaller is relieved from duty, you must write on the pilotman's form (RT3154):

- the name of the new signaller, and
- the time and date.

3.8 Working by pilotman to and from the point of obstruction

If a line has been blocked, and you are required to introduce working 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.

pilotman

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 maintained at danger
- emergency protection as described in module M1 *Train stopped by train accident, fire or accidental division* or G1 *General safety responsibilities*
- possession protection as described in module T3 *Possession of the line for engineering work.*

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



The arrangements in section 3.8 can be introduced on both sides of an obstruction, but two pilotmen will need to be appointed - one for each side.

Before normal working can be resumed, the signaller at each end of the section must reach a clear understanding with both pilotmen that working by pilotman has been withdrawn on both sides of the obstruction.

Working single and bi-directional lines by pilotman

3

section

pilotman

When working to and from the point of obstruction has been introduced you must:

- accompany every train over the line
- not issue the driver with a driver's ticket (RT3156).

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

4

Withdrawal of working by pilotman

The people responsible: pilotman, signaller

4.1 Pilotman's actions

You are the only person authorised to withdraw working by pilotman.

pilotman

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

- cancel your pilotman's form (RT3154)
- instruct each signaller to cancel their signaller's form (RT3155)
- get an assurance from each signaller that this has been done.

If you have a token with you, you must hand it to the signalling technician who will as necessary:

- take it away, or
- restore it to the token instrument.

You must send the cancelled pilotman's form (RT3154) and any driver's tickets (RT3156) to your local manager.

4.2 Signaller's actions

signaller

You must:

- cancel your signaller's form (RT3155) when instructed to do so by the pilotman, and
- tell the pilotman when this has been done.

You must make the following entry in the Train Register:

'Working by pilotman between.....
and.....cancelled at.....(time)'

You must send the cancelled signaller's form (RT3155) to your local manager.

5

Modified working arrangements

The people responsible: signaller, driver

5.1 General requirements

At locations authorised in the *Sectional Appendix*, a train is allowed to pass through a single-line section without the pilotman being appointed when any of the following fails:

- a track circuit
- signalling equipment
- level crossing equipment.

This arrangement is allowed only until working by pilotman can be introduced.

You must carry out the instructions in section 21 of module T1B *Movement of trains during failure of, or when working on, signalling equipment*.

5.2 Signaller's instructions to the driver

The signaller will:

- tell you why the modified working arrangements have been introduced
- issue you with a ticket RT3177 *Modified Working Arrangements Failure or Disconnection of Signalling Equipment* or dictate this to you
- if there is more than one locomotive on the train, show the ticket (RT3177) to the driver of each locomotive at the leading end of the train and hand it to the driver of the leading locomotive (or if the ticket (RT3177) is dictated, instruct the driver of the leading locomotive to do this).

driver

signaller

driver

Working single and bi-directional lines by pilotman

5

section

driver

You must:

- carry out the instructions on your ticket (RT3177), and
- hand the ticket (RT3177) to the signaller at the end of the section or deal with it as shown in your train operating company instructions.

You must not enter the single line until you have a completed ticket (RT3177) which may be dictated.

If the signaller tells you, you must stop at each ground frame and not proceed until you are sure that the points are set correctly.

Example of ticket RT3177 Modified Working Arrangements Failure or Disconnection of Signalling Equipment

RT3177								
<small>December 2007 side 1 of 1</small>								
MODIFIED WORKING ARRANGEMENTS								
Failure or Disconnection of Signalling Equipment								
<small>(Ticket referred to in section 5 of module P2 <i>Working single and bi-directional lines by pilotman</i> and in section 21 of module T1B <i>Movement of trains during failure of, or when working on, signalling equipment</i>)</small>								
Signal Box: _____ Date: _____								
To the driver of train –								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black; width: 20%;">Train number</td> <td style="text-align: center; border-bottom: 1px solid black; width: 15%;">time</td> <td style="text-align: center; border-bottom: 1px solid black; width: 35%;">from</td> <td style="text-align: center; border-bottom: 1px solid black; width: 30%;">to</td> </tr> <tr> <td style="border: 1px solid black; height: 20px;"></td> <td style="border: 1px solid black; height: 20px;"></td> <td style="border: 1px solid black; height: 20px;"></td> <td style="border: 1px solid black; height: 20px;"></td> </tr> </table>	Train number	time	from	to				
Train number	time	from	to					
You are authorised to proceed from : _____								
To : _____ in accordance with the instructions shown in Rule Book module P2 <i>Working of single and bi-directional lines by pilotman</i> and in the <i>Sectional Appendix</i> .								
You are not permitted to pass any signal at danger unless you are given the authority to do so by the signaller (or handsignaller) concerned.								
Signed * _____ (Signaller) <small>* If dictated, the name of the signaller must be entered here by the driver.</small>								
<small>The driver must cancel this ticket by writing the word 'CANCELLED' across it on arriving at the end of the affected single line section and then hand it to the signaller, or if no signaller dispose of it as shown in train operating company instructions.</small>								

