



## AGENDA

### SAF17-A1

#### Notice of meeting

The next meeting of the Health, Safety and Environment Committee will take place at 2.00pm on Wednesday 8 February 2017 in the Jennings Council Chamber, 201.1.12, Hazlerigg Building.

Martine Ashby, Secretary

#### 1 Apologies for Absence

#### 2 Business of the Agenda

To give notice of intention to speak to any starred items, which otherwise will be taken without discussion. Any member wishing to speak to a starred item is asked to give notice to the Secretary by midday on Tuesday 7 February 2017.

#### 3 Minutes

##### SAF16-M2

To confirm the Minutes of the meeting held on 28 September 2016.

#### 4 Matters arising from previous meetings

##### SAF17-P1

- 4.1 To note actions arising from the Minutes
- 4.2 Arising from 16/52 *Accident and Insurance Statistics* regarding imago's use of plastic glasses for serving drinks, a verbal report will be provided at the meeting.
- 4.3 To note any other matters arising

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## SECTION A – Items for Discussion

#### 5 Constitution, Terms of Reference and Membership

##### SAF17-P2

To receive a report from a working group set up to review the constitution, terms of reference and membership of the Committee and consider recommendations made by the working group.

## **6 Health and Safety Annual Report**

### **SAF17-P3**

To receive the Health and Safety Annual Report covering progress in 2016 and plans for 2016 / 17.

## **7 Environmental Manager's Report**

### **SAF17-P4**

To receive a report from the Environmental Manager.

## **8 Risk Register**

### **SAF17-P5**

To receive a verbal update from the Deputy Health and Safety Manager on progress in developing the Risk Register.

## **9 Research into Effective Safety Conversations**

### **SAF17-P6**

To receive a presentation from Professor Elizabeth Stoke on the findings of research carried out by the Department of Social Sciences into effective safety conversations.

## **10 Annual Report of the Radiation Protection Officer**

### **SAF17-P7**

To receive the annual report of the Radiation Protection Officer for 2016 for submission to Council.

## **11 Biological/GM and Chemistry Safety Update**

To receive a verbal update from the Radiation, Biological and Chemical Safety Officer.

## **12 University Fire Officer's Report**

### **SAF17-P8**

To receive a report from the University Fire Officer

## **13 Accident and Insurance Statistics**

### **SAF17-P9, SAF17-P10, SAF17-P11, SAF17-P12**

- 13.1 To receive incident data from the third quarter of 2016 and benchmark data
- 13.2 To receive reports on accidents and insurance claims for the periods 1 July to 31 December 2016
- 13.3 To note that Council (COUN16/104) has requested additional information on accident and insurance statistics and consider a suitable format for presenting the statistics to Council.

## **14 Training Matrix**

To receive a verbal update from the Deputy Health and Safety Manager on changes to the Training Matrix.

## **15 Health and Safety Statutory Compliance Sub-Committee**

### **SAF17-P13**

- 15.1 To receive minutes of the meeting held on 11 January 2017
- 15.2 To receive a verbal report from the Chair.
- 15.3 To consider the revised terms of reference, constitution and membership of the Sub-Committee

## **16 Occupational Health**

To receive a verbal update from the Health, Safety and Risk Manager on the development of the University's Occupational Health Service.

## **17 Stress Policy**

Arising from M16/56 to receive a verbal update from the Health, Safety and Risk Manager on progress in developing the following documents:

- Revised stress policy
- Organisational level stress assessment
- Stress audit template

## **18 Health and Wellbeing of the Working Age Population**

To receive a verbal update from the Health, Safety and Risk Manager on the development of principles for the introduction of a wellbeing offering for University staff.

## **19 Policy and Guidance on Unmanned Aircraft Systems (Drones)**

### **SAF17-P14**

To consider a new policy on unmanned aircraft systems (drones).

## **20 Staff Exit Policy**

To receive a verbal update from the Radiation, Biological and Chemical Safety Officer on the proposed new policy for the management of resources associated with a member of staff, on the departure of the member of staff from the University.

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## **SECTION B – Starred Items for Approval**

## **\*21 Radiological Protection Sub-Committee**

### **SAF17-P15**

To receive the minutes of the Radiological Protection Sub-Committee.

## **\*22 Health and Safety Strategic Framework**

### **SAF17-P16**

To consider a proposed health and safety vision and agree the strategic principles and the broad strategic themes

## **\*23 Safeguarding Policy**

### **SAF17-P17**

To consider the revised new University policy following further work to identify required revisions to the policy to ensure that it can be operated at the London Campus and to ensure consistency with the University's AUP (Acceptable Use Policy) for IT Equipment.

## **\*24 Policy and Code of Practice for Electricity at Work**

### **SAF17-P18**

To consider the revised new Policy and Code following minor corrections and amendments in relation to use on the London campus.

## **\*25 Change to Constitution**

To consider a change to the Constitution of the Committee to replace the 'Director of Campus Living' with the 'Director of Campus Services' with immediate effect.

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## **SECTION C – Items for Information**

None

## **26 Any Other Business**

## **27 Dates of Meetings in 2016/17**

7 June 2017

Author – Martine Ashby  
January 2017

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## Minutes

### SAF16-M3

Minutes of the Health, Safety and Environment Committee held on Wednesday 28 September 2016

#### Attendance

##### Members:

Rob Allan, Spencer Aryeetey, Mark Biggs, Neil Budworth, Andrew Burgess, Tom Carslake, Suzanne Dexter (ab), Sandy Edwards, Alec Edworthy, Geoff Feavyour (ab), David Fulford, Marc Gibson (ab), Andy Gomez (ab), Tony Goodall, Ann Greenwood, Rod Harrison, Irvin Hendrickson (ab), Jude Hoy (ab), Nik Hunt, Rob Hunter (ab), Rachael Jermyn, Allan Jones, Alice Kirkaldy, Mark Lewis, Chris Linton (Chair), Hershil Patel, Harshad Purohit, Brian Reed, Richard Taylor, Bob Temple, Christian Tileaga, Julie Turner, Hugh Weaver

##### In attendance:

Manuel Alonso (in place of Chair of the Wardens Sub Group and for item 16/55), Martine Ashby (Secretary), Kay England (in place of Director of Campus Living), Fehmidah Munir (for item 16/45)

##### Apologies received from:

Geoff Feavyour, Marc Gibson, Jude Hoy, Rob Hunter

#### 16/39 Minutes

##### SAF16-M2

The minutes of the previous meeting held on 8 June 2016 were CONFIRMED.

#### 16/40 Matters arising from the Minutes

##### SAF16-P41

Actions arising from previous minutes were NOTED and their current status confirmed.

#### 16/41 Constitution, Terms of Reference and Membership for 2016/17

##### SAF16-P42

41.1 The Committee's constitution, terms of reference and membership for 2016/17 were NOTED.

41.2 The Committee APPROVED a proposal by the Health, Safety and Risk Manager (HSR Manager) to establish a working group of five to six people to review the constitution, terms of reference and membership of the Committee. The working group would consult with the unions. It would be chaired by the HSR Manager and would report back to the Committee at its next meeting in February 2017. **ACTION: HSR Manager**

## 16/42 Report from the Health, Safety and Risk Manager

### SAF16-P43

42.1 The Committee RECEIVED a report from the HSR Manager.

42.2 The following points were NOTED in particular:

- (i) A recent high-profile health and safety court case involving Alton Towers had revealed how the courts were interpreting the new sentencing guidance. The case highlighted the importance, amongst other things, of staff training, maintenance of equipment, access to equipment manuals and the attitude of managers. In particular the court had noted the pressures that were placed upon employees and the incentives used to maximise the time the rides in question were running.
- (ii) Arising from 16/M18.4 *Matters Arising*, work was continuing on the development of a policy on Unmanned Aircraft Systems (Drones) with a view to a policy and guidance being made available for consideration at the February 2017 meeting. **ACTION: Deputy HSR Manager**
- (iii) Arising from 16/M21 *Development of Health and Safety Risk Registers*, a full project plan had been developed and dates identified for the production of risk registers in all Schools and Professional Services with significant risks. Sessions had been conducted for imago, Student Services and the School of Arts, English and Drama, and they were to be guided through the process of producing their own action plans. This information would be used to produce an overall University health and safety risk register and coordinated audit plan.
- (iv) Opportunities were being sought to work with academic colleagues on site to develop best practice and to strengthen the evidence base of Health and Safety Management. A significant piece of research was being undertaken with staff in the Department of Social Sciences to examine safety conversations with the aim of identifying ways of making them more effective. Practical training based on the research would be delivered in October and the research findings presented at the February 2017 meeting. **ACTION: HSR Manager**
- (v) Visual Communications students had been asked to develop an approach to improve bicycle safety on site, and discussions were being held with the Design School to identify strategies to improve road safety on campus.
- (vi) A wellbeing programme developed by staff in the School of Sport, Exercise and Health Sciences, 'Walking Works Wonders', had been implemented by the Corporate Services team.
- (vii) Incident reduction programmes were being implemented following analysis of incident data, and existing incident reporting processes were being examined with the aim of optimising the processes and automating them.
- (viii) A safety alert process had been developed and implemented so that lessons could be learnt from incidents on campus and beyond.

## 16/43 Overview of the Draft Health and Safety Strategic Framework

### SAF16-P44

43.1 The Committee RECEIVED an overview of the draft strategic framework. The framework directly linked the activity of the Health and Safety Service to the strategic aims of the University and would form the basis of the health and safety annual plan for 2016/17.

43.2 The Committee NOTED the efforts made to inform students of health and safety issues that could affect them and to motivate them to take appropriate precautions. These were very evident at induction through, for example, fire exercises and pre-registration inductions. The Service was also using alternative methods of engaging with students throughout their time at the University, for example through social media, to continue to reinforce health and safety messages. The Service anticipated that the communication research which it had commissioned would help it to improve this communication with existing students.

43.3 The Committee NOTED that when used operationally an additional column was to be added to the Framework document to record what actions needed to be completed, by when and by whom.

43.4 The Committee APPROVED the vision and strategic principles contained within the Framework and NOTED that the work plan was appropriate.

## 16/44 Environmental Manager's Report

### SAF16-P45

44.1 The Committee RECEIVED an update on environmental management activities from the Environmental Manager.

44.2 The following points were NOTED in particular:

- (i) The majority of development plan targets had been met. Those that had not, had been rolled into new targets in the new development plan.
- (ii) An external audit of the ISO 14001 Environmental Management System had been carried out in July. The outcome of the audit had been very positive. The auditors had indicated that the University had demonstrated that it continued to operate an effective system which was exposed to continual improvement and had recommended continued registration to ISO 14001: 2004. The system needed to be reviewed to incorporate Loughborough University London within its scope. **ACTION: Environmental Manager**
- (iii) The report included details of four environmental incidents during the reporting period. One of these had been potentially significant but had been judged by the local Environment Agency Officer not to be reportable as a pollution incident.
- (iv) There had been no significant change in waste levels excluding construction waste compared with the previous year. It was noted that it was difficult to achieve a reduction in waste because targets could easily be missed as a result of one-off events such as the decommissioning of a laboratory. It was suggested that in future these one-off events could be presented separately in the waste report so that they did not skew the statistics. The Environmental Manager would investigate whether this would be possible. **ACTION: Environmental Manager**
- (v) The existing Waste Strategy was being reviewed, together with progress against it, making use of more reliable data than had been available in the past. The new strategy would place greater emphasis on a number of areas including a reduction in food waste, an increase in campus recycling and engagement with students to increase recycling in halls.
- (vi) An Emergency Spill Response Exercise had been carried out in the S Building to fulfill a requirement of the Environmental Management System. The exercise had been well attended and well received. It had achieved its aims of testing the University's procedures and in doing so had confirmed that the procedures were appropriate. A review of the outcomes from the identified actions arising from the exercise would take place early in 2017.

44.3 It was AGREED to approve the University Environmental Policy once again and recommend it to the Vice-Chancellor for signing dated October 2016 following some minor corrections ('continuous' changed to 'continual' and 'certain' to be removed from 'share *certain* responsibilities') and incorporation of references to Loughborough University London. **ACTION: Environmental Manager.**

## 16/45 Health and Wellbeing of the Working Age Population

### SAF16-P46

45.1 The Committee RECEIVED a presentation by the Dean of the School of Sport, Exercise and Health Sciences on the University's role in the health and wellbeing of the working age population. The presentation outlined the School's research experience and expertise in this area and provided details of a number of relevant areas of research which its staff had been involved with. It was AGREED that weblinks to the guidance that had been generated from the research findings should be made available to members. **ACTION: Secretary**

45.2 The Committee AGREED in principle to the development of a proposal for a wellbeing offering for University staff making use of the outcomes of this research. Human Resources and the School of

Sport, Exercise and Health Sciences would develop principles for the introduction of the offering for consideration at the February meeting. **ACTION: Director of HR, Dean of SSEHS**

- 45.3 Members were invited to contact the School's Technical Resources Manager should they wish to seek further information about the School's treadmill desks and other similar equipment. **ACTION: Members**

## 16/46 Radiation Protection Officer's Report

### SAF16-P47

- 46.1 The Committee RECEIVED an update on radiation protection from the Radiation Protection and Biological and Chemical Safety Officer (RPBCS Officer).
- 46.2 The following points were NOTED:
- (i) The Office for Nuclear Regulation (ONR) had carried out a largely positive unscheduled visit to the University. The representative intended to meet with senior management to explain issues relating to the reporting of nuclear declarations for research projects.
  - (ii) The RPBCS Officer was working closely with ONR regarding the ONR transport non-compliance earlier in the year and was on track to complete requested action by ONR's deadline of the end of the year.
  - (iii) An internal inspection had been carried out on all permitted radiation area as specified by the Environment Agency and had discovered no compliance issues. The full report of the inspection had been approved by the Radiological Protection Sub-Committee.
  - (iv) A full audit had been carried out of items in the radiochemistry lab, and plans were being made for the disposal of various items which had circumvented current procurement procedures. The Committee was assured that the acquisition of such items could not happen in the future because there were new systems in place in regards to procurement, security and auditing, allowing more authority to Radiation Protection Supervisors..
  - (v) Two accidents/incidents were NOTED. Appropriate corrective action had been taken.
- 46.3 The Committee APPROVED the constitution and terms of reference of the Radiological Protection Sub-Committee.

## 16/47 Biological/GM and Chemistry Safety Update

### SAF16-P48

- 47.1 The Committee RECEIVED an update on Biological/GM Safety from the RPBCS Officer.
- 47.2 The following points were NOTED in particular:
- (i) An external biosafety audit had been carried out of biological/GM areas of the Department of Chemical Engineering. Overall the audit had been extremely positive, though it had confirmed that some central area of biological/GM safety needed to be improved and a number of actions had been identified. The auditor would return later in the year to assess the Department of Chemistry and the School of Civil and Building Engineering.
  - (ii) One incident was NOTED. The matter was being investigated by the School's Dean and the Health and Safety Service.
  - (iii) COSHH training was to be rolled out across the University.
  - (iv) As requested Schools had reviewed long-term storage of chemicals and processes for the disposal of chemicals that were no longer needed. A number of generic issues had been identified. The chemical procurement process will be reviewed in its entirety in 2017. The HSR Manager would ensure that the review also focused on training that was currently in place.  
**ACTION: HSR Manager**
- 47.3 The Committee NOTED that issues regarding the disposal of chemicals sometimes occurred when a member of staff left and chemicals or equipment which they had used for their research or teaching were retained by their department. A similar situation occurred for research students, and



one School was considering incorporating disposal plans into their progression requirements. The Committee AGREED that the Director of Human Resources should take the lead, working with others, to develop a staff exit strategy. The policy would cover chemicals and other items accumulated whilst a member of staff carried out their role at the University. **ACTION: Director of HR**

## 16/48 University Fire Officer's Report

### SAF16-P49

48.1 The Fire Officer's report was RECEIVED.

48.2 The following points were NOTED:

- (i) Underlying issues associated with the fire alarm system at Holywell Park had been addressed. Engineers had been tasked with investigating an ongoing issue with an aspiration system.
- (ii) The current method of alarm isolation was being reviewed to develop a more robust management system following two incidents involving contractors in occupied buildings. The Health and Safety Service and Facilities Management were to introduce a permit process with associated documentation to ensure that contractors were aware of University requirements to avoid such occurrences happening in the future. **ACTION: Fire Officer**
- (iii) Alternative devices had been fitted in two halls of residence to attempt to reduce the number of false fire alarm activations caused by smoke/steam from cooking. The Fire Officer would report back to the Committee on the success of this intervention at the October 2017 meeting. **ACTION: Fire Officer**

## 16/49 Bespoke Building Design Fire Strategy Policy

### SAF16-P50

49.1 The Committee RECEIVED a proposal for a Fire Design Strategy. The strategy sought to remove ambiguity regarding the standards to be applied in the development of new buildings and the refurbishment of existing buildings. It combined University Health and Safety Association and Government advice as well as building upon the University's existing good practice.

49.2 The following points were NOTED:

- (i) the Policy had not been considered by the Health and Safety Statutory Compliance Sub-Committee but had been through an extensive consultation process with the major stakeholders and had been circulated to most of the Sub-Committee's members for comment.
- (ii) proposed variations from these standards would need to be agreed in advance by the Health and Safety Service.
- (iii) Facilities Management had confirmed that they would be able to implement the standards and that the document would form part of the standards documentation that they made use of.
- (iv) Clarification would be sought from the Fire Officer on one clause within the Policy. **ACTION: Alec Edworthy**

49.3 The Committee APPROVED the new policy.

## 16/50 Health, Safety and Environment Short Films

### SAF16-P51

50.1 The Committee NOTED the following:

- (i) the availability of a number of health, safety and environment short films and an Environmental Essentials elearning module.
- (ii) it would be possible to develop short films about other policies.

- (iii) Staff Development would be including the Environmental Essentials module on the standard induction check list.
- (iv) A prize draw would be used as an incentive to encourage staff and students to complete the module. Students would also be encouraged to complete it as part of the Green League, the inter-hall environmental competition.

50.2 The Committee APPROVED use of the films by Schools and Professional Services and of the elearning module by staff and students.

## 16/51 Occupational Health

### SAF16-P52

- 51.1 Arising from M16/19, the Committee RECEIVED an update on Occupational Health provision at the University which included a response to issues raised in the independent Occupational Health Surveillance Audit carried out in April 2016.
- 51.2 The update noted that the Occupational Health service was under-resourced. It had received additional resource in the current year's budget. However, even with this additional resource, the staffing was well below that recommended by the Higher Education Occupational Physicians/Practitioners for universities and the accepted norm for large organizations. The levels of staffing were said to impact upon the University's ability to recruit and retain occupational health staff. Outsourcing of the service would be an alternative option for the University, and might be necessary if it was not possible to recruit to this area, but would be more expensive and less desirable.
- 51.3 Sickness absence rates represented in numbers of days lost due to sickness had risen year on year since 2013/14. However, it was not clear if there had been more incidents or whether there was now better reporting of absences. Average days off through sickness had increased in the public sector generally and were higher than the University's levels. However, it was noted that it was more appropriate for the University to use itself as a benchmark.
- 51.4 Health Surveillance processes had been interrupted because of the occupational health staffing issues and had resulted in a backlog in health surveillance activities. The update noted that the Counselling and Disability Service provided counselling for both students and staff. It had seen a rise in demand with the reductions to counselling through primary care services, and at busy times there was a waiting list for staff.
- 51.5 The response to the independent audit was NOTED.
- 51.6 The Committee NOTED the Director of HR's recommendation for the development of the Occupational Health service. He confirmed that this would allow the service to provide a reactive service. However, further resource would be required should the service need to be more proactive. The COO and Director of HR would liaise regarding the development of a plan to improve the service. **ACTION: COO, Director of HR**

## 16/52 Accident and Insurance Statistics

### SAF16-P53, SAF16-P54

- 52.1 The papers were RECEIVED. No new insurance claims had been made against the University during the reporting period. An update on the status of claims was NOTED.
- 52.2 The following points were NOTED:
- (i) Most accidents involved cuts on sharps and glassware, and a strategy had been put in place in the area where most of these incidents occurred.
  - (ii) A comparison of the number of RIDDOR reportable incidents occurring in the second quarter of the year since 2012 revealed a near uniform upward trend. However, the increase was not seen to be significant, particularly when seen in the context of a general increase in the number of staff over this period, and should be countered by recent interventions.

- (iii) A member noted that imago served drinks in glasses made of plastic rather than glass. The Environmental Manager confirmed that health and safety concerns were not normally valid reasons for use of plastic. **ACTION: Environment Manager to discuss this issue with imago**

## 16/53 Training Requirements for School and Departmental Safety Officers

### SAF16-P55

- 53.1 The Committee NOTED proposals for the training of School and Departmental Safety Officers. The paper recommended an approach to training based on the risk profile of the School or Professional Service. Further developments would be made to the approach over time.
- 53.2 The Deputy COO was very supportive of the proposal and noted that it could be scaled up to meet compliance requirements. The Deputy Health and Safety Manager would contact the University Compliance Engineer to discuss use of the approach. **ACTION: Deputy Health and Safety Manager**
- 53.3 The following points were NOTED:
- (i) it may be possible to make use of iTrent to prompt staff to undertake refresher courses.
  - (ii) it should be possible to arrange cohesive training for staff within a School.
- 53.4 The Committee APPROVED the proposals.

## 16/54 Health and Safety Statutory Compliance Sub-Committee

### SAF16-P56

- 54.1 The Committee RECEIVED the minutes of the meeting held on 13 September 2016.
- 54.2 The following points were NOTED:
- (i) A streamlined version of the Maturity Matrix had been distilled into a questionnaire for School contacts that could be targeted flexibly. The Matrix described all areas of compliance. An assessment had been completed and good progress was being made with the implementation of the Asbestos and Local Exhaust Ventilation Policy. The Sub-Committee was considering how to refine the matrix for Schools. This was being done on a risk basis.
  - (ii) The Chair of the Sub-Committee had met with Duty Authorised Persons over the summer to allow them to raise any issues. He intended to continue to meet with them periodically in the future.
  - (iii) The Chair would liaise with Brian Reed to establish possible colleagues to fill a vacant position of Academic representative for the Sub Committee. **ACTION: Deputy COO**
- 54.3 In considering the Sub-Committee's Terms of Reference and Constitution the Committee:
- (i) NOTED the need to appoint an 'Academic representative with expertise in this area'
  - (ii) APPROVED:
    - a) an amendment to the Sub-Committee's constitution to change a reference to 'Electricity installation' compliance to 'Electricity'.
    - b) the addition of a technical officer to the constitution who could help with the implementation of policy within Schools.
- 54.4 The revised terms of reference and constitution would be submitted to the February HSE meeting. **ACTION: Secretary HSSC**

## 16/55 Safeguarding Policy

### SAF16-P57

- 55.1 The Committee RECEIVED a new Safeguarding Policy. The policy would replace the Child protection Policy which had a narrower scope and which was now out of date. A draft of the new policy had been circulated widely for comment. A group would be convened to establish how the Policy would be disseminated and to put in place linked training.
- 55.2 The Committee NOTED that further changes to the Policy may be needed to ensure it covered acceptable use of computers. The Director of Student Services would liaise with Alec Edworthy to identify possible changes. **ACTION: Director of Student Services, Alec Edworthy**
- 55.3 The Committee ENDORSED the Policy subject to minor changes being made where appropriate to ensure that it took into consideration acceptable use of computers and to ensure that it could also be used on the London campus. **ACTION: Director of Student Services**

## 16/56 Stress Policy

### SAF16-P58

- 56.1 Arising from M16/35 the Committee RECEIVED an extract from the draft Workplace Stress Report compiled from the results of the 2016 staff survey.
- 56.2 The following points were noted:
- (i) HSE had noted the revised stress policy at its June meeting. The policy was continuing to be developed.
  - (ii) The draft Workplace Stress Report would form part of the Staff Survey Report. It would require further analysis, and a plan would be constructed in due course on how to tackle the issues raised.
  - (iii) Whilst the Workplace Stress Report had yet to be analysed some common themes had become apparent from the free text comments, though there did not appear to be a uniform pattern across Schools. The report had revealed a correlation between lack of take up of management training and problem areas. This may need to be followed up in PDRs. Management experience may also need to be tested during recruitment, rather than recruiters relying upon declared experience. Management training may also need to become mandatory to ensure that all managers were appropriately equipped for their roles.
  - (iv) A member observed how few policies and procedures the University had in place as compared with other universities. The Committee was informed that Audit Committee had identified instances of local procedures being overlaid on top of University procedures. The Secretary would seek further information from the Secretary to Audit Committee. **ACTION: Secretary**

## 16/57 Review of Committee Effectiveness

### SAF16-P59

Arising from M16/41, the Committee NOTED that the HSR Manager was to establish a working group to review the constitution, terms of reference and membership of the Committee. Members were invited to forward comments on the effectiveness of the Committee to the HSR Manager. **ACTION: Members**

## 16/58 Laser Safety Policy

### SAF16-P60

The Committee APPROVED the revised policy.

## 16/59 Policy for the Management of Gas Installations

### SAF16-P61

The Committee APPROVED the new policy.

## 16/60 Electricity at Work

### SAF16-P62 (Additional paper)

- 60.1 Arising from HSSC MM16/22 the Committee RECEIVED a new policy and code of practice on electricity at work. The policy had been based upon the existing Facilities Management only policy.
- 60.2 The Committee NOTED that the documents were Loughborough specific and made no mention of the London campus. It AGREED that all health and safety policies should be reviewed to ensure that they covered the London campus. **ACTION: HSR Manager**
- 60.3 The Committee APPROVED the new policy and code of practice subject to minor corrections to be supplied by Alec Edworthy. **ACTION: Technical Services Manager, Alex Edworthy.**

## 16/61 Dates of Meeting in 2016/17

8 February 2017

7 June 2017

Martine Ashby  
June 2016

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Paper Title: **Matters Arising from Previous Meetings**

Author: **Martine Ashby (Secretary)**

1. <b>Specific Decision Required by Committee</b>	<b>To note the status of matters arising from previous meetings</b>
2. <b>Relevance to University Strategy</b>	<b>Means for the Sub-Committee to monitor agreed actions which may be associated with the University Strategy</b>
3. <b>Executive Summary</b>	<b>The table overleaf details the statuses of matters arising from previous meetings of the Health, Safety and Environment Committee</b>
4. <b>Essential Background Information</b>	<b>Previous minutes of HSE Meetings</b>
5. <b>Risks, Risk Mitigation and Governance/ Accountability</b>	<b>To ensure actions taken following HSE meetings</b>
6. <b>Implications for other activities</b>	n/a
7. <b>Resource and Cost</b>	None
8. <b>Alternative Options considered</b>	None
9. <b>Other Groups/Individuals consulted.</b>	Name individuals
10. <b>Future Actions, Timescales &amp; Frequency of Review by this Committee.</b>	Next opportunity for review: Meeting in June 2017
11. <b>Success Criteria (KPIs)</b>	None
12. <b>University Executive comment (required for Council papers only)</b>	n/a

	Completed
	Not yet Completed

Meeting	Minute	Description	Action	Status
SAF15-M2	15/18	Non-ionising radiation (excluding lasers) policy to be considered at September meeting. New policy and generic risk assessment to be completed by the end of 2015.	Radiation Protection Officer	To be completed before legislation is in place in July 2016.  Policy approved at Sept 15 HSE meeting (15/M36). Guidance documents are still being written. Action is still ongoing. Status update given at June 16 meeting <b>Sept 16 update: Guidance documents to be considered by Non-ionising Radiation Committee. Should be complete by Feb 17 HSE meeting</b>
SAF16-M1	16/3(iii)	Policy for use of Unmanned Aerial Vehicles to go to Oct 2016 meeting	HSR Manager	Update included under agenda item 4.4. Draft policy to go to Sept 16 meeting.  <b>Sept 16 update: Draft policy and guidance to go to Feb 17 meeting</b>  <b>Feb 17 Update: On agenda</b>
SAF16-M1	16/11.4	Review Health and Safety Office's webpages to respond to comments during HSE meeting and mend broken weblink	HSE Manager	HSR Manager confirms that new HS Administrator will update webpages.  June 16 Meeting: Noted that on track.  <b>Sept 16 update: work ongoing</b>
SAF16-M2	18.4	Submit unmanned aerial vehicle policy to Sept 16 meeting	Deputy Health and Safety Manager	New policy and guidance to come to Feb 17 meeting <b>Feb 17 Update: On agenda</b>
SAF16-M2	19.7	Draft a response to review of health surveillance processes for consideration at Sept 16 meeting	Director of HR + HSR Manager	Response provided at Sept 16 meeting <b>Completed</b>
SAF16-M2	20.2(iv)	Raise urgent issues resulting from ISO14001:2015 Gap Analysis at Sept 16 meeting	Environmental Manager	Work to date has not highlighted any urgent actions for HSE. Further work ongoing with SSRG + HSSC. If it is felt

Meeting	Minute	Description	Action	Status
				anything needs to be specifically raised will raise item again. EM Manger recommends item to be closed. <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	20.2(viii)	Undertake review of Waste Strategy. Report back on progress at Sept16 meeting	Environmental Manager	Update to be provided in EM report to Sept 16 meeting
SAF16-M2	20.3	Remind Deans + Heads of Prof Services to display Univ Environmental Policy and Standards and Sustainability Charter in key areas	Environmental Manager	Update to be provided in EM report to Sept 16 meeting
SAF16-M2	21.4	Aiming to complete the 3 steps for compliance with USHA guidance document by Oct 2017. Provide regular progress updates to HSE	HSR Manager	HSR Manager confirmed that will report to HSE on this routinely and will feed back top risks. <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	21.4	Make School/Service risk registers available to other parts of Uni to help with drafting and share ideas	HSR Manager	HSR Manager confirmed will do so. <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	21.4	Combine efforts with Sustainability team to potentially have joined up auditing approach	HSR Manager	Noted by Sustainability team and HSR Manager <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	21.5	Accountability for engagement in risk register and audit process and ensuring identified actions are carried out to be linked to PDRs of Deans and Dirs of Professional Services	Provost and COO	Provost and HSR Manager have agreed an approach to include Health and Safety in quarterly reviews with Deans. Approach will include provision of PDR objectives in early December <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	22.3	Constitution and Terms of reference for Non-Ionising Radiation Safety Committee to go to Sept 16 meeting for approval	Radiation Protection Officer	Included in Radiation Protection Officer's Report (Sept 16 meeting) <b>Confirmed closed at Sept 16 meeting</b>
SAF16-M2	23.2	Consider whether GM/Biological Safety Committee has appropriate expertise in all applicable areas	RPBCS Officer	Members only from a limited no of Schools. However this reflects where expertise lies. Membership to be reviewed at Sept 17 GM/BS Com meeting



Meeting	Minute	Description	Action	Status
SAF16-M2	23.3 (v)	Tighten up identification of COSHH materials at purchase stage	RPBCS Officer	Ongoing. Update included in Biological/GM and Chemical Safety Report (Sept 16)
SAF16-M2	24.2 (ii)	Submit University Bespoke Building Design Fire Strategy Policy for consideration at Sept 16 meeting	University Fire Officer	<b>Policy submitted. Completed.</b>
SAF16-M2	24.3	H&S Service exploring alternative intervention devices to evaluate their effectiveness in reducing no of false fire alarm activations. Check insurance implications of making changes	University Fire Officer	Currently ongoing. Door Screamers been fitted to some Telford courts kitchens. Smoke detectors to be reviewed late Sept 2016. <b>Sept 16 update: To monitor in next year. Have checked insurance so considered completed</b>
SAF16-M2	26.4	Include more leading indicators in accident and insurance reports in next year (agreed at June 16 meeting)	HSR Manager	Currently being developed
SAF16-M2	31.3	Develop School/ Departmental Safety Officer Training Matrix further to take into consideration comments from June 16 meeting. Submit revised version to Sept 16 meeting	Deputy Health and Safety Manager	
SAF16-M2	32.2	Make Schools and relevant services aware of relevant elements of Asbestos Policy	HSR Manager	In progress. Policy currently being rolled out.
SAF16-M2	33.3	Inform Schools and relevant Services of Policy for Using LEV Systems and in particular of requirement to maintain log	HSR Manager	In progress. Roll out plan has been agreed
SAF16-M2	34.2(ii)	HSSC Sub-Committee to provide HSE with reassurance on a regular basis that the water safety governance structure remains in place and functioning	HSSC Chair and Secretary	
SAF16-M2	35.2	Staff who have not received a PDR in last year to contact the COO for follow up	All members	<b>Sept 16 update: Noted that is ongoing action. Confirmed closed</b>

Meeting	Minute	Description	Action	Status
SAF16-M2	35.3	Conduct consultation process involving staff and Unions prior to stress documents being finalised	Director of HR, HSR Manager	<b>Sept 16 update: Confirmed completed</b>
SAF16-M3	41.2	Working group to review constitution, terms of reference and membership and report back to Feb 17 meeting	HSR Manager	Recommendations on Feb 17 agenda
SAF16-M3	42.2(ii)	New drone policy and guidance to be considered at Feb 17 meeting	Deputy HSR Manager (HW)	Draft policy on Feb 17 agenda
SAF16-M3	42.2 (iv)	Safety communication research findings to be presented at Feb 17 meeting.	HSR Manager	Presentation on Feb 17 agenda
SAF16-M3	42.2 (iv)	Deliver practical training on safety communication in Oct 17	HSR Manager	
SAF16-M3	44.2 (ii)	Review Environmental Management System to incorporate London campus	Environmental Manager	
SAF16-M3	44.2 (iv)	Investigate possibility of presenting one-off events separately in waste report in future	Environmental Manager	
SAF16-M3	44.3	Make corrections to University Environmental Policy prior to signing by VC	Environmental Manager	
SAF16-M3	45.1	Make web links to guidance generated from research findings available to members	Secretary	
SAF16-M3	45.2	Develop principles for the introduction of wellbeing offering for University staff using outcomes of SSEHS research to present at Feb 17 meeting	Director of HR, Dean of SSEHS	
SAF16-M3	45.3	Contact School's Technical Resources Manager for advice on School's treadmill desks and similar equipment	Members	
SAF16-M3	47.2	Review of chemical procurement process in 2017 to also focus on existing training	HSR Manager	HSR manager notes this is part of H&S Plan. Revised chemical safety training is being developed and will be offered to AED first

Meeting	Minute	Description	Action	Status
SAF16-M3	47.3	Take lead, working with others, in developing a staff exit strategy.	Director of HR	
SAF16-M3	48.2 (ii)	Introduce permit process to ensure contractors aware of University requirements	Fire Officer	
SAF16-M3	48.2 (iii)	Report back at Oct 17 meeting on use of alternative devices in two halls to reduce number of false fire alarm activations	Fire Officer	
SAF16-M3	49.2 (iv)	Seek clarification from Fire Officer on clause in Bespoke Building Design Fire Strategy Policy	Alec Edworthy	
SAF16-M3	51.6	Liaise regarding the development of a plan to improve the OH Service	COO, Director of HR	
SAF16-M3	52.2 (iii)	Discuss with imago their use of plastic glasses for serving drinks	Environmental Manager	
SAF16-M3	53.2	Discuss with University Compliance Engineer scaling up of training approach to meet compliance requirements	Deputy Health and Safety Manager (HW)	
SAF16-M3	54.2	Liaise with Brian Reed to fill vacant academic representative position on HSSC	Deputy COO	
SAF16-M3	54.4	Provide revised terms of reference and constitution for consideration at Feb 17 meeting	HSSC Secretary	
SAF16-M3	55.2	Liaise to identify possible changes to Safeguarding Policy to ensure covers acceptable use of computers	Director of Students Services, Alec Edworthy	
SAF16-M3	55.3	Make changes to Safeguarding Policy to ensure applicable on London campus and takes into consideration acceptable use of computers	Director of Students Services	
SAF16-M3	56.2	Seek information from Secretary to Audit Committee on instances of local procedures being overload on top of University procedures	Secretary	

<b>Meeting</b>	<b>Minute</b>	<b>Description</b>	<b>Action</b>	<b>Status</b>
<b>SAF16-M3</b>	59	Forward comments on effectiveness of HSE Committee to the HSR Manager	Members	
<b>SAF16-M3</b>	60.2	All health and safety policies to be reviewed to ensure cover London campus	HSR Manager	
<b>SAF16-M3</b>	60.3	Make changes to Electricity at Work policy and code of practice as supplied by Alec Edworthy	Technical Services Manager	

## Health, Safety & Environment Committee



Loughborough  
University

**Ref:**

Date: 23<sup>rd</sup> January 2017

**Paper Title:** Report of the working group on the review of the constitution, terms of reference and membership of the Health, Safety and Environment Committee.

