

Project Name BMS Upgrade Phase 3

Risk Identification															Current Assessment					Mitigation Plan				Target Assessment						Comments	Notes
Risk ID	Type (Threat/Opportunity)	Status	Date Entered	Risk Title	Risk Event & Cause 'There is a Risk that will happen' 'The Risk is caused due to.....'	Risk Impact 'The impact of the Risk is	Risk Owner	Risk Start	PMO Risk Category	Proximity	Likelihood	Cost	Time	Other	Max	Rating	RAG Status	Management Actions Taken	Management Actions Planned	Action Owner	Review By (Date)	Likelihood	Cost	Time	Other	Max	Risk Matrix	Rating	Risk Status	Comments	Notes
BACS PH3 001	Threat	Open	01/02/2022	COVID	There is a risk that although the UK is reducing COVID restrictions, there will be a spike in cases and further lockdowns may be imposed. Europe cases are also factored in as some parts may come from EU.	The impact of the risk at this stage is a delay during detailed design and equipment lead times		01/04/2022	Programme	RIBA Stage 4	3	2	4	4	34	4000	A	TPI are well versed with remote working following the recent lockdown. Early discussions with suppliers have already taken place and efforts maximised during periods where restrictions have been lifted.	Monitor situation and put plans in place as necessary			2	1	3		3	23	200	G		
BACS PH3 002	Threat	Open	01/02/2022	Supply Chain	Lack of equipment availability due to delays caused by current global supply chain issues	Increased cost or delays in delivery. Missed Shutdowns to carry out works Project Handover Delayed BMS remains at risk for longer period		01/04/2022	Programme and cost	RIBA Stage 4	3	2	4	4	34	4000	A	Additional time allocated for the procurement of equipment (20% time contingency factored in). Discussions with potential suppliers have already taken place	Monitor situation and put plans in place. Consider bulk buying of equipment, particularly any item with silicone chips due to global shortage. As a temporary measure, consider whether there are opportunities to configure existing controllers with new software to maintain programme and replace at later date.			2	2	3		3	23	200	G		
BACS PH3 003	Threat	Open	01/02/2022	Biohazards	Loss of containment (SAPO4/FMDV agent escape) during works Contractors don't follow Institute protocol Field Device work is subject to unforeseen issue	Escape of Biological Agents		01/04/2022	Site	RIBA Stage 5	3	1	3	3	33	400	A	All contractors to complete Bio-Safety induction and sign declaration. PWBCS to be in place for bio-safety critical works with detailed RAMS reviewed by site technical experts. Work to take place when no science in critical buildings or post decontamination if required. Work to take place with SAPO4/FMDV protocols in place (barrier shower/quarantine)	Follow Institute bio-safety rules Appropriate technical review (SWIFT, HAZOP, LOPA), or similar.			2	1	2		2	22	20	G		
BACS PH3 004	Threat	Open	01/02/2022	Contracts	There is a risk that there could be a failure to conclude contract negotiations	The impact is that contract negotiations will need to start with an alternative supplier		01/04/2022	Contract Administration	RIBA Stage 4	3	4	4	4	34	4000	A	Single source justification/agreed to be used for vendor critical work.	Follow rules for Find a Tender Service to ensure fair and complete tendering. Agree through tender stage, the contract model to use so early preparation of contract can be complete to allow sufficient time for negotiations.			2	2	3		3	23	200	G		
BACS PH3 005	Threat	Open	01/02/2022	Planning Consent	There is a risk that planning consent is delayed or rejected	This may impact detailed design and result in major rework		01/04/2022	Statutory Approvals	RIBA Stage 4	2	3	3	3	23	200	G		Early engagement with planning consultant for works involve refurbishment. However, it is not envisaged that planning will be required as all works are based around internal furnishing upgrades rather than installing major plant/equipment			1	2	2		2	12	10	G		
BACS PH3 006	Threat	Open	01/02/2022	Interdependencies with other site projects	There is a risk that other Brooksby, Biggs and CHP projects may delay the delivery of this project as there is an element to bring these onto the centralised alarm system. Delivery timescales may also lead to their alarms not being captured	The impact of this would be delay to delivery schedule. Any delay in Brooksby or Biggs may lead to a delay to configuring all alarms as part of this project.		01/04/2022	Inter-dependencies	Ongoing	4	4	4	4	44	6000	R	An assessment has been made on the delivery timescales of these 3 projects and it is expected that they will be finish much earlier than the point at which the configuration works are required.	Centralised Alarm System delivery: ETA May 2023. Brooksby handover ETA: Q1 FY 23/24, with Biggs handover ETA: End FY 21-22. Both not expected to impact project delivery. Strong governance via Operational Projects Board and internal & external project assurance roles. Pirbright Projects team integrated with site operations processes to ensure deconflicting takes place.			1	3	2		3	13	100	G		
BACS PH3 007	Threat	Open	01/02/2022	Cashflow Profile	There is a risk that any delay would push spend on the project in the next financial year	The impact of the risk is that forecast spend may not be available for this project.		01/04/2022	Funding & Financial	Ongoing	3	3	2	3	33	400	A	Sufficient time has been allocated to the project, which has been shared with potential contractors for the works	Monitor cashflow through project management and raise issues at board meetings.			3	2	2		2	32	40	G		
BACS PH3 008	Threat	Open	01/02/2022	SWIFT	There is a risk that the SWIFT study will identify additional requirements for the project	The impact of this could result in an increase in project costs and/or additional time required in the programme		01/04/2022	Programme and cost	RIBA Stage 5	4	4	3	4	44	6000	R	Early engagement with vendors and specialist consultants has taken place to develop this business case	SWIFT study to be planned at 80 - 90% of detailed design completion to allow time to make adjustments.			2	3	3		3	23	200	G		
