**ACTIVITY IMPACT ANALYSIS**

**USER GUIDE**

**Introduction**

Investors and Stakeholders in Imperial College have an, often implicit but sometimes explicit, expectation that their investment in Imperial College will be appropriately protected. Students expect to be able to complete their course at the advertised time; funders of research expect the output of that research to be of the agreed quality, timeliness and cost.

For an institution as large and diverse as Imperial College there are a plethora of untoward events that can and do disrupt activities that take place at the College and thus threaten the expectations of our investors and stakeholders. In the recent past, events from volcanic ash clouds disrupting the return of staff and students for the start of term and exams to localised floods & fires and injuries to people, at both home and abroad, have disrupted activities, sometimes severely.

**Purpose**

The purpose of the Activity Impact Analysis is to assist those responsible for the delivery of activities consider:

1. The resilience of that activity in the event of a disruption or untoward event
2. The mitigation that should be in place to provide the appropriate level of resilience
3. Whether that mitigation is in place and, if not
4. Who owns the mitigation in order to have it put in place

**Overview**

The pivotal column of the Activity Impact Analysis is **Risk Mitigation**. All the columns to the left of Risk Mitigation are there to guide the user to consideration of what mitigation is appropriate. All the columns to the right of Risk Mitigation are there to assist in implementation of the mitigation and for local management information.

**Column Colouring**

Columns with a White header are optional

Columns with Blue header should be completed

Columns with Amber header should be completed if mitigation is required but not in place

**Filters**

Where appropriate possible values for each column are suggested below column 11. These are not mandatory and others may be used.

**Comments**

Each column heading has a comment which is a brief description of the column purpose. This is also described in the Process section

**Process**

The purpose of the Activity Impact Analysis is to provide assurance that any particular activity has appropriate resilience to a disruption or untoward event or, if not, establish what measures should be in place and who is responsible for putting them in place to achieve that appropriate level of resilience. The following guides the reader through the template

**Column A:** Thus the template starts by asking what the area in question does and/or requires in order to undertake its work.

**Column B:** It may be helpful to assign a category to each activity, although this is optional

**Column C:** This provides a more detailed description of the activity and an assessment of the impact of a disruption or loss. Description of the activity, including sufficient information to identify the area, scope, possible causes, consequences and other factors that will describe the activity in a way which is understandable to someone who is not from your area or discipline.

**Column D:** Identifies the general area of impact (e.g. financial, people, reputation. This column is optional.

**Column E:** The Recovery Time Objective identifies how quickly the activity must be restored. This is the maximum tolerable period of disruption. Identify how long before the impact of the disruption becomes intolerable. e.g. within 24hrs; 1 week; 2 weeks; a month; a year.

This will then inform the mitigation required to recover the activity within that time frame. As a general rule the more quickly recovery is required the greater the expense of the mitigation. Thus there should be consideration of what mitigation is appropriate.

**Column F:** The Recovery Point Objective: When an activity is disrupted or lost, consideration of what needs to be provided to restart that activity can inform the mitigation that is required to facilitate recovery.

For example:

If an experiment has been running for some time it might be desirable to restart the experiment from the point it was at when it was lost/disrupted. In reality this may not be possible and the experiment may need to be restarted from the beginning but, with the knowledge already gained, it may be possible to restart the experiment at some other point. This point would be the recovery point objective.

In an IT context, we generally expect that a backup will be available. However, we also accept that the backup may not restore everything to the point of loss and several hours’ data may be lost. The point to which recovery from backup can be achieved is the Recovery Point Objective.

In both examples above, the point to which recovery is required will have cost implications. In the IT example if no loss of data is acceptable then a ‘mirrored backup’ will be required which is inherently more costly than a backup every 24 hours. In the case of the experiment, if no loss or delay is acceptable, it may be necessary to run the same experiment in parallel but at a different location.

**Column G:** The Minimum Service Level and Recovery Priority: To assist the recovery teams and also inform the mitigation required it may also be helpful to identify the minimum acceptable service level. E.g. it may be acceptable for some infrequently used areas to be restored last but it may also be necessary for a number of activities to be restored simultaneously before an acceptable level of service/activity can be achieved. This column is optional.

**Column H:** Anticipated Support From the College: Assumptions are often made as to what support will be available from College support activities. It may be helpful to record what support is anticipated. If the activity or support required falls outside the service normally provided, it would be prudent to check with the appropriate support function that such support is actually available/provided. This column is optional.

**Column I:** Risk Mitigation: This is the pivotal column and focus of the AIA exercise.

What mitigation is required to achieve the desired Recovery Point, Recovery Time and Minimum Service Level/Recovery Priority?

Please also note whether this is in place or, if not, what action is required and by whom to put it in place.

In the event of a loss of a partial or total loss of an activity or project, the cost of restoration of that activity will often fall on the owner of that activity. Similarly, the cost of mitigation to reduce the likelihood of loss or facilitate the recovery of an activity will most likely fall to the activity owner.

**Column J:** The Mitigation Owner is the person with the accountability and authority to be best placed to manage the mitigation. They are responsible for securing agreement to:

* The identification and implementation of the appropriate mitigation required to improve resilience and facilitate recovery
* The Key milestones and review dates.

**Column K:** This column is only required if measures need to be put in place and should be the next key milestone date.

**Column L:** This column is optional and records the person best placed to understand the activity and impact of any loss or disruption.

**Column M:**  This column is optional and records where information relating to this AIA is stored.

**Glossary of Terms**

**Critical Activity:** Work elements required to ensure the success of an organization, program or project

**Resilience:** The capacity to be unaffected or recover quickly from difficulties

**Mitigation**: Measures taken to:

* Avoid or lessen the impact of a disruption or untoward event
* Make a disruption or untoward event less severe

**Recovery Time Objective:** (RTO) is the targeted duration of **time** and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity.

**Recovery Point Objective:** (RPO), is the point to which an activity must be recovered after a disruption or loss. It may be the point of loss in which case if it is IT data the IT system must be mirrored or if an experiment it must be replicated to its position at the point of loss. It may be acceptable to have a less onerous recovery point, say 24 hours or some other point.