**Origin:** Neil Budworth Health - Safety and Risk Manager

1. Specific Decision Required by Committee	To approve :- <ul style="list-style-type: none"> <li>The establishment of a smaller Health, Safety and Environment Executive Committee, which would replace the current Health, Safety and Environment Committee</li> <li>The establishment of a consultative forum to ensure wide consultation on Health, Safety and Environmental matters.</li> <li>The development of formal terms of reference for both the proposed Health, Safety and Environment Executive committee and the Consultative Forum for formal approval by Council in March 2017.</li> </ul>
2. Relevance to University Strategy	Developing a culture of delivering excellence in all that we do and raising our standards
3. Executive Summary	A working party was established to review the function and membership of the Health, Safety and Environment Committee. The working party is recommending a significant change to the role and membership of the committee and the establishment of a consultative forum.
4. Essential Background Information	
5. Risks, Risk Mitigation and Governance/ Accountability	Risks associated with transitioning from one set of structures to another - continuity of work and the continued engagement of key stakeholders. High levels of engagement and communications mitigate these risks
6. Implications for other activities	The proposals would mean a substantial change for the way in which the Sustainability and Social Responsibility Committee operate
7. Resource and Cost	Administration costs associated with an additional meeting
8. Alternative Options considered	The working group benchmarked and considered a number of models used at other Universities and institution before recommending the model attached.
9. Other Groups/Individuals consulted.	Wide consultation through a variety of routes – Deans, Operations Managers, Directors of Professional services, recognised Trades Unions, Safety Officers
10. Future Actions, Timescales and Frequency of Review by this Committee.	If approved, proposals and constitution and terms of reference to be submitted to the March Council meeting with the new structure to be established in the new academic year
11. Success Criteria (KPIs)	
12. University Executive comment (required for Council papers only)	

# Review of the Loughborough University Health, Safety and Environment Committee

## Background and Summary

The Health, Safety and Environment Committee (HSE Committee) on an annual basis, conducts a review of the effectiveness of the committee. At the meeting in September 2016 the Health, Safety and Risk Manager, requested and was granted, approval to conduct a more fundamental review of the committee.

The current role and terms of reference are reproduced in Appendix 1 and 2 for information.

Following a review the Health, Safety and Environment Committee are asked to approve :-

- The establishment of a smaller Health, Safety and Environment Executive Committee, which would replace the current Health, Safety and Environment Committee in the University structure and which would operate in the ways outlined in this paper. Specifically this would extend the remit of the committee to also consider matters related to sustainability.
- The establishment of a consultative forum to ensure wide consultation on Health, Safety and Environmental matters.
- The development of formal terms of reference for both the proposed Health, Safety and Environment Executive committee and the Consultative Forum for formal approval by Council in March 2017.

Subject to approval, the aim is for the new committee structure to start functioning in the new academic year.

## **Process of the Review**

Approval was given by the HSE committee to establish a small working party to review the terms of reference and membership of the University Health, Safety and Environment Committee.

The working party was established and the membership chosen to represent a number of constituencies across the University. The review committee consisted of the Health, Safety and Risk Manager, the Dean of Science, a lay member of Council, an Operations Manager, the Director of a Professional Service and a Warden. Additional consultation occurred with the recognised trades unions, the Deputy Vice Chancellor, the Chief Operating Officer, the Deputy Chief Operating Officer, the Director of Human Resources, Loughborough University Students' Union and the Sustainability and Environment Managers.

To help the review committee consider a suitable structure, a benchmarking exercise was undertaken which reviewed the Health, Safety and Environmental governance structure of a number of UK Universities.

The committee considered the information gathered and clarified the role of the HSE committee and from there recommended the membership of the committee and the structures needed to ensure effective operation of the committee.

## Recommendations

### The Role of the Committee

The first task of the working party was to clearly define the role of the committee.

The recommended role of the Health, Safety and Environment Executive Committee is to agree and drive Health, Safety, Environmental and Sustainability strategy. The committee should also receive relevant information on the management of Health, Safety, Environment and Sustainability, monitor audit outputs, and receive exception reports (ie problems, or where expected actions have not been delivered).

To ensure that Health, Safety, Environment and Sustainability is embedded in the operational practices of the University the HSE committee will receive a formalised report from each of the schools and identified professional services. These reports will be based on a standard pro forma. In addition on a regular basis (on a frequency determined by the HSE Committee), the Dean, Director or Head of Professional service will present their plans, progress, key performance indicators and response to any significant incidents to the committee. Part of this update will be linked directly to their own H&S risk register.

The committee will also receive reports for approval / action from the Statutory Compliance Committee; by exception from School and Professional Services safety committees; from the subject specific committees and from any task and finish project groups which have been established.

It is anticipated that the detailed work on any particular topic will be undertaken within the sub groups, with the HSE Executive Committee normally giving formal approval if due process has been followed.

The main body of the HSE committee meeting will be focused on developing and monitoring the strategic direction of the University and in driving the performance of the University – Reports from committees should be brief.

It is inevitable that there will be certain areas where the agendas of the Joint Negotiating and Consultative Committee and the Health, Safety and Environment Executive committee overlap. In these cases the Health, Safety and Risk Manager and the Director of HR in consultation with colleagues will agree which body will take the lead on a particular issue.



## The Membership of the Health, Safety and Environment Executive Committee

The proposed membership of the committee is as follows :-

Chair :- Deputy Vice Chancellor,  
Chief Operating Officer  
Deputy Chief Operating Officer  
A Dean selected on a rotating basis  
An Operations Manager selected on a rotating basis  
2 X Lay member of Council  
Student Union Representative  
One representative from each of the recognised Trades Unions (3 in total)

### **Ex officio members**

Health, Safety and Risk Manager  
Sustainability Manager  
Human Resources Director

### **Rationale for choice of membership**

The proposed membership has been selected such that it is senior enough to exercise executive power across the University, whilst still being representative of the activities across the University.

Two lay members of council are recommended to ensure as far as is possible that one independent member is always present.

There was considerable debate regarding the proposed membership of the committee ultimately a Dean and an Operations Manager have been recommended to be selected on a rotating basis to ensure that the committee remains close enough to the operational practices of the University to be relevant.

One representative from each of the recognised Trades Unions have been included to ensure that the diverse constituencies that they represent are fully represented, and to ensure that the legal requirements on consultation are properly discharged.

The membership of the committee should be reviewed after the first year of operation in order to ensure that the balance and coverage is effective.

## The Role of School and Professional Services Safety Committees

These committees play an important part in the management of health, safety and environment across the University, however the activity and coverage of the committees varies substantially across the University.

To improve the effectiveness of these committees a recommended framework agenda has been issued, which, if followed will serve to link the committees more strongly with the central services and the Health and Safety governance structure.

Once the role and membership of the HSE committee is agreed the coverage of the current committees will be reviewed. For example it may be sensible to combine some of the committees for the smaller, lower risk professional services in the future.

### **Subject Specific Committees**

A number of subject specific committees already exist. Some of these committees are required by legislation eg the Biological Safety Committee, others represent a permit requirement or good practice.

These committees are important in managing the more technical hazards we have consistently across the University. In addition they enable us to learn from specialists, and from other Institutions. It is anticipated that these committees will continue and that additional committees may be required as new hazards develop.

### **Task and Finish Groups**

Occasionally challenges will come along to which the University will need to respond. For example there may be changes in regulations which will affect the way that we operate. In these cases a task and finish group will be established reporting to the HSE committee to review the challenge and develop a recommended solution.

### **Compliance**

This structure will remain unchanged.

### **The Proposed Consultative Forum**

Reducing the size and role of the HSE committee will limit its ability to act as a genuinely consultative body. To ensure that significant proposals and activities receive appropriate scrutiny, and to ensure that we, as an institution, fulfil our legal obligations relating to consultation (see Appendix 3 for details) a consultative forum will be formed which will include suitable Trades Union and cross campus representation.

It is recommended that the chairing of this group alternate between the Health, Safety and Risk Manager and a nominated Union representative.

The precise membership of this forum will be determined by mapping the key constituencies across the University and then developing membership proposals to give the greatest possible coverage, whilst keeping the committee to a size that will function.

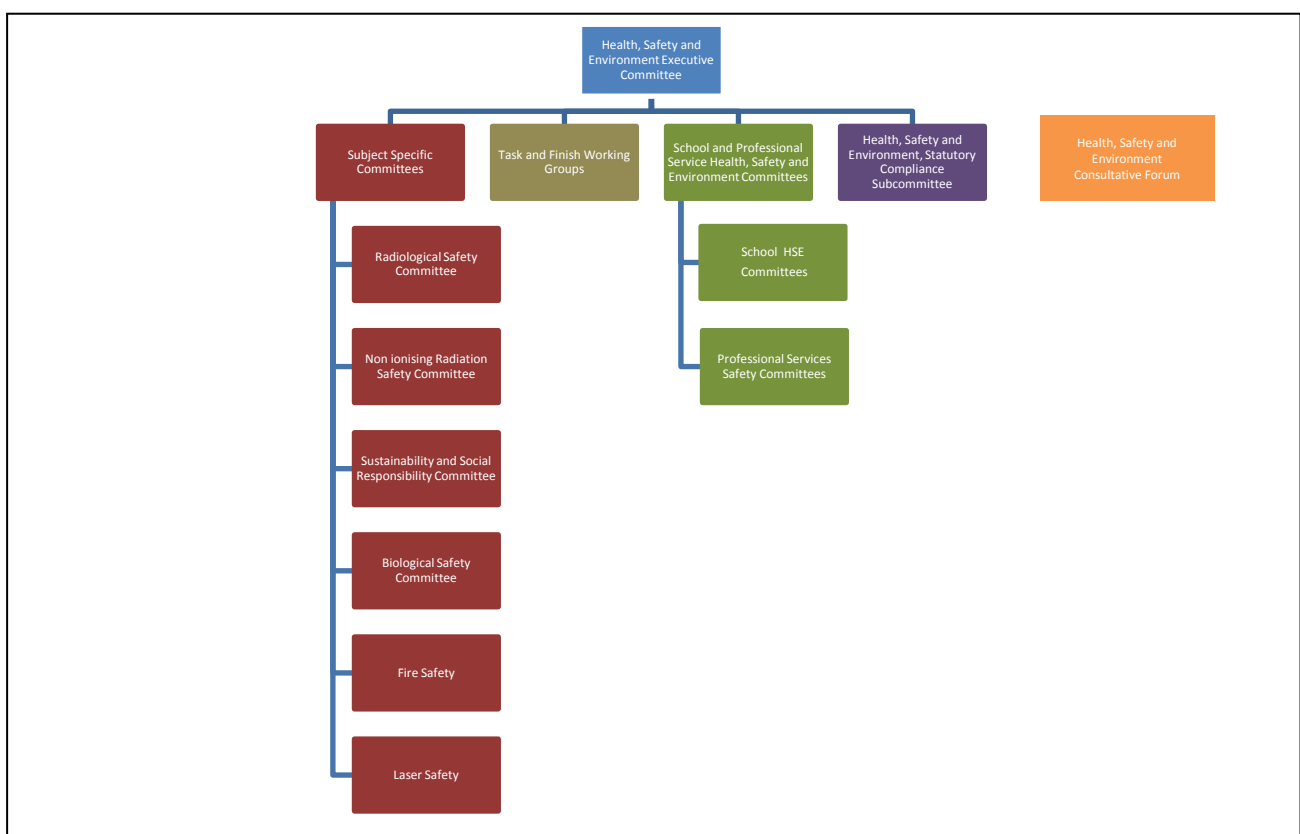
To ensure that consultation occurs across the full range of subjects and activities, a standing invitation is to be extended to the recognised trades unions to local and subject specific committees such that a nominated representative may attend any of the committee meetings where a subject of interest arises. Attendance is to be agreed with the chair of the appropriate committee in advance of the meeting.

### The Position of Environmental Management and Sustainability in the new HSE Structure

Matters relating to the future direction and strategy of Sustainability and Social responsibility are discussed at the Sustainability and Social Responsibility Group which is currently chaired by Richard Taylor, the Chief Operating Officer. At present this group does not link directly to any standing committee of either Senate or Council. The recommendation is to bring the reporting line of this group into the Health, Safety and Environment Executive Committee such that it ultimately reports through to Council. Realigning the group gives the opportunity for wider stakeholder engagement in the development of Sustainability and Social Responsibility strategy and gives Council visibility, overview and assurance of the subject areas.

The new Sustainability and Social Responsibility Committee would also consider matters relating to the environmental management system. However much of the environmental management detail will be dealt with in the appropriate committee eg discussions relating to waste in the local school or specialist committee, compliance in the Health, Safety and Environment Statutory Compliance Sub Committee with the SSRC taking an overarching view as the SSRG does currently.

### Proposed Structure of Health and Safety Committee Meetings



## **The Next Steps**

Approval is sought from the HSE committee to develop formal terms of reference for both the proposed Health, Safety and Environment Executive committee and the Consultative Forum for formal approval by Council in March 2017.

Subject to approval, the aim is for the new committee structure to start functioning in the new academic year.

## Appendix 1 Details of Current Membership

<b>Position</b>	<b>Member</b>
<b>CHAIR, Provost and Deputy Vice-Chancellor</b>	Chris Linton
<b>Chief Operating Officer</b>	Richard Taylor
<b>Deputy Chief Operating Officer</b>	Andrew Burgess
<b>Two lay members, one of whom shall be a member of Council</b>	Ann Greenwood (2018)
	Allan Jones (2017)
<b>Three Representatives from each of the recognised Trade Unions: UNITE, UCU, UNISON</b>	<b>UNITE</b> Spencer Aryeetey Rob Hunter Harshad Purohit
	<b>UCU</b> Alec Edworthy Marc Gibson Brian Reed
	<b>UNISON</b> Sandy Edwards Andy Gomez Irvin Hendrickson
<b>Two members appointed by the Students' Union</b>	Matt Gill Alice Kirkaldy
<b>Two Deans of Schools nominated by the Chair, with a view to ensuring representation of a range of views and expertise</b>	Mark Biggs (Sci) Mark Lewis (SSEHS)
<b>Three Safety Officers from the Schools nominated by the Chair, with a view to ensuring representation of a range of views and expertise</b>	Tony Goodall (SSEHS) Rachael Jermyn (School of the Arts) Bob Temple (Wolfson School)
<b>One member of the Ethical Approvals (Human Participants) sub-committee nominated by the Chair of the Ethical Approvals (Human Participants) sub-committee</b>	Cristian Tileaga
<b>The following Officers of the University will serve on the Committee ex-officio:</b>	
<b>Health, Safety and Risk Manager</b>	Neil Budworth

<b>Deputy Health and Safety Manager</b>	Hugh Weaver
<b>Radiological Protection Officer</b>	Julie Turner
<b>Security Manager</b>	Geoff Feavyour
<b>University Fire Officer</b>	Rod Harrison
<b>Director of Facilities Management</b>	David Fulford
<b>Director of Campus Living</b>	<i>TBC</i>
<b>Director of Human Resources</b>	Rob Allan
<b>Chair of the Wardens Sub Group</b>	<i>Vacancy</i>
<b>Occupational Health Adviser</b>	<i>Vacancy</i>
<b>Environmental Manager</b>	Nik Hunt
<b>Two Operations Managers nominated by the Chief Operating Officer, with a view to ensuring representation of a range of views and expertise</b>	Tom Carslake Suzanne Dexter
<b>LSU Health &amp; Safety Officer</b>	Jude Hoy
<b>Committee Secretary</b>	Martine Ashby

## Appendix 2 Loughborough University Current HSE Committee Terms of Reference

1. To act as a consultative forum, normally meeting three times each academic year, for the consideration and discussion of draft health, safety and environment policies and procedures;
2. To act on behalf of and to advise Senate and Council and senior management on matters of health, safety and environmental policy, structure and communications; and to recommend any action necessary to ensure the health and safety of staff, students and members of the public (including contractors and visitors to University premises);
3. To keep under review the University's legal and statutory obligations with regard to health, safety and environmental regulation compliance and to identify through regular monitoring and bring to the attention of senior management and/or Senate and Council areas where compliance is at risk or not being achieved;
4. To receive reports on health and safety and environmental audits, accident statistics, communications with enforcing authorities, and from relevant sub-groups, and to make recommendations to relevant University management of any corrective action required;
5. To receive updates on changing legislation and to review and assist in the development of policies and procedures to enable the University to meet all statutory requirements;
6. To ensure all levels of University management are aware of their safety and environmental obligations and through the receipt of regular monitoring reports to ensure these obligations are being discharged appropriately;
7. To set up and oversee sub-groups of the Committee and to commission reports from these sub-groups as is necessary to assist the Committee in the development of policy and procedure. To produce terms of reference for environmental management and sustainability sub-group(s) of the Health, Safety and Environment Committee;
8. To monitor staff training and development programmes as they relate to health, safety and environmental issues to ensure appropriate training is provided to enable all managers safely to discharge their duties;
9. To receive reports and review personal safety for staff, students and visitors on University premises, particularly where it could impinge on health and safety;
10. To receive reports on the progress of the University Environmental Management System;
11. To report after each meeting to Senate and Council on health, safety and environmental activities and provide Senate and Council with the information required to discharge their duties under the Health and Safety at Work Act (1974), the Management of Health and Safety at Work Regulations (1997) and the Register of Environmental Legislation.

## **Appendix 3 - The legal requirements regarding consultation**

As a University there are certain legal requirements with which we need to comply.

Under the Safety Representatives and Safety Committee Regulations 1977, Where Unions are recognised and they have requested that a health and safety committee be formed then there is a duty to establish such a committee.

The Health and Safety (Consultation with Employees) Regulations 1996 also requires that employees are consulted on issues related to their health and safety, either directly or through an established consultation mechanism.

There is also a requirement to have a biological safety committee under the regulations that cover the use of Genetically Modified Organisms.

In terms of the use of radioactivity a radiological committee is an expectation of the Environment Agency and is written in to our local rules and our permit requirements. The reporting line of that committee is also specified in our permit.



## Health, Safety & Environment Committee



Loughborough  
University

**Ref:**

Date: 08/02/2017

**Paper Title:** HSE Committee Update for the period September 2016 to January 2017

**Origin:** Environmental Manager – Nik Hunt

1. Specific Decision Required by Committee	The report is for information only and no specific actions are required by the Committee.
2. Relevance to University Strategy	Embedding Sustainability
3. Executive Summary	<ul style="list-style-type: none"> <li>The development plan targets for the current year are well underway with 8/14 on track and 5 slightly behind schedule but not of major concern. 1 item is significantly behind schedule and relates to the ongoing concerns relating food waste in academic areas, further work is required to progress this target.</li> <li>Work on the EMS is on track and expansion of the scope to include imago operations, some aspects of tenanted areas and Loughborough London is currently being reviewed.</li> <li>There have been three environmental incidents of which one had the potential to become a pollution incident but prompt spill response action prevented this.</li> <li>A new Waste Action Plan (to replace the previous Waste Strategy) is still in development and will be presented at the next committee meeting</li> <li>There have been no new processes or procedures since the last meeting</li> <li>Waste recorded is 16% up on the same period compared to 2015 and further urgent work is required to understand the potential causes but a large proportion of this occurred in the summer and ties in with a significant increase in conference business. Other areas of concern and findings are detailed along with an action plan.</li> <li>1 new piece of legislation is referenced but has no impact on Environmental Management.</li> <li>Training has focussed on Environmental Essentials the new eLearning course but there has been limited take up of this and therefore there will now be direct engagement with location managers to promote this.</li> </ul>
4. Essential Background Information	Previous reports and papers.
5. Risks, Risk Mitigation and Governance/ Accountability	All relevant to risk mitigation as part of Environmental Management.
6. Implications for other activities	The potential overspend on waste has financial implications
7. Resource and Cost	Additional funds may be required for waste disposal.
8. Alternative Options considered	N/A
9. Other Groups/Individuals consulted.	Sustainability Manager, Environment Agency, External Contractors, Campus Living, other departments
10. Future Actions, Timescales and Frequency of Review by Cttee.	Nothing of note
11. Success Criteria (KPIs)	Waste Action Plan Targets, Legal Compliance, maintaining the EMS
12. University Executive comment (required for Council papers only)	N/A



## Environmental Management

**Subject: HSE Committee Update for the period September 2016 – January 2017**

**Origin: Environmental Manager, Nik Hunt**

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### **Purpose of the report**

To provide a report on environmental management activities in the following areas for the year just passed and for the year to come.

1. Progress against Development Plan targets
2. Environmental Management System Update
3. Environmental Incidents
4. Progress against Objectives and Targets
5. Processes and Procedures
6. Current waste data
7. Legislation
8. Training & Emergency Spill Response Exercise

**Executive Summary: Please see cover sheet.**

### **Update on Activities:**

#### **1. Progress against Development Plan targets 2015/16**

The development plan for 2016/17 can be seen in Appendix 1 with commentary of progress against each task including a traffic light system for progress. There are 10 targets for this year with a further four carried over, of these:

- 8 are on tack
- 5 have commenced and are not quite where we had anticipated being at this stage. Of these :
  - 1 relates to Sustainable procurement and there have been discussions in respect of this.
  - 3 relate to additional work required to tackle an increase in waste (see item 6 on Waste data).
  - The final item relates to the Environmental Essentials Course (see item 8 on Training).
- 1 is significantly behind target – this is the appraisal on the option of introducing food waste into academic areas. Although a trial is still underway there has been no feedback on this and therefore no indication of the resource implications.

#### **2. Environmental Management System (EMS) ISO14001 Update**

Work is progressing on the EMS in accordance with its annual plan and the development of it towards ISO14001:2015. A review of scope is underway and considering imago Ltd, Tenanted areas and Loughborough London. We have a peer audit of our systems scheduled for the 23<sup>rd</sup> February and internal compliance audits will be undertaken in March and April. The external audit has not yet been scheduled for this year but is expected to be mid-summer. The Environmental Policy was amended to include Loughborough London and received chairs approval and was then signed by the VC. It has now been distributed and anyone requiring an updated policy please contact the Environmental Manager.

### 3. Environmental Incidents

There have been three recorded environmental incidents since the last meeting and these are summarised in Appendix 2. All three involved diesel, two of which were from vehicles traversing the campus. The third had the potential to be more serious and occurred when the nozzle became detached from the diesel tank in the FM yard during a routine vehicle fill. A significant amount of diesel was spilt but the prompt spill response action of those in the vicinity prevented diesel entering the surface water system.

### 4. Progress against Objectives and Targets

**Waste Strategy:** The new Waste Action Plan (to replace the previous Waste Strategy) is still in development and will be presented at the next committee meeting.

### 5. Processes and Procedures

There have been no new processes or procedures since the last meeting. A review of the documents pertaining to Sustainability and Environmental Management as it relates to construction, refurbishment and maintenance of the estate has however just been started.

### 6. Current waste data

The table in Appendix 3 details the waste data for 2016/17 upto December 31<sup>st</sup> along with previous year's data. This is shown excluding construction waste. Key points of note are:

- Overall waste generated for the year to date is up by 96 tonnes or 16% on the same period in 2015. Investigations are ongoing to understand why but initial findings are:
  - Increased waste is being seen across a range of areas including:
    - Sports (Badminton & Swimming Pool)
    - Retail (EHB and Cafe 641)
    - Administration (Hazlerigg, Mech Eng)
    - Academic (Wolfson building, School of the Arts)
    - Catering (Towers kitchen)

All of these areas are producing on average between 300Kg and 600Kg more waste per month when compared to the previous year.
  - There was an increase in campus conference business in the summer with the number of bednights increasing from 2683 to 11687 representing a 435% increase and in the corresponding period waste increased by 62 tonnes. However the waste over the weekend of the school games was not significantly higher.
  - There has been an increase in use of disposables by campus livings retail operations and this can be seen by a 35% increase in waste from the EHB.
  - There have been ongoing clear outs as a result of movements and 200 staff vacated a tenanted area of Holywell Park in the summer.
  - Burleigh Court has produced 50% more food waste in the first five months of the year compared to the same period in 2015. Bednights have increased but not proportionately to the amount of food waste generated.
- Recycling levels are up by 2.8% at present which is helping
- 96 tonnes of general waste equates to £18K, however a proportion of this is recycling (disposal costs are less) and so the net overspend on waste in this area is currently £10.7K

#### Actions to be taken:

- There will be discussions with key stakeholders in each of the buildings where additional waste has been identified to see if we can understand the cause of the additional waste.
- The increase in conference business (and presumably income) does not result in an increase in contribution to waste costs and this is being raised with Campus Services Management.
- We are working with Camus Living to see if the use of disposables can be reduced.

- We have looked at the practicalities of segregating waste associated with clear-outs and whilst it is feasible to monitor waste generated and disposed of in additional temporary skips, it is not very often necessary nor feasible (financially and practically) to bring in additional skips for the disposal of this waste and therefore not practical to segregate this waste in the reports to any great extent.
- We are reviewing tenant, staff and student numbers to see if this could have impacted on waste but initial indicators are there has not been a significant change in any of these.

## 7. Legislation

The only new legislation of note is **The Environmental Permitting (England and Wales) Regulations 2016** which came into force on the 1<sup>st</sup> January replacing the regulations of the same name from 2010. There is no impact as a result of these from an environmental perspective as they consolidate the original regulations and all the subsequent amendments.

## 8. Training

We have been focussing on delivery of the Environmental Essentials Learn module but with limited success. There has been engagement with this across most schools and professional services but only in small quantities. We are now going out and engaging direct with managers to seek their support in promoting this. It is on the standard induction check list, the sustainability web pages and the staff development web pages.

We have also undertaken some training with all the cleaning supervisors and their teams on the importance of waste, the waste hierarchy and encouraging these staff to engage with building occupants if waste is not being recycled (at all or correctly).

## Appendix 1: ENVIRONMENTAL MANAGEMENT DEVELOPMENT PLAN 2016/17 - progress report

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Investing in People</b>	<b>Educating for Success</b>	<b>Growing Capacity &amp; Influence</b>	<b>Raising Standards and Aspirations</b>

Objectives for Year 2016 To 2017					Date:
	Specific Objectives	Enter Heading No.*	Measures	Date by	Progress
1.	EMS – continued development of the system to achieve ISO14001:2015 and environmental compliance.	4	<ul style="list-style-type: none"> <li>Internal System Audit (peer)</li> <li>Internal Compliance Audit</li> <li>External Audit</li> </ul>	Feb 17 Apr 17 July 17	Peer audit date set for 23 <sup>rd</sup> Feb No other dates set yet. ISO work on track
2.	Development and delivery of a Sustainable Cup Campaign	2	<ul style="list-style-type: none"> <li>Successful Marketing Campaign</li> <li>Sales of Reusable Cups</li> <li>Recycling of disposable cups</li> <li>Reductions in disposable cups</li> </ul>	Oct 16 Dec 16 Dec 16 July 17	Sales of Cups progressing and campaign ongoing. Recycling of cups is more challenging. Analysis ongoing, project on track
3.	Training in General  Delivery of an online Environmental Sustainability Training Module	1,2,4	<ul style="list-style-type: none"> <li>Module on Learn</li> <li>Undertaken by 1000 Students</li> <li>Undertaken by 250 Staff</li> </ul>	Sep 16 Dec 16 July 17	Environmental Essentials launched. 214 staff visited 106 staff completed and passed the test. Limited student engagement. Needs more work.
4.	Continue work with General Waste contractor on communication and engagement with staff	1,2,4	<ul style="list-style-type: none"> <li>Programme of communication and engagement / training</li> <li>Programme delivered</li> </ul>	Aug 16  July 17	Some engagement done but more needed in light of waste arising's
5.	Ongoing Waste Audits of Academic Buildings	2,4	<ul style="list-style-type: none"> <li>Engagement with Schools and Service Departments as a result of findings</li> </ul>	July 17	Some audits done but more needed in areas where waste has increased
6.	Ongoing Waste Audits of student halls through Grime Scene Investigations		<ul style="list-style-type: none"> <li>Engagement with Halls of Residence and Students as a result of findings</li> </ul>	July 17	On track – more GSI completed in term 1 than all last year.
7.	EMS – Testing of emergency response procedures	1,4	<ul style="list-style-type: none"> <li>Follow up to exercise held to improve procedures.</li> </ul>	Feb 17	Work still ongoing but on track
8.	Continued delivery of the Environment League through the Environmental Management Assistant and Students Union	1,2,3,4	<ul style="list-style-type: none"> <li>Evidence of engagement from the halls</li> <li>Recycling levels maintained and ideally improved.</li> </ul>	Ongoing	Working hard to increase and improve engagement with halls and work with LSU. On track but always seeking ways to enhance this.
9.	Academic and Operational Environmental Synergies	2,3,4	<ul style="list-style-type: none"> <li>Look for further opportunities for engagement with academic departments</li> <li>Engage with one new department</li> </ul>		Engaged with WEDC on pollution prevention and looking at Design School engagement. Still on the lookout for more opportunities.
10.	Budgetary Management	4	<ul style="list-style-type: none"> <li>Deliver operations within budgetary constraints</li> </ul>		Currently reviewing waste arising's as over budget for YTD expenditure

	<b>CARRIED OVER FROM 2015/16</b>		•		
	Duty of Care Audit Inspections on any waste contractors not audited in the last 12 months	4	<ul style="list-style-type: none"> <li>Follow all waste streams from point of inception to point of disposal.</li> </ul>	Dec 17	Audits have now been completed on three out of four contractors. The fourth is being undertaken by other consortium members.
	Roll out of ISO14001 into imago Ltd	1,2,3,4	<ul style="list-style-type: none"> <li>Accreditation for imago ltd.</li> </ul>	Dec 17	Part of EMS Scope Review
	Developing Sustainable Procurement	3,4	<ul style="list-style-type: none"> <li>Reconvene Working Group</li> <li>Get allocated support from Procurement</li> <li>Support review of Objectives, Targets and Strategy</li> <li>Agree and set target for Flexible Framework Level 4</li> </ul>	July 17	Started and working with procurement advisors but limited tangible progress.
	Appraise and report on the option of introducing food waste segregation in staff areas.	4	<ul style="list-style-type: none"> <li>Fully informed report</li> <li>Present to HSE Cttee</li> </ul>	Oct 16	No further progress as staff resource issues remain the same.

