Public Document Pack

ADVANCED PUBLICATION OF REPORTS

This publication gives five clear working days' notice of the decisions listed below.

These decisions are due to be signed by individual Cabinet Members and operational key decision makers.

Once signed all decisions will be published on the Council's Publication of Decisions List.

1. IT HOSTING CONSOLIDATION AND NETWORK REFRESH (Pages 1 - 12)

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Agenda Item 1

MUNICIPAL YEAR 2018/2019 REPORT NO.

ACTION TO BE TAKEN UNDER DELEGATED AUTHORITY

Agenda – Part: n/a	**KD Num: 4838**
Subject: IT hosting consolidation and network refresh	
Wards: n/a	

OPERATIONAL DECISION OF:
Director of Customer Experience & Change

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1. RECOMMENDATIONS

To seek approval of an infrastructure rationalisation and investment programme at the capital cost of £3.9m, with £2.7m covered from the ICT capital funding programme approved by Council in 2017, £160k pre-approved funding and £1.1m required in new capital funding, to take from the contingency pot of the existing ICT capital programme.

The Hybrid Hosting element will enable the programme to make a revenue saving of £964k in year 1 and £1.4m from year 2 onwards.

2. BACKGROUND

The council has several contracts that are up for review or have finished and need replacing. This gives us an opportunity to procure new contracts using improved technology that reduces annual costs and provides the organisation with improved services.

These contracts need putting in place to ensure business continuity for example, ensuring that our Wi-Fi is still available across the borough.

The overall aim is to reduce cost and improve the infrastructure and services. The workstream ‘seamless connectivity’ improves the network infrastructure by consolidation of network connections and reducing the cost of the telephony contract. The biggest saving is from the Hybrid Hosting workstream, reducing the SunGard hosting cost to nil by building an on-site data centre that is more cost effective to operate.

The Infrastructure Programme has the following two work streams:

2.1 Hybrid Hosting

This workstream aims to move all applications from our outsourced SunGard data centre on-site or into Microsoft Azure with the emphasis on the on-site data centre and using Microsoft Azure as a secondary hosting site.

In 2016 The London Borough of Enfield (LBE) embarked on 'cloud first' strategy as cloud can offer impressive flexibility, scalability and significant economies of scale. This approach is in line with central government recommendations for the public-sector organisations.

LBE successfully moved many of its services from the SunGard data centre to the cloud but we still have several applications with SunGard because they were not suitable for hosting in the cloud. There are older systems that are best hosted physically on the council's premises, for maximum security and control. Unless an application has been architected specifically for the Cloud, there's really no benefit to moving it there as it well be more expensive to do so.

Whilst 'cloud first' is still the approach, a mix of public cloud and on-site hosting makes good business sense from cost, security, privacy, and efficiency perspectives. Taking this hybrid approach will enable LBE to reduce annual revenue spend.

We received approval to commence project implementation on 17/12/18 to realise some early savings by moving some applications from the SunGard data centre by 31/01/19. The cost for pre-project work was £160,309 which includes costs identified under each project below and additional resource costs. The remaining migrations will take place between 28/02/19 and 31/08/19. At each point of migration, we will realise a reduction in costs culminating in the SAP migration.

We are aiming to move all LBE applications from the SunGard data centre by 31/08/19. Some applications will be moved earlier than this to realise savings prior to 31/12/19.

2.2 Seamless connectivity

Seamless connectivity means being able to work from anywhere and connect to a network without having to log on. The existing network does not provide this consistently or throughout the borough.

The London Borough of Enfield networks are at the end of their life, so we have the following issues:

- Poor performance presents a risk to business continuity and we cannot guarantee a network service
- The current network has insufficient capacity for more staff to be able to work remotely
- Currently staff cannot connect from everywhere

- A security and compliance risk – for example, it will become harder and harder to keep ourselves compliant with PCI DSS (for the council to be able to take credit/debit card payments) and Public Service Network compliance (for us to share data securely with central government)
- We are more vulnerable to cyber-security attacks

Changing our network provides the opportunity to reduce ongoing costs and provides opportunity to scale up or down according to organisational requirements. We've procured network provision in separate procurements in the past missing the opportunity to bulk buy equipment and services.

