OLLSCOIL TEICNEOLAÍOCHTA BHAILE ÁTHA CLIATH
TECHNOLOGICAL UNIVERSITY DUBLIN

Technological University Dublin – Tallaght Campus

Reference should be made to the Technological University Dublin Parent Safety Statement v.30-Nov-2018 as appropriate

Computing Services Department

Safety Statement

The Department of Computing Safety Statement

1.0 INTRODUCTION

The Computing Services Department comprises an IT Manager, 12 Technicians, an MIS Manager and Administrative Support. The department enables and supports the use of computing and information technology throughout the Institute.

This safety statement supersedes all previous statements in this area and is based on the Safety, Health and Welfare at Work Act, 2005.

The purpose of this document is to detail the identification of hazards, the assessment of risks, the indication of controls where appropriate, and the revision and reviewing of these procedures.

It is a prime objective of the Computing Services Department to achieve and sustain high standards of Health and Safety so far is reasonably practicable. This means at a minimum to conform to the requirements of Irish legislation as it pertains to Occupational Health and Safety.

It is the department's desire to do all that is reasonably practicable to prevent damage to property and injury from foreseeable work hazards.

In particular the Department recognises it's responsibility and commits itself to:

- Provide and maintain safe and healthy working conditions, taking account of statutory requirements;
- Provide training and instruction, where necessary, to enable staff to perform their work safely and effectively;
- Make available all necessary safety devices and protective equipment and supervise their use;
- Maintain a constant and continuing interest in health and safety matters pertinent to the Department
- Keep this Safety Statement and other safety documents under review.

2.0 HEALTH AND SAFETY WELFARE ACT 2005

The new 2005 Safety, Health and Welfare at Work Act, has imposed new duties and responsibilities on employers, employees, manufacturers, designers and contractors.

It would be important that these new duties are highlighted in any document of this type. Therefore, the main duties identified in the 2005 Act which pertain to employers, employees and to persons other than employees are highlighted here.

2.1 Duties of Employers to Employees

Most of the duties imposed on employers by the 2005 Act are ones which they owe to employees, and the majority of these are contained in Section 8 of the 2005 Act, (which replaced section 6 of the 1989 Act).

Section 8 (1) of the 2005 Act states:

'Every employer shall ensure, so far as is reasonably practicable, the safety, health and welfare of his or her employees.'

Section 8 (2) of the 2005 Act then sets out 12 sub-headings of this general duty. Section 8 (2) states that the duty under section 8 (1) include:

(a) managing and conducting work activities in such a way as to ensure so far as is reasonably practicable, the safety, health and welfare at work of his or her employees:
(b) managing and conducting work activities in such a way as to prevent, so far as is reasonably practicable, any improper conduct or behaviour likely to put the safety, health or welfare at work of his or her employees at risk;
(c) as regards the place of work concerned, ensuring, so far as is reasonably practicable-
    (i) the design, provision and maintenance of it in a condition that is safe and without risk to health,
    (ii) the design, provision and maintenance of safe means of access to and egress from it, (iii) the design, provision and maintenance of plant and machinery or any other articles that are safe and without risk to health;
(d) ensuring, so far as it is reasonably practicable, the safety and the prevention of risk to health at work or his or her employees relating to the use of any article or substance or the exposure to noise, vibration or ionising or other radiations or any other physical agent;
(e) providing systems of work that are planned, organised, performed, maintained and revised as appropriate so as to be, so far as is reasonably practicable, safe and without risk to health;
(f) providing and maintaining facilities and arrangements for the welfare of his or her employees at work;

(g) providing the information, instruction, training and supervision necessary to ensure, so far as is reasonably practicable, the safety, health, and welfare at work of his or her employees;
(h) determining and implementing the safety, health and welfare measures necessary for the protection of the safety, health and welfare of his or her employees when identifying hazards and carrying out a risk assessment under section 19 or when preparing a safety statement under section 20 and ensuring that the measures take account of changing circumstances and the general principles of prevention specified in Schedule 3;
(i) having regard to the general principles of prevention in Schedule 3, where risks cannot be eliminated or adequately controlled or in such circumstances as may be prescribed, providing and maintaining such suitable protective clothing and equipment as is necessary to ensure, so far as is reasonable practicable, the safety, health and welfare at work of his or her employees;
(j) preparing and revising, as appropriate, adequate plans and procedures to be followed and measures to be taken in the case of an emergency or serious and imminent danger;
(k) reporting accidents and dangerous occurrences, as may be prescribed, to the Authority or to a person prescribed under section 33, as appropriate, and
(l) the obtaining, where necessary, of the services of a competent person (whether under a contract of employment or otherwise) for the purpose of ensuring, so far as is reasonably practicable, the safety, health and welfare at work of his or her employees.'

