

CAPITAL INVESTMENT BUSINESS CASE

Life Centre Fire and PA system replacement



EXECUTIVE SUMMARY

The Executive Summary is a short summary of the Business Case and should be the last section you complete, this will enable you to extract or only the key facts from relevant sections i.e. 'project on a page'. The summary is a 'snapshot' of the business case which will need to tell the story and sell the proposal.

The purpose of this business case is to request approval for the existing Fire detection and Public Address and Voice Alarm (PAVA) system to be upgraded and replaced at Plymouth Life Centre.

Fire Alarm System

The system is end of life and has weekly faults causing expensive callouts from contractors to which some issues have been on the system for long periods that they have never fully been resolved. Some areas have been identified to have no fire detection as they were shown to have detection on the as fitted drawings however the devices do not exist in the locations indicated. If the issues are not addressed it could lead to longer activation times, which could cause risk to life in a genuine fire condition.

Proposal is to supply and install new Fire Alarm System at a cost of **£237,831.78** excl VAT

PAVA System

The current system Baldwin Boxall is end of life and the original installation has both A and B lines connected into the same line output which is non-compliant with BS5839-8. In addition the system does not have sufficient spare amplification should a line output fail to re-route the system to compensate for any failures.

Proposal is to upgrade the PAVA and replace the rack to provide a compliant system that will enable resilience in the event of one of the lines failing.

Cost to supply, install, upgrade and commission system is **£87,267.40** excl VAT

To ensure the design and proposal is suitable and sufficient, there is an allowance for technical advice and support from an independent consultant. Costs **£6,970.00** excl VAT

Project contingency allowance has been included at 13%, **£49,810.38** excl VAT

Full works would cost £381,879.56 excl VAT

Non - completion of works puts risk of harm to others and reputation risk to the Council.

SECTION I: PROJECT DETAIL

Project Value (indicate capital or revenue)	£381,879.56 - Capital	Contingency (show as £ and % of the project value)	£49,810.38 -13%
Portfolio Holder	Cllr Chris Penberthy, Housing and Co-operative Development	Directorate	Customer & Corporate Services
		Service Director	Ian Trisk-Grove

Senior Responsible Officer (client)	Kirstie Spencer Interim Head of Service – Facilities management	Project Manager	Ciara Holmes
Address and Post Code	40 Mayflower Drive, Milehouse, Plymouth PL2 3DG	Ward	Peverell
<p>Current Situation: <i>(Provide a brief, concise paragraph outlining the current situation and explain the current business need, problem, opportunity or change of circumstances that needs to be resolved)</i></p> <p>The fire alarm and PAVA systems were installed circa 2010/11 and are approaching end of life.</p> <p>Current Condition of Fire Alarm System All current devices on the Gent system are the original heads and are in an Amber / red state meaning they need to be replaced. The system has weekly faults causing expensive callouts from contractors to which some issues have been on the system for long periods that they have never fully been resolved. There are new faults coming weekly at PCC's / PAL's cost which is compromising fire detection and / or working manual call points which needs to be addressed as the building is high risk with a diverse occupancy. Whilst in general the current coverage is adequate in most areas there are a large number of void spaces above ceilings that lack any detection , which possess a fire detection risk. Some areas have been identified to have no fire detection as they were shown to have detection on the as fitted drawings however the devices do not exist in the locations indicated. If the issues are not addressed it could lead to longer activation times, which could cause risk to life in a genuine fire condition.</p> <p>Current Condition of PAVA System It was highlighted in 2022 that the current system Baldwin Boxall is end of life and the original installation has both A and B lines connected into the same line output. The current BS5839-8 requires both lines to be separately powered to give redundancy should a line output fail so the zone will still have sufficient Sound (DB) levels in the event of a fire alarm. The current system also does not have sufficient spare amplification should a line output fail to re-route the system to compensate for any failures</p>			
<p>Proposal: <i>(Provide a brief, concise paragraph outlining your scheme and explain how the business proposal will address the current situation above or take advantage of the business opportunity) and (What would happen if we didn't proceed with this scheme?)</i></p> <p>Upgrade Proposal for Fire Alarm System The proposal is to install 6 open protocol Advanced panels with Hochiki devices. As this system will be fully open protocol, it will be able to be worked on by any fire engineer should the contract with the existing Fire Alarm maintenance provider not be renewed. All parts will be readily available from multiple suppliers. The current building is wired as 4 loops throughout, the loop loadings and lengths exceed current requirements, therefore the proposal is to split each of the 4 loops into 14 individual loops to meet the load requirements of BS5839-1 2017 and EN54. Due to the number of panels being installed and splitting the current loop wiring the proposal will offer the ability to run both systems at the same time reducing any down time of the fire alarm system. Where an area will not be working for a period of time, radio detectors that will be linked to the fire alarm will be temporarily put in place to give some form of coverage. Should large areas need to be taken out of service, measures will be taken through liaison with the site team, for the potential of a night watch arrangement to be made. As well as replacing all current devices there is the need for an additional 108 devices to be installed throughout the Life Centre to make sure the system is compliant and gives sufficient coverage within the requirements of BS 5839-1 2017 where practically possible. Any areas where it is not possible to fit devices in line with BS5839-1 2017 will be noted as a variation and can be reviewed by the appointed PAL Fire Risk Assessor.</p>			

