Completion Report

EST080: Estates Helpdesk - Completion Report

Report Caveat

This completion report was originally written by the incumbent project manager, appointed to the project in August 2016. Comments and input have been collated from others.  The report was initially circulated at the end of February 2017, around 4 weeks after the go-live date at the end of January 2017. However, due to the requirement to resolve a number of post deployment issues the project has remained open for a further period of time to ensure the overall functionality and stability of the system.   This having now being achieved and with the requirement to move forward towards the next upgrade of WebCentral, version 23.1 – approval has been received via the Estates Hard Services project board to close the project.

The original report has now been updated to incorporate the activity during the intervening period and these changes will be indicated throughout the report with the tag 'Post Closure Report Update.

A separate lessons learned has been help, with input from the business, IS Applications Project Services, Development Technology, Development, Applications Production Management and the third party supplier.

Objectives Analysis

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| --- | --- | --- |
|  | Objective  (as stated in original Brief) | Objective Status (Achieved / Partially Achieved / Not Achieved).  Commentary. |
| O01 | The new WebCentral browser based module  (On-Demand) will utilise  process flows and will pass faults/requests into a holding queue | Achieved. |
| O02 | The aim is to limit or remove the paper flow using mobile devices. | Achieved.    Paper flow will be eliminated entirely, except as an emergency back-up. |
| O03 | Project will affect a lot of people and is high priority | Achieved.    (This should not have been stated as an original objective). |
| O04 | External company MASS will be involved (we would go through them for any essential modifications) | Achieved.    (This should not have been stated as an original objective). |
| O05 | This project will involve a change in working practice for those reporting and recording faults, and potentially for the internal Trades teams, if the mobile device solution is deemed satisfactory | Achieved.    Mobile device solution implemented. |
| O06 | Requirement to consider implication on current WebCentral licenses | Achieved.    An additional 35 licences purchased. |
| O07 | Roles and responsibilities for this project are key to be identified especially for communication purposes | Achieved.    In early stages of project roles and responsibilities were not well defined, but this was subsequently resolved.    Standard UofE project methodology employed. |
| O08 | Requires a full common strategy for this project which will require training and supporting customers | Achieved.    Substantial training undertaken. |
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Deliverables Analysis

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| --- | --- | --- |
|  | Deliverable  (as stated in original Brief) | Deliverable Status (Delivered / Partially Delivered / Not Delivered).  Commentary. |
| D01 | A detailed set of business requirements, prioritising requirements based on a mandatory, highly desirable and desirable basis, based on consultation exercise. | Delivered |
| D02 | A Gap analysis report detailing recommendations regarding the application being fit for purpose, incorporating any recommendations associated with potential mobile technology. (Listing the mobile devices that are found to be fit for purpose) | Delivered |
| D03 | Conduct a proof of Concept test will be undertaken to ensure that the application can deliver the business requirements | Delivered.    Extensive scenario testing conducted. |
| D04 | Implement the new Web Central based on-demand module. | Delivered |
| D05 | A business change strategy document relating to the product implementation and incorporating the communication strategy regarding the project throughout the university | Not Delivered |
| D06 | Training guides and other material regarding the usage of the new application | Delivered    IS heavily involved in the creation and delivery of training. |
| D07 | Managed delivery of the new Estates Help Desk throughout the University that provides users of the system with automated updates regarding work activity undertaken | Partially Delivered    Decision taken not to switch on email notifications. Project EST092 is delivering a self-service reporting capability. |
| D08 | Introduction of mobile technology to receive, manage and update work related activity that will replace the existing manual paper based activity. | Delivered. |
| D09 | Management Information reporting to enable SLA and associated KPI’s to be managed | Not delivered.    To be delivered as part of EST092/ EST093 reporting projects. |
| D10 | Where appropriate, switch off EBIS Online module / Archibus system, so that users no longer have access once the Project is Live and has been signed off. | Delivered |
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Scope Analysis