2.2 Duties of employers to persons other than employees

Section 12 of the 2005 Act, which replaces section 7 of the 1989 Act, also has a new emphasis on managing safety and health, which makes it more wide-ranging than section 7 of the 1989 Act. Section 12 of the 2005 Act states:

'Every employer shall manage and conduct his or her undertaking in such a way as to ensure, so far as is reasonably practicable, that in the course of the work being carried on, individuals at the place of work (not being his or her employees) are not exposed to risks to their safety, health or welfare.'

The effect of this provision is to place a general duty on employers to manage work activities so that they do not endanger persons at work. This duty applies not merely to employees but also to other persons, such as contractors and their employees and other members of the public and students.

2.3 Duties of employees

Sections 13 and 14 of the 2005 Act (which replaces section 9 of the 1989 Act) place a number of obligations on employees and others while at work.

Section 13 states that the employee must:

(a) comply with the relevant statutory provisions, as appropriate, and take reasonable care to protect his or her safety, health and welfare and the safety, health and welfare of any other person who may be affected by the employee's acts or omissions at work,

(b) ensure that he or she is not under the influence of an intoxicant to the extend that he or she is in such a state as to endanger his or her own safety, health or welfare at work or that of any other person,

(c) if reasonably required by his or her employer, submit to any appropriate, reasonable and proportionate tests by, or under the supervision of , a registered practitioner who is a competent person as may be prescribed,

(d) co-operate with his or her employer or any other person so far as is necessary to enable his or her employer or the other person to comply with the relevant statutory provisions, as appropriate,

(e) not engage in improper conduct or other behaviour that is likely to endanger his or her own safety, health and welfare at work or that of any other person,

(f) attend such training as may be reasonably be required by his or her employer or as may be prescribed relating to safety, health and welfare at work or relating to the work carried out by the employee,

(g) having regard to his or her training and the instructions given by his or her employer, make correct use of any article or substance provided for use by the employee at work or for the protection of his or her safety, health and welfare at work, including protective clothing and equipment,

(h) report to his or her employer or to any or to any appropriate person, as soon as practicable –

  (i) any work being carried on, or likely to be carried on, in a manner which may endanger the safety, health or welfare at work of the employee or that of any other person,

  (ii) any defect in the place of work, the systems of work, any article or substance which might endanger the safety, health or welfare at work of the employee or that of any other person, or

  (iii) any contravention of the relevant statutory provisions which may endanger the safety, health and welfare at work of the employee or that of any other person of which he or she is aware.

3.0 HAZARD IDENTIFICATION

Hazards have been identified via a physical inspection of the relevant areas which took place in January.

Hazards have been categorised in a methodical way, namely, mechanical, physical (slips, trips, falls, noise, illumination, vibration), human factor, fire and electrical.

During the physical inspection, each of these hazard categories has been audited in relation to each area under the responsibility of the Computing Services Department. This document highlights the major hazards as identified which do not, at the time of inspection have reasonable controls.

A risk assessment has been carried out on these hazards and suggested control measures have been identified and recorded in the tables to be found at the end of this safety statement.

3.1 Hazard

A hazard is any object, condition or practice which can cause an injury or loss. There is general recognition of many common hazards, e.g. a wet stairway or an untidy floor. There is a need to recognise that unsafe working is equally hazardous and can cause serious injury and loss, e.g. poor lifting, mishandling of tools and chemicals, failure to wear personal protective equipment (PPE).

3.2 Safety Audits

A safety audit is a systematic and critical examination of the workplace for the purpose of identifying hazards, assessing the risk and recommending controls of the hazard where appropriate. Every workplace will be audited annually by the appropriate responsible person. The results of the audit are published in the form of Hazard Identification and Control Sheets.

3.3 Hazard Identification and Control Sheets

These are numbered sheets with blanks for the relevant section, responsible person and auditor.

There are eight numbered columns.

- The first two columns describe the area and the hazard category.
- Column three describes the hazard and consequence.
- Column four describes the recommended remedy or control.
- Column five assesses the degree of risk.
- Column six is the date the hazard was identified.

- Column seven identifies the action person who will effect the control. The responsible person will assign the work to the action person and ensure remedial action is taken.
- The date of implementation of the control is identified in Column 8.

