

**UNIVERSITY OF EAST ANGLIA**  
**REVIEW OF PROJECT MANAGEMENT WITHIN THE INFORMATION**  
**SERVICES DIRECTORATE**  
**REPORT NUMBER 1266/11**



**UNIVERSITY OF EAST ANGLIA**

**REVIEW OF PROJECT MANAGEMENT WITHIN THE  
INFORMATION SERVICES DIRECTORATE**

**REPORT NUMBER 1266/11**



**SUMS Consulting**  
*Management Consultants*

Lesley Reed  
August 2011



# CONTENTS

	Page
1. EXECUTIVE SUMMARY .....	1
2. TERMS OF REFERENCE .....	3
3. ACKNOWLEDGEMENTS .....	3
4. BACKGROUND AND APPROACH .....	3
4.1 Approach.....	3
5. CONTEXT .....	5
5.1 University IT Service Provision .....	5
5.2 Project Governance and Organisation.....	5
5.3 Overview of Selected Projects.....	6
5.4 Best Practice Project Management .....	7
6. CURRENT SITUATION.....	9
6.1 Strengths of the Current Situation .....	9
6.2 Weakness and Opportunities of the Current Situation .....	9
7. CONCLUSIONS.....	15
8. RECOMMENDATIONS .....	16
8.1 Key Recommendations .....	16
8.2 Supporting Recommendations.....	17
8.3 Other Considerations .....	20
9. BENEFITS.....	22
10. NEXT STEPS .....	22

## APPENDICES

Appendix A	Terms of Reference
Appendix B	List of Contributors
Appendix C	“Best Management Practice”
Appendix D	Programme or Project Board Report Template
Appendix E	Project Management Techniques



# SUMS CONSULTING

## REPORT NUMBER 1266/11

### REVIEW OF PROJECT MANAGEMENT WITHIN THE INFORMATION SERVICES DIRECTORATE

#### UNIVERSITY OF EAST ANGLIA

	Cross Reference
<b>1. Executive Summary</b>	
SUMS Consulting was asked to	2
“Review the Project Management method applied to current and recent Information Services Directorate (ISD) projects and bring forward proposals for changes to the method and its application that will provide the basis of an efficient and effective Project Management framework for the delivery of future projects”.	
The type of project undertaken by ISD is increasingly moving away from bespoke solutions towards the implementation of packages and supporting hosted or managed services. This change in demand coupled with a mixture of recent successful and less successful implementations has prompted a review of the Project management method applied in ISD.	4
Three diverse projects were selected as examples for the review: UEA London – ICT Infrastructure; Enterprise Service Desk Implementation; and Student Information Systems Replacement Project. The approach to Project management applied to all three projects was compared against the industry standard baseline of PRINCE2; taking into account organisational needs for a tailored method.	5
The review identified a number of good practices, but also a number of opportunities for improvement. The areas of improvements identified included project governance, organisation, selection and initiation, reporting, control, closure and benefit realisation.	6
Key recommendations of improvements to the project management method and its application include:	8
<ul style="list-style-type: none"><li>• Refocusing Project Boards</li><li>• Reassessing the role of Project Managers</li><li>• Refocusing Project Summary / Plans</li><li>• Improving the visibility of a project status</li><li>• Formally closing projects.</li></ul>	
Supporting recommendations and future considerations are also provided.	
Benefits of implementing the recommendations will include improved delivery and credibility for ISD, with justified projects that are visibly controlled.	9

Informed and streamlined decision making should increase business engagement and ownership. Clarity over the definition and focus of projects and rationalising the role of the Project Manager should support a more effective use of resources and project delivery.

Recommended immediate next steps are:

10

- Review the Governance structures for future and long term projects
- Review resource management and roles of Projects Managers
- Amend Project Summary / Plan Templates and raise their profile
- Review other templates and toolkits available to gain quick win low cost solutions.

## 2. Terms of Reference

SUMS Consulting was asked to:

“Review the Project Management method applied to current and recent ISD projects and bring forward proposals for changes to the method and its application that will provide the basis of an efficient and effective Project Management framework for the delivery of future projects.”

The full Terms of Reference are given in Appendix A.

## 3. Acknowledgements

SUMS Consulting wishes to acknowledge the assistance given by UEA staff during the review and their contribution to the outcome of the assignment. A full list of UEA contributors may be found in Appendix B.

## 4. Background and Approach

Following the development of a five year Information Strategy in 2003 a Project management method was introduced into ISD in order to support the implementation of the strategy. The Project management method was based on PRINCE2 but tailored by the NCC Group to meet the needs of ISD. This method has been in place and used within ISD for the last eight years with only minor changes applied. During this period the types of Corporate Information Service projects undertaken by the unit has largely moved away from software development towards the implementation and configuration of ‘best of breed’ package solutions. A small amount of bespoke developments are undertaken, with Agile development methods employed.

The majority of Project management activities are undertaken by Technical Leads who fulfil dual roles, but a recent successful joint project with City University was managed by a dedicated Project Manager. This success, in contrast to a less successful recent SITS Time Tabling project has prompted the review of the Project management method and its application within ISD.

### 4.1 Approach

The approach taken was in line with the Terms of Reference. A number of projects were nominated as examples of the diversity of work undertaken: Student Information System Replacements Project; UEA London – ICT Infrastructure; Enterprise Service Desk Implementation.

A more detailed description of the approach is given in the terms of reference, Appendix A.

A presentation of our findings and recommendations was given to Jonathan Colam-French and Duncan Westlake on 1 July 2011.

### **Out of Scope**

The review was neither an audit nor a post implementation review of the individual projects and does not draw conclusions as to their relative success or failure.

## **5. Context**

### **5.1 University IT Service Provision**

ISD is a centralised service provider of Library and IT services to the University. The University is undergoing a major organisation restructure due for implementation in August 2011. Part of this restructure includes the centralisation of line management responsibilities for localised IT support provided within Schools and Departments into ISD.

The move from bespoke solutions to package and hosted or managed services increases the complexity of supplier relationships, with the need for the Project Managers and the ISD Management Team to deal with multiple suppliers, sub-contractors and consultants both for projects and operational support. Partnership relationships with other institutes also adds to the complexity of service provision where a partner may act as both a customer and / or a supplier.

Customer expectations are also increasing, from both staff and students, in terms of facilities, reliability and security, with accessibility demanded from remote students and additional campus sites such as UEA London.

The impact of changes resulting from Government initiatives, organisational changes, demand for value for money coupled with expectations of rapid delivery and response to changing requirements all have a direct impact on ISD and the method it adopts for delivery projects to its customers.

### **5.2 Project Governance and Organisation**

The Information Strategy and Services Committee (ISSC) is the main governance committee for ISD, the ISSC reports to Executive Team. The committee has responsibility for agreeing and monitoring the overall programme of work for the directorate, ensuring that this is aligned to the corporate plan and its objectives. The committee prioritises projects and tasks across all areas of ISD.

Once approved, major projects are overseen by external Boards, such as the Research Board and Education Boards. These Boards are responsible for overseeing development and delivery of activities identified in the ISD Strategy 2008-2013 and may oversee a number of different projects in parallel.

