

<b>Subject:</b>	<b>Planned IT Investment</b>		
<b>Date of Meeting:</b>	<b>Policy Resources and Growth Committee 21st March 2019</b>		
<b>Report of:</b>	<b>Executive Director, Finance and Resources</b>		
<b>Contact Officer:</b>	<b>Name:</b>	<b>Dan Snowdon</b>	<b>Tel: 291218</b>
	<b>Email:</b>	<b>dan.snowdon@brighton-hove.gov.uk</b>	
<b>Ward(s) affected:</b>	<b>All</b>		

**FOR GENERAL RELEASE**

**1. PURPOSE OF REPORT AND POLICY CONTEXT**

- 1.1 This report sets out the plans for investment in the core IT architecture and technologies which support the delivery of front line services, including the provision of Windows10 end user devices and the transition of digital capabilities into business as usual corporate services.
- 1.2 The report also seek approval to delegate authority to the Executive Director Finance & Resources to award framework call-off contracts for the provision of end user computer devices and associated services up to a total spend value of £5.418 million during the life of the contracts.

**2. RECOMMENDATIONS:**

That Policy, Resources & Growth Committee:

- 2.1 Approves the inclusion of £5.418 million in the 2019/20 capital budget proposal.
- 2.2 Grants delegated authority to the Executive Director Finance & Resources to procure and award contracts for the laptop device and deployment services referred to in paragraphs 3.39 - 3.41 for a term of up to four years.

**3. CONTEXT/ BACKGROUND INFORMATION**

**The Role of IT & Digital**

- 3.1 Excluding traded services to schools, the IT & Digital service (IT&D) provides 27 distinct services (Appendix 1 – IT&D services provided across the Council) to 4,375 users. The service has a broadening remit which is constantly evolving.

However, the changes in the last five years are greater and more fundamental than before. On the one hand, the traditional function of operating IT is decreasing in significance as virtualisation and automation increase; on the other, a whole new range of demands has emerged, such as innovation and orchestrating digital platforms. Furthermore the increasing security threats mean that the urgency for investment is more profound.

## **Broad Strategy**

3.2 Since the council joined Orbis, the strategy has mainly concerned the stabilisation and safety of the service. To this end and during the last 12 months, IT&D has:

- Implemented a new Mobile Device Management (MDM) system.
- Upgraded all member and officer mobile phones from out of support Blackberrys to iPhones.
- Migrated from an end of life Citrix environment onto a new Citrix platform.
- Moved all email off premise onto the Microsoft cloud.
- Moved from the withdrawn Eduserv datacentre service into the Orbis data centre.

3.3 The next phase of the strategy will be to shift focus to improving productivity and mobility for staff. This includes the introduction of Office365 tooling (such as Microsoft Teams, SharePoint Online and OneDrive) along with mobile devices that are appropriate to officer roles. Additionally the continued creation of digital products and services will improve customer experience and pave the way for greater use of Robotic Process Automation (RPA) and Artificial Intelligence (AI) solutions.

## **Context**

3.4 The context can be broken down into four parts:

- Historic under-investment in IT.
- Continued Cyber threat.
- Operationalisation of GDPR.
- Operationalising the approach to Digital.

### Historic under-investment in IT

3.5 Since its inception, the council has under-invested and under-performed in its provision of IT and in the way it uses technology to maximise the value of its services to residents. A benchmarking exercise carried out at the time Brighton & Hove joined Orbis showed that Brighton & Hove spends an average of 0.23% of its operating budget less than that of its Orbis partners. This equates to an average spend per employee on IT of £692 (or 22%) per annum less for Brighton

& Hove City Council than East Sussex and Surrey County Councils. (Appendix 2 - Organisational IT Spend as a percentage of OpEx and Appendix 3 - Organisational IT Spend per Employee, Gartner Benchmarking 2016/17).

