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Project Initiation Document

Joint School Computing Service

Project Manager: Alinda Tyler
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1.1 Approvals

Role	Name	Date
SCM Project Lead	Richard Bartlett	
SBS Project Lead	Derek Smith	

1.2 Change Control Record

Date	Changed By	Version	Change
15/10/2014	Alinda Tyler	1.1	4.2 Amended Acceptance Criteria 11.

1.3 Change Control Record for PID Documentation

Date	Document	Changed By	Version
06/10/2014	Project Brief	Alinda Tyler	1.5
06/10/2014	Project Organisation	Alinda Tyler	1.1
08/10/2014	Communications Strategy	Alinda Tyler	1.0
29/09/2014	Product Breakdown Structure	Alinda Tyler	0.5 Draft
18/08/2014	Risk Management Strategy	Alinda Tyler	1.0
n/a	Product Description Template	n/a	1.0
n/a	Quality Criteria Register template	n/a	1.0
n/a	Project Change Request Template	n/a	1.0
n/a	Impact Assessment Template	n/a	1.0

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2. Introduction

2.1 Purpose of Document

The purpose of the Project Initiation Document (PID) is to clearly define the project, in order to form the basis for its management and an assessment of its overall success. The PID gives the direction and scope of the project and (along with project stage plans) forms the base document.

This PID will act as the single source of reference about the project and therefore will be a 'living' document to continuously reflect the current plans, status and controls of the project.

2.2 Project Definition

The Project definition, scope and objectives are described in the Project Brief. The purpose of the Project Brief is to lay-out the project information and understanding to define the scope, budget and timelines for the Joint School Computing Service (JSCS) Project. The Project Brief will ensure there is an agreed, commonly understood and well defined starting point.

The objective of the JSCS project is to enable the review, analysis and creation of potential Technical and Governance & Finance solutions for implementing this service, including its expected benefits, disbenefits, impact and investment required. The project output will be a recommendation comprising of:

1. What services would be delivered, including the infrastructure required
2. What structure may be required to deliver these services, and the skills and experience required
3. A financial and governance model to underpin and support the technical and staffing structure required to deliver the required services

The final recommendation will be offered to the Councils of both Schools for review and consideration.

The scope for this project is restricted to the gathering of all technical requirements which will in turn inform the services that will be delivered, the financial and governance model and result in the final recommendation for the Councils of both Schools. This business case, if approved, would then start the implementation stage.

Please find the Project Brief in the Appendix Authorised Project Brief for the full project details.

3. Project Organisation

The purpose of the Project Organisation Document is to clearly define and establish the project's structure of accountability and responsibilities for the JSCS project.

Please find the Project Organisation Document in the Appendix Project Organisation Document.

4. Quality Management Strategy

To ensure the project is meeting expectations and to enable the desired benefits to be achieved subsequently, there needs to be a focus on the quality of the project's product: a Joint School Computing Service recommendation.

By agreeing acceptance criteria, this will prevent the project to be exposed to major risks such as acceptance disputes, rework, uncontrolled change, user dissatisfaction, etc.

4.1 Quality Expectations

The Joint School Computing Service Recommendation that will be provided to the Councils of the Schools of Clinical Medicine and Biological Sciences needs to comprise of a description of:

- The services to be delivered to best serve the needs of both Schools
- The Systems and Infrastructure required to deliver these services alongside associated costs
- The Skills and Experience required to deliver these services and maintain the Systems and Infrastructure
- A Financial and Governance model to underpin and support the Technical and Staffing Structure required to deliver these services.
- The Financial and Governance model to provide at least 3 options with high, medium and low costs for consideration

4.2 Acceptance Criteria, Tolerances and Measurements

Joint School Computing Services' Mission Statement

"Our goal is to design a service that can embrace change, is able to take advantage of developments in technology, and provides IT Services which are commensurate with the standing of Cambridge as a leading University, in the UK and the world."

To achieve this ambitious goal this Mission Statement is underpinned by Acceptance Criteria which emphasise the need for a computing infrastructure to support world class life-sciences research in the post genome data rich world. The Joint School Computing Service recognises and emphasises the need for a diverse spectrum of provision ranging from basic IT services to a robust infrastructure supporting the needs of data rich research.

The Joint School Computing Service is designed to serve the users interest, strengthen the position of Cambridge as a world leading University and contribute to the continuous improvement of IT service provision by establishing and promoting adherence to high-quality professional standards and ensuring continuous improvements by striving for excellence.

Please be aware that these Acceptance Criteria and respective measurements and tolerances are work in progress. As a result of further project planning activities these will be refined and baselined as more detailed project information is available. In addition, at the end of each management stage the review and acceptance of these Acceptance Criteria will be part of the Steering Group Review to ensure it remains accurate and appropriate.