Some major projects, such as UEA London and SIS have their own dedicated Project Board separate from those above.

Smaller 'reduced projects' are overseen by the ISD Management Team (ISDMT) and have no Project Board. The ISDMT report progress against the Programme of Work three times a year to the ISSC.

### 5.2.1 Project Organisation Roles

Recognised roles at UEA within a project include:

- **Project Sponsor** - each project should have a Sponsor who will champion the project and for larger projects should be a member of the Executive Team
- **Project Director** - This specific role does not exist separately from the Project Sponsor in PRINCE2 but is not uncommon in project organisations. Within UEA each project should have a Project Director who will represent the project at executive levels and for IS Strategy projects will receive feedback from the ISSC. For the major projects the Project Director tends to be the Director of Information Services who is ultimately responsible for delivery of the IT element of the project (acting as the Senior Supplier in PRINCE2 terms).
- **Senior User** - A PRINCE2 term not used at UEA. The Business Community will be represented by one or more 'Senior Users' on the Project Board.
- **Project Manager** - Responsible for the day-to-day management of the project
- **Project Team** - Comprising of staff reporting predominantly through line management, indirectly through other teams or a combination of both
- **Expert Teams** - Consultative Groups who provide support and act as working parties for identifying requirements, addressing scoping issues and in some cases training and rollout activities. The SIS Project has at least seven of these groups.

### 5.3 Overview of Selected Projects

The three projects nominated to act as examples for the review were varied in nature and give a reasonable cross section of projects and the application of project management within ISD:

#### 5.3.1 UEA London – ICT Infrastructure

This was an infrastructure project that formed part of a larger business project to set-up and launch a University site in London providing remote access to UEA systems by London based UEA students and staff. This was a joint venture with INTO and City University.

The ICT Infrastructure workstream was led by a dedicated IT Project Manager who joined the project at the start of the workstream's initiation. The project was not initially identified as part of the annual Programme of Work, but its priority and profile ensured that resources were reallocated as necessary to the project. The project team consisted of staff primarily located within their line management teams.

A UEA London Project Board was set up to include City and INTO. A further Joint Venture Project Board and IT Project Board evolved during the project lifecycle.

A low risk technical solution was identified and delivered broadly on schedule (revised dates were agreed to accommodate supplier lead times). One major issue arose relating to IT building facilities and space resulting in additional finance being sought for the project as a whole.

The project was formally closed and outstanding items handed over to the appropriate IT support teams.

### **5.3.2 Enterprise Service Desk Implementation**

The Enterprise Service Desk Implementation is the ISD installation and rollout of Service Desk software from Tribal. The technical solution was selected prior to the Project Manager being appointed.

The project was identified as a 'Lite' project with an implementation to ISD staff, and IT staff located within departments. The Project Manager had no previous project management experience and is also performing a Service Desk support role. All staff on the project perform support and project roles in parallel.

No Project Board exists and the Project Manager neither produces project progress reports nor attends any ISDMT meetings to report progress. One major issue has arisen relating to process reviews and this has resulted in significant delays to the project. The project is currently still in progress.

### **5.3.3 Student Information System Replacements Project**

The Student Information System Replacements Project (SIS) is the implementation and subsequent enhancement and tailoring of the SITS package provided by Tribal.

The initial project for the selection and installation of the package was managed by the Business Community with technical input from ISD. ISD now manage the on-going upgrades, tailoring and enhancement to the package including the introduction of major new modules, such as Timetabling and Events. The SITS Team of around eleven staff is split between Analysis and Support (including Training), and Development. The current Project Manager is responsible for the SITS Analysis and Support teams, more recently the SITS Development team and has other line management responsibilities.

The 'Project' now consists of a series of minor projects identified by the Business Community and prioritised through the Project Board. The Project Board consists of numerous interested parties each with its own priority enhancements. The minor projects selected are restricted by the number of SITS resources available and is significantly less than the volume of enhancements requested (the number of resources are restricted by the funding available).

These minor projects are locally managed by analysts or technical staff and all SITS development staff support projects, production support fix-on-fail and minor enhancements. The recent poor implementation of the Timetabling and Events module and the subsequent unplanned support activity had major impacts on the SITS Teams ability to deliver other scheduled enhancements.

## **5.4 Best Practice Project Management**

The Office of Government Commerce (OGC) strongly promotes the use of predictive programme and project management methods to support delivery of both business and IT programmes and projects. These methods have been widely adopted within the public and private sector, both within the UK

and internationally, with numerous training courses and qualifications available. PRINCE2 is recognised as a world leading project management methodology (further details and references to the OGC may be found in Appendix C). Predictive project management focuses on planning the projects upfront, executing projects as per the plan, checking for variances and taking action wherever necessary.

As an alternative to a predictive project management is an adaptive approach supporting requirements evolving over the project life cycle with an incremental product delivery at the end of short time boxes (3 to 6 weeks). Project variables of time and cost become fixed and scope becomes the flexible variable being adjusted to meet time and budget constraints. Agile, SCRUM, XP (Extreme Programming) are all recognised approaches to adaptive development. The DSDM Consortium supporting DSDM (Dynamic Systems Development Method) have joined forces with APMG to deliver recognised qualifications in "Agile Project Management", promoting a method that can be adopted independently or alongside PRINCE2.

Although Agile is becoming more widely recognised and accepted as an appropriate project management approach, this review uses the OGC 'Best Practice Project Management' approach of PRINCE2 and as the main basis of a comparator against UEA application of project management. Recognition is made that PRINCE2 should be tailored to take into account its practical application within an organisation.

## **6. Current Situation**

### **6.1 Strengths of the Current Situation**

There are a number of positive project management strengths exhibited within ISD.

#### **Project Selection**

An annual process exists that supports the selection of projects for the forthcoming academic year. This process engages the Business Community and is aligned to the University Governance structure resulting in an agreed Programme of Work for ISD.

#### **Project Management Tailoring**

Recognition that not all projects are the same and that the project management approach should be tailored to take into account the relative size, complexity, risk and impact associated with the project. This results in some projects being treated as 'Lite' projects where the project management approach and deliverables are reduced.

#### **Project Initiation Process**

A template and handbook exists to support the production of the Project Summary / Plan. This is a key document for all projects as it provides the basis upon which the project is agreed and delivered against.

#### **Successful Project and Service Delivery**

ISD have delivered numerous successful projects and it is acknowledged within the Business Community that significant changes to the University administration, research and teaching support have been made as result of the projects delivered.

#### **Committed Staff**

ISD staff appear committed to deliver projects and generally welcome opportunities and innovations that may improve their ability to be more effective.

### **6.2 Weakness and Opportunities of the Current Situation**

A number of weakness and opportunities to improve the application of project management within ISD were identified.

#### **6.2.1 Project Governance**

##### **Multiple Project Boards.**

Large or high profile projects may have more than one Project Board, for example, UEA London had a Joint Venture Board, Project Board and IT Project Board providing a multi-layered governance structure

##### **No Project Board**

'Lite' projects, such as ESD, report directly into the ISDMT via line management providing limited support for direct escalation of IT issues and no escalation route for Business related issues.

