

ENGINE DRIVER 1ST-GRADE – *SIGNALS and RULES & REGULATIONS* EXAMINATION

TYPICAL Q & A

Note:

TA: Train Advice. Daily operational notice to all personnel.

LA: Locomotive Assistant. Driver's assistant/Observer/Second-person.

OIC: Officer-in-charge. The senior employee at a station or depot.

OCTR: Officer Controlling Train Running: A Traffic Branch member in the Train Running office, who schedules and manages the day-to-day requirements around the operation of trains.

TCO: Train Control Officer: A Traffic Branch member qualified to manage an area of a rail network and who authorises and directs all activities that take place on that part of the network.

DTM: District Traffic Manager. The regional head of the Traffic Branch.

MIS forms: Administrative instruments that convey *MIS*cellaneous train operation information and instructions. Each type of MIS form is a dedicated pro-forma identified by a number.

RULES

1. What are the driver's duties regarding knowledge of the rules and special instructions? (R4)

He must make himself thoroughly acquainted with and comply with the whole of the rules and regulations contained in the rulebook that relate to the duties of the position he occupies. He must also be thoroughly acquainted with all special instructions relating to such duties as may from time to time be issued. He must have a sufficient knowledge of the rules and regulations relating to safety to enable him to delete correction what is necessary at all times without reference to the rulebook.

2. What are the driver's duties in advising the TCO regarding adverse conditions? (R6)

He must inform the TCO or if possible, the OIC or signaller at the earliest opportunity.

3. (a) When are side lamps not required on trains? (R16)

When the train is equipped with flashing tail lamps, or built-in tail lamps.

(b) When must the headlight ON and when must it be dimmed? (R16)

At all times by day and night on trains travelling on the main line, and all locomotives, railcars, and multiple units when moving between platforms, yards, and depots. Headlamps must be dimmed when trains are standing at a station and when approaching stations at which they are timed to stop (provided that the train is entering the station on a Proceed signal indication). Headlights on shunt locomotives are to show a dimmed white light at each end when the locomotive is engaged on shunting duties.

4. What is the procedure to bring a train within the Home signal in a 2-position semaphore signalling area on the main line when the road is occupied, and no low-speed signal is fitted? (R32)

The train must stop at the signal and the driver must be verbally instructed by the signaller (or shunter when authorised by the signaller) to pass the Home signal at Stop. The signaller (or shunter) must ride on the locomotive or clearly inform the driver of how far he may proceed.

5. As the driver of a train running as directed by train control with no shunting instructions En route, what action would you take;

- (a) After almost stopping at the semaphore Home signal it was set to Proceed, and at what speed would you enter and travel within station limits? (R34)

At low speed.

- (b) Where would you stop if;
- i. There is a signalbox? (R34)
 - ii. There is a fixed signal? (R34)
 - iii. There are no further signals provided? (R34)

- i. At the signalbox.
- ii. At the fixed signal unless it is placed at Proceed.
- iii. At the signalbox.

- (c) What action would you take if a Starting or Departure signal in advance is set at Proceed? (R34)

Proceed on receipt of 'right-away'.

6. What procedure must a driver adopt when his train is detained outside a Home signal? (R36)

The driver must sound the engine whistle immediately. If no action, LA must communicate with the signaller and advise him of the position. The train must be protected if necessary. The signaller must allow sufficient time for the guard or LA to re-join the train before placing the signal at Proceed. The driver to receive verbal or hand signal from the guard before moving the train.

7. Under what conditions and on whose authority may a train shunt outside station limits in an Open Section? (R56c)

This shunting may only be permitted by instruction of made the Officer in Charge. Shunting operations must be completed 15 minutes before the next incoming train is due. When necessary, protection must be provided.

8 (a) When a signal is set at Proceed what check must a driver make? (R56)

The driver should satisfy himself that the signal refers to his train and the line it is on, and he must understand the movement thereby authorised.

(b) Should only one signal control the exit from several roads, what authority will the driver require before moving? (R59)

Verbal instructions from the shunter or other employee in charge.

9. When running trains in a Double Line area where provision is not made for two-way running, on which line must these trains run under normal conditions? (R64)

On the left-hand line in the direction of travel.

10. What authority is required by a driver before proceeding with his train into an Open Section and where signalling has been suspended, and who will issue this authority? (R65)

A TA from the OCTR.

11. Under what conditions must a driver proceed with this train when signals cannot readily be seen? (R68)

The driver must be particularly alert and must move his train under such control as will enable him to stop before passing any signal, the indication of which is not known.

12. When a train has an accident or causes an obstruction to the line, what duties must the crew immediately perform and what information must they give? (R73)

Immediate measures to ensure safety must be taken. The train must be protected, and the driver and guard must communicate and inform the TCO. The driver and guard must decide from which direction relief is to be obtained on measures to be adopted to meet the situation. Particulars must be properly reported to the next station or signalbox on each side of the accident.

13. If it is expedient not to take this information to the station in advance or the rear, how then may this information be given in any area to the member charged with the responsibility of clearing the section? (R73)

By the use of whatever facilities may be available.

14. When it is necessary to remove a disabled train from a section without taking the MIS 39 to either end of the section, what authority will be issued to allow the relief locomotive to enter this section? (R73)

A TA from the OCTR.

15. In an Automatic Signalling area when a relief locomotive is required to assist a disabled train, what protection must be provided to protect the disabled train? (R74)

The member of the train crew going for assistance must place 2 detonators 10 m apart on each rail 200 m from the train warn the driver of the relief locomotive of the position of the disabled train.

16. When it is necessary for a driver to send the locomotive assistant to protect his train per Rule 74:

(a) How many detonators must he have for a normal protection?

Two tins (22 or 24 depending on location of an intervening tunnel).

