BUSINESS PLAN FOR ICT SHARED SERVICE 2020/21

Service Leads

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APPROVED BY	Status	Date
Management Board	Draft	7/10/19
Shared Services Partnership Board	Draft	7/11/19
Joint Advisory Committee	Final draft	
Cambridge City Council *[Executive Councillor and Scrutiny Committee]*	Final	
Huntingdonshire District Council Cabinet	Final	
South Cambridgeshire District Council Cabinet	Final	

3C Reporting timetable

Progress reports on Business Plan implementation and progress against key measures will be monitored at the quarterly 3C Management Board meetings and then submitted every quarter to the 3C Chief Executives' Board. Quarterly performance reports will be submitted to the Joint Shared Service Group (Leaders) prior to consideration by each partner at executive and scrutiny level.

Progress updates in quarterly reports will inform the preparation of annual reports, to be submitted to the partners' decision-making bodies in March 2021 as part of the strategic review process set out in Schedule 2 to the Partnership Agreement.

Version	Date
V0.1 DRAFT	**07 OCTOBER 2019**

SECTION 1: CONTEXT AND OVERVIEW

A. PURPOSE OF THIS DOCUMENT

This is the Business Plan for the ICT Service, part of 3C Shared Services, for 2020/21. It describes how the shared service arrangement outlined in the approved Business Case will be delivered to ensure objectives are achieved and business benefits are realised within a robust governance framework and in the context of the partner councils' corporate plans.

The following objectives have been agreed:

- Protection of services which support the delivery of the wider policy objectives of each Council.
- Creation of services that are genuinely shared between the relevant councils with those councils sharing the risks and benefits whilst having in place a robust model to control the operation and direction of the service.
- Savings and efficiencies through reduced management costs and economies of scale.
- Increased resilience and retention of staff.
- Minimise the bureaucracy involved in operating the shared service.
- Opportunities to generate additional income, where appropriate.
- Procurement and purchasing efficiencies.
- Sharing of specialist roles which individually, are not viable in the long-term.

The Plan is divided into the following sections:

- Section 1: Context and Overview
- Section 2: Operational Plan (business as usual activities)
- Section 3: Summary of Performance Indicators

In order to deliver a robust and reliable business as usual service, the focus to date has been to address the legacy "technical debt" of the infrastructure that 3C ICT inherited. Overcoming and addressing the variations in technical strategies and infrastructure has been challenging. We are now coming to the end of this phase of work through programmes such as Council Anywhere, Server Room Consolidation, Network improvements and implementation of the Digital Portal. Each of the 3 councils are now in a stronger position and can look forward to including more value added, business led transformation work to their respective development and improvement plans.

As well as technical improvements, 3C ICT as a service have matured and during 19/20 has undergone staffing and internal structural changes. The Head of IT and Digital is in place and as of Autumn 2019 a permanent Deputy Head of IT – Operations has also been recruited. Teams who were once separate have been brought together to provide seamless service over the 3 partners delivering projects and BAU services.

Following on from the delivery of Council Anywhere and the Server Room Consolidation project there is a stable IT platform and key infrastructure that will support transformational change within the three councils and how the councils can use technology to solve their problems.

Within the business plan for 2020/21 there is a focus on standardisation, stabilisation and delivery, with a view to changes that can be made to improve the service technically and structurally in line with that delivery.

There are still key projects to be delivered, incorporating some of the largest line of business systems (Waste, Housing, Environmental Health) as well as the move to a new network provider (MLL) but overall the direction of travel will be towards a different type of IT delivery. There is a growing need to balance the drive to realise efficiencies with pressures to deliver service improvements.

There are also some challenges. What people want and need from IT & Digital is changing and the service needs to adapt to reflect that. The shape of that change needs to be derived from collaborative work with the three councils and that discussion will take time.

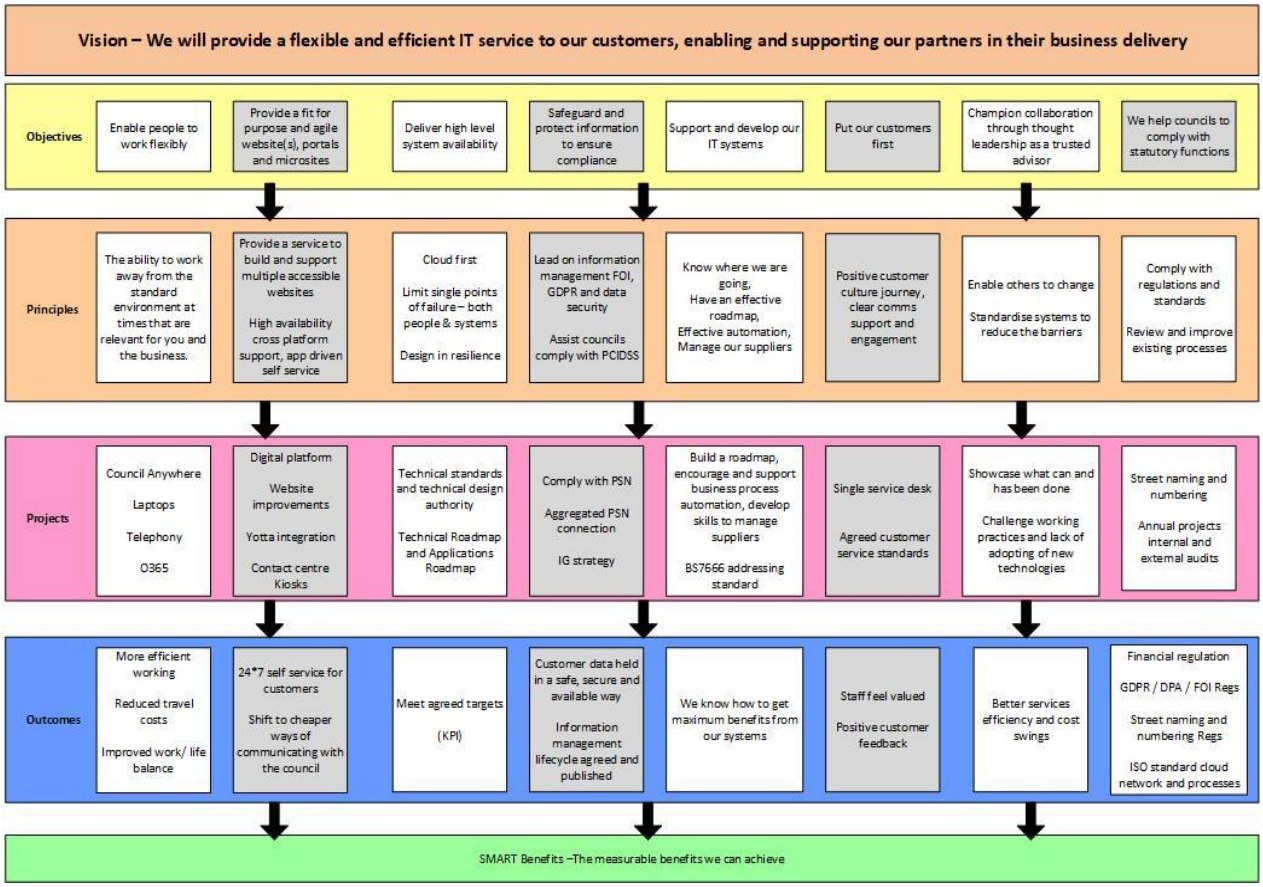
This and other important discussions need to be undertaken by the 3 councils and their IT service to ensure that the IT service is structured and funded in a way that supports the councils in the transformational activities. These discussions are planned but will not be concluded in time for the results to be included in the business plan for 2020/21. The expectation is that the outcomes from those discussions will be worked on and included in the business plan for 2021/22.

Therefore the 2020/2021 Business plan for ICT Shared Service is in effect an update on the existing business plan rather than a substantive change.

B. DESCRIPTION OF THE SERVICE

Vision & Objectives

The following diagram summarises the vision and high level objectives for the 3C ICT Shared Service. This has been updated in 19/20:



In essence, the drivers for the ICT Shared Service are:

- **Savings to the 3 councils**: a single shared service increases efficiency and reduces the unit cost of service delivery.
- **Service resilience**: fewer single points of failure, and increased scale enables increased investment in more robust infrastructure, thus reducing probability and impact of service outages.
- **Collaborative innovation**: increased scale enables investment in roles such as technical architect / IT Analyst, which will be the catalyst for accelerating the design and delivery of next generation council services, with Digital First an excellent customer service at their heart. In this way, the 3C ICT Shared Service will contribute to the evolution of council services, a position and level of investment which none of the 3 partner councils could afford on their own.

