

# Compass Group (UK and Ireland) Ltd

# **Electrical Systems Operational Policy**

Owner: Peter Priday

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# **Version Control**

Version Number	Implementation Date	Review Date	Amendments
1.0	November 2015	November 2017	New Site-Specific Policies
2.0	April 2017	April 2018	Trading Name Changed to Compass Group.  Group Policy, Site Specificity Removed.
2.1	April 2018	April 2020	Spelling and Grammatical Corrections
2.2	April 2020	April 2022	Spelling and Grammatical Corrections 3.7.1 Amendment to Level 3 Competent Person Description
2.3	March 2022	April 2024	Font Changed to Arial Spelling and Grammatical Corrections Introduction of Designated Person Contract Manager designation changed to Operations Manager Change in frequency of RCD Testing from 3 Monthly to 6 Monthly Inclusion of In-Service Inspection and Test of Electrical Equipment in Maintenance Section
2.4	August 2024	August 2027	Grammatical amendments made to the Policy Statement Designated Person designation changed to Technical Authority Inclusion of the Authorised Signatory and Authority to Work Safety Revision of Authorising Engineers responsibilities 4.1.5 Revision of Control of Safety Locks and Keys 4.1.9 Revision of text General Definitions moved to Appendix 4

Technical Authority Peter Priday



# **Contents**

# **Part 1 Policy Statement**

#### **Part 2 Definitions**

- 2.1 Definitions of Personnel
- 2.2 Definitions of Safety Documentation
- 2.3 Definitions of Safety Signs

# Part 3 Responsibilities

- 3.1 General Responsibilities
- 3.2 Duty Holder (DH)
- 3.3 Technical Authority (TA)
- 3.4 Operations Manager (OM)
- 3.5 Co-Ordinating Authorising Engineer (CAE)
- 3.6 Authorising Engineer (AE)
- 3.7 Authorised Person (AP)
- 3.8 Authorised Signatory (AS)
- 3.9 Competent Person (CP)
- 3.10 Accompanying Safety Person (ASP)

# **Part 4 Safety Arrangements**

**4.1 Electrical Systems Safety Arrangements** 

#### **Part 5 Maintenance and Inspection**

5.1 Maintenance and Inspection of Electrical Systems and Equipment

#### **Part 6 Training and Competency**

6.1 General

#### Part 7 Monitoring and Review of Electrical Systems Safety Processes

- 7.1 Technical Authority Review of the Operational Policy and Safety Rules
- 7.2 Authorising Engineers Audit of Authorised Persons and Safe Systems

#### **Appendices**

**A4 General Definitions** 

A2 Signage

A3 Not Used

**A4 General Definitions** 



# **Part 1 Policy Statement**

Compass Group (UK & Ireland) Ltd (hereafter referred to as Compass Group) is committed to:

- implementing this policy.
- ensuring all electrical systems are managed without giving rise to danger.
- providing procedures for the safe operation and maintenance of electrical systems.
- monitoring this policy to ensure its effectiveness.

This policy has been created for the protection of those persons whose employment involves them operating or working on electrical systems and equipment controlled by Compass Group and any person likely to be affected by the activities of Compass Group employees.

This policy is in accordance with the requirements of:

- The Health and Safety at Work Act 1974
- The Electricity at Work Regulations
- The Electricity Safety, Quality and Continuity Regulations
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
- Workplace (Health, Safety and Welfare) Regulations
- Compass Safety Rules and Procedures for High Voltage Systems SRP01
- Compass Safety Rules and Procedures for Low Voltage Systems SRP03
- Ministry of Defence JSP 375
- Department of Health HTM 06-02 and 06 03

It is the duty of all persons, who may be concerned with the operation of, or work upon electrical systems and equipment to:

- Comply with this Safety Policy.
- Be conversant with all legislation governing the work they are called upon to undertake.
- Be conversant with the Safety Rules employed on the system they are called to work upon.

Only employees with the appropriate knowledge, skills and training will be authorised or instructed to work on electrical systems.

All work on electrical systems will be carried out in accordance with The Electricity at Work Regulations 1989 and the Compass Group Safety Rules and Procedures for High Voltage Systems, Compass Group Safety Rules and Procedures for Low Voltage Systems, HTM 06-02, HTM 06-03 or JSP 375 as appropriate (hereafter referred to as the Safety Rules).

Where it is appropriate, safety training and instruction will be given.



# **Part 2 Definitions**

#### 2.1 Definitions of Personnel

#### 2.1.1 Duty Holder (DH)

The Duty Holder is a person on whom Health and Safety Legislation imposes a duty in connection with safety.

#### 2.1.2 Technical Authority (TA)

A person appointed, in writing by the Duty Holder to take responsibility for the creation and update of the Compass Group Operational Policy for Electrical Systems and Safety Rules.

#### 2.1.3 Operations Manager (OM)

The Operations Manager is defined as the person in the organisation, who is accountable for the maintenance of the premises.

#### 2.1.4 Co-Ordinating Authorising Engineer (CAE)

The Co-Ordinating Authorising Engineer is appointed in writing by the Duty Holder to take responsibility for the overall management of the Safety Rules and assignment of Authorising Engineers. The person appointed should possess the necessary degree of independence from local management to agree actions as required.

#### 2.1.5 Authorising Engineer (AE)

An Authorising Engineer is appointed in writing by the Duty Holder on the recommendation of the Co-Ordinating Authorising Engineer to take responsibility for the effective management of the Safety Rules. The person appointed should possess the necessary degree of independence from local management to take action within the Safety Rules as required.

#### 2.1.6 Authorised Person (AP)

An Authorised Person is appointed in writing by the Operations Manager on the recommendation of the Authorising Engineer in accordance with the Safety Rules and Procedures and is responsible for the implementation and operation of the Safety Rules with regard to work on, or the testing of, defined electrical equipment.

#### 2.1.7 Authorised Signatory (AS)

An Authorised Signatory is appointed in writing by the Duty Holder to take responsibility for the issue or approval of the issue of an Authority to Work for low and medium risk work activities.

#### 2.1.8 Competent Person (CP)

A Competent Person is appointed in writing by the Operations Manager on the recommendation of an Authorised Person for defined work. They must possess the necessary technical knowledge, skills, and experience relevant to the nature of the work to be undertaken, and be able to prevent danger or, where appropriate, injury.