- 3.6 Under-investment has been a contributing factor in poor customer experience and negatively impacts on staff morale, as evidenced in customer surveys and staff surveys. In addition in certain services there has been at times a lack of pace around modernisation, although this has been mitigated to some extent by the progress of the Digital First programme.
- 3.7 A solid, up to date technical infrastructure is a prerequisite for the majority of the projects and programmes across the authority. This includes:
- Data storage and application hosting with high availability and minimal interruption to business. Increased uptime is essential in supporting RPA and AI technologies.
  - Consistent customer experience irrespective of device
  - Reduction in infrastructural complexity (standardised on a Microsoft platform).
  - Able to scale quickly either on-premises or in the cloud for new technology solutions.
  - Introduce elements of 'self-healing infrastructure' where faults are responded to automatically with little business downtime.
- 3.8 Additionally an infrastructure which keeps pace with modern approaches will significantly reduce the threat of Cyber-attack and help avoid the financial and reputational cost incurred as a result of technical failure and/or Cyber incidents.

### Cyber Threat

- 3.9 The threat of Cyber-attack has grown significantly over recent years. Freedom of Information responses (FOIs) collated by *Big Brother Watch* (the non-profit civil liberties and privacy campaigning organisation) showed that local authorities in the UK have been hit by almost 100 million Cyber-attacks in the last five years – the equivalent of 37 attacks a minute with around 1 in 4 councils' systems being successfully breached during that time.
- 3.10 While this council is *not* in the 25% of local authorities that have been breached, the Council is under daily Cyber-attack and needs to improve resilience.
- 3.11 With increasing dependency on technology, the impact of successful attacks has also increased. According to research conducted by Hewlett Packard, Cyber-attacks are growing more targeted, sophisticated, and costly to repair. The average cost to small/medium businesses due to disruption to operations has increased by 26% in two years. Depending on the nature of the incident, the Information Commissioner (ICO) fines could add up to €20 million to the cost of a

breach (although to date the highest penalty issued to a public sector organisation was £0.325 million issued to The Crown Prosecution Service (CPS) in May 2018).

- 3.12 The 'Wannacry' ransomware attack of May 2017 illustrates the cost to larger organisations. The Department of Health & Social Care (DHSC) estimated the cost to the NHS of the ransomware attack was £92 million in direct costs and lost output. However, costs to smaller organisations are also substantial. The 2017 ransomware attack on Copeland Borough Council was estimated to have cost around £2 million.

### Operationalising GDPR

- 3.13 With the introduction of The General Data Protection Regulation (GDPR) in May 2018, Brighton & Hove City Council put in place a GDPR project to introduce new initiatives to achieve compliance with the legislation.
- 3.14 Whilst this project has helped the council to protect customer data and avoid the reputational and financial impact of non-compliance, continuing to meet our GDPR responsibilities does carry a substantial overhead.
- 3.15 This is consistent with other organisations and is evident in the fact that the ICO received double the number of complaints in the period after May 2018 compared to same period in the previous year.
- 3.16 Although not explicit, it is broadly understood that any organisation that is found to have failed to protect sufficiently against a data breach, will be treated more sympathetically by the ICO if there are clear plans and actions in train. Equally it is accepted that very few organisations will be fully GDPR-compliant at this stage.

### Operationalising the approach to Digital

- 3.17 Digital First (DF) was initiated in April 2016 with the objective of overlaying services with improved customer-focused technology. The programme, which was funded through the modernisation programme, draws to a close in March 2019.
- 3.18 Major achievements of the programme include:
- the delivery of a new, customer focused corporate website.
  - the implementation of the iPaaS integration platform which provides the underlying data integration capabilities to support the 'My Account' customer portal.

- multiple service improvement projects which have created end to end, customer focused digital journeys for Cityclean, Parking, Community grants, Field Officers, Revenues and Benefits, Taxi licensing and School admissions.

3.19 Although the programme in its current form is ending, the demand for digital innovation (adopting the processes, culture and technology of an internet era to drive improved outcomes) and the continued support and maintenance of exiting digital products and platforms requires that the programme capabilities transfer into central corporate services and becomes part of a continual service improvement offer to customer facing services.

3.20 Projects that are currently 'in flight' (for example at City Clean) will be completed, and a number of Digital First staff have been retained to ensure this happens.

