Introduction

The purpose of this document is to describe the arrangements which shall be in place in Operations Group for conducting, implementing and reviewing risk assessments.

This document is a Code of Practice and as such applies to all Departments and Divisions within the Operations Group.

The document aims to provide a framework that enables Departments to manage the ever changing dynamic of risk thereby ensuring that resources are most effectively targeted at areas where risk is greatest.

1. The Law & Risk Assessment

The Management of Health & Safety at Work Regulations 1999 require every employer to make a suitable and sufficient risk assessment of those work activities undertaken by their staff which could cause them or others harm.

The College in its Statement of Policy ‘requires the risks of all activities, on and off site, which may affect the health and safety of its staff, students and others to be assessed. The risk control measures that are implemented should be what is reasonably practicable in the circumstances and should be regularly monitored and reviewed.’ College’s risk assessment and control policy and Code of Practice is to be found here: http://www.imperial.ac.uk/safety/safety-by-topic/safety-management/safety-management-policies/.

The Health & Safety Executive (HSE) recommend via their good practice guidance that all hazards are identified, the likelihood of the hazard occurring quantified and the severity of the injury evaluated. The product or outcome of this consideration is commonly referred to as a risk assessment.

2. The Principles of Risk Assessment & Control

A risk assessment is a careful examination of what, in the workplace, could cause harm to persons be they employees, students, members of the public or any other person having a legitimate reason to be in the workplace.

The 1st stage in producing a risk assessment is......To identify hazards, a hazard is something having the potential to cause harm.

The 2nd stage is.....To identify who might be harmed and how, this requires consideration of the severity of injury which could occur and to whom.

The 3rd stage is.....To identify the risk, this requires a determination of the likelihood that the hazard will cause harm.

The 4th and final stage is.....To determine control measures, which are actions that can be taken to remove or reduce the risk.
The following provides a practical illustration of the above principle:

**The workplace activity** - Inspection covers in roads / pathways have to be regularly lifted in order to take readings of utility meters from the pit below, existing practice requires two individuals to insert a key at each end of the cover and manually lift the cover away. An individual takes the reading and the reverse procedure is used to replace the cover.

**The hazard** – the above activity creates a manual handling hazard,

**Who might be harmed and how** – the operatives undertaking the task could incur a musculoskeletal injury.

**The risk** – this task is undertaken on a quarterly basis at a number of locations around College and as such could result in an acute or chronic injury to an operative who is using their back muscles to generate the force to lift the cover.

**The controls** - the task cannot be avoided and therefore a safer alternative method must be sought to avoid the potential injury. The illustration to the left shows a ‘manhole cover lifter’ which can be operated by one individual and removes the requirement for the cover to be manually lifted. In addition to introducing the lifting device the operatives would need to be trained in its use and provided with safe moving and handling training.

(Handylift Swinger by Proteus)

A phrase commonly used in H&S Regulation is ‘so far as is reasonably practicable’, this requires employers to take action to implement control measures which are proportionate to the risk and ‘affordable’. In the example above the cost of a musculoskeletal injury could be in excess of £30,000 if an individual pursued a personal injury claim, the cost of the device would be a fraction of that cost therefore ‘reasonably practicable’.

The English legal system does not require employers to remove all risk as it could require the organisation to allocate a disproportionate percentage of its resources to achieve this aim. Again in the example above to remove all risk would require the College to relocate all utility meters to positions where they can be easily read and avoiding the operation as described. This could be substantially more costly than a personal injury claim and therefore ‘not reasonably practicable’.

3. **Hierarchy of Control**

The Health & Safety Executive (HSE) advocate in their guide *Five Steps to Risk Assessment* the application of a hierarchy of measures which aim to eliminate or minimise risk:

- Try a less risky option (e.g. switch to using a less hazardous chemical);
- Prevent access to the hazard (e.g. by guarding);
- Organise the work to reduce exposure to the hazard; (e.g. put barriers between pedestrians and the traffic);
- Issue staff with Personal Protective Equipment (e.g. clothing, footwear, goggles etc);
- Provide welfare facilities e.g. washing facilities for removal of contamination and first aid.

The Five Steps Guide provides a basic introduction to risk assessment which can be successfully applied in workplaces where the nature of the hazard(s) is such that little specialist knowledge is required to mitigate the hazard.

In workplaces such as Imperial College the nature and scope of the risk present dictate that, in certain environments, a more robust analysis of risk is undertaken which involves risk scoring and ranking. [This link will take you to the method used in College for calculating risk](#).
4. Risk Assessment Methodology in Operations Group

The purpose of a risk assessment is to assist a ‘duty holder’ e.g. a manager to determine whether risk exists in the workplace, whether it can be eliminated, or if it cannot be eliminated to identify how it might be minimised to a tolerable level.

In Operations Group it has been decided, in order to assist its managers to comply with their duties, to implement a multi-layered approach to risk assessment utilising the following elements:

a) **Generic Risk Assessments**;
b) **Dynamic Risk Assessments**;
c) **Specific Risk Assessments**.