The new network will provide the following benefits:

- High speed and more reliable network
- More capacity for staff to be able to work remotely, and from any location in the borough, supporting the council's ambitions for staff flexibility, productivity and accommodation rationalisation
- Ability to log onto any network immediately
- A secure network which meets regulations
- Significantly reduced risk to business continuity as the new network will be supported through a contractual service support level
- Better Wi-Fi corporately and in our Libraries serving our customers

We are proposing to enhance and make use of our existing London IT consortium, the London Grid for Learning (LGFL), as the main network provider. LGFL is a not-for-profit jointly owned company/consortium which provides IT networking services to schools and local authorities in all 33 Boroughs. The LGFL which is jointly owned by its members was developed to provide London Boroughs with IT services for an affordable price. This service will provide us with enhanced, seamless technology and we can take advantage of shared technology and a shared service arena.

In December 2016, the Capital Funding for the ICT Work Programme was approved, which included the replacement and upgrading of Enfield's network. The recommended route is to do this via the consortium, and adopting the same approach as other London boroughs, as it's cheaper and offers more value than doing it ourselves in isolation.

1.1 Project within the hybrid hosting workstream

1.1.1.1 Skype for Business migration

We have already started the migration from Skype for Business from the Sungard data centre to our Microsoft Cloud. We are also proposing to migrate data to Microsoft Teams in the Cloud which is the latest rebranded version of Skype for Business on-line. This proposal includes additional funding to migrate to Microsoft Teams and funding to replace old desk-based telephone handsets for users requiring switchboard functionality. There will

be a change of phone number required for more than 50% of users, the exact details of this are still to be worked out.

1.1.1.2 SAP migration

The proposal is to migrate SAP to the Microsoft cloud which will cost less annually than the current cost.

SAP is the corporate ERP (Enterprise Resource Portal) used by the whole council. We are proposing to move SAP to the Microsoft Cloud by 31/07/19.

1.1.1.3 On-site Data Centre

To provide additional on-site capacity to host applications moving from SunGard and the Microsoft cloud (where appropriate) as well as replace old, end-of-life equipment, we are proposing to build a new, on-site data centre in the Civic Centre with disaster recovery in Edmonton Green. Replacing old equipment with new, energy efficient equipment should reduce electricity consumption in the Civic Centre data centre and disaster recovery site in Edmonton Green Library.

The Edmonton Green disaster recovery site will be set up by re-using the newest servers we have on-site in the Civic Centre and Edmonton Green.

1.1.1.4 Northgate migration

We are proposing to move the Northgate system used by the Housing Service on-site by 30/05/19.

1.1.1.5 Lagan, IPO migration and Telephony Infrastructure (SIP)

We received approval on 17/12/18 for migrating the Lagan CRM application, IPO and telephony infrastructure from the Sungard data centre on-site, at a capital cost of £160,309. This commenced on 04/01/19 and will be completed by 21/03/19 to ensure we achieve early savings. The savings for pre-approved projects are included the table below (4.1, Financial Implications).

1.2 Project within Seamless Connectivity workstream

1.2.1.1 Mobile phone contract

The existing mobile phone contract has come to an end and this new 4-year contract has the following benefits:

- Enable staff to use tablets or laptops containing sim cards for phone calls, by using headsets, and therefore not require a separate mobile phone and reduce the need for staff to carry around multiple devices
- Reduced cost due to:

  - Purchasing an upfront internet data bundle which will last approximately 4 years based on current annual increase in data usage, and aggregate usage so that staff who under-use compensate for those that over-use, therefore reducing the risk of high costs for individually high usage
  - Benefitting from lower monthly user fees for voice and unlimited minutes
- There is a £108,000 technology fund for device purchase from the supplier
- Ability to increase or decrease the number of users and therefore costs as required.

The transition to a new mobile phone contract will not require changes to numbers, or handsets, or involve any user disruption.

1.2.1.2 Local Area Network (LAN), Wide Area Network (WAN), Wi-Fi and Radio connection upgrades

This project will enable staff from different Enfield public sector organisations to all be able to access a network to work from, wherever they are in Enfield or London. Investing in this communications infrastructure is also a foundation for enabling the council to collect data from physical infrastructure in the borough such as road and traffic sensors, in the future.