The partners are increasingly aligning their strategic direction for the service and have signed up to a 5 year Roadmap encompassing the strategic direction for IT and Digital services. There is recognition that 3C ICT is an enabling service that will allow the respective partners to transform the way that Council services are delivered, and that IT is no longer just a service cost. This alignment has been achieved through active engagement from 3C ICT with the strategic leads in each authority, intelligent clients and service leads across the partnership. This common approach is now allowing the partners to derive maximum benefit from the service, in particular the benefits in flexible and

effective working that derive from Council Anywhere are clearly noted in the feedback from services across all three councils.

The **Digital and ICT Strategy, ICT Roadmap** together with the **Service Catalogue** (currently being updated) are the primary documents outlining the strategic intent for the service and describe the current service offerings provided by the ICT Shared Service. These important documents are managed under the approval of the 3C Management Board, and will continue to evolve throughout the life of the ICT Shared Service.

The current service catalogue categorises in detail the services that 3C ICT deliver. This is achieved through a mixture of in house developed, managed systems, co-sourced and out-sourced service arrangements. Even though the list illustrates the breadth and depth of the services that are delivered, in its current form it is only really used as part of the service management process by ICT staff. As part of improvements and developments planned in the coming 12 months and following discussions with the Intelligent Clients, a more user-friendly version of the service catalogue is in the process of being developed. This will allow officers, staff and any user of 3C ICT services to be able to see services that that they are able to request to use and act as a starting point for request for service (be that access, change or development)

Appendix C contains the list of all live services.

In addition to delivering the “traditional” ICT service such as Service Desk and Applications Support, the portfolio of services includes less traditional “thought leadership” types of services, which are seen as essential for the three partner authorities to achieve their strategic goals. For example, “Digital First” delivery of front line council services is strategically vital in order to deliver the level of savings and customer satisfaction required of the councils.

The **Technology Roadmap** is the other important document describing service capability. It describes the planned changes / additions / modifications to service delivery as well as identifying the financial opportunities to leverage the economies of scale needed to fulfil the anticipated savings desired from the service. It includes the relative priorities of these changes (MoSCoW), together with a mapping of which of partner(s) wish these change(s). As with the service catalogue, this document is also managed under change control, and will continue to evolve throughout the life of the Shared Service.

Together, the Service Catalogue and Technology Roadmap provide a complete and comprehensive description of the services (current and planned) that will be provided by the 3C ICT Shared Service.
The Team structure has been designed to deliver on this programme of work, an overview of the current service structure is provided in Section D

Aims & Priorities
The aims and priorities of the service are to provide the right ICT services at the right price point to enable the partner councils to achieve their goals and to be agile enough to respond to rapidly shifting priorities. Within the template of the service catalogue, each of the individual services will have a clear priority, service availability, service support details, KPIs and a service owner.

Regular reviews between the ICT Shared Service management team and the Intelligent clients of each of the partner councils have been instigated to monitor, report, further refine

and improve the delivery of services offered by 3C ICT. This includes priorities of upcoming requests for development and project work generated from service areas, annual bid process and ad hoc requests. Over the past 6 months as noted in the introduction, focus of these meetings has shifted from just operational issues to the wider service development needs for each council and collectively across all three. We will continue to build and develop on these initiatives.

The agreed list of priority projects requests as of the end of Nov 2019 can be found in Appendix D.

All three councils approved the proposal to create the service, and 5 year plan, hence the ICT Shared Service and are expected to renew for a further 3 years in October 2019.

In addition to the work with the 3 Councils the 3C ICT Service will continue to support the Cambridgeshire and Peterborough Combined Authority for which a separate arrangement and SLA exists. Any further business opportunities to support external organisations will be shared with the strategic leads in each authority once an initial assessment of the request has been undertaken.

Benefits Realisation

The largest financial savings are being achieved through the standardisation of the existing 3 environments. As line of business systems are standardised it is very likely that there will be additional service specific operational savings realised by each discrete partner service through the introduction of more efficient digital platforms. The operational savings will be realised and reported by the relevant service areas. 3C ICT will continue to support the Transformation teams in the delivery of their planned improvements and strategies and helping the services realise and be responsible to account for these benefits moving forward. This supports the fact that 3C ICT is an enabling service and not a cost centre.

C. FINANCIAL OVERVIEW

The financial profile of the Business Plan was remodelled in 2018/19 to show a pragmatic stepped approach to savings recognising the (a) significant dependence on hired resources during the first year of the service and also (b) recognising the procurement practicalities of rationalising several key “line of business” systems across partners when there was at the time, little or no correlation of vendors.

The goal remains to deliver the service on fair usage model and as such the following approach to the apportionment of cost is outlined below:

(1) **Staff Costs** – The contribution of the partners to the staff element of the budget is used to calculate the percentage of the service the partner should expect. The proportion of time committed to business as usual and project support will be reported through routine monthly service management reports. Recognising that business as usual involves a significant amount of updating and upgrading systems and services.

(2) **Project Costs** – The contribution to new projects will be based on the utilisation of the live system. In essence, the cost of each shared project will be split amongst the number of expected users in the proposed system from each partner. Partners may have specific implementation requirements due to a variety of reasons. In such cases where there is no perceived benefit for the other partners this will be funded

directly from the partner requesting any additional/enhanced features.

(3) **Shared Costs** – Those projects resulting in the realisation of truly shared service systems will usually involve ongoing running/support costs. These running costs for shared systems will be based on the number of users from each partner.

(4) **Legacy Costs** – These include systems/services and ongoing procurement commitments the partner is directly liable for. These costs will be charged directly back to the originating partner. This will serve to further incentivise partners to support and work with 3C ICT to develop opportunities to adopt a shared approach. This in turn will help the service unlock and realise the economies of scale by moving as many services as practical into the shared approach.

(5) **Charges** – Partner invoicing based on the approach above will be charged on a quarterly basis including any overspend to avoid the hosting council carrying the liability of the other partners.

This approach prevents the subsidy of respective partners in the event of overspend, will continue to focus partners on supporting the Shared Service "Buy once and use three times" principle and provide fairness and transparency in relation to partner contributions.

The costs incurred by 3C ICT and the partners of using and purchasing systems will be influenced by changes to operating models. The trend across industry is moving away from selling or licensing perpetual use of self-contained and stand-alone applications, with a support and maintenance package option. We can expect, hosted, "utility" operating models being the main offering from suppliers. We will find more frequently, it will be the only offering from some vendors or suppliers in the future. This means conventional capital funded projects will need to be changed to follow a revenue-based funding approach. 3C ICT will also need to consider how this shift could affect some of the teams. E.g. as we move to less fully hosted and supported directly onsite by internal teams, to more software as a service approach remits, structure and responsibilities will need to adapt accordingly. Other benefits include extended support and hours of working underpinned by new contracts with software vendors who provide hosted services. 3C ICT can present options to the board and stakeholders so that ICT operating model can align with what is needed from a business point of view. Any recommendations for changes will be reflected in the full business case rewrite for 2021 and presented to the Shared Services Board for consideration and approval.

The introduction of Council Anywhere this year has supported the adoption of various flexible working practices and changes in the work force. Consultation with board members, portfolio leads, stakeholders and senior managers across all 3 partners will take place in the coming year to assess and understand whether, as part of any changes to the 3 ICT operating model, that any changes in location and distribution of IT staff is required and how this may affect costs. This can also be influenced by the estates strategy for each of the partners. 3C ICT will continue to work closely with teams to monitor and support any future estates plans.

Definition: - Hosted systems / Software as a Service (SaaS) - where customers and users access centrally hosted software applications over the internet. E.g. Office365 hosted within the Microsoft Corporation infrastructure. All hardware and data is off site, but administration and management of the application can still be done locally by the user/customer. All lifecycle management and administration of hardware and infrastructure is carried out by the service provider.