(b) To what point must the LA travel under normal conditions of protection?

To appoint not less than 1200 m from the disabled train, with drivers of approaching trains will be able to obtain a good and distant view of the LA's hand signal.

(c) To what point must the LA travel to if the train is near the foot of a gradient?

As above, to a point not less than 1500 m from the disabled train.

(d) If a tunnel intervenes within the required distance:

i. How far beyond the channel must the LA now travel?

As above, at least 400 m beyond the tunnel.

ii. How many detonators will the LA require if he is to go to the minimum distance?

24.

17. In a Double Line Automatic Signalling Area, when it is necessary for the train to be divided and taken forward into parts (R75/76):

(a) What must be left to define the location of the rear portion?

Two detonators 10 m apart on each rail 200 m from the rear portion of the train. At night or in bad visibility, a red light must be placed on the front vehicle of the report.

(b) Must a flag or tail lamp be attached to the portion to be taken to the station in advance?

Not unless the train must proceed beyond the first signalbox reached, we are a tail lamp should be attached to the rear most vehicle.

(c) Must the brakes be tested?

Yes

(d) Should it be necessary to go beyond the first station with the first portion, what must be attached to the last vehicle to indicate this portion is complete?

A tail lamp or flag.

(e) Should staff be in attendance at all stations involved in this movement?

Yes.

(f) What authority is required to return for the remainder of the train?

The permission of the signalman.

(g) On which line must the train returning for the remainder of the train run?

On the wrong line, unless the front portion has been taken forward beyond the station in advance, in which case the locomotive must return on the proper line to the station in front of the rear portion at which there is a crossover and then crossed to the wrong line and return to the rear portion.

18. When a train is disabled in a Double Line Automatic Signalling area and assistance is required from the station in advance (R78):

(a) Who must be advised as soon as possible?

The TCO.

(b) On what authority would the driver of a relief locomotive run on the wrong line?

On the authority of the signalman.

(c) Describe the protection that must be established to protect a disabled train under these conditions.

Two detonators 10 m apart on each rail 200 m from the front of the disabled train. At night or in bad visibility, a red light on the front of the disabled train.

(d) When a crewmember of a disabled train has gone for assistance, what are the driver's duties regarding movement of the disabled train?

He must not allow his train to be moved until the relief locomotive arrives unless satisfactory arrangements have been made previously to prevent the relief locomotive from travelling on the wrong line from the station in advance, and the crewmember going for assistance has returned to the disabled train.

19. In a Double Line Automatic Signalling Area when a train is stalled or disabled, but the following train is able to assist the disabled train to the station in advance:

(a) Who must be advised as soon as possible?

The TCO.

(b) What undertaking must be issued by the driver of the disabled train?

A completed MIS 39.

(c) Would be necessary to protect the disabled train?

Yes

(d) Describe what authority must be given for the following train to push the disabled train.

The permission of the guard and driver of the disabled train.

(e) How far may the disabled train be pushed?

To a place beyond which it no longer requires assistance, or where a relief locomotive may be attached in the front.

20. In a Double Line Automatic Signalling area when it is necessary for a train to return to the station in the rear:

(a) Who must be advised as soon as possible?

The TCO.

(b) Who will issue the authority prior to any movement to the rear and in what form?

A MIS 52 from the signalman.

(c) May this authority be waived and if so by whom?

Yes. By TA from the OCTR.

(d) In the case of following trains returning, what will the driver of each such train require?

He will require to sign the MIS 52.

(e) When the last train is clear of the section, what must be done with this authority?

The driver of the last train must hand the MIS 52 to the signalman who will cancel it.

21. In a Double Line Automatic Signalling area when setting back to the station in the rear, what reportedly much the driver take?

The driver must proceed cautiously, having such controlling the train is to be able to stop it short of any obstruction. He must make frequent use of the locomotive whistle. Any catch points in the rear must be held or have been secured in the proper position before the train passes over them. Maximum speed 10 km/h over level crossings.

22. In a Double Line Automatic Signalling area, a train stops as a result of brakes applying but the driver cannot see that the opposite running line is clear, what is the procedure to protect both lines? (R83)

The driver must immediately take steps to protect the opposite running line. If the locomotive can be moved, he must move it to a point at least 1200 m from the disabled train and there leave the LA with detonators and hand signals to protect the opposite line. If the locomotive cannot be moved, the LA must protect the opposite line in accordance with Rule 74. The guard must protect in the rear. If able to move the locomotive, the driver must proceed to the nearest telephone or signalbox and informed the signalman of the situation. While going forward, the driver must stop any oncoming train by sounding the Apply Brakes whistle and exhibiting a Danger hand signal or any other effective means. At night or when visibility is bad or when passing through a tunnel, a red light must be shown in a forward direction from the locomotive. If there is no guard, the LA must proceed forward on foot as above and lay protection as per Rule 74, and the driver — after placing a red light or flag on the front of his locomotive — must go back (or send another competent member) to protect the rear. Both lines must be protected and the TCO or OCTR advised

23. When it is necessary to work the traffic of a double line in both directions over a single line (R86):

(a) What method will be used to control train movements?

Pilotworking.

(b) Who will issue the authority for this control and in what form?

A TA from the OCTR.

24. To institute Pilotworking in a Double Line Automatic Signalling Area, a MIS 33 is used and when completed by the Traffic Branch, who will give permission for a train to depart? (R86)

The Pilotman.

25. Describe the procedure to dispatch trains under Pilotworking in a Double-Line Automatic Signalling Area:

(a) With the Pilotman being present and riding on the locomotive.