**a) Generic Risk Assessments**

A Generic Risk Assessment (GRA) is based on the principle that the majority of work tasks undertaken by employees within the Department are repetitive and that the majority of risk is foreseeable. It is therefore possible to develop risk assessments that satisfy the College requirements which are ‘generic’ in their nature e.g. pertinent to a number of staff undertaking the same task.

Being that the product of a risk assessment is a range of measures that will be applied by an employer to minimise risk it is reasonable to deduce that the range of measures specified will in fact be a ‘safe system of work’ that all staff undertaking that task will be required to follow.

A generic risk assessment will identify the hazards associated with the task, the effect or harm that could occur and the control measures which should be in place to eliminate or reduce the risk. Using the example at 2. above:

- The Hazard is – lifting and handling a heavy manhole cover
- The Effect could be – musculoskeletal injuries
- The Control Measures are – manhole covers are only to be lifted using the Handylift Swinger provided, along with any instruction set for safe use of the tool.

**Developing Generic Risk Assessments**

Each Generic Risk Assessment (GRA) will therefore state the service to which it applies, the job type / role, the specific task, the hazard(s), who could be harmed / how, and what measures are to be used to eliminate, combat or minimise the risk.

All GRAs will be developed in accordance with the relevant Health & Safety Regulations, industry best practice and British Standards. Wherever possible staff undertaking the roles to which the GRA(s) apply should be encouraged / enabled to contribute to their development as they are often able to suggest ways in which tasks can be undertaken more safely.

Involving and consulting staff on the development of GRAs will substantially raise their sense of ‘ownership’ and increase the likelihood of them being adhered to in practice.

The Directorate’s Head of Health, Safety & Fire will assist and support managers in the process of developing GRAs and ensure they are ‘fit for purpose’.
**Safe Systems of Work**

Each generic risk assessment produced will in effect be a ‘safe system of work’ (SSoW) which staff will be expected to follow when carrying out the task to which it applies.

The SSoW will describe the measures to be applied when undertaking the task which will eliminate, combat or minimise the risk. These measures will, where appropriate, specify equipment that is to be used e.g. 110v electrical apparatus. They will also specify any ‘Personal Protective Equipment’ (PPE) that is to be worn such as hearing protection, eye protection, personal fall arrest equipment etc.

The SSoW will also refer to any relevant codes of practice which have been developed by Imperial College to address such activities as Working at Height, Moving & Handling, Safe Use of DSE etc.

**b) Dynamic Risk Assessment**

‘Dynamic’ or ‘60 second’ risk assessment are terms which describe a process of continually and consciously assessing the hazards present in undertaking a work task. Frequently, circumstances can change quite dramatically, and sometimes in a short space of time, the weather being a case in point. Alternatively, a task which appears straight-forward to start with can quickly become complex due to a circumstance which was not reasonably foreseeable.

All staff will be trained and encouraged to apply the principle of dynamic risk assessment in their every day work activities which should assist them to foresee and prevent accidents and incidents at work.

The product of a dynamic or 60 second risk assessment will be either the task can be safely undertaken within the parameters set out in the generic risk assessment / SSoW or it cannot. In the case of the former the employee should proceed with the task but remain alert to the possibility that something could change e.g. the weather which may render it unsafe to continue. Where it is assessed that the task, the environment or the individual’s capabilities are not commensurate with the ‘safe system of work’ then the employee should not immediately proceed.

In the latter example the employee has identified, further to the 60 second risk assessment, that something about the task, the environment or his individual capabilities does not accord with the ‘safe system of work’. Where this situation arises, the employee undertaking the task should do one of the following:

a) Apply his experience and prior knowledge to implement additional precautions to ensure the task can be carried out without placing himself, others or the environment at risk. Where additional precautions are applied the employee must annotate the job sheet (comments box) with the additional measures taken and return this to their Supervisor.

b) Where the operative is unable to, or lacks the confidence to determine the additional precautions necessary to carry out the task safely, this must be reported back to their Supervisor whose duty it will then be to assess how the task can be completed without compromising safety.

c) Specific Risk Assessment

As stated at 4 a) above, many tasks that staff undertake are repetitive and predictable in terms of their inherent risk and it is possible to develop generic risk assessments that provide employees with guidance as to how to work safely.

It is however recognised that there will be work tasks which cannot, due to the complexity of the task, the nature of the environment or the competency required of the employee, be covered by a generic risk assessment.

Where it is identified that a particular task cannot be safely managed through the application of a generic risk assessment responsibility will rest with the line manager to ensure that a suitable and sufficient task specific risk assessment is undertaken and recorded.
A specific risk assessment (link to blank Word document) should follow exactly the same format as a generic risk assessment and identify the **Hazard, Who might be harmed & how, and What precautions should be applied to minimise the risk.** (Safe System of Work).