3C ICT Revenue Budget for 2019/20

The 3C ICT Budget for 2019/20 was updated to reflect some changes made within the 2018/19 Fir Year, this includes changes to the structure of the service. These changes continue into 2020/21. Only the HDC contribution for the Digital team funding is included within these costs.

Budget category	**Year 4 2019/20**	**Year 5 2020/21**	**Year 6 2021/22**	**Year 7 2022/23**
Baseline Staff	£3,481,047	£3,550,668	£3,621,681	£3,681,498
Baseline Other	£3,951,795	£4,022,411	£4,101,759	£4,182,695
Baseline Total ICT	**£7,432,842**	**£7,573,079**	**£7,723,440**	**£7,864,193**
Budgetary Staff Costs	£3,019,288	£3,080,554	£3,143,045	£3,206,786
Budgetary Other Costs	£3,420,959	£3,371,419	£3,438,847	£3,507,626
Budget	**£6,440,247**	**£6,451,972**	**£6,581,892**	**£6,714,411**
Forecast Staff Savings vs baseline	£461,759	£470,114	£478,636	£474,712
Forecast Other Savings vs baseline	£530,836	£650,992	£662,912	£675,069
Total Savings vs baseline	£992,595	£1,121,106	£1,141,549	£1,149,782
Savings Percentage vs Baseline	**13%**	**15%**	**15%**	**15%**

Cost of 3C ICT Shared Service by Partner

ICT Shared Service per partner	**Year 4 2019/20**	**Year 5 2020/21**	**Year 6 2021/22**	**Year 7 2022/23**
Cambridge City Council	£2,987,772	£2,991,556	£3,052,222	£3,046,606
Huntingdonshire DC	£2,081,813	£2,084,951	£2,127,233	£2,130,981
South Cambridgeshire DC	£1,370,663	£1,375,465	£1,402,437	£1,404,304
Grand Totals	**£6,508,725**	**£6,489,619**	**£6,512,972**	**£6,644,111**

Figures show above based on the original proportional contribution. Actual charge backs to the partners will be based on actuals

As detailed previously, the avoidance of the sharing approach for actuals avoids any potential cross-subsidy issues.

Savings from 3C ICT Shared Service by Partner

The following table details the estimated split of savings per partner.

ICT Shared Service savings per partner	**Year 4 2019/20**	**Year 5 2020/21**	**Year 6 2021/22**	**Year 7 2022/23**
Cambridge City Council	£460,663	£523,047	£532,673	£597,370
Huntingdonshire District Council	£320,874	£362,589	£362,589	£415,440

South Cambridgeshire DC	£211,058	£235,471	£239,617	£269,492
Grand Totals	**£992,595**	**£1,121,106**	**£1,141,549**	**£1,282,302**
Cumulative Total Saving	**£2,065,878**	**£3,186,984**	**£4,328,533**	**£5,610,835**

[1]Savings from previous years excluded from this business base but shown cumulatively above in the forecast.

These figures do not include capital projects that are underway which will deliver further efficiencies and
opportunities for savings in the future.

TOTAL SUMMARY OF 3C ICT FORECAST OUTTURN AUGUST 2019/20

	2019/20 BUDGET	**2019/20 FORECAST**	**2019/20 VARIANCE AGAINST BASLINE BUDGET**	**2019/20 AUTHORISED OVERSPEND ****	**2019/20 VARIANCE INC AUTHORISED OVERSPEND**
City	2,994,586	3,017,380	22,794	50,000	(27,206)
HDC	2,126,223	2,094,613	(31,610)	50,000	(81,610)
SCDC	1,379,986	1,419,187	39,202	50,000	(10,798)
	6,500,795	**6,531,180**	**30,385**	**150,000**	**(119,615)**

* HDC overspend funded from carry forward from previous year

** £150k overspend in 19/20 was agreed by Shared Service directors in March 2019 to support the delivery of Council Anywhere. If the overspend continues this will affect the end of year position as shown in the final column.

Please note that these are estimate figures and will change by the end of the year

Overall savings for the shared service in 2019/20 are 13% compared to the baseline budget and will be 15% in 2020/21

To better reflect fairness between contributions the distinction is made between what comprises the service element of the Shared Service and the ongoing running costs of the partners. Any partner overspend against budget for legacy costs will be charged directly back to the originating council based on actuals to ensure that the integrity of the original baseline can be accurately monitored (in essence anything not transferred as part of the original budget will be charged back direct to the partners).

The savings represented within the tables above are based on planned changes to rationalise existing partner support arrangements and leverage the benefits of scale across the three partners. Benefits realisation from activities detailed within the **Roadmap** and **Digital & ICT Strategy** will be evaluated separately.

It should be noted that there is an industry driven move to subscription based services which makes it easier to apportion costs (as this services are priced per user) but does have an ongoing impact on revenue budgets for each council as it will become increasingly difficult to capitalise some of the expenditure on IT systems. Paying third parties on a price per user basis does provide flexibility for the partners should there be a need to make significant changes in staff numbers as the contracts and payments can be scaled up and down as needed. If this flexibility is required of the Shared Service this will need to be incorporated in any updated or recast business plan. Discussions on this are planned.

Approach to Funding CCC/SCDC Digital Programmes

To ensure that the financial business case detail is able to reflect the original baseline costs the business plan for ICT shared service 19/20 referenced funding requests that would be made to CCC & SCDC as part of the 2019/20 budget process. This additional funding will put the digital team on a sustainable footing in order to ensure it can support the transformational work being organised by the respective transformation programmes and prioritised by the 3C Digital Steering group, and to ensure the growing remit of the 3C Digital Team is adequately resourced. If these funding bids are approved, it is requested that these costs be incorporated fully into the business plan from financial year 2020/21

Background

The current 3C ICT digital team remit for both Cambridge City and South Cambridgeshire District Councils is to provide a well run and developed content management system for their websites and to provide digital guidance and leadership. This contrasts with the remit for Hunts which, since the inception of 3C ICT, has always been to provide both web and digital services.

Over the past year the 3C Digital team has been asked to carry out back office system integrations in order to support Customer Portal and Yotta Streets and Waste projects for all councils. Further projects for Housing and Environmental Health are in progress and will attract further work requests. This bid is for funding to support these requests as well as to equal out the contribution made by each of the 3C partners so that they can continue to receive an equal share of the 3C Digital Teams resource.

The objectives of the funding requests are outlined below:

- Ensures that by April 2020 the 3C ICT Digital team is put on a sustainable footing to adequately resource at least 75% of the current demands placed upon it by the partnership.
- Ensures that by April 2020 the funding contribution to the 3C Digital team from City Council and SCDC is equal to that of HDC and reflects the equal share of resource apportioned to each partner by this team. This can be measured by comparing financial contributions.
- Ensures that by April 2021 3c ICT are able to incorporate these additional costs into the 3C ICT Business plan, ideally via reuse of funding released by partners through efficiencies so as to be cost neutral to the three partners. This will be a multi-year approach as outlined in the 3C ICT business plan and will be measured based on appropriate metrics within the 3C ICT business case.

The benefits of the funding requests are outlined below:

- Ensures 3C ICT Digital team have capacity to deliver integrations and digital development for City and SCDC to support better frontline service delivery to customers and also to support these integrations on an ongoing basis. For example, Yotta waste integration, mobile App development, Voice and Artificial intelligence development. These are all currently capabilities that 3C Digital have but don't have the capacity to deliver or support.
- Ensures capacity to deliver integration required for al partner customer portal projects. For example, integrations with new housing Management solution and Environmental Health applications.
- Ensures continued resource is available for continued development of the City council and SCDC Websites. Note that while the Digital team are funded to provide this development they have already been asked to work on other integrations for City and South Cambs councils compromising the website work.

The risks of the funding requests are outlined below:

Risk description	Impact	Mitigation/Controls
Demand for 3c Digital Services increases further over the coming year	Capacity of 3c Digital Team fails to meet demand.	3c Digital Steering group will need to continue to prioritise work with partners and may have to slow some corporate projects to match resource with demand.
Demand for 3c Digital services reduces	Developers not fully utilised	Demand for 3c Digital resource is growing exponentially so we do not feel this scenario is likely. Possible mitigation should this arise would be to make staff redundant or reduce via natural wastage.
3c ICT partnership is dissolved.	3C ICT digital team staff would be split between partners	The team operate effectively as a single unit so splitting staff would have a negative impact on productivity but some limited progress would still be possible.