The JSCS Recommendation (and future implementation):

1) Should provide a service as good or better and to equivalent cost to peer institutions worldwide

"Better service" can be a combination of measuring items 2 and 5, and "equivalent cost" could be covered by 11. Equivalent cost is difficult to measure, even in the UK there is no easy way to compare service costs, spend per fte student is a measure used by UCISA, other statistics for quantitative analysis could include those mentioned in item 11 at https://www.ucisa.ac.uk/~/media/Files/members/statistics/2004/comm04.pdf.ashx and whilst we cannot access it directly we should be able to get the most recent survey results for this. For US institutions (our main non-UK competitors) Educause would be a possible source of data (e.g. https://net.educause.edu/ir/library/pdf/PUB8010.pdf)

2) Must result in meeting the IT needs of all participating Departments and Institutes

Measured by comparing the requirements gathered and prioritised with the existing service offerings, the aim being to deliver all services defined as tier 1 and a % of services deemed as valuable as per tier 2 and 3, with a high level plan to deliver those remaining services not yet met, including budget allocation to cover both capital and operational costs.

The items within Tier 1,2,3 will be confirmed with appropriate definition after the requirements gathering phase.

3) Must result in a Catalogue of Services from which Departments can select according to the specific needs, requirements and finances.
Measured by providing a minimum level of service (cost per head of X), taking a modular approach allowing departments to choose for specific items and respective costs.
This Acceptance Criteria requires more thought. Measurement to be finalised after requirements gathering.

4) Must result in a service catalogue with Service Level Agreements covering resilience, capacity, performance, security and usability.
Measured by industry standard Key Performance Indicators' (KPI's) qualified during the requirements gathering process to ensure what is measured and reported against is meaningful and relate to those services which are key to the function of both Schools. Service uptime, capacity per user/group/department, performance levels measured per service (e.g. network throughput, first response to incident etc.)

5) Must provide service uptime of 99.9% for both Schools subscribed to the JSCS
Measured by service availability, not specific system uptime but service uptime (e.g. email was available as measured by availability of service web page (webmail), service protocols (HTTPS, IMAP, SMTP) and mail flow tests).

6) Must result in a service that can grow its existing capability and expand in new areas as needed.
Measured by the creation of a capacity plan, which states current requirements in terms of predicted and measured usage, projects growth based on requirements gathering, and a plan for how the underlying infrastructure will continue to grow to meet that predicted demand, including capital and operational costs and staff resources. Also measured by commitment of a proportion of staff resources to proactive work which will lead to the expansion of the capacity or capability of the service, whose role will explicitly include comparing the service to partner or peer institutions worldwide to look for opportunities to improve. This doesn't guarantee the service will grow, but it should be measurable that there is a capability which would allow it to.

7) Must result in a management structure allowing for continuous improvement, training, striving for excellence
Measured by the identification and creation of key roles within the new team which will fill industry best practice roles and functions which in turn will allow for continuous improvement. Those roles would include individuals responsible for Business Relationship Management, Demand Management and Continuous Service Improvement (CSI), who between them identify and/or predict customer need and demand, measure the performance of the services and design improvements to processes, services and infrastructure.

8) Must result in a clearly defined overview and description of minimum level of experience and competences (such as knowing your limits?) required for the JSCS IT jobs
See item 4, we would define a minimum level of experience and competencies per role and grade (e.g. Grade 5 Service Desk Technician) which would go into the PD33 of each member of the team.

9) Should provide expanded skill sets and increased development opportunities for staff
Measure increased development opportunities:
Measured by number of training courses available to staff per year, measured by achieving specific skill

levels, possibly measured by certification, measured by progression of staff as tracked by appraisal process. Could get some HR input on how you can measure this.

Measure expanded skill sets:

Measured by measuring skills of the two separate teams at formation of JSCS and then post-formation, using the SFIA skills matrix (it lists 96 professional skills and 7 levels, see http://www.sfia-online.org/about-sfia/what-is-sfia/). Note this framework includes professional skills, knowledge, experience and qualifications, AND behavioural skills (which addresses DS point about knowing your limits, when to escalate etc.)

10) Should result in a Financial and Governance model enabling the JSCS to be implemented and allow for growth and investment.

The design phase will identify the capital and operational (including staff) costs of providing the service, so measuring the financial model would involve comparing those initial and projected costs with the income the model will deliver. Measuring the governance model is covered under item 7 and 8 (measuring the result).

11) For existing CSCS Users, should enable further economies of scale and consequently an expanded catalogue of services.

Measured either by cost per service (comparable with current CSCS service catalogue), cost per head (based on service subscription or just a calculation of total cost of all services divided by fte), or using cost per service where the service has a quantitative measurement, e.g. storage costs X per GB per year, or CPU cycles per GB per year for HPC. Support Services could be compared based on committed or achieved service levels (e.g. uptime, first response time, fixes time) compared to cost per fte or per head per year.

This Acceptance Criteria requires more thought and will need to be finalised.

4.3 Benefits

The potential and expected benefits for the School of Clinical Medicine (SCM) include: further economies of scale, improved service resilience, expanded skill set and consequently an expanded catalogue of services at a lower unit cost.