The train is not to enter the single line without the Pilotman being present and riding with the leading driver unless two or more trains are required to follow in the same direction, in which case the Pilotman must hand the driver of each train not accompanied by himself a MIS 29 Pilotman's Ticket properly filled-in and signed. The Pilotman must personally authorise all trains to start, with the concurrence of all concerned.

(b) Without the Pilotman being present on the locomotive.

As above.

(c) Where communication exists.

The arrival of each train unaccompanied by the Pilotman must be telegraphed to the Pilotman for the OIC at the other end of the section. The Pilotman must not dispatch another train until receiving the telegram stating that the preceding train has arrived and unless automatic signalling is in operation, or by special authority of the OCTR.

(d) Where communication does not exist.

No train may follow another until the ordinary running time for the section has elapsed unless automatic signalling is in operation for trains running in the right direction or by special authority of the OCTR, and the driver has been advised of the nature and departure time of the preceding train.

26. During the time Pilotworking is an operation in a Double Line Automatic Signalling area, what is the procedure when:

(a) A following train is to be dispatched with communication exists in the Pilotman does not accompany the train.

The driver is to be handed a MIS 29 and advised that the preceding train has arrived.

(b) Communication does not exist and the Pilotman does not accompany the train.

Intermediate sidings must be worked only by trains accompanied by Pilotman.

(c) May intermediate sidings be worked when the Pilotman is travelling on the locomotive?

Yes.

27. When Pilotworking is in operation in a Double Line Automatic Signalling area:

(a) Must the driver be advised of the area covered by Pilotworking?

Yes.

(b) Who is responsible for supplying this information?

The OIC at each end of the single line section.

(c) If there are no fixed signals controlling the entrance into the area of single line Pilotworking, how should this be defined?

By a competent person with the necessary hand signals and detonators situated at least 800 m from the entrance to the single line section, and another man (similarly equipped) situated at the entrance to this section. Should a tunnel intervene, then the outer protection should be at least 1200 m from the entrance to the single line section where an approaching driver will obtain a good and distant view of the hand signal.

(d) By what method would a driver be signalled back onto his right line when Pilotworking ends?

By a hand signalman stationed at the crossover or by fixed signals were provided.

28. In a Double Line Automatic Signalling area, what precautions must the driver take when running on the wrong line?

He must be cautious and make frequent use of the locomotive whistle. At night, in bad visibility, or when passing through a tunnel, a red light must be displayed forward from the front of the train as well as the headlight. The driver must reduce speed over level crossings to 10 km/h.

29. In a Double Line Automatic Signalling area when Pilotworking is cancelled, what advice must driver receive?

A TA from the OCTR.

30. When and for what purpose is a MIS 29 used, what authority does it give the driver, and what are his responsibilities with this form?

It is a Pilotman's Ticket for Tablet and Double Line areas. It is the driver's authority to travel through the section when Pilotworking is in operation and the Pilotman does not accompany the train. It must be handed to the OIC at the end of the section to which it applies.

31. When and for what purpose is a MIS 31 used and what precautions must driver take when issued with one?

It is a driver's advice that signals staff are working in the section, and when no TA has been issued advising of the conditions. The driver must expect and be able to act upon hand signals from signals staff. This form applies to all areas.

32. When signals or points of effective the signals must be placed at Stop if possible:

(a) What authority will a driver require to pass such signals?

A hand signal from a member stationed at the signal or points.

(b) Who will instruct that this authority be given?

The signalman.

33(a). What is the procedure to pass a defective Distant or Stop-and-Proceed signal that cannot be placed at Caution or Stop? (R98)

The signal like must be extinguished or obscured and a hand signalman appointed who, unless otherwise instructed by the signalman, must stop any approaching train before it reaches the signal, inform the driver of the circumstances, and then allow the train to proceed stop

(b) When a train is required to pass over isolated motor points and the TCO cannot discern from his panel that such points are in their Normal position, how long must such points remain isolated for the passage of a train? (R98)

For the whole passage of the train.

34. When circumstances arise which call for special instructions requiring a departure from a Rule or Regulation:

(a) Who has the authority to issue such instructions?

Any officer duly authorised by the DTM.

(c) In what form will they be delivered to the driver?

As a TA.

35. There are set procedures in the Rulebook for the various ways of obtaining a relief locomotive and removing disabled trains from sections in Tablet and Automatic Signalling areas. Can these procedures be altered and, if so, by whom and in what form?

By TA from the OCTR.

36. In what areas and under what conditions would it be necessary to issue Train Advices for alternate crossings or the running order of trains? (R99)

In Open Section areas, in Automatic Signalling areas where automatic signalling is suspended in accordance with Automatic Signalling Regulation 32, and in Tablet areas when trains are running without tablet under the provisions of Tablet Regulation 20.

37. What is the purpose of a Block-of-Line Train Advice?

To temporarily close the stated portion of line to all traffic except that shown on the TA, which may enter or be within the blocked section during the stated period. Trolleys may operate normally.

38. What other drivers duties regarding Train Advices when:

(a) Coming on duty?

The driver must sign for an uplift all TAs and special instructions that will concern his shift. He must hand them to his LA to peruse and see that he understands them.

(c) Before commencing a journey?

The driver must check with the guard and OIC that they have identical TAs, Crossing Orders, and special instructions if in Open Section for Single Line Automatic areas.

(d) When changing over with another driver en route?

The driver must hand over all unfulfilled Crossing Orders, and satisfy himself that the other driver possesses TAs and special instructions affecting the train.

39. When it becomes necessary to take part of a train forward to the station in advance, where and under what conditions may such wagons be left unattended?

The remainder of the train must be secured by sufficient hand brakes, guards van hand brakes, and at least a 75 kPa brake application before the front portion is detached. Except where authorised, vehicles must not remain on the main line or crossing loop but must be placed in the siding and are safely secured clear of any movements on adjoining lines. If stop blocks or trap points are provided, the vehicles must be left inside them. If the siding is on a grade, the vehicles must be placed close to the stop block or trap points at the lower end of the siding.

