

## ICT Capital Programme – Budget Synopsis

Appendix 2 shows the ICT Capital profile required to deliver the proposed ICT Capital programme for 2018-2019 to 2022-2023 and below are explanations of each of the line items.

### Future Developments

*Desirable:- A budget to support future developments that are not yet known. If there are no future developments this budget will not be spent.*

It is envisaged that a budget of £250,000 per annum will be required to fund future developments through to 2022-2023. This budget has been increased compared to previous years as experience has shown that new developments have come to light which require funding above the original £200,000 future developments budget.

### Emergency Projects

*Desirable:- A budget to support emergency developments where expedited procurement is required.*

A fund of £25,000 is included in 2018-2019 to cater for the requirement to purchase ICT solutions more swiftly than normal processes would allow. It is estimated that £50,000 will be carried forward as an underspend from the 2017-2018 budget which will amount to a total of £75,000 being available for 2018-2019.

### Security Enhancements

- Penetration Tests and ITHC:-

*Essential to retain connectivity with central government departments such as the DWP.  
Prevents risk, high priority.*

In order to comply with PSN requirements it is mandatory for the Authority to undertake external penetration tests and provide authorised health check reports. A 3 year contract is currently being let in 2017-2018 and a further contract will be required in 2020-2021 at an estimated cost of £50,000. Health checks are also required to be performed and submitted annually and the cost of these is estimated to cost approximately £13,000 per annum.

- Internal Security Testing Tools:-

*Desirable.  
Reduces resource requirement, low priority.*

In order to support the requirement to provide health checks and ensure the Council's infrastructure complies with PSN requirements some specialist tools will need to be purchased and it is estimated that a budget of £10,000 will be required to purchase these in 2018-2019.

### Storage Refresh

- Increase Storage Capacity:-

*Probable  
Reduces risk, medium priority.*

There is likely to be a requirement to increase storage capacity as the Council stores more and more data, an estimated budget of £30,000 per annum (apart from years when the filer itself may require upgrading / re-contracting) has been apportioned for this. A strategic move towards cloud services may warrant a different financial model for storage

than is currently proposed, however, it is prudent to budget for the solution that is currently in place.

- Upgrade / Replace filers:-  
*Probable:- This will be dependent on future storage strategies but something will definitely be required.*  
*Prevents risk, medium priority.*  
In August 2017 a 5 year storage contract was entered into at a cost of £450,000. A new storage contract may be required in 2021-2022 and the proposed budget for this contract has also been set at an estimated £450,000. As stated above a move to cloud services may warrant a different financial model than the one currently envisaged.
- Upgrade / Replace Data Domain:-  
*Probable:- This asset is beyond its life expectancy and will need replacing but only when it starts showing signs of failure.*  
*Reduces risk, medium priority.*  
The current Data Domain appliance is ageing and beyond its expected life and, although functioning well, may require upgrading or replacing in 2019-2020 at an estimated cost of £150,000. Using figures based on an average 3 year life expectancy a further £200,000 has been included for upgrade / replacement in 2022-2023.

## Upgrades

- Replace / Upgrade Firewalls:-  
*Probable:- A health check will be undertaken prior to any purchases in order to ascertain when upgrades / replacements become necessary.*  
*Prevents risk, high priority.*  
£50,000 is estimated to be required in 2018-2019 to cover increased requirements, hardware failure and / or upgrade / replacement with a further £80,000 and £50,000 being required in 2020-2021 and 2021-2022 respectively to maintain a fit for purpose firewall infrastructure.
- Active Directory Upgrade:-  
*Essential*  
*Prevents risk, provides opportunities, medium priority.*  
The council relies on a product known as “Active Directory” (AD) to manage all users and their associated assets. The council’s AD requires upgrading in 2018-2019 at an estimated cost of £10,000. It is also envisaged that AD will require a further upgrade in 2021-2022 therefore an additional £10,000 has been included for this.