### **Large Project Boards**

Project Boards, such as the SIS Project Board with up to 20 attendees, were reported as less effective than smaller focused groups and tend to act more as working parties rather than decision making bodies.

### **Unbalanced Project Boards.**

Project Boards that do not have both customer and supplier representation may not provide a balanced view of the needs of the project.

## **6.2.2 Project Organisation**

### **Lack of Clear Sponsorship**

Not all projects have a named individual as Sponsor for example, the SIS Events and Timetabling project has 'Project Owner' described as the 'Academic Division' and the SIS 2009 Stage Plan only has a Project Board Chair identified and no specific Sponsor (there are multiple Stakeholders sponsoring sub-components for this Plan). The ESD project has no identified Project Sponsor.

### **Multiple Roles for Project Managers**

Both the ESD project manager and the SIS Project Manager have multiple roles, including production support. The conflict with other responsibilities, and in particular production support activities, was reported to be at the detriment of the project management activities.

### **Resourcing Issues**

In two of the three projects reviewed staff raised access to an appropriate resource or skill as an issue. In some cases the resource was not available due to long term sickness or a vacancy, in other situations there was insufficient resource due to other priorities, usually production support requirements.

### **Unclear Team Boundaries**

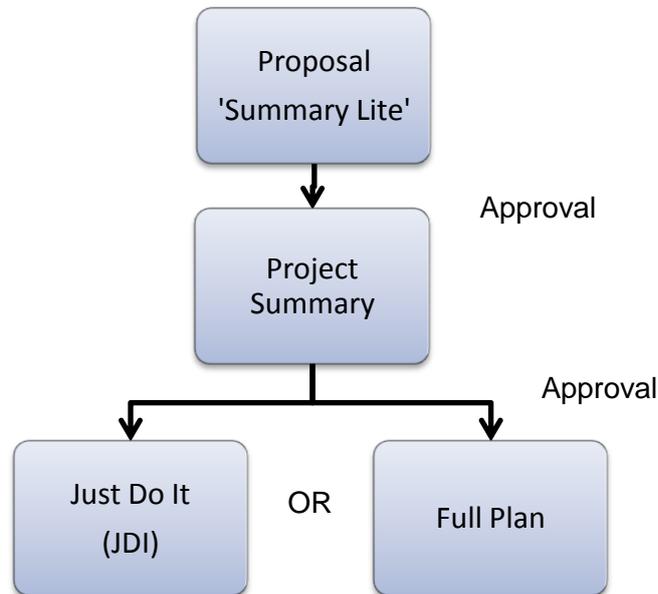
The boundaries and responsibilities between the IT teams and Business Teams are becoming less clear, particularly within the SIS project where Business super-users are taking on IT activities including direct contact with suppliers. This trend is likely to continue if more package or hosted solutions are adopted.

### **Complexities of Supplier and Partnership Involvement**

Increasingly there is a need to work as part of a partnership, such as with City and INTO or with package suppliers such as Tribal.

These other parties will have their own agenda and timescales to which they are working and will not always comply with expectations, such as City's involvement with the UEA London project, where lack of commitment to plans caused issues.

### 6.2.3 Project Selection and Initiation



**Figure One – Initiation Document Lifecycle**

A 'Summary Lite' is produced by the ISD Directors for consideration as part of the annual Programme of Work. Once agreed that a project should form part of the Programme of Work a Project Manager is tasked to produce a Project Summary after which the project is classified as 'Lite' (JDI) in which case no further definition work is required, or a Full Plan document requested.

#### **Portfolio Selection**

As the annual selection process for the Programme of Work is carried out at the same point in time each year variable amounts of information will be available to inform a cost / benefit / risk case. This may result in projects being selected that have less of a Benefit Case than some non-selected.

#### **Limited Cost / Benefit Analysis**

A 5 year Business Plan was developed by the Sponsor for the overall UEA London project and a Business Case was reported to have been developed by the Business for the original SIS project.

However, it appears that generally Project Summary / Plans have limited tangible benefits, project and operational costs identified. Some stated that the operational costs would be defined at a later stage.

No ROI calculations were performed for any IT project reviewed.

#### **Confusion over Project Classification**

Project Managers and staff reported that it was not always clear why work was classified as 'Lite', standard or support work. 'Lite' projects are determined by Senior Management based on the anticipated size, risk and impact of the project.

### **Omissions in the Project Summary / Plan documents**

The Project Summary and Full Plan documents are largely in-line with what would be expected for Project Initiation Documentation. However, there are a number of key elements that need refining or adding:

- Multiple objectives (SIS Stage Plan)
- No Critical Success factors are defined
- No Project context or external project dependencies are given, i.e. a projects relationship to other workstreams within a larger project, such as UEA London, or pre-requisite / post-requisite dependent projects.

### **Undervalued Project Plans**

The value of the Project Summary / Plan as a baseline document is not fully appreciated by all staff and the Business Community. A number expressed concerns that it is a static document of little value.

## **6.2.4 Project Reporting and Communication**

Formal reporting is required by major University Boards at least three times a year including all ISD projects within the Programme of Work. The SIS Board meets more frequently at around 6 weeks and other major projects that have their own Boards, such as UEA London, that also met more frequently.

### **Project Reporting**

No standard template appears to be used for the Board Reports. UEA London developed its own standard. The SIS Board reports are lengthy and it is difficult to ascertain the current status and key issues of the project(s) without reading the whole document.

Board minutes from the SIS are equally lengthy, acting more as meeting commentary with a short action list to the rear.

There is no regular project reporting to the ISDMT, 'Lite' projects report progress through line management only and the Project Managers are only asked to attend the ISDMT meeting infrequently.

### **Project Team Meetings**

The occurrence and format of team meetings varies between projects from non-existent, informal to formal. On some projects there were documented minutes and issues recorded, but more commonly no meeting notes were produced.

## **6.2.5 Project Control**

### **Change Control**

Change control is managed largely through informal meetings with changes to design controlled through version control of technical documents.

Large changes, such as change in delivery dates or budgets tend to be managed and documented through minuted Project Board meetings. For 'Lite' projects there appears to be limited documentation of changes, reasons and impact.

### **Financial Control**

Financial control on projects is limited to monitoring of external spend.

### **Quality Control**

There appears to be no Project Assurance role. There are no project Health-checks or Audits carried out during a project lifecycle. There does not appear to be any formal reviews or sign-off of key project management or technical documents.

### **Scheduling**

Gantt Charts or key milestone plans are appropriately produced at varying levels of detail according to the project. However, for some projects there is no evidence as to how these plans were derived, the estimating basis used and therefore the confidence levels of achieving the milestone dates. Team members reported having no input into the estimates or the planning process.

There appears to be no monitoring of resource utilisation and identification of impacts on other projects of overruns or major over utilisation (SIS does monitor and reschedule its own resources).

### **Risks, Issues and Dependencies**

Teams reported differing approaches to issues and risk management, some very proactive and others very limited with risks highlighted in the Project Summary / Plan being ignored.

All projects appear to be inward looking with project dependencies not sufficiently recognised or actively managed, for example, for UEA London the inward dependency on Facilities Management / Estates to set-up room requirements, and outward dependency on changes to SITS were not documented.