3.4 Physical Hazards

These include slips, trips, falls, illumination, noise, vibration, heat and cold.

3.7 Human Factor Hazards

Human factor hazards are potential hazards which arise from conditions where the employee is under stress, taking shortcuts, inexperienced, ineffectively trained or untrained, pregnant, not fully able bodied, colour blind etc, etc. It recognises that inexperienced staff (new employees) are particularly vulnerable.

4.0 RISK ASSESSMENT

A categorical mechanism of risk assessment has been used and deemed most appropriate for the Computing Services Department. Three categories have been identified, namely, high, medium and low. Risk has been separated into two constituent components, namely the frequency of exposure and the severity of the injury or damage. In making a risk assessment, frequency of the exposure and the measure of injury are calculated and the outcome is recorded as being either of High risk, of Medium risk or of Low risk.

High signifies death or very serious injury. Medium signifies impairment of a bodily function or loss a limb or the loss of use of a faculty. Low refers to cuts, bruises, sprains or injuries of a minor nature.

5.0 SERVER AND HUB ROOMS

There are 3 main server rooms operated by the Computing Services Department. There are also 1 each maintained by the Engineering & Computing departments respectively. There are also 3 smaller hub rooms used exclusively for wiring closets.

Naming Convention:

All server/hub rooms are named alphabetically and are listed below. There is a server list spreadsheet with more detailed listings of equipment located in each server room located on
\\staff-store\group_storage\computing_services\Resource\comp_docs\srvinfo\server room\server room.xls

Server Room A: Room number 205A (beside Computing Services office). This is the main & largest server room with the majority of Computing Services equipment maintained there. This server room is fitted with

- Failover air conditioning system
- 30KVA UPS
- FM200 fire suppression system
- Magnetic lock + Swipe card access
- CCTV On Entrance/Exit

Hub Room B: Room 003 (behind first Ladies toilets ground floor) Student digital signage system and small wiring closet for Student Services, Library & Priority 4.

Hub Room C: Room 015 (behind second Ladies toilets ground floor) Small wiring closet for Engineering, Language Labs & Admin Offices

Server Room D: Room 044 (ground floor, end of Main Street) Large Server room consisting of wiring closet for Academic Kerals and a large number of rack-mountable servers and backup library. This server room is fitted with

- Failover air conditioning system
- 20KVA UPS
- FM200 fire suppression system
- Magnetic lock + Swipe card access
- CCTV On Entrance/Exit

Hub Room E: Room 121 (located in the Science Labs, first floor) Small wiring closet for Science Labs, Finance, Personnel & Admin offices

Server Room F: Room 235 (located end of second floor) Maintained by Department of Computing, all switches, cabling and servers for the Department of Computing are stored here.

Server Room G: Room 221 (Second floor) Maintained by Department of Engineering, all servers for this department are located here. There is also a wiring closet maintained outside of this room for the second floor Engineering Labs.

Server Room Z: Room 114 (First floor) Second network core router + backup library as well as some servers are located here as well as a fireproof safe.

The wiring closet for the registrar's suite, science labs, library (upstairs), reprographics is maintained here.

This server room is fitted with

- Failover air conditioning system
- 10KVA UPS
- FM200 fire suppression system
- Magnetic lock + Swipe card access
- CCTV on Entrance/Exit

5.1 Server Room Policy

- All Systems must be labelled regardless of the amount of time they will spend in the server room. The label should be the server's name, additional information can be found in the server list.xls.
- Server rooms are to be kept free of dirt & dust as much as possible.
- When work has been carried out in server rooms they must be left in at least the condition they were found.
- All Servers must be connected to the switchview, the server's name should be programmed into the switchview. Switchviews should be on the 10. network to assure access security.
- The cable management system must be used for all cabling. Cabling should be neat and should not obstruct access to the racks or servers.
- The proper VLAN colour coded cable should be used for all cabling. Please refer to the SOP detailing cabling standards – CS4010 – Cabling.doc.
- No server should be left in operation while it's cover is removed as overheating/dust will damage/reduce the life of the components.
- No or drink is to be taken into any server/hub room.
- No air conditioning unit is to be turned off. Please refer to the SOP on the management of the air conditioning system for reference. CS4064 Operation of Server Room Failover Air Conditioning System.
- Monitors are to be switched off when not in use as they do add to heat in the server room.
- Servers should be administratively locked when not in use.
- No raised floor tiles are to be left removed.
- The doors are to be closed at all times for security and environmental reasons.
- Windows should not be opened.
- Monitors should not be plugged into UPS sockets.
- Extreme care should be taken when unplugging power cables, always ask other technicians if in any doubt.
- All administrative passwords are to be recorded in the Red Book.
- All Servers are to be in Server rooms.
- The Server room is not to be used as storage area, specifically:

    - No backup media or their cases are to be left in server rooms
    - No boxes or packaging are to be left in server rooms
    - No manuals are to be left in server rooms
    - No redundant hardware (monitors, disk drives, cards, cables, old servers etc.) is to be left in server rooms.
- Packaging should be removed from servers/network equipment before they are brought into server rooms.
- Anything that can generate smoke should not be used within the immediate vicinity of the server rooms, this could accidentally set off the fire suppression system.
- Anyone installing new equipment in the Server rooms should adhere to the SOP on server commissioning. CS4046 – Server Commissioning Policy.
- Any contractors should be made aware of these regulations. If they require access for extended periods they should be issued with a swipe card, this should be revoked when the access is no longer required. – see appropriate SOP
- Building Services should be contacted in the event of problems with electrical or other buildings maintenance issues.

A subset of the above procedure will be displayed prominently in each Server & Hub room.

5.2 External Contacts List

Air Conditioning – Crossflow Air Conditioning 01 4279330

Electrics – Crowe Engineering – Nat Duffy 01 8407769

Fire Suppression – Siemens Fire Safety 01 2162000

Raised Floor – System Floors – Paudie Lynch 01 4569888

- Crossflow – 01 4279330

Swipe Cards – A T Ireland – John Keats 028 9083 6622

UPS – Barb Electrical – Garrett Murphy 01 8381188 (D)

UPS – Etec – 01-8205999 (01-2830800 engineer on call) (A&Z)

Note: External contact details for out of hours cover over Christmas and Easter will be forwarded via email to team members

6.0 EMERGENCY & EVACUATION PROCEDURES

Paul Campbell is the Estates Manager responsible for the Institute buildings and environs. He has particular responsibilities for campus security and evacuation and emergency procedures. Paul can be contacted at Ext 2630 or his assistant Mark Parle at Ext 2139.

Smoking

Smoking is strictly prohibited in all parts of the Institute.
Since opening in September 1992 the Institute has adopted a very clear and unambiguous antismoking policy. It has done so on the basis of the serious harmful effects of passive smoking which have been established beyond doubt. This policy entails designating a smoking zone. The designated smoking area is located to the rear of the Institute. Smoking on campus is confined to this area.
The entire Institute building has been designated a non smoking area.

Security

The Institute will obviously try to prevent theft and losses on campus. However the Institute cannot accept any responsibility in the event of losses or theft of property. As with most Institutes, particularly those based in cities, TU Dublin - Tallaght Campus has its share of security problems. In addressing these the Institute employs security staff and has installed a sophisticated closed circuit television system throughout the Institute. The work of the Institute's security staff would be very much assisted if all the Institute's members, students and staff, became more security conscious. You can assist by bearing the following points in mind

- If you see someone acting suspiciously either on the campus or in buildings, you should contact the Caretakers [Ext 2610/2601] or Security [Ext 2617] immediately
- Be particularly vigilant about bikes. Securely lock your bike to the bicycle racks provided
- Be careful with money. Keep it with you all the time - but don't carry large sums of money
- Take normal precautions regarding your personal safety both on and off the campus
- Keep your locker key carefully
- Do not leave any valuables unguarded
- Write your name and class group on all books, calculators, folders and other belongings

Fire and Emergency Drills

Fire and Emergency drills are held in the Institute on a regular basis so that students will be familiar with procedures in the event of an emergency. When

these are arranged all students must leave the building at the time of the drill and cooperate with all instructions. It has been noticed during such drills that some students do not take these seriously and are reluctant to leave the building. This is a serious disciplinary matter as failure to practice the evacuation of the buildings could leave to a loss of lives in a real fire. It is important to go to your assembly point and not stand close to the buildings. In the event of a fire or other emergency all students shall obey the instructions of the authorised personnel. Students must participate in fire drills as are organised from time to time. Any student who in the absence of a fire, discharges fire fighting equipment or causes a bomb scare or similar hoax will be subject to the full rigour of the Institute's General Student Discipline Policy.

