

Project Briefing

Project identifier	
[1a] Unique Project Identifier	[1b] Departmental Reference Number
[2] Core Project Name	<i>BEMS Upgrade Project-CPG Estate – Phase 1</i>
[3] Programme Affiliation (if applicable)	<i>BEMS Upgrade Project CPG Estate</i>

Ownership	
[4] Chief Officer has signed off on this document	Paul Wilkinson
[5] Senior Responsible Officer	James Rooke
[6] Project Manager	Brendan Crowley

Description and purpose								
[7] Project Description								
<p>The City Surveyor's Corporate Energy Team has oversight of the Building Energy Management System (BEMS) which monitors and controls the HVAC plant (& other engineering systems) across the CPG estate. We have commissioned Skanska to conduct a condition survey of 3 of the highest priority sites in terms of business criticality and vulnerability to system failure, these sites make up Phase 1. This is the first phase of a larger estate-wide upgrade BEMS upgrade project. The estimated energy and maintenance cost savings resulting from the upgrade of these sites comes to approx. £83,513/ann. Below is a breakdown of these savings and the total project cost for <i>BEMS Upgrade Project-CPG Estate – Phase 1</i>:</p>								
Site	Est. Savings kWh/ann	Est. Savings £/ann.	Est. Reactive Maintenance Savings £/ann.	Total Est. savings, £/ann.	Estimated Project Cost (excl. Risk)	Total project est. Cost (incl. Risk)	Simple Payback for project	Request for Central Funding
Guildhall East Wing	406,113	£42,008	£11,725	£53,732	£681,000	£749,100	14	£749,100
Walbrook Wharf	115,591	£7,680	£10,037	£17,717	£60,000	£66,000	4	£66,000
LMA	93,848	£6,804	£7,686	£14,490	£81,000	£89,100	6	£89,100
Total	615,552	£59,382	£29,448	£88,830	£822,000	£904,200	10	£904,200
<p><i>Please Note: This project isn't an energy efficiency project, but it will provide energy and maintenance savings as a by-product and is an enabling project for future energy efficiency projects. It is an essential project to ensure continuity of business operations for these CPW buildings. If the current obsolete BEMS fails, the buildings can't be heated/cooled properly, life safety systems could be prevented from working correctly etc.</i></p>								
[8] Definition of Need: What is the problem we are trying to solve or opportunity we are trying to realise (i.e. the reasons why we should make a change)?								
<p>The Current BEMS platform is obsolete, end-of-life & increasingly unreliable. We intend to:</p> <ol style="list-style-type: none"> 1. Mitigate the Life Safety Risk posed by the failure of the obsolete system which monitors &, in some cases, controls the fire & smoke emergency plant with the installation a new, fit-for-purpose BEMS. 2. Mitigate this significant business risk to the Corporation with the upgrade of the system the latest BEMS platform, Schnieder EcoStruxure. 3. Invest in a modern, flexible & easily optimised control system for the CPG estate building assets. Bringing with it improved building energy performance and, as such, supporting the Carbon Descent Plan, endorsed by the Energy Board and CASC. which is committed to achieving 40% energy savings between 2008/09 and 2025/26. 4. Use the new BEMS as a platform to implement further innovative smart building technologies and to allow for integration with other systems e.g. CAFM software, energy management software and lighting controls. 								
[9] What is the link to the City of London Corporate plan outcomes?								
<p>[5] Businesses are trusted and socially and environmentally responsible. [7] We are a global hub for innovation and enterprise. [9] Our spaces are secure, resilient and well-maintained. [11] Our spaces are digitally and physically well-connected and responsive.</p>								

[10] What is the link to the departmental business plan objectives?					
<p>Property assets and facilities management: We will ensure buildings are fit for purpose, sustainable, safe and secure, providing access for all, meeting service needs and community expectations and delivering value for money through enhancing our efficiencies;</p> <p>Links to City Surveyor's departmental programme item 12 to "Implement the new Carbon Descent Plan, developing programme of energy efficiency projects across the Estate" & item 16 to "Deliver a rolling programme of reviews, rationalisation and optimisation of Facilities Management (FM) services, working in partnership with the FM corporate contractors."</p>					
[11] Note all which apply:					
Officer: Project developed from Officer initiation	N	Member: Project developed from Member initiation	N	Corporate: Project developed as a large scale Corporate initiative	N
Mandatory: Compliance with legislation, policy and audit	N	Sustainability: Essential for business continuity	Y	Improvement: New opportunity/ idea that leads to improvement	N

Project Benchmarking:	
[12] What are the top 3 measures of success which will indicate that the project has achieved its aims? <These should be impacts of the activity to complete the aim/objective, rather than 'finishes on time and on budget'>>	
1. Have a fully reliable, resilient BEMS which meets customer needs for the 6 sites selected in phase 1	
2. Have building assets that are optimised to operate as efficiently as possible via a new BEMS platform and via integration with energy management software, resulting in energy consumption savings.	
3. Phase1 being the start of the development of centralised BEMS command centre, where assets on all CPG sites are monitored and optimised centrally by a dedicated BEMS team based at Guildhall.	
[13] Will this project have any measurable legacy benefits/outcome that we will need to track after the end of the 'delivery' phase? If so, what are they and how will you track them? (E.g. cost savings, quality etc.)	
<ul style="list-style-type: none"> The new/upgraded BEMS will be monitored post-commissioning by the Corporate Energy Team to verify it conforms to specification and meets site needs. Any deviations will be raised during the defects period with the commissioned contractor as appropriate. 	
[14] What is the expected delivery cost of this project (range values)[£]?	
Lower Range estimate: £850,000 Upper Range estimate: £950,000	
[15] Total anticipated on-going revenue commitment post-delivery (lifecycle costs)[£]:	
The maintenance of the current BEMS is managed via the building operations contract with Skanska, this will continue for the new system. It is expected that the cost of maintaining a new BEMS will be significantly less due to increased reliability of the new hardware and software.	
[16] What are the expected sources of funding for this project?	
<ul style="list-style-type: none"> Central Funding: £904,200 of funding is requested. 	
[17] What is the expected delivery timeframe for this project (range values)?	
Are there any deadlines which must be met (e.g. statutory obligations)?	
Lower Range estimate: 1/11/2020 Upper Range estimate: 1/6/2023	

Project Impact:

[18] Will this project generate public or media impact and response which the City of London will need to manage? Will this be a high-profile activity with public and media momentum?	
No	
[19] Who has been actively consulted to develop this project to this stage? <(Add additional internal or external stakeholders where required) >	
Chamberlains: Finance	Hazel Lerigo
Chamberlains: Procurement	
IT	David Clelland
HR	
Communications	
Corporate Property	Alison Bunn, Daniel Tyler
External	James Burton (Schneider Electric), Jack Sharpe, (Skanska)
[20] Is this project being delivered internally on behalf of another department? If not ignore this question. If so:	
<p>Please note the Client supplier departments. Who will be the Officer responsible for the designing of the project? If the supplier department will take over the day-to-day responsibility for the project, when will this occur in its design and delivery?</p>	
Client	Department:
Supplier	Department:
Supplier	Department:
Project Design Manager	Department:
Design/Delivery handover to Supplier	Gateway stage: <Before Project Proposal>, <Post Project Proposal>, <Post Options Appraisal>, <Post Detailed design>, <Post Authority to start work>