ICT Modernisation Programme: Financial Breakdown

High Level Plan

	21/22		22/23		23/24	
Activity	**One off Revenue (000s)**	**One Off Capital (000s)**	**One off Revenue (000s)**	**One Off Capital (000s)**	**One off Revenue (000s)**	**One Off Capital (000s)**
Migrating business applications appropriate platforms	94		386		150	
Replacing aged infrastructure (Server & Network)		28		822		200
Commissioning a new Wide Area Network			125			
Replace end of life disk storage systems		11		139		
Implementing Autopilot laptop build		11		39		
Replacing & standardising remote access service				170		
Replacing the Council's dated backup solution			75			
Replacing Mobile device management solution			80			
Commissioning new corporate and contact centre telephony solution			350			
Implementing a full ITSM function				100		
IT Resources to deliver modernisation	107		1,446			

Activity in Confidential Appendix 3			75	210		
	201	**50**	**2,537**	**1,480**	**150**	**200**
Total Yearly Funding		**251**		**4,017**		**350**
Total Funding Requested						**4,618**

2021/22 Breakdown

#	Reason	One off Revenue £000	One off Capital £000	Total 21/22 Cost (000's)
1	To upgrade, replace or consolidate or decommission c240 aged servers which support SBC applications and services		**28**	**28**
2	To migrate several key lines of business applications from being hosted at SBC datacentre to the application providers cloud bringing resilience and security.	**94**		**94**
3	To replace 3 old and end of life disk storage units which hold all the SBC data. In the result of a system or hardware failure it is unlikely they could be recovered, and the data could be lost.		**11**	**11**
4	To implement a standardised autopilot laptop build mechanism to improve speed of delivery, quality and security to laptop devices.		**11**	**11**

5	To establish the modernisation programme and have resources working on it this financial year.	**107**		**107**
	Total	**201**	**50**	**251**

1. There are approximately 240 servers, of the Council's 400 servers, which need urgent replacement, upgrade or a move to a cloud solution. Some of these are running operating systems over18 years old. This gives rise to reliability and support issues. Resources recruited and assigned to this work programme and scoping of the council's critical applications has commenced.. This is a significant programme of work which will roll into 22/23 and will on completion provide the council with a supported platform to run council services.
2. Business applications that can be hosted by the software provider in their own secure resilient cloud are in the process of being reviewed and identified. This will give some cost benefit but will more importantly mean that they can be managed, updated and monitored by the supplier of the service . These will then be robustly performance managed through the contract management controls. Cloud migration reduces the organisation's risk and need to keep servers and provide system support. SBC would only need to provide the existing application support it already does and ICT resources would be more available to manage other systems. Applications including Modern.Gov (Committee Management System) and APAS (Planning & Building Control System) have already been migrated to the Cloud with further applications being scoped
3. The Council has application and user data stored on storage units which are all coming to, or are already, end of life both in their age and in support from their respective manufactures. IT are working with third party suppliers to replace the existing disk storage units and migrate the council's data and services onto these units. This will ensure the council's data and systems are stored on a supported platform and has the necessary performance and capacity to meet the current and future demand. Quotes have been received and it is intended the procurement will be completed in March 2022 with installation prior to the end of the current maintenance contract in June 2022.
4. The Council has moved to a deploying number of laptops for staff rather than the previously used desktop based ('thin') client devices. This has created a significant demand to install and configure laptops to a consistent standard. To address the council has identified a partner who is assisting with the setup of a solution that provides a standard laptop configuration and management service. This will benefit the council by automating a currently manual process and the reliance on interim staff to build and deploy laptops. This will enable the service to be more responsive to the needs of the council and will allow a more effective deployment of devices. Consultancy to support testing and configuration has been procured and testing is underway with IT engineers. This is expected to be completed by April/May 2022.
5. Resources recruited.

2022/23 Breakdown

#	Reason	One off Revenue £000	One-off Capital £000	Total 22/23 Cost £000
1	Continued Server upgrades and migrations		822	822
2	Migrate specific line of business systems to their provider clouds. E.g., Revs & Bens Academy system	386		386
3	Expand the scale of the network upgrade and replacement programme		139	139
4	Commission high speed WAN links for cloud access	125		125
5	Replace backup solution	75		75
6	Mobile Device Management	80		80
7	Replace and upgrade capability of remote access solution.		170	170
8	Implement improved software build and control		39	39
9	Upgrade Service Management platform (helpdesk and self-serve)		100	100
10	Telephony (contact centre and internal corporate phone system)	350		350
11	Resource costs for implementation of this programme of work.	1446		1446
12	Options in Confidential Appendix	75	210	285
	Total	**2,537**	**1,480**	**4,017**

1.Continued Server Upgrades and Migrations– Continue to replace or upgrade systems which have run on out of vendor support hardware, based on a “Cloud Appropriate” strategy, whereby the best solution (Software as a Service or SaaS, or public cloud would be selected. Physical or “on premise” servers are not excluded but would be minimised to reduce Data Centre costs and maintenance. The risk of not continuing with this work to the organisation is very high given the inability to repair or replace current hardware components should an issue arise. This is a highly complex area. Each upgrade or migration will require careful project management – provided by the Modernisation Programme Team. It should be noted that this will not be a single procurement, but

will consist of multiple elements, each of which will need to be properly assessed for value, technical compatibility, service need and high availability. This part of the programme links closely with the Business System reviews and plans to use system provider private cloud services.