### **Detailed Plans**

3.21 In response to the context outlined above, investment is required in the following three areas:

- Upgrading of foundation IT across the council.
- Ongoing investment to support mobile working.
- Development of the digital offer to customers.

#### Upgrading of foundation IT across the council

3.22 The introduction of machine learning and AI algorithms aims to enable real time detection and alerting of Cyber threats across the digital infrastructure. Improved detection will help maintain a resilient technical infrastructure and avoid the financial and reputational cost incurred as a result of technical failure and/or Cyber incidents.

3.23 The council holds very significant amounts of unstructured data across shared drives, personal drives, SharePoint, and line of business applications. Deployment of content analytics tooling will enable the fast, safe disposal and archiving of duplicate and redundant stored data. This will avoid some of the cost of large migration projects and mitigate the security risk of unmanaged data.

3.24 Content analytics tooling will also be used extensively in the SharePoint and shared drive migrations and large service migration projects (e.g. the social care and housing systems replacement) and makes compliance with FOIs and Subject Access Requests (SARs) less time-consuming and lower risk.

3.25 Managing the overhead of GDPR processing through the use of suitable systems of record with a focus on automation will help avoid the high financial and reputational cost incurred as a result of GDPR breaches. According to

[EUGDPR.org](http://EUGDPR.org), under the new legislation organisations in breach of GDPR can be fined up to 4% of annual global turnover or €20 Million (whichever is greater).

#### Ongoing investment to support mobile working

- 3.26 The council currently runs the Windows7 operating system across the entire IT estate. Mainstream support for Windows7 ended in 2015. Extended support (including the issuing of security patches) will cease in January 14th 2020. This creates an urgent requirement to upgrade *all* laptop and desktop devices to Windows 10.
- 3.27 The current device estate is split with around 32% staff using laptops and 68% using fixed or Citrix desktop. All the current laptops are unsuitable for running Windows 10 in a corporate environment and need to be replaced with higher specification machines. Around 80% of desktops also require renewal.
- 3.28 Rather than investing in new desktops, a proposal to replace all end of life desktops with laptops would cost an additional £0.350 million. This would move the device estate to around 80% laptop and 20% fixed or Citrix desktop.
- 3.29 Given the lifespan of desktop machines, the opportunity to move to a predominantly laptop based estate will not arise again until 2025.
- 3.30 Workforce mobility has been a long standing business requirement that to date has not been within budget to address in a strategic manner. This investment would enable cashable savings through the creation of a more mobile workforce based on the greatest need rather than seniority and / or available service budget.
- 3.31 Creation of a mobile workforce will be a critical enabler for future decisions about the use of office space across the estate.
- 3.32 The increased use of iPhones and laptops has resulted in increased demand for Wi-Fi in a number of smaller sites (including Residential care homes, CityClean sites, Homeless hostels, etc.).
- 3.33 The proposed extension of Wi-Fi across all of the council's sites will help leverage investment in mobile devices and reduce mobile phone data costs where users only have access to 4G networks.

#### Development of the digital offer to customers

- 3.34 The ongoing development digital services will be achieved by transferring key product owner, development and analyst roles into IT&D's Digital team. Digital content and service design will transition to the Communications and Performance Improvement & Programmes (PIP) teams within the Strategy,

Governance & Law directorate. Contract management and ownership for digital products will transfer to IT&D.

3.35 The approach for future customer facing digital service development will be primarily driven by the Customer Strategy and Sustainable Social Care programmes. Both of these strategic programmes seek to:

- Support the ongoing redevelopment of services and create end to end customer focused digital journeys.
- Create well-defined, streamlined, and transparent operational processes.
- Use improved data management to ensure decisions are made based on evidence.
- Challenge the status quo and actively seek out opportunities to deliver value in new, innovative ways.

3.36 Although not specifically covered in the above proposals, streamlined digital services and improved data management pave the way for the future adoption of RPA, Machine Learning and AI which have the potential to enable significant cashable savings.