This project will upgrade:

- Internal networks in council buildings, the LAN;
- Pipes connecting buildings, the WAN;
- All our Wi-Fi access points and Wi-Fi solutions. This will also include implementing the new LGFL Wi-Fi solutions which can be used by any other London Borough (EduRoam for educational institutes and GovRoam). We intend to begin the new corporate Wi-Fi solution by starting with the network in Enfield Libraries, as they are suffering poor performance, which impacts on the public who come to libraries for free internet.
- Radio links to smaller council sites, which are more cost effective to maintain than traditional pipes. We will increase radio links to sites, where technically feasible, to reduce the cost of ongoing support.

2. Costs and savings

The projected costs and savings are as follows:

£3,764,887	**Cost for the delivery of the Infrastructure programme excluding pre-approved funding**
	Additional information below
£160,309	Pre-approved funding (Lagan migration, Skype for Business and SAP migration)
£3,925,169	Total cost for delivering the Infrastructure programme

We already ring-fenced an amount of £2,700,000 for the network upgrade, approved by a key decision DAR in February 2018. We have received an amount of £160,309 in pre-approved spending therefore we are looking for an additional £1,064,860 from the ICT Capital Programme to fund the remainder of the programme. Our expectation is that this money will be available in the existing capital programme. If it is not, we will seek Cabinet and Council approval.

The costs stated include resources and payments to suppliers to implement the project.

The savings shown are based on current spend compared to the new spend on annual supplier costs. The total savings in the first year is £964,151 this is reduced compared to the second year because of the SunGard exit charge. The second year the savings are £1,427,251 and expected the same going forward. Over a 4-year period, the savings total is estimated to be £5,245,904.

Year 1	£964,151
Year 2	£1,427,251
Year 3	£1,427,251
Year 4	£1,427,251
Total year 1 to 4	**£5,245,904**

Do nothing is not an option as our network is end of life and service cannot be guaranteed any longer.

3. COMMENTS OF THE DIRECTOR OF FINANCE AND OTHER DEPARTMENTS

4.1 Financial Implications

The total cost of this project is £3,925,169 to be funded by borrowing.
The council's current average cost of borrowing rate is 3.4%. Total interest cost of this amount of borrowing over a 7year (average life of assets to be acquired) repayment period is £551,655. Annual repayments covering both interest and principal costs will be £639,546.

The Council signed off a £32m capital programme for ICT and Transformation on 28th February 2017, which secured the funding pot and the cost of borrowing are covered in a separate budget.

The budget for this programme will be provided from the IT capital investment fund approved by Council in December 2016.
Annual maintenance costs from this project will be funded from existing revenue budgets.

The implementation of these proposals is expected to generate revenue savings in year one of £964k, after allowing for a 10% contingency. This should increase in the second year to annual on-going savings of £1,427k. The current revenue costs associated with data hosting are funded from IT revenue budgets (FG0227 & FG0230) and these savings will facilitate the achievement of a £1,000k MTFP saving which was originally planned to be delivered through a review of IT contracts.

A summary of costs and savings is shown below in Appendix A.

4.2 Legal Implications

Section 111 of the Local Government Act 1972 permits local authorities to do anything which is calculated to facilitate or is conducive or incidental to the discharge of their functions.

Furthermore, the Council has a general power of competence under Section 1(1) of the Localism Act 2011 to do anything that individuals may do, provided that it is not prohibited by legislation and subject to public law principles.

The Council will need to ensure that any contracts which are entered into pursuant to the IT rationalisation programme are procured in accordance with the Public Contracts Regulations 2015 (where applicable) and the Council's Contract Procedure Rules.

The contracts will need to be in a form approved by the Director of Law and Governance.

This will be a Key Decision as it involves expenditure of more than £250,000 and therefore the Key Decision governance process will need to be followed (see CPR 1.22.4).

The Council needs to be mindful that the Transfer of Undertakings (Protection of Employment) Regulations 2006 (TUPE) may apply to any future service provision change, and legal advice should be sought on this at the appropriate time.

(Legal imps provided by MO'C on 21 February 2019 based on a report circulated on 19 February 2019).

4.3 Property Implications

The data centre build will not impact the ability of 3rd party occupants to host services in the Civic Centre server room.

4.4 Procurement Implications

4.4.1 For the Northgate migration, where only the original vendor can support the software migration, we are commissioning migration support directly through Northgate.

4.4.2 For software and services where there is an existing support contract (SAP and Skype for Business), we are commissioning migration work through the vendors who provide us with support, so our support contract remains valid. The existing Absoft and Modality contract scope and value limit enables us to commission this additional work directly through the supplier.