#### 2.1.9 Accompanying Safety Person (ASP)

An Accompanying Safety Person is a person not involved in the work or test who has received training in emergency first-aid for electric shock and who has adequate knowledge, experience,



and the ability to avoid danger, keep watch, prevent interruption, apply first aid, and summon help.

The person is to be familiar with the system or installation being worked on or tested and is to have been instructed on the action to be taken to safely rescue a person in the event of an accident.

# 2.2 Definitions of Safety Documents

#### 2.2.1 Limitation-of-Access

This is a Safety Document, signed and issued by an Authorised Person to allow access to areas under their control. It clearly states the area that can be accessed and the actions that can be undertaken under the Document. It is not to be used to authorise works on Electrical Systems.

#### 2.2.2 Minor Electrical Isolation Certificate

This is a Safety Document, completed by The Duty Authorised Person (LV) or a Level 3 Competent Person (LV) when they have completed a Simple Isolation for a Third Party.

#### 2.2.3 Permit-to-Work

This is a Safety Document, for use on electrical systems or equipment made dead. It is signed and issued by The Duty Authorised Person, to the Competent Person in charge of work to be carried out. It defines the scope of the work to be undertaken and makes known exactly what equipment is isolated from all live circuit conductors. The template for the Permit to Work on Low Voltage Systems is shown in Appendix 1.1.

#### 2.2.4 Switching Schedule

A written programme produced by an Authorised Person setting out the sequence of operations to be followed before a Permit-to-Work is issued. The programme is to be countersigned by another Authorised Person appointed for the system or the Authorising Engineer.

#### 2.2.5 Sanction to Work On or Near Live Conductors

This is a Safety Document, for use on Low Voltage Systems Only. It is signed and issued by The Duty Authorised Person to the Competent Person in charge of the work to be carried out live. It states clearly, what equipment can be worked on with details of the work to be undertaken live, what safety equipment is to be used, and the safety precautions to be taken.

#### 2.2.6 Specific Written Instructions

This is the Safety Document, used when a Duty Authorised Person needs a specific operation to be completed on a system or in an area under their control. For instance, the operation of Switchgear.

#### 2.2.7 Standing Instructions

This is the Safety Document, used when regular entry is needed to an area and no intrusive work on the system is to take place. For instance, when carrying out Meter Readings.

#### 2.2.8 Working On or Near Live Conductors Assessment

A written assessment produced by an Authorised Person setting out the reasons for Live Working being unavoidable and safety precautions that will be in place before a Sanction to Work On or

6



Near Live Conductors is issued. The assessment is to be approved, in writing by the Authorising Engineer before the Sanction is issued.

#### 2.2.9 Authority to Work

This is a safety document, issued for low or medium risk tasks conducted by third party contractors. It is signed and issued on the authority of The Authorised Signatory, to the Competent Person in charge of work to be carried out. The template for the Authority to Work is shown in Appendix 1.2.

The full range of Model Safety Documents can be found in the Safety Rules and Procedures for High and Low Voltage Systems

# 2.3 Definitions of Safety Signs

#### 2.3.1 Caution Sign

This is a temporary, non-metallic sign (as per Appendix 2.1), bearing the words "caution" and "do not attempt to remove" which is to be secured at a point of isolation by the Duty Authorised Person.

# 2.3.2 Danger Sign

This sign is a temporary, non-metallic sign (as per Appendix 2.2), bearing the words "danger" "electrical hazard". It is to be displayed where there is live equipment adjacent to a point of work, or on the approaches to an area where Live Working is being undertaken.

#### 2.3.3 Point of Work Sign

This sign is a temporary, non-metallic sign (as per Appendix 2.3), bearing the words "Point of Work". It is to be displayed by the Duty Authorised Person to positively identify the Point of Work to the Competent Person.

#### 2.3.4 Isolation Sign (Personal)

This is a temporary, non-metallic sign (as per Appendix 2.4), bearing the words "warning equipment locked off for maintenance" and displaying the photograph of the Competent Person. Which is to be secured at a point of isolation for their own safety by a Level 2 or 3 Competent Person (LV).

#### 2.3.5 Isolation Sign (Controlled)

This is a temporary, non-metallic sign (as per Appendix 2.5), bearing the words "caution – isolated for safety" and "do not attempt to remove". Which is to be secured at a point of isolation by a Level 3 Competent Person (LV).

#### 2.3.6 Sub-Station and Switchroom Signs

These are permanent signs, (as per Appendix 2.6), identifying the Sub-Stations and Switchrooms by name or designation, and bearing appropriate warnings

#### 2.3.7 Warning Signs

These are permanent signs, (as per Appendix 2.7), indicating the presence of an electrical hazard within an area or enclosure.



# Part 3 Responsibilities

# 3.1 General Responsibilities

#### 3.1.1 Compass Group Management

It is the responsibility of Compass Group Management to ensure that arrangements are in place to enable contracts to comply with all relevant Statutes, Compass Group Policies and Safety Rules. Specific responsibilities with regards electrical systems are outlined in Parts 3.2 to 3.4

#### 3.1.2 Compass Group Staff

It is the responsibility of all employees to comply with the management arrangements put in place for statutory compliance. Only Authorised or Competent Persons with a valid Certificate of Appointment or Safety Documentation are to carry out works on the electrical systems. Specific responsibilities for Authorised and Competent Persons are outlined in Parts 3.5 to 3.10.

#### 3.1.3 Contractors Working for Compass Group

It is the responsibility of all contractors to comply with the management arrangements put in place for statutory compliance. Only contractors in possession of a valid Safety Document or Competent Persons Certificate and/or Authority to Work are to carry out works on the electrical systems. Specific responsibilities are outlined in Parts 3.9, 3.10 and 4.1.

# 3.2 Duty Holder (DH)

#### 3.2.1 General

The Duty Holder is responsible for ensuring the Management Structure including the Operations Managers and Authorising Engineers have sufficient resources and the authority necessary to ensure that the electrical systems under the control of Compass Group comply with the requirements of all relevant legislation.

#### 3.2.2 Appointment of The Technical Authority

The Duty Holder is responsible for appointing in writing a Technical Authority to produce and update the Compass Group Electrical Systems Operational Policy and Safety Rules

#### 3.2.3 Appointment of a Co-Ordinating Authorising Engineer

The Duty Holder is responsible for appointing in writing a Co-Ordinating Authorising Engineer to take responsibility for the overall management of the Safety Rules. The Co-Ordinating Authorising Engineer may be directly employed or sub-contractor, but in either case must be independent from the Site Management Structure.