### **Implementation & Governance**

3.37 The above propositions will be delivered through a series of structured projects within the existing IT&D improvement programme (the Digital Organisation Programme). This programme reports to the Corporate Modernisation Delivery Board (CMDDB) and will have additional oversight through the Tech and Digital Board (an offshoot of CMDDB with a dedicate focus on technical/digital initiatives).

3.38 All digital service developments will be subject to a new governance framework designed to manage the flow of work and track business benefits. Oversight of this activity will be again be provided by the Tech and Digital Board.

3.39 The procurement of contracts for laptop top devices and deployment services will be carried out in conjunction with Orbis partners (East Sussex County Council and Surrey County Council) in order to align Orbis IT&D services and obtain better supplier pricing.

3.40 Contracts will include the initial provision of between 3,500-4,000 laptop devices along with end to end services which include:

- Overall project management.
- 'Unboxing' and asset tagging.
- Initial device testing and battery check.

- Device setup using the core Orbis Win10 build and required business applications.
- Pre-delivery testing.
- Delivery of new and collection of old laptops.
- Handover and initial troubleshooting support.
- Asset retirement and recycle/disposal of old devices.

3.41 Award of contract for devices is anticipated to take place before April 1<sup>st</sup> 2019 and will therefore require delegation to the Executive Director Finance & Resources in order to accommodate procurement timelines. The competition for device provision will establish if a further completion for deployment services is required.

#### **4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS**

4.1 An alternative approach to Windows10 compliance was considered. Rather than seek to extend the use of laptops across the organisation, a 'like for like' refresh would preserve laptops and desktops numbers at the current level. Although the less costly alternative, this approach was rejected for the following reasons:

- Workforce mobility has been a long standing business requirement that to date has not been addressed in a strategic manner. This investment will create increased capacity and an improved staff experience and customer outcomes.
- Creating a more mobile and flexible workforce will create opportunities to release or use of office space across.

#### **5. COMMUNITY ENGAGEMENT & CONSULTATION**

5.1 Ongoing consultation of service leads takes place through the Corporate Modernisation Delivery Board, the Tech & Digital Board, and various project boards. Staff will feed in views through the Staff Survey in April.

5.2 Where improved technology facilitates further service re-designs, the staff and trade unions will be consulted in line with the council's policies and procedures in the normal way.

#### **6. CONCLUSION**

6.1 The digital revolution can bring about an unprecedented access to information for better decision making and the capabilities to engage and collaborate with stakeholders across traditional internal and external boundaries.

- 6.2 The plans outlined in this report will enable these ambitions to be fulfilled in as safe a way as possible.

## **7. FINANCIAL & OTHER IMPLICATIONS:**

### Financial Implications:

- 7.1 The total estimated investment in IT and Digital within this report is £5.418 million and is fully funded within the councils capital programme. Budget Council on 28 February approved £3.111 million in 2019/20 for the implementation of Windows 10 and wifi and this is supplemented by £0.143 million included in the 2018/19 capital programme which will now be refiled in 2019/20. The £0.350 million for Upgrading foundation IT and £1.813 million for developing the digital offer both form part of the £3.902 million approved for Modernisation and investment in Integrated Service and Financial Plans within the 2019/20 capital programme.

*Finance Officer Consulted: James Hengeveld*

*Date: 10/03/19*

### Legal Implications:

- 7.2 The Council has a duty to secure continuous improvement in the way in which its functions are exercised having regard to a combination of 'economy, efficiency and effectiveness' (known as the duty of best value).
- 7.3 In accordance with Part 4 of the Council's Constitution, Policy, Resources & Growth Committee is the appropriate decision-making body in respect of the recommendations set out in paragraph 2 above. In addition, in order to comply with CSO 3.1, authority to enter into contracts in excess of £0.500 million must be obtained by the relevant committee.
- 7.4 Procurement and award of the proposed contract(s) must comply with all relevant public procurement legislation as well as the Council's Contract Standing Orders (CSOs).