<b>Not Started</b>		<b>Started and not running according to schedule</b>	
<b>Started and on track or Complete</b>		<b>Significantly behind schedule and of major concern</b>	

## Appendix 2: Summary of Environmental Incidents (September 2016 – February 2017)

55	Diesel Spill	06.11.16	Near miss	Pollution of brook-legislative breach.	Reported to Security cleaned up by FM, no known cause.
54	Diesel Spill	04.11.16	Near miss	Pollution of brook-legislative breach.	Likely Kinch bus with overflowing tank, reported to Security cleaned up by FM
53	Diesel Leak	31.10.16	Near miss	Pollution of brook-legislative breach.	Incident occurred in FM yard and was dealt with by FM

## Appendix 4: Waste Data – excluding construction

		2010/11		2011/12		2012/13		2013/14		2014/15		2015/16		2015/16 TO DATE	
HESA	Waste Total For:	Tonnes	% of Sub total	Tonnes	% of Sub total	Tonnes	% of Sub total	Tonnes	% of Sub total	Tonnes	% of Sub total	Tonnes	% of Sub total	Tonnes	% of Sub total
Non Residential															
D73.C13a	Recycled	495.4	60.30%	762.53	76.79%	657.16	80.12%	634.28	78.10%	671.87	77.91%	671.12	78.74%	360.04	81.19%
D73.C13b	Incineration	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%	0.00	0.00%
D73.C13b	Composting	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%		0.00%
D73.C13b	Anaerobic Digestion	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%	0.446	0.10%
D73.C13b	Landfill	252.1	30.69%	87.99	8.86%	36.62	4.46%	39.93	4.92%	42.76	4.96%	40.68	4.77%	18.63	4.20%
D73.C13d	Used to Create Energy	74	9.01%	142.45	14.35%	126.49	15.42%	137.94	16.98%	147.72	17.13%	140.54	16.49%	64.35	14.51%
D73.C13c	Other	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%		0.00%
	<b>SUB TOTAL</b>	<b>821.5</b>		<b>992.97</b>		<b>820.27</b>		<b>812.15</b>		<b>862.36</b>		<b>852.34</b>		<b>443.46</b>	
D73.C14a	Recycled	371.9	37.64%	504.42	45.85%	556.06	54.51%	613.84	54.43%	621.69	53.68%	604.55	53.18%	232.62	51.17%
D73.C14b	Incineration	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%	0.00	0.00%
D73.C14b	Composting	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%		0.00%
D73.C14b	Anaerobic Digestion	151.5	15.33%	235.27	21.39%	195.04	19.12%	209.9	18.61%	226.50	19.56%	216.19	19.02%	105.70	23.25%
D73.C14b	Landfill	340.4	34.45%	137.62	12.51%	60.39	5.92%	68.25	6.05%	69.59	6.01%	70.94	6.24%	26.12	5.74%
D73.C14d	Used to Create Energy	124.3	12.58%	222.81	20.25%	208.62	20.45%	235.77	20.91%	240.38	20.76%	245.05	21.56%	90.22	19.84%
D73.C14c	Other	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%		0.00%		0.00%
	<b>SUB TOTAL</b>	<b>988.1</b>	<b>% of All</b>	<b>1100.1</b>	<b>% of All</b>	<b>1020.1</b>	<b>% of All</b>	<b>1127.76</b>	<b>% of All</b>	<b>1158.16</b>		<b>1136.72</b>		<b>454.65</b>	
D73.C01a	Recycled	867.3	47.93%	1266.95	60.53%	1213.22	65.92%	1248.12	64.34%	1293.57	64.02%	1275.66	64.13%	592.66	65.99%
D73.C01b	Incineration	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
D73.C01b	Composting	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
D73.C01b	Anaerobic Digestion	151.5	8.37%	235.27	11.24%	195.04	10.60%	209.9	10.82%	226.50	11.21%	216.19	10.87%	106.14	11.82%
D73.C01b	Landfill	592.5	32.74%	225.61	10.78%	97.01	5.27%	108.18	5.58%	112.35	5.56%	111.62	5.61%	44.74	4.98%
D73.C01d	Used to Create Energy	198.3	10.96%	365.26	17.45%	335.11	18.21%	373.71	19.26%	388.11	19.21%	385.60	19.39%	154.57	17.21%
D73.C01c	Other	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
D73.C01	<b>All Wastes Total</b>	<b>1809.6</b>		<b>2093.07</b>		<b>1840.37</b>		<b>1939.91</b>		<b>2020.52</b>		<b>1989.062</b>		<b>898.11</b>	
	<b>Adjusted recycling figure</b>		56.30%		71.77%		76.52%		75.16%		75.23%		75.00%		77.81%

**Composting – because we compost on site we do not record this tonnage as it is closed loop on site**

**Other** = waste mass from the estate that is disposed of by other offsite methods. This may include mechanical biological treatment and offsite autoclave.



Paper Title: Verbal update from the Deputy Health, Safety and Risk Manager on progress in developing the Risk Register (10 minute PowerPoint presentation, plus 5 minutes for questions)

Author: James Stapleton 19<sup>th</sup> January 2017

<b>1. Specific Decision Required by Committee</b>	<b>To note the update to the development of the H&amp;S Risk Registers</b>
<b>2. Relevance to University Strategy</b>	Raising standards and aspirations (by managing health and safety performance more effectively across the University)
<b>3. Executive Summary</b>	The University H&S Service has been working with departmental colleagues since 2017 to understand their own risks and to subsequently manage them. This is an update to the Committee.
<b>4. Essential Background Information</b>	In June 2016, approval was given by the HSE Committee to the production of H&S Risk Registers for each School and Professional Service.
<b>5. Risks, Risk Mitigation and Governance/ Accountability</b>	This presentation provides assurance to the HSE Committee that the programme for undertaking the risk registers is being worked through.
<b>6. Implications for other activities</b>	No specific implications identified
<b>7. Resource and Cost</b>	Initial 0.5 day time resource for Schools and Professional Services SMTs to undertake a departmental risk profiling exercise, with the support of H&S Service staff given to the larger departments. Following this, additional time resource needed to produce an action plan to manage the risks, and allocated resource & training costs to implement the action plan.
<b>8. Alternative Options considered</b>	General guidance is available on the HSE website but this paper sets out a coordinated, structured approach across the University.
<b>9. Other Groups/Individuals consulted.</b>	Benchmarking has recently taken place with the University of Nottingham, University of Warwick, and De Montfort University.
<b>10. Future Actions, Timescales &amp; Frequency of Review by this Committee.</b>	Programme of Risk Register workshops to be worked through. All Risk Registers to be produced by the end of Q4 2017. Each team also has to produce a resultant action plan to manage their risks.
<b>11. Success Criteria (KPIs)</b>	<ol style="list-style-type: none"> <li>1. The production of a risk register for each school / department.</li> <li>2. The production of resultant action plans to manage risks identified. <i>(Both owned by the School or Professional Service.)</i></li> <li>3. The production of a coordinated H&amp;S audit programme, owned by the H&amp;S Service.</li> </ol>
<b>12. University Executive comment (required for Council papers only)</b>	





# Health and Safety Risk Registers

Update so far

James Stapleton  
8<sup>th</sup> February 2017



# Content

- Objective re-cap
- Progress against programme
- Workshop lessons learned
- Trends identified (so far...)
- Issues identified outside local control
- Next steps
- Questions

# Objective re-cap:

1. Identify significant H&S risks in each School / Professional Service
2. Production of local action plans to manage risks
3. University H&S risk register & audit programme
4. Providing visibility and assurance of key risks to the HS&E Committee

# Progress against programme

Workshops undertaken to 25/01/17, since July 2016 (8 out of 23):

- Schools
  - School of the Arts, English and Drama 08/09/16
  - Loughborough University London 20/10/16
  - School of Social, Political and Geographical Sciences 09/11/16
  - School of Science 15/12/16
- Professional Services
  - Imago Ltd 21/07/16
  - Student Services 15/08/16
  - Facilities Management 21/11/16
  - Marketing and Advancement 05/12/2016
- Programme scheduled to complete Q4 2017



# Workshop lessons learned

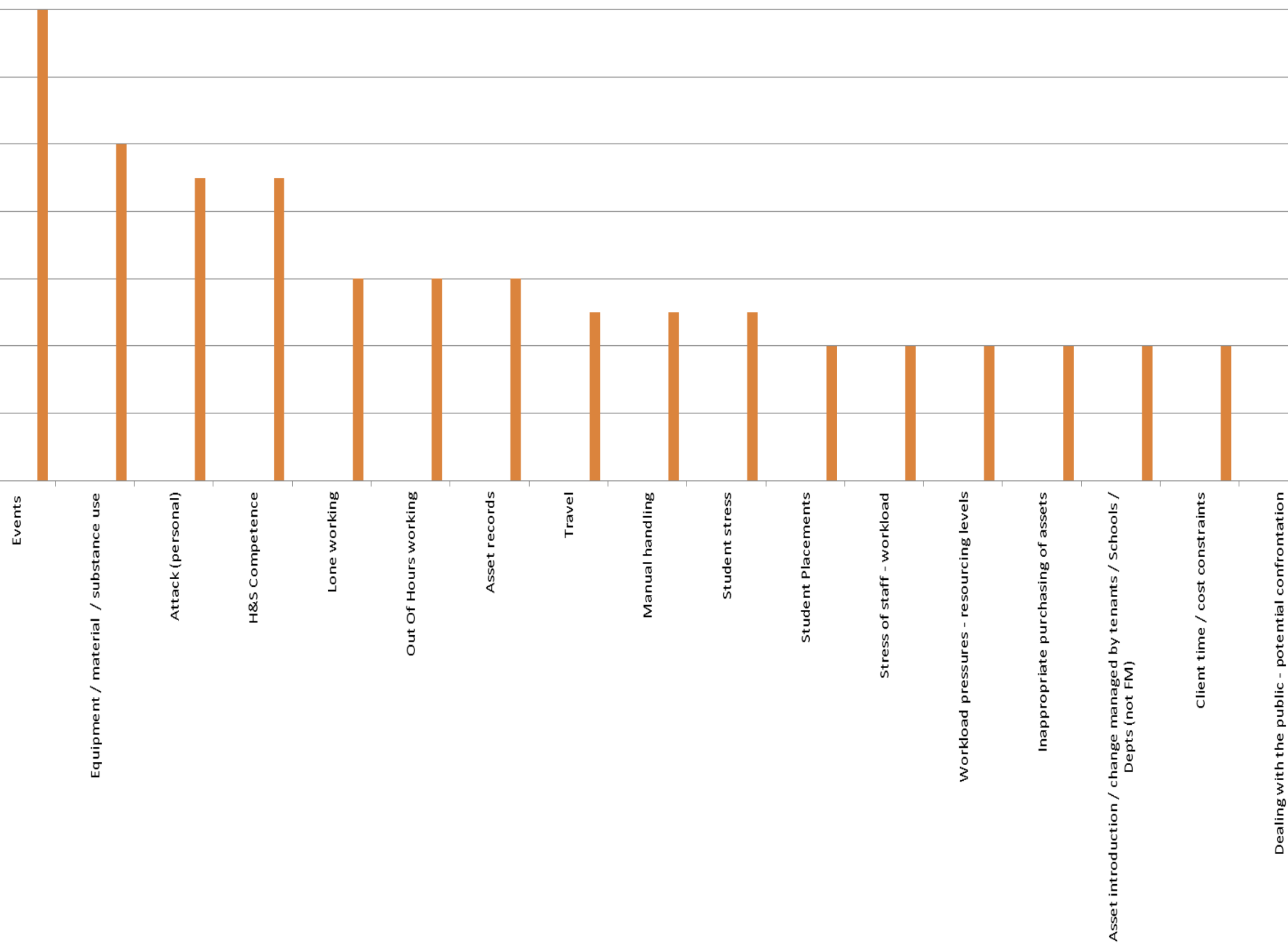
- The importance of Dean and Director attendance
- Agreement for shorter or joint workshops for smaller Professional Services
- Additional time for the production of action plans
- Contentious issues
  
- Overall – workshops have been positive & engaging



# Trends identified (so far...)

Top 5 significant H&S risks identified, common across more than one School / Professional Service:

- Events
- Equipment / material / substance use
- Attack (personal)
- H&S Competence of individuals undertaking tasks
- Lone working





# Issues identified outside local control of School / Service

## Campus infrastructure concerns:

- Concern over the potential risk of collision of vehicles / pedestrians / cyclists in busy areas
- Poor lighting in some areas
- The increase of cyclists on campus - not all display lighting
- Some campus roads are narrow, causing vehicles to mount the pavements to pass (adjacent to the Paddock Pitch)
- The campus is open to the public – we have limited entry control

## IT / Business Continuity / Data concerns:

- The consequences of IT failure are high to service delivery
- Safe storage of a high amount of sensitive data
- Personal data (e.g. student passports) left unsecured on campus



# Next steps

- Continue delivering the H&S risk register workshops
- Continue to support all Schools and Professional Services in developing and finalising action plans
  - Assurance reports to HS&E Committee by Schools / Professional Services from summer 2017
- Produce University H&S Risk Register
- Analyse data to:
  - Design internal H&S audit programme
  - Design H&S campaigns
  - Review effectiveness of key H&S Policies

# Questions

## Health, Safety & Environment Committee



Loughborough  
University

**Ref:**

Date: 6<sup>th</sup> January 2017

**Paper Title:** Research into Effective Safety Conversations

**Origin:** Neil Budworth

1. Specific Decision Required by Committee	For information
2. Relevance to University Strategy	Supports investing in our staff and enhancing a culture of excellence in what we do.
3. Executive Summary	The Health and Safety Team have been working with Professor Elizabeth Stokoe and Dr Emily Hofstetter to examine the ways in which safety conversations can be made more impactful. This item updates the committee on the preliminary findings.
4. Essential Background Information	The Health and Safety Service is committed to working with the academic centres of excellence across the University to determine how that expertise can be used to drive excellent Health and Safety performance across the University.
5. Risks, Risk Mitigation and Governance/ Accountability	The only risks are in not trying to improve.
6. Implications for other activities	None
7. Resource and Cost	Already within the Health and Safety Services budget
8. Alternative Options considered	Taking no action was considered, as was looking at commercial products focused on the same aim.
9. Other Groups/Individuals consulted.	The strategic framework has been developed by the health and safety service and has been sent to Deans, Operations Managers, Departmental and School Safety Officers and Union representatives. The framework has also been discussed at a number of school safety committees
10. Future Actions, Timescales and Frequency of Review by this Committee.	Strategic items have now been incorporated into the action plan. Progress to be reviewed as part of the Health, Safety and Risk Manager's update at each HSE meeting
11. Success Criteria (KPIs)	These will be defined for each element of the strategy eg production of risk registers will have a project plan and timeframes
12. University Executive comment (required for Council papers only)	



Paper Title: **University Fire Officers report for the period 1st September 2016 to 31st December 2016**

Author: **Mr R M Harrison, University Fire Officer**

1. <b>Specific Decision Required by Committee</b>	<b>None. Report to be received and noted</b>
2. <b>Relevance to University Strategy</b>	To identify any deficiencies in the University Fire Policy and Strategy
3. <b>Executive Summary</b>	Brief on three small fire incidents, two in student halls of residence and one at the Hockey Pavilion involving external flood lighting with LF&RS in attendance. Update on fire alarm system issues at Holywell Park, Fire alarm system isolations in University buildings, and an update on alternative devices to reduce the number of false fire alarm and fire alarm incidents
4. <b>Essential Background Information</b>	Previous reports
5. <b>Risks, Risk Mitigation and Governance/ Accountability</b>	Legal compliance
6. <b>Implications for other activities</b>	Lost time by University Staff due to false alarms
7. <b>Resource and Cost</b>	Revenue loss by University Staff due to false alarms
8. <b>Alternative Options considered</b>	N/A
9. <b>Other Groups/Individuals consulted.</b>	Health and Safety Services, Facilities Management Health and Safety
10. <b>Future Actions, Timescales &amp; Frequency of Review by this Committee.</b>	Report at next University committee
11. <b>Success Criteria (KPIs)</b>	Reduction in the number of false fire alarms, positive response to occupants responding to fire alarms and investigating the cause.
12. <b>University Executive comment (required for Council papers only)</b>	

## Summary

To date in this academic year there has been three small fire related incidents, one of which required the attendance of Leicestershire Fire and Rescue.

Good progress is being made in improving the standards of fire alarm systems and reducing the number of false alarms across the Loughborough campus.

### 1. Fire Incidents

There have been three small fire related incident one involving the external hockey pitch lighting and two in Halls of Residence kitchens:

#### Incident 1

01/11/2016 21:35

Security attend following a call from the hockey pavilion reporting the flood lights has burnt out and a lot of smoke is coming from one.

LF&RS called and arrive onsite at 21:39 extinguished fire, inspected the flood light and request the system is isolated.

Electrician requested to make the light safe 21:40 arrived 22:05

Power isolated and security coned off the area incident stood down at 22:45

The following day Lighting engineers attended site the incoming cable had been damaged going in to the ground the incident appears to have been caused by a faulty capacitor causing a small fire this has in turn damaged all the internal electrical components and the incoming supply cable (see attached photos).



#### Incident 2

12/11/2016 Royce Block 5 (2<sup>nd</sup> floor kitchen)

An open book that had been left on the cooker rings which apparently were on full power. A Foam extinguisher was used by security to put out the fire, the area was heavily smoke logged, Smoke was cleared, the kitchen was secured and a Hall electrician was requested to isolate the affected electrical equipment involved.

This incident was investigated by Mark King, with little success.

#### Incident 3

16/11/2016 Hazlerigg Block D kitchen

Pan fire causing damage to the extractor fan. Following this incident the Warden sent out a memo to all students in Hazlerigg / Rutland Hall of residence. Reminding all students on the importance of kitchen safety and stressing that when cooking it is not left unattended

### 2. Update on fire alarm system problems Holywell Park

The previous problem with the aspiration system in Core G Garendon Wing has now been resolved and to date no further false fire alarms from this system have been experienced.

Work is ongoing to document and validate the emergency lighting in Holywell Park. Arrangements are being made to perform a walk through in the hours of darkness to validate emergency lighting illumination levels.

### 3. Fire alarm system isolations in University Buildings

Health and Safety Service are working with the Facilities Development and Facilities Services teams to develop workable control system. Detailed proposals (2 drafts) have been made to the Facilities Development and Facilities Services teams. The target is to get a system implemented by the end of March 2017

### 4. Update on alternative devices to reduce the number of false fire alarm activations caused by smoke/steam from cooking in student Halls.

Previous analysis had shown that the main areas for cooking related false alarm were Telford Courts and Falkner/Eggington. To try and address these situation modifications were made in a controlled way in a number of areas. "Door Screammers" fitted to selected kitchen/diners in Telford Courts and Falkner/Eggington and since the modifications were made at the start of the 2016/17 academic year there have been no false alarms caused by smoke/steam entering into the buildings common parts (escape corridors) due to the kitchen door being held open.

In addition in certain areas the sensitivity of the smoke detectors in the kitchen/diners has been adjusted to make them slightly less sensitive to smoke/steam particles. To date no false alarms have been received from the areas where these modifications have been made.

The effectiveness of these measures will continue to be monitored, with recommendations being made to Campus Living before the summer maintenance window.

### 5. Fire Alarm Activations and Fire & Rescue Service call-outs statistics September 2016 – December 2016.

	September 2016	October 2016	November 2016	December 2016	Total
<b>Number of Activations</b>	25 Residential 0 Dining Halls 15 LU Building	50 Residential 0 Dining Halls 14 LU Building	51 Residential 1 Dining Halls 13 LU Building	27 Residential 1 Dining Halls 7 LU Building	153 2 49
<b>Activations involving F&amp;RS</b>	None	None	Flood light fire Hockey Pavilion	None	1
<b>Genuine Fires</b>	None	None	2 small localised kitchen fires	None	2

### Loughborough University Buildings (Academic & None-Academic):

1 Brockington	4 Burleigh Court	4 Charnwood/Garendon
2 Clyde Williams	1 Design School	1 Edward Herbert Building
1 FM Building	1 Haslegrave	1 John Hardie
1 John Ferguson	1 John Pickford	1 Holywell Drive (No 7)
2 Link Hotel	4 Martin Hall	1 NCSEM
3 Performance Cent	4 Pilkington Library	1 Rutland
3 S Building	1 Schofield	1 Seb Coe
2 Sports Park	2 Sir David Davies	2 Sir David Wallace
1 Sir Richard Morris	3 Stewart Mason	

### Dining Halls:

0 Cayley/Rutherford D/Hall	0 Faraday/Royce D/Hall	1 David Collett D/Hall
0 Village Restaurant D/Hall	0 William Morris D/Hall	1 Towers D/Hall

**Halls of Residence (University Managed)**

4 Butler Court	17 Cayley	0 David Collett	44 Falk / Egg
21 Faraday	11 Royce	7 Rutherford	21 Telford
2 Towers	1 University Lodge	20 UPP Blocks	3 Whitworth

**Halls of Residence (Not managed by the University) Unite:**

Note regarding Unite premises

During this reporting period these are the alarm activations with a known cause/reason

Harry French (9)

Holt (0)

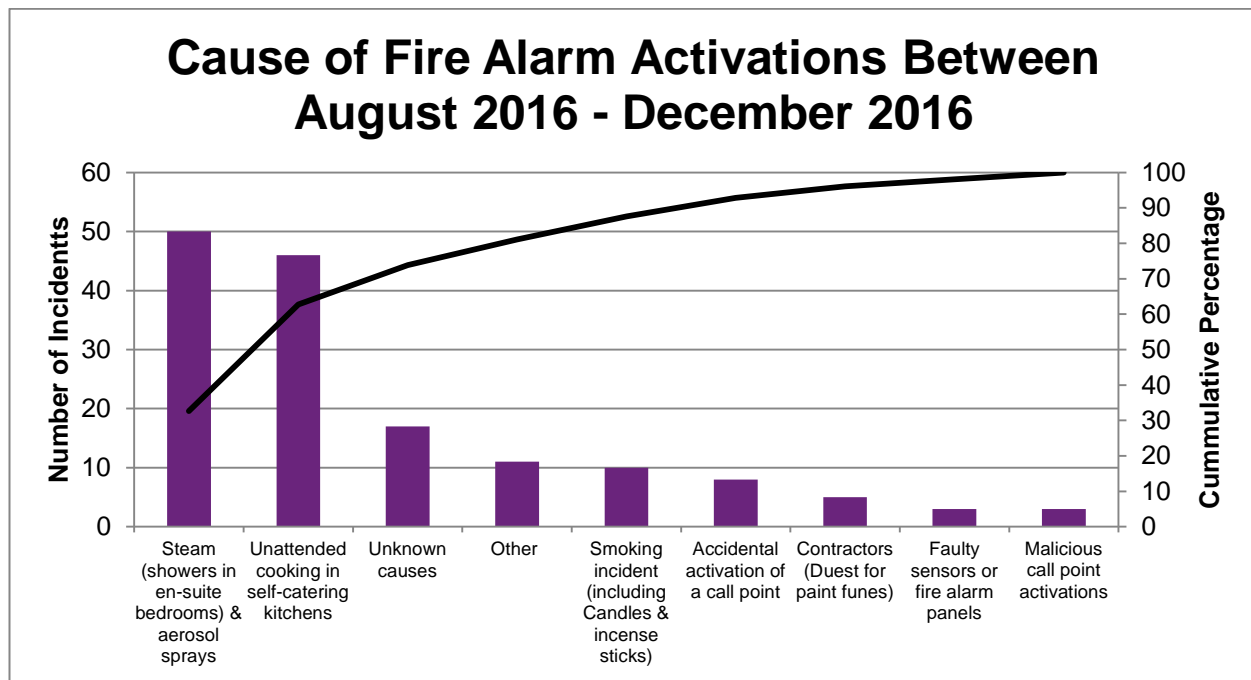
Waterways (1)

William Morris (2)

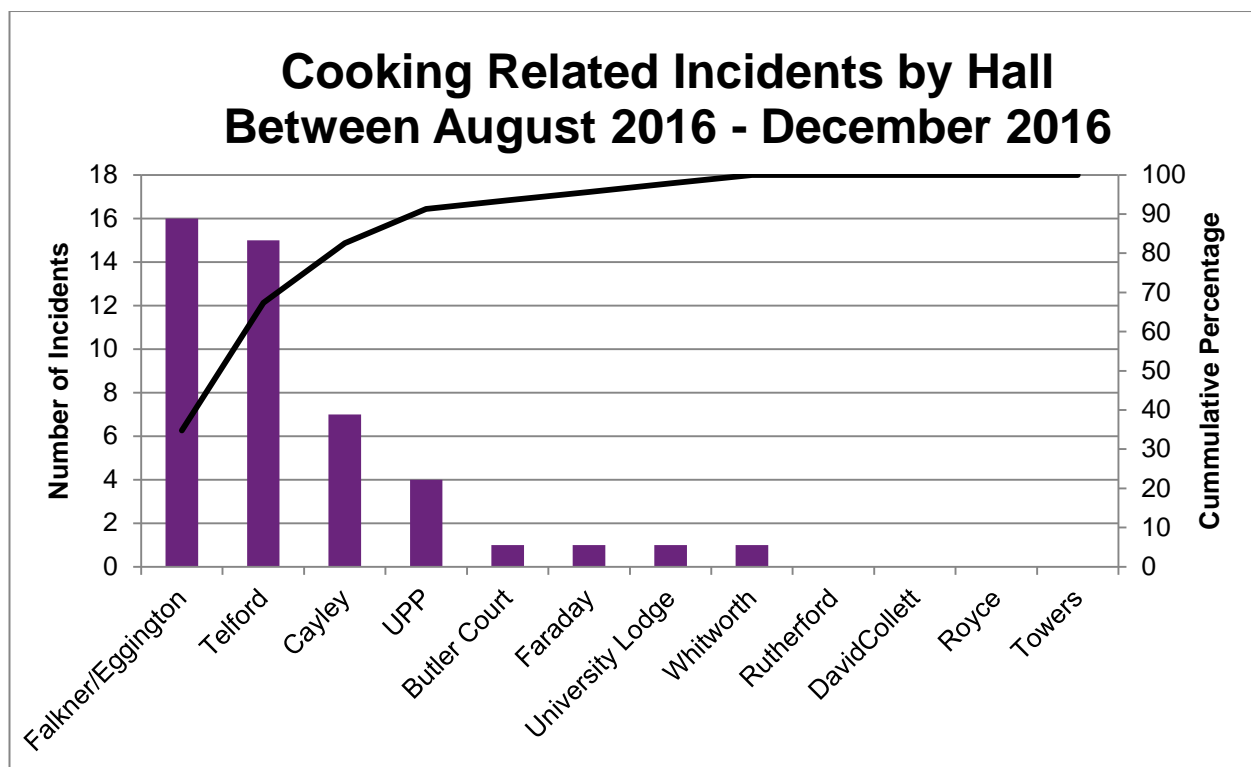
There were 2 stances of fire alarms that didn't have a known cause.

(All above information gathered from period (1/09/16 –31/12/16) Mr R M Harrison –University Health & Safety Service

The Major Causes of Fire Alarm Activations in LU Halls of Residence:



Cooking Related Incidents In LU Halls Of Residence:





## Health, Safety and Environment Statutory Compliance Sub- Committee



### Minutes

#### HSSC17-M1

Minutes of the meeting held on 11 January 2017

#### Attendance

**Present:**

Andrew Burgess (Chair), Neil Budworth, Andrew Sweeny, Chris Rielly, Paul Walker, David Howell, James Stapleton, Steve Warren, Nik Hunt

**In attendance:**

Tanya Osborne (Secretary)

#### Business of the Agenda

No items were unstarred.

#### 17/1 Minutes

##### HSSC16-M3

- 1.1 The minutes of the meeting held on 13 September 2016 were CONFIRMED.

#### 17/2 Matters arising from the Minutes

##### Committee Members

- 2.1 It was noted that this would be the final meeting attended by Andrew Sweeny. The chair extended his thanks to Andrew for his valuable contribution to the committee.
- 2.2 It was reported that a member had been nominated to represent technical positions and will be approved in time to attend the next meeting

##### Electrical Code of Practice

- 2.3 The committee received feedback that the code of practice should also refer to the London campus
-

## **SECTION A – Items for Discussion**

### **17/3 Construction and Small Works Policy**

#### **HSSC17-P1**

- 3.1 The committee considered the revised small works policy, and concluded that the document required a full rewrite before it could be endorsed to the Health, Safety and Environment Committee. The re-write should be from a user perspective and should ensure that terminology is up to date and guidance is consistent.
- i) Action: James Stapleton to submit a re-written policy to the next meeting of HSSC
- 3.2 The committee noted that it would be useful for this policy to demonstrate a link between the procurement regulations of the University in order to ensure a consistent approach.
- 3.3 The committee also felt it needed to be made clear the degree and level of responsibility that Facilities Management have in the process when the work is being carried out on behalf of a School or Department.

### **17/4 Update on Appointment of DAPs**

#### **HSSC17-P2**

- 4.1 The committee RECEIVED and NOTED the update on the appointment of Duty Authorised Persons and heard that the process would be rolled out. A new shared workspace would be set up to accommodate the appointment forms using a standardised naming convention, and the update or forms would be triggered by the compliance questionnaires.

### **17/5 Feedback on Implementation of Policies**

#### **HSSC17-P3**

- 5.1 The committee noted some lessons learned in communicating policy implementation. In particular, the value of concise messages targeted at appropriate audiences was highlighted, as was the need to space messages out and avoid sending repetitive messages. Messaging should also be proportionate to potential impact for end users.

### **17/6 Lifting Operations and Lifting Equipment Regulations (LOLER)**

- 6.1 It was reported that the University does not currently have a policy specifically addressing the Lifting Operations and Lifting Equipment Regulations, and the committee were asked to discuss if they felt it relevant for the University to put a policy in place.
- 6.2 The committee agreed that there were elements of LOLER that would benefit from there being a University policy, and that a draft policy would be presented to the next meeting of the committee.
- i) Action: James Stapleton to submit a draft policy to the next meeting

## **17/7 Update on Compliance Questionnaires**

### **HSSC17-P47**

- 7.1 The committee received an update on the progress of compliance questionnaires. Members praised the approach for being user-centric.

## **17/8 Pressure Systems Audit**

- 8.1 The committee noted that the report from the external audit had still not been received.
- i) David Howell to confirm that there were no actions arising as a result of the audit.

## **17/9 F-Gas Update**

### **HSSC17-P6**

- 9.1 The committee noted that a new contractor was in place to continue the work on F-Gas audit outcomes, and that they are satisfied with the new contractor. Work is ongoing in producing and updating an F-Gas asset register, and this has brought to light some issues with the way that information for bespoke chiller and cooling equipment is recorded which requires review.
- 9.2 Some staff change has stalled the clerical aspects of the work being done, but the committee felt confident that all documentation and procedures would be in place for the next external audit.

## **17/10 Audit on Health and Safety Compliance Governance**

- 10.1 The Chair reported that there would be an external audit of health and safety compliance governance focussing on the work of the committee, and in particular on the implementation cycle of policies. Work on this is expected to commence in February. It was agreed that the asbestos policy process would be reviewed to see how effective the implementation was to the end user, with input from Steve Warren for AED.

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## **SECTION B – Starred Items for Approval**

There were no starred items for approval

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## **SECTION C – Starred Items for Information**

- \*Fire Design Strategy – HSSC17-P7

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## **17/11 Any other Business**

### **Environmental Management System and Outstanding Compliance Issues**

- 11.1 The Committee received a tabled paper.
- 11.2 The committee noted the need for a consistent, progressive escalation process.