#### 3.5.4 Appointment of Authorising Engineers

The Duty Holder is responsible for appointing in writing adequate numbers of Authorising Engineers to take responsibility for the effective management of the Safety Rules. The Authorising Engineers may be directly employed or sub-contractor, but in either case must be independent from the Site Management Structure.



#### 3.2.5 Appointment of Authorised Signatories

The Duty Holder is responsible for appointing in writing adequate numbers of Authorised Signatories to effectively implement the Authority to Work process.

# 3.3 Technical Authority (TA)

#### 3.3.1 General

The Technical Authority is responsible for the production of the Compass Group Electrical Systems Operational Policy and the Safety Rules and Procedures for High Voltage and Low Voltage Systems.

The Technical Authority is to ensure that the Compass Group Electrical Systems Operational Policy and Safety Rules are maintained and updated to ensure compliance with current legislation and where appropriate industry best practice.

The Technical Authority is to liaise with the Co-Ordinating Authorising Engineer to ensure that Compass Group Electrical Systems Operational Policy and Safety Rules are suitable and sufficient for all electrical activities and systems for which Compass Group has responsibility.

# 3.4 Operations Manager (OM)

#### 3.4.1 General

Operations Managers have, under the requirements of the Health and Safety at Work Act 1974 and subsequent Regulations, a duty to ensure that so far as is reasonably practicable the following are adhered to:

- a) Provision of adequate information, supervision, and instruction to ensure that work with electrical systems can be carried out safely.
- b) Provision of a safe place of work, including adequate working space, access, and lighting.
- c) The design and purchase of new equipment and extensions or modifications to existing electrical systems shall be carried out by persons with the appropriate technical knowledge, experience and understanding of current regulations, and the requirements of the relevant safety guidance.
- d) All items of Electrical Equipment shall be selected to take account of the environment in which they are to be installed / used.
- e) All new electrical installation work shall be inspected and tested prior to handover or putting into service.
- f) All electrical systems equipment shall be clearly labelled for identification purposes.



- g) Schematics and plans shall be maintained to provide a comprehensive record of all electrical systems, and arrangements shall exist for updating following systems modifications.
- h) All electrical systems shall be periodically inspected and tested, and appropriate records maintained.
- i) All electrical systems shall be maintained as appropriate to prevent danger so far as is reasonably practicable.

#### 3.4.2 Appointment of Authorised Person

The Operations Manager is responsible for appointing in writing adequate numbers of Authorised Persons to effectively implement and operate the Safety Rules and Procedures with regard to work on, or the testing of, defined electrical equipment. These appointments will be endorsed by the Authorising Engineer.

#### 3.4.3 Appointment of Competent Persons

The Operations Manager is responsible for appointing in writing adequate numbers of Competent Persons to work on, or the carry out testing of, defined electrical equipment. These appointments will be endorsed by the Authorised Person.

# 3.5 Co-Ordinating Authorising Engineer (CAE)

#### 3.5.1 General

The Co-Ordinating Authorising Engineer is responsible for overall management and review of the Safety Rules. They are also responsible for ensuring that Authorising Engineers are informed of any changes in legislation or operational restrictions.

#### 3.5.2 Endorsement of Authorising Engineers

The Co-Ordinating Authorising Engineer is responsible for endorsing the appointment of Authorising Engineers to take responsibility for the effective management of the Safety Rules. The Authorising Engineers may be directly employed or sub-contractor, but in either case must be independent from the Site Management Structure.

#### 3.5.3 Audit of Authorising Engineers

The Co-Ordinating Authorising Engineer is responsible for the annual audit of all Authorising Engineers to ensure their continued suitability for the role.

# 3.6 Authorising Engineer (AE)

#### 3.6.1 General

The Authorising Engineer is responsible for advising and providing guidance to The Operations Manager and Authorised Persons on electrical safety and relevant legislation. They are also responsible for notifying the Operations Manager and Authorised Persons of any defect reports or operational restrictions relating to the electrical equipment on site.



In the event of a Breach of the Safety Rules and Procedures; or following an incident involving any electrical equipment, system, or installation. The Authorising Engineer is responsible for assisting in any investigation.

#### 3.6.2 Management of Safety Rules and Procedures

The Authorising Engineer is responsible for the implementation and administration of the Safety Rules and Procedures for Electrical Systems. They shall also be responsible for agreeing, in writing any local deviation from the Safety Rules and Procedures and ensuring that any amendments are brought to the attention of The Operations Manager and Authorised Persons.

#### 3.6.3 Produce a Demarcation Agreement

The Authorising Engineer is responsible for the producing, where required, a Demarcation Document that clearly outlines the extent of the Electrical Systems for which Compass Group has responsibility. It should also outline the extent of the Electrical Systems which are solely controlled by the Authorised Person and the parts of the system for which a certificated Competent Person may have control.

#### 3.6.4 Endorsement of Authorised Persons Appointments

The Authorising Engineer is to endorse the appointment or re-appointment of Authorised Persons. This endorsement will follow an interview and assessment, following which the Authorising Engineer should be satisfied that the prospective Authorised Person meets the qualifications and requirements of The Safety Rules and Procedures.

If necessary, the Authorising Engineer may suspend, at any time, the appointment of an Authorised Person by withdrawing their Certificate of Appointment. The Authorising Engineer is to report to the Operations Manager and or Duty Holder, any deficiency in the number of suitably trained and experienced Authorised Persons that significantly impairs the ability of Compass Group to provide a safe and effective service.

#### 3.6.5 Audit of Authorised Persons Appointments

The Authorising Engineer shall audit the performance and record the operational experience of each Authorised Person at twelve monthly intervals. Following the audit The Authorising Engineer will produce a written report highlighting any actions required.

# 3.7 Authorised Person (AP)

#### 3.7.1 General

The Authorised Person is responsible for advising the Operations Manager on matters of site electrical systems operation and safety. They are also responsible for notifying the Operations Manager and Authorising Engineer of any issues with regards electrical equipment on site.