## **6.2.6 Project Delivery and Implementation**

### **Limited Handover**

Handover from ISD Directors to Project Managers was reported to be too brief with some information not being conveyed successfully causing issues further within the project lifecycle, for example the process review work for ESD.

Handover to support staff, where they are different from the project staff is also poor. Limited or no handover and closure documentation is produced and time is allowed for formal warranty by the project teams to ensure initial teething problems are addressed by project staff prior to their reallocation.

### **Lack of Templates and Project Document Management**

A number of the more inexperienced staff expressed a desire for a more formal project framework with more templates and structured filing of project documentation.

A number of templates do exist for major documents, but others for issues, changes, cost controls, regular and Board reporting are not available.

There is no structured or consistent project management filing structure or repository, with staff holding key project documents in personal drives.

### **6.2.7 Project Closure**

In some cases staff are unclear when or how a project should be closed. For some projects, such as the SIS Project, additional requirements are formally added to the overall project scope resulting in a rolling project.

It was reported that Lessons Learned Reports and Project Closure Reports are never or rarely produced and Post Implementation Reviews are not held; project closure depends on the project and the Project Manager involved.

Without CSFs and tangible benefits identified it is difficult to measure the success, or not, of a project.

### **6.2.8 Benefit Realisation**

Business Change and Benefit Realisation are not detailed in the current Project Management Handbook but do form part of a successful project implementation. With the exception of UEA London there is little evidence of formal Benefit Realisation.

## 7. Conclusions

In accordance with good practice ISD are ensuring that projects involving IT are approved through a formal governance process involving the Business Community.

Project management is tailored to cater for projects relative size, risk and impact with a resultant 'Lite' (JDI) project where appropriate. Major Projects are governed by cross functional Boards with representation from IT and the Business Community.

Key areas of concern are:

- **Effectiveness of the Project Boards.** Projects may have no Project Board, multiple levels of Project Board, large Project Boards or Boards that cover multiple projects and there are concerns that the Project Boards are not effective decision making bodies.
- **Multi-roles of the Project Managers.** Project Managers may be responsible for other line management, project activities and support duties in parallel with project management. Multiple roles or management of multiple projects is not unusual but should not be to the detriment of project delivery which is also more likely to occur when production support responsibilities are included as this will always take priority over project work.
- **Clarity of Project Definition.** It is not always clear to the Project Manager and Team why work is classified as a 'Lite' project, project or support work or what the main differences are. The Project Summary / Plan documents are undervalued and have key sections omitted that would add clarity, context and measures of success to a project.
- **Visibility of Project Status.** Project Reporting is non-existent or poor with visibility of project KPIs minimal. This lack of visibility of project status to Senior Management and Project Boards reduces their ability to make informed decisions and take appropriate action to ensure successful project delivery.
- **Project Closure and Benefit Realisation.** Projects are rarely formally closed providing limited opportunity for learning through previous project experience. Handover to operational areas is limited and benefit realisation generally unmeasured providing no indication of any ROI or value from a project.

## 8. Recommendations

Following on from the review conclusions the key recommendations are given below and are supplemented by further supporting recommendations and considerations for moving forward.

### 8.1 Key Recommendations

#### 8.1.1 Project Governance - Refocus Project Boards

- Ensure that only one identifiable Project Board exists for each project. Support may be provided by User Groups and Supplier Working Groups.
- Ideally (but not always practically) a Project Board should focus on a single project and should be separate to but aligned with the University Governance structure
- Limit the size and composition of the Project Board membership to ensure that it remains focused and its members are empowered to make decisions
- Tailor the Project Board and its membership in accordance with the size and profile of the project. 'Lite' projects do not need a full Board, but should have a nominated Sponsor, Supplier and User representatives (some roles may be combined).

#### 8.1.2 Project Organisation - Reassess the role of Project Managers

- Allocate dedicated experienced Project Managers to the larger high profile projects. An experienced Project Manager should be able to support more than one project at any point in time; providing the lifecycles of the projects overlap i.e. they do not all commence or finish at the same time.
- Allow adequate time for project management activities to be carried out where in parallel with other duties. Avoid combining production support roles with project management responsibilities as production support will inevitably take priority and impact project delivery.

#### 8.1.3 Project Definition - Refocus Project Summary / Plans

The Project Summary / Plan template should be amended to include:

- Clear guidance on limited SMART objectives
- Critical Success Factors (factors that if not achieved indicate that the project is not successful, i.e. they are critical)
- Project context and dependencies in relation to other workstreams in large projects and known pre and post project dependencies
- Deviations from the expected processes and deliverables in order that expectations of all key Stakeholders are managed e.g. Agile, Hosted, Outsourced, Partnerships.

#### 8.1.4 Project Reporting - Improve the Visibility of a Project Status

- Introduce regular project reporting and / or Project Board meetings for all projects, including 'Lite' projects to ensure Senior Management is kept aware of the status of all projects directly by the Project Managers
- Produce a concise template for project progress reports and Project Board reports to minimise reporting effort, but maximise impact and information provision (see Appendix D for an example report template). Key Project Performance Indicators of cost, delivery and time should be

easily identifiable and supplementary information only provided when a project is in difficulty or requiring a decision.

### **8.1.5 Project Closure - Formally Close Projects**

- Ensure Project Managers understand when a project should be closed and what process should be followed
- Produce Project Closure documents and handover documents for production support
- Carry out brief Post Implementation Reviews with the Project Team, Project Board members and any Suppliers or Partners. Publish and share lessons learned.
- Use the lessons learned to continuously improve the project management process.

## **8.2 Supporting Recommendations**

### **8.2.1 Project Organisation**

#### **Ensure Project Management is Consistently Applied**

- Manage all projects according to their size and in a consistent manner, irrespective of the Project Manager (IT Manager, Business Analyst or Technical Lead) assigned.

#### **Ensure Adequate Training and Support for Project Managers**

- Provide additional support and training for Project Managers in supplier and partnership management, in particular for cultural awareness and commercial aspects of the relationships
- Provide additional support for inexperienced Project Managers responsible for 'Lite' projects. This could include experienced Project Managers line managing the delivery of 'Lite' projects.
- Develop leadership skills in addition to project management skills, particularly where Agile projects are to be undertaken
- Recruit experienced Project Managers to provide knowledge transfer and guidance to less experienced staff.

#### **Recognise the Impact of Production Support on Teams**

- Recognise the impact and support staff combining production support roles with project roles. Production support issues will always take priority over project work and key individuals will always be in demand for both.

#### **Support a Warranty Period for each Project**

- Ensure resource allocation allows for project staff to provide support for a project after implementation for a formal pre-defined warranty period.

#### **Clearly Define Boundaries of Business Responsibilities**

- Engage the Business Community to act as Super-users wherever feasible and reduce the dependency on IT Support
- Ensure that responsibilities and boundaries for support, training and rollout are clearly defined and understood where performed by the Business Community
- Ensure that ownership for supplier relationships remains clearly defined and does not become spread across different departments.