Summary of Current and Proposed Digital Funding

Apportionment of Costs	Year 4 2019/20	Year 5 2020/21
Cambridge City Council[1]	115k	200k
Huntingdonshire District Council	200k	200k
South Cambridgeshire DC	54k	200k
Grand Totals	**369k**	**600k**

Financial contributions for further years to be agreed against deliverables.

Key Financial Risks/Observations.

1. Some of the Roadmap activities could see operating costs increase where authorities currently don't have a system or made previous capital investment that may need to be identified again or use additional revenue contributions to fund systems in the future. As the projects are dependent on procurement and it has been assumed that there is no uplift against operational costs, all such projects will have a separate business case and justification which will include the impact on revenue budgets.

2. Regional staff salaries for key skills become difficult to recruit/replace resulting in significant overspend due to hired staff.

3. Exchange rate variances pose a genuine risk to the ICT budget forecast due to a large

number of non-UK software suppliers.

4. There is currently no consistent way to reflect operational savings derived from ICT projects against the 3C ICT service. Currently this would just be seen as an operational ICT cost uplift even though there are clear benefits for the operational teams for doing so. Significant time and effort has gone into working with the Transformation and Change functions at the 3 Councils to better align success criteria, operational objectives and processes/ways of working to ensure that operational objectives are clear and 3C ICT projects deliver to these. However agreed and clear direction from the 3 Councils is still not consistently in existence, which jeopardises full benefits realisation.

5. Out of Hours (OOH) support arrangements are done on a best endeavour's basis for specific areas .e.g. car parking services. The arrangement carries with it a number of issues and gaps because it's not a formal arrangement, not consistent across partners, and even where it is in place, there are limited numbers of staff with the skills and knowledge available. There will be an increase in costs for a formal on-call rota as well as any costs associated with call outs if an option to formalise the arrangements is needed. As expectations and service demands from residents and users change, 3C SS may want to consider the position and add these costs to the baseline business case. This will need to be balanced against needs, priorities and affordability. Digital is increasingly becoming a critical service, and as yet hasn't scaled up/out the support offering to cover the inevitable out of hours incidents. As Digital has evolved to become the primary method of interaction and communication with residents 24/7, options for extended support and the implications of these will be included in the next business case re-write.

C. FINANCIAL OVERVIEW (ROADMAP: HIGH LEVEL CAPITAL INVESTMENT FORECAST)

The table below represents the existing investment profile based on the ICT Roadmap for major applications. All investment has undergone formal scrutiny through existing partner budgeting processes. All systems will be procured in line within ICT Strategy principles.

		2020-21		2021-22		2022-23	
Council	**Roadmap Activity**	**CapEx**	**OpEx**	**CapEx**	**OpEx**	**CapEx**	**OpEx**
CCC	Council Anywhere (Initial investment and rolling desktop upgrade)			£150k		£150k	
	Waste System		£38k		£38k		£38k
	Housing Management System						
	Shared Planning System						
	Environmental Health System						
	HR/Payroll system	£150k					
	Revs & Bens System						
HDC	Council Anywhere (Initial investment and rolling desktop upgrade)			£130k		£130k	
	Waste System		£33k		£33k		£33k
	Housing Management System						
	Shared Planning System						
	Environmental Health System						
	HR/Payroll system		£100k				
	Revs & Bens System						
SCDC	Council Anywhere (Initial investment and rolling desktop upgrade)			£89k		£89k	
	Waste System		£16k		£16k		£16k
	Housing Management System						
	Shared Planning System						
	Environmental Health System						
	HR/Payroll system			£115k	24k		
	Revs & Bens System						

Assumptions:
Any capital costs for replacement systems have been through the budget decision making process at each Council. The costs in the table above are only indicative. Final costs would be dependent on procurement and the number of Councils implementing a shared system.

- There are also indicative costs for a new HR system included in the table – assuming all 3 councils move to a single system, discussions are underway between the three authorities and it is anticipated the new system would be in place during 2021/22
- It is anticipated that any efficiency savings needed due to an uplift of revenue budgets will be met by the relevant service.

3C ICT CAPITAL BIDS 2020/21

The table below is a summary of bids submitted by 3C ICT (July to Sept 2019) - At the time of writing, each of the partners are still part way through their capital budget processes and some of the bids may be moved to revenue depending on financial thresholds and final decisions from boards and members.

Capital Bid	SCDC	CCC	HDC	Total
WIFI Access Point replacement	£6,768	0	£11,700	£18,468
Call Management IT Service Desk	£2,820	£7,305	£4,875 *	£15,000
Cyber Security Monitoring	£3,760	£9,740	£6,500*	£20,000
Resource Planning Tool	£2,820	£7,305	£4,875 *	£15,000
Data Centre Growth Capacity	£13,160	£34,090	£22,750	£70,000
AV Equipment	0	0	£30,000	£30,000
Digital Team Funding	£146,000	£85,000	0	£231,000
Telephony (Core Telephony)	0**	£150,000	£150,000	£300,000
Power BI & Analytics	£3,760	£9,740	£6,500*	£20,000
PFH Generator (Supporting new server environment for 3C)	£15,980	£41,395	£27,625	£85,000
TOTAL	**£195,068**	**£344,575**	**£264,825**	**£804,468**

*Originally submitted as Capital bids - Moved to Revenue
** Note £150k allocated in 19/20

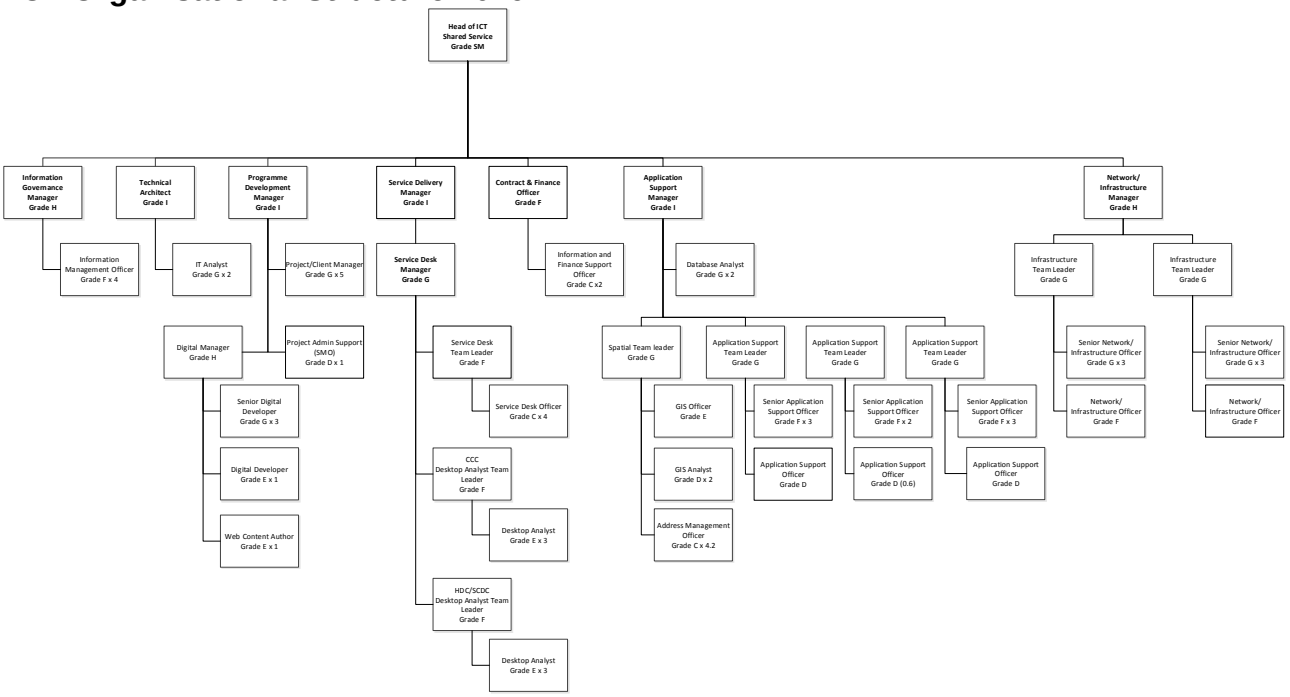
D. STAFFING OVERVIEW

Huntingdonshire is the employing authority.