## Date of Next Meeting

- 18 May 2017, 10:00, Pearce Committee Room

Author – Tanya Osborne

Date – 17/01/2017

## Health Safety and Environmental Statutory Compliance Sub Committee

### Composition, Membership and Terms of Reference

#### Composition and Membership

Deputy Chief Operating Officer (Chair)	Andrew Burgess
<del>Health, Safety and Risk Manager</del>	Neil Budworth
Deputy Director of Facilities Management	Andy Sweeney
Dean (to be nominated by HSEC)	Professor Chris Rielly
Operations Manager (nominated by HSEC)	Steve Warren
Environmental Manager	Nik Hunt
School Technical Services Manager	TBC

Deleted: and

In attendance:

Academic representative with expertise in this area	TBC
University Compliance Engineer	Paul Walker
FM Technical Services Manager	David Howell
<del>Deputy Health, Safety and Risk Manager</del>	James Stapleton

Deleted: FM

Deleted: and

Secretary	Tanya Osborne
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Other Duty Authorised Persons, Heads of Professional Services Management Team, or other specialist advisors by invitation

#### Terms of Reference

- To advise Health, Safety and Environment Committee on compliance with statutory health and safety across the University relating to facilities in line with the University Health and safety policy.
- Monitor adherence to governance structure for health and safety management
- Ensure an appropriate audit programme of statutory activities exists
- Governance of compliance in relation to topics listed below to a schedule agreed by the committee;
  1. Asbestos
  2. Water hygiene
  3. Local Exhaust Ventilation Systems (LEVs)
  4. Substances Hazardous to Health
  5. Occupational Health Surveillance
  6. Noise
  7. Hand arm Vibration
  8. Display Screen Equipment
  9. Lifting equipment
  10. Pressure systems
  11. Electrical installation
  12. Gas
  13. Fire safety
  14. Working at height
  15. Vehicle movement, traffic management and driving
  16. Environment

*In 2015-16 the Sub Committee will undertake a management audit of compliance management to produce a gap analysis from which to prioritise an action plan for the University*

- Meet three times per annum in advance of HSEC; 2016-17 schedule
  - 13<sup>th</sup> September in preparation for HSEC 28<sup>th</sup> September 2016
  - 11<sup>th</sup> January in preparation for HSEC 8<sup>th</sup> February 2017
  - 3<sup>rd</sup> May in preparation for HSEC 7<sup>th</sup> June 2017

Paper Title: University Unmanned Aircraft Systems (UAS) (Drone) Policy

Author: Hugh Weaver, Deputy Health and Safety Manager

<b>1. Specific Decision Required by Committee</b>	To approve a new University UAS (Drone) policy
<b>2. Relevance to University Strategy</b>	Legislative compliance / reputational impact issue
<b>3. Executive Summary</b>	This policy requires that all UAS (or drones) used for Research, Teaching, Consultancy, Events, commercial and recreational use in connection with the University's activities is planned and managed so that UAS are flown safely This policy has been through a full consultative process with interested parties.
<b>4. Essential Background Information</b>	UAS are used extensively for many varied purposes and the associated risks are well known. Aviation and health and safety law requires that the flying of UAS is managed and controlled.
<b>5. Risks, Risk Mitigation and Governance/ Accountability</b>	Legal, financial and business risk associated with failure to comply
<b>6. Implications for other activities</b>	None
<b>7. Resource and Cost</b>	Time of relevant staff in the development of the policy. This is an investment to protect against the costs of possible enforcement action, insurance claims, replacement of staff, equipment and property
<b>8. Alternative Options considered</b>	Maintenance of the status quo was considered but rejected
<b>9. Other Groups/Individuals consulted.</b>	Commercial stakeholders, event organizers, LSU Drone Society, Academic UAS Group, Insurance Office
<b>10. Future Actions, Timescales &amp; Frequency of Review by this Committee.</b>	Regular review due to changes in law or guidance and a bi annual review in any case.
<b>11. Success Criteria (KPIs)</b>	Use of UAS fully in line with UK Aviation (CAA) and Health and Safety law (HSE)
<b>12. University Executive comment (required for Council papers only)</b>	

## **Unmanned Aircraft System (UAS) (Drone) Policy**

### **Contents**

- 1. Policy statement**
  - 2. Objective**
  - 3. Responsibilities**
    - 3.1 Deans and Heads of Professional Services
    - 3.2 University Health and Safety Service
    - 3.3 UAS Operations Coordinator
    - 3.4 UAS pilots
  - 4. Definitions**
  - 5. Background**
    - 5.1 Regulation of aviation in the UK
    - 5.2 Commercial aviation
    - 5.3 East Midlands Airport (EMA) Control Traffic Zone (CTR).
  - 6. Generic health and safety considerations**
  - 7. LSU Drone Society use of Unmanned Aircraft Systems**
  - 8. Use of Unmanned Aircraft Systems for research and consultancy activities**
    - 8.1 The University's Permission for Commercial Operations
    - 8.2 The University's Operations Manual
  - 9. Use of Unmanned Aircraft Systems for teaching activities**
  - 10. Use of Unmanned Aircraft Systems for events**
  - 11. Recreational and all other UAS activities**
  - 12. Insurance**
  - 13. References and document management table**
- Appendix 1**

## **1. Policy statement**

It is the policy of Loughborough University, (LU), so far as is reasonably practicable, but in accordance with the relevant legislation, statutory requirements and good practice, to ensure the health and safety of staff, students and visitors to the University with respect to the use of Unmanned Aircraft Systems (UAS) (Drone).

## **2. Objective**

The objective of this policy is to set out the requirements in respect of persons using UAS owned by the University on University business, or using personal UAS on University premises or business.

## **3. Responsibilities**

### **3.1 Deans and Heads of Professional Services**

Ensure all UAS use in respect of research and commercial activities is undertaken;

- in compliance with this policy, CAA regulations and guidance and LU Operations Manual,
- on completion of suitable and sufficient risk assessments,
- by suitably trained persons and
- with the necessary public liability insurance cover.

### **3.2 University Health and Safety Service**

- Ensure the UAS (Drone) policy is reviewed and updated at least every 2 years.
- Provide advice and guidance to UAS pilots and approve, where appropriate, UAS use subject to satisfactory compliance with this policy, CAA regulations and guidance, on completion of suitable and sufficient risk assessments and having obtained the necessary public liability insurance.

### **3.3 UAS Operations Coordinator**

- Hold and maintain the Permission for Commercial Operations (PFCO) (following issue by the CAA) and regularly review and maintain the associated LU UAS Operations Manual.
- Advise on the appropriate procedures for complying with the relevant legislation and guidance on safe management of UAS.
- Unmanned Aircraft Systems pilots
- Operate UAS in compliance with this policy, CAA regulations and guidance, on completion of suitable and sufficient risk assessments and having obtained the necessary public liability insurance.

## **4. Definitions**

- UAS – Unmanned Aircraft System; Defined as remotely operated aircraft and all of the control, launch and landing systems required for their operation. Sometimes referred to as ‘Drones’, Unmanned Aerial Vehicles (UAV), and Remotely Piloted Aircraft Systems (RPAS). All are covered by the scope of this policy.
- CAA – Civil Aviation Authority
- Pilot – the person operating the UAS
- Commercial operation – work for which valuable consideration is given or promised in respect of the purpose of the flight (i.e. commercial activity)
- Congested Area – any area of a city, town or settlement which is substantially used for residential, industrial, commercial or recreational purposes.

## **5. Background**



## 5.1 Regulation of aviation in the UK

The primary legislation is the Air Navigation Order 2016 (ANO). The ANO is enforced by the Civil Aviation Authority (CAA), which has powers of prosecution.

The ANO does not distinguish between different types of aircraft. It covers ALL aircraft, of all sizes. The CAA grants “exemptions” from certain provisions of the ANO. If there is no explicit exemption, then the provisions of the ANO apply.

The ANO does not regulate the use of UAS indoors.

## 5.2 Commercial aviation

The ANO 2016 defines a ‘commercial operation’ as:

*“...any operation of an aircraft other than for public transport—  
(a) which is available to the public; or  
(b) which, when not made available to the public, is performed under a contract between an operator and a customer, where the latter has no control over the operator, in return for re-numeration or other valuable consideration.”*

Any commercial operation requires the operator to meet all of the legal requirements of a commercial operator that apply to their type of aircraft.

Any UAS use must be assessed for risk. This will include the risk to persons who might be affected by malfunction, as well as operators, where there may be manual handling and hazardous substance hazards, for example.

## 5.3 East Midlands Airport (EMA) Control Traffic Zone (CTR).

EMA has designated (categorized) airspace classifications that require local Air Traffic Control (ATC) permission to operate certain classes of aircraft. Permission is required from ATC to fly any UAS with a mass over 7kg in the Zone. Smaller UAS do not need ATC permission. Outside of the CTR above 2500ft is the EMA Control Traffic Area (CTA), but this is not relevant to UAS, because they are limited to a max altitude of 400ft in any-case.

The CTR extends south from EMA to a line which runs east/west on the map, dissecting Burleigh Court Hotel and Conference Centre. North of this line, is controlled air space under the control of EMA ATC. The Zone extends from ground level to 10500 feet.

Anyone wishing to fly a UAS over 7kg in the Zone must seek and obtain permission from the ATC. Written evidence of the ATC’s permission must be provided to the University Health & Safety Service upon request and in any case prior to flying in the CTR.

## 6. Generic health and safety considerations

UAS are considered to be work equipment, as defined by the Provision and Use of Work Equipment Regulations 1998. The UAS must therefore be;

- suitable for the intended use.

- safe for use, maintained in a safe condition and inspected to ensure it is correctly constructed and does not subsequently deteriorate.
- used only by people who have received adequate information, instruction and training.
- accompanied by suitable health and safety measures, such as protective devices and controls. These will normally include emergency devices, adequate means of isolation from sources of energy, clearly visible markings and warning devices

The full regulations that apply to UAS under the CAA regulations are summarised as follows;

1. All flights should be taken with satisfaction that it will be safe.
2. The person responsible for the flight must maintain direct, unaided, visual contact.
3. Must not exceed 400 feet above surface unless in Class A, C, D or E (\*) as long as it flies in accordance with their respective airspace regulations. (*\*Refers to categorisation of airspace – (controlled or uncontrolled)*)
4. Vehicle must not be used for aerial work unless permission granted by the CAA.
5. Must not fly over or within 150m of any congested area or an open-air assembly of more than 1000 people.
6. Must not fly within 50m of any vehicle/structure that is not under control of the person in charge of the aircraft.
7. Must not fly within 50m of any person, except that who is charge of the aircraft.
8. During landing / take off it must not fly within 30 meters of any person, except those who are in charge of the aircraft.

*(\*Please see references below for links to CAA, European Safety Agency and “DroneSafe UK” safety guidance and other resources including the “Drone Assist” App and “Drone Aware” safety video.)*

## **7. LSU Drone Society use of Unmanned Aircraft Systems**

Student societies, including LSU Drone Society, should seek permission from the UH&SS Approval for flights will be subject to;

- compliance with the CAA guidance on UAS safety,
- observance and compliance with LSU Drone Society Operations Manual and operating procedures,
- completion of appropriate risk assessments,
- obtaining the necessary public liability insurance provision.

## **8. Use of Unmanned Aircraft Systems for Research and Consultancy Activities**

The University requires that all UAS use for research or commercial purposes must be undertaken in accordance with the procedures in the Operations Manual and conditions in any applicable Permission for Commercial Operations. Any School or Department which wishes to undertake teaching, research or consultancy using a UAS should seek guidance from the UAS Operations Coordinator.

(For enquiries regarding these activities, contact the University Operations Coordinator at; [uasoperations@lboro.ac.uk](mailto:uasoperations@lboro.ac.uk)).

### **8.1 The University’s Permission for Commercial Operations**

A CAA-issued Permission for Commercial Operations (PFCO) is required for all commercial UAS activities and for activities outside of the operating limits set out in the Air Navigation Order. Such permission is granted by submitting to the CAA, for their examination and approval, an Operations Manual. The University is seeking to obtain a PFCO covering multi-rotor and fixed wing remotely-piloted aircraft systems with a maximum take-off mass of less than 20 kg. Any permission will be issued to the University, not to any individual or group of individuals, and will be held by the UAS Operations Coordinator.

## **8.2 The University's Operations Manual**

The Operations Manual covers ALL outdoor research/commercial UAS operations for the entire institution. As LU is a large, complex organisation that wishes to undertake many different types of mission it has to spell out its procedures in detail to reassure the CAA about LU's ability to design "open ended" missions safely.

This Operations Manual describes the organisation, aircraft systems, personnel, flight operations and procedures by which LU carries out UAS operations.

The Operations Manual describes, comprehensively, how UAS will be operated. It covers, (but not exclusively):

- Pilot qualification requirements
- Operational management
- Operational procedures
- Maintenance procedures
- Emergency procedures

The Operations Manual is held by the UAS Operations Coordinator. For any enquiries regarding the Operations Manual, contact the University Operations Coordinator at; [uasoperations@lboro.ac.uk](mailto:uasoperations@lboro.ac.uk).

## **9. Use of Unmanned Aircraft Systems for teaching activities**

Flying of UAS on campus for teaching purposes is permitted provided that:

- CAA regulations and rules are complied with fully.
- The flight is undertaken by an appropriately qualified/experienced person, or under their direct supervision.
- A risk assessment is undertaken and provided to the University Health and Safety Service a minimum of 1 week in advance for their comment.

## **10. Use of Unmanned Aircraft Systems for events**

It may sometimes be desirable to use UAS for events held on LU land (e.g. for demonstration purposes or to obtain aerial imagery). Their use in such circumstances can present additional health and safety considerations owing to the larger number of people who may be impacted.

A formal request for permission must be made through the LU Events Team and an Event approval form completed. Approval will be subject to compliance with the CAA guidance on drone safety, observance of agreed operating procedures, completion of

appropriate risk assessments, and satisfactory insurance provision. There is no guarantee that permission will be granted.

If 'valuable consideration' is granted in association with the operation of the UAS, the operator must have a valid CAA Permission for Commercial Operations.

## **11. Recreational and all other Unmanned Aircraft Systems activities**

The recreational use of UAS on LU land is prohibited, unless the pilot has obtained the necessary permission from the UH&SS. There is a presumption against recreational use of UAS by individuals on LU land. Exceptions may be made however, and permission given subject to;

- Compliance with generic health and safety considerations (See section 6)
- The UAS pilot demonstrating compliance with CAA regulations.
- The UAS pilot demonstrates competence by providing evidence of suitable qualifications and training and experience or is operating under the direct supervision of a competent person.
- A risk assessment has been undertaken, provided to the University Health and Safety Service a minimum of 1 week in advance for their comment and approved.

## **12. Insurance**

The current Public and Products Liability policy states; Notwithstanding an exclusion under the current insurance policy, Public and Products Liability is extended to include liability arising out of, or from the ownership, possession or use by, or on behalf of, the University of any Unmanned Aerial Vehicle (UAV) provided that:

- a. the Member (and any person acting on the Member's behalf) complies with the operating and licensing provisions of the Civil Aviation Authority in respect of the use of the UAV in the United Kingdom, and
- b. the UAV is restricted to 500 metres in altitude, and
- c. the maximum range of the UAV is not greater than 1 kilometre from the operator, and
- d. the operator of the UAV has obtained the full qualification, where required, from the local aviation authority or is specifically trained, or is being trained in the presence of a competent person, and
- e. the UAV is within the airspace of the United Kingdom/EU countries. (Please contact Insurance Support at; [Insurance.Support@lboro.ac.uk](mailto:Insurance.Support@lboro.ac.uk) for information on other countries).
- f. the UAV is not a military vehicle, does not carry weapons of any kind and is not being used for military purposes or in any way involving military purposes.

**NOTE:** "Unmanned Aerial Vehicle" includes Unmanned Aircraft Systems (or any part thereof) and radio controlled helicopters.

Where a personally owned UAV is to be deployed on University business, the University would need to agree with the owner in advance that it was taking responsibility for the

drone for the duration of its use for the University. This could include property damage cover for the drone too, but please note there is no accidental damage cover for drones whilst being flown.

The University Insurance office and University Health and Safety Service must be informed of, and consulted on any other types of UAS operations on campus. Information required will include the activity risk assessment, details of the pilot's training and a copy of a current public liability insurance certificate. (Minimum cover of £5M required).

### 13. References

1. Unmanned Aircraft System Operators in UK Airspace – Guidance. Go to; <http://publicapps.caa.co.uk/docs/33/CAP%20722%20Sixth%20Edition%20March%202015.pdf>
2. <http://dronesafe.uk/> : Link to the Drone Assist” App, “Drone Aware” video and other resources
3. [CAA Unmanned Aircraft - Requirements for operating in airspace](#)
4. [European Aviation Safety Agency - drone safety video](#)

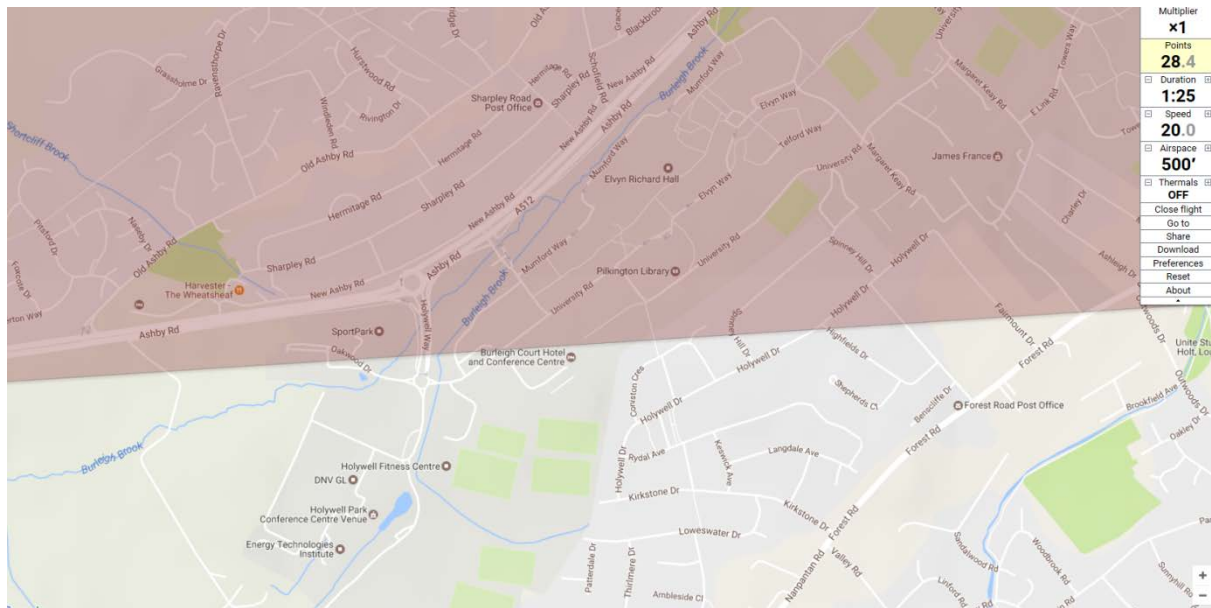
#### **Document management table**

<b>Version</b>	<b>Owner</b>	<b>Author</b>	<b>Revised by</b>	<b>Summary of revision</b>	<b>Date of revision</b>
1	UH&SS	H Weaver		New policy draft	January 2017

## Appendix 1; Control Traffic Zone (CTZ)

The shaded area is the East Midlands Airport (EMA) Control Traffic Zone (CTZ) from the surface up to 10,500 feet. This means it is 'Class D controlled air space'.

The area unshaded to the south is uncontrolled airspace up to 2,500 feet, above this and up to 10,500 feet, is also 'Class D controlled air space'.



## Health, Safety & Environment Committee



Loughborough  
University

**Ref:**

Date: 6<sup>th</sup> January 2017

**Paper Title:** Health and Safety Strategic Framework

**Origin:** Neil Budworth

1. Specific Decision Required by Committee	Approval of the proposed health and safety vision, agreement of the strategic principles and agreement of the broad strategic themes
2. Relevance to University Strategy	Directly links the activity of the Health and Safety Service to the strategic aims of the University
3. Executive Summary	The strategic frame works seeks to clearly develop a vision for health and safety across the University, outline a series of strategic principles and then align and focus the activities of the Health and Safety services to support the strategy of the University.
4. Essential Background Information	
5. Risks, Risk Mitigation and Governance/ Accountability	The risk of not having a framework in place is that there may be misalignment of priorities and that individuals may not be aware of their responsibilities and roles
6. Implications for other activities	None
7. Resource and Cost	Nothing specifically
8. Alternative Options considered	Developing a plan and not linking it to the University strategy was considered
9. Other Groups/Individuals consulted.	The strategic framework has been developed by the health and safety service and has been sent to Deans, Operations Managers, Departmental and School Safety Officers and Union representatives. The framework has also been discussed at a number of school safety committees
10. Future Actions, Timescales and Frequency of Review by this Committee.	Strategic items have now been incorporated into the action plan. Progress to be reviewed as part of the Health, Safety and Risk Manager's update at each HSE meeting
11. Success Criteria (KPIs)	These will be defined for each element of the strategy eg production of risk registers will have a project plan and timeframes
12. University Executive comment (required for Council papers only)	

## **Our Vision**

Educating for Success - A future where excellent, health and safety is achieved within the University, inspiring all to be ambassadors of good practice.

## **Our Strategic Principles**

Processes will be put in place so that each individual is clearly aware of the risks they own.

Those who own the risk are aware of their responsibilities for the assessment and management of that risk.

Structures will also be put into place which will allow a good oversight of the most significant risks to the University and how they are being managed.

Responsibilities will be clearly defined and individuals will be held accountable for the delivery of those responsibilities

The Health and Safety Service will provide facilitation, advice, support and guidance, but the responsibility for the management of key risks lies with the owners of those risks.

The Health and Safety Service will work flexibly as a team, drawing on the skills and competencies of the team members as appropriate.

Communication within and beyond the Health and Safety Service is a key activity.



## How Do we Best Support the University in Delivering Our Strategy

University Strategic Ambition	Health and Safety Aims	Health and Safety Objectives to support aims	What do we need to do to achieve this ?
<p>A distinctive international reputation for excellence</p>	<p>To become an organisation which others will admire and seek to emulate</p>	<ol style="list-style-type: none"> <li data-bbox="1227 331 1637 587">1. To develop management systems which align with the best practice examples in the Higher Education sector (for example by adopting the USHA HASMAP management system and producing risk registers)</li>   <li data-bbox="1227 1074 1637 1201">2. To identify and eliminate or reduce the causes of incidents and ill health at the University</li> </ol>	<p>Develop a programme for delivering risk registers for each school or department</p> <p>Effective use of incident and near miss reports.</p> <p>Use a mixture of leading and lagging indicators to track progress</p> <p>Ensure an understanding of the Health surveillance needs of the University and monitor its delivery.</p>

<p>A life-shaping student experience</p>	<p>A future where excellent, health and safety is achieved within the University, inspiring all to be ambassadors of good practice.</p> <p>Every member of staff and every student is aware of the risks that they face and the precautions that they should take and are motivated to take the appropriate precautions.</p>	<ol style="list-style-type: none"> <li>1. To ensure that all within the University have a clear understanding of their responsibilities and the actions they need to discharge those responsibilities</li> <li>2. To ensure that there is a comprehensive training matrix available against which people can assess their training needs</li> <li>3. To develop a positive and engaging communications strategy which positively influences all who come into contact with the University</li> </ol>	<p>Review the presentation of responsibilities such that it is easy for people to identify which duties are relevant to them.</p> <p>Review the effectiveness of induction.</p> <p>Develop and deliver a University wide training matrix with line management support.</p> <p>Consider collaboration with other Universities in the East Midlands to reduce costs</p> <p>Revitalise H&amp;S communications – it's not boring, it's important, we have to get this across in an engaging way</p>
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University Strategic Ambition	Health and Safety Aims	Health and Safety Objectives to support aims	What do we need to do to achieve this ?
<p>Outstanding partnerships to develop social, economic and cultural prosperity</p>	<p>Seamless partnership between the practitioners in the University Health and Safety function and the academic departments to identify, and refine evidence based good practice.</p>	<ol style="list-style-type: none"> <li>1. To seek to identify where the H&amp;S function and the academic departments can work in harmony to develop better approaches eg with the Ergonomists in the Design School to test and improve communications, with the School of Civil and Building Engineering to seek to take the identified areas of best practice in construction and utilise them on our own campus.</li> <li>2. Work with the relevant departments to develop evidence based targeted approaches to improve standards across the University</li> </ol>	<p>Identify H&amp;S expertise in schools and explore collaboration</p> <p>Use DSO/SSO network to spread messages</p>

University Strategic Ambition	Health and Safety Aims	Health and Safety Objectives to support aims	What do we need to do to achieve this ?
<p>A culture of delivering excellence in all that we do</p>	<p>To achieve a top quartile performance in the Higher Education sector in terms of reportable incidents and occupational ill health</p>	<ol style="list-style-type: none"> <li>1. To ensure that good quality advice is available to the risk owners close to the point of risk through a network of School and Departmental Safety Officers trained to an appropriate level.</li> <li>2. To ensure that structures are in place such that lessons are learned throughout the University from any serious incident or high potential near miss.</li> <li>3. To ensure that high quality information is available to those who own and manage risk within the University and that good quality data on incidents and their causes is readily available</li> </ol>	<p>Ensure that the training requirements for DSOs and SSOs are clearly defined.</p> <p>Run DSO and SSO forums</p> <p>Proper investigations are being conducted</p> <p>Develop and utilise the safety alert system</p> <p>Review the incident reporting system</p> <p>Review the provision of relevant data to key audiences to drive action.</p> <p>Single points of contact to be defined to enhance communication</p>

University Strategic Ambition	Health and Safety Aims	Health and Safety Objectives to support aims	What do we need to do to achieve this ?
One outstanding University: two vibrant campuses	Assurance that high health and safety standards are in place wherever we operate	<ol style="list-style-type: none"> <li>1. To design and implement a comprehensive assurance programme which will inform the responsible individuals of the state of compliance and the actions needed for improvement.</li> </ol>	Use HASMAP and the risk register as the basis for audit and assurance

## Health, Safety & Environment Committee



Loughborough  
University

**Ref:**

Date: 20 January 2017

**Paper Title:** Revised draft Safeguarding Policy

**Origin:** Director of Student Services

1. Specific Decision Required by Committee	The committee is asked to NOTE the actions taken as a result of the previous discussion of the policy and ENDORSE the draft version for consideration by Council.
2. Relevance to University Strategy	The policy is of relevance to the Educating for Success theme of the University's strategy.
3. Executive Summary	<p>Following discussion at the September meeting of HSE, the Director of Student Services was asked to do some further work to identify any revisions to the policy required:</p> <ol style="list-style-type: none"> <li>1. to ensure consistency with the University's AUP (Acceptable Use Policy) for IT equipment;</li> <li>2. to ensure the policy could be operated at the London campus.</li> </ol> <p>In respect of item 1, the Director of Student Services discussed the issue with Alec Edworthy. The issue relates not to the Safeguarding Policy itself, but to the process for ensuring that parents/ guardians are required to agree to the University's AUP on behalf any students under 18. No specific amendment is required to the policy. Discussions on this issue will continue between Alec Edworthy and Dave Norton (Admissions).</p> <p>In respect of item 2, the matter was discussed with the Operations Director, London. In order to ensure the proper operation of the safeguarding procedure, it was agreed that the Operations Director, London would be specified as a Safeguarding Officer. Contact details for the local social services (Newham) have also been added to the revised policy. These amendments are included in the current version of the policy (pp.9, 12, 20 &amp; 21).</p>
4. Essential Background Information	<p>HSE Committee considered a draft version of the policy at its meeting on 28 September 2016. The following actions were recorded in the minutes:</p> <p>55.2 The Committee NOTED that further changes to the Policy may be needed to ensure it covered acceptable use of computers. The Director of Student Services would liaise with Alec Edworthy to identify possible changes. <b>ACTION: Director of Student Services, Alec Edworthy</b></p> <p>55.3 The Committee ENDORSED the Policy subject to minor changes being made where appropriate to ensure that it took into consideration acceptable use of computers and to ensure that it could also be used on the London campus. <b>ACTION: Director of Student Services</b></p>
5. Risks, Risk Mitigation and Governance/ Accountability	The major risk in not adopting an updated policy is that the University would fail to be compliant with its duties to protect children and vulnerable individuals.

	Accountability for the policy (including regular review an update) would rest with HSE Committee.
6. Implications for other activities	Those staff involved in pastoral and welfare/ support roles would need to be made aware of the policy and training made available to those key staff most likely to work with safeguarding issues. Staff involved in outreach work would also need to be made aware.
7. Resource and Cost	N/A
8. Alternative Options considered	N/A
9. Other Groups/Individuals consulted.	Draft versions of the document have been circulated extensively. Those consulted include: colleagues in Student Services, Wardens, Security, HR (Anne Lamb), LSU, Admissions, Health & Safety, Campus Living, Imago, Centre for Research in Social Policy, COO, DCOO.
10. Future Actions, Timescales and Frequency of Review by this Committee.	Following comments from HSE Committee, the draft policy would be taken to Council for discussion and approval. Review of the policy, once adopted, would be on an annual basis by HSE Committee. Training for key staff would commence later in 2017.
11. Success Criteria (KPIs)	N/A
12. University Executive comment (required for Council papers only)	

## Loughborough University Safeguarding Policy

### Document Version Control

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### Change History

<b>Change Date</b>	<b>Changed by</b>	<b>Changes</b>
25/07/16	MA	<ul style="list-style-type: none"><li>• Substantive revisions to text based on initial feedback from colleagues.</li></ul>
27/07/16	MA	<ul style="list-style-type: none"><li>• Addition of section on 'External Organisation Use of University Facilities'</li><li>• Addition of Appendix 4</li></ul>
01/08/16	MA	<ul style="list-style-type: none"><li>• Amendments to the order of section 4 (transposition of paragraphs 4.2 and 4.3)</li><li>• Amendments to Section 5 to clarify the limits of investigation/ information gathering from the SO.</li></ul>
14/09/16	MA	<ul style="list-style-type: none"><li>• Amendment to paragraph 6.1 to provide some further detail on Academic School responsibilities for under-18s.</li><li>• Addition of section in Appendix relating to guidance for Academic Schools admitting an under-18 student.</li></ul>
02/11/16	MA	<ul style="list-style-type: none"><li>• Addition of Operations Director, London as SO.</li><li>• Insertion of contact details for Newham Social Services contacts for Loughborough in London staff.</li></ul>
13/01/17	MA	<ul style="list-style-type: none"><li>• Insertion of 6.1 (g) stating that students under the age of 16 will not normally be housed in University halls accommodation.</li></ul>



## Table of Contents

<b>1. Scope</b>	<b>3</b>
<b>2. Introduction</b>	<b>3</b>
<b>3. Key Safeguarding Principles</b>	<b>4</b>
<b>4. Definitions</b>	<b>4</b>
<b>5. Reporting a Safeguarding Concern</b>	<b>6</b>
<b>6. Admission of students under 18 years of age</b>	<b>7</b>
<b>7. External Organisation Use of University Facilities</b>	<b>8</b>
<b>8. Monitoring of Safeguarding Concerns and Review of this Policy</b>	<b>9</b>
<b>9. Disclosure and Barring Service (DBS) Checks</b>	<b>9</b>
<b>10. Key Contacts</b>	<b>9</b>
<b>11. Links to other Relevant University Policies and External Guidance</b>	<b>11</b>
<b>12. Links to other External Agencies and Resources</b>	<b>11</b>
<b>Appendix 1: Safeguarding Concerns Reporting Form</b>	<b>12</b>
<b>Appendix 2: Guidance for Staff on Safeguarding Children and Vulnerable Adults</b>	<b>16</b>
<b>Appendix 3: Flowchart for Reporting Safeguarding Concerns</b>	<b>21</b>
<b>Appendix 4: Declaration Form for External Organisations bringing children or vulnerable adults onto University premises</b>	<b>22</b>

## 1. Scope

- 1.1. This policy applies to safeguarding concerns regarding any registered student, staff member or visitor at Loughborough University.
- 1.2. The term 'safeguarding' is used to refer to a number of areas of concern relating to children or vulnerable adults, including:
  - a) Child protection issues;
  - b) (Sexual) exploitation;
  - c) Radicalisation;
  - d) Physical abuse or neglect;
  - e) Emotional abuse or neglect.

Further examples of safeguarding concerns are provided in paragraph 4.6.

## 2. Introduction

- 2.1. Loughborough University is committed to ensuring the safety and physical and emotional wellbeing of its students, staff and visitors and to creating an environment conducive to study, learning and the advancement of knowledge.
- 2.2. Loughborough University recognises that in the course of fulfilling their duties members of staff will come into contact with children and vulnerable adults (as defined in section 4 below).
- 2.3. Loughborough University is committed to ensuring that it is able to fulfil its responsibilities in safeguarding any children or vulnerable adults who may be at risk of harm or exploitation (including radicalisation or being drawn into terrorism, as defined in the University's [Prevent Policy](#)).
- 2.4. In fulfilling these responsibilities Loughborough University will remain mindful of its obligations under relevant legislation such as the [Health and Safety at Work Act \(1974\)](#), the [Children Act \(1989\)](#), the [Data Protection Act \(1998\)](#), the [Safeguarding Vulnerable Groups Act \(2006\)](#), the [Protections of Freedom Act \(2012\)](#) and the [Counter-terrorism and Security Act \(2015\)](#).
- 2.5. Loughborough University recognises that it has a duty to report suspected safeguarding concerns relating to a child or vulnerable adult to relevant external agencies, regardless of whether the individual is a member of the University community, if that concern is reported to, or identified by, a member of staff in the course of their duties.
- 2.6. In order to ensure it fulfils its duties, Loughborough University will ensure an appropriate member of Senior Management is designated as Lead Safeguarding Officer (LSO). The Lead Safeguarding Officer's responsibilities will include:
  - a) Implementing and promoting this policy;
  - b) Ensuring the policy is monitored and reviewed in accordance with changes in legislation and guidance on the protection of children and vulnerable adults;
  - c) Appointing Safeguarding Officers (SOs) and ensuring SOs are trained in relevant safeguarding procedures and competent in fulfilling their duties;
  - d) Ensuring appropriate and adequate resources are available in order that the University is able to meet its safeguarding responsibilities;
  - e) Ensuring that appropriate University members and University Committees are provided with appropriate reassurance that the University is meeting its safeguarding obligations;
  - f) Establishing and maintaining contacts with Children's and Adult Social Care Services, Police authorities and NHS Safeguarding Teams.

- 2.7. Loughborough University will ensure that all relevant staff (including students employed by the University) receive information and advice on safeguarding issues as appropriate for their role within the organisation.
- 2.8. Loughborough University will work in collaboration with Social Care Services, the Police and other relevant statutory and voluntary services to ensure children and vulnerable adults are safeguarded.
- 2.9. Loughborough University will ensure it has appropriate procedures in place to check the suitability of staff and students whose responsibilities involve close, unsupervised contact with children or vulnerable adults. These processes are detailed in paragraph 7.4 of this policy and in the University's [Guidance on Recruiting Staff and Students to work with Children](#).
- 2.10. Loughborough University will ensure it makes appropriate support available to staff who receive disclosures of safeguarding issues.