4.4.3 We are commissioning additional project support through SunGard, for application and service migrations, where SunGard are the sole suppliers who can support the migrations. We require support to have full access to the SunGard data centres and servers. As the environment is shared with other organisations, it isn't possible to resource this in-house.

4.4.4 We are using the London Grid for Learning (LGFL) framework for the Seamless Connectivity LAN, WAN, Wi-Fi, Radio and mobile phone contracts. Procurement have supported the use of the LGFL framework.

4.4.5 The data centre hardware build and support will be purchased through the London Tenders Portal.

4.4.6 The data centre hardware prices were estimated by requesting a quote directly from the hardware suppliers (Dell, HP and Nutanix). We will procure the data centre through resellers when we go to tender instead of directly through the vendors.

4.4.7 All other price estimates are either directly from the supplier, where we anticipate the supplier will provide the service directly or, where purchasing new hardware and the supplier is unknown, based on internet list prices.

4.4.8 All Procurement is to be carried out in accordance with the Council's Contract Procedure Rules and the Public Contracts Regulations (2015) using the London Tenders Portal.

4.5 HR Implications

4.5.1 There would only be HR implications if there is a proposed transfer of undertakings (e.g. bringing in house a service currently provided externally that has an impact on staff currently working on the contract for the external provider).

4.6 ICT Implications

4.6.1 This proposal supports the ICT strategy to in-source hosting and support, develop our own in-house capacity and support future digital initiatives.

4.6.2 We are making direct savings on infrastructure support by migrating SAP to the Microsoft Cloud, where it will automatically have Microsoft disaster recovery. The Cloud itself is also supported by Microsoft. We will require additional support from our in-house teams for regular server maintenance, for example: server security updates; anti-virus and monitoring; these costs are taken into account in the revenue figures above.

4.6.3 We will require additional support to support applications we are bringing on-site to the new datacentre. However, migrating applications on-site will make it easier to upgrade or migrate the applications. Having applications on-site instead of hosted in an environment, where we have limited access, will improve our ability to support applications and resolve faults directly with the supplier instead of having to involve other 3rd parties. This will improve the time taken to fix issues for applications, application interfaces, networks, security and servers as diagnosis and remediation will be in our own environment and supported by our own teams.

4.6.4 The new data centre will be in one location and will replace old, unsupported servers so support and maintenance will be easier for the server team and applications and services will be more stable.

4.6.5 We are planning to migrate Northgate on-site. Northgate is on an old Solaris system which requires specialist knowledge to support. We are planning to recruit a technical resource whose expertise includes Solaris or, train internal resources to support specialist systems.

5. ALTERNATIVE OPTIONS CONSIDERED

The following options have been considered:

5.1 Do nothing

Remaining in SunGard has been rejected as the cost of doing nothing will mean we would continue to pay SunGard data centre hosting and services at a cost of £1,465,000 p/a.

Not investing in our communications network infrastructure has been rejected as an option because effective internet and voice connectivity is essential for the council to function effectively and providing Wi-Fi access to our residents in libraries is an important community benefit that supports digital inclusion and our Corporate Plan priorities.

The existing on-site servers are at the end of their life and need replacing.

5.2 Tender for a new data centre contract

This option has been rejected because it is cheaper to buy one as an asset rather than procure it as a service with annual running costs.

5.3 Go to tender for an alternative network supplier

This option has been rejected as we will realise best value by making use of existing LGFL services. Other suppliers are not able to provide the same options and the same opportunity to share services with other public sector organisations.

6. REASONS FOR RECOMMENDATIONS

Proceeding with this proposal will realise £964,151 savings in year one and £1,427,251 savings in subsequent years:

- Building an on-site data centre and migrating applications from SunGard
- Changing the mobile phone contract
- Upgrading the end of life ICT network and ensure business continuity and data security.

There are some additional benefits to be derived such as: service improvement; service stability and; reducing the cost of future projects such as ININ phase 2.

Hosting services on-site can improve performance speed for memory-hungry and older applications.
ICT will have immediate access to our own applications to improve service response times.

Bringing our telephony SIP trunk infrastructure on-site will reduce the cost of future telephony projects such as ININ phase 2 as we will be able to decommission and migrate services in-house instead of engaging a 3rd party.

This programme will support the planned implementation of a digital infrastructure the borough, and support Enfield staff and 3rd party occupants of Enfield's buildings with online collaboration and telephony tools.