## 8.2.2 Cost Benefit / Risk Case

### **Focus on the Outcomes and Benefits of Project Delivery**

- Ensure definition and ownership of benefits is with the Sponsor / Senior Users (this may be IT if it is an internal project)
- Identify tangible benefits wherever possible
- Produce a Benefit Realisation Plan owned by the Sponsor / Senior User during initiation and refined and executed after project implementation.

### **Understand Project and Operational Costs**

- Produce project costs and initial operational costs during initiation and agree these with Stakeholders as part of the Project Summary / Plan production. Agreement should reflect any future impacts on operational budgets.
- Refine the operational costs prior to implementation and the handover to production support and / or operational units

### **Identify Return on Investment (ROI)**

- Perform ROI analysis where costs and tangible benefits exist
- Perform sensitivity analysis to identify potential impacts on costs / benefits and therefore on the ROI
- Identify risk contingency for major project risks ( see Appendix E) to understand potential impacts of risk realisation.

### **Continually Review Portfolio Selection**

- Review the Portfolio selection based on the relative priorities, strategic alignment, risks and ROI of projects as they are initiated and progress throughout the year.

### **Justify Requirement Selection with Multiple Stakeholders**

- Insist that the Business Community fully justify the priority of their requirements on large or on-going projects / programmes. Prioritisation should be objective and supported by cost / benefit justification and possibly assisted by techniques such as MoSCoW (see Appendix E).

## 8.2.3 Project Definition

### **Raise the Project Plan Profile**

- Ensure that the Business and Project Managers understand the value of the Project Plan as the key project baseline document
- Ensure that there is a mandatory sign-off of key stakeholders with and understanding of their commitment to the project in giving their approval.

### **Refine the Definition and Thresholds of Projects**

- Cater for annual events, such as upgrades, and small service enhancements as part of BAU as they tend to be less innovative and lower risk
- Raise awareness that the size and risk of the project profile will dictate if it is a 'Lite' project and what impact this has to the allocation of a project manager and production of project deliverables. It should be clear why and when projects are defined as 'Lite' as opposed to standard.

### **Externalise Resource Management**

- Increase the visibility of IT resource management to the Project Managers and at a high level to the Business Community in order that there is more of an awareness of resource conflicts, constraints, demands and available supply.

## **8.2.4 Project Reporting, Stakeholder Management and Communication**

### **Support Access to key Project Stakeholders**

- Ensure escalation routes are available to the Project Manager where Project Boards meet infrequently or do not exist as standalone entities.

### **Develop Stakeholder Strategies**

- Develop Stakeholder Management Plans for major supplier, partnerships and key business stakeholders early in the project lifecycle.

## **8.2.5 Project Controls**

### **Monitor Resource Usage**

- Identify and flag projects where there is significant over utilisation of internal resources above the original estimate and feed into overall resource management to identify impacts on other projects.

### **Introduce Project Health-checks**

- Introduce Project Health-checks on major / high risk / high profile / large projects to support Project Managers identify early improvements to help ensure project success. These Health-checks can be carried out by specialist resources or other experienced Project Managers.

### **Explicitly identify Change Control Items**

- Create explicit project logs for change control items together with formal impact assessments. These should be carried out for the major changes impacting scope, cost or timescales.

## **8.2.6 Project Delivery and Implementation**

### **Improve Handover Procedures**

- Engage Project managers as early in the project lifecycle as possible. Ensure that the handover of all pre-initiation work is complete.
- Engage production support staff in the early stages of the project if they are not part of the Project Team to assist in the transition from project to production support.

### **Invest in Implementation Handover**

- Consider the use of Release Management and Change Boards as defined within ITIL to improve the control and release of software into the production environment.

### **Introduce a Standardised Project File Structure**

- Develop a standard directory structure for holding all project management deliverables on a shared drive to support consistency and access to documentation

- Create a number of standard templates for reporting, issue and change management and cost controls
- Consider the introduction of a toolset to support Project Managers e.g. CQC, Atern.

#### **Clarify Processes and Deliverables for Non-standard Projects**

- Ensure that less experienced Project Managers on 'Lite' projects are clear what processes and deliverables (and sections within them) they are required / not required to produce

### **8.2.7 Benefit Realisation**

#### **Implement Benefit Realisation Plans**

- Encourage Sponsor / Senior Users to manage the Benefit Realisation Plan execution after the project is closed and the Project Manager has moved on
- Support Sponsor / Senior Users to monitor and report benefit delivery against KPIs.

### **8.3 Other Considerations**

There are a number of other actions that should be considered for future projects and staff development:

#### **8.3.1 Consider Predictive vs. Adaptive Project Approaches**

The Business Community will continue to demand more flexibility and a faster approach to delivery. The suitability of adaptive or predictive approaches to delivery should be considered and selected as appropriate for each project. The project management method will also need to cater for the different approaches, with adaptive project management requiring more leadership skills and less task management, more flexibility over scope and tighter control on timescales and cost.

#### **8.3.2 Consider Introducing Commercial Costing Models to Identify the real cost of Projects**

The true cost of a project will include the resource costs of staff working on the project. A cost / benefit case should include the full cost of all resources planned to be working on the project in order to calculate a realistic ROI. It is acknowledged that on-going monitoring of detailed resource tracking may present an unacceptable overhead.

#### **8.3.3 Consider Applying Tools and Techniques to aid the Visibility of Project Status and inform Decision Making**

Example tools and techniques include:

- Cost based risk analysis
- Risk based testing
- Value Trees for supporting decision making for requirements analysis.

Appendix E gives further details of some of the techniques.

#### **8.3.4 Acknowledge the Changing Role of Project Managers as Systems Integrators**

Not only do Project Managers need to exhibit the skills of project management and leadership but the continuing complexity of the technical environment and solution providers is forcing Project Managers to become Systems Integrators. Combining numerous supplier solutions together requires not just technical and business awareness, but complex supplier relationship management skills with inter-supplier dependencies, supplier mergers and acquisitions, back-to-back agreements with sub-contractors, and off-shore working practices will all need to be planned for and managed.

#### **8.3.5 Introduce more Business Project Managers**

Ideally a business project should be led by a Business Project Manager (BPM) from the appropriate business area, providing the business knowledge and drive to implement the project and change management. The BPM would take full accountability and responsibility for the delivery of the whole project with an IT Project Manager appointed as a Workstream Manager responsible for delivering the IT element of the project and reporting into the BPM. In some organisations, experience of running projects is limited to IT Services and in such situations IT will typically take the lead in managing the projects as the risk of an inexperienced PM is often not desirable. Such organisations need to invest in training and supporting its BPMs to gain sufficient experience, part of which can be achieved through partnering them with experienced IT PMs.

#### **8.3.6 Promote Project Success and Customer Service**

There should be more self promotion of achievements by the University of its success in project delivery. ISD need to promote itself as having a 'can-do' service approach in an effort to remove any perception that it is a barrier to project delivery. Customer surveys can be utilised to measure changes in perception.