More than one Authorised person can be appointed for a system or installation but, only one is to be on duty at any one time. Each transfer of responsibility between Authorised Persons is to be recorded in the Logbook. The name of the Duty Authorised Person is to be displayed at the Mimic Panel or Document Cabinet



#### 3.7.2 Implementation of Safety Rules

The Authorised Person is responsible for the practical implementation and operation of The Safety Rules for the systems and installations for which Compass Group has control of the danger and for which the Authorised Person has been appointed.

#### 3.7.3 Control of Works on Electrical Systems

The Duty Authorised Person is responsible for controlling all works on the site electrical systems and equipment. They will review and approve Task Risk Assessments and Method Statements before issuing the Safety Documentation required. They are also responsible for Proving or Confirming Dead any conductors exposed during the works, and for Conducting or Witnessing any Tests carried out upon completion of said works.

#### 3.7.4 Endorsement of Competent Persons Appointments

The Authorised Person is to endorse the appointment or re-appointment of Competent Persons for the site. This endorsement will follow an interview and assessment, following which the Authorised Person should be satisfied that the prospective Competent Person meets the qualifications and requirements of The Safety Rules.

If necessary, the Authorised Person may suspend, at any time, the appointment of a Competent Person by withdrawing their Certificate of Appointment. The Authorised Person should inform the Operations Manager and Authorising Engineer of any such suspension.

#### 3.7.5 Provision of Support and Guidance to Competent Persons

The Authorised Person shall, when required, provide Guidance and Support to Competent Persons with regards the task they are conduction or on any aspects of this Policy or the Safety Rules.

#### 3.7.6 Reporting

The Authorised Person shall report to the Operations Manager with regards to the operation and maintenance of the site electrical systems.

The Authorised Person shall report to the Authorising Engineer with regards any aspect of this Policy or the Safety Rules and Procedures.

The Authorised Person shall report immediately to the Operations Manager and Authorising Engineer; any defects found in electrical equipment, any dangerous occurrence, any dangerous practices observed in the course of his duties and the actions they have taken.

#### 3.8 Authorised Signatory (AS)

The Authorised Signatory is responsible for the practical implementation and operation of the Compass Group Authority to Work Process.

In operating the Authority to Work procedure for Electrical Works the Authorised Signatory's' duties include:

a) Be satisfied the Competent Person is clear about the work to be carried out and will provide adequate supervision.



- b) Go through Safe System of Work submitted by the Competent Person to ensure all the relevant points listed in the checklist have been adequately covered.
- c) Check that the specified precautions in the Safe System of Work are in place.
- d) Check if other "High Risk" Permits or Isolations apply e.g., service isolations.
- e) Liaise with Authorised Persons to ensure isolations are competed and High Risk Permits Prepared.
- f) Explain to the Competent Person any other activities that may impact on the work.
- g) Ensure the Competent Person understands the emergency procedures.
- h) Issue the Authority to Work as per the procedure and follow the cancellation procedure once the work is complete.

# 3.9 Competent Person (CP)

#### 3.9.1 General

The Competent Person is responsible for themselves and their work team conducting their activities in a safe manner, and that at all times, they work in accordance with relevant legislation, this policy and the safety rules.

The duties of Competent Person authorised by the issue of a Certificate of Appointment will be limited to those duties specified on the certificate. These certificated duties do not preclude the necessity for Safety Documentation as required by the Safety Rules.

There are 3 levels of Certificated Competent Persons (LV)

- Level 1: Certificated to work on electrical equipment which has been isolated and proved dead by an Authorised Person (LV) or Level 3 Competent Person (LV).
- Level 2: Certificated to work on electrical equipment which they have personally isolated and proved dead for their own safety.
- Level 3: Certificated to isolate and prove dead electrical equipment for their own safety or for the safety of a Third Party.

There is Only 1 Level of Certificated Competent Persons (HV) as all works on High Voltage Systems are conducted under permit to work.

A Competent Person authorised by the issue of a Safety Document may only undertake or supervise the work or test specified until the task is complete, the Competent Person has signed the clearance, and the Safety Document is cancelled by the Duty Authorised Person.

#### 3.9.2 Provision of Task Risk Assessments and Method Statements

The Competent Person or their Employer is responsible for producing Suitable and Sufficient Task Risk Assessments and Method Statements, before any task is conducted.



These Risk Assessments and Method Statements are to be reviewed by The Authorised Person and/or Authorised Signatory prior to any Safety Documentation being issued and the task commencing.

#### 3.9.3 Compliance with the Safety Rules

The Competent Person is responsible for conducting their activities in accordance with the Safety Rules. If for any reason they are unable to comply with the requirements of the Safety Rules they are to stop work, make the work area safe and inform the Duty Authorised Person.

#### 3.9.4 Reporting

The Competent Person shall report to the Duty Authorised Person any changes in the task they are undertaking which requires alteration of the Task Risk Assessment or Method Statement.

The Competent Person shall report immediately to the Duty Authorised Person; any defects found in electrical equipment, any dangerous occurrence, and the actions they have taken.

# 3.10 Accompanying Safety Person (ASP)

#### 3.10.1 General

The Accompanying Safety Person is responsible for controlling the Work Area and ensuring that the Competent Person and their Work Team are not put in danger by external influences or communication.

They must be able to react to emergency situations and know what actions to take.



# **Part 4 Safety Arrangements**

# 4.1 Electrical Systems Safety Arrangements

#### 4.1.1 General

It shall be the duty of all persons under the control of Compass Group to comply with this policy, associated safety rules, and all relevant legislation.

Only Competent Persons in receipt of a valid Certificates of Appointment or Safety Documentation shall carry out work on electrical systems and equipment.

The Duty Authorised Person shall control all works on the electrical systems and equipment.

#### 4.1.2 Hazard Identification and Area Risk Assessment

The Operational Management shall identify the hazards, including Electrical Systems, under their control. These hazards are to be laid out in the Contract Hazard and Risk Register. The latest version of this document is available from the Operational Management.

#### 4.1.3 Admittance to the Sub-Stations

Access to Sub-Stations under Compass Group control is controlled by the Authorised Person (HV).

Only persons escorted by the Duty Authorised Person (HV) or in Possession of valid Safety Documentation or Certification issued by the Duty Authorised Person (HV) shall be granted access to Sub-Stations.

#### 4.1.4 Admittance to the Switchrooms

Access to Switchrooms under Compass Group control is controlled by the Authorised Person (LV)

Only persons escorted by the Duty Authorised Person (LV) or in Possession of valid Safety Documentation or Certification issued by the Duty Authorised Person (LV) shall be granted access to Switchrooms.