## Infrastructure Upgrades

- Telephony Improvement:-  
*Probable:- This will be subject to an analysis exercise to establish exactly what is required.*  
*Provides opportunity, low priority.*  
As the future space programme embeds itself and mobile/smarter working becomes a natural part of the working culture, solutions that satisfy the telephony demand aligned to this working profile will need to be developed. A £50,000 budget has been proposed in 2018-2019 for this with a further £50,000 proposed for 2021-2022 where upgrade and/or replacement of infrastructure may be required.
- Core Network Infrastructure Upgrade:-  
*Probable:- This asset will reach its life expectancy but a health check will take place to assess the need for upgrade / replacement.*  
*Reduces risk, medium priority.*  
This was upgraded in 2013-2014 so, with an estimated 5 year life, this will need upgrading again in 2018-2019 at an estimated cost of £180,000.

- **Network Hardware Refresh:-**  
*Probable:- This project will be aligned with the Council's property rationalisation programme in order to ensure that funds are used for the most appropriate locations.  
Reduces risk, provides opportunity, low priority.*  
A rolling Capital replacement programme of £30,000 per annum is required to ensure that the network infrastructure throughout the corporate network remains up to date, maintained and supported. There is an additional £270,000 requirement in 2018-2019 to enable agility across non Civic Centre sites (to match the agility of the Civic Centre) that are to be retained longer than 3 years. At this point it is not known which sites will form (or not) part of the group of Council wide assets, where sites reduce then the costs will also reduce.
- **Expand production VM environment and production DMZ environment:-**  
*Probable:- Dependent upon future strategies and business requirements.  
Reduces risk, low priority.*  
Some demand for additional server infrastructure remains, and, as such, the requirement for expansion of the virtual infrastructure is estimated to be £30,000 every 2 years. As the council's "cloud first" strategy accelerates this budget line may go towards supporting cloud server infrastructure as opposed to on-premise virtual server infrastructure.
- **Expand SDC Virtual Server Farm:-**  
*Possible:- Dependent upon future strategies and business requirements.  
Reduces risk, low priority.*  
Infrastructure at the Secondary Data Centre (SDC) needs to be expanded in line with infrastructure at the Primary Data Centre (PDC) and, as a result of this, it is estimated that £35,000 will be required in 2018-2019 and £15,000 will be required in 2020-2021 and 2022-2023. Note that the Physical SDC may be largely replaced by a virtual SDC (Infrastructure As A Service) but the costs are estimated to be the same for infrastructure requirements.
- **Civic Centre Infrastructure Upgrade:-**  
*Essential:- Required to finalise the ICT requirements for the Future Space Programme.  
Provides opportunity, high priority.*  
A further £250,000 is estimated to be required in 2018-2019 in order to fund additional hardware to support the final phase of the Future Space programme.
- **Application rationalisation and SAAS:-**  
*Possible:- Dependent upon further analysis.  
May provide a return on investment, low priority.*  
Solutions need to be investigated to reduce the application estate and take advantage of technologies that allow for more affordable and more mobile / agile working methods. Software As A Service is a tried and tested path and will be investigated as well as the DTP being utilised were appropriate. A budget of £100,000 for 2018-2019 has been included for this rationalisation.
- **Auditing Tools & Log Management Solution:-**  
*Essential:- The Council needs this information to remain PSN compliant.  
Reduces risk, high priority.*  
PSN have a requirement for council's to monitor staff access to computers via "log management" and tools at an estimated cost of £90,000 (in 2018-2019) are required to do this. These tools will also assist in auditing of non PSN requirements such as file and permission access.
- **Telephony Refresh:-**  
*Probable:- Dependent upon the failure rate of current equipment.  
Reduces risk, medium priority.*

As the telephony system is now much more reliant on server and switch infrastructure, as well as an increasing reliance on cloud technologies, it is necessary to replace ageing hardware / software on a cyclical basis, therefore, a £10,000 budget per annum has been estimated to accommodate this.

- **Civic Centre Wireless Upgrade:-**

*Probable:- Dependent upon analysis that will take place to identify requirements.*

*Reduces risk, low priority.*

As the number of laptops and tablets increases within the civic centre the associated wireless infrastructure needs to be maintained to keep pace. £10,000 per annum budget has been estimated to support this with an increased sum of £50,000 in 2020-2021 to replace / upgrade the back end infrastructure.

