Management of Electrical Safety

Guidance for Heads of School/ Service
Introduction
This guidance is for Heads of School/ Service and explains your role as part of the management process of implementing the Standard.

Definitions

Electrical systems and equipment - Includes anything used, intended to be used or installed for use, to generate, provide, transmit, transform, rectify, convert, conduct, distribute, control, store, measure or use electrical energy. It includes every type of electrical equipment, from a 400 kV overhead line to a lamp. Electrical equipment includes conductors used to distribute electrical energy such as cables, wires and leads and those used in the high voltage transmission of bulk electrical energy, as in the national grid.

This covers both the system which supplies electricity to the socket, into which the electrical equipment is then plugged.

System of portable appliance testing – also known as PA Testing, this is a formal, recorded visual inspection and/or PA test using a PA testing meter (this can be combined). This is usually carried out on any equipment which has a plug, whether or not it is portable. Portable handheld equipment is likely to need more frequent PA testing than equipment which tends to stay in the same place.

Roles and actions
The health and safety responsibilities of staff, students or visiting personnel are set out in the University Health and Safety Policy (http://www.leeds.ac.uk/safety/policy.htm). For this protocol these include the actions which should also be carried out.

Staff and students
- Visually inspect electrical equipment before they use it.
- Take out of use and report any damaged equipment.
- Report to your local contact and/or FD Estates if there is a defect to an electrical systems, supply or electrical sockets etc.
- Be aware of local arrangements regarding personal electrical equipment
- Do not use block adaptors, heaters with open elements, daisychained or coiled extension leads
- If they have had an electric shock, seek medical attention.
- Include any electrical hazards in the risk assessment
- Report all accidents and incidents to your local contact / academic tutor so they can be reported on the University’s online system.
- Dispose of electrical equipment in line with the University’s waste procedures.

Line managers or academic tutors
- When involved in health and safety inspections, check that electrical equipment is in good condition and has an in-date PA test label.
- Make sure that personal protective equipment is available.
- Make sure that anyone who has had an electric shock seeks medical attention.
- When authorising risk assessments, check that electrical hazards are included.

Head of School/ Service
- Identify a Competent Individual to manage electrical safety in your area
- In conjunction with your Health and Safety Manager and the Competent Individual put in place a system to manage electrical safety and PA testing
- Decide on a system for externally owned electrical equipment in your area.
- Assure yourself that only competent staff/ contractors are used for PA testing
- Check that your staff understand the need to visually inspect electrical equipment before use
Head of FD Estates

- Be assured that there is a system in place to assess and manage the risks associated with electrical systems at the University
- Authorise competent staff/contractors to carry out work on installation of electrical equipment (fixed wiring, single or 3-phase)

Competent Individual

- Put in place a system to manage electrical safety which includes a register of electrical equipment (along with records of PA tests, results, defective equipment and repairs for the school/service), PA testing of electrical equipment, a process for reporting defects and disposal of defective or outdated equipment.
- Liaise with other schools/services/organizations to discuss and agree arrangements for PA testing in shared areas.
- Communicate the system to staff and students.

Staff/contractors carrying out PA testing

- Pass University or external courses as required to ensure competent to carry out PA testing, and be authorised by the school/service.

Staff/contractors carrying out work on electrical equipment which requires fixed wiring, single or 3-phase

- Be authorised by FD Estates before carrying out work on this equipment.

Guidance

- Assessing the hazards associated with workplace electrical systems and equipment

As Head of School/Service you should assure yourself that there is a system in place for all areas within your remit to control the risk associated with workplace electrical equipment. To do this, your managers could include the hazards in one of the following risk assessments:

Generic Assessments – e.g. office risk assessment – which includes computer equipment

Activity Assessments – use of electrical equipment in a particular task (e.g. lab experiment or work outside) as the risks will be specific to the activity and location

You can also contact your Health and Safety Manager for more information.

The Head of FD Estates should also be assured that in addition to the risk assessments above, there is a system in place for assessing and managing the risks associated with electrical systems at the University.

- Competent individual

You as Head of School/Service should nominate a ‘Competent individual’ to oversee electrical safety management in your area. This means they should establish as a minimum a PA testing system and make sure it is carried out, highlight the need for user checks and provide advice on matters relating to electrical safety. This person is your main source of assurance that the systems for this protocol are in place within your remit. They will oversee the inspection and testing of electrical equipment and ensuring that it is carried out by competent internal people or contractors Contact your Health and Safety Manager for more details.
• **Electrical equipment is in good condition**
  You should check that the Competent Individual you have nominated has put a system in place to ensure that all electrical equipment in use in their area is undamaged and free of defects or taken or out use.