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| --- | --- | --- |
|  | Scope  (as stated in original Brief) | Status (Delivered / Partially Delivered / Not Delivered).  Commentary. |
| S01 | The project will look to implement the default ‘out of the box’ WebCentral On-Demand module to replace the current EBIS RepairLine application that is current used to log and manage repairs throughout the University estate | Delivered.    Some customisation has taken place. See section below. |
| S02 | The project will oversee the rollout of the new application throughout the University | Delivered |
| S03 | The project will investigate implementing maintenance related Fault Reporting; general Estates related enquiries; service related activity incorporating Cleaning, Servitorial and Furniture | Delivered. |
| S04 | Consultation with nominated Estates and Buildings personnel and nominated users of the current EBIS RepairLine will be undertaken to determine business requirements for a replacement system, looking into WebCentral module (On Demand). | Delivered |
| S05 | Requirement to determine any license implications regarding the usage of the WebCentral module | Delivered.    An additional 35 licences purchased |
| S06 | A proof of concept will be incorporated within the project to ascertain if the new WebCentral mobile (on-demand) application is fit for purpose and can effectively replace the current paper based.  In reviewing this functionality, there will be the requirement to adhere to the mobile strategy within Estates and Buildings | Delivered |
| S07 | Review of mobile devices and implement , if appropriate (the mobile technology will be supported where required by MASS), e.g. phone, tablet | Delivered |
| S08 | Test system using mobile and non-mobile solution | Delivered |
| S09 | External consultancy will be utilised, if deemed necessary, to assist with the Gap Analysis and product configuration to deliver business requirements | Delivered.    Substantial levels of consultancy delivered by Mass Plc. |
| S10 | Due to added activity relating to the WebCentral server, load testing will be undertaken to ensure additional projected capacity can  be catered for to ensure that the infrastructure can cope with potential system demand | Partially Delivered.  Limited Load testing carried out, with co-ordinated manual activity. This was, at best, an approximation of the likely production load. |
| S11 | A sub-project team will be formed under the guidance of a business change manager to mange to the content and circulation of project related communication and associated impact throughout the University | Delivered.    All communications handled by Estates communications dept. |
| S12 | Out of scope items    Software changes to the default ‘out of the box’ WebCentral On-Demand.  Security and Parking related enquiries  Waste enquiries  Financial control enquiries | Partially delivered.  See customisation section. |

Success Criteria Analysis

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| --- | --- | --- |
|  | Success Criteria  (as stated in original Brief) | Status (Achieved / Partially Achieved / Not Achieved).  Commentary. |
| SC01 | Fully defined business requirements | Achieved. |
| SC02 | The delivery of an effective and responsive help desk | Achieved.    This is partially related to the overall Estates Hard services programme, in addition to this project. |

Schedule

The project commenced in August 2014, with the go-live event occurring in January 2017. The overall project schedule from initiation to completion was 31 months.

Milestone History

|  |  |  |
| --- | --- | --- |
| Key Milestone | Baseline Date | Final Date |
| End of Planning | 26/09/2014 | 10/10/2014 |
| Deployment | 05/12/2014 | 25/01/2017 |
| Project Close | 18/12/2015 | 30/06/2017 |
|  |  |  |