40. Before a locomotive, either with or without vehicles attached, is to be detached from the train, what are the driver's duties and what must be carried out by the member uncoupling?

The driver is to make a reduction of at least 75 kPa brake pipe pressure. The member uncoupling must ensure that the air brakes are applied on a train before closing the coupling cocks.

41(a) Where there are no fixed signals to control the departure of trains from the station but the points are operated from a signalbox the guards Right Away signal will indicate to the driver "clear to proceed", but what must he observe if in a position to do so?

That in fact the points are correct before he passes over them.

(b) Where fixed signals control the departure of trains, what must the driver observe when the signal is set at Proceed?

That the line before him is clear.

(d) When a train has been checked or stopped within station limits, what must the driver do before proceeding on his journey?

Sound a short whistle and wait for the guard's "Right Away".

42. When is it not permitted to run trains ahead of time?

When they are passenger trains or any train in Open Section areas, in Single Line Automatic Signalling areas when automatic signalling is suspended in accordance with Automatic Signalling Regulation 32, in Tablet areas when running without a tablet under Tablet Regulation 21, and in any area with specifically prohibited by the Working Timetable.

(a) When are trains not scheduled to convey passengers permitted to run ahead of time?

When authorised in the Working Timetable or TA or by the TCO. When Train Control is not in operation, they may leave up to 15 minutes ahead of time and may run to destination up to 15 minutes ahead of time.

(b) Under what conditions may lost time be made up by a driver?

Where it can be done without exceeding the maximum authorised speed.

43. As the driver of an untimed train in Open Section or a Single Line Automatic area not worked under CTC, when about to cross to schedule trains at a station where no staff is in attendance, we must the untimed train berth?

In the siding and clear of the loop and main line.

44. What is meant by the term "clear of all trains" and what are the instructions that apply to this in Open Section, Tablet, and Automatic areas?

It means a special or work train running without specific instructions as to the crossing of other trains, which — in Open Section — must be sidetracked at least 15 minutes before any other train is due. If clearance time is in doubt, protection is to be laid. In Tablet and Double Line areas, these trains must clear the section 5 minutes before any other train is due thereon. In Single Line Automatic areas, specials and works trains must work under the direction of the TCO.

45. Under what conditions may locomotives or motive power be left unattended outside depot points?

In cases of absolute necessity or we are authorised by special instruction, and then only after all proportions as required in the related rules and instructions have been taken by the driver.

46. On receipt of a signal call from the locomotive assistant, what must the driver do?

Repeat the call.

47. Under what conditions may vehicles with broken side chains be run on trains?

If the air brake is in operation throughout the train, the vehicles if loaded may run to destination or if empty to the nearest examining station provided they are otherwise in good running order. They must be attached to the rear of the van at the next convenient station and should only run as much as possible, during daylight.

(a) Where should vehicles containing explosives be placed on a train in relation to locomotives and guards vans?

Vehicles containing explosives must not be marshalled closer to the locomotive or van than three wagon-lengths away.

(b) What invoice should be given to the driver?

Information as to the number and location of such wagons on the train.

(c) Should a tank wagon develop a hot box what action must the driver take? (R235/236)

The wagon should be isolated as soon as possible and placed under guard and the defect reported to the nearest responsible officer. The wagon must be inspected by Car and Wagon staff before being moved. An official of the company owning the wagon should be advised.



TABLET

48(a) Is it permissible to carry out shunting movements without the authority of a tablet?

Yes.

(b) What authority would be required to shunt outside station limits if no tablet was available?

Verbal authority from the signalman or by written instruction which must be timed, dated, and signed by the signalman and delivered by the shunter.

(d) What is the limit to which a driver may travel under these conditions?

400 m outside station limits.

49. What are the conditions when a signalman is not permitted to authorise shunting outside station limits without a tablet?

- i. When a train is approaching in the section or has permission to enter the other end of the section.
- ii. When a Tablet or Bank Engine Key has been issued for a train to return through that section to the station.
- iii. When Pilotworking is in operation.

50. When Tablet working and signalling have been suspended, what authority will a driver require to travel through the section?

A Safeall TA issued by the OCTR.

51. What signals does a Safeall TA authorise the driver to pass at Stop? (T20)

Those signals at stations which have been suspended provided the lamps are extinguished and no Danger hand signal or detonator signals are being exhibited.

52. What authority does a Safeall TA give a driver?

Authority to run over a certain section of line with Tablet- and Signal-Working suspended.

53. If a Safeall TA has been issued but "security" has not been received from all suspended stations, what would a driver be instructed to do in regard to the station from which security was not received?

The driver would be instructed to examine the points at that station before passing over them, and to take any other necessary action.

54. What signal aspects must be shown at Switched-Out stations when trains are running under Safeall?

Those that provide the Proceed indication.

55. What is the maximum allowable speed that the driver may take a train over facing points at suspended stations? (T20)

15 km/h.

56. When station staff are required to stop a train that is running under Safeall at a suspended station, what action must the traffic staff take and how should this be done? (T20)

Signal lamps must be relit and the signals placed at Stop, and hand signals must be exhibited. Detonators must also be placed to draw the driver's attention to signal indications.

57. On arrival at the end of the section worked under Safeall what must a driver of a light locomotive give to the OCTR?

the driver must send a TR telegram stating that the section is safe with the passage of trains and that any apparatus which is being used for any reason has been returned to its correct position (i.e. he must give "security" for that section).

58. When trains are running under Safeall TAs, when may Tablet Working be resumed?

When the last train authorised to run without tablet has arrived at the end of the section for which Tablet Working was suspended, or at a point fixed under special conditions by the OCTR.