## 9. Benefits

It is anticipated that if the recommendations and further considerations are adopted there will be clear benefits in terms of the following:

- Improved delivery and credibility for ISD, recognition as an enabler and supplier of choice
- Quantifiable project ROI, resource justification and benefit realisation
- Visible controlled projects with explicit status information for cost, delivery, scope and changes impacting this project KPIs
- Better informed and streamlined decision making
- Improved business engagement and ownership of project issues, impacts and benefits
- Clarity over the definition of projects with the resultant application of the appropriate route to achieving the desired outcome. This may be via a 'Lite', full project route, programme or support framework.
- Recognition of the impact of production support activities on projects resulting in improved resource management, staff morale and delivery for projects
- Longer term, a more consistent approach to project management with the allocation of the appropriate experienced Project Managers from within both IT and the Business.

## 10. Next Steps

Implementation of recommendations and considerations should be made on an on-going basis in order not to impact negatively on existing project and service delivery. It is recommended that the immediate next steps should be:

- Review resource management, in particular the multi-roles of Projects Managers and the impact of production support responsibilities
- Review the Governance structures for future and long term projects, ensuring there is only one Project Board and that it is a small effective decision making body
- Amend Project Proposal Templates and reiterate the importance of the document with both IT staff and the Business. Ensure they all formally signed-off in the future.
- Review other templates and toolkits available to gain quick win low cost solutions. Amend the handbook as appropriate.

24 March 2011

Mr J. Colam-French  
Director of Information Services  
The Library  
University of East Anglia  
Norwich  
NR4 7TJ

Dear Jonathan,

**Assignment 1266 – Review of Project Management within ISD**

Following my recent visit to the University of East Anglia accompanied by Lesley Reed and our meeting with you and Duncan Westlake (Head of ISD Secretariat), we set our understanding of your requirements for a review of Project Management within the Information Services Directorate (ISD).

**Background**

Following the development of a five year Information Strategy in 2003 a Project Management method was introduced into ISD in order to support the implementation of the strategy. The Project Management method was based on PRINCE2 but tailored by the NCC Group to meet the needs of ISD. This method has been in place and used within ISD for the last eight years with only minor changes applied. During this period the types of Corporate Information Service projects undertaken by the unit has largely moved away from software development towards the implementation and configuration of 'best of breed' package solutions.

The majority of Project Management activities are undertaken by Technical Leads who fulfil dual roles, but a recent successful joint project with City University was managed by a dedicated Project Manager. This success, in contrast to a less successful recent SITS Time Tabling project has prompted a review of the Project Management method and its application within ISD.

**Terms of Reference**

Against this background you have asked SUMS Consulting to:

“Review the Project Management method applied to current and recent ISD projects and bring forward proposals for changes to the method and its application that will provide the basis of an efficient and effective Project Management framework for the delivery of future projects.”

**Scope of Work**

The review will focus on the projects and Project Management method used within ISD. It will cover the full lifecycle of a project from pre-initiation to post-implementation. It will not include assessing any Systems Development or other Project Management methods, production support processes or technical deliverables produced or used by the University.

## **Approach**

In undertaking the study we will:

1. Agree with you a small number of current or recent projects that are representative of the diversity of projects undertaken by ISD for review.
2. Draw upon data and information provided by you; this will include details of the Project Management method applied, any project Governance processes and samples of Project Management documentation from the selected projects.
3. Undertake one-to-one meetings with nominated staff who will include:
  - a) Key Business Owners / Project Sponsors
  - b) Project Managers
  - c) A small number of project team members
4. If subsequently we feel that it should become necessary to meet other connected people we will agree this with you prior to any meetings.
5. Draw upon our previous studies for other universities and best practice from outside the HE sector.
6. Identify opportunities for improvement to the Project Management method and its application.
7. Feedback our findings to you through a summary slide presentation.
8. Prepare and deliver a brief report detailing our findings and proposals.

## **Staffing and Timing**

Duncan, will be our primary point of contact; we will liaise with him to agree project selection, attendees for the interviews and for information provision. We will use Vicky Payne as the contact for administrative purposes to arrange and organise meetings and to book appointments. We will require office space where notes can be written up between meetings and temporary access to the University of East Anglia intranet during the assignment would be useful.

The review will be undertaken by Lesley Reed, under my overall direction. We will start the review during April and would anticipate delivering our presentation by the end of June subject to the availability of interviewees.

In accordance with our normal practice, we would ask that staff and trade union representatives are briefed on the review prior to our beginning the work.

We look forward to working with you on this study. In the meantime, please do not hesitate to contact me if you have any questions.

Yours sincerely

Bernarde Hyde

cc Duncan Westlake (University of East Anglia)  
Lesley Reed (SUMS Consulting)

**List of Contributors****Appendix B**

University of East Anglia contributors.

Jonathan Colam-French	Director of Information Services
Duncan Westlake	Head of Secretariat (ISD)
Richard Harvey (UEA London)	Dean of UEA London
Mark Jones (UEA London)	Systems Developer (ITCS), UEA London PM
Pete Andrews (UEA London)	Head of Networking Services (ITCS)
Jon Woodley (UEA London)	Head of Systems (ITCS)
Joanne Champeney (ESD)	SIS Application Support Advisor (ITCS)
Catherine Baker (ESD)	User Services Manager (LIB), ESD PM
Andrea Blanchflower (SIS)	Director of University Services (REG)
Michael Mcgarvie (SIS)	Senior Assistant Registrar (ACAD)
Laura Thompson (SIS)	Admissions Manager (MAC)
Emma Koro (SIS)	Head of Application Support & Analysis (ITCS) – SIS PM.
Ben Petley (SIS)	Application Specialist (ITCS)
Alex Swain (SIS)	Application Specialist (ITCS)
Jonathan Richardson (SIS)	Assistant CIS Director (ITCS)



**Office of Government Commerce (OGC)**

The Office of Government Commerce (OGC) supports the development of methodologies, processes and frameworks, and establishing these as best practice. These include ITIL, the most widely accepted approach to service management in the world, PRINCE2, a world leading project management methodology, Managing Successful Programmes (MSP), Management of Risk (M\_o\_R), Portfolio, Programme and Project Offices (P3O), Management of Portfolios (MoP), Management of Value (MoV) and the Portfolio, Programme, and Project Management Maturity Model (P3M3).

The OGC work with TSO (The Stationery Office Ltd) as official publisher, and APM Group (as official accreditor) to provides publications, training, qualification schemes and consultancy services.

For more information visit: [www.best-management-practice.com](http://www.best-management-practice.com), [www.tso.co.uk](http://www.tso.co.uk)

**APM Group**

The APM Group provide accreditation and certification services with Approved Software Vendors, and Accredited Consultancy and Training Organisations and offer professional qualifications in Programme and Project management with third party independent accreditation through the United Kingdom Accreditation Service (UKAS).

For more information visit: [www.apmgroupltd.com](http://www.apmgroupltd.com).

**DSDM Consortium**

The not-for-profit DSDM Consortium, founded in 1994, operates on a collegiate model and is the custodian of DSDM®, an Agile Project Framework. Atern® is the latest version of DSDM that is free to view and provides the governance and rigour along with the agility and flexibility demanded by organisations today. Atern can be used either stand-alone or combined with other recognised methods such as PRINCE2®, MSP® and PMI.

