

MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	AUTHORITY		
DATE:	12 OCTOBER 2023	REPORT NO:	CFO/051/23
PRESENTING OFFICER	CHIEF FIRE OFFICER, PHIL GARRIGAN		
RESPONSIBLE OFFICER:	CHIEF FIRE OFFICER, PHIL GARRIGAN	REPORT AUTHOR:	HEAD OF TECHNOLOGY, ED FRANKLIN
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TITLE OF REPORT:	REALIGNED ICT CAPITAL BUDGET		
APPENDICES:			
APPENDICES:	NONE		

Purpose of Report

1. To request that Members approve the recommendations of this report pertaining to the completion of three large and complex ICT infrastructure projects in the fiscal year 2023/2024 and the drawdown of £247.5k from the capital reserve.

Recommendation

2. It is recommended that Members approve:
 - a) the increase in the current ICT capital budget of £312.6k in order for the completion of a project to deliver an enhanced Local Area Network (LAN) project, at a cost of £925k;
 - b) the increase in the current capital budget of £6.8k in order for the completion of a project to deliver enhanced audio-visual services in the Service Headquarters (SHQ) conference facilities, at a cost of £100k;
 - c) the completion of a project to deliver further ICT server virtualisation with an upgrade to SQL 2019, at a cost of £450k, a reduction in planned capital spend of £71.9k;
 - d) the required re-phasing of £0.573m of planned spend in future years into 2023/24, as outlined in the financial section of this report; and
 - e) the drawdown of £247.5k from the Capital Reserve to fund the required increase in the ICT capital budget .

Introduction and Background

3. In February 2023, Members approved the 2023/2028 ICT Five Year Capital Plan.

4. The plan contained the 2023/2024 ICT capital budget estimates for the following three large and complex projects:
 - a) Enhanced LAN
 - b) Enhanced audio-visuals (AV)
 - c) ICT server virtualisation and upgrade to SQL 2019

These budgets were set in good faith, based on the factors known at the time.

5. Since setting the budget, the scope of the three projects have been widened to include activities planned in future years of the ICT five-year capital plan. Further details of the widened scope are included in this report from paragraph 11 onwards.
6. Since setting the budget and widening the scope, quotes for the cost of each of the three projects have been obtained and subjected to due diligence and value engineering.
7. The obtained costs, however, have risen against budgeted figures due to the recent increases in inflation and the exchange rate against the pound.
8. For these reasons if the projects are still to be delivered, the five-year ICT capital budget for 2023/2024 will need to be increased by £248k.
9. Furthermore, on some budget lines, in agreement with Finance, ICT future capital spend will be moved into 2023/2024.
10. What follows is a brief description of each project.

Enhanced LAN

11. Following the successful upgrade of all elements of the Virgin Media Network, otherwise known as the Wide Area Network (WAN). The next step is to upgrade the LAN, the project involves and is not limited to:
 - a) core network switches replacement
 - b) user stack switches replacement
 - c) replacement of Wireless Access Points (WAPs)
12. Initial design meetings have taken place with regards to the specification of the core network switches, and the new LAN design has been subjected to value engineering to ensure value for money.

13. The £312.6k increase in budget, however, is largely due to the increase in size and complexity of the Merseyside Fire & Rescue Service (MFRS) data network since budgets were set.
14. The security-driven design of this project involves new and upgraded core network switches, management switches and user stack switches.
15. This new heart of the MFRS data network ensures network speeds to match the demands of modern technology and the users that use the technology.