59. When a train is running late and has encroached on the time of the train to run without tablet, what is the procedure?

Tablet Working must remain in operation for both trains until the train running under tablet has reached its destination or has crossed the train running under Safeall. From this crossing place onward, the last-mentioned train must run without tablet as originally constructed.

60. May Pilotworking be in operation at the same time as Safeall working?

Yes.

61. May trains set back when working under Safeall TA? If so, to what point? (T20)

Yes. To within 600 m of the Home or Outer Home signal at the station at the commencement of the section covered by the Safeall TA.

62. When, owing to a failure of the tablet instruments, what authority is required to proceed through the section? (T20)

A TA from the OCTR

63. When a Switch-Out station is opened or closed at a time not shown in the WTT and the strain is running late, what is the procedure to travel, what must the drivers of trains concerned receive, and what are their responsibilities regarding this advice?

The driver must stop and receive and sign for a MIS 46 advice.

64. Describe the procedure to obtain a relief locomotive to enter a section without its driver being in possession of the tablet for the purpose of removing a disabled train from the section.

The driver and guard must confer and contact the TCO. The guard (or LA) will take possession of the tablet and completed MIS 39, and after the disabled train has been protected, will communicate with the OCTR, giving him particulars of the MIS 39 and the precise location of the disabled train. The OCTR will issue a TA authorising the relief locomotive to enter the section without a tablet and run at reduced speed to the point at which protection has been laid. This TA must be acknowledged by all concerned before the relief locomotive enters the section. When the relief locomotive arrives at the point of protection, the crewmember of the disabled train will give the relief driver the tablet and MIS 39, and pilot him to the disabled train. After receiving the permission of the driver and guard of the disabled train, the relief driver may remove it from the section. The relief driver must retain possession of the tablet until all of the disabled train is removed from the section.

65. A train is derailed and has become an obstruction. Describe the procedure to clear this tablet section by working trains from each end of the section.

The driver and guard must confer and contact TCO. Unless otherwise instructed by the OCTR, the guard is to place the driver in charge of the obstruction where he will be responsible for seeing that protection is maintained until he is relieved by a member of the traffic branch. The guard will take the completed MIS 39 and proceed to the station from which Pilotworking will be instituted, inform the OIC of the circumstances, and show him the MIS 39. The guard must lay protection on the way. The LA, with a completed MIS 39 and the tablet, will proceed to the station from which tablet working will be used, protecting the train on the way. Upon arrival he will show the signalman and OIC the tablet and MIS 39. OICs at both stations will make the necessary arrangements. The LA must retain possession of the tablet. When the section is clear and safe for traffic, the tablet has been given to the signalman, and Pilotworking has been cancelled, normal Tablet Working may resume. No train may pass the point of obstruction unless under normal Tablet Working.

66. A train locomotive has failed while being assisted by a locomotive in the rear of the train and must be removed to the station in the rear in two parts. What is the procedure to clear this section? (T29)

Contact the TCO, and unless the OCTR directs otherwise, all members present must reach an understanding. The train driver will give the assisting driver the tablet and a completed MIS 39. The assisting locomotive then proceeds with a portion of the train to within 600 m of the Home signal of the station in the rear— laying protection on the way — where the OIC is advised and handed the MIS 39. The assisting locomotive now returns for the remainder of the train and after receiving the permission of the driver and guard removes this portion and the disabled locomotive from the section. The assisting driver retains possession of the tablet until the section is clear. Protection must be maintained until this locomotive returns for the remainder of the train.

67. When it becomes necessary for a train to return to the station in the rear, under what conditions may the train be set back?

The driver, with the concurrence of the guard, may set the train back until the leading vehicle in the direction of travel is not less than 600 m from the Home (or Outer Home) signal of the tablet station in the rear, where the train must stop. The guard is then to proceed to the station and obtain the authority of the signalman for the train to set back into the station. Where a train has dropped the tablet before entering the section ahead, the train must stop and the LA — after advising the guard — must go back to the station to get the tablet will receive authority of the signalman for the train set back to the station. When the Home signal can be set at Proceed for the train to return to the station, this may be done.

68. When and for what purpose is a MIS 21 used? What are the driver's and locomotive assistant's responsibilities regarding this form?

It is used to advise the driver that tablet instruments are out of order and that Line Clear Working is in operation. It is valid for a single journey through one section only. It must be readily allowed by both the driver and LA and collected by the superwoman at the other end of the section. Non-stopping trains need not be stopped to receive this form.

69. Pilotworking may be instituted in a Tablet Area when a Bank Engine Key is lost or when a Switch-Out station is opened at a time when Pilotworking is operating. What are the other four circumstances when you would expect to find Pilotworking in operation? (T33)

- i. When communication has failed
- ii. When trains are being worked up to an obstruction from both sides
- iii. When a tablet is lost
- iv. In any other circumstances when so-directed by the OCTR.

70. When a tablet is lost, what authority must driver have to travel through the section?

A TA from the OCTR, or under Pilotworking.

71. When a tablet is damaged so that it cannot be placed in the tablet instrument, what is the procedure?

the tablet must be securely locked away and Line Clear Working instituted. If the tablet is damaged during delivery to a departing train and the station names on the tablet are easily readable, the pieces of the damaged tablet may be tied together in used for one journey only on the train to which it had been delivered. This action is permitted only when the train delay could not otherwise have been avoided.



AUTOMATIC SIGNALLING

72. When an automatic running signal is at Proceed for Normal Speed, what does it indicate to a driver?

That the section is clear up to the next signal in advance, which is at Caution or Clear for Normal Speed.

