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## Signalling Maintenance Testing Handbook





# Outline of Transition Tests and Topics Covered

# Your current paper signal maintenance test certificate will cease to be valid from 2 March 2025.

## Time

Although no test has a time limit, we would expect it will take approximately four hours to answer all six tests if you need to do so.

You do not have to take them all in one go, but do need to complete the test you are on to enable you to continue to the next one.

The assessment solution will be open until the 1 March 2025, bear in mind that if you need to sit a third attempt this will need to be done at least 28 days before 1 March.

## Number of attempts

You have three opportunities to sit each test should you need to do so.

- The second test can be taken 24 hours after the first attempt if you fail
- The third test can be taken 28 days after the second test if you failed

If you failed the third attempt, you will have to be retrained on that element or on the whole of the signal maintenance testing if you failed core skills.

## Results

Once you have completed a test, the system will give you an interim result on how you have answered the questions. The final result will only be released once the proctoring video has been reviewed.

All results will be uploaded to Sentinel within nine days.

# **Principles Test**

There are 30 questions to be answered. This is a closed book test on signalling principles.

- Questions one and two are mandatory and must be answered correctly to pass. You will end up with a negative score if you get one of these wrong.
- The questions are either multiple choice or true/false.
- The pass mark is 80% including the mandatory questions.
- All questions must be answered prior to submitting the test results.
- The browser will close once you have submitted your answers. To take another test please re-enter the browser.

# **Core Skills Test**

There are 30 questions to be answered. This is an open book test where access to the Signal Maintenance Specifications and Signal Maintenance Testing Handbook are both available to view in the assessment solution to aid with the responses.

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- Questions one to eight are mandatory, you will receive a negative score if you get any of these wrong
- The questions are either multiple choice or true/false
- The pass mark is 80% including the mandatory questions
- All questions must be answered prior to submitting the test results
- The browser will close once you have submitted your answers. To take another test please re-enter the browser.

You need to pass both tests to obtain core skills (SMTH.A)

## Aspect Test

(SMTH.B) There are 24 questions to be answered, you will require access to the signal sighting records on the system to answer some questions.

You will also require access to the Signal Maintenance Testing handbook, also loaded to the system for this test. It is an open book test.

- The questions are a mixture of multiple choice and True/False
- The pass mark is 80 %
- Please answer all the questions before hitting the submit button
- The browser will close once you have submitted your answers, to take another test please re-enter the browser.

## **Points Test**

(SMTH.C) There are 14 questions, you will require access to the Signal Maintenance Testing Handbook on the system. It is an open book test.

- The questions are a mixture of multiple choice and True/False.
- The pass mark is 80 %
- Please answer all the questions before hitting the submit button
- The browser will close once you have submitted your answers, to take another test please re-enter the browser.

## **Cable Testing**

(SMTH D) There are 13 questions, you will require access to the Signal Maintenance Testing Handbook and Signal Maintenance Specifications for this test. It is an open book test.

- The questions are a mixture of multiple choice and True/False
- The pass mark is 80 %
- Please answer all the questions before hitting the submit button
- The browser will close once you have submitted your answers, to take another test please re-enter the browser.

## **Cable Diversion**

(SMTH F) There are 11 questions, you will require access to the Signal Maintenance Testing Handbook and Signal Maintenance Specifications for this test. It is an open book test.

- The questions are a mixture of multiple choice and True/False
- The pass mark is 80 %
- Please answer all the questions before hitting the submit button
- The browser will close once you have submitted your answers, to take another test please re-enter the browser.

## List of Subjects Covered in SMTH Signalling Principles Test

To aid the successful completion of the SMTH signalling principles knowledge here are the topic areas covered by the test.

- Signalling principles knowledge, around what controls would be in any given route to permit a signal to clear
- Signalling wiring diagram reading
- Circuit diagram symbols
- Nomenclature meanings
- Scheme plan symbols and what they mean
- Location plan symbols and what they mean
- Signals and the aspect they can display and the meaning of that instruction to a train driver
- Limits of authority with regard to cable insulation values
- Knowing your way around the signal maintenance specifications
- Lamp proving and signal head diagrams and what indications does the signaller receive
- Signal route terminology and where the 'A' route would go for example
- AWS controls and the train driver's indications
- What test equipment would you use when
- What test equipment do you need to test and when and consequence of not doing so
- The difference between right and wrong side failures and defining those terms
- Handbook 19 of the rule book regarding Technician's duties
- When Maintenance testing processes apply
- Wire degradation types and risks.

## List of Subjects Covered in SMTH Core Skills Test

- All items covered in the SMTH course
- Definitions where to find the definitions of specific terms
- Earth testing values and intervention limits for a given result.