- **Replace Cisco with Aruba for non Civic Centre Locations:-**

*Probable:- This project will be aligned with the Council's property rationalisation programme in order to ensure that funds are used for the most appropriate locations.*

*Provides opportunity, low risk.*

There are a number of non Civic Centre locations that have ageing Cisco WiFi equipment that needs to be replaced with Aruba WiFi equipment. A budget of £55,000 will be required in 2018-2019 to achieve this. (This figure is based on current sites, a reduction in sites will lead to a reduction in costs)

- **Replace/Upgrade/Develop System Centre:-**

*Probable:- Dependent upon analysis that will take place to identify requirements.*

*Reduces risk, low priority.*

A £40,000 budget is required in 2018-2019 to upgrade and develop the current system centre implementation and a further budget of £60,000 will be required in 2020-2021 to replace the physical system centre appliance with a further upgrade required two years later at a cost of £50,000.

- **Unified Communications:-**

*Probable:- Dependent upon future strategies and business requirements.*

*Provides opportunity, low priority.*

In order to aid mobility and agility a unified communications solution is required to allow people to be contacted easily, wherever they are, using one simple solution. This project is already underway and an estimated budget of £50,000 will be required in 2018-2019 to ensure the infrastructure is fit for purpose with a further £25,000 per annum being required to ensure it remains resilient and capable of supporting increased numbers.

- **Project Resource to Support Agile Working:-**

*Possible:- Dependent upon future agile working requirements.*

*Provides opportunity, low priority.*

Resource is required to support the roll out and the usage of agile working project throughout forthcoming years at an estimated cost of £90,000 per annum.

- **Additional Digital Signage Equipment and AV:-**

*Probable:- Dependent upon future strategies and business requirements.*

*Provide opportunity, low priority.*

In order to promote events to the citizens of Wolverhampton, professionally advertise schemes and activities and to generally inform the public and employees of the council external digital signage is required and additional internal Audio Visual capability is also required at an estimated cost of £300,000 being required in 2018-2019.

- **Just in Time Development:-**

*Probable:- Dependent upon future strategies and business requirements.*

*Provides opportunity, low priority.*

In order to support rapid development of solutions to support the business over the coming years estimated funding of £300,000 per annum will be required.

- **Internet Upgrade / Replacement:-**  
*Essential:- The current contract is due to expire and needs to be renewed. Maintenance, medium priority.*  
As the Council operates more and more in the digital world it is imperative that fast and resilient internet links are available and, in order to ensure this, the Council's current internet service will need to be upgraded or replaced in 2018-2019 at an estimated cost of £50,000.
- **Resilient Express Route Installation:-**  
*Probable:- Dependent upon analysis that will take place to identify requirements. Prevents risk, medium priority.*  
In line with an upgrade internet link there is also a requirement to make the specialist internet connection for the Digital Transformation Programme resilient at an estimated cost of £20,000 in 2018-2019.
- **WAN Rationalisation:-**  
*Possible:- Dependent upon analysis that will take place to identify requirements. May provide a return on investment, low priority.*  
In order to reduce costs in the longer term and, therefore, save the council money it is necessary to invest in network architecture changes in 2018-2019 at an estimated cost of £40,000.

## IT Service Management

- **System Centre, Cireson, SharePoint Development:-**  
*Probable:- Dependent upon future strategies and business requirements. Maintenance, medium priority.*  
These solutions need to be developed to continually evolve to meet the demands of service users. It is estimated that a budget of £60,000 will be required in 2018-2019 to achieve this with a further budget of £50,000 every two years thereafter.

