



# Pre-Assessment Manual: Fire, Emergency and Security Systems (FESS)

January 2020



*By the industry, for the industry*

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## Introduction

**The purpose of this guidance document is to ensure the procedures and presentation of all aspects of the Fire, Emergency and Security Systems (FESS) Assessment of Occupational Competence is of the same standard in each of the National Electrotechnical Training (NET) approved assessment centres in England, Wales and Northern Ireland.**

The Fire, Emergency and Security Systems Assessment of Occupational Competence is designed for individuals who need to demonstrate 'occupational competence' to fulfil the requirements of:

- **Completing an Apprenticeship.**
- **Providing evidence of occupational competence as a requirement of a competence-based certification scheme.**

The Fire, Emergency and Security Systems assessment is designed for individuals who wish to practice as a Fire, Emergency and Security Systems Technician. It demonstrates that they have the level of competence expected by the industry in the following key occupational areas:

- **Risk assessment, including COSHH requirements.**
- **The interpretation of specifications and diagrams.**
- **Safe isolation.**
- **Planning and preparing to install, terminate and connect identified components.**
- **Installing, terminating and connecting identified components.**
- **The inspection, verification, testing and certification of a system.**
- **Fault diagnosis and recommend appropriate rectification.**
- **Completion of documentation to include;**
  - **Testing and commissioning documentation.**
  - **Completion of hand-over documentation.**
- **Professional Discussion.**
- **The understanding and application of procedures, industry recognised working practices and the requirements of statutory and non-statutory regulations relevant to the industry.**

## Are you ready for assessment?

Your first port of call should be NET's Candidate Self-Assessment Checklist. This is a compulsory piece of paperwork and we recommend that you use this during the last three months of your training as part of an honest review of your readiness, and to identify areas where further training or experience may be required.

The Checklist will show you everything you should have learned before going into the assessment - read through it and make sure you have done it all! It's your employer's and training provider's responsibility to make sure you've covered everything on the list, so they should go through this with you and help identify any areas of concern.

Your employer and training provider must also sign the checklist to confirm that you have completed everything on the list and that you are ready to complete your assessment.

## Special considerations

If there are health or other circumstances which may require an application for adjustment to the assessment, please refer to the NET Special Considerations and Reasonable Adjustments Policy which is available on the NET website.

## On the day

Common sense can desert the best of us in exam season, so in the run up to the assessment it might be helpful to consider the following:

- **Get a good night's sleep the night before your first assessment day and during the assessment period - you need to be firing on all cylinders, so don't make big plans for the evenings!**
- **Make sure you know exactly where the test centre is and how to get there. Leave enough time to travel as well, you don't want to be late.**
- **Mobile phones, smart watches, MP3 players and all electronic devices are not allowed in the assessment area. If you have any of these with you, they will need to be handed in at the beginning of the assessment and signed out at the end of each day.**

NET is producing a range of additional resources to support candidates in preparing for the FESS Assessment - please visit [www.netservices.org.uk/candidate-guidance](http://www.netservices.org.uk/candidate-guidance) for more details.

### The assessment contains the following sections:

- Section A - Working Safely
- Section B - Takeover Existing Installation
- Section C - Additions to Systems
- Section D - Commission Systems
- Section E - Assessment of Underpinning Knowledge
- Section F - Professional Discussion

## When you arrive, the Assessor will brief you on:

- The emergency evacuation procedures.
- The position of first aid equipment, the First Aider and how to contact them.
- The position of any fire extinguishers.
- Any other Health and Safety requirements of the assessment centre.
- The location of toilets and refreshment facilities and how to securely store your personal belongings.
- The procedures and requirements of each section of the assessment.
- The assessment timetable.

You must ensure that you understand the Assessment Centre's emergency procedures and the location of equipment, tools, materials and first aid facilities.

**Note: Candidates are NOT permitted to use their own tools, only those provided by the centre MUST be used**

The 'Candidate Guidance Manual' is for your reference throughout the assessment but **must remain in the assessment area**. Non-compliance with this procedure will result in you being disqualified from the assessment.

All relevant publications and documentation to complete the assessment will be made available by the Centre Assessor.

### **Relevant Publications and Documents:**

- Candidate Guidance Manual.
- Data sheets and instructions for components.