BACS PH3 009	Threat	Open	01/02/2022	TPI Resource Availability	There is a risk that TPI's resource may be limited for design reviews, assistance during the project delivery phase and Training during a busy phase of Development Programme Phase 2 (Biggs and Brooksby projects). Delays during shutdown to obtain permits/assistance for site team during shutdown. Potential Human Factors issues to existing systems and processes due to excessive workloads. Possible impact in the occupation of Biggs / Brooksby buildings.	The impact of this could result in delays to obtain approval for designs or completing works due to delays in obtaining permits/permissions to work. Delays during shutdown to obtain permits/assistance for site team during shutdown. Potential Human Factors issues to existing systems and processes due to excessive workloads. Possible impact in the occupation of Biggs / Brooksby buildings.		01/04/2022	Site	Ongoing	4	3	3	3	43	600	A	EMS Programme Manager post created to "project manage" EMS resource and prioritise as required. Additional costs have been allowed for such CDM related works. Liaison and collaboration with BACS team management. BACS team now comprises of 3 staff per shift. SWIFT / HAZOP review of project implementation processes on an operational facility / site.	Human Factors Integration Plan working group chaired by independent Human Factors consultant will act as governance in project delivery. Strong site presence required by Project Management. Site Shutdown processes to be strictly followed. Robust technical (HAZOP / SWIFT) and Human Factors analysis through Human Factors consultant will be required. Project resources plan will be delivered as part of Project Management package, which will be shared with Brooksby occupation resources plan. Project deliverables include all necessary Hardware, Software and configuration to reduce IT staff involvement. RAMS/permits/PWBCS to be completed in good time to reduce risk of not obtaining sign off for works on the day.			2	2	3		3	23	200	G		
BACS PH3 010	Threat	Open	01/02/2022	Technical design	There is a risk that existing control equipment not compatible with international standard Open Platform Communications (OPC) due to age or specification. There is a risk that if an issue arises and the information cannot be retrieved or presented on the centralised BACS system, there will be a conflict of who is responsible for resolving the issue. Alternative option is high risk due to use of Novel technology to deliver WP3.	The impact of this is increased costs, complexity and time. OPC unable to be implemented for all devices leading to project delays and reworking of existing control systems.		01/04/2022	Design & Procurement	RIBA Stage 3	3	4	3	4	34	4000	A	The design of an example Centralised Alarm System has been demonstrated to Pirbright. Detailed design to be completed as part of the project, but initial concept solution allows for open protocol communication across OPC and IIOT. IT infrastructure works being carried out as part of BMS Upgrade Phase 2 Project was specified to accommodate Phase 3 works. All devices specified will allow all system to communicate over OPC. Preferred Way Forward delivered using proven technology.	Ensure detailed design confirms connectivity of any device. Strong governance through Technical Working group, Human Factors Integration Plan group and Operational Project Boards.			1	3	2		3	13	100	G		
BACS PH3 011	Threat	Open	01/02/2022	Disruption to Science	There is a risk that the project may cause disruption to science programmes due to missed shutdowns, excessive planned / unplanned shutdowns and facility unavailability.	Loss of science, grant income, reputational damage.		01/04/2022	Site	Ongoing	3	4	3	4	34	4000	A	Early engagement with senior science staff and Facility Coordinators.	Shutdowns to be agreed with Science and Facility Coordinator to minimise disruption to science activities. Where possible, works will be planned around existing shutdowns. Approach to shutdowns mirrors existing PPM shutdown of individual labs. World Reference Laboratories in the event of an international outbreak labs must be restarted for diagnostics within 4 hours. This mirrors current process during PPM shutdowns.			1	3	2		3	13	100	G		
BACS PH3 012	Threat	Open	01/02/2022	Pirbright IT Department involvement isn't understood.	There is a risk that Pirbright IT stakeholders are not engaged sufficiently leading to lack of knowledge transfer and inappropriate decisions / design regards hardware / software.	Pirbright IT engagement is insufficient. Technical solutions pursued which may not be feasible on Pirbright site within existing infrastructure.		01/04/2022	Communication	Ongoing	3	4	3	4	34	4000	A	Early engagement with senior science staff and Facility Coordinators.	Technical Working Groups will be set up to manage project details and to ensure stakeholder engagement. IT able to advise on hardware and software to ensure integration with current systems and processes.			1	3	2		3	13	100	G		
BACS PH3 013	Threat	Open	01/02/2022	Cyber-Security	There is a risk that resilience, cyber-security and compatibility with pre-existing equipment is not fully understood by the project, or is suitable for a Major Accident Hazard site.	Cyber-security breach, delays to project, additional cyber security risks introduced to Pirbright BMS network.		01/04/2022	Site	Ongoing	3	3	3	3	33	400	A	Early engagement with IT and security. Hardware specified as "High Availability"	Technical Working Group will ensure particular requirements are captured. Early engagement with IT and security.			1	3	2		3	13	100	G		
BACS PH3 014	Threat	Open	01/02/2022	BACS Control Room disruption	There is a risk that site operations may be affected due to BACS Control Room works	There is a risk of additional Human Factors problems during project delivery phase including excessive operator workload, constant changes in BACS environment and head end and a disruptive work environment.		01/04/2022	Site	Ongoing	4	4	4	4	44	6000	R	Early engagement with BACS management team. Draft Business Case has been distributed to entire BACS team.	A Secondary (mirrored) BACS control room will be built by refurbishment of the existing BAC Office in mod 2 and commissioned independently, making the existing BACS Control Room unaffected by the works. Technical Working Group will closely control changeover process.			1	3	2		3	13	100	G		