## Print and Mail

- **Hybrid Mail / MailMark:-**  
*Probable:- Dependent upon future strategies and business requirements. May provide a return on investment, low priority.*  
In order to deliver savings on outgoing post, and provide options to email or text rather than post, to meet service demand for different communication options it is estimated that a budget of £45,000 will be required in 2018-2019.
- **Folding Machine:-**  
*Probable:- Dependent upon analysis that will take place to identify requirements. May provide a return on investment, low priority.*  
To provide the ability to automatically fold printed items either for inserting into envelopes or printed booklets it is estimated that a budget of £20,000 will be required in 2019-2020.
- **Large Format Laminator:-**  
*Probable:- Dependent upon analysis that will take place to identify requirements. May provide a return on investment, low priority.*  
To provide large format laminating services for external signage solutions an estimated budget of £10,000 will be required in 2020-2021.
- **Scorer:-**  
*Probable:- This asset will reach its life expectancy but a health check will take place to assess the need for upgrade / replacement. Reduces risk, low priority.*

To replace the current scoring machine (which enables the effective folding of printed items) when it reaches end of life in 2020-2021 and estimated budget of £10,000 will be required.

- **Booklet Maker:-**  
*Probable:- This asset will reach its life expectancy but a health check will take place to assess the need for upgrade / replacement.*  
*Reduces risk, low priority.*  
The current booklet making machine reaches end of life in 2021-2022 and an estimated budget of £30,000 will be required to replace it.
- **Large Format Printer:-**  
*Probable:- This asset will reach its life expectancy but a health check will take place to assess the need for upgrade / replacement.*  
*Reduces risk, low priority.*  
The large format printer has an estimated life of 5 years so will require replacing in 2022-2023 at a cost of £20,000.

## Data Centres

- **Additional Data Cabinets:-**  
*Possible:- Dependent upon whether we can generate income by housing other organisations' infrastructure to generate income.*  
*May provide a return on investment, low priority.*  
An estimated £2,000 per annum will be required to ensure there are sufficient data cabinets suitably powered and network enabled in order to house required network and infrastructure hardware. This requirement is anticipated to slow down as we look to migrate infrastructure from "on premise" into the "cloud."
- **Air Conditioning:-**  
*Probable:- Dependent upon how well the initial phase of the replacement progresses.*  
*Maintenance, medium priority.*  
The air conditioning units in the UPS (Uninterrupted Power Supply) room are in the process of being replaced with and estimated £5,000 being required in 2018-2019 to complete the project.
- **Data Centre Deep Clean:-**  
*Probable:- Dependent upon the cleanliness of the data centre every 2 years.*  
*Maintenance, low priority.*  
A deep clean should be undertaken every 2 years, therefore, £5,000 funding has been requested for 2018-2019, 2020-2021 and 2022-2023.
- **Replace UPS Batteries:-**  
*Probable:- Dependent upon the failure rate of the batteries.*  
*Maintenance, low priority.*  
Batteries in the UPS have a finite life and need replacing on a cyclical basis. It is estimated that £15,000 will be required in 2018-2019 and £5,000 being required in 2019-2020 with these amounts being required again in 2021-2022 and 2022-2023 respectively.
- **UPS DC & AC Capacitor Replacement:-**  
*Essential:- These are beyond their life expectancy and will need replacing but only when it starts showing signs of failure.*  
*Maintenance, high priority.*  
Capacitors in the Data Centre have a 5 year life expectancy (some are currently beyond this) and therefore need replacing before they become end of life. The capacitors are of different ages, therefore, replacement periods vary with budget requirements of 2018-

2019 (£10,000) and 2019-2020 (£5,000) with a probable additional requirement of £20,000 in 2022-2023.

- Cold Aisle Containment:-

*Desirable:- A business case will be built to assess whether this will be financially viable. May provide a return on investment, low priority.*

To make the data centre as efficient as possible it would be prudent to introduce partitioning to ensure that “hot air aisles” and “cold air aisles” remain separate so that air conditioning units do not have to cool hot air more than necessary. A full review of the data centre will be required to ascertain if this exercise would be viable and worthwhile but, if it is, there will be an estimated cost of £20,000 to introduce it in 2019-2020.

- Environmental Management:-

*Desirable:- A business case will be built to assess whether this will be financially viable. May provide a return on investment, low priority.*

As the council moves more towards using the cloud to supply services the strategy is to “rent out” space in the data centre to generate income. In order to ensure the data centre is fit for this purpose environmental monitoring will need to be installed and an amount of £40,000 has been budgeted for in 2021-2022 to achieve this. Again, a full review will be undertaken to establish whether it is going to prove viable and worthwhile undertaking this activity.