### **When required the following additional documentation will be provided:**

- Risk Assessment.
- Takeover documentation.
- Additions / Commission documentation.
- Handover documentation.

## **Further Information**

### **1. The following documents are displayed in your assessment area:**

- a) Health and safety information and fire procedures.
- b) Risk Assessment Information.

### **2. You should:**

- Carefully read all assessment instructions.
- Study any manufacturer manuals and diagrams and information provided.
- Use the information throughout the assessment.

If you do not understand any of the instructions, the Centre Assessor can provide further explanation if required.

### **3. You should bring to the attention of the assessor any materials or equipment you consider are damaged or unsuitable.**

### **4. You are responsible for your own safety, and the safety of others who may be affected by your work.**

# Section A - Working Safely

Maximum Time Allowed: 30 mins

**You have a minimum of 10 minutes to read this section and prepare for assessment. PLEASE READ THIS.**

To demonstrate occupational competence, you will be required to:

- Carry out a review of safe working practices.
- Carry out a risk assessment that agrees with organisational requirements and procedures prior to commencing the assessment.
- Record the findings on the relevant documentation.

## Risk Assessment

**This is a careful examination of the risks associated with both working practices and candidate and centre staff activities.**

- A hazard is anything that may cause you or others harm.
- A risk is a chance, great or small, that someone will be harmed by a hazard.

The aim is to make sure that all processes are safe and to minimise any potential dangers at the facility. You will need to consider the following three steps:

### 1. Identify the Hazards

Look at what may cause harm to an individual because of a work-related activity.

### 2. Decide Who Might be Harmed and How

Look at who may be affected by the work activity, how they may be affected; this may include other candidates and centre staff.

### 3. Evaluate the Risks and Decide on Precautions

If you find a hazard, there may be a risk to other people. You will need to decide the steps to take to eliminate or reduce the identified risks as far as is reasonably practical:

- What needs to be done depends on whether the hazard is low risk or high risk.
- You can determine this by looking at what type of injury may occur and how often it may happen.
- It may be possible to remove the hazard altogether or to take steps to reduce this risk to an acceptable level.
- If there is no risk present, then you do not need to take any action and you should record 'No action required' on the Risk Assessment document.

## Section A - Top Tips

- Read all documentation supplied.
- Look at what might cause harm to individuals because of work-related activity.
- Decide who might be harmed and how.
- Evaluate the risks and decide on precautions.
- Record everything!



## Section B - Take over Existing Systems

Maximum Time Allowed: 1.5 Hours

To demonstrate occupational competence, you will be required to, in accordance with statutory and non-statutory regulations and approved industry working practices:

- Check the systems for operation and compliance with current standards.
- Complete Takeover Certificates for each system.
- If any faults or errors are found, list the circuit, type of fault and suggest a rectification.

### System Specification:

- This is a small commercial unit with stand-alone systems.
- The existing systems are to be verified before additions are made to each system.

## Section B - Top Tips

- Read all documentation supplied.
- Attempt to identify all faults for each system.
- Complete the required paperwork and record your findings.
- Ask your training provider and employer for support and practice the systems covered in the checklist before attending the assessment.



## Section C - Addition to Systems

Maximum Time Allowed: 5 Hours

To demonstrate occupational competence, you will be required to, in accordance with statutory and non-statutory regulations and approved industry working practices:

- From the given specification select the correct equipment to expand the existing system.
- Position the equipment in the specified position.
- Select the correct cable and install to current standards.
- Correctly connect the additional equipment to the existing system as stated within the given specification.
- You are working as if you are at a customer's premises. The work area is to be kept as clean, tidy and hazard free, as far as possible at all times.
- The safe isolation procedure will be fully observed by the Centre Assessor.

To demonstrate occupational competence, you will be required to:

- Carry out the correct sequence for safe isolation of the circuit you will be working on. You must inform the assessor when you have finished, and the circuit is now safe.

### Additions to systems

In this section you must install all cabling and equipment required for the additions to the systems. You will be allowed to programme in the Commissioning Section (D). However, if you do complete the installation of cabling and equipment you may start programming if time allows.

In the Commissioning Section (D) you can alter any errors found but not install new cables and equipment. i.e. if you have a faulty cable you can replace it, but not install new cable.