The staffing structure is shaped by the following Key Principles:

1. The structure has clear accountabilities for delivering the scope of work described in the ICT Shared Service Catalogue.
2. An ongoing drive to ensure the ICT Shared Service has sufficient knowledge and experience to provide thought leadership to the three councils as they seek to evolve their services to a "digital first" world.
3. No more than 7x direct reports for any role within the structure.
4. Minimize the number of management layers between the Head of Service and all roles within the ICT Shared Service.
5. Move towards stronger alignment with the ITIL management model.
6. Provide a single shared services structure, with roles spanning the needs of all clients (as opposed to silo teams serving each council).
7. Wherever possible to minimise the use of external contractors, recognizing that in certain situations buying in knowledge and skills will provide the best value for money.

ICT Organisational Structure 2019



Changes to structure -

A new permanent Head of Service was recruited on the 1st March 2019, whilst this had been advertised as a permanent role the postholder is working part time in the role as part of a shared arrangement with CCC & PCC. As a result, the ICT structure was amended in 19/20 to include a full time Deputy Head of IT (Operations) role. This role was initially recruited on an interim basis but was filled as permanent role in Sept by Sagar Roy.

Interim arrangements -

During 2019/20 several secondments within the Service which had had been in place due to maternity leave cover where reviewed and are in the process of being replaced with permanent arrangements through standard recruitment processes.

Information Governance -
In April 2019 the Information Governance Manager (DPO) resigned and in order to ensure that the DPO role for the partners was covered an interim DPO was recruited to provide cover while recruitment to the permanent role was undertaken. The permanent recruitment was not successful, likely in part due to the salary banding of the role and the complexity of delivery to three councils. A second recruitment campaign is planned and this area has been discussed with SIRO's Autumn 2019.

Network / Infrastructure -
This team continue to manage a large and complex infrastructure and having the required level of resources in this team to manage both BAU and project work remains a challenge. Some temporary recruitment has been undertaken to provide back fill for the Eastnet/MLL project.

Digital Team -
Due to a growing remit and high demand for Digital Services along with a commitment to funding from partners in order to provide website development 3C ICT digital team has grown considerably over the past 2 years yet still only meets around 50% of customer demand. If the bid to balance partner inputs is successful, then the team will grow further.

IT Service Desk -
Attracting and retaining staff in this key area also remains a priority, both in terms of developing the required skills to deal with more enquiries at the first point of contact but also recognising that once people have expanded their knowledge, skills and experience they may also look to further their careers within the Councils or in the wider market. Process review work designed to improve the service delivered to officers and members has started and will continue throughout 2020 building on activity already completed that has assessed patterns of demand, areas of inefficiency and process gaps. Significant work has also been undertaken to track and reduce the number of walk-ins and encourage people to call or raise a request on Hornbill wherever possible. This enables the issue to be captured more effectively and also improves productivity within the team - we have seen and evidenced that attempts to bypass the service desk process adversely affects the time to resolve and dealing with priority jobs. However, there is still in excess of 100 calls raised a day on average and although steps are being taken to encourage self-service, on for example, resetting passwords, there is still some way to go to get this number down.

E. LOOKING BACK

Achievements (2019/20 – as at Oct 2019)

Updates on the main projects have been provided in 1:1 discussions with the strategic leads and/or intelligent clients in each authority. Written updates have been included in the quarterly reports, regular highlight reports have also been produced on the project work. The past year has also presented significant number of challenges to the service, particularly in moving towards a single desktop and transforming the way that people work. Some of the issues that occurred were known risks and steps were put in place to mitigate them. However, other issues and problems have emerged as projects have progressed. A pattern of missing and incorrect legacy system documentation has been seen some of which are for key application and infrastructure areas. Nonetheless, as the new Council Anywhere technology is rolled out, the Server Room Consolidation project completes, WAN migration progresses and applications are either upgraded or replaced, these issues are being resolved and risks are being managed down.

Significant work is required to maintain and update the 222 applications and support over 2,000 users, hence this appears at the top of the list. Since the introduction of 3C ICT, the Applications support team have reviewed and assessed applications being used and supported joint projects with the aim to reduce and consolidate application numbers. Through bringing user groups together with similar applications, removing redundant software and cancelling unused software, by Q2 2019, the list of supported applications is now below 170 and targets for software costs efficiencies has been met. In addition to managing down costs and license fees, it also reduces the support overhead that would otherwise be incurred. There are also a high proportion of projects that involve all three councils. This list (Appendix D) is regularly reviewed with the strategic leads and intelligent clients, as it forms the core work programme. This list is entirely in line with the previous Business Plan, and the IT roadmap and strategy, with those projects nearest the top contributing most significantly to reliable business as usual.

The much-anticipated Council Anywhere project roll out started in earnest during 2019. As the first groups of devices were delivered, the supporting processes and procedures were still being refined as something on this scale and across 3 partners was new to all those involved. As roll outs continued over the next couple of months, further improvements were implemented. This has been a successful exercise as evidenced by the fact that during the early phases it was taking just over a week to roll out 100 new devices. However, as of October, the quality and pace of delivery has improved markedly and the recent City Housing phase, saw just over 100 new devices rolled out in approximately 1 ½ days with extremely positive feedback being received almost immediately.

The Server Room Consolidation (SRC) project was formally closed November 2019. This is considered as one of the flagship projects for the original 3C business case because it was designed to address fundamental gaps in the original separate infrastructures for each council and deliver improvements and efficiencies that individually would have been extremely difficult to achieve. As servers have been migrated into the new environment all 3 councils have benefited from reduced server replacement costs, improved server availability, improved cyber security risk mitigation and improved monitoring and support. This also provides a strong technical foundation on which to build, expand and deliver services in the future in shorter timescales with greater flexibility to scale up or down as demands shift.

The IT Service desk which is by far the most common point of contact for the 3 partners continues to evolve. As mentioned earlier in the report, improved monitoring and reporting is now in place that helps us understand demands and patterns of use. We have seen peaks in demand during and immediately after major incidents such as the 2018 power outage at City and SAN failure where up to 200 calls a day were being logged, compared to normal demand which is 100 to 120 calls per day. The number of outstanding jobs logged has also seen improvements over the past 6 months. A peak of 1000+ at the beginning of the year was managed down to approximately 740 at the beginning of September. In the last few months, 15% reduction in outstanding jobs has been achieved. Further improvements are expected as skills within team's improve, processes are refined and projects complete delivery. This means in the future we can free up capacity to broaden the remit of what the IT Service desk and other ICT support teams can deliver. Less faults and incidents / faster resolution also means the workforce can be more productive and make more use of the technology that is being provided.

A few specific items that warrant further commentary are as follows:-

EastNet as of Oct 2019.
CPSN Replacement – This major project involves all the Council's in the area who have their internet, network and WiFi provided by Virgin Media. 3C ICT have been part of a joint procurement led by Cambridgeshire County Council to replace this service contract which comes to an end in Dec 2019. The winning supplier was MLL which will provide access to all the Public Service Network sites with the EastNet network once the transition has been completed. When agreement in principle across the three authorities to proceed with MLL was achieved in January 2019, internally a new project was established to deliver the migration before the contract end date.

Due to risks we face as part of the exit from the VMB contract this has been a substantial piece of work involving many resources around the organisation, not just ICT. Following agreement reached with the CPSN partners and VMB, we have a period of dual running to avoid any gaps in service. The services being replaced include WiFi, network security, site connections and internet connectivity and as of Oct 2019 a fast track programme of work has bene agreed by the 3C board to deliver the migration of 40+ sites within 3 months in order to minimise any dual running costs and start to deliver the benefits of the new network service – improved performance, reliability and capacity.

IT Roadmap
3C ICT have worked with the Waste and Open Spaces teams to implement the Yotta system, this work will continue into 2020 with more services coming online in a phased manner. This modern system integrates with the Digital Platform allowing services to be delivered to the customer easily and with real time information underpinning the online forms. Shared Waste are already benefitting from the new setup and work continues on the roll out for the Open Spaces services to enable Officers to complete more of their day to day work in the field. Budget is already in place or working through the budget process at all 3 Councils.