Budget Analysis

Budget Evolution

|  |  |  |  |
| --- | --- | --- | --- |
|  | Reason | Date | Budget (days) |
| 1 | Original estimate |  | 95 |
| 2 | The project will now continue to July to enable the proof of concept and set up of dates, consultation and rollout to take place. This has increased the project management and business analysis roles with continuing / additional work. The project team has increased from 6 to 11 to enable increased testing to take place. This covers running more project meetings and there is key involvement from the programme manager in this project too. The breakdown of the increased time will be provided with the revised milestones during February. | 29/01/2015 | 145 |
| 3 | The project has been re-planned and re-estimated based on receipt of the latest configuration enhancements on 27-Nov-15.    As a result it has been identified that an additional 35 days are required to complete the remaining work load. Currently 11 days of this have already been spent by the PM and Dev Tech due to delays to reach the current point.    The additional 24 days are required to ensure that the PM and Dev Tech can monitor, support and implement the work required | 3/12/2015 | 180 |
| 4 | Due to the on-going delays to resolve the outstanding issues, there has been the requirement to re-estimate the project budget to complete the project deployment.  For information, the revised project milestones have been previously agreed (ref. PICCL item 29)    The project sponsor and programme manager have approved the increase of 37 days to the current approved EST080 budget of 180, which now brings the revised total to 217 days 15-Mar-16 | 03/03/2016 | 217 |
| 5 | Additional project manager time - 20 days    Additional Development time to incorporate additional monthly billing, archiving and changes to exiting reports - 13 days    Additional support from Development technology - 4 days | 20/07/2016 | 254 |
| 6 | Additional project manager focus, now that the project is a P1.  - Management of a key supplier is moving from Estates to IS.  - Additional focus from Dev Tech to sort out snagging issues.  - Additional effort required to focus on data archiving / deletion as a means to increasing transaction performance.  - Additional resource required to cover extension of project milestones. | 22/08/2016 | 316 |
| 7 | Effort required for UAT Plan: +7 days  - Effort required for UAT execution mgmt +5 days  - Effort required for Training design +6 days  - Effort required for Training delivery +3 days.  - Effort required to create additional tomcats +6 days.  - Effort required for impact analysis on inventory mgmt changes +3 days.  - PM effort to be increased to cover additional 4 weeks, and to move from estimated 50% to 70% coverage over remaining 10 weeks of project +25 days  - Over-run on existing tasks +10 days. | 06/10/2016 | 381 |
| 8 | Effort required for additional training delivery: +3 days  - Effort required for Load Testing support: +2 days  - Effort required for UAT mgmt: +5 days  - Effort required for additional BA support through pre go-live / go-live / post go-live: +6 days  - Effort required for additional PM support through pre go-live / go-live / post go-live: +4 days    - Effort required for additional Dev Apps support through pre go-live / go-live / post go-live: +4 days  SUB-TOTAL= +24 Days, taking the project from 381 days to 405 days.  - Projected over-run to date (30/11) compared to existing plan: +15 days  Additional days spent supporting training  Additional days spent on project management  Additional days spent on response time issues.   SUB-TOTAL= +15 Days, taking the project from 405 to 420 days.  Re-estimate of remaining IS work conducted +77 days  - Includes coverage for a number of carry-over tasks  - Implement a weekly job to update em\_id  - Implement any longer term performance enhancements.  SUB-TOTAL = 420 + 77 = 497 days.  - (16/12) Additional days added to cover new Estates training requirements.  IS have agreed to supply a trainer for c. 15 training / refresher courses in January +6 days.  GRAND-TOTAL = 497 + 6 = 503 days = rounded up to 505 days. | 07/12/2016 | 505 |
| 9 | Current estimate to complete based on remaining  effort to manage post go-live activities | 24/02/2017 | 550 |
| 10 | Post Closure Report Update  Additional effort to resolve the post go-live deployment issues and close the project | 19/06/17 | 588 |

Final Spend Analysis by team

|  |  |
| --- | --- |
| Row Labels | Sum of Actual Effort/1d |
| Application Dev | 76 |
| Application Mgmt | 24 |
| Dev Technology | 125 |
| Business Analysis | 135 |
| Project Mgmt | 225 |
| Technical Mgmt | 2 |
| Grand Total | 588 |

Final Spend Analysis by Phase

|  |  |
| --- | --- |
| Row Labels | Sum of Actual Effort/1d |
| Build | 344 |
| Initiation | 1 |
| Overhead | 97 |
| Implementation | 73 |
| Post Implementation | 73 |
| Grand Total | 588 |

(For further spend analysis refer to the following document - K:\ISAPPS\csg\projects\EST080\90-Close and Completion\ EST080 Asta Project Extract @ 2016-02-13.xlsx)

Spend with Supplier

The original brief mentions a 5k spend on consultancy

|  |  |
| --- | --- |
| Row Labels | Sum of Revised Value (incl. VAT) |
| Consultancy | 9,760 |
| Consultancy | 9,760 |
| Data | 27,073 |
| Data clean-up | 21,074 |
| Data Migration | 5,999 |
| Licences | 13,127 |
| Licences | 13,127 |
| Software Development | 63,548 |
| Archibus Client | 8924 |
| Legacy | 13,738 |
| WebCentral | 50,415 |
| (blank) |  |
| Grand Total | 123,037 |

A further breakdown of Software development costs: -

|  |  |
| --- | --- |
| Row Labels | Sum of Revised Value (incl. VAT) |
| Software Development | 63,548 |
| Archibus Client | 5,578 |
| Parts List / Reorder List | 900 |
| Views | 4,678 |
| Legacy | 17,084 |
| EBIS On-line | 13,738 |
| Monthly Billing | 3,346 |
| WebCentral | 50,415 |
| BOC - Stop/Close button suppress. | 3,952 |
| Building operations console | 1,388 |
| Employee No Change EIT no ref | 5,280 |
| Mobile Framework Goods+Parts restructure | 24,748 |
| Parts cost calculation | 4,951 |
| Weekly em\_ID update | 3,913 |
| Dynamic Stock Updates | 6,184 |
| Grand Total | 73,078 |

(For further PO analysis refer to the following document - K:\ISAPPS\csg\projects\EST080\30 MASS specs and costs\Mass Purchase Order Register 2017-02-22.xlsx)

A further purchase order for £3,162 has been placed to enable credit notes associated with archived work requests to be processed.  This is scheduled to be delivered w/c 3rd July.