For more information visit [www.dsdm.org](http://www.dsdm.org)



# Programme or Project Board Report Template

# Appendix D

Strictly Confidential

Programme XYZ (Draft as @ 22/03/08)

The University

Current Status: **R**

Status Next Reporting Period: **A**  
(Projected)

KPIs:  
Last Week  
This Week  
Next Week

Cost	Dependency	Delivery	Risk	Resource
G	A	A	R	R
A	A	A	A	R
A	A	A	A	A

Reasons for RAG Status if not Green:		•Planning incomplete for HR changes •Resource availability not confirmed		•Several change requests in progress or expected that will impact budget																						
<p style="text-align: center;"><b>Finance</b></p>  <p style="text-align: center;"><b>AMBER</b></p> <p>Reason For RAG Status – Finance requirements completed, awaiting estimates from external suppliers and computer services</p> <ul style="list-style-type: none"> <li>•Process redesigns commenced</li> </ul>	<p style="text-align: center;"><b>Human Resources</b></p>  <p style="text-align: center;"><b>AMBER</b></p> <p>Reason For RAG Status - HR plan is still under review given the recent estimates from the Suppliers.</p> <ul style="list-style-type: none"> <li>•Requirements complete. Estimates received and plans in progress.</li> <li>•Process definitions started.</li> <li>•Training plans commenced with gap analysis.</li> </ul>	<p style="text-align: center;"><b>Computer Services</b></p>  <p style="text-align: center;"><b>AMBER</b></p> <p>Reason For RAG Status - Have made further progress on reviewing Finance requirements and matching resourcing requests.</p> <ul style="list-style-type: none"> <li>•Database refresh decisions planned</li> <li>•Hardware solution being developed</li> <li>•Automated help desk capability, JR to contact suppliers.</li> <li>•Uncertainty relating to resourcing requirement as estimates not yet complete.</li> </ul>	<p style="text-align: center;"><b>External Suppliers</b></p>  <p style="text-align: center;"><b>AMBER</b></p> <ul style="list-style-type: none"> <li>•Reason For Rag status - CS workstream plan will not be complete until next week. Cannot therefore confirm if delivery can be met until it is reviewed.</li> <li>•Stage 1 activities now complete and in warranty period.</li> <li>•Need to confirm design and whether additional resources are required to do development.</li> </ul>	<p style="text-align: center;"><b>Programme Testing</b></p>  <p style="text-align: center;"><b>RED</b></p> <ul style="list-style-type: none"> <li>• Plans indicate insufficient time to complete disaster recovery testing.</li> <li>• Quality assurance of platform deliveries under discussion</li> <li>• Insufficient experienced testers available.</li> <li>• Requirements for volume and stress testing incomplete</li> </ul>	<p style="text-align: center;"><b>Departmental Implementation</b></p>  <p style="text-align: center;"><b>GREEN</b></p> <ul style="list-style-type: none"> <li>• Cost forecast revised to reflect extension of Programme completed. Resource cost increase minimal (2%). Will be monitored as requirements evolve.</li> <li>Identifying training needs within departments.</li> <li>•Dependency matrix being produced.</li> </ul>																					
Key Deliverables:		Key Issues:																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Deliverable</th> <th>Due Date</th> <th>RAG</th> </tr> </thead> <tbody> <tr> <td>Signed off Finance requirements</td> <td>24/04/08</td> <td>Green</td> </tr> <tr> <td>Hardware design</td> <td>27/04/08</td> <td>Amber</td> </tr> <tr> <td>Training Gap analysis</td> <td>30/04/08</td> <td>Green</td> </tr> <tr> <td>HR requirements</td> <td>15/04/08</td> <td>Amber</td> </tr> <tr> <td>Agreed Finance</td> <td>27/04/08</td> <td>Amber</td> </tr> <tr> <td>Testing resource plan</td> <td>01/05/08</td> <td>Amber</td> </tr> </tbody> </table>		Deliverable	Due Date	RAG	Signed off Finance requirements	24/04/08	Green	Hardware design	27/04/08	Amber	Training Gap analysis	30/04/08	Green	HR requirements	15/04/08	Amber	Agreed Finance	27/04/08	Amber	Testing resource plan	01/05/08	Amber	<ul style="list-style-type: none"> <li>• [A] Reorganisation has created a requirement for several resource changes over the next few weeks.</li> <li>• [A] Required interfaces need to be determined / confirmed.</li> <li>• [A] There are several significant cost uncertainties and omissions that have not been budgeted for and investigation</li> </ul>			
Deliverable	Due Date	RAG																								
Signed off Finance requirements	24/04/08	Green																								
Hardware design	27/04/08	Amber																								
Training Gap analysis	30/04/08	Green																								
HR requirements	15/04/08	Amber																								
Agreed Finance	27/04/08	Amber																								
Testing resource plan	01/05/08	Amber																								
		Key Risks:																								
		<ul style="list-style-type: none"> <li>• [A] If we fail to recruit quickly an effective testing team will need to review options - recommendations require discussion / ratification.</li> <li>• [A] Estimates result in missing milestone delivery. May need to review scope or resourcing options. Planning sessions in progress.</li> </ul>																								
		Costs:																								
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Programme Budget</th> <th>£20.4m</th> <th>Management Reserve</th> <th>£4.5m</th> </tr> </thead> <tbody> <tr> <td>2008 Budget</td> <td>£14.56m</td> <td>2008 YTD</td> <td>£0.56m</td> </tr> <tr> <td>Feb Actual</td> <td>£0.4m</td> <td>2008 ETC:</td> <td>£12.23m</td> </tr> </tbody> </table>				Programme Budget	£20.4m	Management Reserve	£4.5m	2008 Budget	£14.56m	2008 YTD	£0.56m	Feb Actual	£0.4m	2008 ETC:	£12.23m									
Programme Budget	£20.4m	Management Reserve	£4.5m																							
2008 Budget	£14.56m	2008 YTD	£0.56m																							
Feb Actual	£0.4m	2008 ETC:	£12.23m																							
Key Planning Assumptions:		Change requests expected																								
<ul style="list-style-type: none"> <li>• [G] Change of dates of training sessions flexible within departments</li> <li>• [A] No dependency between Finance and HR components</li> </ul>		<ul style="list-style-type: none"> <li>• [A] Additional testing resources will be required</li> </ul>																								



## Project Management Techniques

## Appendix E

### Risk and Action Log

Below is an example template where risks are given actions to mitigate or reduce the risk, and this log is used to manage both the risk and the actions. The RAG status provides an instant view as to the progress of either the action or risk.