Enhancements to consolidated Web Publishing Platforms
Following on from the successful work undertaken by the Digital team to consolidate all three council websites onto a single platform, development of these platforms has continued throughout the year with over 200 separate enhancements being delivered to partners.

Digital Portal
Partner councils launched their digital portals in early 2019. Each partner has their own project and project board within their own organisation and work has continued during 2019/20 to integrate the portals and forms with back office systems such as Yotta Alloy and to prepare for integration with the new housing and environmental health systems. A number of new forms and integrated workflows have been developed by the 3C Digital content team for HDC which have delivered efficiencies for the Revenues and Benefits and Active lifestyles teams. This work continues both from a project and BAU perspective.

Process improvement
The Deputy Head of IT has worked with teams within IT to review several key processes, including those around Major Incidents (MI's), Priority 1 incidents. In particular weekly operational reviews are now held to ensure that any lessons learnt from such incidents are captured and actioned.

F. LOOKING FORWARD

A number of discrete projects are either in flight or will be completed by the end of the financial year. The current priorities for 3C have been agreed by the Intelligent Clients of the three Councils as at October 2019 and can be found in Appendix D.

Short to medium term:

Digital team – Short term work for this team includes; the integration of Yotta Allow into the Digital platform to deliver end to end digital processes for Operations services and the exploration of innovative service enhancements to support the CRM replacement at HDC (Voice/chatbot integration etc). Work will also continue on development of the councils' web publishing platform with a key upgrade due in late 2020 to the latest core version of Umbraco CMS and integration into AD for security management improvements.

With the **Technology Roadmap** established 3C continue to engage with Partners to identify and review 3-way opportunities to rationalise the application environment, with a view to the potential for unlocking further cost savings. In addition, the development of an applications lifecycle and risk matrix is nearing completion. This supplements the technology roadmap by allowing dependencies between applications and underpinning technology to be understood. Any opportunities to rationalise and consolidate applications can then also be considered.

The joint Housing project between City and SCDC is in phase one of its system delivery. By mid October 2019, the first of the two councils will be going live, with the second of the councils expected to follow suit in very early 2020.

The Environmental Health Teams will also benefit from replacing their old systems with modern mobile enabled services that will integrate with the Digital Platform. The current systems require a lot of manual rekeying of data, and administration to enable cases to be logged and kept up to date. A new system would automate many of these functions and allow Officers and customers via online forms to view and update their cases. This project will procure and implement a new system for all 3 Partner Authorities.

Some technology changes do not line up in such a way that they can be done as a single project. For example, SCDC have a pressing need for a replacement Telephony solution while the other two councils have different timelines for their replacements. For these projects the first implementation (for telephony SCDC) will create a platform that can then be reutilised by the other two councils and overall ensure a single well-designed supportable set of technology solutions.

Work continues to look at the strategic alignment of some of the services that were transferred across to 3C ICT at creation. Some of these were transferred due to them being done within the IT structure, rather than being specifically ICT tasks. An example is Street Naming and Numbering which we believe fits better within the Building Control Service and we are working with colleagues in that service on a paper to propose the service is transferred. In other instances (e.g HR reporting) we are engaging with the 3 Councils to discuss the transfer back of any tasks, and associated budget, where the benefit of the task sitting in 3C ICT is not clear.

The Service Desk is the ‘front-door’ to IT and the work has been detailed above that concerns the improvements that we need to make to that service. Equally, processes within the partner councils also need to be optimised to ensure that the working

relationship and expectations between the partners and the Shared Service is positive and effective. The role of the Intelligent client within the partner councils is absolutely key to this and it is acknowledged that systems and ways of working (including transformation) across all three partners are changing. This organisational changes, makes this an opportune time to revise and improve the way in which the Intelligent Client role is delivered and the impact it has in each of the respective councils and the Shared Service expects to work with and support partners to help them redefine this.

As detailed in Section 1C, proposals have been submitted to balance partner contributions to the Digital team plans and approval is sought to incorporate this funding into the overall 3C ICT Business case. If approved, it is anticipated that this work will be completed by March 2020.

Medium term: -
As referenced in the introduction discussions are planned around what is required from 3C ICT and it anticipated that the output of those will form part of the medium term workplan for the Shared Service.

Both the industry trend and strategic direction of 3C ICT is for systems to be cloud hosted (where technically and financially appropriate). Where this is already in place it has been noted that the requirements of the Shared Service change quite profoundly. Whereas traditional hosting requires 3C ICT staff to be knowledgeable in and responsible for all elements of hosting, cloud hosting requires 3C ICT to have a broader view of how that system integrates with other systems and service and this requires a change in support model, in particular for the Application Support Team. These support models will be reviewed to ensure that the expectations of support needed from the shared service are clear, achievable and measurable.

As well as reviewing support models and in order to ensure that we train staff (and Members) across the three councils to ensure we all get the best value from IT (ranging from Audio Visual equipment, telephony replacements, and into major applications), 3C ICT will review with the partners what their current and future needs are from IT training. This will also include a review of the training needs of IT staff.

Risks & threats:
Infrastructure Risk Assessments are being completed for each council and the outputs of these will be compiled into Risk Registers (Appendix A). Alongside the applications lifecycle and risk matrix (Appendix B) these present a full and rounded view of technology risk for each council.

The following table describes key risks for the service, and associated mitigation actions:

Risk Description	Risk Mitigations
The Shared Service is not able to adequately protect the partner ICT environment from Cyber Crime threats and maintain PSN compliance.	An extensive programme of external audit activities has been established to review the Service's approach to the management of these critical areas of ICT operations. This programme also includes the ongoing compliance plan for PSN compliance. Audit activities focus on

	procedural, organisational and operational approaches to ICT security. The service has already deployed a significant number of counter measures to combat the overall threat posed by security. A budget bid to enhance security provision and detection has been submitted as part of the 2019/20 budget cycle.
Shared Service benefits are not adequately captured nor regularly checked and monitored leading to inaccurate reporting and potentially lack of support (including financial)	Business cases have been developed and presented to each council's committee cycle for consideration and approval. Benefits have been identified and quantified wherever possible and quarterly performance reporting agreed.
Service standards are set at different levels across the three Councils, leading to customer and Member complaints about differing service levels from a shared service.	Active governance arrangements exist to ensure that service standards can be appropriately developed and approved. To support standardisation where this is appropriate but allow for local variation where this is required, costing model to reflect cost implications of different service delivery. A single Service Catalogue will be reviewed by the partners on a frequent basis.
Overall financial savings targets are unrealistic and unachievable, leading to service 'cuts' being required elsewhere to meet the shared service saving shortfalls.	Savings targets to be regularly reviewed as part of performance monitoring and evaluated as part of the development and delivery of the Shared service business case Business cases to include robust financial analysis and risk / sensitivity analysis for projected savings
Until live testing is completed, it's not possible to confirm that the new shared ICT infrastructure fully meets the design requirements for availability and resilience for all three partners.	BCP and DR testing has been agreed (by the Server Room Consolidation Board) to commence Q1 20/21. 3C ICT to work with each council to prepare plans and test systems once the EastNet migration has been completed.
Shared Services do not deliver the expected good quality services to internal and external customers	Agreed service standards to be developed and approved. These will support standardisation where this is appropriate but allow for local variation where this is required, costing model to reflect cost implications of different service delivery
Current budget model doesn't yet align with the industry trend to subscription based services/software. Industry is moving much faster now which results in changes to licensing and contracts. The 3 councils will need to keep up with/match these 'pivots'	Revenue budgets will need to accommodate a change in operating models i.e.. Capital spend moving to revenue spend. Next year's in depth review of the business case will take this in to account. In addition, changes and adjustments to the 3C ICT operating model. Will be incorporated. .e.g Team structures or numbers could change. As support services are scaled up or down. Cost for Basic offering + premium services.

G. COMMUNICATION AND ENGAGEMENT

The ICT Shared Service uses a variety of methods for communication with their members, staff, customers and key stakeholders. <consider developing a comms plan for ICT>

The **3C ICT and Digital Strategy** sets out the intent and vision of the ICT Shared Service. This is shared and disseminated to all partners via the 3C Management Board. The document, as well as outlining short to longer term objectives, also outlines the principles to which partners engage with 3C ICT and each other to ensure that the service is able to meet the objectives of the original business case.

