

Report of: Digital & Information Services – Head of ICT Strategy & Commissioning

Report to: Deputy Chief Executive

Date: 27th March 2017

Subject: ICT ESP – Infrastructure Upgrades 2017/18

Capital Scheme Number(s): 32194/000 & 32552/000 - £5900K and £100K

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Summary of Main Issues

The Essential Services Programme (ESP) was established to enable Digital & Information (D&I) Services (previously IT Services) to undertake a continuous annual programme of upgrade and refresh of Leeds City Council's extensive core ICT infrastructure. As a general principle, D&I Services ensure that our ICT hardware and software are operated as long as feasibly possible before being replaced or upgraded. However, there are major elements of refresh required over the coming year as outlined in this report.

In particular: building a major new platform that will replace previous end of life server and storage infrastructure. This platform will host many of our critical applications and services and will be capable of being shared with other public service partners across the city. Significant investment will also be made in 'cyber/IG' processes and solutions to help ensure that the ongoing threat to our information and systems is minimised. We will also upgrade all the PC's and laptops across the organisation to Windows 10 and we will replace the Cisco telephony estate with MS 'Skype for Business'; completely unifying our telephony environment with a single lower maintenance modern 'collaboration' solution. In addition, we will replace a significant number of PC's and laptops that are over 7 years old. There will also be a range of medium/small size but important initiatives that are required to be undertaken in order to keep our overall infrastructure up to date, including the deployment of devices to staff and members of the public to help bridge the digital divide.

Recommendations

1. Request that the Deputy Chief Executive gives authority to incur expenditure of £6,000K on the 2017/18 ESP upgrades outlined in this report, which includes the specialist resources (internal and external) to commission and implement these services.

1 Purpose of this Report

- 1.1 The purpose of this report is to seek approval on the funding required to conduct a range of major essential IT infrastructure refresh and upgrade initiatives over the next 12 months.
- 1.2 This involves new hardware and software and the engagement of specialist internal and external resources to commission and implement this infrastructure.

2 Background Information

- 2.1 There are approximately 11,000 users across 350 Council sites (including a number of schools) and two primary data centres hosting a significant range of infrastructure; servers, storage, networks, telephony and ancillary equipment etc. These data centres host over 300 critical and important business applications. This fundamental and extensive ICT infrastructure continually requires refreshing and upgrading.
- 2.2 The approach in LCC has always been that hardware and software will only be refreshed when we have extracted all the value from it and before supportability, poor performance and the potential consequential failure of critical business services becomes an issue. The proposed programme of work outlined in this report for 2017/18 is part of an ongoing long term programme of infrastructure maintenance and refresh, prioritised to ensure that the failure of business critical services is minimised.
- 2.3 Reassuringly LCC generally spends significantly proportionally less than many of its core city counterparts refreshing this core infrastructure.
- 2.4 It is also the case that this refresh brings additional benefits because software and hardware (in particular) improves significantly over time and we therefore get a higher return on our investment in terms of functionality, performance and reliability etc.

3 Main Issues

- 3.1 From a hardware, software and external services (resources) perspective, approximately £3,900K is required to deliver a range of important initiatives as defined and agreed in the 2017/18 ESP programme. In addition, it is anticipated that £1,650K of internal D&I Services and £450K of PPPU resources are required to assist with the commissioning and implementation of this hardware and software. This equates to £6,000K in total, and this has already been factored into the Council's approved Capital Programme for 2017/18.
- 3.2 A significant proportion of our extensive server and storage estate is reaching its end of life. A new scalable platform is required to replace this ageing infrastructure. This will be built using new generation technology and architectures to ensure future proofing for the next 5 – 7 years. This scalable platform will be designed in a way that will also enable public service partners across the city to share the capability in a consistent and repeatable way, so ensuring the efficient provisioning of any new partners and lower overall maintenance costs. The platform will also be replicated (mirrored) to allow hosting across dual data centres so facilitating high resilience and availability. Our commitment to the 'cloud' and our 'cloud first' strategy still applies, but is still the case that over the next 5 years many of our critical legacy applications and also the legacy applications of our partner organisations will need to operate 'on premise' because they are not architected in a way that makes them suitable to operate in the 'cloud'.
- 3.3 Microsoft 'Skype for Business' has been rolled out across the organisation replacing the end of life Ericsson analogue PABX (Private Automatic Branch Exchange) with a modern IP based telephony and collaboration solution. The next stage of this work to achieve a single unified telephony and collaboration capability is to replace our Cisco telephony with 'Skype for Business', so reducing our overall PABX telephony maintenance and support costs.