2.Migrate specific line of business systems to their provider clouds. E.g. Revenues & Benefits Academy system– This work stream relates to the migration of key (and very complex) applications to provider cloud services (known as SaaS). These services provide a greater resilience for each application, removing the pain of upgrades and regulation changes (done automatically), protecting accessibility for the officers and reducing our server footprint.

One-off costs relate to the actual migration work required and undertaken by the provider (data integrity and transfers, training, system configuration specific to Slough BC), on-going revenue charges relate to the subscription (or licence) for access to the application.

3.Expand the scale of the network upgrade and replacement programme– Complete the replacement of end-of-life network equipment, across sites, office locations and data centre. Failure to replace this equipment will lead to areas of buildings not being able to work and increases the opportunity for cyber-attack. Legacy out of support hardware has no maintenance or patches released and could leave the council vulnerable. This work will be led by the Network team and fed into the wider modernisation plan. Key milestones will include, the purchasing, the installation, testing, migration and the set-up of the solution.

4.Commission high speed WAN links for cloud access– Replacement of the existing wide area network access to provide better bandwidth for cloud services and utilise more modern technology (called SDWAN) to manage the network.

5.Replace backup solution– Continue and complete the replace of the data storage back-up solution. The Council has its data stored on three storage units (racks of hard disk drives). These operate as individual units providing many Terabytes of storage. These units are all coming to, or are already in some cases, end of life both in their age and in support from their respective manufactures. SBC must consolidate the data storage into one larger unit which will provide greater performance, resilience, and reliability. The risk of not undertaking this is high and will amount to a catastrophic failure resulting in a loss of systems / data and applications/services. This work will be led by the infrastructure team and the key milestones will include, the purchasing, the installation, testing, migration and the set-up of the solution.

6.Mobile Device Management– A replacement is required for our currently outdated mobile device management software. This is the tool that allows mobile devices to be updated and maintained remotely and is used to secure stolen or lost devices.

7.Replace and upgrade capability of remote access solution– Complete the replacement of the current remote access solution. Currently there are a variety of solutions to support remote access to the council's network, this will enable discovery and solution design of a consolidated solution ensuring continued staff access to hybrid, on premises and cloud as the systems are modernised. The work is being led by infrastructure team and the ICT modernisation programme lead and the key milestones will include the creation of a work programme and a replacement programme, followed by procurement, installation, testing and live deployment.

8.Implement improved software build and control– All newly deployed laptops have to be built manually – by built, we mean the software is loaded individually by one or more of the IT Operations Team. There are products that will automate this process and also control any unofficial loading of applications or data. These are commodity products, so a full tender process will determine the best product at the right price for Slough.

9.Upgrade Service Management platform (helpdesk and self-serve)– The IT Service currently utilises the Helix (Remedy) system to log, manage and complete IT Help Desk requests. This system is known as an ITSM (IT Service Management). The system was inherited following the transfer from Arvato into Slough BC. As an ITSM, the system is inadequate as it does not provide self-serve functionality, no AD integration, limited knowledge base functions, no asset management tools configured and more complex than is necessary.
An upgrade or replacement of the Helix (Remedy) ITSM is required to ensure Slough ICT are properly equipped to manage the IT estate in all its complexity

10.Corporate Telephony Solution – The telephony service is fragmented and uses different, somewhat old-fashioned, technology. This project will look at leveraging the MS365 functionality to provide a cohesive, robust and highly functional telephony solution. This will need to be done in the light of any Corporate or Service restructures, the need to reduce the number of inbound calls but maintain an acceptable service level to residents and visitors or Slough. This solution will also include telephony for the councils contact centre, IT service desk & Track Trace call centre.

11.Resources – Resource costs.

12.Refer to part 2 papers

2023/24 Breakdown

#	Reason	One off Revenue	One off Capital	Cost (000's)
1	Annual cost of Disaster recovery solution			
2	Continued Server upgrades and migrations		**200**	**200**
3	Continue planning and migration to cloud and cost of cloud environments	**50**		**50**
4	Migrate specific line of business systems to their provider clouds. E.g. Revs & Bens Academy system	**100**		**100**
5	Security Solutions			
6	Annual disk storage maintenance			
7	Expand scale or network upgrade and replacement programme			
8	Commission high speed WAN links for cloud access			
9	Cyber reporting			
10	Replace backup solution			
15	Infrastructure and cloud monitoring			
16	Upgrade Service Management platform (helpdesk and self-serve)			
17	Telephony (contact centre and internal corporate phone system)			
	Total	**150**	**200**	**350**