



# EAS 2020

How this impacts Members and  
electrotechnical enterprises



Excellence in Electrotechnical  
& Engineering Services

[www.eca.co.uk](http://www.eca.co.uk)

ECA Technical Team

# Agenda

- What is the EAS?
- What are the key changes?
- Your assessment
- Summary
- Q&A

EAS, what is it?

# THE EAS 2020 IS HERE



[www.eca.co.uk](http://www.eca.co.uk)

ECA Technical Team

# EAS – What is it?

- The EAS is the electrotechnical assessment specification
- It is the core document for bodies assessing electrotechnical enterprises
- Essentially it is the base minimum for what companies on schemes must have, including ECA



**ELECTROTECHNICAL ASSESSMENT SPECIFICATION  
FOR USE BY CERTIFICATION AND REGISTRATION BODIES**

NOTE: This EAS (January 2020) replaces the previous EAS (July 2015) and is effective from 1<sup>st</sup> September 2020.

EAS 21-478

**ELECTROTECHNICAL ASSESSMENT SPECIFICATION FOR  
USE BY CERTIFICATION AND REGISTRATION BODIES**

NOTE: This EAS (October 2021) replaces the previous EAS (January 2020)

# EAS – What is it?

- It is freely available from
- <https://electrical.theiet.org/bs-7671/building-regulations/electrotechnical-assessment-specification/>
- It is worth obtaining a copy for you and your employees
- There have been several versions in the past and it is constantly being reviewed

*This is one of the biggest reviews and increases the requirements for enterprises. This should be seen as a positive as we have had too much dross coming in to the industry for too long*

# EAS – When did it change?

- This version came into effect 1<sup>st</sup> September 2020
- New enterprises have to be assessed to this specification from this date on
- There are additional requirements in the specification for 2021, so please keep up to date with future changes too
- As seen, there has been a short update in October 2021 too

# EAS – Why is compliance importance?

- All enterprises will be assessed against the same criteria, whoever they are registered with
- Non-compliances will impact the outcome
- This could reduce the intervals between your assessment, or even result in a re-visit
- Therefore it is in your interest to ensure you comply with the requirements

What are the key changes?

# CHANGES AND UPDATES



# EAS – What are the key changes?

- Many minor updates
- Some major changes to what an enterprise needs
- New qualification entry requirements
- More documentation
- Ultimately it is a move in the right direction. Members have complained for years about low quality entries and poor firms, now this will stop
- Let's look at the major changes

# EAS – Documentation?

- For the assessment the enterprise shall have documents going back **6 years** to hand including, specifications, certificates, complaints, H&S information, calibration certs etc. where relevant
- They need to have a copy of GS38, a free HSE guide to test equipment
- This is in addition to the usual books
  - BS 7671
  - EaWR
  - Possibly Approved Document P



# EAS – Competence

- EAS 2020 places a new requirement on enterprises to ensure competence and adequate supervision of individuals takes place
- This is a big change for many firms

## 16. RECORDS

16.1 The *Assessed Enterprise* shall be required to hold the following records as appropriate to the range, scale, geographical spread and categories of the *Electrotechnical work* undertaken.

Records:-

16.1.1 of all *Electrotechnical work* carried out together with the specifications, drawings, certificates, reports and other relevant documents relating to that work for a minimum period of 6 years, or as otherwise contractually required

16.1.2 demonstrating the accuracy and consistency of test instruments held or hired (Section 9 and Appendix 3)

16.1.3 demonstrating that all *Employed Persons* are competent and/or adequately supervised to undertake *Electrotechnical work* in accordance with Appendix 11

16.1.4 of all complaints received over the previous 6 years about the technical standard, safety and *Functionality of Electrotechnical work*, and details of actions taken to resolve the complaints

16.1.5 of relevant qualifications, training (including Continuous Professional Development) and experience

# EAS – Competence

- The enterprise is to ensure that all employed persons (full or part time or sub-contract) are suitably qualified for their roles
- This is to be documented and maintained
- An example matrix is in the EAS on how to do this
- Additional note to check on CPD too, where relevant
- ECA have a solution for this

Operative Level	Guidance
<b>Level 1</b>	Operatives would be <i>Instructed persons (electrically)</i> who would generally be apprentices, labourers, electrician's mates or electrical improvers – and who under the supervision of a <i>skilled person (electrically)</i> , could be able to install wiring systems. Others that fall within this category are career changers who may have training and/or qualifications but lack experience.
<b>Level 2</b>	Operatives would be <i>Instructed persons (electrically)</i> who are experienced, trusted electrical installers who can carry out Electrotechnical work efficiently and in accordance with the current BS 7671 and Building Regulations/Standards and can therefore be expected mostly to work without the need of close and detailed supervision.
<b>Level 3</b>	Operatives would be considered as <i>Skilled persons (electrically)</i> who possess practical, theoretical and electrical engineering skills, experience and knowledge with adequate technical supervisory experience comparable to that of QS.