The potential and expected benefits for the SBS include: access to a catalogue of standard desktop IT services, access to a more robust support service, improved service resilience, improved economies of scale and increased development opportunities for staff. A more detailed benefits analysis will be carried out in the Project Initiation Phase.

4.4 Quality Control

The objective of quality review is to assess the conformity of the products, involve the key interested parties in checking the products quality and promoting wider acceptance of the product. It will also provide confirmation that the product is complete and ready for approval. Once approved, the product is baselined for change control purposes.

Control

The project will control the quality of the project's products by completing Product Descriptions for all the defined project deliverables. Please find enclosed the Product Description Template in the Appendix.

The Product Description will govern the development of the products and their subsequent review and approval. The level of detail in the Product Description will provide a secure and appropriate measure of control sufficient to fulfil the quality expectations and acceptance criteria. It will include the quality specifications that the product must meet, and the measurements that will be applied by those inspecting the completed product.

Records and Reporting
Once all the project products and Product Descriptions have been completed, all the quality events required will be logged in the Quality Register. Please find the Quality Register template in the Appendix.
The register will show all the quality events planned, undertaken and outcomes and will be maintained and updated throughout the project.

Once products have been approved, this will need to be recorded through a formal 'sign off' email from the approver to the Project Manager.

Quality Methods
The quality approach the JSCS project will be taking for the majority of the products is the 'In-Process' quality method which means they are built into the products as they are developed. This will include piloting exercises and use of quality inspections during the development as well as on completion.
Once the product is completed, the 'Appraisal' method will be used to assess whether the product is complete and fit for purpose. The appraisal method will include quality inspection/ testing and quality review. Which method is used will be defined when completing the Product Description.

Planning
The quality checking for each Product Description will be planned for as part of the Project Stage Planning to ensure there is sufficient time set aside for the review and approval of completed products.

5. Change Management Strategy

When there is a change to the base lined project scope, there are project controls to effectively manage any change. A formal Project Change Request will need to be raised to the project after which an Impact Assessment will be carried out in order to identify the impact on the contractual agreements, project quality, timelines and budget.

When the Project Change Request has been reviewed, agreed and signed off by the Steering Group all appropriate project documentation will be updated to reflect the change to project scope.

Please find enclosed the Project Change Request Form and Impact Assessment for reference in the Appendix Project Change Request.

6. Risk Management Strategy

The purpose of this document is to define the aims, objectives and approach of the JSCS Project Risk Management strategy as well as to identify the project's attitude towards risk taking.

The purpose of implementing a risk management strategy is to identify, assess and control uncertainty and as a result of that, improve the ability of the project to succeed.
The strategy is to describe how risk management will be embedded in the project management activities.

The Risk Management Strategy is specifically created for the JSCS project and represents the structure required to control and manage the project delivery. The project structure with regards Project Organisation and Risk Management should not have any impact on what is currently in place within both Schools and should not reduce service in any way.

Please find the Project Risk Management Strategy in the Appendix Project Risk Management Strategy

7. Communication Management Strategy

The Communication Management Strategy addresses both internal and external communications and will contain details of how the project management team will send information to, and receive information from.

Please find the Project Communication Management Strategy in the Appendix Communication Management Strategy.

8. Project Plan

The Project Plan document provides a statement of how and when a project's time, scope and quality performance targets are to be achieved by showing the major products, activities and resources required for the project which is used by the Project Board and Steering Team as a baseline against which to monitor project progress stage by stage.

A Stage Plan is required for each management stage and is similar to the Project Plan, however each element is broken down to the level of detail required to be an adequate basis for day-to-day control by the Project Manager. The Stage Plan will be produced near the end of the current management phase and will inform the Project Plan.

This approach ensures that the products required are identified first, and only then are the activities, dependencies, resources and costs required to deliver those products identified which is resulting in project timelines.

Please find the Project Plan and Project Timeline Overview for Project Initiation and Planning in the Appendix Project Plan.

Also please find the first draft of the Product Breakdown Structure in the Appendix. This provides an overview of project requirements for the Technical Phase. The first stage plan that will be created is for Stage 1 'Requirements Gathering'.

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9. Appendix

Section:	Document:
Authorised Project Brief	Project Brief - Joint School Computing Ser
Project Organisation Document	Project Organisation JSCS Current.pdf
Quality Control	Product Description Template - V1.0.xlsx JSCS Quality Register.xlsx
Project Change Request	JSCS Project Change Request Form V1.doc JSCS Impact Assessment V1.docx
Project Risk Management Strategy	JSCS Project Risk Management Current
Communication Management Strategy	Communications Strategy JSCS V1.0 L JSCS Stakeholder Overview Current.pd
Project Plan and Timeline Overview & Product Breakdown Structure	JSCS Project Timeline Overview Revised.pd Product Breakdown Structure V0.5 DRAF