Where Switchgear is accessible, the said Switchgear will be locked to prevent unauthorised operation. Where this is not practicable Warning Signs (Appendix 1g) will be posted to inform persons entering the area the need for authorisation to operate the Switchgear.

#### 4.1.5 Control of Safety Locks and Keys

Safety locks are coloured red and are to be used to secure Points of Isolation or Earthing. Each Safety Lock has a unique key and a means of identification.

When applied for a minor "Personal Isolation", the key for a Safety Lock will remain in the precession of the Authorised or Competent Person (Level 2 or 3) who applied the isolation.

When applied for a minor "Controlled Isolation", the key for a Safety Lock will be secured in a Key Safe only accessible by Authorised or Competent Persons (Level 2 or 3).



When applied for complex isolations, the Safety Lock Keys will be secured in a Safety Key Box in the procession of the Duty Authorised Person. The Safety Key Box has two locks each of which has only one key. One key held by the Authorised Person and the other by the Competent Person.

#### 4.1.6 Safety Documents

All persons working on Electrical Systems or Equipment must be in possession of a valid Certificate of Appointment and/or Safety Documentation from the Duty Authorised Person.

The following safety documents shall be used and issued by the Duty Authorised Person when it is required under the Safety Rules and Procedures:

- Limitation-of-Access.
- Minor Electrical Isolation Certificate
- Permit to Work.
- Sanction to Work on or Near Live Conductors.
- Specific Written Instruction
- Standing Instruction
- Working on or Near Live Conductors Assessment.

Full description on the use of these safety documents can be found in the Safety Rules and Procedures.

#### 4.1.7 Control of Contractors

All Contractors engaged by Compass Group, and undertaking electrical work, shall be approved by the National Inspection Council for Electrical Installation Contracting (NICEIC) or Electrical Contractors Association (ECA)

When approved contractors are required to carry out work on electrical systems or equipment, the following procedures shall be adopted:

- a) Contract specifications shall state the contractors shall be required to work in accordance with this Electrical Safety Policy, and the Safety Rules. Copies shall be sent to the contractor with the official order to do the work.
- b) The Contractor will provide Task Risk Assessments and Method Statements in advance of attendance to be reviewed and approved by the Authorised Signatory and Authorised Person.
- c) The Authorised Person shall determine the point(s) and complexity of the required isolation and earthing.
  - For simple isolations within the parts of the system for which a certificated Competent Person have control, an Authorised Person or Level 3 Competent Person shall complete the isolation and issue a Minor Isolation Certificate
  - For complex isolations or for isolations within the parts of the system controlled by the Authorised Person. The Authorised Person will complete a Safety



Programme, outlining the operations required to Isolate, Earth, and Prove or Confirm Dead the Point of Work. The Duty Authorised Person shall then complete the operations outlined in the Safety Programme.

- d) The Authorised Signatory shall issue an Authority to Work (ATW) to the contractor in respect of the work.
- e) Before the commencement of work on any electrical system the Authorised Person, shall specify the safety measures to be adopted by the contractor.
- f) The Authorised Person shall issue Safety Documentation to the contractor in respect of the work.
- g) The Authorised Person shall Prove or Confirm Dead any conductors exposed by the works.
- h) On completion of the electrical work the Contractor must provide any relevant "dead test" results.
- i) The Safety Documentation should then be cancelled.
- j) The Duty Authorised Person or Level 3 Competent Person shall reinstate the isolated supply or supplies.
- k) The Authorised Signatory shall cancel the Authority to Work (ATW) once the works are complete.
- The Contractor will provide relevant documentation such as service reports or test certificates.

#### 4.1.8 Operating Records

Accurate and up to date records will be kept in the following:

- Electrical Logbooks
- Operational File
- Operation and Maintenance Manuals
- CAFM System
- Building Drawing Records.

#### 4.1.9 Operational Restrictions.

An operational restriction is issued by the Authorising Engineer; it modifies the normal operating procedure for equipment.

On receipt of an operational restriction the Authorised Person should acknowledge receipt. The receipt shall be recorded in the LV logbook and signed by each Authorised Person.

#### 4.1.10 Working on Electrical Equipment made Dead

Unless approved by the Authorising Engineer, work shall be carried out on equipment or cables that have previously been made electrically dead.



The Point of Work shall be Isolated from all sources of Electrical Potential. Points of Isolation shall be secured using a Safety Lock and a Caution Sign. Safety Lock Keys are to be secured for the duration of the works.

If Possible, all isolated conductors shall be "Proved Dead" before the issue of Safety Documentation or Earths Applied via Switchgear. Where Proprietary Earths are required, the Conductors Must be Proved Dead before being earthed.

In all cases any conductors which are exposed during the works shall be "Confirmed Dead" by the Duty Authorised Person or Competent Person.

#### 4.1.11 Working or Testing on or Near Live Conductors

Any work or test carried out on or near live conductors must satisfy the requirements of Regulation 14 of the Electricity at Work Regulations 1989.

#### Regulation 14 States:

No person shall be engaged in any work activity on or so near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless:

- a) It is unreasonable in all the circumstances to be dead,
- b) It is reasonable in all circumstances to be at work on or near it whilst it is live,
- c) Suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury.

Any Request to Work or Test, On or Near Live Conductors where the last level of Basic Protection will require removal must be approved, in writing, by the Authorising Engineer.

Upon approval, and after all required controls are in place the Duty Authorised Person will issue a Certificate of Authorisation for Live Working.

Full details of the safety precautions and procedures required for Live Working can be found in the Safety Rules.

#### 4.1.12 Work on Cables

Before any work is commenced on any cable it shall be made dead, earthed (if HV) and either:

- Be positively identified by physically tracing from the Point of Work to a Point(s)
  of Isolation
- Be spiked by an Authorised Person using an approved type of cable spiking device.

#### 4.1.13 Underground cables

When excavation work is to take place under the control of Compass Group the Authorised Person will ensure the location of any underground cables is clearly marked before work begins.



#### 4.1.14 Temporary Electrical Installations

Temporary electrical installations shall be managed as follows:

- a) Temporary Electrical Installations shall conform to the safety standards of permanent installations.
- b) Temporary electrical installations shall be under the control of the Authorised Person. Such installations shall be inspected at intervals not exceeding 3 months.
- c) A register of all Temporary Electrical Installations shall be maintained by the Authorised Person.