73. What is the meaning of (a) Low-Speed, (b) Medium Speed, (c) Normal Speed?

(a) 'The train must travel slowly, being prepared to stop short of any obstruction. Points are correctly set but the road is not necessarily unoccupied'.

(b) If Red-over-Green: 'Clear for Medium Speed to the next signal in advance which is at Caution or Clear for Medium or Normal Speed. If Red-over-Yellow: 'Caution, the section is clear for Medium Speed up to the next signal in advance, which is displaying *Stop* or *Low Speed* (25 km/h unless otherwise authorised)'. With both of these displays, Medium Speed must be maintained up to the next signal in advance or until clear of the points to which the signal applies.

(c) If Green-over-Red: 'Clear for Normal Speed to the next signal in advance, which is at Proceed. If Yellow-over-Red: Caution, Normal Speed. Be prepared to stop at the next signal. If Yellow-over-Green: Caution, Normal Speed. Prepare to reduce to Medium Speed at the next signal in advance, which is at *Caution* or *Clear* for Medium Speed only'. Do not exceed the normal speed for the locality.

74. What is the purpose of the lower light unit or marker light on an automatic running signal?

To distinguish between *Stop & Stay* and *Stop & Proceed* signals by the position of the lower unit or marker light in relation to the upper unit.

75. Describe the purpose and operation of an Approach signal.

It is used to control the speed of trains entering junctions, points, or interlocked areas. They are *Stop & Stay* signals placed in the rear of another *Stop & Stay* signal and operate in the same way as an *Intermediate Stop & Stay* signal except when the signal in advance of the Approach signal is at *Stop*, then the Approach signal is also *Stop* until the expiration of a prearranged time delay, when it displays a *Proceed* indication.

76. In an Automatic Signalling area, if a train overruns a platform but stops within station limits and is protected by Home signals, what authority would a driver require to set back?

The authority of the signalman (who may be the TCO) and the OIC, provided that the train will fit within station limits.

77. The train has been stopped at a Stop & Stay signal at Stop, but the "A" light is not illuminated, what procedure must be carried out to enable the train to proceed?

The driver must ascertain;

- i. that the station is switched out
- ii. that the switchlock door is shut and locked
- iii. that the points are secure and safe
- iv. that the main line is clear.

The train must then be piloted through the station by the LA or guard to the next signal. Contact the TCO.

78. An Intermediate Stop & Stay signal not fitted with an "A" light is at Stop. What authority will the driver require before proceeding?

A TR telegram from the TCO.

79. When a train arrives at an automatic Stop & Proceed signal at Stop, what must the driver do and what is the procedure to pass it and continue through the section ahead?

The driver must stop the train and wait 10 seconds. If the signal was still at Stop he may proceed cautiously, speed not to exceed 10 km/h if the view ahead is obstructed. The driver must expect to find the section obstructed or occupied, a broken or misplaced rail, or points wrongly set, and must be able to stop short of any obstruction. Any mainline points must be secured before the train passes over them. If the next signal is at Proceed, the driver must wait until his train is wholly past the signal before resuming normal speed. If the signal is an Arrival signal, the rules applicable to Arrival signals will apply. If any preceding side, tail, or headlamps are cited, the driver must immediately stop and only move ahead if the guard of the preceding train verbally instructs to do so. If the preceding train is moving, the following train may continue at a safe distance.

80(a). What constitutes an imperfectly-displayed automatic running signal?

A signal displaying any aspect not described in the regulations, or a signal not showing a steady indication.

(b) Under what Automatic Signalling Regulations may such signals be passed?

ASR 6 (Stop & Proceed signals)

ASR 5 (Stop & Stay signals)

ASR 19 (Departure signals)

(c) To whom must driver report regularities with automatic signals?

To the OIC, the TCO, or the locomotive supervisor.

81. If a driver considered his train to be insulated in an Automatic Signalling area because of the use of sand, what action must he take and why?

He must stop and advise the TCO or OIC. If under Single Line Automatic Signalling, protect both ends of the train and if under Double Line Automatic Signalling protect the rear. (NOTE: This is because under these conditions, the signal protecting the rear of the train may have assumed a Proceed indication.)

82(a). When an "A" light is illuminated on a Stop & Stay signal, what does this indicate to a driver?

That the signalbox is switched Out and the switchlock door is closed and the points correctly set. The illuminated "A" light converts the signal to Stop & Proceed.

(b) What effect does opening a Double Line switchlock door have on the signals protecting the crossover?

This action places the signals at Stop and extinguishes the "A" light.

83. In a Double-Line Automatic Signalling area all signals, or all signals and communications, have failed. The DTM has not made arrangements regarding train movements. What is the procedure to run a train under these conditions?

Trains may proceed in accordance with ASR 6 over the portion of line affected up to the next Stop & Stay signal. If the fault still exists then after the expiration of 5 minutes following the departure of the preceding train, the TCO or OIC may authorise the train to proceed, notifying the driver of particulars of the preceding train and that the conditions of ASR 6 still apply. If a train is detained at a Stop & Stay signal and the "A" light is not illuminated, the provisions of ASR 5 must apply.

84. When and for what purpose is a MIS 59 used?

It is used when, for any reason it is required that a train movement must be made past a Departure signal at Stop. It is the driver's authority from the TCO to pass the Departure signal at Stop and proceed into or through the section. It is also required if the signal has gone to Red in front of a train and the train has passed it before being able to stop.

85. When the driver of a light locomotive arrives at an unattended crossing station and finds the Departure signal at Stop, what procedure must be carried out to obtain authority to proceed?

After all apparatus has been operated correctly and if the signal still fails to clear, the driver must contact the TCO and obtain a MIS 59 or have Pilotworking instituted.

86. If a Departure signal failed and went to Stop just prior to a train passing it, what authority is required;

(a) To set back into station limits?

