

BMS Project Procedure

STAGE 2

Step 1: M&E Engineer develops outline BMS design specification for tender purposes

Procurement

Step 2: Imperial College Procurement Team Tender for BMS Engineer

STAGE 3

Step 3: BMS Engineer engaged as ICL Design team member

Step 4: M&E Engineer via BMS Engineer develop Stage 3 Design.

Step 5: Project team issue Architectural plans to College Space Planning Team.

Step 6: Space Team issue room numbers.

Step 7: Information forwarded to M&E Engineer in order to update design.

Step 8: Project Manager obtains and approves User and Maintenance Department alarm requirements, and issues them to BMS Engineer and Engineering Team.

Step 9: M&E Engineer & BMS Engineer present stage 3 controls design at ERM.

Step 10: Exception Reports arising from Stage 3 design to be presented at ERM for review and at TAG for formal approval.

Step 11: Engineering Team review Stage 3 controls design and forward comments to PM, PM to update tracker document.

Step 12: PM appoints BEMS Validation Engineer (internal or external).

Procurement

Step 13: BMS Design document issued for Tendering purposes

Step 14: M&E Contractor proceeds with Tender to appoint BMS Contractor as per procurement procedure.

Stage 4

Step 15: PM to instruct Main Contractor to issue final construction issue floor plans and approved room numbers to BMS Contractor to enable software and graphics to be completed.

- Step 16: Main Contractor via BMS Contractor develops Stage 4 design.
- Step 17: Main Contractor via BMS Contractor presents stage 4 design at ERM.
- Step 18: Exception Reports arising from Stage 4 design to be presented at ERM for review and at TAG for formal approval.
- Step 19: Engineering Team review Stage 4 controls design and forward comments to PM, PM to update tracker document.

Stage 5

- Step 20: Main Contractor completes M&E works and carries out final test & commission.
- Step 21: BMS Contractor completes installation, programming and testing ready for final commissioning.
- Step 22: Main Contractor to confirm all M&E systems are complete, certified, witnessed, operational and stable before offering to the controls contractor for final tests.
- Step 23: BMS Contractor issues final description of operation, MCC wiring diagrams, graphics pages and SET (System Engineering Tool) files to Validation Engineer and Engineering Team.
- Step 24: Validation Engineer carries out 100% check as per Scope of Duties.
- Step 25: Validation Engineer confirms final validation process complete and issues reports to Project Manager and the Engineering Team.
- Step 26: Main Contractor confirms that system is available for Engineering Team witnessing.
- Step 27: Engineering Team carries out 10% check.
- Step 28: Following the 10% witnessing the Controls Contractor adds the graphics files onto the test server for validation.
- Step 29: BMS Contractor issues final documentation and software to the Engineering Team to enable final checks.
- Step 30: Engineering Team issues final report to Project Manager.
- Step 31: Project Manager informs Head of Maintenance and Head of Energy and Environment of state of project.
- Step 32: Head of Maintenance and Head of Energy and Environment inform Project Manager if project is suitably complete for BMS to be handed over.
- Step 33: BMS Contractor adds graphics pages onto main BMS server
- Step 34: Controls familiarisation to be given to Estates Facilities via the project team (Novated M&E Engineer and BMS Contractor) with all appropriate documentation available.
- Step 35: Completion of BMS Controls Granted.