All areas will have beacons installed which the site only has in assisted WCs.
 Works will be carried out in hours, with an element of out of hours working.
 As fitted and as wired drawings will be updated basing cabling changes against the as built drawings issued for when the building was built.
 Following the installation a full BAFE Gold certificate will be issued and the contractor installing will take full design liability of the system, ensuring it meets the current standard of installation, where the system does not meet the requirements and agreed variation will be noted.

Upgrade Proposal for PAVA system

To make the system compliant in line with the requirements of BS5839-8 2017, the proposal includes for replacement all control equipment and the rack for the PAVA. New Vigil 3 controllers to be installed and new cabling installed from the rack to a new touch screen desk mount microphone station on the reception desk.
 All existing low-level End of Line receivers will be replaced to work with the Vigil 3 system, any high-level requirements will be picked up as part of the fire alarm upgrade works as a business opportunity to reduce costs associated with reaching high areas.

Why is this your preferred option: *(Provide a brief explanation why this option is preferred) and (Explain why this is a good capital investment and how this would be an advantage for the Council) and (explain how the preferred option is the right balance between the risks and benefits identified below).*

The existing fire alarm system has closed protocol meaning it can only be worked on by a Gent licenced vendor and any replacement product (smoke detector break glass) can only be obtained from a Gent approved vendor. In the Plymouth area there is only one company Trinity accredited to complete works on the Gent system.

The proposal is to install and open protocol system that any Fire system company can service/repair and all components are off the shelf locally.

PAVA upgrade works to be completed at the same time to enable efficiencies in working at height works and associated plant hire costs.

Option Analysis: *(Provide an analysis of 'other' options which were considered and discounted, the options considered must be a 'do Nothing' and 'do minimum' and 'viable alternative' options. A SWOT – Strength, Benefit, Opportunity, Threat analysis could be attached as an appendix).*

Do Nothing Option	Abandon project
List Benefits:	Removal of any time and resource implications and risks associated with the design and construction of the project
List Risk / Issues:	Total or part of fire system failure, the life centre would have to be closed until system replaced/repared. If repair is successful there would be no guarantee on longevity. A further failure would mean further closure of life centre. PAVA system would remain non-compliant.
Cost:	
Why did you discount this option	For health and safety reasons Reputational reasons
Do Minimum Option	Replace failing objects
List Benefits:	Reduction in cost
List Risk / Issues:	Areas within the centre still not covered by fire detection, fire detectors located in wrong location and could reduce detection times. The current PAVA system also does not have sufficient spare amplification should a line output fail to re-route the system to compensate for any failures therefore existing risks cannot be mitigated

Cost:	
Why did you discount this option	This approach will not address all of the issue with both systems and still present a risk of failure to detect fire. For health and safety reasons Reputational reasons
Viable Alternative Option	None
List Benefits:	
List Risk / Issues:	
Cost:	
Why did you discount this option	

Strategic Case:	
Which Corporate Plan priorities does this project deliver?	Keep children, adults and communities safe
	Focusing on prevention and early intervention

Milestones and Date:		
Contract Award Date	Start On Site Date	Completion Date
N/A	July 2025	January 2026

SECTION 2: PROJECT RISK, OUTCOMES AND BENEFITS

Risk Register: The Risk Register/Risk Log is a master document created during the early stages of a project. It includes information about each identified risk, level of risk, who owns it and what measures are in place to mitigate the risks (cut and paste more boxes if required).