#### 4.1.15 Circuit Identification

A Single Line Schematic shall be available to all Authorised and Competent Persons appointed for the System. This schematic will identify the HV and Major LV Cables, Switchgear and Distribution Boards indicating the Switchgear and Distribution Board Designations and the Cable Numbers.

Each Distribution Board shall have a Circuit Schedule displayed inside or adjacent to the board. This schedule will identify the final circuits supplied from the board indicating their use, cable size and protection rating.

#### 4.1.16 Emergency Resuscitation and First Aid

All persons working on the electrical systems or acting as Accompanying Safety Person must receive appropriate First Aid training.

#### 4.1.17 Display of Permanent Posters

Posters Displaying Extracts from The Electricity at Work Regulations, The Method or Treatment for Electric Shock and a Single Line Schematic of the electrical system will be displayed in all Sub-Stations and Switchrooms.

# 4.1.18 Portable Extinguishers

Only carbon dioxide (CO<sub>2</sub>) or dry powder extinguishers may be used near live electrical equipment.

#### 4.1.19 Injuries or Dangerous Occurrences

All injuries or dangerous occurrences must be reported to the Authorised Person, Authorising Engineer and the HSE Team. They will prepare a report under RIDDOR.

#### 4.1.20 Protective Equipment

Equipment provided to protect those working on or near electrical equipment must be:

- Suitable for its intended use.
- Maintained in good condition.
- · Properly used.



# **Part 5 Maintenance and Inspection**

# 5.1 Maintenance and Inspection of Electrical Systems and Equipment

#### 5.1.1 General

All Electrical Equipment shall be included on the site Asset Register. The assets on the register shall then be inputted into the site CAFM System or Maintenance Plan.

The CAFM System or Maintenance Plan will produce Planned Preventative Maintenance (PPM) Task Sheets for every maintenance activity for the assets.

#### 5.1.2 Guidance

The scope and frequency of Planned Preventative Maintenance on Electrical Systems and Equipment shall be based on a combination of Legislation, Supplier Recommendation, Contractual Requirements and Risk Assessment.

Therefore, the following is included in this policy as guidance only:

#### 5.1.3 High Voltage Switchgear, Transformers and Ancillaries

- HV Switchgear operated every 12 Months.
- HV Switchgear maintained every 24 Months.
- HV Circuit Breaker Protection tested every 12 Months.
- HV Transformers and Ancillaries maintained every 24 Months.

#### 5.1.4 Low Voltage Switchgear

- LV Switchgear operated every 12 Months.
- The Air Circuit Breakers (ACBs) maintained every 24 Months.
- Air Circuit Breaker Protection tested every 12 Months.
- LV Switches maintained every 24 Months.

#### 5.1.5 Earthing Systems

- HV Earthing Systems Inspected and Tested every 12 Months.
- LV Earthing Systems Inspected and Tested every 12 Months.

#### 5.1.6 Distribution Boards

- Distribution Board Thermal Imaging Survey every 6 Months.
- Distribution Boards maintained every 12 Months.
- Final Circuits tested every 60 Months.

#### 5.1.7 Residual Current Devices (RCDs and RCBOs)

- Residual Current Devices functionally tested every 6 Months.
- Residual Current Devices tested every 12 Months.

#### 5.1.8 Lightening Protection

• Lightening Protection Systems tested every 11 Months.



#### **5.1.9 Power Factor Correction**

• Power Factor Correction Systems tested every 12 Months.

#### 5.1.10 Standby Generators

- Generators visually checked every Week.
- Generators on-line tested every Month.
- Generators maintained every 6 Months.
- Generators load bank tested every 12 Months.
- Generators "black start" tested every 12 Months.

#### 5.1.11 UPS Systems

- UPS Systems visually inspected every Month.
- UPS Systems maintained every 3 Months.
- UPS System Batteries tested every 12 Months.
- UPS Systems load bank tested every 12 Months.

#### 5.1.12 In Service Inspection and Test of Electrical Equipment (PAT Testing)

- i. Formal Visual Inspection every 6 Months.
- ii. Combined Inspection and Test every 12 Months.



# Part 6 Training & Competency

#### 6.1 General

All Persons conducting or overseeing Electrical Systems Operations controlled by Compass Group will be Suitably Trained to conduct their role safely. Full details of the Training and Competency requirements can be found in the Compass Group Safety Rules and Procedures for High Voltage and Low Voltage Systems. However, the following table provides a guide as to the standards of training required for various Roles.

Authorising Engineer (HV)	(MS1) or equivalent, Authorising Engineer Training Course.  (AP15) or equivalent, Authorised Person (HV) Training Course.
Authorising Engineer (LV)	(MS1) or equivalent, Authorising Engineer Training Course.  (AP12) or equivalent, Authorised Person (LV) Training Course.
Authorised Person (HV)	(AP15) or equivalent, Authorised Person (HV) Training Course.
Authorised Person (LV)	(AP12) or equivalent, Authorised Person (LV) Training Course.
Competent Persons (HV / LV)	(C&G / BTech) EUSR, IET, NICEIC or ECA accredited training courses concomitant to the nature of the works undertaken.



# Part 7 Monitoring and Review of Electrical Systems Safety Processes

# 7.1 Technical Authority Review of the Safety Policy and Safety Rules

At intervals not exceeding 3 Years the Technical Authority will conduct, a Review of this Policy and the Compass Group Safety Rules and Procedures for High Voltage and Low Voltage Systems.

These reviews may include consultation with the Coordinating Authorising Engineer, and Authorising Engineers (HV and LV).

The reviewed documents will be submitted to the Duty Holder for approval and publication on the Compass Group HSE Website.

# 7.2 Authorising Engineers Audit of Authorised Persons and Safe Systems

Following acceptance and sign off of this operational policy and appointment of an Authorising Engineer or Authorised Person the Authorising Engineer must carry out a compliance audit.

The Audit will cover the following areas:

- Appointed Authorised Persons
- Appointed Competent Persons
- Site Logbook
- Operational File
- Completed Safety Documentation
- Compliance with the Safety Rules and Procedures
- Safety Equipment
- Sub-Stations
- Switchrooms
- Key Control

The Authorising Engineer shall produce a report following the audit, highlighting any deficiencies, and outlining an action plan. Any urgent deficiencies may be enforced with either a Practice Enforcement Notice or Suspension Notice.