Issues

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| --- | --- | --- | --- | --- | --- |
|  |  | Impact\* | | |  |
|  | Issue | B | S | T | Details |
| I01 | Nature of the project: Business led vs. IS led | X | X | X | The project was initially viewed as a business only project, with assistance from a supplier but with very limited support required from IS.  This has proved not to be the case.    With hindsight, earlier and more substantial involvement from IS Apps Dev would have massively benefited the project. |
| I02 | Impact of existing, legacy systems | X | X | X | The impact of the new helpdesk system on existing systems such as EBIS on-line and Archibus client were not well understood.    A comprehensive impact analysis across all impacted systems was never conducted during the design phase.    This has led to numerous pre-live and post-live issues. For example, we discovered database triggers that had existed in the live environment for many years, and under certain circumstances these were not logically compatible with the new Helpdesk system. This caused failures in the live system. |
| I03 | Big Bang Migration |  | X |  | A phased migration was initially proposed and discussed with both Estates and Mass.  However, due to a combination of time pressures and the requirement to incorporate the revised structure from the hard services review running in parallel, the decision was taken to go with a ‘big bang’ migration  e.g. go live with new system in all 5 zones in one go.  This led to a significant amount of risk management activity around the go-live event.    A phased migration would have had a far better risk profile, and minimised any possible impact to the business. However, it would have required a more complicated technical, and business solution. |
| I04 | Deletion / archiving | X | X | X | For performance reasons, the requirement to add deletion and archiving into the project scope was taken decided late and well into the build phase of the project.  Archibus data had never been deleted, with records up to 15 years old present. Data had also never been archived, thereby was not taking advantage of the active/history table partitions within Archibus.    This added a substantial layer of complexity to the project. |
| I05 | Infrastructure Architecture | X | X | X | The infrastructure was designed with a single tomcat instance supporting both CAD (Mobile) and non-CAD (Desktop) access. This caused a number of complex technical issues related to EASE authentication.  Eventually a dual tomcat solution was installed which rectified the issues.  The project was unaware of this requirement at the outset. |
| I06 | Release Management |  |  | X | Throughout the build phase of the project, there have been a number of issue with receiving software files from Mass and successfully installing them in our DEV / TEST environments.  An agreed and robust release mgmt process is required so that the following basics can be covered:  - Define bill of materials for software and other components being delivered.  - Full instruction on how to implement.  - Confirmation from supplier that change has been installed correctly.  - Accurate maintenance of configuration mgmt items across all environments. |
| I07 | Environment Management |  |  | X | As part of the go-live event, it was not possible to migrate only those parts of WebCentral that had been modified; the advised course of action was to completely replace Webcentral LIVE with TEST.    In addition, we could not guarantee that DEV and TEST were synchronised. A complete copy of TEST was installed in DEV.    It should be possible with better environment, configuration and release mgmt to move to a more normalised situation where changes only are copied into LIVE. |
| I08 | System performance | X |  | X | There were a number of concerns regarding the performance of the system, exposed before and during load testing.    The important resolution actions applied:  1. Alteration of Oracle DB parameters.  2. Suppression of all possible email activity.    Performance remains a concern, but is considered acceptable. Performance gains are claimed for the next upgrade (version 23.1), but this must be verified.    In addition a performance patch to Oracle has been recommended. See post project enhancements. |
| I09 | Budget / Scope Creep | X | X | X | The original budget for the project was 95 days, with the actual spend coming in at over 500 days.    The original supplier spend was estimated at 5k, with an eventual cost of c.113k.    The eventual cost of the project therefore bears no relation to the initial estimate.    In terms of scope, a number large items have been added in to the project over time and at the request of Estates. See I11. |
| I10 | Reliance on Supplier |  |  | X | We have relied upon a single implementation partner (Mass) throughout the project.  There have been some issues getting the attention required from Mass, however less so in the last 6 months, after a supplier single point of contact was appointed.    Generally speaking the relationship needs to be more professional and better defined. There was no separate project budget established with Mass. |
| I10a | UAT quality |  |  | X | A comprehensive UAT was not conducted on all aspects of the systems, particularly the satellite and legacy functions. This has led to some post production issues that could have been prevented. A high quality and comprehensive UAT planning and execution process should become a feature of future Estates projects. |
| I11 | Business Resources for Testing / Training | X | X |  | A number of tasks that had originally been identified as the responsibility of Estates were handed over to IS. These included:  - Creation of UAT test plan  - UAT management  - Creation of training material  - Training delivery  - On-site go-live support  IS demonstrated a high degree of flexibility and capability in being able to fill cover these tasks at short notice. |
| I11a | Estates Financial processes. | X | X | X | Scope changes occurred during project, to include Monthly Billing and other financial processes. |
| I12 | System Administration Training | X | X |  | This was not fully defined at the outset of the project to deliver the business requirements. |
| I13 | WebCentral Licensing | X |  |  | There is currently a limitation within Archibus whereby the mobile application cannot function through single sign-on via EASE.    If and when Archibus resolve this issue, this will greatly impact on the current licensing model as we in effect currently have 135 free licenses. |
| I14 | Overlap with other Projects |  |  | X | There were a number of parallel estates projects that were competing for the same business resources, and ended up competing fro the same people.  EST091 – Cold Fusion upgrade  EST083 – Financial mgmt process review  EST092 – Operational Reporting |
| I15 | Estates Resource Availability |  |  | X | Lack of Estates resource reported at early/mid project stages. |
| I16 | End-state solution misaligned to business goals |  | X |  | Several changes to designed solution raised post go-live.  Heavy change management load post implementation. Estates and IS resource and prioritisation challenges. |
| I17 | Solution Supportability |  |  | X | Lack of solution documentation intellectual property held outside.  Inability to take full control of solution support. Over reliance on supplier. |
| I18 | Communications |  |  | X | Concerns raised re lack of understanding of project updates. |