Type	Number	Status	Rag	Impact	Probability	Description	Date Raised	Date Closed	Target Date	Owner
Risk	R01977-KY	Open	Green	Medium	Low	The patch from supplier will be delivered as a patch to later version will not impact the scope or timescales of this project	02/02/2004		02/07/2004	
Action	R01977-KY	Open	Amber			Monitor monthly progress reports from supplier to ensure that AS fixes will be delivered in time for system testing cycle 2	26/04/2004		02/07/2004	John Smith
Action	R01977-KY	Open	Green			Request specs for patches from supplier and IA them to ensure test coverage in system testing	26/04/2004	17/05/2004	22/05/2004	John Smith
Action	R01977-KY	Open	Green			Review IA with tester and IA	17/05/2004	25/05/2004	19/05/2004	Mark Armstrong
Action	R01977-KY	Open	Green			Raise internal RfC confirming that this can be absorbed	25/05/2004		27/05/2004	John Smith
Risk	R01992-KY	Open	Red	High	Medium	Application upgrade results in an unexpected performance or operational problems	02/02/2004		03/09/2004	
Action	R01992-KY	Open	Red			Plan for OET and Performance testing. 16/03/04 - Awaiting confirmation if Programme will take forward.	26/02/2004	08/04/2004	26/03/2004	

## Cost Based Risk Analysis

Having identified major risks in a project costs associated with risk impact can be defined. This impact cost can then be multiplied by the likelihood of its occurrence and providing a risk based contingency amount. This risk contingency should be held against the project by the Project Board and used to address known risks if they occur. As a project progresses and the risks are actively reduced this contingency amount can decrease. If however a risk becomes an issue, cannot be resolved and results in a change request, this contingency amount can be utilised to fund the change.

ID	Visibility	Risk Commentary / History	Risks Description	Date Raised	Risk Owner	Impact Description	Strategy	Mitigating Action	Target Date	Likelihood (%)	Impact (H/M/L)	Cost Impact (£K)	Priority (1-25)	Contingency Allowance (£k)	Status
R1	Programme Board		Separate project not approved to provide the performance test preparation	22/12/2003	Project Manager	Project bears cost of performance test preparation	Contingency	Programme Managers need to escalate to Programme Board. Checkpoint at end of March.	End March	70%	H	£150	16	£105	OPEN
R2	Project Board		First client to implement package on new infrastructure specification	22/12/2008	Project Manager	Possible unforeseen problems due to application problems on the new infrastructure	Reduce	Installation testing should identify major problems. Core testing should identify application / infrastructure issues	End March / End May	45%	H	£150	8	£68	OPEN
R3	Project Team		Application upgrade results in an unexpected performance or operational problems	22/12/2008	Project Manager	Additional resources required to assess and resolve problems, causing delay in implementation	Reduce	Full regression test on new infrastructure. Supplier to support	End May	25%	H	£150	8	£0	CLOSE
R4	Project Board		Timescales for enhancements may be impacted by unforeseen complications	22/12/2008	Project Manager	Increase timescales over and above planned time or resource usage	Contingency		Mid May	25%	H	£150	8	£38	OPEN

## Risk Based Testing

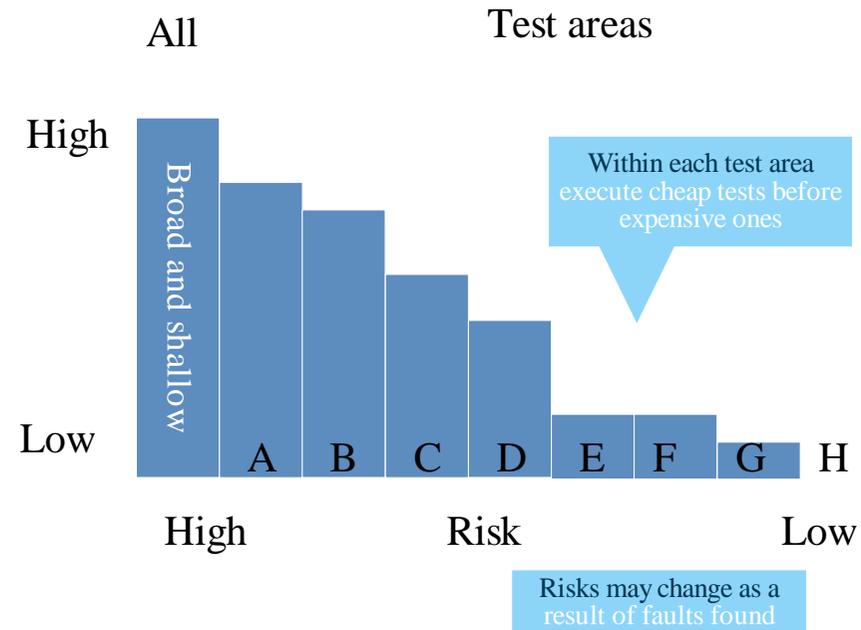
The risk-based test method is an attempt to use early risk analysis to connect the concerns and objectives of the Business (and therefore the project) to the test process and the activities of project testers.

For each functional area or process identify the importance of that item and assign a rating to it, based on its occurrence, the impact of it failing, how complex the area is and the likelihood of it going wrong. For example, yearend processing may only occur once a year, but it has a high impact if it goes wrong, is a complex area, but if the functionality has been used in other universities the likelihood of it failing is low.

<b>Project</b>	Project Sample				
<b>Completed By</b>	J Hanmer				
<b>Version</b>	0.1				
<b>Date</b>	18th May 05				
	<b>Business Criticality/ Volume Rating</b>	<b>Visibility / Impact Rating</b>	<b>Technical Complexity Rating</b>	<b>Likelihood Rating</b>	<b>Overall Rating Rating</b>
<b>Subject of Risk</b>					
<b>Products</b>					
Prod 1	H	H	H	H	C
Prod 2	C	H	L	L	C
Prod 3	H	H	L	L	M
<b>Test Entity</b>					
Prod 1 SL Initial Comm	C	H	L	L	C
Prod 1 JL Initial Comm	C	H	L	L	C
Prod 1 ML Initial Comm	M	H	L	L	M
Prod 1 SL Comm Sacrifice	L	H	L	L	L
<b>Functionality/Transaction</b>					
Switching	H	H	M	L	H
Change of Address - UK	M	M	L	L	M
Change of Address - OS	L	M	L	L	L
Death Claim	C	C	H	M	C

## Risk Assessment

The amount of effort given to test preparation and execution must be relative to the assessed risk of that area. Low risk area may require less scripted work, with only conditions and exploratory testing, whereas high areas of risk require more rigour both in preparation and execution.



**Tailoring effort based on risk**

## “MoSCoW”

A method popularised by the DSDM for determining the priority of requirements:

**M - MUST** have this.

**S - SHOULD** have this if at all possible.

**C - COULD** have this if it does not affect anything else.

**W - WON'T** have this time but would like in the future.

The "Must" requirements are non-negotiable and essential for project success and form a coherent set. Nice to have features are classified in the other categories of "Should" and "Could.

"Won't" acknowledges a requirements as important, but can be left for a future release, impact what is asked for now and allowing designers to possibly see how solutions can accommodate these requirements in a future release.

©Southern Universities Management Services 2011

Copyright in this report is held by Southern Universities Management Services. The commissioning institution is free to copy or reproduce material in whole or in part, provided that the source is acknowledged and it is not used for commercial gain.

Subject to consent having been given to the distribution of the report to other members of Southern Universities Management Services consortium, members may copy or reproduce material for internal use, provided that the source is acknowledged.

The moral rights of the author should be respected in all instances.

This report has been produced for and reviewed by the commissioning institution. The statements and views expressed represent the understanding of the author and the institution arising through the approach described at the time of writing.