Potential Risks Identified			Likelihood	Impact	Overall Rating
Risk	System failure and have to close Life Centre		High	High	High
Mitigation	Replace the fire system		Low	Low	Low
Calculated risk value in £ (Extent of financial risk)	£	Risk Owner PAL PCC			
Risk	A fire could break out and not being detected due to system failure or time taken to detect placing building staff and visitors at high risk		High	High	High
Mitigation	Replace system and install additional detection to all areas.		Low	Low	Low
Calculated risk value in £ (Extent of financial risk)	£	Risk Owner			
Risk	Should a PAVA line output fail the zone will not have sufficient Sound (DB) levels in the event of a fire alarm		High	High	High
Mitigation	Replace PAVA rack and upgrade system lopps and cabling		Low	Low	Low

Calculated risk value in £ (Extent of financial risk)	£	Risk Owner			
Risk			Select value	Select value	Select value
Mitigation			Select value	Select value	Select value
Calculated risk value in £ (Extent of financial risk)	£	Risk Owner			

Outcomes and Benefits

List the outcomes and benefits expected from this project.

(An **outcome** is the result of the change derived from using the project's deliverables. This section should describe the anticipated outcome)

(A **benefit** is the measurable improvement resulting from an outcome that is perceived as an advantage. Benefits are the expected value to be delivered by the project, measurable whenever possible)

Financial outcomes and benefits:

Non-financial outcomes and benefits:

As high level scaffolding equipment is required to access beams, this equipment would also be used to complete the high level works to the PAVA system

Less frequent call outs reducing the fees currently being paid due to a faulty system

Ability to go out to market as the open protocol system will eradicate the need to go to one single provider for repairs and replacement equipment.

Safe operating building with the ability to detect and automatically set alarm to warn staff and visitor of the present danger, staff have the ability to place message over the PA system to assist with evacuation

SECTION 3: CONSULTATION

Does this business case need to go to CMT	No	Date business case approved by CMT (if required)	
Did a mandate go via CPOG/CPB		Date Capital Mandate approved by CPB	

Does this project involve a corporately maintained property

Yes

Details of impact of this project i.e. cost saving from this project or additional requirements

Essential Health and Safety works and upgrades

Climate Impact Assessment

Upload Climate Impact Wheel https://pcc-climate-tool.webflow.io/	See attached
Summary of the anticipated impact of the proposal on the climate (including any proposed mitigations and impacts beyond 2030)	

Confirm you have engaged with Procurement <i>(All business cases must be discussed with Procurement prior to submission to CPOG. If Procurement have not been consulted on the procurement route, CPOG may not endorse your project to CPB for approval)</i>	Yes
Who have you consulted with in Procurement/ who is your Procurement lead?	Holly Golden
Where an existing contract is to be used could you include the contract title and reference number	Scutum SW Contract number 21602-8 Detailed quotations have been provided See Quotation No: 29427 for Fire Alarm System and Quotation No: 29749 for PAVA.
Procurement route options considered <i>(Procurement Officer to complete this section only)</i>	
Recommended Procurement route <i>(Procurement Officer to complete this section only)</i>	

Which Members have you engaged with and how have they been consulted <i>(including the Leader, Portfolio Holders and Ward Members)</i>	Chris Penberthy has been made aware of the works required.
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Confirm you have taken necessary Legal advice, is this proposal State Aid compliant, if yes please explain why.	N/A
Who is your Legal advisor you have consulted with?	