Glossary of terms and abbreviations

The term	Includes or means:
Bi-directional line	A line on which the signalling allows trains to run in both directions.
Facing points	Points where two routes diverge. Includes switch diamonds and swing-nose crossings.
Ground frame	A control point containing levers or switches to allow points in running lines and sidings, and any associated signals, to be operated locally. This local operation is only possible when the signaller at the controlling signal box gives a release. Also includes a ground-switch panel.
Level crossing	Any manned, automatic or open crossing shown in Table A of the <i>Sectional Appendix</i> .
One-train working	Method of signalling on a single line, with or without a train staff, where only one train at a time is permitted.
Permissible speed	The maximum permitted speed as shown in the <i>Sectional Appendix</i> .
Pilotman	A person who has been appointed to manage the passage of trains over a single line during a failure of equipment, during repairs or due to an obstruction.
Protection	Ways of making sure that a line is protected. This includes keeping signals at danger, placing detonators on the line, using a track circuit operating clip and showing a hand danger signal.
Single line	One line is available for movements in both directions.



The term

Includes or means:

Token

Any single line token, train staff or tablet.

**Track circuit
block**

A method of signalling trains in a section of line using track circuits or other means of automatic train absence detection and without using block instruments.

Train

Light locomotive, self-propelled rail vehicle or road-rail vehicle in rail mode.

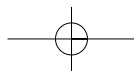
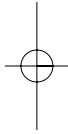
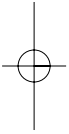
Train Register

The record that signallers keep of:

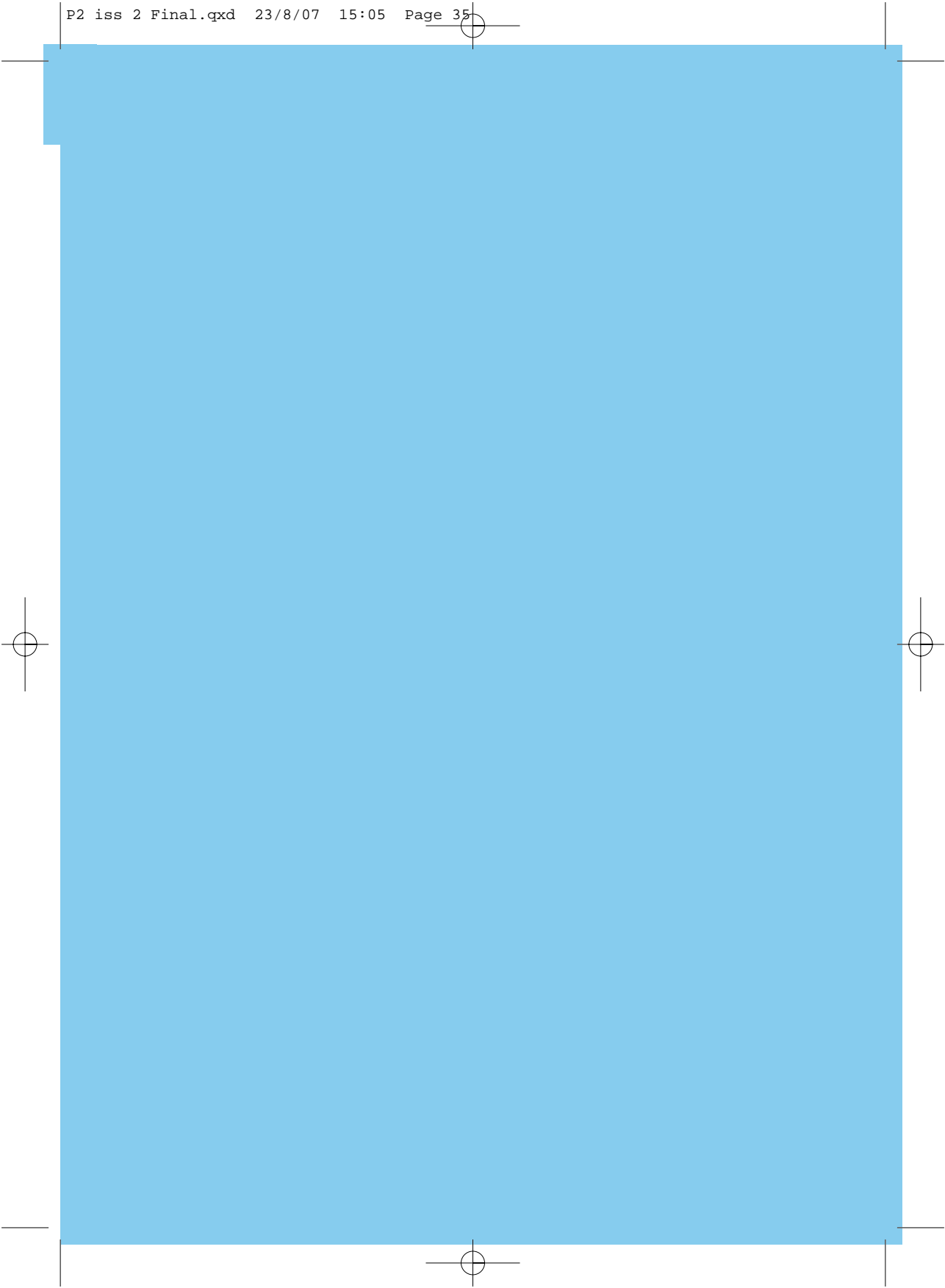
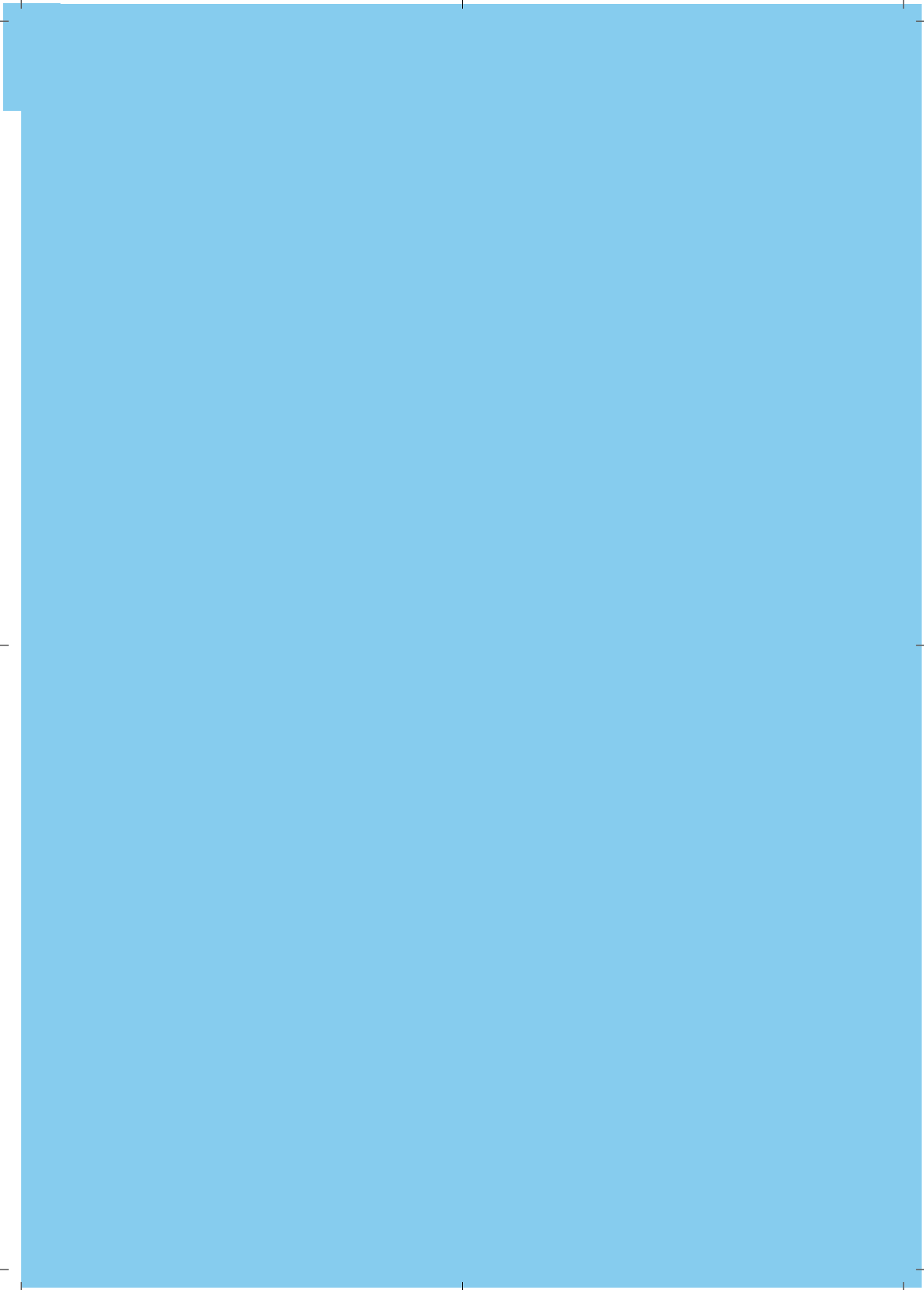
- train times
- other information required by the rules and train signalling regulations to be recorded.