\*Impact B/S/T = Budget/Scope/time.

Customisations

The table below provides an analysis of the software development effort.

|  |  |  |  |
| --- | --- | --- | --- |
| PO No | Sub-Category | Short Description | Long Description |
| 345956 | WebCentral | Mobile Framework Goods+Parts restructure | Goods and Parts Restructuring o Contract and Goods Order Input Screens to accommodate Work Request ID’s o Revert to standard ARCHIBUS parts table (pt) and remove links to (npt) · Mobile Framework Development o Risk Assessment Function o Gas Questionnaire Function o Building Name Search/Display Function o Repair Type Estimated Time/Cost Function |
| 349900 | WebCentral | Employee No Change EIT no ref | Employee Data Change o Display Employee name and number merged together o Increase field length to 64 characters · EIT Number Amend o Include a manual entry box for EIT number on Work Request Form o Reference EIT number in Work Request More Information Tab |
| 350694 | WebCentral | Mobile Framework Goods+Parts restructure | See PO 350694 |
| 354381 | WebCentral | Parts cost calculation | D) Parts Cost Update VAT and 14% uplift Modify Standard WEB Central parts cost calculation to include VAT and 14% mark up. This will be handled using a trigger to update the costs on a completion of a work request. |
| 359079 | Archibus Client | Views | Create Purchase Order Views Create Invoice Views |
| 359766 | WebCentral | Building operations console | Web Central Building Ops console Repair Type Configuration to only display Repair Types linked to the selected problem type. The components of our solution, which are also included in the attached quotation, are as follows: Development Configuration Services to Include:·Customisation of the Web Central Building Ops Console Repair Type |
| 360114 | Archibus Client | Parts List / Reorder List | There are 2 reports in use that need removal of all references to the NPT table, to be replaced by PT :- - Stock List - Re-order List |
| 360875 | Legacy | EBIS On-line | Remove use of NPT table from EBIS on-line |
| 361871 | Legacy | EBIS On-line | Remove use of legacy timesheet tables from from EBIS On-line. |
| 364939 | WebCentral | Weekly em\_ID update | Create weekly job to correct contents of em\_ID, upon update to employee name. |
| 365366 | WebCentral | BOC - Stop/Close button suppress. | Suppress stop/close buttons on BOC console |
| In-house | Legacy | Monthly Billing Process | Modify existing MBP to work with new helpdesk status settings. Include regular archiving. |
| In-house | Legacy | HR Interface | Modify existing HR interface to work with extended contents of em\_id. |
| 366596 | Legacy | Monthly Billing Process | Post Closure Report Update: To overcome the monthly billing process timing out, the process was amended  to cater for the cost calculation trigger to be actioned only when work request status changes to COMPLETED and create a new stored procedure for the cost calculation to be actioned when work request status is set to CLOSED within the live tables |
| 368856 | WebCentral | Dynamic Stock Updates | Post Closure Report Update: Requirement to update local stock dynamically (during mobile synchronisation) to maintain accurate stock counts as opposed to the  original process of updating stock on closing the work request |
| In-house | Legacy | Transfer Invoices | Post Closure Report Update: Requirement to transfer invoices associated with archived work requests to Finance system |
| 370379 | Legacy | Process Credit Notes | Post Closure Report Update: Requirement to process credit notes associated with involves relating to archived work requests |