*Lawyer Consulted:*

*Isabella Sidoli*

*Date: 12/03/19*

### Equalities Implications:

- 7.5 The council is committed to providing its services in a way, which promotes equality of opportunity at every possibility. Any supplier of service will be required to comply with the relevant Equality and Diversity legislation.
- 7.6 All individual projects will be required to carry out Equalities Impact Assessments and, in accordance with IT&D Architectural standards, any technology implementations will be compatible with corporate assistive technology tools.

Sustainability Implications:

7.7 No significant implications arising from this report.

**SUPPORTING DOCUMENTATION**

**Appendices:**

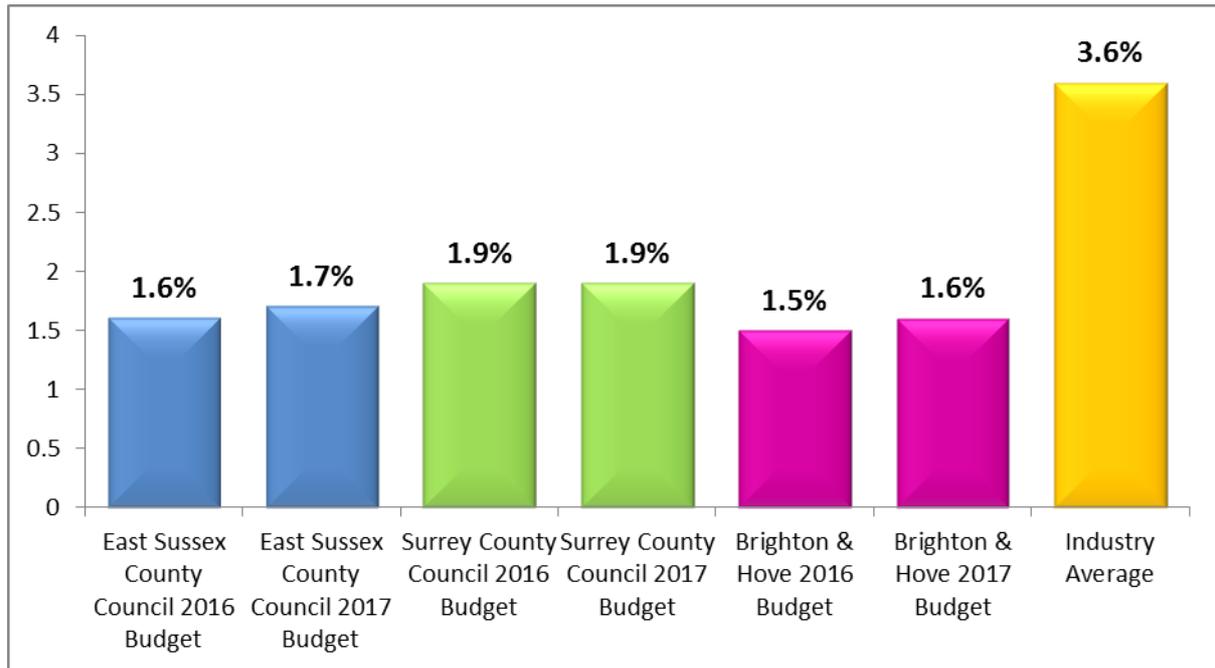
- 1 IT & D Services
- 2 Organisational IT Spend as a percentage of OpEx, Gartner Benchmarking 2016/17.
- 3 Organisational IT Spend per Employee, Gartner Benchmarking 2016/17
- 4 Break-down of planned expenditure.