### 5. Conducting & Implementing Risk Assessments

It is the responsibility of Operations Group Managers to put the necessary arrangements in place to devise and implement suitable and sufficient risk assessments. To achieve this, managers will be responsible for ensuring that:

- managers and supervisors understand their role & responsibilities for risk assessment;
- those allocated responsibility for producing risk assessments are competent;
- staff who will be required to apply the risk assessments are consulted as to the measures developed to minimise the risk;
- all staff have been trained to apply the risk assessments and conduct dynamic risk assessments;
- all staff are provided with access to any tools, plant or safety equipment specified in the risk assessment / Safe System of Work;
- risk assessments are regularly reviewed particularly following an incident or accident.

| ACTION – Heads of Departments are to identify which member(s) of their staff are required, as part of their role, to be risk assessors. |

#### i) Risk Assessor Competence

Those staff identified as having responsibility for conducting and reviewing risk assessments must be competent. The College’s *Risk Assessment Foundation Training* (RAFT), provides essential basic training in the process of risk assessment and is considered by College as the entry level competence.

All staff identified by the Head of Department as ‘risk assessors’ must have attended and passed the RAFT course or equivalent and must fully understand the hazards, risks and controls of the item, area or process they are assessing.

| ACTION – Heads of Departments are to record, on the pro-forma attached, the qualifications and experience which qualify each assessor as being competent. |

#### ii) Staff Involvement

Operations Group is committed to achieving high standards of safety practice and acknowledges the significant benefit to be gained from engaging staff in the development of risk assessments and safe working practice. It is recognised that staff who are undertaking work tasks are more likely to be aware of the hazards and will through their professional experience be well placed to suggest ways of removing or minimising the risk.

It is hoped by utilising this principle that staff will be more able to relate to the resultant risk assessment / safe system of work and therefore more likely to value and observe the control measures.

Nominated Departmental risk assessors will therefore be encouraged to use Team meetings, focus groups and Committee meetings to engage and consult those staff who will be affected by the risk assessments being produced.
iii)  **Staff Training**

All staff will be required to be fully conversant with the risk assessments which relate to the role they carry out and the environment in which they operate. They must clearly understand what control measures apply to the task(s) they undertake and how they are to be used in order to achieve the intended risk reduction.

Communicating the contents of risk assessments does not necessarily take place in a training room, it can be facilitated at Team Meetings, via ‘tool box talks’, during 1:1 supervision or by such means as coaching and mentoring.

Having shared the contents of risk assessments with staff they will be required to sign to record the fact that they have been trained in the application of the risk assessment, each generic / specific risk assessment has a designated position where an employee can sign to acknowledge receipt of the risk assessment.

**ACTION** – Heads of Departments are to ensure that arrangements are in place for staff to be trained and records to be maintained of that training.

iv)  **Designing for Safety**

The duty to risk assess applies not only to hazards already present in the organisation but to risk potentially entering the organisation as a result of new activities, processes or new equipment being purchased. Any manager intending to introduce a new function or activity is duty bound to consider the safety implications of the new function and where reasonably practicable ‘design out’ risk.

Managers should seek advice from and consult professional bodies and institutions with regard to industry standards and best practice; they may also find it helpful to consult the Departmental H&S Manager and/or the Safety Unit.

Managers are recommended to record their evaluation of the new function using the standard risk assessment pro-forma.

6. **Risk Register(s)**

It is a College requirement that each Department produces and maintains a ‘risk register’ following a prescribed format. In Operations Group the following Departments produce a risk register:

- Estates Projects and Facilities;
- Campus Services;
- Information & Communications Technology;

Each Department will have an arrangement in place to ensure the register is regularly reviewed and maintained.
7. Recording & Retaining Risk Assessments

The law requires that employers record the significant findings of their risk assessments - which means writing down the significant hazards and the control measures which are to be applied to minimise the risk.

All risk assessments carried out in Operations Group will be recorded using this pro-forma, or by using the College risk assessment form:

All risk assessments operative within Operations Group will be filed in a Departmental electronic folder which can be viewed by staff at all levels within the Department and by Safety/Union Representatives.

Each risk assessment will be dated, signed off by an approved risk assessor and line manager and, bear a review by date.

8. Reviewing Risk Assessments

At the point of a risk assessment being formally signed off in 7., above, it should be decided in what time frame it will be considered necessary for it to be reviewed. Where a risk assessment pertains to a high risk activity or task e.g. using access equipment on an unprotected roof, it is advised that this should be reviewed not less than annually. For a low risk task e.g. moving and handling items of stationery it may only be necessary to review every two years or greater.

In addition to programmed reviews as above it will be necessary to review risk assessments under the following circumstances:

- Following changes to legislation or College policy;
- Following changes to work processes, locations and after the introduction of new technology;
- Following an accident, incident, work related ill-health or fire.

It will be the responsibility of the Head of Service to ensure that a review of the relevant risk assessment(s) is undertaken, this will be led by the ‘Approved’ risk assessor in association with the line manager who originally ‘signed-off’ the risk assessment. The review must consider the nature of the risk and the suitability of the control measures. In the case of an accident or incident it will be necessary to identify where the control measures failed to mitigate the risk.

Where a risk assessment is subsequently modified or updated a copy of the out of date assessment must be retained for a period of not less than three years, this is to be stored in a Departmental electronic archive folder.