Key Learning Points

With reference to the Lessons Learned workshop

Workshop Agenda

Workshop Lessons Learned

Post Project Activities

|  |  |  |
| --- | --- | --- |
| No | Description | Detail |
| PP01 | Removal of em\_id name and number logic | The em\_id field was changed to include the name + number of the employee, so that the requestor name would show on the mobile devices. This has caused a number of issues and required a number of unattractive software compromises. This is because the em\_id field is a table master key.  In addition there is a weekly job that correct the name part of em\_id, in situations where a person’s name has changed.  It is expected that Archibus 23.1 will remove the need to populate em\_id in this way as a separate field will carry the name onto the mobile.  This logic should be removed from the system at that point. |
| PP02 | Creation of separate VM containers | Now that a more significant business service is being hosted on Webcentral, Technical management have stated that the WebCentral service should be hosted on dedicated servers.  This would give a better support profile. |
| PP02a | Convert to ‘active-active’ configuration for increased Resilience | Existing live infrastructure is active-passive  There is a desire to move towards active-active (with passive DB) for increased resilience.  This may be a challenge however, due to the requirements for shared storage to accommodate drawings. |
| PP02b | Separation of WebCentral transactional and reporting servers. | With the increased importance of WebCentral based systems, consideration should be given to changing the server architecture to separate transactional and reporting functions. The reporting function of WebCentral will only increase over time, as more and more reports are transferred from EBIS on-line, as part of project EST092 and others. An alternative option could be to use the passive DB for reporting. |
| PP02c | Security Review | AFM Account password.  It was commented on a number of occasions that the AFM account password should be changed.    In addition, the CAD URL allows access to the Helpdesk system, usefully bypassing EASE authentication (it was designed this way). However, as a by-product, this allows access to the live system from outside the university e.g. by the supplier.  This should be reviewed and a conscious decision made as to whether this is a desirable situation. There are support advantages to the current arrangement. |
| PP02d | Infrastructure Project | With the various infrastructure items noted above, consideration could be given to a specific technical project which;   Introduced dedicated VM’s for the application servers  Installed load balancing on the application servers to improve performance through spreading the load  A full review of the server file structures to remove redundant files / folders  Document the process flow of all files, especially drawings on the system and their interaction with Archibus client / smart client, EBIS On-Line (if still required),  WebCentral and mobile |
| PP03 | Implement Oracle Performance Bug Fixes | During load testing, a performance related bug was encountered in Oracle 11.2.0.3. A config change was made to circumvent the problem, however there are a number of bugs fixed in patch 11.2.0.4 which would resolve the underlying issue. It is recommended that this forms part of the next upgrade project. |
| PP04 | Refresh of DB in TEST environment | The TEST Database has not been refreshed with LIVE data and configuration for a number of years.  There was a requirement to refresh data as part of EST080 UAT, but was deemed too risky and too time-consuming.  There are also a number of concerns over differences in definitions between TEST and LIVE.  It would be advantageous to do this in a planned way, as part of the next Archibus project.  Clear procedures should be created so that this can be done on a regular basis in future. |
| PP05 | Clean-up Junk files on LIVE WebCentral server | The migration process has copied TEST WebCentral to LIVE    A lot of duplicate/backup files also copied - with no relevance to the live service.    Files should be cleaned up to release space and declutter. |
| PP06 | Improve Webcentral HealthCheck Capability | At the moment, the health check in the Load Balancer is basically just a server up/down check. The LB is not able to notice the error with the application not loading and so is not marking the application as unavailable. Are we able to implement a more intelligent health check that more accurately reflects the status of the application? Not sure if this is because we have configured WebCentral to be active / passive?    See <https://ed.unidesk.ac.uk/tas/secure/contained/incident?unid=06e4ee3ff6dc492fa4f5b96bf7bdea5c> |
| PP07 | Archibus Software Audit | Conduct a full audit on all aspects of the Archibus software installation.    Fully inventorise non vanilla and customised code.    Itemise redundant and obsolete code as candidates for subsequent removal and tidy up. |
| PP08 | Building operations Console behaviour | Acknowledgement message style and location displays differently in each browser  See <https://www.jira.is.ed.ac.uk/projects/EST080/issues/EST080-142>    This is a minor point picked up during UAT. |
| PP09 | License Monitoring | We have not put into practice any process to monitor license usage on both CAD and non CAD URLs.  This could this be added as a recommendation to be undertaken in the next upgrade project. |
| PP10 | User Roles | Assuming that new roles were set up for the new helpdesk functionality, have the old redundant roles been removed.  Recommendation that all historic roles are reviewed and tidied up outside this project. |
| PP11 | WebCentral Navigation | Consider moving to the latest WebCentral screen navigation (Page navigation) from the existing Process navigation setting.  This provides user menu options on a single page as opposed to the current left hand navigation. |
|  |  |  |