## **Appendix 1 – IT&D services provided across the Council**

IT & Digital provide the following services

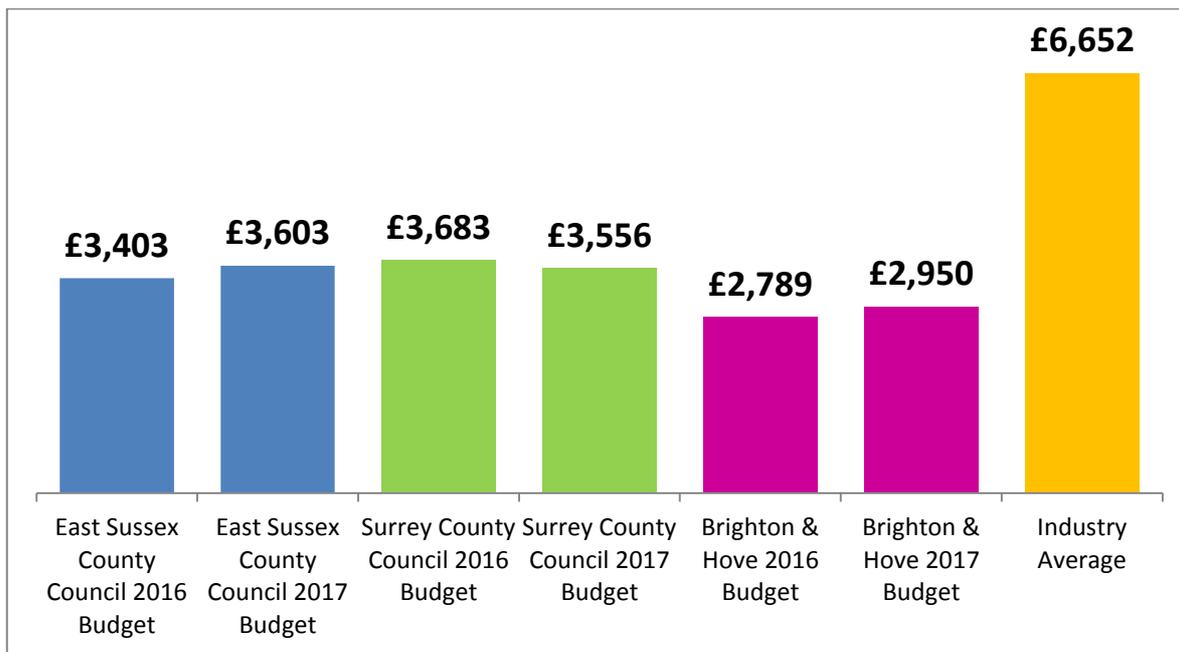
- Application Development
- Application Support & Management
- Assistive Technology
- BHCC Network Account Access
- Business Reporting & Data Analysis
- Electronic Document Capture (idox)
- Email, Instant Messaging, Calendars & Contacts
- Equipment Returns
- File Transfers
- Internet Access & Network Provision
- Investigations
- IT Business Continuity Support
- IT Project Management
- IT Risk Assessment
- IT Training
- Laptop & Desktop Provision
- Mapping & Spatial Services
- Media Storage & Retrieval
- Mobile Phones & Tablets
- Network Folders Permissions
- Office Moves
- Video & Phone Conferencing
- Printing & Scanning
- Remote Access
- Telephony
- Website Platform Management
- Wi-Fi Corporate & Public

## Appendix 2 – Organisational IT Spend as a percentage of OpEx, Gartner Benchmarking 2016/17



Industry average measure = Average spend by National and Local Government, plus Government affiliated organisations

### Appendix 3 – Organisational IT Spend per Employee, Gartner Benchmarking 2016/17



Industry average measure = Average spend by National and Local Government, plus Government affiliated organisations

## Appendix 4 – Break-down of Planned Expenditure

Note that all costs are indicative and based on initial market analysis. Furthermore, IT&D will work with Corporate Procurement to ensure the organisation gets the best value from suppliers.

- Upgrading of foundation IT across the council

Includes the introduction of cyber detection technology, the deployment Content Analytics tools and the implementation of a GDPR Compliance Platform

Total expenditure - £350,000

- Ongoing investment to support mobile working

Includes the provision of Windows10 compliant laptops and desktops (with laptop deployment covering approximately 80% of the workforce). Also includes the provision of Wi-Fi across all Brighton & Hove City Council sites

Total expenditure - £3,254,500

- Development of the digital offer to customers

Includes the transition of Digital First resources and Digital platform contracts

Total expenditure - £1,813,000

Combined total - £5,417,500