Equalities Impact Assessment completed <i>(This is a working document which should inform the project throughout its development. The final version will need to be submitted with your Executive Decision)</i>	Yes
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SECTION 4: FINANCIAL ASSESSMENT

FINANCIAL ASSESSMENT: *In this section the robustness of the proposals should be set out in financial terms. The Project Manager will need to work closely with the capital and revenue finance teams to ensure that these sections demonstrate the affordability of the proposals to the Council as a whole. Exact amounts only throughout the paper - not to be rounded.*

CAPITAL COSTS AND FINANCING								
Breakdown of project costs including fees surveys and contingency	Prev. Yr.	25/26	26/27	27/28	28/29	29/30	Future Yrs.	Total
	£	£	£	£	£	£	£	£
Supply and install new Fire Alarm System		237,831.78						237,831.78
Upgrade PAVA system including supply and install of new rack		87,267.40						87,267.40
Technical Advisors support		6,970.00						6,970.00
Contingency at 13%		49,810.38						49,810.38
Total capital spend		381,879.56						381,879.56

Provide details of proposed funding: Funding to match with Project Value								
Breakdown of proposed funding	Prev. Yr.	25/26	26/27	27/28	28/29	29/30	Future Yrs.	Total
	£	£	£	£	£	£	£	£
Corporate Borrowing		381,879.56						381,879.56
Total funding		381,879.56						381,879.56

S106 or CIL (Provide Planning App or site numbers)	No
Which alternative external funding sources been explored	
Are there any bidding constraints and/or any restrictions or conditions attached to your funding	

Tax and VAT implications	<p>The proposed works will not relate to a VAT-exempt activity of the Council. The Council has opted to tax the site of the Life Centre and has granted a peppercorn lease to Plymouth Active Leisure; these are taxable and non-business activities respectively,</p> <p>The VAT incurred on the cost of the fire alarm and public address systems will be fully recoverable by the Council, therefore, provided that the usual conditions are met. The Council must place the order(s) with the contractor, received a valid VAT invoice(s) in its name which is then paid using its own funds.</p>
Tax and VAT reviewed by	Sarah Scott
Will this project deliver capital receipts? <i>(If so please provide details)</i>	No

REVENUE COSTS AND IMPLICATIONS

Cost of Developing the Capital Project (To be incurred at risk to Service area)

Total Cost of developing the project	£0
Revenue cost code for the development costs	n/a
Revenue costs incurred for developing the project are to be included in the capital total, some of the expenditure could be capitalised if it meets the criteria	Y/N
Budget Managers Name	Kirstie Spencer/Ciara Holmes

Ongoing Revenue Implications for Service Area

	24/25 £	25/26 £	26/27 £	27/28 £	28/29 £	Future Yrs.
Service area revenue cost						
Other (e.g.: maintenance, utilities, etc)		0	0	0	0	
Loan repayment (terms agreed with Treasury Management)		0	0	0	0	
Total Revenue Cost (A)		0	0	0	0	
Service area revenue benefits/savings						
Annual revenue income (eg: rents, etc)						
Total Revenue Income (B)	0	0	0	0	0	0
Service area net (benefit) cost (B-A)						
Has the revenue cost been budgeted for or would this make a revenue pressure	As this is a capital cost which is funded by corporate borrowing there is no borrowing cost to the service					
Which cost centre would the revenue pressure be shown	n/a		Has this been reviewed by the budget manager		Y/N	
Name of budget manager	Kirstie Spencer/Ciara Holmes					

Loan value	£0	Interest Rate	%	Term Years		Annual Repayment	£
Revenue code for annual repayments			n/a				
Service area or corporate borrowing			Corporate Borrowing				
Revenue implications reviewed by			Nathan Franklin				

Version Control: (The version control table must be updated and signed off each time a change is made to the document to provide an audit trail for the revision and update of draft and final versions)



Author of Business Case	Date	Document Version	Reviewed By	Date
Ciara Holmes	28/05/2025	v 1.0	Lynn Walter Kirstie Spencer	28/05/2025 29/05/2025

SECTION 5: RECOMMENDATION AND ENDORSEMENT

Recommended Decision

It is recommended that the Leader of the Council:

- Approves the Business Case
- Allocates £381,879.56 for the project into the Capital Programme funded by Corporate Borrowing
- Authorises the procurement process
- Delegates the award of the contract to Service Director for Customer & Corporate Services

[Name, Portfolio]		Head of Service, Kirstie Spencer	
Either email dated:	date	Either email dated:	date
		Signed: 	
Or signed:			
Date: 14.07.2025		Date: 29/05/2025	