### **3. Key Safeguarding Principles**

- 3.1. Loughborough University will take all safeguarding concerns relating to children and vulnerable adults seriously, will consider concerns fully and will report any such concerns in a timely manner to the relevant person or body.
- 3.2. Safeguarding referrals to the relevant statutory body will be made on the basis of identified and evaluated risk, as per the procedures outlined in section 5 of this policy.
- 3.3. Loughborough University will ensure it maintains central records of any safeguarding concerns and any referrals made as a consequence. Any records will be kept in accordance with the University's [Data Protection Policy](#).
- 3.4. Loughborough University staff working with students or staff who are the subject of safeguarding concerns will consider what support may be offered to the individual and will signpost accordingly. This may include referral to internal and/or external services.
- 3.5. In a placement or professional work experience setting (including teaching placements), a member of staff or student should normally report any safeguarding concern to the employer's Designated Safeguarding Lead, as per the employer's policy. If this is inappropriate, or if an appropriate response is not received from the employer, the safeguarding concern may also be reported to one of the University's Safeguarding Officers as per the procedure set out in section 5 below.
- 3.6. Research carried out on, or with the participation of, children or vulnerable adults must comply with Loughborough University's [Code of Practice on Investigations Involving Human Participants](#) and Loughborough University's [Ethical Framework](#).

### **4. Definitions**

#### Definition of a Child

- 4.1. For the purposes of this policy, Loughborough University defines a child as a person who is under the age of 18.

#### Definition of a Vulnerable Adult

- 4.2. In legal terms, the [Safeguarding Vulnerable Groups Act \(2006\)](#), as amended by the [Protection of Freedoms Act \(2012\)](#), defines a vulnerable adult as an individual over the age of 18 in receipt of a regulated activity. Specified regulated activity includes:

- a) Health Care provided by or under the supervision of a health care professional;
- b) Provision of Personal Care;
- c) Provision of Social Work;
- d) Assistance with general household matters;
- e) Assistance in the conduct of a person's own affairs;
- f) Conveying (transporting from one place to another).

The definition of regulated activity does not include any such activities carried out in the course of family and personal, non-commercial relationships.

4.3. For the purposes of this policy, Loughborough University defines a vulnerable adult as:

- a) an individual over the age of 18;
- b) who lacks the capacity to take care of him or herself (i.e. at risk of neglect); and/or
- c) who may be unable to keep him or herself safe from the risk of significant harm or exploitation, including the risk of radicalisation or being drawn into terrorism.

#### Examples of Potential Safeguarding Concerns

4.4. This policy sets out how Loughborough University will deal with safeguarding concerns in relation to children or vulnerable adults. For the purposes of this policy safeguarding is defined as protecting children and vulnerable adults who may be at risk of exploitation (including radicalisation), harm, neglect or abuse.

4.5. Examples of types of situations which may present a safeguarding concern and which may result in implementation of the procedure detailed in Section 5 are provided below. This list is not exhaustive and staff will need to exercise professional judgement in determining whether there are safeguarding concerns which need to be considered. Advice can also be sought from a Safeguarding Officer (see [Section 9](#) for contact details) :

- a) A child or adult raises an allegation of current abuse, harm, neglect or other inappropriate behaviour;
- b) A student, staff member or visitor discloses information involving themselves, family members or any other child or adult which gives rise to concerns that an individual may be harming or abusing a child or vulnerable adult;
- c) There are suspicions or indications that a child or vulnerable adult is being abused or harmed, or is at risk of exploitation (including radicalisation), harm, neglect or abuse. The indicators of abuse or harm can be difficult to recognise, but advice is given in the accompanying [Guidance for Staff on Safeguarding Children and Vulnerable Adults](#).
- d) There are observable changes in a child or vulnerable adult's appearance or behaviour that may be related to exploitation, harm or abuse, including radicalisation. The indicators of abuse or harm can be difficult to recognise, but advice is given in the accompanying [Guidance for Staff on Safeguarding Children and Vulnerable Adults](#).

- e) A concern is raised that an individual presents a risk of abuse or harm towards a child or vulnerable adult. If there is a concern that a member of staff or student may present such a risk the University will carry out a risk assessment and, if appropriate, invoke other appropriate policies, including disciplinary procedures, the Fitness to Study policy or the appropriate [Procedure for Applicants who declare a Criminal Conviction](#).
  - f) Concerns arise that a student or member of staff is vulnerable to radicalisation and there is an identifiable risk of the individual being drawn into terrorism.
  - g) A historic disclosure of sexual or physical abuse is made, where the perpetrator still has access to children or vulnerable adults.
- 4.6. The following incidents MUST always be reported to a Designated Safeguarding Officer:
- a) If a child or vulnerable adult is accidentally hurt;
  - b) If you are concerned that a relationship is developing with a child or vulnerable adult, which could represent an abuse of trust;
  - c) If you are concerned that a child or vulnerable adult is becoming attracted to you;
  - d) If you are concerned that a colleague is becoming attracted to a child or vulnerable adult;
  - e) If a child or vulnerable adult misunderstands or misinterprets something you have done in a way which could be construed to be abusive or harmful;
  - f) If you have to use reasonable physical restraint to prevent a child or vulnerable adult from harming themselves or another, or from causing significant damage to property;
  - g) If a child or vulnerable adult reports an allegation of abuse regarding a member of an external organisation using University facilities.

## 5. Reporting a Safeguarding Concern

### Making the Report

- 5.1. This section describes the process for reporting a safeguarding concern. A flowchart of this process can also be found in [Appendix 3](#). Detailed information and guidance on dealing with safeguarding concerns can be found in the [Guidance for Staff on Safeguarding Children and Vulnerable Adults](#).
- 5.2. The duty to investigate suspected abuse or harm rests with statutory services; primarily Social Care Services and the Police. Staff who become aware of a safeguarding matter, whether from a victim or from a third party, should follow these steps (further information is available in the [Guidance for Staff on Safeguarding Children and Vulnerable Adults](#)):
- a) Listen carefully and stay calm;
  - b) Reassure the individual that what they have reported will be dealt with;
  - c) Keep questions to an absolute minimum, do not interrogate the individual. Any questions should be about any immediate health and safety concerns;
  - d) Explain to the individual that you will need to report the matter to a University's Safeguarding Officer and explain the University's internal process as outlined in sections 5.3 to 5.8 onwards.
  - e) Make a full record of what was said and what you have done as a result. You should do so on the [Safeguarding Concerns Reporting Form](#) included as Appendix 1 of this policy.

- f) Report the matter immediately to a Safeguarding Officer. Contact details are included in Section 10.
- 5.3. If a student or staff member has an **immediate and significant** concern for a child or vulnerable adult's **immediate safety**, they may refer the matter directly to the Police or Social Care Services. Contact details are provided in Section 12 below. After they have done so they should report the incident to a Safeguarding Officer using the [Safeguarding Concerns Reporting Form](#) included in [Appendix 1](#).
- 5.4. Where the situation is not urgent, any safeguarding concern should be reported to the Safeguarding Officer using the [Safeguarding Concerns Reporting Form](#) included in [Appendix 1](#). Before referring to Social Care Services, the Police or any other external agency, the University will undertake a risk assessment. This will be carried out by a Safeguarding Officer (SO) in consultation with appropriate colleagues.
- 5.5. On receipt of a referral the Safeguarding Officer will limit their enquiries to that necessary to undertake a risk assessment and:
- Address any serious and immediate risk to the child, vulnerable adult or any other party.
  - Preserve any evidence likely to be lost before external agencies can respond.
  - Determine the appropriateness of a referral to Social Care Services, the Police or another appropriate agency and provide sufficient information to the relevant external agency to enable an effective response.
  - Determine any further University procedures which should be invoked.
  - Identify any internal support required by the child or vulnerable adult
- This may be carried out in conjunction with relevant colleagues and/or the Lead Safeguarding Officer.
- 5.6. If a referral to an external agency is deemed appropriate the Safeguarding Officer or their nominee will make the referral.
- 5.7. If a member of staff wishes to discuss a potential referral before completing the form they may contact a Safeguarding Officer and discuss the referral in principle without providing any names or identifying details. Contact details for Safeguarding Officers are included in Section 10 of this policy.
- 5.8. Where the suspected abuse is alleged to have been carried out by a staff member, the University will work alongside external agencies during any investigations. If necessary, the appropriate disciplinary procedures may be invoked.

#### Record keeping

- 5.9. The Safeguarding Officer will be responsible for ensuring that a full record is kept of the risk assessment process and of any action taken subsequently. This will be done in accordance with the University's [Data Protection Policy](#).
- 5.10. The Safeguarding Officer will report brief details of all referrals, regardless of whether the matter was referred to an external agency, to the Lead Safeguarding Officer.

## **6. Admission of students under 18 years of age**

- 6.1. In admitting students under the age of 18 Loughborough University acknowledges that it will have an enhanced duty towards these individuals as they are children. The following steps will be taken to ensure that the University meets its obligations to safeguard students under the age of 18:

- a) As per the process set out in our [Admissions Policy](#) (section I), the University will require the student's parent/ guardian to sign a Consent Form confirming that they have understood that the University is not *in loco parentis*. Where the child is looked after away from home, appropriate contact will be made with their Local Authority, including with their Social Worker.
- b) The University will ensure that it holds a list of the student's emergency contact details, in particular those of parents/ guardians.
- c) The University will ensure that a DBS disclosure has been obtained for the student's personal tutor, hall warden, sub-wardens and anyone else who the University considers will have close, unsupervised contact with the student.
- d) Academic Schools will ensure that they identify a staff member in their school who will act as personal tutor to all under-18 students in that School. The staff member will have an appropriate DBS disclosure and will be made aware of the University's Safeguarding Policy, including the guidance contained in [Appendix 2](#). Personal Tutors should make themselves known to the student at induction and meet with the student regularly to ensure that if the student has any difficulties, they are able to approach the school contact for students under the age of 18.
- e) The University will inform Loughborough Students Union of any student under the age of 18 to ensure that their access to the licensed premises can be monitored.
- f) The University will ensure that hall wardens, the Director of Student Services and relevant contacts in Academic Schools are provided with a list of students under 18 years of age.
- g) The University will not normally allow students under the age of 16 to live in University Hall accommodation.

## **7. External Organisation Use of University Facilities**

- 7.1. A number of the University's facilities, most notably sporting facilities, are hired by external organisations for use in events involving children or vulnerable adults. In such cases the University has no control over, and assumes no liability for, the conduct of individuals from these organisations. However, the University wishes to ensure that safeguarding risks are mitigated as far as possible for such external events.
- 7.2. In organising any event the University and the external organisation will comply with the [University Events Safety Policy](#).
- 7.3. All external organisations requesting the use of University facilities for activities involving children or vulnerable adults will be asked to sign a declaration confirming that they have obtained appropriate checks on their staff and volunteers before they are permitted to use University facilities. A copy of the declaration form can be found in [Appendix 4](#) of this policy. The organisation will also be asked to confirm they have a Safeguarding Policy in place.
- 7.4. If an organisation that works with children or vulnerable adults does not have a Safeguarding Policy in place they will not be permitted to use University facilities.

## 8. Monitoring of Safeguarding Concerns and Review of this Policy

- 8.1. The Lead Safeguarding Officer will ensure an anonymized report is provided to Health, Safety and Environment Committee on an annual basis. The Health, Safety and Environment Committee will review the report to identify any trends or patterns which may be of concern. The committee will then determine any action which needs to be taken.
- 8.2. Health, Safety and Environment Committee is responsible for the review of this policy and the associated procedures.
- 8.3. The policy will be reviewed on a two-yearly basis or more often if there are any changes in legislation or the statutory duties which fall on the University.

## 9. Disclosure and Barring Service (DBS) Checks

- 9.1. The University will ensure that any staff or students working with children or vulnerable adults on a substantial basis, or having close, unsupervised contact with children or vulnerable adults, will have an appropriate DBS check carried out. This will usually be an enhanced check. Responsibility for ensuring such checks are conducted rests with the line manager.
- 9.2. Students enrolled on a PGCE at the University will be required to have an enhanced DBS check as a matter of course.
- 9.3. The procedure for carrying out DBS checks is outlined in the University's [Guidance on the Disclosure and Barring Service \(DBS\)](#).

## 10. Key Contacts

### Lead Safeguarding Officer

Richard Taylor, Chief Operating Officer  
t. (01509) 222223  
e. r.taylor@lboro.ac.uk

### Safeguarding Officers

Name	Email Address	Phone Number
Manuel Alonso (Director of Student Services)	m.alonso@lboro.ac.uk	(01509) 222050 or 07535 122962
Andrew Burgess (Deputy Chief Operating Officer)	a.burgess@lboro.ac.uk	(01509) 222101
Chris Euden (Operations Director, Loughborough University London)	c.euden@lboro.ac.uk	020 3805 1300

### Security

888 (internal and emergency), Gatehouse - (01509) 222141

### Leicestershire Children's Social Care Services

t. 0116 305 0005 (24 hours)

### Leicestershire Adult Social Care Services

t. 0116 305 0004 (8.30am – 5pm Mon-Fri, 8.30am – 4.30pm Fri and Bank Holidays)  
t. 0116 255 1606 (out of hours) Emergency Duty Team  
e. [adultsandcommunitiesCSC@leics.gov.uk](mailto:adultsandcommunitiesCSC@leics.gov.uk)

### Leicestershire Police



t. 0116 222222 or dial 101

Newham Local Children Safeguarding Board

t. 020 3373 4600

Newham Safeguarding Adults Board

t. 020 3373 0440

NSPCC

t. 0808 800 5000

e. [help@nspcc.org.uk](mailto:help@nspcc.org.uk)

[www.nspcc.org.uk](http://www.nspcc.org.uk)

ChildLine

t. 0800 1111

[www.childline.org.uk](http://www.childline.org.uk)

**11. Links to other Relevant University Policies and External Guidance**

[Harassment and Bullying Policy](#)

[Loughborough University Sexual Assault and Sexual Harassment Policy](#)

[Loughborough University Prevent Policy](#)

[Loughborough University Data Protection Policy](#)

[Code of Practice on Investigations Involving Human Participants](#)

[Additional Guidance and Procedure for Applicants who declare a Criminal Conviction](#)

[Guidance on the Disclosure and Barring Service \(DBS\)](#)

[Loughborough University Admissions Policy](#)

[Whistleblowing Policy and Procedure](#)

[University Events Safety Policy](#)

**12. Links to other External Agencies and Resources**

[Leicestershire and Rutland Safeguarding Children Board](#)

[Leicestershire and Rutland Safeguarding Adults Board](#)

[Department of Health Guidance on \*Regulated Activity \(adults\)\*](#)

## Appendix 1: Safeguarding Concerns Reporting Form

**If you have immediate and significant concerns about a child or vulnerable adult's safety you should make the referral to Social Care Services first and then submit this form to a Safeguarding Officer.**

- For referrals concerning a child:
  - In Leicestershire contact Children's Social Care Services on 0116 305 0005 (24 hours)
  - At Loughborough in London, contact Newham Social Care Services on 020 3373 4600
- For referrals concerning vulnerable adults:
  - In Leicestershire contact Adult Social Care on 0116 305 0004 (8.30am – 5pm Mon-Fri, 8.30am – 4.30pm Fri and Bank Holidays) or 0116 255 1606 (out of hours)
  - At Loughborough in London, contact Newham Social Care Services on 020 3373 0440

For all non-urgent referrals please complete this form as fully as possible and send to a Safeguarding Officer without delay.

### University Safeguarding Officers

Name and Role	Email Address	Phone number
Manuel Alonso (Director of Student Services)	m.alonso@lboro.ac.uk	(01509) 222050 or 07535 122962
Andrew Burgess (Deputy Chief Operating Officer)	a.burgess@lboro.ac.uk	(01509) 222101
Chris Euden (Operations Director, Loughborough University London)	c.euden@lboro.ac.uk	020 3805 1300

### SECTIONS A-F TO BE COMPLETED BY THE REFERRER

REFERRAL TO : Safeguarding Officer					
Date of Referral		Time of Referral			
A. Details of Child/ Vulnerable Adult					
Child/ Vulnerable adult's name & ID number if a student		DOB		Age	
Gender		Disability [if known please specify]			
Address					
Postcode		Tel No			
Name of child's primary carer/s		Relationship to child			
B. Family Composition/Significant Others					
Name	DOB		Relationship to child/ vulnerable adult		

<b>C. Details of the alleged perpetrator/ individual causing concern</b>			
Name (& ID if a student)		Gender	
DOB		Age	
Address (if known)			
Postcode		Tel No	
Relationship to child/ vulnerable adult			
<b>D. Reason for referral</b>			
<p><i>State the key areas of concern about harm or neglect</i></p> <ul style="list-style-type: none"> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> </ul>			
<b>E. Details of any alleged incident (if there are no specific incidents to report then insert N/A below)</b>			
Date of alleged incident		Time	
Location of incident			
Name of Witness(es) (if appropriate)	Contact Details (if known)		
Describe in detail what happened. If the child/ vulnerable adult gave an account please record what they said verbatim. Please use additional paper if required.			

<b>F. Details of any action already taken by referrer</b>
<i>Note any referrals made to internal or external support or agencies.</i>
<ul style="list-style-type: none"> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> </ul>

**TO BE COMPLETED BY THE SAFEGUARDING OFFICER**

<b>G. Details of action taken following the receipt of this referral</b>
<ul style="list-style-type: none"> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> <li>▪</li> </ul>

<b>H. Details of External Agencies contacted</b>		
<b>Police</b>	<b>Name of force</b>	
	<b>Name and contact number</b>	
	<b>Advice received and incident/ crime reference</b>	
<b>Social Care Services</b>	<b>Social Care Services department referred to</b>	
	<b>Name and contact number</b>	
	<b>Advice received</b>	
<b>Other (e.g. Channel)</b>	<b>Name of organisation</b>	
	<b>Name and contact number</b>	
	<b>Advice received</b>	

**I. Other information**

*Record any other relevant information.*

<b>Signature of Safeguarding Officer</b>	
<b>Print Name</b>	
<b>Date</b>	

## **Appendix 2: Guidance for Staff on Safeguarding Children and Vulnerable Adults**

### **1. Introduction and Definitions**

*This guidance should be read in conjunction with Loughborough University's Safeguarding Policy, a copy of which is available at: [INSERT LINK TO ONLINE LOCATION OF POLICY](#)*

For the purposes of this guidance and of its Safeguarding Policy, Loughborough University defines a child as a person who is under the age of 18 and defines a vulnerable adult as:

- a) an individual over the age of 18;
- b) who lacks the capacity to take care of him or herself (i.e. at risk of neglect); and/or
- c) who may be unable to keep him or herself safe from the risk of significant harm or exploitation, including the risk of radicalisation or being drawn into terrorism.

### **2. Principles**

These guidelines reflect the following principles:

- The welfare of vulnerable groups, including children and vulnerable adults, is paramount and the University has a duty to take all reasonable steps to ensure the safety of vulnerable groups.
- Vulnerable individuals should be treated with respect and dignity.
- Staff should understand their responsibility in safeguarding vulnerable groups.
- Staff should demonstrate the highest standards of professionalism when working with children and vulnerable adults to protect them from abuse and to protect themselves from false allegations.
- Staff should discuss and/ or take advice promptly from a Safeguarding Officer (SO) about any incident or behaviour which may give rise to a safeguarding concern.
- Any allegations or suspicions of abuse of a child or a vulnerable adult disclosed to a member of staff in the course of their duties, whether or not that person is a member of the University community, should be reported immediately to a Safeguarding Officer (SO).
- Staff should be aware that breaches of professional standards may result in disciplinary action being taken against them.
- Staff should know the procedures for handling allegations against staff and to whom they should report concerns. This is outlined in Section 5 below.

### **3. Working with Children and Vulnerable Adults**

As a matter of good practice, staff should observe the following when working with children and vulnerable adults:

- Work in an open environment avoiding private or unobserved situations. Avoid spending time alone with children or a vulnerable adult away from others.
- Treat all children and vulnerable adults with respect and dignity.
- Always put the welfare of the child or vulnerable adult first.
- Maintain a safe and appropriate distance. It is not appropriate for staff, students or volunteers to have an intimate relationship with a child or vulnerable adult.

- Ensure that if any form of physical contact is required, it is provided openly.
- Involve parents/ carers/ teachers wherever possible, for example by encouraging them to take responsibility for the children/ vulnerable adults in their care.
- Keep a written record of any injury that occurs, along with details of any treatment given.
- Attend any relevant courses provided by the University.

You should never do any of the following:

- Engage in rough physical or sexually provocative games with a child or vulnerable adult.
- Share a room overnight with a child or vulnerable adult.
- Go into a child or vulnerable adult's room unless absolutely necessary. Where this is necessary two members of staff should enter.
- Allow or engage in any form of inappropriate touching.
- Allow children to use inappropriate language unchallenged.
- Make sexually suggestive comments.
- Deliberately reduce a child to tears as a form of control.
- Allow allegations made by a child to go unchallenged, unrecorded or not acted upon.
- Invite or allow children to stay with you at your home unsupervised.
- Develop a social media friendship with a child or vulnerable adult, this includes being a Facebook friend with a child or vulnerable adult.
- Do things of a personal nature for a child or vulnerable adult which they can do for themselves. If any support with personal care is required (for example if the individual is disabled) this should only be provided by appropriately trained staff following protocols provided by their manager/ supervisor.
- Transport children or vulnerable adults on your own in a vehicle, except in emergency situations.

#### **4. Recognising Abuse**

The University recognises that some members of staff will have only very limited contact with children and vulnerable adults and consequently may not be in a position to recognise abuse.

Abuse can and does occur both within families and in institutional or community settings. The University acknowledges that some individuals seek to use voluntary and community organisations to gain access to vulnerable groups. The University also acknowledges that there may be some instances in which a University staff member may be suspected of abuse or inappropriate activity.

The following may indicate that abuse is taking place:

- Unexplained or suspicious injuries, particularly if such an injury is unlikely to have occurred accidentally.
- An injury for which the individual's explanation appears inconsistent.
- The individual describes an abusive act or situation.
- Unexplained changes in behaviour, including withdrawal from social or academic engagement.



- Inappropriate sexual awareness or sexually explicit behaviour, including sharing personal, sexualised images.
- The child or vulnerable adult appears distrustful of adults.
- The child or vulnerable adult is prevented from engagement with normal social activities.
- The child or vulnerable adult appears unkempt or dishevelled on a regular basis.
- Self-harm/increased self-harming behaviour.

The recognition of abuse is not straightforward and the University acknowledges that staff may not always know whether or not abuse is taking place. The safeguarding processes outlined in the University's Safeguarding Policy [\[INSERT LINK TO ONLINE POLICY\]](#) are designed to allow staff to consult with trained colleagues where they may have suspicions of abuse. Staff have a responsibility to act on concerns to ensure that children and vulnerable adults are safeguarded.

The following incidents **MUST** always be reported to a Safeguarding Officer:

- If a child or vulnerable adult is accidentally hurt.
- If you are concerned that a relationship is developing with a child or vulnerable adult, which could represent an abuse of trust.
- If you are concerned that a child or vulnerable adult is becoming attracted to you.
- If you are concerned that a colleague is becoming attracted to a child or vulnerable adult.
- If a child or vulnerable adult misunderstands or misinterprets something you have done in a way which could be construed to be abusive or harmful.
- If you have to use reasonable physical restraint to prevent a child or vulnerable adult from harming themselves or another, or from causing significant damage to property.
- If a child or vulnerable adult reports an allegation of abuse regarding a member of an external organisation using University facilities.

## 5. Reporting Abuse

If a staff member becomes aware of abuse of a child or vulnerable adult he/she has a duty to report this to a Safeguarding Officer as per the procedure outlined in Section 5 of the University's Safeguarding Policy [\[INCLUDE LINK TO ONLINE POLICY\]](#).

The duty to investigate suspected abuse or harm rests with statutory services; primarily Social Care Services and the Police. Under no circumstances should a member of University staff attempt to investigate suspected abuse or harm. Before referring to Social Care Services, the Police or any other external agency, the University will undertake a risk assessment. This will be carried out by a Safeguarding Officer (SO) in consultation with appropriate colleagues.

If a student or staff member has an **immediate and significant** concern for a child or vulnerable adult's **immediate safety**, they may refer the matter directly to the Police or Social Care Services. Contact details are provided in the [Useful Contacts](#) section below. After they have done so they should report the incident to a Safeguarding Officer using the [Safeguarding Concerns Reporting Form](#).

Where the situation is not urgent, any safeguarding concern should be reported to the Safeguarding Officer using the [Safeguarding Concerns Reporting Form](#). If a member of staff wishes to discuss a potential referral before completing the form they may contact a Safeguarding Officer and discuss the referral in principle without providing any names or identifying details.

Staff receiving an allegation or information from a child or vulnerable adult which they consider to pose a safeguarding concern must follow these steps:

- Listen carefully and stay calm;
- Reassure the individual that what they have reported will be dealt with;
- Keep questions to an absolute minimum, do not interrogate the individual. Any questions should be about any immediate health and safety concerns;
- Find an early opportunity to explain to the individual that the information will need to be shared. Do not promise to keep the matter confidential.
- Explain to the individual that you will need to report the matter to the University's Safeguarding Officer and explain the University's internal process as outlined in the Safeguarding Policy **[INCLUDE LINK TO ONLINE POLICY]**.
- Make a full record of what was said and what you have done as a result. You should do so on the [Safeguarding Concerns Reporting Form](#). The record should include:
  - A verbatim record of the individual's disclosure. This may be used later in any criminal proceedings and it is therefore vital that what the individual discloses is recorded as accurately as possible. The record must be drafted in the individual's own words and should not include the assumptions or opinions of others.
  - The nature of the allegation or concern.
  - A description of any visible physical injury. Clothing should not be removed to inspect the individual.
  - Any dates, times or places linked to any incidents and any other potentially useful information.
- Report the matter immediately to a Safeguarding Officer. Contact details are included in the [Useful Contacts](#) section below.

## **6. Support for staff receiving disclosures**

The University recognises that staff may need support after receiving a disclosure. The Safeguarding Officer will discuss this with the staff member and will ensure that they are made aware of support available, including from the University [Counselling Service](#).

## **7. Whistleblowing**

Whistleblowing forms part of any safeguarding approach at an institution. Staff, students and third parties are encouraged to share concerns about the conduct of staff which may constitute malpractice, wrongdoing or a criminal offence but which may not be covered by the University's Safeguarding Policy or procedures. Details of how to raise concerns can be found in the University's [Whistleblowing Policy and Procedure](#).

## 8. Useful Contacts

### Lead Safeguarding Officer

Richard Taylor, Chief Operating Officer

t. (01509) 222223

e. r.taylor@lboro.ac.uk

### Safeguarding Officers

Name	Email Address	Phone Number
Manuel Alonso (Director of Student Services)	m.alonso@lboro.ac.uk	(01509) 222050 or 07535122962
Chris Euden (Operations Director, Loughborough University London)	c.euden@lboro.ac.uk	020 3805 1300
Andrew Burgess (Deputy Chief Operating Officer)	a.burgess@lboro.ac.uk	(01509) 222101

### Security

888 (internal and emergency), Gatehouse - (01509) 222141

### Leicestershire Children's Social Care Services

t. 0116 305 0005 (24 hours)

### Leicestershire Adult Social Care Services

t. 0116 305 0004 (8.30am – 5pm Mon-Fri, 8.30am – 4.30pm Fri and Bank Holidays)

t. 0116 255 1606 (out of hours) Emergency Duty Team

e. [adultsandcommunitiesCSC@leics.gov.uk](mailto:adultsandcommunitiesCSC@leics.gov.uk)

### Leicestershire Police

t. 0116 2222222

### Newham Local Children Safeguarding Board

t. 020 3373 4600

### Newham Safeguarding Adults Board

t. 020 3373 0440

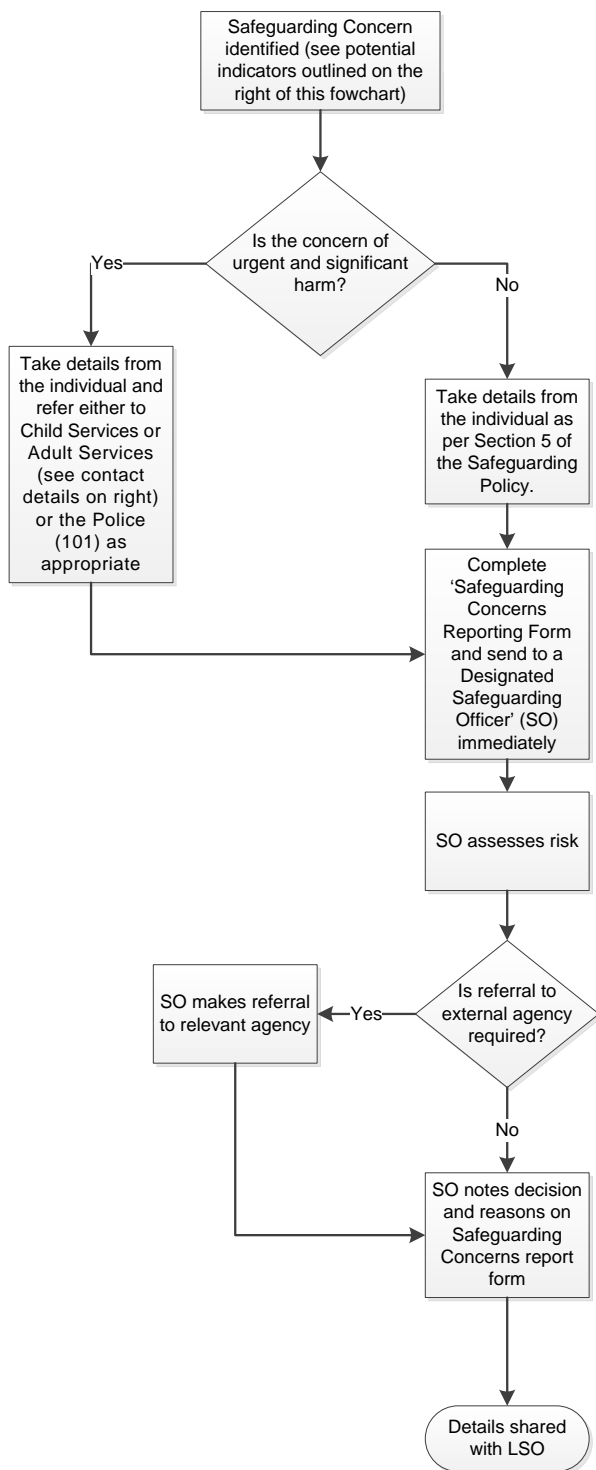
### NSPCC

t. 0808 800 5000

e. [help@nspcc.org.uk](mailto:help@nspcc.org.uk)

[www.nspcc.org.uk](http://www.nspcc.org.uk)

### Appendix 3: Flowchart for Reporting Safeguarding Concerns



#### Potential Indicators of Safeguarding Concerns

- A child or adult raises an allegation of current abuse, harm or other inappropriate behaviour.
- A student, staff member or visitor discloses information involving themselves or family members which gives rise to concerns that an individual may be harming or abusing a child or vulnerable adult.
- There are suspicions or indications that a child or vulnerable adult is being abused or harmed, or is at risk of exploitation, harm or abuse (including radicalization). The indicators of abuse or harm can be difficult to recognize, but advice is given in the [Guidance for Staff on Safeguarding Children and Vulnerable Adults](#).
- There are observable changes in a child or vulnerable adult's appearance or behaviour that may be related to exploitation, harm or abuse, including radicalisation.
- A concern is raised that an individual presents a risk of abuse or harm towards a child or vulnerable adult.
- Concerns arise that a student or member of staff is vulnerable to radicalization and there is an identifiable risk of being drawn into terrorism.
- A historic disclosure of sexual or physical abuse is made, where the perpetrator still has access to children or vulnerable adults.

#### Important Contacts

##### Lead Safeguarding Officer (LSO)

Richard Taylor  
t. (01509) 222223  
R.taylor@lboro.ac.uk

##### Safeguarding Officers (SO)

Manuel Alonso, m.alonso@lboro.ac.uk, (01509) 222050  
Andrew Burgess, a.burgess@lboro.ac.uk, (01509) 222101  
Chris Euden, c.euden@lboro.ac.uk, 020 3805 1300

**Leics Children's Social Services**  
(0116) 305 0005

**Leics Adult Social Services**  
(0116) 305 0004 (8.30-5.00, Mon-Fri & Bank Holidays)  
0116 255 1606 (out of hours)

**Newham Children's Social Services**  
020 3373 4600

**Newham Adult Social Services**  
020 3373 0440

#### **Appendix 4: Declaration Form for External Organisations bringing children or vulnerable adults onto University premises**

##### **Context**

The University's Safeguarding Policy states that any external organisation whose membership includes children or vulnerable adults, that wishes to use University facilities, must confirm that they have a Safeguarding Policy and that they have conducted the appropriate checks on their staff. Below is a form of wording to be used when entering into an agreement with such an organisation. It is imperative that this document is signed by the external organisation in order to make it clear that they are responsible for any child protection issues that occur while they are on campus.