**Table 2 Degree of Risk in the Electrotechnical Work covered by BS 7671**

Installation Work Examples (Note: The Enterprise will be responsible for judging the degree of risk, this table is provided for Guidance)	Degree of Risk
Electrical work where the installation is isolated when not under the control of the installer e.g. <ul style="list-style-type: none"> <li>• First fix <i>Electrotechnical work</i>.</li> <li>• Second fix <i>Electrotechnical work</i>.</li> </ul>	<b>Low</b>
Electrical work defined as Minor Works in an unoccupied building – subject to safe isolation procedures documented and implemented	<b>Low</b>
Electrical work defined as Minor Works in an occupied building – subject to safe isolation procedures documented and implemented	<b>Medium</b>
All other <i>Electrotechnical work</i> whether or not it is subject to safe isolation procedures.	<b>High</b>
Electrical work – Periodic Inspection and Testing	<b>High</b>

**Table 3 Risk Matrix**

Level of Operative Appointed (from Table 1)	Level 1 Operative ( <i>instructed person</i> : apprentice, improver, electrician's mate)			
	Level 2 Operative ( <i>instructed person</i> : experienced, trusted)			
	Level 3 Operative ( <i>skilled person</i> : equivalent to QS without role or qualification)			
		Low Risk	Medium Risk	High Risk
		Degree of Risk in the Installation (from Table 2)		

**Table 4 Degree of Supervision (based on the risk matrix in Table 3)**

Risk	Nature of Instruction to Operative	Minimum required Competence of a Skilled Person (electrically)	Involvement of QS on site
	Verbal	Satisfying the definition of a <i>Skilled Person (electrically)</i>	Remote
	Written		Periodic
	Written		Close and Detailed

\*It is recognised that the person responsible for carrying out the initial verification or periodic inspection, testing and certification of the installation may not be the registered QS. The person shall hold an appropriate qualification or be able to demonstrate equivalent competence.

- Members are able to access eCOMS, for free
- This is a new Member benefit exclusive to ECA
- It allows enterprises to record their staff and competence levels
- You can also store company documents, sound familiar?

The screenshot displays the eCOMS web application. The top navigation bar includes links for 'Home', 'Company', 'Operatives', 'Training Records', 'Documents', 'Observations', and 'Help'. The main content area is divided into two sections:

### Company Details

This section contains a form for entering company information. Fields include:

- Trading Contact Name (with a dropdown arrow)
- Contact Email (with a dropdown arrow)
- Contact Phone (with a dropdown arrow)
- Company Name (with a dropdown arrow)
- Address Line 1 (with a dropdown arrow)
- Address Line 2 (with a dropdown arrow)
- Address Line 3 (with a dropdown arrow)
- Postcode (with a dropdown arrow)
- County (with a dropdown arrow)
- Region (with a dropdown arrow)
- Identification Number (with a dropdown arrow)

### Current Operatives

This section displays a table of current operatives. The table has columns for First Name, Last Name, Reference No., Job Role, Work Role, Job Level, Employment, Supervision, Start Date, and Observation Due. There are three rows of data:

First Name	Last Name	Reference No.	Job Role	Work Role	Job Level	Employment	Supervision	Start Date	Observation Due
John	Smith	123456789	Non-electrical	Non-electrical	Level 2	Part-time	00	15/04/2021	
John	Smith	123456789	Qualified Supervisor	High	Level 3	Full-time	00	15/04/2021	
John	Smith	123456789	Qualified Supervisor	Medium	Level 2	Contractor	00	15/04/2021	

[www.eca.co.uk/ecoms](http://www.eca.co.uk/ecoms)

- This will help to ensure that adequate supervision has taken place and is ongoing
- It will also ensure compliance with EAS for their assessment
- This requirement will only grow and become more relevant so get on board now

The screenshot displays the eCOMS web application interface. The top navigation bar includes links for 'Home', 'Company', 'Operatives', 'Training Records', 'Documents', 'Observations', and 'Help'. The main content area is divided into two sections: 'Company Details' and 'Current Operatives'.