Enhanced Audio Visual

16. The SHQ conference AV is experiencing component failures, as existing solutions are coming to end-of-life and need replacing.
17. This project to replace the AV in the SHQ Conferencing facilities has seen a small marginal increase of £6.8k

ICT Server Virtualisation and Upgrade to SQL 2019

18. Server virtualisation is the process of dividing a physical server into multiple unique and isolated virtual servers by means of a software application. Each virtual server can operate independently.
19. The benefits of server virtualisation are:
 - a) lower total operational cost
 - b) optimal use of the physical servers
 - c) more efficient utilisation of power
20. The hardware currently used for server virtualisation is reaching end-of-life, and backup software no longer supports newer operating systems and applications.
21. Microsoft SQL Server is a relational database management system (RDBMS) that supports a wide variety of transaction processing, business intelligence and analytics applications, and Microsoft SQL 2012 is behind many of the applications used at Merseyside Fire and Rescue Service (MFRS).
22. SQL 2012 was end-of-life on 12/07/2022. The plan is to upgrade to on-premises SQL 2019 which will run on the new virtual servers.
23. For this project, ICT was able to deliver a reduced cost of £71.9k by undertaking extensive value engineering and robust supplier negotiations.

Equality and Diversity Implications

24. The ED&I implications of this proposal are neutral or positive, in terms of supporting the protected characteristics of our employees and the community. The enhanced AV, for example, will improve access for deaf and hard of hearing users

Staff Implications

25. Higher performing ICT infrastructure will assist employees in executing their duties more effectively.
26. Training will be supplied, if necessary, and the training schedule will form part of any project plans.

Legal Implications

27. A compliant procurement procedure will be followed, as goods and services will be purchased under the Change Control Note (CCN) process under the Telent ICT managed service contract, which expires 31/03/2026.

Financial Implications & Value for Money

28. The total budget allocation for these schemes within the current 5-year ICT capital programme is £1,227.5k;

ICT Capital Programme 2023/24 to 2027/28						
	Total Cost £	2023/24 £	2024/25 £	2025/26 £	2026/27 £	2027/28 £
Enhanced LAN	612,400	127,400	200,000	0	0	285,000
Enhanced AV	93,200	33,200	60,000	0	0	0
ICT Server Virtualisation / Upgrade	521,900	493,900	14,000	14,000	0	0
Total	1,227,500	654,500	274,000	14,000	0	285,000

29. After obtaining quotes and carrying out a due diligence exercise, the cost to deliver the three projects has risen to £1,475k., as outlined in the report, an increase in planned spend of £247.5k. Provision has been made within the capital reserve to cover these additional costs.
30. The timing of the projects needs to fit in with the new TDA and station delivery in order to avoid retrospective work and on the new build. Therefore the delivery of these schemes is planned to be completed in 2023/24. The table below reflects the new phasing and costs associated with these schemes;

Proposed Re-aligned ICT Capital Programme 2023/24 to 2027/28						
	Total Cost £	2023/24 £	2024/25 £	2025/26 £	2026/27 £	2027/28 £
Enhanced LAN	925,000	925,000	0	0	0	0
Enhanced AV	100,000	100,000	0	0	0	0
ICT Server Virtualisation / Upgrade	450,000	450,000	0	0	0	0
Total	1,475,000	1,475,000	0	0	0	0

Risk Management, Health & Safety, and Environmental Implications

31. All ICT equipment purchased will satisfy all legal and statutory health and safety requirements. All end-of-life ICT equipment will be disposed of securely and safely to minimise the risk of data leaks.
32. It is believed a proactive approach in improving MFRS ICT Infrastructure further strengthens MFRS position in relation to Cyber Security.

Contribution to Our Vision: *To be the best Fire & Rescue Service in the UK.*

Our Purpose: *Here to serve, Here to protect, Here to keep you safe.*

33. ICT is committed to a successful partnership working within MFRS and with third parties to deliver a value-for-money, secure, and robust quality service whilst enabling continuous business-led ICT Innovation.
34. To respond to all emergency calls for assistance with a level of response appropriate to the risk and deal with all emergencies efficiently and effectively.

BACKGROUND PAPERS

NONE

GLOSSARY OF TERMS

AV	Audio-Visual
CCN	Change Control Note
ICT	Information and Communications Technology
LAN	Local Area Network
MFRA	Merseyside Fire and Rescue Authority
MFRS	Merseyside Fire and Rescue Service
OFS	Operational Fire Station
OSR	Operational Support Room
RDBMS	Relational Database Management System
SHQ	Service Headquarters
WAP	Wireless Access Point