##### **Agreement**

It is the responsibility of all groups and voluntary organisations accompanying children (i.e. persons under 18) and vulnerable adults using the University's facilities to comply with legislation governing the protection of such persons. It is the policy of Loughborough University to seek assurances of such compliance and accordingly it requires confirmation of the following:

- (a) that the organisation has a safeguarding policy;
- (b) that appropriate DBS checks have been conducted in relation to all staff and/or volunteers accompanying children or vulnerable adults while on University premises; and
- (c) no person whose checks indicate that he/she is unsuitable to work with children or vulnerable adults will be included in any activities taking place on the University's premises.

The University cannot be held responsible for the death or personal injury of anyone attending events, unless such death or personal injury occurs as a result of the University's negligence or breach of statutory duty. The University is not responsible for any other loss or damage that may occur to while attending the University's premises unless it occurs as a result of the University's negligence or its wilful damage. Groups/voluntary organisations are responsible for the security of all property/valuable possessions brought onto University premises and are advised to arrange separate insurance for such property/valuable possessions.

I/we confirm that that I/we have complied with (a) and (b) above and agree to (c) above.

I confirm that I have authority to sign on behalf of that group/organisation (where this form is signed by an individual on behalf of a group/organisation).

Signed:

On Behalf of:

Dated:



**UNIVERSITY MANAGEMENT POLICY**

**Loughborough University (incl. London Campus) Health and Safety  
Policy**

**Policy for the Electricity at Work Policy and Code of Practice**

**Reference No. TBC**

**Version No. Revision 9**

**Author David Howell**

**This document was formally approved by**

**The University Health and Safety Committee on:**

**Date.....**

**Name:.....**

**Signed:.....**

**Version: 9 Issue 2**

**Date of Issue: September 2016**

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# Policy for Electricity at Work Policy and Code of Practice

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<b>Contents</b>	<b>Page Number</b>
1.1 Purpose	3
1.2 Scope	3
<b>2. Key legislative requirements</b>	<b>4</b>
2.1 The Health and Safety at Work etc Act 1974	4
2.2 The Management of Health and Safety at Work Regulations 1999	4
2.3 The Electricity at Work Regulations 1989	4
2.4 BS 7671:2008+A1:2011 CORR June 2013. Requirements for electrical installations. IET Wiring Regulations - 17 <sup>th</sup> edition.	6
2.5 The Building Regulations 2000	6
<b>3. Duty holders</b>	<b>6</b>
3.1 Heads of Schools / Support Services	6
3.2 Operations Managers	7
3.3 Facilities Services	7
3.4 University Health & Safety Service	8
3.5 School / Departmental Safety Officers	8
3.6 Nominated competent person(s)	8
3.7 Employees / students	9
3.8 Contractors / visitors	9
<b>4. Technical references and further reading</b>	<b>10</b>
<b>5. Document management table</b>	<b>11</b>

## APPENDICES

<b>A</b>	<b>Code of practice – Part One; Electrical safety</b>	<b>12</b>
<b>B</b>	<b>Code of practice – Part Two; Electrical installation &amp; portable (&amp; transportable) equipment test and inspection (including PAT testing)</b>	<b>18</b>
<b>C</b>	<b>Guidance on completing an electrical risk assessment</b>	<b>27</b>
<b>D</b>	<b>High Voltage (HV) Electricity System Safety Rules and Associated Safety Guidance</b>	<b>29</b>
<b>E</b>	<b>Low Voltage (LV) Electricity System Safety Rules and Associated Safety Guidance</b>	<b>48</b>

**Revisions**

<b>Number</b>	<b>Amendment</b>	<b>Requested</b>	<b>Actioned</b>
<b>1</b>	<b>London Campus added</b>	<b>H&amp;S</b>	<b>DH Jan 17</b>



## **1.1 PURPOSE**

Loughborough University recognises its duties under the Health and Safety at Work etc Act 1974 (“the Act”), and the Electricity at Work Regulations 1989, (“the Regulations”) to provide a safe and healthy working environment by ensuring that precautions are taken against the risk of death or personal injury from the use of electricity in work activities. Furthermore, the University will ensure that electrical systems are constructed and maintained so as to prevent danger, and the use and maintenance of an electrical system, and work near a system, shall not give rise to danger. To this end a two part Code of Practice (CoP) incorporating, Part One: “Electrical safety”, and Part Two: “Electrical installation & portable (& transportable) equipment test and inspection – (including PAT testing)” is included in this policy. Guidance on completing an electrical risk assessment also constitutes part of this policy. They are intended to assist all duty holders in meeting the requirements of the Regulations.

## **1.2 SCOPE**

This policy and CoP applies to all electrical systems and equipment except the University High Voltage (HV) distribution ring main located in both the Loughborough and London Campus. All duties under the Regulations apply to the protection of employees. For the purposes of this policy students shall be afforded the same level of protection under the Regulations as members of staff. The Regulations impose responsibilities on the University, its employees and students, requiring them to conform with this policy and thereby the Regulations, in every respect.

Other individuals e.g. visitors and contractors are also protected by this policy insofar as the Regulations are applicable.

The arrangements necessary to fulfil the requirements of this policy are set out in Section 3 (Duty Holders) of this document and in Appendix C - Guidance on completing an electrical risk assessment.

In addition Appendix E is produced, ‘Low Voltage Electricity System Safety Rules and Associated Safety Guidance which should be read in conjunction with this policy.

## **2 Key legislative requirements**

### **2.1 The Health and Safety at Work etc Act 1974**

Under the Health and Safety at Work etc Act 1974 (“the Act”), the employer has general duties to ensure the health, safety and welfare of his employees at work. Employers also have duties to persons other than their employees who may be affected by their undertaking. Furthermore, employees have duties to their employer and others whilst at work.

### **2.2 The Management of Health and Safety at Work Regulations 1999**

These regulations require employers to make a suitable and sufficient assessment of the risk to the health and safety both of their employees, and of other persons arising out of or in connection with, the conduct of their undertaking. Guidance on completing an electrical risk assessment can be found in Appendix C. This information should be used as the basis for all electrical risk assessments.

### 2.3 The Electricity at Work Regulations 1989

The Electricity at Work Regulations (“the Regulations”), were made under the Act and came into force on 1 April 1990. The purpose of the Regulations is to require precautions to be taken against the risk of death or personal injury from electricity in work activities. The Regulations impose duties on persons in respect of systems, electrical equipment and conductors. The main duties of the Regulations are listed in **Table 1** below.

**Table 1**

Regulation	Duty	Comment
3	Persons on whom duties are imposed by the Regulations	Duties fall to employers, the self employed and employees
4	Systems, work activities and protective equipment	Systems shall be constructed and maintained so as to prevent danger. Work on or near a system shall not give rise to danger. Equipment provided for the protection of people at work shall be suitable and properly used.
5	Strength and capability of electrical equipment	The strength and capability of electrical equipment shall not be exceeded whilst in use.
6	Adverse or hazardous environments	Electrical equipment exposed to damage, adverse conditions, effects or substances must be constructed so as to prevent danger.
7	Insulation, protection and placing of conductors	All conductors which give rise to danger shall either be suitably insulated or have precautions taken in respect of them so as to prevent danger.
8	Earthing or other suitable precautions	Precautions shall be taken either by earthing or other means to prevent danger when a conductor becomes charged as a result of a fault or when the system is in use.
9	Integrity of referenced conductors	The object is to prevent referenced circuit conductors from reaching significantly different potentials thereby giving rise to possible danger.
10	Connections	In order to prevent danger, every joint and connection shall be suitable for use.
11	Means for protecting from excess of current	Efficient means suitably located, shall be provided to protect all of the

		system so as to prevent danger.
12	Means for cutting off the supply and for isolation	In order to prevent danger, suitable means shall be available for cutting and isolating electrical equipment from the electricity supply.
13	Precautions for work on equipment made dead	Precautions shall be taken to ensure equipment is made dead, so work can be done on it, or near it, and it cannot become electrically charged
14	Work on or near live conductors	No person shall be engaged in live work unless (a) it is unreasonable in <b>all</b> the circumstances for it to be dead; and (b) it is reasonable in all the circumstances for him to be at work on or near it while it is live; and (c) suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent <b>injury</b>
15	Working space, access and lighting	When working at electrical equipment, adequate space, access and lighting shall be provided
16	Persons to be competent to prevent danger and injury	When carrying out work which requires technical knowledge or experience to prevent danger or injury, that person must possess that knowledge and experience or must be appropriately supervised
29	Defence	It shall be a defence for any person to prove that he took all reasonable steps and exercised all due diligence to avoid the commission of that offence.

2.4 BS 7671:2008 Amendment 3 2015. Requirements for Electrical installations. IET Wiring Regulations - 17th edition. (“the Wiring Regulations”)

The Wiring Regulations are non statutory regulations and have the status of a British Standard. They relate to the design, selection, erection, inspection and testing of electrical installations, whether permanent or temporary, in or about buildings, including construction sites. Compliance with the Wiring Regulations is likely to achieve compliance with the relevant aspects of the Regulations.

2.5 The Building Regulations 2010

Part P of the Building Regulations 2010, entitled; “Electrical safety”, applies to electrical installations that are intended to operate at low or extra Low Voltage (LV) in buildings or parts of buildings comprising dwelling houses and flats, dwellings and business premises with a shared supply, common areas in blocks of flats, such as corridors and staircases

and shared amenities of blocks of flats such as laundries and kitchens. They apply to fixed electrical installations which are not controlled by the Regulations.

### **3. Duty Holders**

#### 3.1 Heads of Schools / Support Services

Heads of Schools / Support Services shall:

- a) Ensure that systems better or equal are in place to comply with this policy.
- b) Appoint (in writing) one or more departmental competent persons
- c) Ensure appropriate risk assessments are carried out and recorded where necessary before electrical work is undertaken. In particular, in respect of project work, e.g. the construction of electrical rigs. Electrical equipment must be included in activity-based and/or machinery risk assessments, where appropriate.
- d) Ensure responsible persons identified in this policy know and discharge their duties in accordance with this policy
- e) Whilst Facilities Services (FS) is responsible for all fixed electrical installations and infrastructure. Heads of Schools / Support Services are responsible for School / Department / Support Service owned or leased equipment, including portable appliances, and for any wiring installations and equipment supplied from the fixed installation power socket or isolator.
- f) Ensure that under no circumstances, Schools / Departments / Support Services, interfere with the fixed electrical systems or give instructions to any contractor concerning any work on the electrical distribution system without first seeking FS approval.

#### 3.2 Operations Managers shall:

- a) Ensure that systems are in place to control the purchasing or introduction into the department of electrical equipment. A register shall be kept within the department for this purpose.
- b) Ensure that adequate resources are made available to implement this policy, in particular, sufficient resources to install and maintain effective control measures in accordance with statutory requirements.
- c) Ensure sufficient information, instruction and training is provided in order to enable staff to comply with this policy.
- c) Seek confirmation from departmental staff that arrangements are still effective. This duty shall be discharged by submitting an annual report to the University's Health, Safety and Environment Committee, (HSEC), when requested to do so by the University Health & Safety Service (H&SS).

#### 3.3 Facilities Services

FS shall:

- a) Identify and compile a register of items of electrical plant and equipment that have been installed following an electrical risk assessment whenever this apparatus forms part of the University FS estate.
- b) Ensure that items on the register are thoroughly inspected and tested at a frequency not less than that stipulated in the attached CoP.
- c) Ensure that where necessary the inspection/testing of fixed wire electrical services will be notified to the relevant SSO / DSO's, and remedial action instigated where required. Reports of results of any tests / inspections will be available upon request.
- d) Support University Schools / Support Services / Departments by providing upon request technical advice on plant, equipment or engineering controls that is or shall be provided, following an Electricity at work risk assessment.
- e) Keep records of testing for at least 5 years

### 3.4 University Health & Safety Service

The H&SS shall:

- a) On request, provide information and guidance to staff on electrical safety.
- b) Support Heads of Schools / Departments / Support Services in their duty to provide sufficient resources and suitable training to enable staff to comply with this policy.

### 3.5 School Safety Officers / Departmental Safety Officers

SSO's / DSO's shall:

- a) Monitor the effectiveness of any control measures and make recommendations to the Head of School as necessary. In particular, SSO's / DSO's are expected to:
  - monitor that any electrical equipment introduced into the department is done so in accordance with departmental policies and that the departmental register of portable (& transportable) electrical equipment is maintained
  - periodically inspect risk assessment documentation to verify that suitable and sufficient assessments are in place and that they are reviewed and updated when required.
  - verify that plant, equipment and engineering controls are maintained in accordance with the agreed schedule.
  - liaise with departmental competent person(s) to verify that suitable working practices have been adopted.
- b) Report accidents involving exposure to electricity, to the H&SS.

### 3.6 Nominated competent person(s)

(NB; These nominations shall be made and approved in writing by the Heads of Schools / Heads of Department / Support Services to suit the individual needs of their School / Department / Support Service.

The nominated competent person(s) shall:

- a) Co ordinate the registration of new and existing electrical items.
- b) Carry out suitable and sufficient assessments of exposure to electrical hazards and record the assessment. Guidance on completing an Electrical Risk assessment can be found in Appendix C.
- c) Identify suitable control measures and monitor and record the ongoing compliance with the control measures.
- d) Ensure the inspection and / or testing of new and existing portable (and transportable) electrical equipment is undertaken, in line with Appendix A, B, the guidance note; "Guidance on the inspection & testing of portable and transportable) electrical appliances" and the results should be recorded a maintenance log,
- e) Record and where practicable, rectify deficiencies or report problems to the SSO / DSO as necessary.
- f) Provide sufficient information, instruction and supervision to employees and students to ensure that they are able to work safely with electricity and electrical equipment.
- g) The Electrical Duty Authorised Person (DAP) shall review and, so often as is necessary, amend the University's Electricity at Work Policy and CoP. The Electrical DAP shall also monitor compliance with the Electricity at Work Policy and Code of Practice, in conjunction with Departments, Managers and H&SS.

### 3.7 Employees and students

Employees and students shall:

- a) Attend training as required by the SSO / DSO.
- b) Any portable (& transportable) electrical equipment brought into the School / Department / Support Service, other than by normal School / Departmental / Support Service procurement procedures, must be reported to the SSO / DSO / Nominated competent person and tested in accordance with this policy.
- c) Cooperate with the University to implement any control measures identified in the electricity risk assessments.
- d) Report any defects or deficiencies in these measures (e.g. concerns regarding the effectiveness of engineering controls.)
- e) Ensure that all electrical domestic appliance brought onto campus by resident students living in University residential accommodation, conforms to current safety standards, and is maintained in such a condition so as to prevent danger to themselves or others, or damage to University property.
- f) Comply with the guidance note; "Guidance on the inspection & testing of portable and transportable) electrical appliances".

### 3.8 Contractors and visitors

- a) Equipment belonging to and used by persons visiting the University, must be in an electrically safe condition. The University reserves the right to prohibit the use of any electrical equipment brought onto the campus by a visitor which does not meet the requirements of this policy and CoP.
- b) Equipment belonging to, and used by, contractors of the University must have a valid test certificate or label attached which is available for inspection upon request by any University employee. If the equipment does not possess the relevant safety documentation it will not be allowed onto campus.

Any electrically powered tools used by contractors shall be 110 volt supplied by a centre tapped to earth transformer or battery powered. Mains operated 240 volt tools shall not be permitted for use on campus unless approved in writing.

## 4 Technical references and further reading

- BS 7671:2008 Amendment 3. Requirements for electrical installations. IET Wiring Regulations - 17th edition.
- BS EN 60445:2010 Basic and safety principles for man-machine interface, marking and identification-Identification of equipment terminals, conductor terminations and conductors.
- BS EH 60900:2004 Live working-hand tools for use up to 1000 V ac and 1500 V dc.
- Lighting at work: HSG 38 (2nd edition) HSE Books 1997 ISBN 978 0 7176 1232 1
- Avoiding danger from underground services: HSG 47 (2nd edition) HSE Books 2000 ISBN 978 0 7176 1744 9
- Electricity at work: Safe working practices: HSG 85 (2nd edition) HSE Books 2003 ISBN 978 0 7176 2164 4
- Maintaining portable and transportable electrical equipment: HSG 107 (2nd edition) HSE Books 2004 ISBN 978 0 7176 2805 6
- Electrical safety on construction sites: HSG 141 HSE Books 1995 ISBN 978 0 7176 1000 4
- Keeping electrical switchgear safe: HSG 230 HSE Books 2002 ISBN 978 0 7176 2359 4
- Memorandum of guidance on the Electricity at Work Regulations 1989 – Guidance on Regulations: HSR 25 (2nd edition) HSE Books 2007 ISBN 978 0 7176 6228 9
- Using electrical storage batteries safely: INDG 139L (rev 1) HSE Books ISBN 978 0 7176 6199 2
- Electrical safety and you – a brief guide: INDG 231(rev 1) HSE Books 1996 (single copy free or priced packs of 15) ISBN 978 0 7176 6476 4, Web version; [www.hse.gov.uk/pubns/indg231.pdf](http://www.hse.gov.uk/pubns/indg231.pdf)
- Maintaining portable electric equipment in low risk environments: INDG 236 (rev 2) HSE Books 1996 (single copies free or priced packs of 10) ISBN 978 0 7176 6508 2
- Avoidance of danger from overhead electric power lines: General series Guidance Note GS 6 (3rd edition) HSE Books 1997 ISBN 978 0 7176 1348 9
- Electrical test equipment for use by electricians: General series Guidance Note GS 38 HSE Books 1995 ISBN 978 0 7176 0845 4

- Electrical safety at places of entertainment: General series Guidance Note GS 50 HSE Books 1997 ISBN 978 0 7176 1387 8
- Electrical risks from steam/water pressure cleaners: Plant and machinery Guidance Note PM29 (2nd edition) HSE books 1995 ISBN 978 0 7176 0813 3
- Selection and use of electrical hand lamps: Plant and machinery Guidance Note PM 38 (2nd edition) HSE Books 1992 Web availability only; [www.hse.gov.uk/pubns/guidance/pm38.pdf](http://www.hse.gov.uk/pubns/guidance/pm38.pdf)
- BS 6396:2008 Electrical Systems in office furniture and educational furniture

For general information and links to detailed specific guidance on all aspects of electrical safety, go to the HSE website – [www.hse.gov.uk/electricity/index.htm](http://www.hse.gov.uk/electricity/index.htm).

For a comprehensive list of commonly used electrical British Standards and approved codes of practice, go to [www.hse.gov.uk/electricity/standards.htm](http://www.hse.gov.uk/electricity/standards.htm).

Many priced publications can be obtained free of charge from British Standards online and OHSIS databases, University library website (ATHENS password required).

HSE publications are available at [www.hsebooks.co.uk](http://www.hsebooks.co.uk), and [www.hse.gov.uk](http://www.hse.gov.uk).

## 5 Document management table

Version	Owner	Revised by	Summary of revision	Date of revision
V1 Policy 32	UH&SS			2004
V2	“	HW		Feb 2009
V3	“	“		May 2011
V4	“	“		Dec 2011
V5	“	“	Up date in line with INDG 236	Apr / Nov 2012
V6	“	“	Up dated references	Jan 2013
V7	“	“	Add doc.mngt table & link to risk assessment form included	Feb 2014
V8	“	CM, HW & FM duty holder	To clarify guidance on use of multi plug adaptors, daisy-chaining & use of approved “desk” leads	March 2015
V9		DH	General update	September 2016



# **Appendix A**

## **Code of Practice – Part One; Electrical safety**

### **1 Introduction**

This CoP applies to all electrical systems and equipment except the University High Voltage 11000 volt (HV) distribution system.

The purpose of this CoP is to establish an overall framework to ensure the safe use of electrical equipment and installations within the University. The Code is aimed at providing a flexible framework to help departments comply with the Electricity at Work Regulations 1989, taking into account local conditions and specific risk assessments. Guidance on the Regulations can be found in the Health and Safety Executive's, (HSE), "Memorandum of Guidance on the Electricity at Work Regulations – Guidance on Regulations 1989 (HSR 25). Technical references and standards which provide detailed advice and information of relevance regarding specific electrical applications or installations and risk assessment, are listed in Appendix D

This CoP is approved by the University Council and forms part of the University health and safety policy. The likelihood and consequences of hazards associated with the use of electrical equipment and installations is high. On average electrical accidents are twenty to thirty times more liable to be fatal than other types of accidents at work.

In 2010/2011 (\*), there were 10 fatal injuries, 570 non fatal injuries, 8805 near misses and 404 fires and explosions attributable to safety related electrical incidents. This CoP reflects that the level of risk.

\* (Source: HSE statistics).

### **2 Definitions**

#### **a) CHARGED;**

Means that the item has acquired a charge either because it is live or because it has become charged by other means such as by static or induction charging, or has retained or regained a charge due to capacitance effects, even though it may be disconnected from the rest of the system.

#### **b) CIRCUIT CONDUCTOR;**

Means any conductor in a system which is intended to carry electric current in normal conditions, or to be energised in normal conditions, and includes a combined neutral and earth conductor, but does not include a conductor provided solely to perform a protective function by connection to earth or other reference point.

#### **c) NOMINATED COMPETENT PERSON**

A person, over the age of 18 years, recognised as having sufficient technical knowledge and/or experience to enable him to avoid DANGER and who has been appointed in writing to carry out specified duties, which may include the authority to issue, receive and cancel specified safety documents, e.g. permits to work.

d) **CONDUCTOR;**

Means a conductor of electrical energy. This means any material which is capable of conducting electricity and therefore includes both metals and all other conducting materials.

e) **DANGER;**

Means risk of injury. Within the context of this CoP, dangerous voltages are those exceeding 50V AC and 120V DC. Also included is the risk of injury from burns, arcing, fire or explosion arising from electrical energy.

f) **ELECTRICAL 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.

g) **INJURY;**

Means death or personal injury from electric shock, electric burn, electrical explosion or arcing, or from fire or explosion initiated by electrical energy, where any such death or injury is associated with the generation, provision, transmission, transformation, rectification, conversion, conduction, distribution, control, storage, measurement or use of electrical energy.

h) **LIVE;**

Means that the item in question is connected to a source of electricity in normal use and is at a voltage.

i) **PORTABLE (& transportable) electrical equipment;**

Portable (& transportable) electrical equipment includes any item of electrical equipment which if required, may be moved from place to place between periods of use, and is connected to a fixed electrical supply via a flexible lead and plug and socket arrangement. This covers a wide range of appliances, from a computer or printer, to sophisticated electronic instrumentation and domestic white goods.

j) **SUPERVISION:**

1) **IMMEDIATE SUPERVISION** - Supervision by a person having adequate technical knowledge or experience who is continuously available at the location where work or testing is in progress.

2) **PERSONAL SUPERVISION** - Supervision by a person having adequate technical knowledge or experience, who is at all times in the presence of the person being supervised

k) **SYSTEM;**

Means an electrical system in which all the electrical equipment is, or may be, electrically connected to a common source of electrical energy, and includes such sources and such equipment

### **3 Risk assessment, safe systems of work and training**

3.1 A risk assessment should be completed prior to working upon electrical apparatus or systems and a safe system of work implemented accordingly. (See Appendix C of this policy and CoP). In particular, in respect of project work, e.g. the construction of electrical rigs. Electrical equipment must be included in activity-based and/or machinery risk assessments, where appropriate.

3.2 No person shall engage in live work unless;

(a) it is unreasonable in all the circumstances for equipment to be dead; and,

(b) it is reasonable in all the circumstances for him to be at work on or near the equipment while it is live; and,

(c) suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury.

3.3 Adequate supervisory arrangements should be established where there is a risk of injury with the degree of supervision dependent upon the level of risk, competence, training and experience of those carrying out the work.

3.4 If the initial risk assessment is that work upon live equipment is unavoidable, adequate precautions must be established. Such precautions could include working in pairs, the use of screens etc. if this would significantly contribute to reducing danger.

3.5 Persons authorised to work upon live electrical equipment, should be fully aware of the resuscitation techniques and emergency actions to be taken in the case of electrical shock. Guidance on first aid at work including basic procedures and training can be found in HSE leaflet "Basic advice on First Aid at work" (INDG 347) and guidance document; "First Aid at Work; The Health and Safety (First Aid) Regulations 1981 (L74). HSE also publish a poster for the workplace entitled "Electric shock – First Aid procedures". This poster is aimed at employees in a number of industries: electricity supply; generation; transmission and utilisation; electrical testing; electrical applications. It gives basic advice on what to do in an emergency when someone has an electric shock. Further guidance and contact details for HSE Books can be found in Appendix D.

3.6 Loughborough University see no occasion where live working can be justified on the building infrastructure. Therefore this action is forbidden without explicit written instruction from the Duty Holder

### **4 Installations**

4.1 Fixed installations in buildings are the responsibility of FM up to the final point of use, ie socket outlet or in certain prescribed cases up to the distribution board or other isolation device.

4.2 Departments and sections are responsible for installations and equipment from the socket outlet, or in prescribed cases distribution board or isolating device. This includes; electrical equipment, power converters, generators, uninterruptable power supplies units that differ from the standard supply voltage & frequency that forms part of a Departments

experiments, research and teaching practices. Any exceptions to this requirement shall be identified and defined in a formal exchange of letters between the Director of Facilities Management and respective Heads of Schools / Departments or Support Services.

4.3 For normal use all conductors on apparatus should be correctly designed and installed to prevent danger.

## **5 Use of portable (& transportable) electrical equipment**

5.1 For applications where portability is required, rechargeable equipment should be considered.

5.2 Alternatively, 110V supplied by a centre tapped to earth transformer should be utilised.

5.3 In cases where by a process of selection or replacement, LV equipment is not available, or practicable in a particular set or circumstances, portable (and transportable) electrical tools should either be all insulated or of double insulated construction where practicable. (See Appendix B).

5.4 Where portable (& transportable) equipment with earthed metalwork is used it is required that portable (& transportable) or fixed 30mA residual current protection be provided and used, particularly in harsh environments.

## **6 Work in Laboratories** (All references in this paragraph also apply to certain specified workshops).

6.1 'Dangerous voltages' in laboratories can usually be defined as over 50V.

6.1.1 Where a source is such that it is impossible for it to supply more than one milliamp continuously it may be regarded as safe whatever the voltage. However, if the supply is exposed in conditions where there are dangers, e.g. rotating machinery, it should not be used.

### **6.2 Residual current protection**

6.2.1 In all new laboratories where electrical or electronic apparatus is used, or when refurbishment occurs, or in existing high risk situations, Residual Current Devices (RCD's), must be installed unless the consequences of a sudden loss of electrical power is likely to be of comparable seriousness to the consequences of electric shock.

6.2.2 Whenever instrument repairs are carried out on site consideration should be given to the use of portable (& transportable) devices.

6.2.3 The sensitivity of RCD's should be set at 30mA. Any departure from this setting should be agreed in writing between Heads of Schools / Departments / Support Services and the H&SS.

6.2.4 Portable RCD's should be tested by the user before use.

6.2.5 No practice should be allowed where absolute reliance is placed on an earth leakage trip.

### 6.3 Emergency stop buttons

6.3.1 In all new and refurbished laboratories and similar areas where high risk work is undertaken, isolation emergency buttons must be installed near doors and in convenient places in the laboratory so that all electrical supplies can be cut off in an emergency. These buttons can be made to operate the RCD and can be used for normal switching off at the end of working; in this way, the trip or device is tested regularly. Where danger or damage can arise from unexpected failures in electrical supply, buttons may be provided for emergency use only.

### 6.4 Second Person

Where a person is working with dangerous voltages, he must be accompanied by a second person, if this presence would significantly contribute to reducing danger. The second person must be capable of rendering the equipment safe and summoning help. Where help is not likely to be immediately available, the second person must be trained in resuscitation.

### 6.5 Construction of temporary wiring and experimental rigs

'Rigs' and temporary wiring should be constructed to the relevant standard with exposure to dangerous voltages minimised as low as reasonably practicable, within the context of a risk assessment.

Standard items of equipment, such as mains operated instruments and power supplies, should be constructed, wired and maintained to the standard required for portable (& transportable) electrical equipment in general use.

Large metal structures should be earthed or insulated or dealt with in some other way which will ensure safety, if they come into contact with extraneous voltages.

### 6.6 Yellow/green earthing

Under no circumstances should the yellow-green colour code be used for anything other than safety earth wire.

Colour coded wires are an aid to following circuits and to help workers to avoid mistakes. Systematic colour coding should follow, so far as reasonably practicable, BS EN 60445:2010 "Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors". This will enable the colour coding to be understood by workers other than the constructor.

### 6.7 High current sources (batteries)

High current sources such as secondary batteries present special problems. Wherever possible they should be protected by fuses or circuit breakers as close as possible to the source. Battery terminals should be covered and insulated so that short circuits cannot be

caused by dropped metal tools. It is recommended that rings should not be worn when working with unprotected high current sources.

## 6.8 Batteries

Rechargeable wet batteries must only be used in a well ventilated area. During recharging an explosive mixture of Hydrogen and Oxygen is produced which can be easily ignited. Notices reading "Battery on charge" and "No Smoking" must be displayed in battery charging areas.

## 6.9 Test areas

6.9.1 Test areas and laboratories where exposed conductors are present must have access restricted to competent authorised staff only and should meet the requirements of HSE guidance notes GS 38; "Electrical test equipment for use by Electricians", and, HSG 85; "Electricity at Work – Safe working practices".

6.9.2 Test equipment must have insulated fused probes and be constructed to meet BS 7671:2008 Amendment 3 2015. Requirements for electrical installations. IET Wiring Regulations - 17th edition.

## 6.10 Undergraduate teaching

It is crucial that safety procedures for undergraduates working with electrical apparatus are established and maintained and this CoP endorses the adoption of the guidance produced by the HSE.

## Appendix B

### Code of practice – Part Two; Electrical installation & portable (& transportable) equipment test and inspection ((including PAT testing)

#### 1 Frequency of inspection and testing

1.1 All systems shall be maintained so as to prevent, so far as is reasonably practicable, danger. The method and frequency of formal maintenance and the inspection and testing of such installations shall be determined by the level of risk and nature of installation

#### 1.2 Electrical installations

The minimum frequency of test and inspection of electrical installations will be as shown in **Table 2** unless risk assessment or historical records justify a revised frequent testing regime.

**Table 2**

Type of Installation	Frequency of Inspection and Test
Services and Installations other than listed below	5 years
Workshops and industrial installations in laboratories	3 years
Temporary Experimental rigs and construction sites	3 months
Roadways and access ways	6 years
Halls of Residence(not including students personal equipment)	1 year visual 5 year test
Refectories and restaurants	1 year visual 5 year test
Emergency Lighting	as BS or Risk assessment
Fire Alarms	as BS or Risk assessment

#### 1.3 Portable (& transportable) electrical equipment

Schools / Departments / Support Services are responsible for ensuring that portable (& transportable) electrical equipment is maintained in a safe condition. Low risk equipment may not require a Portable Appliance Test (PAT) and a visual inspection will suffice. There is considerable evidence to indicate that almost 95% of equipment defects can be detected by visual inspection. Furthermore, the defective components are most likely to be the plug and flexible cable. The types of checks and tests are outlined in **Table 4**.

1.3.1 Regular routine PAT testing of portable (& transportable) electrical equipment should be implemented in accordance with this Policy and CoP. The standard interval for testing portable (& transportable) electrical appliances is **12 months**. However, Schools / Departments / Support Services may decrease or increase this frequency in accordance with their own electrical safety risk assessment, (see Appendix C), and standards recommended by the HSE. Suggested initial intervals for checking portable electrical equipment are given in **Table 3 below**.

**Table 3**

<b>Equipment /environment</b>	<b>User checks</b>	<b>Formal visual inspection</b>	<b>Combined inspection and testing</b>
Battery operated (less than 40 volts)	No	No	No
Extra low voltage (less than 50 volts AC): telephone equipment, low voltage desk lights	No	No	No
Desk computers, VDU screens	No	Yes, 2-4 years	No. if double insulated, otherwise up to 5 years
Photocopiers, fax machines; Not hand held, rarely moved	No	Yes, 2-4 years	No if double insulated, otherwise up to 5 years
Double insulated <input type="checkbox"/> (Class II) equipment: Not hand held. Moved occasionally, e.g. fans, table lamps	No	Yes, 2-4 years	No
Double insulated <input type="checkbox"/> Class II) equipment: Hand held, e.g. some floor cleaners, some kitchen equipment	Yes	Yes, 6 months-1 year	No
Earthed equipment (Class I) Electric kettles, some floor cleaners, some kitchen equipment and irons	Yes	Yes, 6 months – 1 year	Yes, 1-2 years
Cables (leads and plugs connected to the above) and mains voltage extension leads and battery charging equipment	Yes	Yes, 6 months - 4 years depending on the type of equipment it is connected to	Yes, 1 - 5 years depending on the type of equipment it is connected to

***(Note; Portable Appliance testing can be arranged through FS, who have a contract with an external provider. Contact the Electrical maintenance supervisor in FS for further details).***

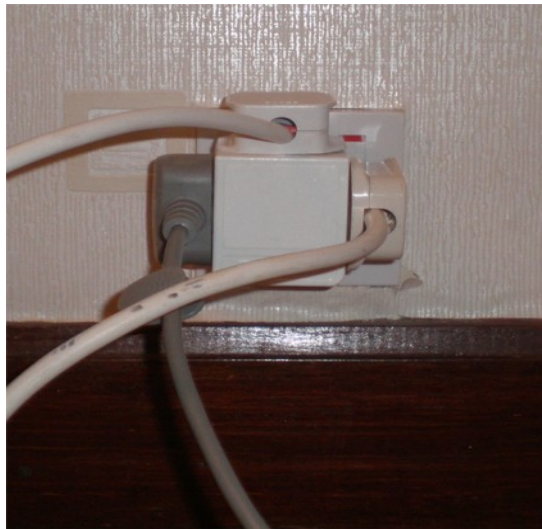


1.3.2 Portable (& transportable) electrical equipment brought in by students or staff, is the responsibility of the individual(s) concerned. Certain items of electrical equipment are prohibited in Residential Halls. If found, this equipment can be confiscated by the Hall Manager, members of the Warden team, Campus Living staff or the H&SS. PAT testing can be carried out on permitted equipment at the request of the student or member of staff. Any equipment found to be causing problems e.g. circuit tripping or damaged, can be PAT tested and if found to be unsafe, removed.