**Company Details**

Training Contact Name: [Text Field] Contact Email: [Text Field] Contact Phone: [Text Field]

Company Name: [Text Field] Address Line 1: [Text Field] Address Line 2: [Text Field] Address Line 3: [Text Field]

City: [Text Field] County: [Text Field] Postcode: [Text Field]

Website: [Text Field] Email: [Text Field] Phone: [Text Field]

**Current Operatives**

First Name	Last Name	Reference No.	Job Role	Work Role	Job Level	Employment	Supervisor	Start Date	Observation Due
John	Smith	123456789	Non-electrical	Non-electrical	Level 3	Part-time	15/04/2021	15/04/2021	
John	Smith	123456789	Qualified Supervisor	High	Level 3	Full-time	15/04/2021	15/04/2021	
John	Smith	123456789	Qualified Supervisor	Medium	Level 3	Contractor	15/04/2021	15/04/2021	

- You can use any solution you wish
- eCOMS is there, it is an option and it will meet the criteria
- It is also FREE and meets all EAS requirements for competence, and more
- Plus it helps to keep you updated on who does and can do what
- Speak to your Regional Manager

The screenshot displays the eCOMS web application interface. The top navigation bar includes links for 'Home', 'Company', 'Operatives', 'Training Records', 'Documents', 'Observations', and 'Help'. The main content area is divided into two sections: 'Company Details' and 'Current Operatives'.

**Company Details**

Fields include: Training Contact Name, Contact Email, Contact Phone, Company Name, Address Line 1, Address Line 2, Address Line 3, Name, County, Postcode, and Date.

**Current Operatives**

First Name	Last Name	Reference No.	Job Role	Work Risk	Job Level	Employment	Supervision	Start Date	Observation Due
John	Smith	123456789	Non-electrical	Non-electrical	Level 3	Part-time	00	15/04/2021	
John	Smith	123456789	Qualified Supervisor	High	Level 3	Full-time	00	15/04/2021	
John	Smith	123456789	Qualified Supervisor	Medium	Level 3	Contractor	00	15/04/2021	

[www.eca.co.uk/ecoms](http://www.eca.co.uk/ecoms)

# EAS – Insurance

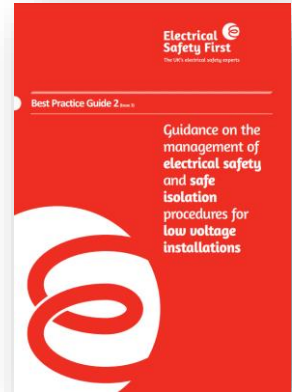
- Typically contractors need £2,000,000 public liability insurance
- Where required they also need employers liability insurance to suit
- New requirement to have **professional indemnity** insurance for a minimum of £250,000 if undertaking EICRs
- Please check your policy prior to assessment
  - Many contractors work outside of their insurances





# EAS – Safe isolation

- Firms shall demonstrate the ability to safely isolate systems
- ECA Members are also required to be able to demonstrate safe energisation
  - This is the opposite to safe isolation
  - Specific to the company as they all work in different scenarios, but the basic concepts are the same
- These must be documented in companies >5 employees
- Electrical safety first have a good guide to safe isolation – BPG2



# EAS – Safe isolation

- We all know how to do safe isolation as individuals but as an industry we are not great at this
- Too many people are injured or killed unnecessarily
- We all know the basics:
  - Lock off
  - Check the test equipment
  - Prove isolation
  - Re-check the test equipment
- This can take seconds, but can save lives

## ISOLATION PROCEDURE

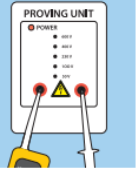
### Step 1

Check it is safe and acceptable (with the occupier/user) to isolate. If the isolator is an off-load device, remove the load. Open the means of isolation for the circuit(s) to be isolated and secure the isolating device in the open position with a lock or other suitable means.



### Step 2

Prove the correct operation of a suitable voltage detection instrument, see note (5), against a known voltage source, such as that illustrated.