Authority of the TCO.

(c) If the train is unable to sit back, what authority is required to proceed?

A MIS 59 from the TCO, or if Pilotworking has been instituted, the authority of the Pilotman.

87. A driver has been issued with a MIS 59 to pass a defective Departure signal at Stop. What action must be taken if the Departure signal goes to Proceed as the locomotive approaches it?

The driver must stop and contact the TCO for authority to proceed.

88. State the conditions and the authority required to pass a defective Departure signal at Stop on the following occasions;

(a) When the Pilot Key is being used.

Pilotworking is in operation. The driver must sight the Pilot Key and be handed a MIS 54.

(b) When the Half Pilot Key is being used.

- If the train is to enter an obstructed block section, the driver is to be shown the Half Pilot Key
- If the train is to enter a block section to provide assistance to a disabled train, the driver must be shown the Half Pilot Key
- If the train is to enter a block section to remove a portion of its own train, the driver must have possession of the Half Pilot Key.

(c) When a Train Advice is used.

When Automatic Signalling is suspended, trains are to proceed in accordance with the instructions in the TA.

89. When a driver has received the proper authority to pass a Departure signal at Stop, how must he proceed through the section with his train?

The driver must proceed cautiously being prepared to find the section obstructed, points wrongly set, or a broken or misplaced rail. All points must be secured before passing over them unless authority has been given to the contrary.

90. What action must be driver take when travelling through a section on a MIS 59 and arrives at an Intermediate signal showing a Proceed indication?

He may act upon the indication of that signal only with his whole train is past it.

91. In a Single Line Automatic Signalling area not worked under CTC;

(a) What is indicated when an “L” light is illuminated on an Arrival signal?

That the mainline points are set for the loop on all points off the loop are in the Normal position.

(b) What must the driver check when proceeding on an “L” light?

That the loop is not occupied or obstructed.

(c) What action must be taken if the “L” light does not illuminate when the mainline points are Reversed?

All points on the loop must be examined, and if they are in their Normal position, the train may be hand-signalled to enter the loop.

92. In a Single Line Automatic Signalling area not worked under CTC;

(a) When two trains are to make a crossing at an unattended crossing station, which train takes the loop?

The train scheduled to arrive first, unless otherwise instructed by WTT or TA.

(b) What is indicated when a train is about to leave the loop at an unattended crossing station and if Yellow-over-Red is displayed on the Arrival signal?

No trains following closely in the rear.

(c) What is indicated when the Arrival signal as discussed above shows Red-over-Red, and what must the driver do?

There is a train following closely in the rear, or an opposing train — having just been crossed — is departing. In the case of a train approaching from the rear, the train in the loop must not be moved until the train from the rear has stopped.

93. In a Single Line Automatic Signalling area not worked under CTC;

(a) What is indicated when a white ball shows in the Releasing Switchbox?

That the opposing Arrival signal is displaying a Caution indication.

(b) What is indicated when no white ball shows in the Releasing Switchbox and what must the driver do?

That there is a train following closely in the rear. The driver must not move until it has arrived and stopped.

94. When it is necessary to shunt a switchlock siding in a Single Line Automatic area;

(a) At what point must the driver stop whose train?

Within 15 m of the points.

(b) After being locked in a switchlock siding, what is the procedure to return to the main line?

The LA is to go forward and open the switchlock door and observe the eyeball indicator to see whether the section is clear or occupied. If occupied, he must close the door and contact the TCO. If clear, he may turn the locking lever, reverse the points, and signal the driver to move out onto the main line. The guard (or LA) then returns the points to Normal and will close and lock the switchbox door.

95. When a Departure signal has failed and a train is running on a MIS 59 and it is necessary to shunt a switchlock siding, what additional precautions must be taken?

At least one vehicle must be left on the main line while the train is in the siding and the train must proceed through the whole block section. Upon arrival at the next crossing station, the guard must advise the TCO with his train has arrived complete.

96. When and for what purpose are a MIS 53 and a MIS 54 used and what are the driver's responsibilities regarding the MIS 54?

A MIS 53 form is used when instituting Single Line Pilotworking to appoint a Pilotman. The rear of the form is used to cancel Pilotworking. Details of the MIS 53 must be repeated back to the TCO. A MIS 54 form is a Single Line Pilotman's Ticket and is issued to the driver when the Pilotman will not accompany the train. It authorises the driver to proceed through the section. It is valid for a single journey only and must be handed to the OIC at the end of the Pilotworked section, or cancelled by the driver and handed the next OIC.

97. Describe the procedure to institute Pilotworking from the station in advance of a defective Departure signal?

The Pilotman is appointed by the TCO and instructed to fill out a MIS 53 form, which must be repeated back to the TCO. The Pilotman will remove the Half Pilot Key to lock the Departure signal at Stop then close and lock the Pilot Key box. He must then proceed back through the section by any means at his disposal provided he has a clear view of the track ahead. If a train is leaving the station he may ride on the locomotive in which case the train must pass the Departure signal at Proceed (i.e. before the Half Pilot Key is removed). The Pilotman must carry the Half Pilot Key back to the station at which is the defective Departure signal where he will remove the Half Pilot Key from that signal and screw the two Half Pilot Keys together to form a Pilot Key for that section. Both the Departure signals will now be locked at Stop. The TCO must then be advised. The Pilot Key will be the driver's authority to pass Departure signals at either end of the section at Stop when so instructed.

98. In a Single Line Automatic Signalling area, describe fully the procedure to dispatch trains when Pilotworking has been instituted.