1.3.3 Portable (& transportable) electrical appliances should, apart from specified low risk equipment, be subject to testing utilising a PAT tester. The use of a pass/fail PAT tester is normally acceptable as a minimum requirement for checking the validity of the earth and insulation. In cases following repair, or where more sophisticated specific readings are required, the department may use a more comprehensive form of portable appliance tester capable of producing specific readings.

of portable appliance tester capable of producing specific readings.

1.3.4 Multi-way plug adaptors, (*see picture below*),



must not be used. Over loaded adaptors can cause overheating from excessive current load and the earth pins on the appliances plugged into them are also vulnerable to incomplete contact, which stops earth faults from blowing the circuit as designed. Where there are insufficient sockets:-

- only individually fused extension leads are permitted, (no multi-way plug adaptors),
- extension leads must not be coupled in series (“daisy chained”). (**See picture below.**) Where additional distribution of electrical power is found necessary, more socket outlets should be requested through FS.



- Proprietary purpose designed and manufactured desks leads can be used to comply with BS6396:2008. (MK Ackerman Desk Pods and approved similar specification). **(See picture below)**



1.3.5 Equipment operating at voltages less than 25 volts ac or 60 volts dc, can be excluded from test and inspection procedures, providing that the risk assessment shows there is no risk of injury from electric shock, electric burn, electrical explosion or arcing, or from fire or explosion initiated by electrical energy.

1.3.6 Before equipment is taken into service the competent person appointed to monitor its condition must enter equipment details on the appropriate register and record that a competent person has confirmed that the equipment is :-

- a) suitable for the intended service environment,
- b) free from defects and is correctly fused,
- c) equipped with a serviceable flexible lead, manufactured to the relevant standard.
- d) functioning correctly and has passed the relevant electrical tests.

1.3.7 User checks will be carried out by person(s) using the equipment. Periodic formal visual inspections and combined inspections and tests will be carried out by competent persons properly trained and appointed to do so.

The periodic inspection and testing of portable (& transportable) equipment must be carried out by person(s) competent to do the following:-

- (a) Avoid the dangers presented by the PAT test and the equipment under test.
- (b) Securely isolate the equipment under test from the supply system and safeguard

other persons who may be affected by the test.

(c) Visually inspect and electrically test portable (& transportable) equipment and correctly interpret the results of the test and inspection.

(d) Take the necessary action to withdraw defective equipment from service and initiate repairs or scrap it.

(e) Record the results of the inspection and test.

(f) Affix a sticker to the equipment to indicate pass/fail and next date of inspection.

The types of checks and tests, by whom they should be carried out and what they should include, are detailed in **Table 4** below. This is not an exhaustive list, however it represents a guide to what should be included. The results of these checks, inspections and tests should be recorded.

**Table 4**

Type of testing	Conducted by	To include
User checks	Person using equipment	Damage to cable sheath. Damage to plug. Inadequate joints, including taped joints in the cable. Damage to the external parts of the casing of the equipment. Evidence of overheating
Formal visual inspections	Competent person with School / Department / Support Service	Removing the plug and checking the fuse Checking the cord grip is effective Cable terminations are secure and correct
Combined inspection and test	Competent person with School / Department / Support Service	The correct polarity of supply cables. Correct fusing. Effective termination of cable and cores. That the equipment is suitable for its environment. Any loss of earth or insulation integrity. Earth continuity and insulation resistance

1.3.8 The competent persons appointed to monitor the equipment must instruct users of hand held or frequently moved equipment with flexible leads, to carry out the following pre-use checks on each day of use;

- Socket outlet - is there any sign of surface damage or overheating or missing cover screws?
- Plug – is there any evidence of a cracked case, loose or bent pins, missing cover screws, or cable sheath pulled from cable grip?
- Cable – is there damage to sheath other than light scuffing. There must be no taped joints.

- Equipment – is there damage to the casing or cover screws missing? Is there evidence of misuse, e.g. damage due to water ingress, heat or corrosion.

The departmental competent person responsible for monitoring the condition of the equipment should repeat the pre-use checks weekly for equipment used by students, and quarterly for other equipment. All defects should be reported and the appropriate action taken.

1.3.9 Visual inspections will be carried out on equipment and associated flexible leads and plugs to confirm that;

- they are free from defects,
- they are fitted with a correctly wired and fused plug,
- cable grommets, where fitted, protect cable insulation and prevent significant movement or rotation of the cable,
- there are no exposed conductors live at voltages exceeding 25 volts ac or 60 volts dc that can deliver 5ma or more,
- where appropriate, it carries the Class II (no earth required) label,
- all control devices function correctly and the equipment performs satisfactorily.

1.3.10 Electrical tests will be carried out on the following equipment and associated flexible leads and plugs;

- (a) Class I (requiring an earth) equipment.
- (b) Extension leads and extension lead hand lamps,
- (c) Any equipment including Class II identified at registration as likely to be used in a hostile or conductive environment,
- (d) Portable (& transportable) RCD's

1.3.11 Electrical tests will consist of the following;

For (a), (b) and (c) above;

- An earth continuity test. The maximum pass resistance should be 0.1 ohm or 0.5 ohm for equipment protected at 3 amps or less. The value of test current will be determined at registration. For electronic equipment it will be 0.1 Amps. For electrical equipment it will be 1.5 times the protective device rating of the equipment. Where test instruments deliver a 25 amp test current, care must be taken that such current does not damage equipment supply cables.
- An insulation test at twice the operating voltage. The minimum pass resistance should be 1meg ohms.
- Flash tests should not be used as a routine practice. Facilities Management can provide further advice.

For (d) above:

- Portable (& transportable) RCD's should be tested by using the test button provided and checked for tripping times and tripping current accuracy using a RCD test instrument.

1.3.12 Electrical tests may be carried out using portable (& transportable) appliance testers which conform to the current BS EN 61010-2-201:2013, "Safety requirements for electrical equipment for measurement, control and laboratory use. Particular requirements for control equipment". All new equipment should comply with this or an equivalent standard. Equipment predating this standard is not necessarily unsafe. PAT testers for departmental use can be of the simple 'pass-fail' type.

FS and some departments possessing the necessary expertise will keep one or more PAT testers capable of applying all appliance standard tests including flash tests and giving measured results. Equipment that fails the simple pass-fail test will be subjected to diagnostic testing using such PAT's. Test equipment itself is portable (& transportable) equipment and subject to this CoP. PAT testing equipment should be calibrated in line with control measures identified by the risk assessment.

1.3.13 To prevent damage and / or injury during testing, safe arrangements must be made for the disconnection of equipment such as IT equipment, lasers and optical fibre systems.

1.3.14 Equipment which is rarely moved and is connected by permanent connection or industrial coupler and which has its flexible cable protected against damage due to tension or impact, may be treated as part of the fixed installation and therefore can be excluded from a PAT testing regime.

Equipment operating at voltages less than 25 V AC or 60 V DC can be excluded from test and inspection procedures, providing that the electrical risk assessment shows there is no risk from injury from arc, fire and / or explosion.

1.3.15 Heads of Schools / Departments / Support Services are responsible for ensuring that inspection and test records are maintained. The results of inspection and test will be recorded in the equipment register, and a label indicating the next due date for inspection and test will be attached to the equipment. Where the equipment's flexible lead is wired into its supply terminals, the label should be affixed to the plug or on the cable adjacent to the plug.

The benefits of keeping records are;

- that it is a useful management tool for monitoring and reviewing the maintenance scheme;
- that it enables managers to demonstrate maintenance does take place, and,
- there is an inventory of portable and transportable electrical equipment which will identify any unauthorised equipment. However, this does not supersede any other existing inventory scheme being operated. Where records are stored on electronic systems it must be possible to extract a paper copy print out for presentation when requested.

Where equipment fails, it should be removed from service, repaired or disposed.

## **2. Safe systems of work**

**2.1** Work on University electrical services by Schools/Departments/Support Services is not permitted. Such work is only to be carried out by, or through FM.

**2.2** Work on portable or transportable electrical equipment belonging to Schools/Departments/Support Services, including experimental rigs, is the responsibility of the relevant School/Department/Support Service.

2.2.1 All work must be done with the system securely isolated from its supply and all conductors discharged to earth potential, except when live diagnostic testing and the use of measuring instruments for carrying out minor adjustments is required.

Secure isolation will be achieved by the most convenient means, such as locking of isolators and labelling (Lock out tag out LOTO), that ensures:-

(a) that the system cannot be re-energised until the persons doing the work and their tools and equipment are withdrawn from the system, and

(b) all persons likely to be affected are informed that the system is to be re-energised.

Where risk assessments have identified other associated hazards, e.g. radiation, chemical, laser etc., precautions shall be taken in accordance with other relevant University Policies, CoP or guidance.

2.2.2 Work on electrical systems will be carried out by persons suitably trained and experienced to avoid injury from electricity.

2.2.3 Where testing, measurement and minor adjustment with the system live cannot be avoided, the following procedure must be observed:-

(a) The work must be done by persons competent to perform the specific task and, who meet the definition of “competent person” given in Section 2 of Appendix A of the policy, (“Definitions”).

(b) Unless live parts are protected to ingress protection standard I.P.2, (maximum access gap 12mm), a second competent person must be present who should be able to contribute to prevention of injury.

(c) Work must be limited to only those parts which need to be live.

(d) The work area must be safeguarded against unauthorised entry by barriers and warning notices.

(e) Proper use must be made of suitable insulating mats, screens, gloves, eye protection and insulated tools.

(f) Only approved test and measuring instruments will be used which are fitted with fused and shrouded leads and conform with the guidance given in the HSE’s Guidance Note; GS 38 (rev); – “Electrical test equipment for use by electricians”.

**2.3** In addition to the requirements outlined in Appendix A; Code of Practice – Part One; Electrical Safety, the following will apply to work in test and repair workshops.

2.3.1 Test areas must be segregated from repair areas. Repairs and alterations must be done in the allocated repair area with the equipment securely isolated and discharged to earth potential.

2.3.2 Unauthorised persons must be denied access to the workshop unless accompanied by a competent person.

### **3. Training**

3.1 Heads of Schools / Departments / Support Services and all other persons with responsibilities under this guidance, (except students), must be familiar with their duties under the Regulations and Section 3 of the University Electricity at Work policy. Familiarity with legal duties can be achieved by reference to the H&SS, it's website, published guidance, and other publications such as the University newsletter; "Health & Safety matters", e-bulletins and attending training courses and seminars, or by personal study. It should be noted that it is a legal requirement that managers and supervisors must be familiar with any risks associated with the use of equipment in their departments or sections.

3.2 Copies of statutory Instruments, codes of practice, guidance notes etc, referred to in this Policy and CoP, must be made available to all University employees having duties in respect of this guidance, should they request them.

3.3 Persons appointed to monitor portable (& transportable) electrical equipment must be competent. Any formal training given should be entered on the person's training and employment records.

3.4 All users of electrical equipment must be instructed in its safe use by a competent person. For equipment with no special risks, reading the manufacturer's instructions for use will be adequate.

3.5 Users of equipment that may contain or produce special risks must be formally trained by a competent person, to avoid danger.

3.6 Where people are at greater risk of electric shock, and therefore may require emergency resuscitation or treatment for electrical burns, the provision of specialised training for first aiders should be provided. The departmental electrical safety risk assessment and/or the first aid risk assessment will inform the decision on the number of first aiders to receive this additional training. (For further information on electrical first aid training courses contact the H&SS on 222181 or email; [hse@lboro.ac.uk](mailto:hse@lboro.ac.uk)).

## Appendix C

### Guidance on completing an electrical risk assessment

The first stage in controlling risks from the use of electricity is to carry out a risk assessment in order to identify what needs to be done. When carrying out a risk assessment;

- Identify the hazards
- Decide who might be harmed and how
- Evaluate the risk arising from the hazards and decide whether existing precautions are adequate or whether more should be taken
- Record any significant findings. *(It is recommended that the generic risk assessment form in the University policy guidance note at; <http://www.lboro.ac.uk/admin/hse/policies/download/guidance%20on%20completing%20risk%20assessment.pdf>, can be used to record electrical safety risk assessments).*
- Review your assessment from time to time and revise it if necessary

Schools / Departments / Support Services must conduct a risk assessment of all portable (& transportable) electrical equipment to determine the frequency of user checks, formal visual inspections and combined inspections and tests. Detailed information on the type of equipment to be tested, the type of check, test and /or inspection, and how often the test should be undertaken, is given in **Tables 3 and 4** in Appendix B; “Code of Practice – Part two; Electrical installation & portable (& transportable) equipment test and inspection (including PAT testing)”.

The risk of injury from electricity is strongly linked to where and how it is used and so, risk assessments must take account of this. The risks are greatest in harsh conditions, for example;

- in wet surroundings – unsuitable equipment can easily become live and can make its surroundings live
- out of doors – equipment may not only become wet but may be at greater risk of damage.
- in cramped spaces with a lot of earthed metalwork, such as inside a tank or bin - if an electrical fault developed it could be very difficult to avoid a shock.

Some items of equipment can also involve greater risk than others. Extension leads are particularly liable to damage;

- to their plugs and sockets
- to their electrical connections, and,
- to the cable itself.

Other flexible leads, particularly those connected to equipment which is moved a great deal, can suffer from similar problems.



As well as the nature of the environment and how equipment is used, there are a number of other factors that need to be considered when assessing the risk of injury arising from working on, near or with electrical equipment. To help identify any precautions you need to take when testing electrical equipment, the following questions should be asked;

- Can the work be done with the equipment dead or energised at a safe voltage or current?
- Is it absolutely necessary for someone to be working on or near to equipment that is live at dangerous voltages or current levels?
- What is the maximum voltage during the work activity?
- Are testers and operatives competent? Are they adequately trained and knowledgeable to do the particular work and, ensure that they others are not put at risk?
- If testers and operatives are not considered fully competent, are they adequately supervised?
- What physical safeguards should be applied to the equipment under test to prevent injury e.g. the use of temporary or permanent screens?
- Is the test instrumentation of safe design? Has it been properly maintained and calibrated?
- Is it necessary to set up a permanent test area separate from the rest of the workplace, where equipment can be taken for testing? Is it necessary to set up a temporary test area around the equipment?
- Are the testers able to supervise the working area sufficiently and at all times to prevent danger to others?
- To what extent should testers be supervised or accompanied?
- If testers design, manufacture or use their own special test equipment, does it meet **BS EN 61010-2-201:2013, "Safety requirements for electrical equipment for measurement, control and laboratory use. Particular requirements for control equipment"**
- Safety requirements for electrical equipment for measurement, control and laboratory use. Particular requirements for control equipment
- Is there sufficient space around the equipment being tested, in order to do it in a safe manner
- Are others working near by, competent to avoid danger if they need to approach the equipment? If not how do you ensure they do not do so?
- Does the workbench or separate area require a warning to show that testing is in progress?
- Is there a need for additional emergency switching devices for use by other employees to reduce the degree of injury to testers? Can RCD's be used to provide supplementary protection.
- Is it possible to reduce the number of paths to earth to reduce the likelihood of shock e.g. insulating mats?
- Is it possible to use unreferenced supplies e.g. isolating transformers/batteries to reduce the likelihood of shock?

## Appendix D

### Revision 3

#### To Loughborough University (LU) Health and Safety Policy

#### High Voltage (HV) Electricity System Safety Rules and Associated Safety Guidance

##### 1. Introduction

- a. These Safety Rules are based on the Electricity Association Model Distribution Safety Rules. This ensures that employees work to recognised industry standards.
- b. The Safety Rules state the basic safety requirements for work on the Loughborough University HV Distribution System but are **NOT designed to cover any Departmental Experimentation or Generation.**
- c. Loughborough University is the “System Owner” and the DUTY APPOINTED PERSON (DAP) is the “Document Holder”.
- d. These rules are designed to provide: -
  - i. Maximum protection to persons working on PLANT or APPARATUS to which they apply.
  - ii. A guide to safe working on or in the vicinity of HIGH VOLTAGE electrical systems.
  - iii. Controls and responsibilities for individuals operating on or working in the vicinity of HIGH VOLTAGE PLANT and equipment.
- e. It is the responsibility of DAP Senior Authorised and Authorised persons (SAP, AP) to be conversant with these rules before SWITCHING the distribution system.

##### 2. Basic Requirements

No person shall, other than the DAP, SAP or AP:

- a. Enter a substation without a PERMIT-TO-WORK.
- b. Touch insulation covering of a “LIVE” cable.
- c. Interfere with any item of electrical equipment without first having been given instructions in writing to do so by the DAP, SAP or AP.
- d. Disturb a “LIVE” cable.

- e. No person shall commence work until they have undertaken and have approved a Risk Assessment and Method Statement, fully understand their instructions and are conversant with the nature and extent of the work to be carried out. Under no circumstances shall the instructions be exceeded. The Risk Assessment and Method Statement should be submitted by the contractors before the HV PERMIT is issued and work starts. This may take the form of an approved switching schedule.
- f. Should any person consider they are unable to carry out the work safely, the matter must be referred to a higher authority, DAP, SAP or AP for a decision before continuing.
- g. No person shall enter a substation until instructed to do so by the DAP, SAP or AP following a job specific Risk Assessment, after all necessary safety precautions have been taken and a PERMIT-TO-WORK or approved switching schedule has been issued for that work.
- h. Smoking is prohibited in substations and within 3 metres of the building.
- i. The Person-in-Charge of the works will be a COMPETENT PERSON, or a person having a higher level of authority and competence, as defined in these rules.

### **3. General Provisions**

Scope and application of these Safety Rules.

These rules apply to the following electrical systems owned by Loughborough University:

- a. All HV substations, PLANT and APPARATUS
- b. All HV distribution cables

### **4. Information, Instruction and Training**

Arrangements shall be made by the DAP or SAP to ensure that all persons with access to the HV equipment are adequately informed of:

- a. Risks to their health and safety.
- b. Preventive and protective measures to be taken.
- c. Procedure in the event of serious or imminent DANGER. (Stop work, leave the area in a secure state (locked) and inform the DAP, SAP or AP immediately.)
- d. The risks arising from other activities in the workplace.
- e. Those with access to operate equipment are aware of the consequences of

operations carried out.

- f. Other people who may be exposed to DANGER by the operations or works receive adequate information and where necessary instruction.
- g. The capabilities of PERSONS are taken into account by the DAP or SAP in allocating tasks.
- h. PERSONS are provided with adequate Health and Safety training and retraining, e.g. HV Safe SWITCHING and refresher courses at periods not exceeding 3 years.

## **5. Issue of Safety Rules**

These rules shall be periodically reviewed by the DAP. The most up to date version will be available in the Duty Holder Electrical file on the FM shared drive. All newly appointed HV AP's will be issued with a copy and drawings showing the HV Ring, substations and their locations on the Campus and Holywell Park. They will be inducted and arrangements made to walk them through the substations.

## **6. Variation of Safety Rules**

In exceptional or special circumstances these safety rules may be varied to such an extent as is necessary and APPROVED by the DAP or SAP. Approval must be based on being satisfied that safety requirements are satisfied in another way. These variations must be documented and held as a permanent record.

## **7. Objections on Safety Grounds**

When any person has concerns regarding the operation or work on the system, they shall refer them to the person issuing instructions or to a higher authority, DAP or SAP. The matter shall be investigated, and reviewed before proceeding.

## **8. Treatment for Electric Shock**

All persons who may be in charge of or in control of any operation or work on the system shall be trained and conversant with the treatment for electric shock. An Emergency First Aid (HSE) course should be completed every 3 years, emphasising electrical burns & injuries.

## **9. Definitions**

Within these rules, where reference is made to a definition below it will appear in CAPITALS within the text.

- APPARATUS – any equipment or switches on the HV system.
- AUTHORISED PERSON – (AP) – a COMPETENT PERSON

Over the age of 18 years, who has been appointed in writing by the DAP to carry out specified duties, which may include, subject to the permission of the DAP or SAP, the issuing and cancelling of SAFETY DOCUMENTS, PERMITS and LIVE SWITCHING activities.

- CAUTION NOTICE – a notice conveying a warning against interference.
- CIRCUIT MAIN EARTH – means the earthing equipment applied before the issue of, and at a position recorded in, a SAFETY DOCUMENT.
- COMPETENT PERSON – a person over the age of 18 years, who has the relevant technical knowledge and experience to prevent DANGER while carrying out specific duties on or adjacent to the HV system who may be nominated to receive and cancel SAFETY DOCUMENTS, with the permission of the SAP or AP. The Competent person may also be the DAP, SAP or AP.
- CONTROL ENGINEER will be the DAP or SAP or AP who will exercise the function and control SWITCHING of the HV system. The SAP shall have sole authority for any SWITCHING changes on the University HV system at any one time.
- DANGER – a risk to health, bodily injury or equipment.
- DANGER NOTICE – a notice reading “DANGER”, warning of electrical or physical DANGER.
- DEAD – means an electrical potential at or about zero voltage and disconnected from any LIVE SYSTEM.
- DOCUMENT OWNER – The DOCUMENT OWNER is the DAP appointed to be responsible for the application of these safety rules.
- DUTY AUTHORISED PERSON (DAP) – someone who has been appointed **in writing by the Director of Facilities Management** to carry out specified duties, including the issue and cancellation of SAFETY DOCUMENTS – HV PERMITS.
- EARTH – means the conductive mass of the earth.
- EARTHED – means that the system or APPARATUS being worked upon is connected to EARTH through switchgear or by adequately rated EARTH leads.
- HIGH VOLTAGE (HV) – a voltage exceeding 1000 volts.
- IMMEDIATE SUPERVISION – means supervision by a person, having adequate technical knowledge and experience, who is continuously available at the location where work or testing is in progress.

- ISOLATED – means disconnected from associated PLANT, APPARATUS and conductors by a SWITCHING device in the OPEN TO OFF position, or by adequate physical separation, or sufficient gap.
- LOW VOLTAGE (LV) - a voltage NOT exceeding 1000 volts.
- LIVE – means electrically charged.
- OPEN TO OFF – means electrically disconnected from the HV distribution system.
- PERMIT-TO-TEST – specifies the HIGH VOLTAGE APPARATUS which has been made safe for testing to proceed and the conditions under which the testing is to be carried out.
- PERMIT-TO-WORK – specifies the HIGH VOLTAGE APPARATUS which has been made safe to work on, the safety precautions applied to ensure continued safety and the work which is to be carried out.
- PERSONAL SUPERVISION – means supervision by a person having adequate technical knowledge and experience, who is at all times in the presence of the person being supervised.
- PLANT – any equipment or switches connected to the HV system.
- SAFETY DOCUMENT – a HV PERMIT TO WORK SWITCHING SCHEDULE OR SANCTION TO TEST identifying the person who the PERMIT is issued to and defining the scope and limitations of the work.
- SAFETY LOCK – a lock that has a unique key, being different from all other standard locks used on the system.
- SCREENED – barrier off to prevent contact with LIVE conductors.
- SENIOR AUTHORISED ENGINEER (SAP) – someone who has been appointed **in writing by the DUTY AUTHORISED PERSON** to carry out specified duties, including the issue and cancellation of SAFETY DOCUMENTS – HV PERMITS.
- SWITCHING – the operation of circuit breakers, isolators, dis-connectors, fuses or other methods of making or breaking an electrical circuit and/or the application and removal of CIRCUIT MAIN EARTHS.
- SWITCHING SCHEDULE – a record of SWITCHING carried out on the HV system. It should record the location, circuit, operation, lock numbers used (if applicable) the time of SWITCHING, who is SWITCHING and the HV PERMIT number it refers to.

## **10. General Precautions**

### a. General Safety

- In addition to the requirements specified in these Safety Rules the safety of all persons at work shall be achieved by maintaining General Safety in the vicinity of the work place.
- The COMPETENT PERSON must ensure that arrangements are maintained to ensure that other work areas are not adversely affected by the activities for which he is responsible.

### b. Access to and Work in Substations

- Only COMPETENT PERSONS will be permitted to access substations.
- Persons not classified as COMPETENT PERSONS may gain access or work on the system provided they are under the SUPERVISION of, at minimum, a COMPETENT PERSON and issued with a PERMIT-TO-WORK (access).
- Access doors and gates shall normally be kept locked. Keys are to be issued only by the DAP, SAP or AP.

### c. Access to HIGH VOLTAGE APPARATUS and Conductors

- Barriers, doors or gates preventing access to LIVE equipment shall be normally kept locked.
- Keys shall be accessible only by the SAP, AP or DAP.
- Access and Work in Fire Protected Areas – CO2 suppression system. Before access is given to or work is undertaken in any enclosure protected by automatic fire extinguishing equipment:
  - The automatic control shall be rendered inoperative and left on “hand control” or by use of the “locking pegs”.
  - The precautions taken shall be recorded on any SAFETY DOCUMENT or written instruction issued, including conditions when the automatic control may be temporarily restored.
  - The automatic control shall be restored immediately after PERSONS engaged on work activities have been withdrawn from the protected enclosure or at the end of the working day.

## **11. HIGH VOLTAGE SWITCHING**

- a. HIGH VOLTAGE SWITCHING shall only be carried out by the DAP, SAP or AP who will become the Control Engineer.
- b. It is forbidden to undertake SWITCHING operations by signal or prearranged understanding after an agreed time interval.
- c. Any concerns over SWITCHING, or where switchgear shows signs of distress, must be communicated with the CONTROL ENGINEER who will investigate before continuing.

## **12. Records**

- a. Verbal SWITCHING instructions (phone messages) shall be recorded and repeated back to the sender (CONTROL ENGINEER), to ensure that it has been accurately received.
- b. The CONTROL ENGINEER carrying out the SWITCHING on the HV system shall ensure that a record is made of the particulars on the SWITCHING SCHEDULE and the mimic panel is updated.

## **13. Use of Voltage Testing Devices**

Where approved voltage testing devices are used, they shall be tested immediately before and after use, on an approved tester, as a check on functionality and calibrated annually.

## **14. Safety Precautions For Work On or Near HIGH VOLTAGE Systems**

- a. General Requirements:  
Safe access to conductors can only be achieved after the following steps have been completed. The section of the system to which access is required must be:-
  - DEAD
  - ISOLATED, and all practical steps should be taken to lock off from all points of supply, including voltage transformers, auxiliary transformers, common neutral earthing equipment and other sources of supply from which the section of the system can be made LIVE.
  - CAUTION NOTICES must be fixed at all points of isolation.
  - EARTHED at all points of disconnection of HIGH VOLTAGE supply.
  - SCREENED where necessary to prevent DANGER from other LIVE parts of the system.



- DANGER NOTICES to be attached to adjacent LIVE equipment.
- IDENTIFIED at the point of work.
- RELEASED for work by issue of appropriate SAFETY DOCUMENT, PERMIT-TO- WORK/TEST, which shall not be issued unless the recipient is fully conversant with the part of the system to be worked on and the nature and extent of the work to be done.
- Where the design of APPARATUS inhibits compliance with the above steps, the work will be carried out under instruction and agreement of the SAP. The instructions shall be documented in writing

b. Isolation of APPARATUS and Conductors:

- Isolation and re-connection can only be completed with the authority of the CONTROL ENGINEER.
- Dedicated SAFETY LOCKS shall be used to lock open all switchgear at points of isolation.
- Keys shall be kept in a key safe or in the possession of the CONTROL ENGINEER, DAP.
- FUSES, LINKS (and carriers) that control circuits to be worked on shall be removed and kept in the custody of the person issuing the SAFETY DOCUMENT, PERMIT-TO-WORK.
- CAUTION NOTICES shall be fixed at all points of isolation.

c. Earthing:

- Where practical, earthing shall be provided by use of a circuit breaker or earthing switch.
- The trip feature shall normally be rendered inoperative before closing. This renders the switch inoperative whilst it remains a CIRCUIT MAIN EARTH.
- After closing the breaker or switch it shall be locked in the EARTH position.
- CIRCUIT MAIN EARTHS can only be applied or removed with the authority of the CONTROL ENGINEER, DAP, who shall record the time of application and removal.

- CIRCUIT MAIN EARTHS shall be recorded on the SAFETY DOCUMENT, PERMIT-TO-WORK.

d. Authority to issue a PERMIT-TO-WORK:

- Before any work can commence on the HIGH VOLTAGE system a PERMIT-TO- WORK must be issued.
- A PERMIT-TO-WORK can only be issued by the DAP, SAP AP., who will then act as the CONTROL ENGINEER.
- Procedure for Issue and Receipt:-
  - A PERMIT-TO-WORK can only be received by a COMPETENT PERSON in charge of the work who shall retain the white (top copy) of the PERMIT in their possession.
  - The PERMIT-TO-WORK will be explained by the issuer and the contents read back by the COMPETENT PERSON, who must confirm understanding of the PERMIT, the nature and extent of the work to be done before signing its receipt.
  - Where there is more than one working party, each working party must have a separate PERMIT. The PERMIT-TO-WORK should be cross-referenced.
- Procedure for Clearance and Cancellation:-
  - The recipient shall sign the PERMIT to clear it and hand it to the DAP, SAP or AP, whoever is the CONTROL ENGINEER, indicating that the work is “complete” or “incomplete” and that all gear and tools “have” or “have not” been removed.
  - The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall cancel the PERMIT.
  - CIRCUIT MAIN EARTHS shall be removed only when all PERMITS-TO-WORK associated with the EARTHS have been cancelled.

e. Authority to issue PERMIT-TO-TEST:

- Before any testing can commence on the HIGH VOLTAGE system, a PERMIT-TO- TEST must be issued.
- A PERMIT-TO-TEST can only be issued by the DAP or a ND, being the CONTROL ENGINEER.
- Procedure for Issue and Receipt:-

- A PERMIT-TO-TEST can only be received by a COMPETENT PERSON who shall retain the white (top copy) of the PERMIT-TO-TEST in their possession at all times during testing.
  - It will be explained to the COMPETENT PERSON receiving the PERMIT-TO-TEST, who after reading the contents back to the issuer, must confirm understanding of the PERMIT-TO-TEST, the nature and extent of the testing to be carried out before signing its receipt.
- Procedure for Clearance and Cancellation:-
    - The recipient shall sign the document to clear it and hand it to the CONTROL ENGINEER DAP, SAP or AP indicating that testing is “complete” or “incomplete”, all equipment “has” or “has not” been removed and the operational state of the APPARATUS.
    - The CONTROL ENGINEER DAP, SAP or AP, whoever it is, shall cancel it.

## **15. Procedures For Work on Particular Items of PLANT, APPARATUS and Conductors**

### a. General Requirements – zone of work:

- When, in order to work on a particular item of PLANT or APPARATUS, a section of the system larger than the “zone of work” is ISOLATED and EARTHED (as in the case of a Ring Main Unit being maintained) the Safety Rule Requirements for PERSONAL SUPERVISION may be waived by the CONTROL ENGINEER, DAP, SAP or AP provided that it is for the specified work:-
  - Before the waiver the normal requirements should be applied in full.
  - All HIGH VOLTAGE APPARATUS within the “zone of work” are connected to CIRCUIT MAIN EARTHS at the time when the specified APPARATUS is released for work or testing by the issue of a SAFETY DOCUMENT, PERMIT-TO-WORK.
  - The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall at the time of issue of the SAFETY DOCUMENT demonstrate to the recipient that the APPARATUS, CONDUCTOR(S) are DEAD.
  - In these circumstances the COMPETENT PERSON receiving the SAFETY DOCUMENT may, in the course of work or testing, disconnect from the CIRCUIT MAIN EARTHS, as required, any APPARATUS within the “zone of work”.
  - The APPARATUS and CONDUCTORS shall be re-connected to the CIRCUIT MAIN EARTHS before the SAFETY DOCUMENT is cleared.