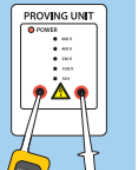
### Step 3

Using a voltage detection instrument, check that there is no dangerous voltage present on any circuit conductor to be worked on. It is important to confirm that conductors are not energised, for example, due to a wiring fault. Check terminal voltages between: (1) earth and line, (2) neutral and line (as shown) and (3) earth and neutral.



### Step 4

Prove the voltage detection instrument again against the known source to check that it was functioning correctly when the circuit(s) were tested for the presence of voltage.



## And NEVER rely on a volt stick!

### ISOLATION PROCEDURE

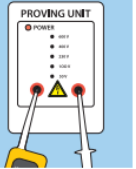
#### Step 1

Check it is safe and acceptable (with the occupier/user) to isolate. If the isolator is an off-load device, remove the load. Open the means of isolation for the circuit(s) to be isolated and secure the isolating device in the open position with a lock or other suitable means.



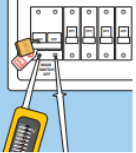
#### Step 2

Prove the correct operation of a suitable voltage detection instrument, see note (5), against a known voltage source, such as that illustrated.



#### Step 3

Using a voltage detection instrument, check that there is no dangerous voltage present on any circuit conductor to be worked on. It is important to confirm that conductors are not energised, for example, due to a wiring fault. Check terminal voltages between: (1) earth and line, (2) neutral and line (as shown) and (3) earth and neutral.



#### Step 4

Prove the voltage detection instrument again against the known source to check that it was functioning correctly when the circuit(s) were tested for the presence of voltage.

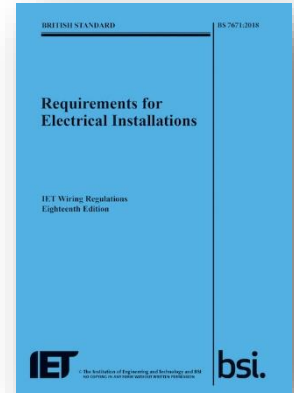


# EAS – Key personnel

- A Principal Duty Holder (PDH) and Qualified Supervisor (QS) are still vital
- The enterprise shall have sufficient QS's for the work they do
- QS does not need to be continually on site, but must manage the quality of the work
- If there are any changes to the QS, the PDH **must** notify the certification body within 30 days
- A replacement must be in place within 120 days
- Additional assessments and charges may be incurred

# EAS – Qualifications for **existing** QS's

- Any QS **must have an 18<sup>th</sup> edition qualification within 2 years of a change coming into effect**
- No longer can a QS simply demonstrate an understanding of the 18<sup>th</sup> edition
- Some ECA Members may not currently be able to meet this, so worth checking to see what the options are in terms of training centres and providers



# EAS – Qualifications for **new** QS's

- The qualifications are an increase on previous editions, this could be seen as a barrier but for us it is ideal
- ECA have been wanting higher standards for years, now we have it
- No more short course entries applying to the industry
- Inspection and Testing qualifications are also increased for new applicants/new QS's

# EAS – Qualifications for new QS's

**Table 4A Overview of Applicable Minimum Technical Competence Requirements by Work Category**

Work Category*	Underpinning Core Technical Competence		Wiring Regulations	Initial Verification	Periodic Inspection and Testing
	Dwellings	All			
<b>A1 Electrical installations up to and including 1000V AC or 1500V DC</b>	<b>Table 4B</b>	<b>Table 4C</b>	<b>Table 4D</b>	<b>Table 4E</b>	<b>Table 4F</b>
A1.1 Dwellings (BS 7671)	✓	✓	✓	✓	-
A1.2 Other than Dwellings (BS 7671)	-	✓	✓	✓	✓
A1.3 Temporary electrical systems (BS 7909)	-	✓	✓	✓	✓
A1.4 Dwellings - defined scope (BS 7671)	✓	✓	✓	✓	-
<b>A2 Periodic inspection and testing</b>					
A2.1 Dwellings (BS 7671)	-	✓	✓	-	✓
A2.2 Other than Dwellings (BS 7671)	-	✓	✓	-	✓

*\*For full details of the scope of the work categories above refer to Appendix 1*

# EAS – Qualifications for new QS's

**Table 4C Underpinning Core Technical Competence, all Electrotechnical Work**

Route	Recognised Qualifications or Equivalent
1	Level 3 Electrotechnical apprenticeship, incorporating end point assessment of competence
2	Industry-approved apprenticeship, recognised historical industry qualifications and / or certificates of competence (refer to EAS Qualifications Guide)
3	Mature candidate assessment via the Recognition of Prior Experience and Learning (RPEL)