- Migrate SDC:-

*Probable:- Dependent upon future strategies and business requirements. Reduces risk, may provide a return on investment, medium priority.*

There is a risk and an annual rental cost in having the Council’s data centre housed in a building that is not owned by the Council, therefore, at the end of the current contract in February 2019 it is planned to migrate to Council owned premises at an estimated one off implementation cost of £50,000.

## Disaster Recovery

*Probable:- Dependent upon future strategies and business requirements. Reduces risk, low priority.*

As more and more services are delivered from cloud or hosted sites the requirement for traditional disaster recovery architectures are reducing, however, there are still essential services (E.g. networking, domain controllers and some critical applications) that are still delivered from “on-premise” these need to be protected in case of a disaster, in order to do this a budget of £100,000 is required in 2018-2019 and 2019-2020.

## Desktop Refresh

*Probable:- Dependent upon future strategies and business requirements. Provides opportunity, low priority.*

The drive to more mobile and smarter working continues, in order to support this, more innovative desktop computing devices are required both now and in the future to ensure users constantly have the correct, equipment that is fit for their work purpose. To ensure the desktop hardware estate remains fit for purpose the following funds are estimated to be required:-

- Tablet Devices: £65,000 is estimated to be required to satisfy current demand in 2018-2019 and a further £525,000 will be required in 2019-2020 with further estimated costs of £225,000 in 2020-2021, £525,000 in 2021-2022 and £375,000 in 2022-2023.
- Laptop Devices: £165,000 is estimated to be required in 2019-2020 with a further £200,000 in 2020-2021, £250,000 in 2021-2022 and £250,000 in 2022-2023.

- Desktop Devices (Libraries): £100,000 is estimated to be required to upgrade devices in 2019-2020 and then another £150,000 will be required in 2022-2023 to refresh these devices.
- Desktop Devices (Non Libraries): It is estimated that £350,000 will be required in 2020-2021 to refresh the current corporate desktop estate.
- Monitors: The majority of monitors have not been upgraded in the last 10 years and they are not capable of delivering the resolution that modern desktop devices (E.g. laptops) produce. These monitors need upgrading which will require a budget of £300,000 in 2018-2019 with a further £200,000 and £50,000 being required in 2019-2020 and 2020-2021 respectively.
- Peripherals(docking stations, keyboards, mice etc.: In order to support the above hardware devices peripherals will be required at an estimated cost of £20,000, £40,000, £40,000, £60,000 and £60,000 for 2018-2019 to 2022-2023.
- Mobile Phones: There will be a requirement for more mobile phones throughout the business and, at a current cost of £155 per device, this is expected to generate a demand of approximately £50,000 per annum from 2018-2019 to 2022-2023.
- Telephony Headsets: There will be a requirement for headsets to be purchased to support the Unified Communications and Collaboration project. The rollout is expected to reach 2,000 people in 2018-2019 and the remainder in 2019-2020 with costs estimated to be £32,000 per annum.

## Service Led ICT Projects

- Migrate Care First to Eclipse:-  
*Probable:- The project is currently being reviewed but is likely to progress and this budget will be required to support it.*  
*Prevent risk, medium priority.*  
The Platform for Care project vision is to transform the systems for Children and Young People and Adult services, transforming customer experiences and outcomes by enabling better service delivery using a single integrated digital platform. Enabling and empowering Council staff to work from anywhere and everywhere, with real time information aiding accurate decision making and improve efficiency. This is estimated to require a Capital investment of £233,00 in 2018-2019.
- Migrate IDOX to Cloud:-  
*Possible:- Analysis will be undertaken to determine if this upgrade / migration is financially viable.*  
*May provide a return on investment, reduces risk, low priority.*  
The Council's IDOX solutions requires upgrading and as part of this it will be migrated to a cloud based solution at an estimated cost of £100,000 in 2018-2019.