The **Service Catalogue** outlines the main functions delivered by the ICT Shared Service, including performance indicators, role responsibility for delivering the function and the main components to be delivered. SS to update - This document has been produced and is in use internally within the service and discussions have commenced to create a version that is focused around user needs which will be distributed more widely.

The **Major System Technology Roadmap** is the forward plan of technological development of the ICT Shared Service, it outlines the timelines for moving to new or different technologies and details how Application rationalisation opportunities will be identified. This will be reviewed with partners, through engagement with Intelligent Clients and service leads.

The Project pipeline and prioritisation list is the forward plan and schedule of work for the ICT Shared Service. This plan captures the needs of services from across the Partner Authorities and sets out the timeline for the work to be completed; the roadmap is the responsibility of the ICT Head of Service who will lead on consultation with the partner Intelligent Clients in the first instance to ensure the programme of work is aligned with strategic partner objectives and council business plan priorities. Additional reporting as done through quarterly service reports for the Shared Services Board. New requests for support at a strategic level will be managed through the Project Management Office after discussion with the intelligent clients locally, service operations matters through the Service Desk. The intelligent clients are also the first point of contact if individuals have any concerns around delivery – for discussion with the Service Delivery Manager, which can then be escalated to the strategic leads to discuss with the Head or Deputy Head of 3C ICT if required. Delivery of major projects will be governed by Project Boards with representation from all relevant Councils and chaired by a Sponsor representative from the Councils. It is the Council's Board representatives who will ultimately make decisions, on the basis of the status of the project and their organisational objectives, on allocating resource, prioritisation and timescales that will govern delivery and quality, advised by the technical and project management team from 3C ICT.

3C ICT aspire to be the trusted advisor for the councils to support them and their staff to use and exploit existing technology to transform services and also to advise on how new and emerging technology can be used to the same end. To achieve this 3C ICT will have regular engagement with Members, Senior Officers and the Intelligent Clients in combination provides a clear 'ask' of the business to 3C ICT. This will form the basis for the development of future functionality and review of solutions.

Member updates – we are now in a position to provide portfolio leads and other interested

members with regular performance updates as requested by each Council. This presents an update on current operational performance, and demonstrating accountability. Details of this can be discussed with Chief Executives.

SECTION 2: OPERATIONAL PLAN 2019/20

SECTION 2A: BUSINESS PLAN PERFORMANCE INDICATORS

This Section sets out the "Business as Usual" priorities and the activities that 3C Shared ICT Services will undertake to deliver value-adding services to customers.

	Priorities for the service	**State where these priorities are outlined *(i.e. Corporate plans, ICT strategy)***	**Actions that will deliver the priority**	**Outputs from the activity**	**Outcomes from the activity**
1	Deliver high standard of system availability	ICT and Digital Strategy, Service Catalogue.	Develop a list of services provided with customer service standards Develop the Technology roadmap to outline forward plan of work.	Service Catalogue. Technology Roadmap.	Services across the Partner Authorities understand and have confidence in the functions being delivered Builds trust in the ICT Shared Service to deliver their services and maintain high performing ICT, thus allowing the Partner Authorities to focus on their own customers.
2	Support and develop our IT systems	ICT and Digital Strategy	Build a technology roadmap. Examine business processes and enable automation wherever possible. Proactive management of vendors/contracts.	Have a clear understanding of the technological direction for the future. Clearer simpler processes that involve less human interaction and that can be replicated elsewhere. A single set of invoices and	The Partner Authorities are confident that we are getting value for money from the ICT investment

				contracts to administer.	
3	Open the door for others to follow	ICT and Digital Strategy	Support the work of the following Shared Services, Building Control, Legal, Waste, Planning and Finance. Council Anywhere Business Case and Project.	Standard applications. Ability to access, use or administer systems centrally Enable the services to change	These shared services deliver a more efficient function and better value for money.
4	Allow people to work flexibly	ICT and Digital Strategy	Council Anywhere Business Case and Project.	Flexible Working Home working Remote Working Office Space Rationalisation.	Allow flexible working, staff are able to have a better work life balance with home or remote working. Better use of accommodation as staff are able to utilise different buildings or venues in a more flexible manner

SECTION 2B: SERVICE KEY PERFORMANCE INDICATORS

KPI	Performance Measures *(provide a list only - target information is included in section 4)*	Dependencies *(ICT, Finance, Human Resources, accommodation etc.)*	Key risks to delivery *(include how these will be mitigated)*
KPI-1	Customer Satisfaction	ICT	Three logical environments are still in place across the shared services plus the work to support the Combined Authority. Although there has been some alignment of systems within 3Cs this still presents a challenge to providing an effective service, this coupled with some further reductions in staff during 2019/20 which may place the service under stress. Plans to standardise the support environment are in place to create capacity within the service and reduce the duplication of effort. Managing the demand is also a key risk for which support from the intelligent clients and strategic leads is vital.
KPI-2	Service Availability	ICT	
KPI-3	Incident Performance	ICT	
KPI-4	Service Desk Response	ICT	
KPI-5	Service/Work Order Request Performance	ICT	
KPI-6	Project Delivery Performance	ICT	
KPI-7	Staff Budget Savings	ICT, Finance	HDC salaries are still not competitive in some areas for key ICT skilled staff, especially considering the external market for this skillset. Mitigated via the recent restructuring to provide competitive salary and career progression, apprenticeships and also opportunities to work across the wider area.
KPI-8	Software and Services Savings	ICT, Partners, Finance	Partners do not engage fully with Roadmap objectives adopting to retain legacy systems in favour of non-rationalisation. Mitigated through sign off against principles within the 3C ICT and Digital Strategy.

SECTION 3: KEY PERFORMANCE INDICATORS (KPIs)

Organisational, Service and Corporate Plan Performance Indicators

The table below should list organisational performance indicators (KPIs) applying to the service, key PIs from the action plan in section 2A and any PIs from partners' Corporate Plans that this Service is responsible for reporting against.

The follow table details the planned measures, reporting frequency for each measure and the business plan target for next year. Each measure is detailed in the 3C ICT Service Catalogue. Measures reported quarterly will be provided to the 3C ICT Management Board in line with routine reporting and service governance.

KPI Reference and Description		Reporting frequency	2019/20 Target	2020/21 Target
KPI-1	Customer Satisfaction (Partial)[1]	Quarterly	85%	85%
KPI-2	Service Availability	Quarterly	95%	95%
KPI-3a	Overall performance on the incident response for Priority 1,2,3,4 calls	Quarterly	85%	85%
KPI-3b	Overall performance on incident resolution for Priority 1,2,3,4 calls	Quarterly	70%	70%
KPI-4a	Overall Service Desk response for priority 1,2,3,4 calls	Quarterly	85%	85%
KPI-4b	Service Desk resolution for priority 1,2,3,4 calls	Quarterly	75%	75%
KPI-5a	Service/Work Order Request Performance on response	Quarterly	90%	90%
KPI-5b	Service/Work Order Request Performance on resolution	Quarterly	85%	85%
KPI-6	Project Delivery Performance	Quarterly	80%	80%
KPI-7	Staff Budget Savings	Annual	£50k	£50k[2]
KPI-8	Software and Services Savings	Annual	£108k	£108k[2]

KPI Reference and Description	Reporting frequency	2019/20 Target	2020/21 Target
Customer Satisfaction (Full)[1]	Bi-Annual	80%	80%
Deliver high standard of system availability	Quarterly	95%	95%
Allow people to work flexibly	Quarterly	Business Case	Benefits realisation[i]

[1] Customer satisfaction surveys will be conducted through service desk feedback on a quarterly basis, in full adopting a full questionnaire approach bi-annually.
[2] These savings are already built in to the business case (V7)

Extract of KPI performance as of end Q2 FY 19 to 20
This summary is based on the Information and Data presented to the Shared Services Board:-

KPI-1 (Green) Customer Satisfaction (Target 85%)
The target of 85% has been exceeded this quarter and overall customer satisfaction has remained the same as last quarter (93%). However, it's been noted in several different areas that the impact of the Council Anywhere roll out is having an extremely positive impact on the recipients. Positive feedback has been received consistently. While not directly recorded as customer satisfaction, they are being collected by the project team for inclusion in the benefits study.