These audits are to be repeated no less that every 12 Months.



# **APPENDICES**

# **Appendix 1 Safety Documentation**

- A1.1 Low Voltage Systems Permit to Work Template
- A1.2 Authority to Work Template

# Appendix 2 Signage

- A2.1 Model Caution Sign
- A2.2 Model Danger Sign
- A2.3 Model Point of Work Sign
- A2.4 Model Personal Isolation Sign
- A2.5 Model Controlled Isolation Sign
- A2.6 Model Sub-Station and Switchroom Signs
- A2.7 Model Warning Signs

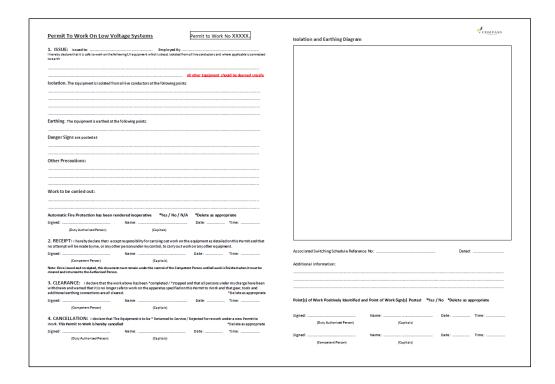
# Appendix 3 Not Used

**Appendix 4 General Definitions** 

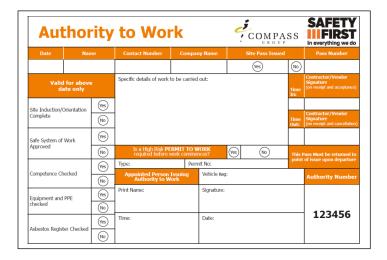


# **A1. Safety Documentation**

# A1.1 Low Voltage Systems Permit to Work Template



# A1.2 Authority to Work Template





# A2. Signage

# **A2.1 Model Caution Sign**



# A2.2 Model Danger Sign

# DANGER Live Electrical Hazard Electrical Equipment beyond this point is Live



# A2.3 Model Point of Work Sign



# A2.4 Model Isolation Sign (Personal)

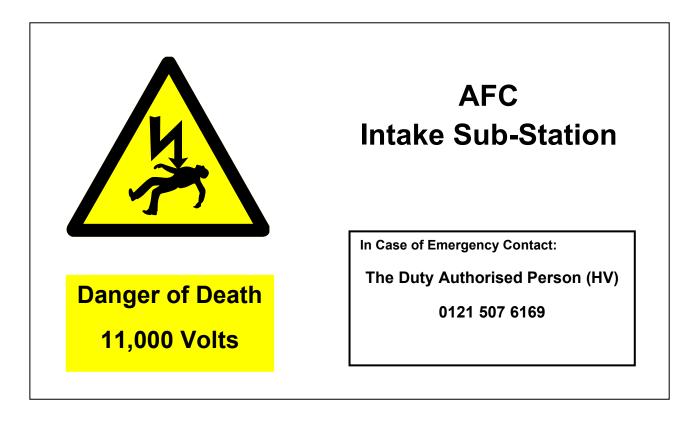




# A2.5 Model Isolation Sign (Controlled)

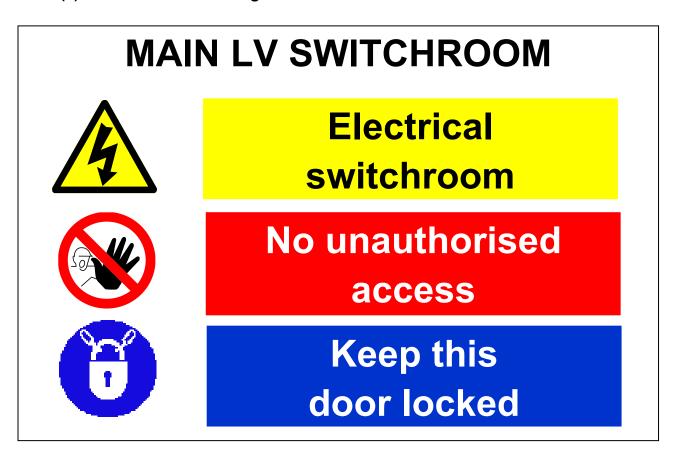


# A2.6 (1). Model Sub-Station Sign

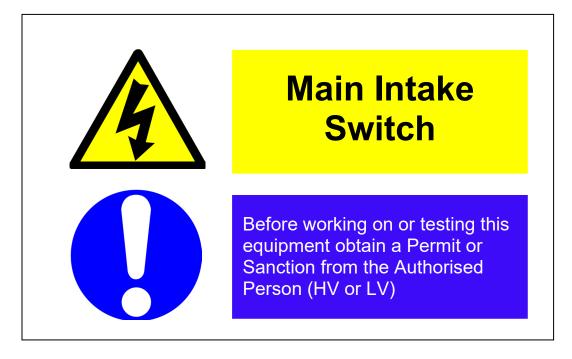




# A2.6(2). Model Switchroom Sign

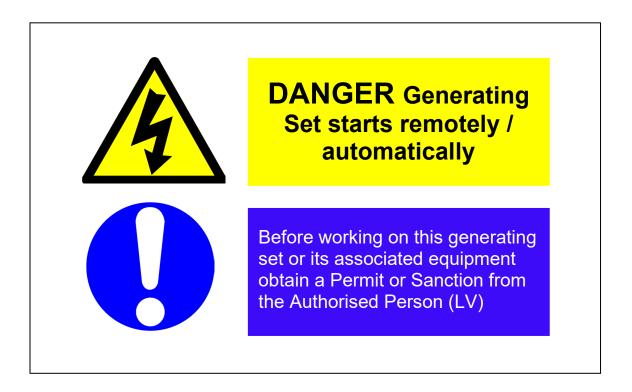


# A2.7(1). Model Main Intake Switch Sign

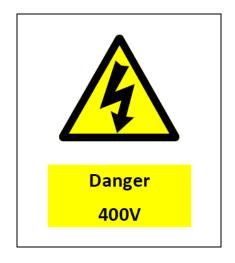




# A2.7(2). Model Generator Warning Sign



# 2.7(3). Model Voltage Warning Sign





# A3 Not Used



#### A4 General Definitions

#### **Audit**

The structured process of collecting independent information on the efficiency, effectiveness, and reliability of the safe system of work, and drawing up plans for corrective action. "Independent" does not necessarily mean external to the organisation.