  Equipment used for PA testing must be calibrated annually – usually these are sent away for calibration independently. Speak to your Health and Safety Manager for more information.

• **Inspection and testing**
  You should ensure that the importance of carrying out visual checks is emphasised with users and that local health and safety inspections include electrical equipment as this is where the majority of defects are identified.

  Your Competent Individual needs to put a system in place for the recorded formal visual inspection and PA test (which can be done together) and for ensuring that all equipment which has been tested or formally visually inspected is labelled. This label would usually include when this happened or when the next date is due.

• **Defects**
  If any electrical equipment is found to be defective either by users or as part of the inspection processes, it should be removed from service immediately and reported to the Competent Individual as soon as possible. The Competent Individual would then arrange for repair or disposal.

  If there are any problems with electrical systems, supply or electrical sockets etc your staff should know to contact FD Estates Helpdesk.

• **Register of electrical equipment**
  Your Competent Individual should have a system in place to record a list of electrical equipment that needs PA testing or a formal visual inspection in your area. The results from the PA testing or visual inspection, any defects identified and any repairs carried out should be recorded. This could be a database associated with the PA testing equipment or a simple spreadsheet.

• **Local arrangements for equipment not owned by the University**
  Sometimes equipment is brought in by individuals for work, study, teaching or research reasons (e.g. trainer bringing in a laptop) or for personal use in the workplace (e.g. mobile phone charger). You as Head of School/Service need to decide (in conjunction with your Health and Safety Manager and / or Competent Individual) and let your staff and students know whether this externally owned equipment should be included in the PA testing and recorded. Whatever you decide, this electrical equipment should be in sound electrical condition and fit for its purpose.

• **Accident reporting**
  As Head of School/Service you should remind staff to report any work-based electrical safety accident, incident or near miss using the online accident reporting system (Sentinel) and your usual local processes. If staff are not sure who has access or how to go about this, please contact Health and Safety Services.

• **Protective Equipment**
  If any personal protective equipment has been identified as necessary in the risk assessment, you should assure yourself that this is provided and maintained in a good condition.

• **Electric shocks and first aid**
  All accidents which result in an individual receiving an electric shock should be referred to medical assistance – i.e. should be referred to Accident and Emergency at the closest hospital.
• ** Installing electrical equipment (fixed wiring, single or 3-phase)**
  You should assure yourself that your staff know that they cannot install or repair any fixed wiring, single or 3-phase electrical equipment – this can only be done by authorised contractors or staff from FD Estates. Your staff and students should only ever plug equipment into sockets.

• **Fixed electrical installations are tested every 5 years**
  The Head of FD Estates will arrange for testing of the fixed electrical installations by authorised and competent contractors or staff every five years.

• **Local arrangements for PA testing in shared areas**
  In areas that are shared with other schools/services or employers (e.g. NHS) you should check that your Competent Individual is liaising with the other occupiers to ensure that all equipment is PA tested or visually formally inspected.

• **People carrying out PA testing are competent**
  Anyone carrying out PA testing should have passed the University course on PA testing and/or the City and Guilds or equivalent qualification.

• **Extension leads**
  You should ensure that staff and students know that if they need to use more than one extension lead, these must not be joined together (sometimes known as ‘daisy chaining’). This is because joining them together is likely to lead to overheating, blowing the fuse and possibly to a fire.

• **Coiled drums**
  You should ensure that where staff need to use a coiled extension lead that they know that they must fully extend the wire. This is because the use of an extension lead whilst still coiled increases the risk of overheating significantly and could lead to a fire.

• **Prohibited items**
  You should ensure that your staff are aware of the prohibited electrical items as detailed within the Fire Safety Protocol, See the Fire Safety protocol at [www.leeds.ac.uk/safety](http://www.leeds.ac.uk/safety) for more information but these include:
  - Block adaptors
  - Heaters with an open bar heating element or any access to the heating elements.

• **Disposal**
  You should ensure that your staff are aware of the local system (usually put in place by the Competent Individual) to dispose of electrical equipment following the University’s waste procedures. If any electrical equipment is contaminated please speak to your Health and Safety Manager.

If you have any further questions or need advice, guidance or support please contact your Health and Safety Manager.