Residual Operational Risks

|  |  |  |
| --- | --- | --- |
| No | Risk | Link |
| 29 | System Performance Issues encountered after Go-Live | <https://www.projects.ed.ac.uk/unpublished/project/est080/risks/29>  Post Closure Report Update: This risk has now been closed |
| 44 | Impact Analysis on Legacy applications is incomplete | <https://www.projects.ed.ac.uk/unpublished/project/est080/risks/44>  Post Closure Report Update- Although the system has now been operational for months and continuing to be monitored, the likelihood of any further issues is now considered low. |
| 45 | Essential Helpdesk Reports to be provided via project EST092 will not be available in time. | <https://www.projects.ed.ac.uk/unpublished/project/est080/risks/45>  Post Closure Report Update - The Operational Reports scheduled to be delivered through the EST092 project have now been deployed to the live environment |
| 52 | Monthly Billing Process cannot be run for February | <https://www.projects.ed.ac.uk/unpublished/project/est080/risks/52>  Post Closure Report Update - The monthly billing process has subsequently been run for a number of months. This risk has now been closed |

Outstanding Issues

Post Closure Report Update In closing this project, there are 2 specific items of functionality that will be subsequently be delivered outwith this project, namely;

1. EST080-275: Credit Note processing relating to archived work requests - A fix to the Archibus windows legacy client will be provided

2. IL004 - Improving work flow process for Contract Services work requests whilst awaiting invoices - Requirement to utilise an existing out of the box WebCentral workflow process

 It is noted that a number of the reported issues will not be resolved through a variety of reasons, namely; it has not been possible to consistently replicate the issues by UoE, Mass or Archibus; the decision has been taken not to pursue with a further configuration; the issue solution is scheduled to be delivered as part of the version 23.1 upgrade.

To ensure that such issues are not lost, these items will be transferred to the new project coded EST098, For information, these details relate to

|  |  |
| --- | --- |
| Previous Reference | Description |
| EST080-167 | Weekly update of employee details |
| EST080-254 | History step missing when work request forwarded on |
| EST080-240 | Console performance |
| EST080-170 | Dynamic Risk Assessment wording change - This is will incorporated as part of the version 23.1 upgrade |
| EST080-270 | Enable fault reporter to add comments to the work request |
| EST080-213 | Mobile application synchronisation error containing an attachment |
| EST080-274 | Synchronisation of manually created Webcentral reports to both tomcats |
| EST080-262 | Remove craftsperson from a work request |
| EST080-260 | Mobile application synchronisation error when work request put on hold for parts |
| EST080-268 | Create a work request via the mobile application |

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|  |  |
| --- | --- |
| Estates | IS |
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\* Indicates completion report feedback kindly received and document updated.