With the concurrence of all concerned, the Pilotman will personally dispatch all trains. He must ride on the leading locomotive unless any trains are following in which case he must show the guard the completed MIS 54 and Pilot Key, give the driver the MIS 54, and show him the Pilot Key and authorise the train to depart. He must then travel on the leading locomotive of the last train. Upon arrival at the other end of the section, the MIS 54 is to be handed to the OIC who will cancel it. If there is no OIC, the driver must cancel it and handed to the OIC at the next station. If communication exists, no following train may be dispatched until information has been received that the preceding train has arrived. If there is no OIC at the end of the block section, the driver must stop and the guard (or LA if a light locomotive) must telephone the necessary information. If there is no communication, the following train may be dispatched after the normal running time preceding train has elapsed. In this case, the driver of each following train must be informed of the particulars of the preceding train and that the Pilotman has not received word of its arrival. The following train may be dispatched earlier than the above conditions by special instructions from the OCTR but the driver must still be supplied with the information already mentioned.

99(a). When the Pilotman shows a driver the Pilot Key for the block section, what authority does this give the driver?

Authority to pass the Departure signal at either end of the section at Stop.

(b) During Pilotworking, what is the procedure to pass Intermediate signals?

By observance of the indication displayed thereon, or if defective, in accordance with ASR 5 or 6.

(c) Who personally dispatches trains when Pilotworking is in operation?

The Pilotman, with the concurrence of all concerned.

100. If the Pilot Key for a section was lost, state fully the procedure to be carried out.

If lost en-route, the train may continue, and the driver must advise the TCO at the next station. If lost prior to departing, the train is not to depart. The TCO must be advised to arrange for hand signalmen to be located at the Departure signal at each end of the block section to operate on the Pilotman's authority. The OCTR will issue a TA to all concerned stating that the pilot key is lost. The Pilotman must wear a badge or a red flag around his left arm. He must show the driver his MIS 53 in place of the Pilot Key.

101. In a Single Line Automatic Signalling area, a train has become disabled. Assistance is available from the station in the rear and the section is to be cleared to that station. There are no following trains in the section. Describe the procedure.

The driver and the guard are to confer and contact the TCO. Unless otherwise directed by the OCTR, the member with the completed MIS 39 is to proceed to the station in the rear protecting the train on the way, and there remove the Half Pilot Key, lock the Pilot Key box, and inform the OIC and TCO. When the relief locomotive arrives, the member procuring assistance must show the driver Half Pilot Key and hand him MIS 39, then pilot him to the disabled train. With the permission of the driver in guard of the disabled train, it may be removed to the station in the rear. After the section has been cleared, the Half Pilot Key this to be replaced and the box locked and TCO advised.

102. When a train or trains have followed into a Single Line Automatic section and are behind a disabled train but are unable to assist it, what is the procedure to clear this section to the rear when the relief locomotive will also come from the station in the rear?

The driver and guard are to confer and contact the TCO. Unless the OCTR directs otherwise the member with the completed MIS 39 is to proceed to the station in the rear, protecting the train on the way. He will stop any following trains and inform their drivers of the circumstances and show them the MIS 39. Upon arrival at the station in the rear, he will remove the Half Pilot Key and lock the box and inform the OIC and TCO. He will then go back to the last following train, show the guard and driver Half Pilot Key and instruct them to set back. He will do the same for each following train allowing a safe space interval between each train. The member will then return to the station in the rear on the last following train. There he will give the relief driver the MIS 39, show him the Half Pilot Key and pilot him to the disabled train. With the permission of the driver and go of the disabled train, it may be removed to the station in rear. When the section is clear, the member is to replace the Half Pilot Key, lock the box and inform the TCO.

103(a). Who will issue instructions when a line is blocked by landslip or flood prior to clearing the obstruction?

The TCO.

(b) What authority will driver require when it is necessary to enter this area and what are his responsibilities regarding this authority? (A31)

He will require position of the Half Pilot Key and must return it to the OIC upon returning from the point of obstruction.

104. When necessary to meet special conditions in a Single Line Automatic Signalling area not worked under CTC, signals are suspended. Describe fully the procedure to run trains under these conditions.

Special instructions will be issued by TA from the OCTR. All signals in the suspended section may only be passed in accordance with the TA. All trains will be scheduled. Alterations to crossings or running water of trains must only be made by authority of a TA. Trains must run 15 minutes apart unless otherwise directed by the OCTR. When trains are following at close intervals or during adverse weather conditions, the driver of the second train is to be stopped and informed of the circumstances.

105(a). When and for what purpose is a MIS 56 used?

In Single Line Automatic Signalling areas not worked under CTC to alter the running order of trains.

(b) How must it be delivered to the locomotive?

By cane sling (if a non-stopping train) as long as the transfer will not endanger the locomotive crew.

(c) What are the driver's responsibilities regarding this authority when he changes over with another driver?

He must hand any unfulfilled Crossing Orders to the other driver.

(d) How may this authority be cancelled?

When fulfilled, the driver is to cancel it by writing "Fulfilled" across it or by tearing it in half. It may also be cancelled by another MIS 56 or by a TA.



MISCELLANEOUS FORMS – SUMMARY

MIS 21 – Tablet instruments out of order (Line Clear Working).

MIS 29 - Pilotman's Ticket (Tablet and Double Line).

MIS 31 - Signal Staff Working in Section.

MIS 33 - Instituting Pilotworking (Tablet and Double Line).

MIS 39 – Driver's undertaking not to move disabled train until relief arrives.

MIS 46 - Alteration in hours of tablet station.

MIS 52 - Wrong Line Order (Automatic Signalling Areas).

MIS 53 - Instituting Pilotworking (Single Line).

MIS 54 - Pilotman's Ticket (Single Line).

MIS 56 - Crossing Order (Single Line Automatic Areas).

MIS 59 – Driver's authority from TCO past Departure signal at STOP.