Emergency Evacuation

EVACUATION PROCEDURES
When the ALARM sounds
1. LEAVE IMMEDIATELY BY THE NEAREST EXIT
2. TAKE ONLY YOUR IMMEDIATE BELONGINGS
3. CLOSE THE DOOR OF THE ROOM YOU VACATE
4. DO NOT USE THE LIFT
5. DO NOT RETURN FOR ANYTHING
6. GO TO THE DESIGNATED ASSEMBLY POINT
7. DO NOT LEAVE THE ASSEMBLY POINT UNTIL AUTHORISED

The lecturer in charge of the class should indicate the exit route and ensure that all of his/her students evacuate the building and go to the designated assembly point in an efficient and orderly manner.

- Please familiarise yourself with the green evacuation signs in the corridors and with the location of the various assembly areas.
- Please ensure that you are familiar with the escape points and assembly areas as shown on the attached drawing.
- Bring the class roll if you have one
- Keep the roadways around the building clear. Assembly points are defined by which door is exited. Fire exits will have signs designating which assembly point is to be used for that exit. Nobody, Staff or Student, should leave the assembly area until the all-clear is given.

Wardens have been appointed on each floor to ensure that all rooms have been cleared.
The caretakers will contact the emergency services. A control centre, with a designated controller (one of the caretakers), will operate at the front door. The person that activates the alarm must make him/herself available to the controller and the fire-brigade.
All incidents must be recorded on an incident sheet. These are available from the caretakers, the laboratory technicians or the school secretaries.
The silencing of the alarm does not indicate the all clear to re-enter the building.

The ALL-CLEAR SIGNAL to re-enter the building will consist of 3 blasts from an air horn. Target evacuation time 2.5 minutes

Emergency Evacuation Procedures for Evening and Other Non-Standard Times

In the event of there being an emergency evacuation required during the evening, e.g. after the day-time classes are finished, or other such time when the "day time" wardens and controllers are not normally on duty, the following are the procedures to be followed in addition/substitution to day time procedures:

- The caretaker on the desk will immediately on hearing the alarm ring security and require that the yard gate is opened and that the roadway is kept clear.
- One caretaker will act as warden for the ground floor, ensuring that it is cleared in an orderly manner, and return to the front entrance as quickly as possible to act as controller.
- The second caretaker will act as warden for both upper floors and as soon as they are cleared return to the front desk to assist the controller.
- Lecturers to the part-time courses should take their class to the designated assembly point, by the most direct and safest route consistent with the condition prevailing. The main entrance should not be considered as the only route for egress.
- People should not congregate around the main entrance under any circumstances, as this area must be kept free for the incident controllers and emergency services.

Note:
On hearing the alarm leave the building quietly and quickly.
Take only your immediate belongings.
Close the door to the room you are vacating.
Do not use the lift.
Assist anyone who may be disabled, but wheel chair users should park in the escape stairways one friend may stay with them, they will be assisted out of the building.
The target time for clearing the building is 2.5 minutes.

7.0 HAZARD IDENTIFICATION RISK ASSESSMENT AND CONTROL MEASURES FOR COMPUTING SERVICES DEPARTMENT

In general, it can be stated that each of the server rooms within Computing Services are very similar in nature to each other. It is more convenient to treat each room as part of a whole and to record the risk assessment in a similar fashion. The following hazard identification and risk assessment with control measures have been evaluated for the Computing Services Department.

8.0 REVIEW

The policy and procedures contained in this document will be reviewed annually.

Hazard Identification and Control Sheet

LOCATION: Server Rooms and Technician Offices

1 **Hazard Category**	2 **AREA**	3 **HAZARD/CONSEQUENCE**	4 **RISK ASSMT**	5 **CONTROL**	6 **DATE IDENTIFY**	7 **ACTION PERSON**	8 **DATE RECTIFY**
Human Factor	General	Injuries resulting from poor manual handling techniques	Medium	Technicians within the Department must be trained in Manual Handling.	31/01/2016	HR Manager	20/06/2016
Human Factor	General	Exacerbated injuries due to lack of local knowledge in First Aid	Medium	Technicians within the Department must be trained in First Aid procedures and first aid kits should be in each Server Room	31/01/2016	HR Manager	20/06/2016
Physical	General	Slips, trips and falls as a result of temporary trailing leads	Medium	Technicians must ensure that power and network cables are correctly installed	31/01/2016	IT Manager	20/06/2016
Human Factor	Server rooms	Injury to staff if present when the fire suppression system activates	Medium	Test suppression system and provide training on disabling and evacuation procedures	31/01/2016	IT Manager	20/06/2016
Physical	General	Fire or injury/damage to staff due to boxes, packing and other installation material left behind after completion of work	Medium	Technicians must ensure that all materials are promptly removed.	31/01/2016	IT Manager	20/06/2016