#### **Authorised Persons Keys**

A set of keys secured in the Key Control Box or held by the Duty Authorised Person. These keys are used to access the APs Key Cabinet, Document Cabinet and Mimic Panel.

#### **Basic Protection**

A physical means by which contact with potentially live conductors is prevented, such as insulation, enclosures, or barriers.

#### Conductor

A conductor of electrical energy, whether "live", "charged", "dead" or "earthed".

#### **Dangerous Condition**

A condition that is likely to lead to a dangerous occurrence.

#### **Dangerous Occurrence (Electrical)**

An incident involving a source of electrical energy which may be dangerous to any person, whether or not an accident has occurred.

#### Dead

A conductor that is neither "live" nor "charged".

#### **Document Cabinet**

A lockable cabinet suitable for storing the electrical safety documents, temporary safety signs, distribution system records etc. used in the application of the Safety Rules. This cabinet is only accessible by the Duty Authorised Person and should not be used to store anything not associated with the Safety Rules.

#### **Earthed**

Connected to the general mass of earth in such a manner as will ensure at all times an immediate discharge of electrical energy without danger.

#### **Electrical Equipment:**

Anything used, intended to be used or installed for use to generate, transmit, transform, rectify, convert, conduct, distribute, control, store, measure or use electrical energy.

#### Isolate

Disconnect and separate electrical equipment from every source of electrical energy in such a way that this disconnection and separation is secure.

#### Isolation (Complex)

Where 2 or more Points of Electrical Isolation are required to make the Point of Work Safe.



#### Isolation (Simple)

Where only 1 Point of Electrical Isolation is required to make the Point of Work Safe.

#### **Isolation (Personal)**

A "Simple" isolation applied by the Duty Authorised Person or Competent Person (Level 2 or 3) for their own safety and where they remain in control of the isolation throughout the duration of its application.

#### **Isolation (Controlled)**

A "Simple" isolation applied by the Duty Authorised Person or Competent Person (Level 3) for the safety of a Third Party or where they cannot remain in control of the isolation throughout the duration of its application.

#### Isolation (AP)

An isolation applied by the Duty Authorised Person for the safety of a Third Party where the Isolation is Complex or where the Point(s) of Isolation are under the control of the Authorised Person.

#### **Key Cabinet**

A cabinet used for the sole purpose of retaining all keys relative to the site's electrical systems of which The Duty Authorised Person has control.

#### **Key Control Box**

A single combination locked box that is used for the control of the Authorised Persons Keys.

#### **Key Safe**

A cabinet, used for the sole purpose of securing safety locks and keys used for controlled isolations.

#### Live

Implies connection to a source of electricity.

#### **Live Functional Testing**

The testing of electrical equipment while live which does not involve live working.

#### **Live Working**

Work where contact with Live conductors is required or possible due to the removal of the last level of "Basic Protection".

#### Logbook

A book in which all matters relating to the electrical system should be recorded.

#### **Operational File**

A ring-binder containing information relating to the control and operation of the electrical system.



#### **Operational Restriction**

A written safety instruction, issued via the Authorising Engineer, modifying, or prohibiting the normal operating procedures associated with a particular make and type of equipment.

#### **Personal Supervision**

Supervision is given by a person having adequate technical knowledge and experience, who is present at all times.

#### Point of Isolation

The Switch or Protective Device used to securely disconnect the electrical supply to a Circuit or Equipment.

#### **Point of Work**

The location on a Circuit or Equipment, where during the task conductors are to be exposed.

#### **Practice Improvement Notice**

A notice issued by the auditor requiring improvements to be made in the observed working practices. The notice will relate to specific task(s) and will give a target date and/or time by which the improvements must be in place before similar task(s) can continue to be carried out.

#### **Proprietary Earth**

Earthing equipment of an approved type and not forming an integral part of the switchgear.

#### **Protective Equipment**

Equipment used to protect persons from danger in the working environment. Protective equipment includes items such as insulated tools, protective clothing, insulating screens, proprietary earths, temporary safety signs etc.

#### **Prove or Confirm Dead**

Demonstrate, with the use of approved equipment designed for the purpose, that no electrical potential liable to cause danger is present.

#### **Risk Assessment**

The analysis of the risks to health and safety inherent in a system and their significance in a particular context.

#### Safety Key Box

A box used to secure keys to applied Safety Locks. It is to have two locks, each of which is to have only one key: one being labelled "Safety Key Box No\*\*– Competent Person"; and the other "Safety Key Box No\*\* – Authorised Person". It is to be so arranged that both locks must be released before access can be gained to the contents of the box.

#### Safety Locks

These are padlocks having only one key, which is different from all other keys in use on the electrical distribution system. Safety locks are to be indelibly coloured red, and each safety lock and its key are to have the same unique serial number for ease of identification. They are used for securing points of isolation or earthing.



#### Single Line Schematic

A single line diagram of the whole system. Which shows all major equipment in its normal state of operation.

#### **Sub-Station**

A room or enclosure designated by an Authorising Engineer which contains High Voltage distribution switchgear of Equipment.

#### **Suspension Notice**

A notice issued by the auditor requiring specified works in progress to be suspended immediately pending action to ensure that compliance with the existing safe system of work can be achieved or a modified system introduced.

#### **Switchgear**

Devices used to connect or disconnect electrical supplies to Circuits or Equipment

#### **Switchroom**

A room or enclosure designated by an Authorising Engineer which contains Low Voltage distribution switchgear.

#### **System**

An electrical system in which all the equipment is, or may be, connected to a common source of electrical energy, including the source and its associated equipment.

#### **Voltage Ranges**

The ranges of voltage are defined as follows:

- a. **Extra Low Voltage (ELV):** a potential not exceeding 50 V ac or 120 V ripple-free dc whether between conductors or to earth.
- b. **Low Voltage (LV):** a potential not exceeding 1000 V ac or 1500 V dc between conductors, or 600 V ac or 900 V dc between a conductor and earth.
- c. **High Voltage (HV):** a potential normally exceeding low voltage.