Table ref	Purpose	Qualification
4D	Wiring Regulations*	Level 3 Award in the Requirements for Electrical Installations: BS 7671 (as amended)
4E	Initial Verification*	Level 3 Award in the Initial Verification of Electrical Installations
4F	Periodic Inspection*	Level 3 Award in the Periodic Inspection and Testing of Electrical Installations

**Table 4A Overview of Applicable Minimum Technical Competence Requirements by Work Category**

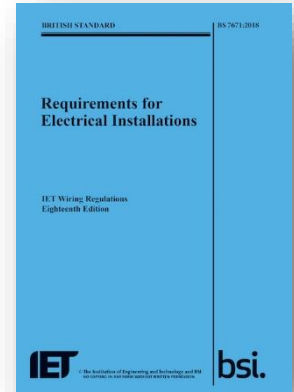
Work Category*	Underpinning Core Technical Competence		Wiring Regulation	Initial Verification	Periodic Inspection and Testing		
	Dwellings	All	Table 4B	Table 4C	Table 4D	Table 4E	Table 4F
A1 Electrical installations up to and including 1000V AC or 1500V DC							
A1.1 Dwellings (BS 7671)	✓	✓	✓	✓	✓	✓	✓
A1.2 Other than Dwellings (BS 7671)	-	✓	✓	✓	✓	✓	✓
A1.3 Temporary electrical systems (BS 7668)	-	✓	✓	✓	✓	✓	✓
A1.4 Dwellings - defined scope (BS 7671)	✓	✓	✓	✓	✓	✓	✓
A2 Periodic inspection and testing	-	✓	✓	✓	✓	✓	✓
A2.1 Dwellings (BS 7671)	-	✓	✓	✓	✓	✓	✓
A2.2 Other than Dwellings (BS 7671)	-	✓	✓	✓	✓	✓	✓

\*For full details of the scope of the work categories above refer to Appendix 1



# EAS – Qualifications, what you need to do

- Ensure that existing QS's have the 18<sup>th</sup> edition
- Ensure that any new QS's meet the criteria for the EAS, including apprenticeship, training and CPD
- Inform the Certification Body of any changes to key personnel within the business ASAP



How will this change the assessment?

# YOUR ASSESSMENT



[www.eca.co.uk](http://www.eca.co.uk)

ECA Technical Team

# EAS – Assessments

- For many years enterprises have been assessed in a similar manner
- With these changes to EAS you will start to notice a change in your assessment



# EAS – Assessments

- Please ensure that you read the checklist prior to your new assessment
- Make sure you have every element covered
- If you are in doubt, check. Better to ask than to fall down on the day



# EAS – Assessments

- For many these changes will be minor
- But assessment of competence may be a big change for some
- You may need to allow some additional time to prepare for your next assessment



What this means for you

# SUMMARY



[www.eca.co.uk](http://www.eca.co.uk)

ECA Technical Team

# EAS – For you

- Be aware of how changes impact you and your business
- Any departures on assessment may impact your outcome
- So worth being aware of the potential pitfalls before the assessor arrives
- Ensure all QS's have the 18<sup>th</sup> edition qualification
- Any new QS's are to meet the new requirements – check on C&G 2391 etc.
- Make sure back office and paperwork is up to date

# EAS – For you

- Download the EAS 2020 document and the guide to qualifications
- Ensure you have the right insurances in place
- Check out eCOMS for a significant Member benefit – speak to your RM about this to ask for a free demo
- This is a great thing for industry and will increase standards
- This is just an overview, other elements may also apply



# EAS – Links

- EAS 2020 and qualifications guide
  - <https://electrical.theiet.org/bs-7671/building-regulations/electrotechnical-assessment-specification/>
- GS 38
  - <https://www.hse.gov.uk/pubns/books/g38.htm>
- BPG 2 and safe isolation guide
  - <https://www.electricalsafetyfirst.org.uk/professional-resources/best-practice-guides/>
  - <https://dms.niceic.com/0000002378.pdf>
- ECOMS (for Members)
  - [www.eca.co.uk/ecoms](http://www.eca.co.uk/ecoms)

# Questions?