- 3.4 The risk of cyber threat is increasingly an issue across all organisations as the risk of serious damage to critical computer systems and the associated information they host continues to rise. There are frequent and high profile cases of computer systems being compromised and sensitive information being stolen on a weekly basis and the organisations that commit these crimes are becoming smarter. The Council also has significant obligations to comply with a range of security frameworks mandated across local government e.g. PSN (networks), PCI (credit card payments) and the new DPA (Data Protection Act) etc. The criteria for compliance with these frameworks are becoming more demanding and consequently the investment required in new cyber and IG tools, protection measures and assurance is significant.
- 3.5 There is a requirement to upgrade to Windows 10. Microsoft withdrew Windows 7 mainstream support in January 2015. Security patches will be released through to January 2020, however given that it will take at least 12 months to upgrade the entire LCC PC, laptop and tablet estate to Windows 10 it is proposed that this work commences this year. This will remove the overhead of supporting multiple Windows operating system versions and different application delivery processes. It will also increase our ability to work in more flexible ways.
- 3.6 There is also a significant allocation of funding assigned to replace the significant number of old PC and laptop devices (7+ years) across the organisation.
- 3.7 There is also funding allocated to help bridge the digital divide within the organisation and also externally. This supports our overall inclusion strategy and will initially include 1000 of our workforce. There will also be an allocation of devices that can be loaned to the public through our Library services.
- 3.8 The 'Discovery and Cleanse' (D&C) project will enter its primary deployment phase in 2017/18 across most areas of the Council. This will predominantly cover the IG resource to ensure the reduction of IG risk in relation to Data Protection legislation including:
- the identification of any potential high risk / sensitive content and the associated remediation;
 - the destruction of redundant, obsolete, and temporary files from storage;
 - the removal of any content beyond its specified retention period to comply with DP and reduce the effort associated with Freedom of information (FOI) requests;
 - Further developments of the associated D&C tools.
- 3.9 There are also a significant number of smaller initiatives that will be undertaken as part of the 2017/18 ESP programme.
- 3.10 It is expected that similar levels of ESP investment will be required in foreseeable future years but each year will be considered based on prevailing risks and priorities.

4 Corporate Considerations

- 4.1 **Consultation and Engagement** - the ESP programme has been consulted on widely. The Deputy Leader of the Council and Executive Member for Strategy & Resources was briefed on the proposed 2017/18 programme in February 2017 and the Deputy Chief Executive was briefed in December 2016.
- 4.2 **Equality and Diversity / Cohesion and Integration** - New hardware and software that directly impacts on end users i.e. PC's, laptops and tablets will take into consideration the requirements of disabled staff in particular. There is also some investment allocated for staff and members of the public who do not have or have limited access to IT services.

4.3 **Council Policies and City Priorities** – Modern and ‘fit for purpose’ core ICT services and end user devices are fundamental in the business effectiveness and efficiency of the 11,000 staff in the organisation who use ICT equipment as an essential and fundamental part of their daily work.

4.4 Resources and Value for Money

4.4.1 Full Scheme Estimate

The anticipated cost for the ESP infrastructure implementation and commissioning for 2017/18 is £6,000K.

4.4.2 Capital Funding and Cash Flow

5900K is required from the capital scheme 32194/000 for the major part of the 2017/18 work programme and £100K from 32552/000 for the Discovery & Cleanse (D&C) work. These schemes were separated in 2016/17 and the D&C project is set to finish completely in 2018/19.

Previous total Authority to Spend on this scheme	TOTAL £000's	TO MARCH 2017 £000's	FORECAST				
			2017/18 £000's	2018/19 £000's	2019/20 £000's	2020/21 £000's	onwards £000's
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend required for this Approval	TOTAL £000's	TO MARCH 2017 £000's	FORECAST				
			2017/18 £000's	2018/19 £000's	2019/20 £000's	2020/21 £000's	onwards £000's
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	3900.0		3900.0				
INTERNAL RESOURCES	2100.0		2100.0				
OTHER COSTS (7)	0.0		0.0				
TOTALS	6000.0	0.0	6000.0	0.0	0.0	0.0	0.0
Total overall Funding (As per latest Capital Programme)	TOTAL £000's	TO MARCH 2017 £000's	FORECAST				
			2017/18 £000's	2018/19 £000's	2019/20 £000's	2020/21 £000's	onwards £000's
Departmental USB	0.0						
Corporate USB	6000.0		6000.0				
Any Other Income (Specify)	0.0						
Total Funding	6000.0	0.0	6000.0	0.0	0.0	0.0	0.0
Balance / Shortfall =	0.0	0.0	0.0	0.0	0.0	0.0	0.0

4.4.3 Revenue

There is funding built into the Council’s revenue budget to pay for the associated capital expenditure. There are some additional revenue pressures associated with the cyber/IG work stream and the new server/storage platform. In the case of the cyber/IG pressure this will be negotiated corporately. In the case of the server/storage platform pressure, it is expected that partners will contribute to the funding required.

4.5 Legal Implications, Access to Information and Call In

4.5.1 The hardware, software and services will be purchased through the Council’s established preferred suppliers under existing contract arrangements. The technologies concerned are consistent with our agreed technical strategies.

4.5.2 This decision is eligible for 'call in' and has been posted on the List of Forthcoming Decisions.

4.6 Risk Management

The hardware and software purchased will be consistent with the current range of technologies and equipment presently being sourced by D&I Services and therefore the risk is minimal. If this work is not undertaken, there is a high risk of additional costs and business failure as we operate on old and in some cases unsupported ICT infrastructure.

5 Recommendations

5.1 The Deputy Chief Executive is requested to authorise that the Council incurs expenditure of £6,000K on the 2017/18 ESP infrastructure upgrades required and outlined in this report which includes the specialist resources (internal and external) to implement and commission these services.

6 Background documents

6.1 None.