7. KEY RISKS

The risks of proceeding with the recommendations in this report are as follows:

- **Timescales:** We fail to meet time scales to migrate from the SunGard data centre and realise savings. **Mitigation**: We are commissioning SunGard to support the migrations and are already planning the

application migrations with other 3rd party suppliers who support the applications. The programme received £160,309 funding on 20/12/19 to reduce the risk of delays to savings.

- **Project delays:** There is a risk that 3rd party suppliers may delay the projects and fail to meet predicted time scales, which would impact savings. **Mitigation:** We have engaged suppliers early and are holding detailed planning workshops with suppliers to ensure resources are scheduled in well in advance and we can meet saving targets.
- **Costs:** There is a risk that some costs may increase due to Brexit as some suppliers base their prices on the $/£ exchange rate. **Mitigation**: We have allowed a small contingency in the budget to allow for fluctuations in the exchange rate.
- **Revenue costs:** Revenue costs for application hosting in the cloud are based on existing cloud hosting costs which may be subject to change. **Mitigation:** We have agreed a fixed price with Microsoft for SAP hosting and Skype for Business is supported under our existing Microsoft support agreement.
- **Resilience:** Project delays around network implementation and infrastructure migrations may pose a risk to the council as equipment is old. **Mitigation**: We will prioritise the most critical sites for infrastructure upgrades and the network refresh.

8. IMPACT ON COUNCIL PRIORITIES – CREATING A LIFETIME OF OPPORTUNITIES IN ENFIELD

8.1 Good homes in well-connected neighbourhoods

8.2 Sustain strong and healthy communities

8.3 Build our local economy to create a thriving place

This Investment Programme will enable the Council to provide a better level of service.

9. EQUALITIES IMPACT IMPLICATIONS

N/a

10. PERFORMANCE AND DATA IMPLICATIONS

N/a

11. HEALTH AND SAFETY IMPLICATIONS

N/a

12. HR IMPLICATIONS

N/a

13. PUBLIC HEALTH IMPLICATIONS

N/a

Background Papers

APPENDIX A

	Capital resource costs	External capital asset costs	Current ongoing revenue costs	New revenue costs Year 1	New revenue costs Year 2	Year one revenue saving	Year two + revenue saving
Resourcing							
Total resource cost	£ 695,500						
FG0230 and FG0227							
Sungard hosting (FG0230)			£ 1,465,000	£ 430,000		£ 1,035,000	£ 1,465,000
MAINTEL EUROPE LTD (FGO227)			£ 156,644	£ 15,664	£ 15,664	£ 140,980	£ 140,980
VIRGIN MEDIA PAYMENTS LIM (FGO227)			£ 114,063	£ 79,844	£ 79,844	£ 34,219	£ 34,219
Workstream - Hybrid Infrastructure							
Lagan Migration		£ 11,300					£ -
IPO migration		£ 4,500					£ -
Telephony Infrastructure Migration (SIP)		£ 17,250	£ 5,000	-£ 120,000	£ 8,000	£ 125,000	-£ 3,000
Northgate migration		£ 100,000				£ -	£ -
DC Build		£ 260,833		£ 53,784	£ 53,784	-£ 53,784	-£ 53,784
Skype for Business		£ 237,010	£ 125,000	£ 15,000	£ 5,000	£ 110,000	£ 120,000
SAP Migration		£ 208,246		£ 200,000	£ 200,000	-£ 200,000	-£ 200,000
Sungard Decommissioning		£ 20,000					
TC3 13 Devices and 220 Disk docommissioning and ethical disposal		£ 4,000					
Iron Mountain		£ 3,770					
Workstream - Seamless Connectivity							
Mobile phone contract		£ 368,800	£ 304,715	£ 226,790	£ 120,290	£ 77,925	£ 184,425
Network in Civic Centre and Edmonton Green		£ 4,960		£ 120,000	£ 120,000	-£ 120,000	-£ 120,000
Radio equipment and Wan upgrade		£ 250,000	£ 8,451	£ 10,000	£ 10,000	-£ 1,549	-£ 1,549
Wi-Fi other sites		£ 1,578,718	£ 25,083	£ 96,013	£ 93,513	-£ 70,930	-£ 68,430
Contingency 10%						-£ 112,710	-£ 70,610
Total	**£695,500**	**£3,069,387**	**£2,203,956**	**£1,127,095**	**£706,095**	**£964,151**	**£1,427,251**