### Section C - Top Tips

- Read all documentation supplied.
- Familiarise yourself with all the systems identified within the checklist.
- Attempt to complete all systems within the time allocated.
- Practice safe isolation as much as possible prior to the assessment - this is an instant fail if not completed correctly.



## Section D - Commission Systems

Maximum Time Allowed: 2 Hours

To demonstrate occupational competence, you will be required to, in accordance with statutory and non-statutory regulations and approved industry working practices:

- Complete the required tests.
- Correctly complete the System Installation Record.

In this section you can alter any errors found but not install new cables and equipment. i.e. if you have a faulty cable you can replace it.

### Section D - Top Tips

- Carry out all required tests on the systems – don't lose marks on missed tests!
- Carefully complete the System Installation Record and ensure all sections are fully completed.
- Read all documentation supplied.





# Section E - Assessment of Underpinning Knowledge

Maximum Time Allowed: 1 Hour 30 mins

The Section E assessment will last for 1 hour and 30 minutes and will be in the form of a computerised multiple-choice examination. You will be expected to answer 60 questions and achieve a minimum pass mark of 66%.

The examination will be Closed Book.

## Section E - Top Tips

- The questions in this section should have been taught and tested as part of the knowledge criteria of your training programme. Ask your training provider for help with preparation in this area.



## Section F - Professional Discussion

Maximum Time Allowed: 45 Mins

You will be required to demonstrate knowledge and competence, by means of a Professional Discussion. This will include a range of standard and scenario-based questions and covers the follow selection of behaviours.

We recommend that you think about some examples of where you have demonstrated these behaviours in the workplace. You may want to discuss these in advance with your employer. If you wish, you can bring evidence or notes to refer to during the professional discussion. Please use the boxes below to record some of your evidence and experiences:

### Honesty and Integrity

### Dependable and Responsible

### Positive Can-Do Attitude

### Openness to Learning

## Maintain Continuous Professional Development

## Work with Others

## Safe and Sustainable Working

### Section F - Top Tips

- There are no trick questions in this section.
- If you do not understand the question you are asked, ask for it to be repeated or ask for it to be asked in a different way.
- You may be asked to expand on your answers, if the assessor needs more information to demonstrate your knowledge or competence.



## FAQs

### Q: Who can I speak to if I have a query about my assessment or booking an assessment?

**A:** All assessment enquiries must be made directly to the centre of your choice from the list of NET licenced Centres.

### Q: If the centre I contact has a waiting time for assessment availability, can I go to another centre?

**A:** Yes - candidates are free to book with any assessment centre. Please bear in mind that selecting an alternative centre located further away may incur additional travel or accommodation costs.

### Q: How can I book an assessment re-sit?

**A:** You can re-sit your assessment at the centre where you sat it initially - or any other centre of your choice. Please contact the centre directly to arrange.

### Q: Is there any preparation I can do prior to taking my assessment?

**A:** Unless otherwise specified, before registering for an assessment the Candidate Self-Assessment Checklist must be completed and signed by you as the candidate, your employer and your training provider (unless you are an independent candidate).

Candidates are advised to read and understand all information documents before booking an assessment. We also recommend that candidates are familiar with the IET On-Site Guide and BS7671 publications.

### Q: I have not received my results. Where can I enquire?

**A:** Please note that NET cannot provide candidate results over the phone. To enquire about assessment results, please contact your chosen assessment centre. Most issues surrounding the non-receipt of results arise because of incorrect email addresses being provided at the point of booking.

If your centre experiences technical problems during the assessment process, they must raise a query with NET's IT support and will contact you with an update once the matter has been resolved.

### Q: I've received my results and wish to query the marks I've been given. How do I go about this?

**A:** Please contact your chosen assessment centre directly. If you are not satisfied with the assessment outcome and believe that you have grounds for an appeal, please see the NET appeals policy.

### Q: How much does an assessment or re-sit cost?

**A:** Please contact your assessment centre directly to enquire about their fees.

### Q: How do I obtain a replacement or duplicate certificate?

**A:** To request a replacement certificate, please download our replacement certificate form This must be completed and returned (including payment) to the address given on the form. We aim to process certificate requests within one week.

## Contacting NET

### National Electrotechnical Training

NET, CAN Mezzanine, 49-51 East Road, London N1 6AH

**T:** 020 7250 8511 **E:** [info@netservices.org.uk](mailto:info@netservices.org.uk) **www.netservices.org.uk**

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