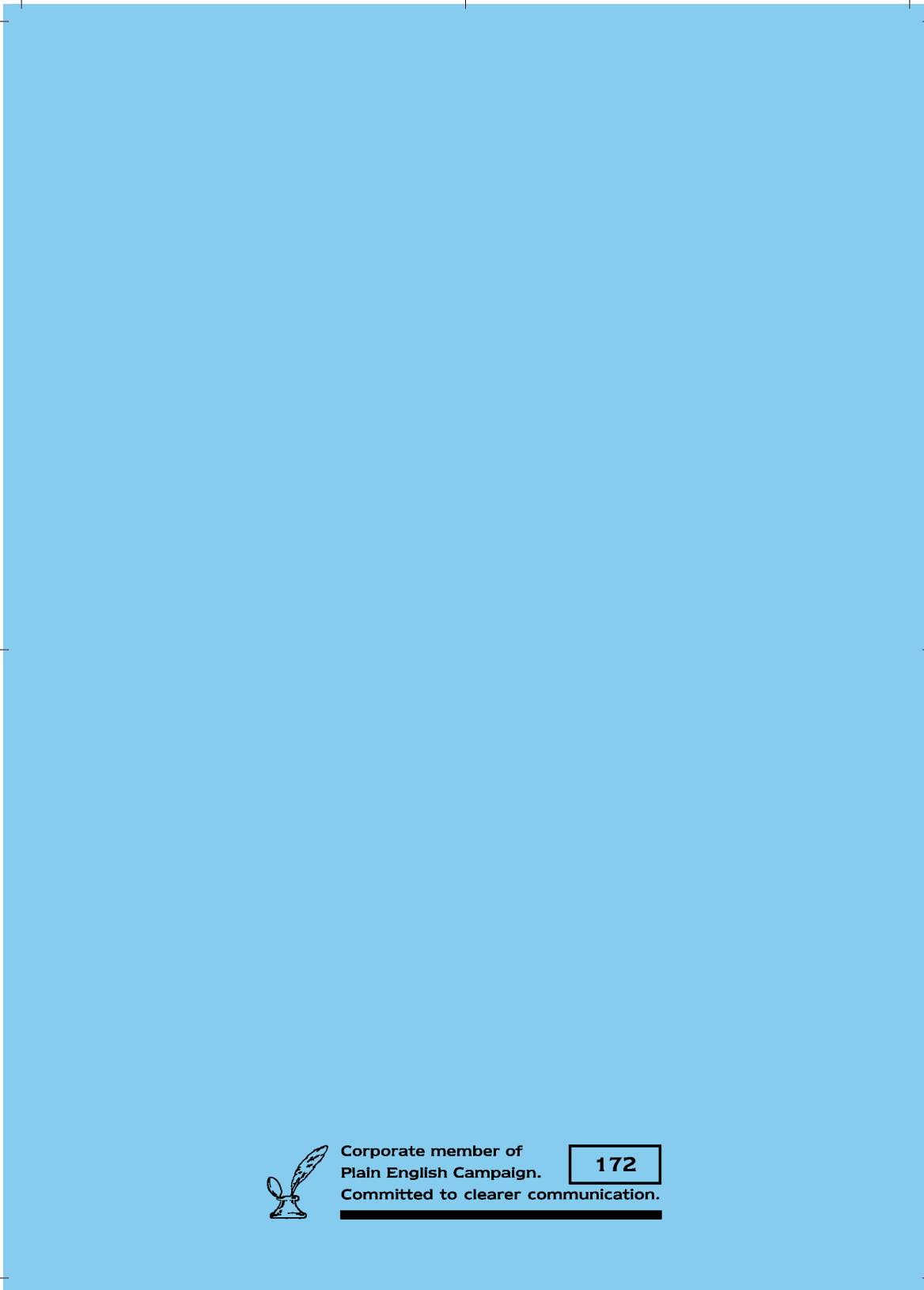
It includes an occurrence book or other authorised method.

Notes



Notes





Corporate member of
Plain English Campaign.
Committed to clearer communication.

172