- Precautions shall be taken to prevent DANGER from potential differences arising from remote EARTH points by bonding and earthing at a point as near as possible to the point of work.
- b. Work on Ring Main Equipment when an LV system back-feed is available:
  - When work is to be carried out on HIGH VOLTAGE contacts or connections of Ring Main Equipment, where there is a known or potential back-feed to the substation, the LOW VOLTAGE switch or links shall be ISOLATED, SCREENED, locked where possible and a CAUTION NOTICE applied.
  - Where facilities exist to lock open switches or secure LV control panels a SAFETY LOCK and a CAUTION NOTICE shall be applied.
  - The remote ends of all HIGH VOLTAGE in-feeds must be ISOLATED, SAFETY LOCKED and CAUTION NOTICES applied and EARTHED.
  - A PERMIT-TO-WORK must be issued for work on the Ring Main Equipment.
- c. Withdrawable APPARATUS:
  - All spout shutters not required to be opened for immediate work or operation shall be locked shut, if not otherwise made inaccessible.
  - Withdrawn APPARATUS shall be discharged to EARTH, but need not remain connected to EARTH.
  - Work on withdrawn APPARATUS that remains within the immediate area shall be completed under a PERMIT-TO-WORK.
- d. Busbar Spouts, Busbars and Busbar Connections of Multi-panel Switchboards: ISOLATION - When work is carried out on the above, isolation shall be carried out as follows:
  - The section on which work is to be carried out shall be ISOLATED from all points from which it can be made LIVE.
  - Isolation arrangements shall be locked and CAUTION NOTICES applied.
  - Where practicable, the shutters of LIVE spouts shall be locked shut.
  - CAUTION NOTICES shall be attached, at all points where the Busbar can be made LIVE.
  - DANGER NOTICES shall be attached on adjacent LIVE APPARATUS.

- EARTHING – where practicable, the section of busbar will be verified as DEAD by use of a testing device, typically on the panel where the CIRCUIT MAIN EARTH is to be applied.
- The CIRCUIT MAIN EARTH is to be applied at a panel other than that at which work is to take place, on the ISOLATED section of busbars.

WORK:

- The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall satisfy himself that the recipient of the PERMIT-TO-WORK is aware of the location of adjacent LIVE circuits before issuing the PERMIT.
  - Work on busbar spouts will be carried out under the PERSONAL SUPERVISION of the DAP, SAP or AP, whoever is the CONTROL ENGINEER. This will include:-
    - Identifying spout to be worked on.
    - Provide access by removing shutter locks and
    - Proving spout is NOT LIVE using a voltage testing device.
  - Work on busbars or busbar connections shall be completed as follows:-
    - Access shall be identified by the DAP, SAP or AP, whoever is the CONTROL ENGINEER.
    - Access shall be made by the removal of appropriate cover plates under the PERSONAL SUPERVISION of the DAP, SAP or AP, whoever is the CONTROL ENGINEER, where practicable each busbar or connection shall be proved DEAD by the use of a voltage testing device.
    - The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall remain on site until he is satisfied that no further access is required to complete the work.
- e. Feeder Spouts and Connections, Voltage Transformer Spouts and Connections and Single Panel Busbar Spouts and Connections.
- ISOLATION - When work is carried out on the above, isolation shall be carried out as follows:
- The spouts or connections on which work is to be carried out shall be ISOLATED from all points from which it can be made LIVE.
  - Isolation arrangements shall be locked.

- The shutters of LIVE spouts shall be locked shut.
- CAUTION NOTICES shall be attached, at all points where the circuit can be made LIVE.
- DANGER NOTICES shall be attached where applicable on adjacent LIVE APPARATUS.
- EARTHING – where practicable, the spout contacts or connections shall be verified as DEAD by use of a voltage testing device, typically on the panel where the CIRCUIT MAIN EARTH is to be applied.
- The circuit shall be EARTHED at the point of work and, where reasonably practicable, at all points of isolation.

WORK:

- The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall satisfy themselves that the recipient of the PERMIT-TO-WORK is aware of the location of adjacent LIVE circuits before issuing the PERMIT. “DANGER Electric Shock Risk” sign.
- Work on the feeder, voltage transformer or busbar spouts on a single panel unit will be carried out under the PERSONAL SUPERVISION of the DAP, SAP or AP, whoever is the CONTROL ENGINEER.
- This will include:-
  - Identifying the spout to be worked on.
  - Provide access by removing shutter locks.
  - Where necessary the CIRCUIT MAIN EARTH may be removed to provide access and
  - Prove each spout is DEAD using a voltage-testing device.
  - No other work shall be carried out on the circuit whilst EARTHS are disconnected.
- Work on feeder or voltage transformer connections and single panel busbar or connections shall be completed as follows:-
  - Access shall be identified by the DAP, SAP or AP, whoever is the CONTROL ENGINEER.
  - Access shall be made by the removal of appropriate cover plates under the SUPERVISION of the recipient of the PERMIT-TO-WORK with the permission of the CONTROL ENGINEER.
  - The DAP SAP or AP, whoever is the CONTROL ENGINEER, shall

remain on site until he is satisfied that no further access is required to complete the work.

- The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall take appropriate action to prove that each connection or busbar in the work area is DEAD by using a voltage testing device.

#### f. Transformers

##### ISOLATION

- When work is to be carried out on the connections to, or the windings of, a transformer, the switchgear or fuse gear controlling all windings shall be opened, or the windings or connections shall be ISOLATED by other means from LIVE CONDUCTORS.
- Additionally, to prevent the possibility of the transformer being made LIVE by back-feed, all LOW VOLTAGE fuses or links on associated voltage or auxiliary transformers shall be withdrawn and, where practical, the voltage and auxiliary transformers shall be ISOLATED.
- When work is to be carried out on a HIGH VOLTAGE or LOW VOLTAGE transformer and the LOW VOLTAGE windings of the transformer are controlled by a switch or isolator, the switch or isolator shall be secured open and LOCKED OFF. In other cases, arrangements shall be made to ensure that the LOW VOLTAGE windings are ISOLATED from all sources of LOW VOLTAGE supply.
- The transformer shall be ISOLATED from all common neutral earthing equipment from which it may become LIVE.
- Before any withdrawable voltage transformer is ISOLATED, or reconnected, the associated HIGH VOLTAGE connections shall, where reasonably practical, be made DEAD.
- If it is suspected that the voltage transformer is faulty, the associated busbars or feeder connections shall be made DEAD before it is ISOLATED.
- CAUTION NOTICES shall be attached at all points of isolation, including those of LOW VOLTAGE.

##### EARTHING

- The transformer shall be EARTHED at all points of isolation from HIGH VOLTAGE supply.

## WORK

- The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall identify the transformer to be worked on at the point of work before issuing the SAFETY DOCUMENT.

### g. HIGH VOLTAGE Cables

- Conductors must be DEAD, ISOLATED and EARTHED before the insulation can be interfered with.
- Where a PERMIT-TO-WORK has been issued to the COMPETENT PERSON the recipient shall spike the cable before starting work.
- Spiking may be omitted when the cable can visually be traced along its entire length from the point of work back to an earthed switch.
- The DAP, SAP or AP, whoever is the CONTROL ENGINEER, shall identify and spike other cables at LU when applicable.
- The DAP will be informed before and after any cable is spiked.
- Precautions shall be taken to prevent DANGER from induced or sheath voltage.

## **16. Safety Precautions for Testing of HIGH VOLTAGE APPARATUS**

### a. Testing under a PERMIT-TO-TEST:

- APPARATUS cannot be connected to the system until it has passed the appropriate test.
- Connection can only be made with the sanction of the CONTROL ENGINEER.

### b. The recipient of the PERMIT-TO-TEST shall:

- Be responsible for co-ordinating all testing.
- Ensure that the APPARATUS, test leads and test equipment are suitably protected to prevent DANGER.
- Ensure that "DANGER HIGH VOLTAGE Testing" notices are suitably



displayed and discharge all cables and capacitors before and after the application of test voltages.

c. The recipient has the authority to:

- Remove and replace EARTHS to complete testing without the further reference to the CONTROL ENGINEER.
- Make LIVE from a testing supply.
- Where reasonably practicable, CIRCUIT MAIN EARTHS shall be replaced before cancellation of the PERMIT-TO-TEST.

## **17. Responsibilities of Person**

a. General:

- All persons concerned with work on or in the vicinity of HV APPARATUS or PLANT to which these safety rules apply have a duty to comply with these HV rules.
- Responsibilities may be tailored to the individual provided they are documented in the individuals' authorisation.

b. COMPETENT PERSONS may:

- Be nominated to be responsible for a working party.
- Receive and retain a PERMIT-TO-WORK confirming they are fully conversant with the nature and extent of the work to be carried out.
- Provide IMMEDIATE or PERSONAL SUPERVISION as required.
- Implement all necessary measures to establish general safety.
- Give authority for work under the SAFETY DOCUMENT they hold.
- Clear SAFETY DOCUMENTS ensuring that all persons are aware that the SAFETY DOCUMENT has been withdrawn and all tools and equipment removed.

c. The AP may in addition to the responsibilities of a COMPETENT PERSON:

- Be authorised for SWITCHING on the SYSTEM.

- Be authorised to issue a PERMIT-TO-TEST.
  - Be authorised to issue and cancel a PERMIT-TO-WORK as the CONTROL ENGINEER.
  - Be authorised to identify and spike cables with the permission of the CONTROL ENGINEER.
- d. The SAP may, in addition to the responsibilities of an AP:
- Issue and cancel a PERMIT-TO-WORK or PERMIT-TO-TEST ensuring that the recipient fully understands the nature and extent of the work or testing to be done.
  - Provide IMMEDIATE or PERSONAL SUPERVISION on work specified as requiring a DAP or ND.
  - Take on the responsibilities of a CONTROL ENGINEER for specified sections of a system.
- e. The CONTROL ENGINEER has responsibility for and authority to:
- Release APPARATUS or PLANT from service.
  - Give authority for all HIGH VOLTAGE SWITCHING.
  - Give authority for the issue of and acknowledge cancellation of SAFETY DOCUMENTS.
  - Maintain a written record of all operations and the issue and cancellation of SAFETY DOCUMENTS on the system.

### **18. Access to Substations – General Safety Requirements**

- a. BEFORE YOU ENTER - Unlock and open substation door.
- b. STOP
- c. SMELL for BURNING, GAS, OZONE
- d. LISTEN for a CRACKLING or HISSING sound (it is normal for transformers to hum or buzz)
- e. Use your torch

- f. Check the access, i.e. is there a step down?
- g. Find the light switch and switch on
- h. LOOK – Is the access clear and unobstructed? Any open trenches in floor?
- i. Enter substation
- j. CHECK – Is there an automatic fire protection system (CO2) installed. If so refer to section 10.c.

**19. Access and work in Fire Protected Areas**

- a. KEEP CLEAR OF HIGH VOLTAGE SWITCHGEAR, TRANSFORMERS AND LOW VOLTAGE SWITCHGEAR. DO NOT TOUCH ANY EQUIPMENT OTHER THAN YOU HAVE BEEN INSTRUCTED TO DO.
- b. Carry out work
- c. Leave substation, switch off light
- d. LOCK THE DOOR AND CHECK IT IS SECURE. IF YOU NOTICE ANY ABNORMALITIES, REPORT THEM TO THE SAP or AP.



## Appendix E

### Revision 3

#### To Loughborough University Health and Safety Policy

#### Low Voltage Electricity System Safety Rules and Associated Safety Guidance

##### 1. Introduction

- a. These Safety Rules are based on the Electricity Association Model Distribution Safety Rules and established safety guidelines common to similar institutions. This ensures that employees work to recognised industry standards.
- b. The Safety Rules state the basic safety requirements for work on the Loughborough University LOW VOLTAGE (LV) Distribution System managed by FM, **but NOT to any Departmental experimentation or generation.** (NB Loughborough University is the “System Owner” and the DUTY AUTHORISED PERSON (DAP) is the “Document Holder”).
- c. An AUTHORISED PERSON is also referred to as AP.
- d. These rules are designed to provide:
  - Maximum protection to persons working on LOW VOLTAGE equipment, plant and apparatus to which they apply.
  - A guide to safe working on or in the vicinity of LOW VOLTAGE electrical systems.
  - Set out the responsibilities and control systems for individuals operating on or working in the vicinity of LOW VOLTAGE plant and equipment.
- e. It is the responsibility of line managers and supervisors to give details to their staff and individuals so they are conversant with these rules before operating equipment on the LV distribution system.

##### 2. General

All persons who operate or work on the LOW VOLTAGE electrical equipment and systems of Loughborough University have a duty to:

- a. Comply with all FM Safety Rules, Codes of Practice and Risk Assessment requirements as required by Loughborough University in particular as detailed in the University Health and Safety Policy “Electricity at Work Policy and Code of Practice.

- b. Comply with the legal obligations of statutory regulations governing the work which they carry out, the Health and Safety at Work Act 1974 and regulations pertinent to it, "The Electricity at Work Regulations 1989" and the IEE Wiring Regulations BS 7671.
- c. Carry out their duties and work so as to prevent harm or INJURY to themselves and DANGER to persons working with them, students, contractors, self-employed persons and the general public.

### **3. Objections to Working Arrangements and Conditions**

When any person has concerns regarding the operation of or work upon the LV system, they shall refer them to the person issuing the instructions, their supervisor, line manager, in the first instance, or to a higher authority. The matter shall be investigated, and reviewed before proceeding.

### **4. Accidents, Incidents and Near Misses**

- a. All employees must report accidents, which cause INJURY, to their supervisor as soon as possible after the accident has occurred. All injuries, which occur at work, must be recorded on the FM (University) Accident Report Form.
- b. All employees must report "near miss" incidents, where an occurrence may have created a hazard but where the occurrence did not cause INJURY.

### **5. Treatment for Electric Shock**

All persons who may be involved with the operation or work on the LV system shall be conversant with the treatment for electric shock and be suitably trained to administer first aid assistance.

### **6. Definitions**

Within these rules where reference is made to a definition below it will appear in CAPITALS within the text.

- APPROVED – Relates to working practices, tools, instruments, testing equipment (see GS 38), locks, safety notices, temporary screens and barriers which are provided by the employer and are inspected and tested by the user as appropriate.
- CIRCUIT – An assembly of electrical equipment supplied from the same origin and protected against over current by the same protective device.
- CIRCUIT MAIN EARTH – The point at which an electrical CIRCUIT is connected to EARTH to safeguard against it becoming LIVE.
- DOCUMENT OWNER – The DAP appointed is to be responsible for the application of these safety rules.
- DANGER – A risk to health or of bodily INJURY.

- DEAD – At or about zero voltage and disconnected from any LIVE CIRCUIT.
- EARTH – The conductive mass of the earth.
- EARTHED – Connected to EARTH through switchgear or by adequately rated EARTH leads.
- INJURY – Death or personal INJURY from electric shock, burns, explosion or arcing (relevant where a COMPETENT PERSON is working where there is DANGER and INJURY needs to be prevented).
- ISOLATED – Disconnected from all associated electrical equipment, plant, apparatus and conductors by an isolating device in the open position, or by adequate physical separation, or sufficient gap.
- LIVE – Electrically charged or energised.
- LIVE PART – A conductor or conductive part intended to be energised in normal use, including neutrals.
- CAUTION NOTICE – A notice conveying a warning or restriction against interference or operation as issued by the FM Department.
- DANGER NOTICES – A notice reading 'DANGER', warning of electrical or physical DANGER as issued by the FM Department.
- LOW VOLTAGE (LV) – A voltage not exceeding AC 1000V or DC 1500V.
- EXTRA LOW VOLTAGE – A Voltage not exceeding AC 50V or DC 120V.
- LOW VOLTAGE APPARATUS – Electrical equipment or its component parts that are connected to a LOW VOLTAGE CIRCUIT.
- LV PERMIT-TO-WORK – A document that specifies the LOW VOLTAGE APPARATUS, which has been made safe to work on, and the work which is to be carried out. The means of proving DEAD should be stated on the PERMIT. The procedure for completing an LV PERMIT-TO- WORK is documented on the inside cover of all LV PERMIT-TO-WORK books.
- PERSONS – (i) COMPETENT PERSON – A person, over the age of 18 years, recognised as having sufficient technical knowledge and experience to enable him to avoid DANGER and who may be nominated to receive and cancel specified SAFETY DOCUMENTS. (ii) AUTHORISED PERSON (AP) – A COMPETENT PERSON, over the age of 18 years, who has been appointed **in writing** by the DAP to carry out specified duties, which may include authority to issue and cancel SAFETY DOCUMENTS.
- SAFETY DOCUMENTS – A document recording the apparatus to be worked on,

the limitations of the work and SWITCHING procedures that need to be followed to avoid DANGER.

- SAFETY LOCK – A lock that has a unique key, being different from all other standard locks used on the LV system.
- SUPERVISION – (i) IMMEDIATE SUPERVISION – SUPERVISION by a person (having adequate technical knowledge or experience) who is continuously available at the location where work or testing is in progress. (ii) PERSONAL SUPERVISION – SUPERVISION by a person (having adequate technical knowledge or experience) who is at all times in the presence of the person being supervised.
- SWITCHING – The operation of CIRCUIT breakers, isolators, disconnectors, fuses or other methods of making or breaking an electrical CIRCUIT and/or the application and removal of CIRCUIT MAIN EARTHS.

## **7. Access to LOW VOLTAGE Switch Rooms**

It is a safety requirement of Loughborough University that access to LOW VOLTAGE switch rooms, including HV substations, is restricted to persons deemed COMPETENT to carry out this function. The restriction is as follows:

- a. SAP, DAP and APs (APs).
- b. COMPETENT PERSONS when carrying out their work as instructed by an SAP, DAP or AP and issued with a PERMIT-TO-WORK.
- c. Only SAP, DAP and APs shall give authority for any third party access to LOW VOLTAGE switch rooms. A PERMIT-TO-WORK may be required.
- d. SAP, DAP and APs may delegate authority in writing to allow selected COMPETENT PERSONS (e.g. FM Projects M&E Engineers) the authority to allow third party COMPETENT PERSONS to access switch rooms.

## **8. Access and Work in Fire Protected Areas, CO2 Suppression System**

Before access to or work in any LV switch room or HV substation, protected by automatic fire extinguishing equipment is affected:

- a. The automatic control shall be rendered inoperative and left 'OFF' in hand control.
- b. A CAUTION NOTICE shall be attached.
- c. The precautions taken shall be recorded on any SAFETY DOCUMENT or written instruction issued, including conditions when the automatic control may be temporarily restored.



- d. The automatic control shall be restored to 'ON' immediately after persons engaged in work activity have left the LV switch room or HV substation for any reason and they shall render it inoperative, 'OFF', when they return.

## **9. LOW VOLTAGE SWITCHING including Fuse Removal and Isolation**

LOW VOLTAGE SWITCHING will only be carried out by persons deemed COMPETENT to carry out this activity. SWITCHING should be carried out in compliance with the following:

- a. Where a risk assessment is in place then the LV SWITCHING should be carried out strictly in compliance with this Safety Policy.
- b. Where no risk assessment is in place the person in charge will carry out a specific risk assessment prior to carrying out the work.
- c. Where no risk assessment exists and the LV SWITCHING is of a complex nature then the person designated to carry out the work will refer the matter to their supervisor to agree the procedure to be followed.

## **10. Safety Precautions and Procedures for Work on LOW VOLTAGE Systems**

### a. General:

- When work or testing is carried out on or near LOW VOLTAGE APPARATUS precautions shall be taken to prevent INJURY from electric shock or burn INJURY, due to electric arc, if the CIRCUIT is exposed.
- If the CIRCUIT is covered with insulation or screening, the adequacy of these materials to prevent INJURY shall be assessed with regard to the nature of the work or testing.
- INJURY may arise in the following circumstances:-
  - A person mistakes a CIRCUIT which has been made DEAD with one which remains LIVE.
  - A DEAD CIRCUIT is accidentally or inadvertently made LIVE.
  - A person accidentally or inadvertently makes contact with an adjacent LIVE CIRCUIT.
  - Inadequate precautions are taken during LIVE working or testing.
- Work or testing of LOW VOLTAGE APPARATUS and CONDUCTORS shall only be carried out by a COMPETENT PERSON.

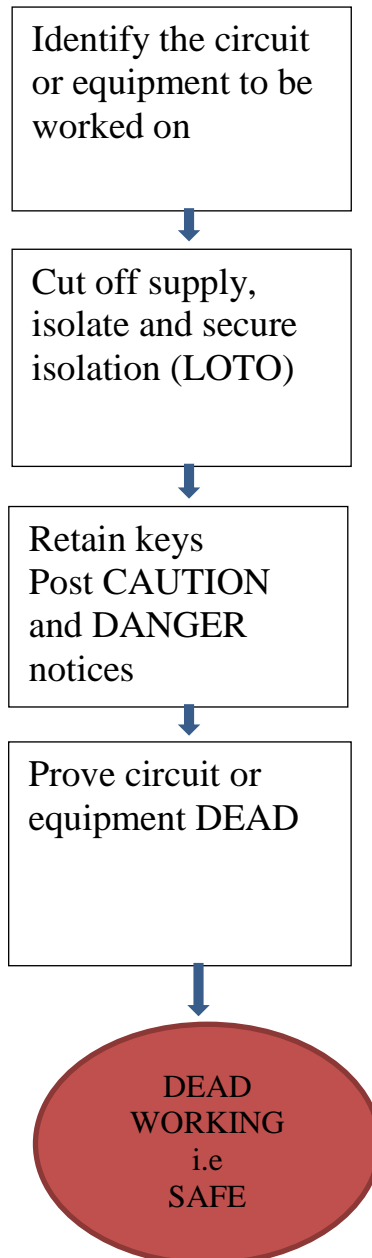
b. Requirements for Work on DEAD, LOW VOLTAGE APPARATUS and Conductors:

- Before any work is carried out on DEAD LOW VOLTAGE equipment, the following must be carried out. It shall be:-
  - Switched off and ISOLATED from all sources of electrical supply.
  - SAFETY LOCKS, if practical and CAUTION NOTICES should be fitted at all points of isolation. If locking facilities are not available isolation must be made secure by other means, e.g. removal of fuses, which should be retained in a secure place by the person in charge.
  - DANGER NOTICES should be fitted at all adjacent LIVE equipment.
  - EARTHED if appropriate.
  - Be proved DEAD at the point of work by means of an “APPROVED testing device” (see GS38). In order to prove its integrity, the voltage testing device shall be tested immediately before and after its use.
  - Where isolation is carried out by a COMPETENT PERSON on behalf of an AUTHORISED PERSON in order that work may be carried out by a third party, the COMPETENT PERSON shall issue a written PERMIT-TO-WORK to the third party.
- If the work requires a point of isolation to be established on the HIGH VOLTAGE SYSTEM, full isolation and earthing shall be carried out and a HV PERMIT-TO-WORK issued (see Appendix D).

## Working 'dead'

### Identification

Identify the circuit or equipment to be worked on. For most circuits and equipment, correct labelling is important, but never assume the labelling is correct and that work can be started without having first proved that the equipment or circuit is dead.



## **Secure Isolation**

Switches including circuit breakers should be locked off, using a 'safety' lock. All keys should be retained in a safe & secure place.

If a fuse is removed, make sure that it or a similar one cannot be reinserted by taking it away or by locking the box or enclosure until work is completed.

This should follow the LOTO principle

**Lockout-tagout (LOTO)** is a safety procedure which is used to ensure that potentially dangerous equipment is properly locked off and not able to be re-energised prior to the completion of maintenance or servicing work. It requires that hazardous energy sources be "isolated and rendered inoperative" before work is started on the equipment in question. The isolated power source(s) are then locked and a tag is placed on the lock identifying the worker who has placed it. The worker then holds the key for the lock ensuring that only he or she can re-energise the equipment.

Multiple locking hasp should be used if more than one individual is working on the same plant or equipment, to ensure inadvertent re-energisation is not possible.

## **Post notices**

A notice or label at the place of disconnection should be used so everyone knows work is being done.

## **Proving dead**

Once the circuit or equipment has been isolated, it must be checked that the circuit is dead before commencing work.

Some luminaires may have more than one source present. Either from a central battery system or dual phases.

Proprietary voltage detectors, test lamps or voltmeters with insulated probes and fused leads shall be used. (see HSE Guidance note GS38). Electrically competent staff shall be supplied with:-

1 off Proving Unit RS NUMBER 716-1086

1 off Fluke Tester RS NUMBER 750-8431

1 off Martindale Lock off Kit RS NUMBER 757-5084

or equivalents

Do not use multimeters or non-contact devices such as volt sticks for proving dead on low voltage systems.

It is necessary to test the instrument before and after use. This must be done by means of a proving unit with a low power output. If live circuits are used to prove instruments, adequate precautions against electric shock and short circuits should be taken.

All instruments used for checking circuits should be maintained and inspected frequently.

**Remove fitting diffuser/cover**

When remove the fitting diffuser/cover, assess the condition of the lamps before removing.

- Wear suitable PPE - Gloves

If in doubt, a qualified electrician must be consulted and a job specific method statement agreed

c. Work on LIVE LOW VOLTAGE APPARATUS and Conductors:

- No LIVE, LOW VOLTAGE work, other than APPROVED testing (see GS38 for test equipment compliance), shall be carried out unless a job specific risk assessment has been undertaken and a written procedure, including an LV PERMIT-TO- WORK being issued, is in place to prevent INJURY from electric shock and inadvertent short-circuiting of the CIRCUITS.
- Where LIVE work is to be carried out the following requirements shall be assessed: -
  - The CIRCUIT to be worked on shall be visually inspected to see that it is in a satisfactory condition.
  - There shall be adequate working space and safe means of egress.
  - The working space and the CIRCUIT to be worked on shall be adequately illuminated.
- If the work is outdoors, the weather conditions shall not be unduly adverse. Suitable temporary cover shall be provided to avoid water ingress into CIRCUITS.
- No person shall carry out work, which involves, or is equivalent to, the manipulation of bare LIVE CONDUCTORS.
- Where work is to be carried out in situations where the LIVE equipment is not housed in a secure location, e.g. switchroom, then additional precautions in the form of barriers and DANGER NOTICES must be in place to protect non-FM staff, students and the general public from the DANGER, which exists.
- Only APPROVED tools (see GS 38) and equipment shall be utilised for all LIVE working.
- APPROVED personal protective equipment shall be worn as per the job specific risk assessment.

d. Work on LIVE EXTRA LOW VOLTAGE APPARATUS and Conductors:

- Risks with this type of CIRCUIT are inherently lower. However, risks are present and care must be taken.
- Potential hazards associated with EXTRA LOW VOLTAGE equipment and CIRCUITS:-
  - Incorrect identification of an EXTRA LOW VOLTAGE CIRCUIT or APPARATUS.
  - Sparking potentially leading to a risk of fire.

- Minor sensation caused by contact with “LIVE” parts.
- When working on EXTRA LOW VOLTAGE CIRCUITS and APPARATUS the following shall be undertaken:-
  - The CIRCUIT to be worked on will be clearly identified or confirmed as an EXTRA LOW VOLTAGE CIRCUIT by a COMPETENT PERSON.
  - The CIRCUIT to be worked on shall be visually inspected to see that it is in a satisfactory condition.
  - There shall be adequate working space and safe means of egress.
  - The working space and the CIRCUIT to be worked on shall be adequately illuminated.

## **11. Testing and Inspection or Adjustment of LOW VOLTAGE APPARATUS**

- a. Testing or adjustment, including functional testing, may be made on LIVE, LOW VOLTAGE CIRCUITS provided that APPROVED insulated tools and instruments are used (see GS38) and other appropriate APPROVED protection methods taken to prevent INJURY, for example, the use of temporary screens or barriers.
- b. If testing or adjustment requires covers to be removed, so that terminals or connections that are LIVE are exposed, precautions shall be taken to prevent unauthorised access to protect non-FM staff, students and the general public from the DANGER which exists from the APPARATUS. Such precautions shall include the erection of suitable barriers or screening and the display of DANGER NOTICES.
- c. APPROVED LIVE work should not be undertaken alone.
- d. Where an existing CIRCUIT is modified or changed a “Minor Electrical Works Certificate” shall be completed. This work to include the addition or replacement of any sockets, spur units, light fittings or cable repairs on an existing CIRCUIT. This will ensure that the CIRCUIT integrity is not compromised. The Certificate is to be kept by FM and filed on the Facilities Management record system (route or software to be defined by admin dept. /change manager). Any modifications or changes to LOW VOLTAGE control and protection type CIRCUITS will be annotated onto a suitable CIRCUIT diagram.

## **12. Access to a Switch Room or Substation – General Safety Requirements**

- **BEFORE YOU ENTER** – Unlock and open substation door
- **STOP**
- **SMELL** for BURNING, GAS or OZONE

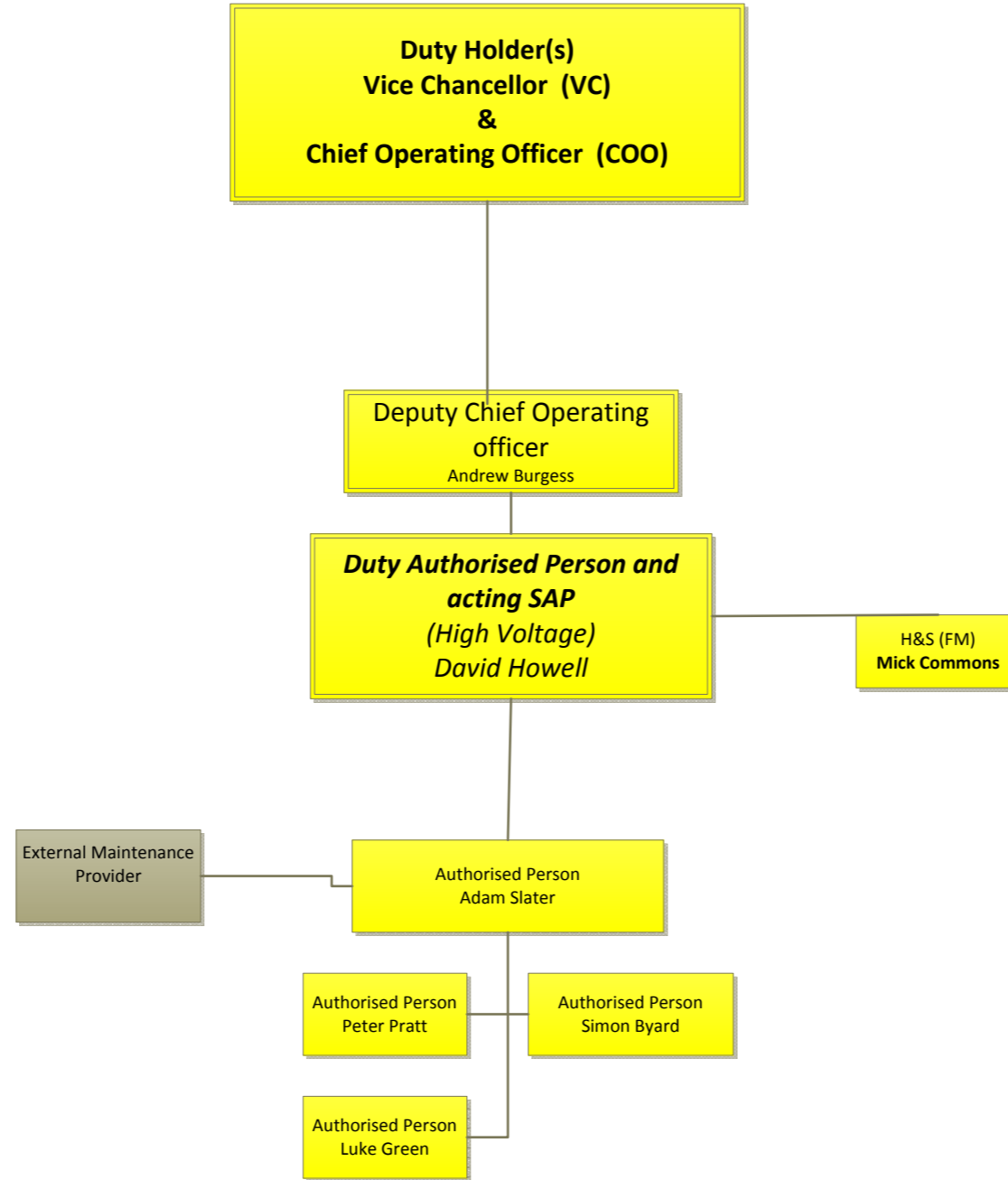
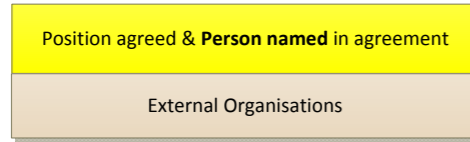
- **LISTEN** for a CRACKLING or HISSING sound (it is normal for transformers to hum or buzz)
  - Use your torch
  - Check the access, i.e. is there a step down?
  - Find the light switch and switch on
- **LOOK** – Is the access clear and unobstructed?
  - Any open trenches in floor?
  - Enter substation
- **CHECK** – Is there an automatic fire protection system installed? If so, refer to Section 8, Access and Work in Fire Protected Areas.
- **KEEP CLEAR OF HIGH VOLTAGE SWITCHGEAR, TRANSFORMERS AND LOW VOLTAGE SWITCHGEAR. DO NOT TOUCH ANY EQUIPMENT OTHER THAN THAT WHICH YOU HAVE BEEN INSTRUCTED TO.**
- Carry out work
- Leave substation or LV switchroom and switch off light.
- **LOCK THE DOOR AND CHECK IT IS SECURE. IF YOU NOTICE ANY ABNORMALITIES THESE SHOULD BE REPORTED TO YOUR SUPERVISOR IMMEDIATELY.**

Revision	Revisions Made	Date	By
11	Update of definitions, descriptions and 'minor works certificate'	2 <sup>nd</sup> July 2012	
2	Updated to reflect change from DH to DAP. Also to include EXTRA LOW VOLTAGE working	July 2013	
3	General review and update	Sept 2106	DH



# Loughborough University

## Organisational Chart for Effective High Voltage Control



# Loughborough University

## Organisational Chart for Effective Low Voltage Control