KPI-2 (Green) Service Availability (Target 95%)
For Q2, the overall service availability achieved was 99.57% (combined across four key areas of ICT service provision). The breakdown of service interruptions or service affecting events for this reporting period is as follows:-

Network/Telephony	250 mins
Email	60 mins
Internet/web site services	70 mins
Centralised server infrastructure	180 mins

It should be noted that these durations are a mixture of service interruptions or where the service has degraded to an extent where it is affecting usability across multiple sites, high numbers of users or significant service areas.

For networking and telephony and email, there were 3 separate extended events that have had a disproportionate impact on the figures this quarter. In the main these were caused by 3rd parties / external service providers (Cambridge County Council for telephony to the HDC contact centre, and Virgin Media Business for Internet access, Enta.net for internet services impacting email to City). The breakdown is as follows:-

- Internet/website - 60mins due to 3rd party administration error affecting incoming internet email and traffic for CCC.
- Network/Telephony - 40mins due to fault at service provider affecting HDC CSC telephony.
- Network - 180mins due to 3rd party issue (VMB/CPSN) causing slow performance for all 3 partners access to internet services. Slow to the point of it being considered unusable.
- Network/Telephony – 30mins planned downtime for maintenance and infrastructure updates following recommendations from supplier.

The interruption to centralised server infrastructure was a single event that affected HDC at the end of the day on 03/09/2019. 30 mins was within the 'working day' up to 5pm, but for completeness the full period of down time is included in the availability figure. This was caused by a hardware fault on one of the servers at the HDC data centre.

KPI-3 (Green) IT Service Desk Resolution Incidents (Target 70%)

The resolution of incidents at the IT Service desk has increased significantly since the last quarter, up from 77% to 86%. The change in performance have been linked directly to changes in staffing, a weekly 'day of action', management monitoring of call queues and addressing underlying root causes of problems that have been leading to repeat faults and calls.

The performance this quarter, which is being tracked weekly, is encouraging and the plan for the coming months is to maintain this level of improvement through addressing the resource, skills and knowledge gap at the IT Service desk and other teams dealing with the more complex faults and requests.

Walk-in's at SCDC where the local ICT team are based has recently increased and is having a negative impact on completing planned work and service requests. ICT are working with the Intelligent client and portfolio holder to explore alternative methods of providing direct access to engineers whilst not overly impacting customer expectation and personal interaction Trials may be able to be put in place during Q3.

KPI-4 (Green) 3C ICT Resolution Incidents (Target 75%)

By the end of the quarter, the performance across the rest of the ICT team for resolution of incidents shows a similar story to that of the IT Service desk. There has been further improvement since the last quarter, up from 89% to 93%. It's interesting to note that

weekly monitoring over the period showed that during the height of the summer, performance actually dropped during the 2 weeks at the end of Aug. This has been attributed to a combination of annual leave, sickness absence and unplanned project demands within ICT. However, concerted effort in dealing with backlogs, prioritisation, addressing root causes of problems and the impact of the council anywhere roll out has seen the overall position not only fully recovered, but also an improvement. Similar to the IT Service desk, steps are being put in place to maintain this performance, however, a change in the pressures from the MLL/EastNet project timetable could see the resources from the Network and infrastructure team diverted.

KPI-5 (Green) Service Requests Resolution (Target 85%)

Following on from recruitment and back fill of staff, the service requests performance for changes associated with starters-moves-leavers has improved. Up from 84% to 93%. The improvement seen so far was not easy to achieve or straightforward due to the mixed estate spanning Council Anywhere and non-council anywhere devices. This makes for a complex environment to support and administer. However, the additional resources who have been brought in are continuing to improve their skills and proficiency, so we are hoping there's room for further improvement.

KPI-6 (Amber) Project Delivery (Target 80%)

A relatively low number of new requests for projects have been submitted over Q2 (7 in total), however, the current status of in-flight projects is shown below

Project Name	Project No.	Key Milestones	Risks & Issues	Delivery date (ICT elements)	Financial	Comments
Housing System Review	P0026			28th Feb 2020		Mobile solution still within development and being agreed. . Risks re resource clash with EastNet project being managed.
PSN	P0030			Closed		Closure report sent to the board at the end of October 2019.
Consolidated Server Room	P0035			Closed		Project closure approved by project board Nov 2019. Residual tasks low risk have been transferred to BAU.

Council Anywhere	P0050			Mar 31st 2020		As of end of the Oct, just over 70% through the planned device roll out.
PCIDSS	P0072			31st May 2020		Discussions taking place with IC's on accelerating activity for CCC and SCDC
Environmental Health System Procurement	P0077			Oct 1st 2020		Supplier asking for changes to contract, but Crown Commercial Services are being engaged to verify legality. Waiting for response from supplier. Project likely to slip by 2-3 months. Project board is aware of current situation.
Shared Planning	P0058			6th Mar 2020		Shared Planning service programme board have agreed change control document recently.
Waste Services Implementation (SOSP) Phase 2	P0075			5th Dec 2020		Issues with Mobile App have arisen. New release is now having to be tested. Risk identified around acceptance of solution currently being discussed at programme level.
Waste Services Implementation Phase 5	P0075			2nd Dec 2020		Due to go live with Domestic waste – all on track. Next stage to be planned which will be trade waste.
Aruba Clear Pass (Council Anywhere)	P0082			Mar 31st 2020		Progress will be linked to MLL site migration plans.
AV Requirement Guildhall	P0047			Dec 13th 2019		Tender process closed and contract awarded. Approval from planning re listed building conditions and work proceeding. 26th Nov.
Eastnet MLL Migration	P0025			Mar 31st 2020		Several sites, Wifi and Firewall migrated. Cease list agreed with project board
Windows Server 2008 Migration	P0084			Feb 28th 2020		With agreement from the Board, dates have been extended by using alternative mitigations and taking the urgency away.

Appendices

Appendix A – infrastructure Risk Registers

Probability Status Unlikely Impact Status Low
Probability Status Possible Unlikely Impact Status Low/Medium
Probability Status Probable Unlikely Impact Status Medium
Probability Status Likely Unlikely Impact Status High

Partner Council	Risk Category	Risk	Mitigation	Recommendation/Next Actions	Probability Status	Impact Status
CCC/HDC/SCDC (joint risk)	**Azure/Cloud Hosted applications**	Several systems for all 3 partner Councils now rely on Microsoft Azure or other cloud hosting platforms which are external to 3C ICT control e.g. Council websites for all 3 partners, Yotta (Shared Waste), Modern.gov, Public Access, SCDC/CCC Revs and Bens portal etc.	Microsoft Azure has multiple built in failover and contingency as you would expect from this service provider, so impact probability is low. However there have been two publicised outages over the last year lasting several hours.	3C ICT continue to recommend the use of MS Azure as this is an industry wide used platform supported by the biggest software vendor worldwide and has extremely high availability rates.		
CCC/HDC/SCDC	**Intersite link**	The connections into both	A full DR test in	Next actions – This was		

(joint risk)	**Pathfinder House to Shire Hall**	the data centre sites (PFH & Shire Hall) that would be used in the event of a failure are 1GB. Although these have undergone functional testing to ensure they work this was done out of hours to minimise impact. There is a risk these connections will not be sufficient for normal everyday traffic should they be required.	hours would prove if the connectivity is sufficient or if larger links are required.	discussed at Server room consolidation project board. The board approved work to develop testing/DR testing plan, which should then be run annually. This will also be tested/evaluated as part of the Shire Hall datacentre move.		
CCC/HDC/SCDC (joint risk)	**Monitoring**	Not all of the infrastructure in the new data centre is monitored by the central monitoring system (Solarwinds). An additional module will enable the entire environment to be monitored.	Additional modules are available and can be purchased.	Next actions – This was discussed at Server room consolidation project board. A budget bid has been submitted to allow for module to be purchased.		
CCC/HDC/SCDC (joint risk)	**Power supply protection (UPS & Generators)**	Pathfinder House (PFH) – the data centre at PFH is supported by a UPS with an estimated runtime of 90 minutes, providing short term cover in the event of power cuts or power spikes. By their nature UPS systems can only provide a limited	• Install a generator at Pathfinder House • Add trend analysis to the 6 month maintenance check to confirm UPS load and	Next actions – 3C ICT working with HDC FM to progress the installation of a generator on site at PFH (timescale to be confirmed) and to add trend analysis to the 6 month maintenance check to confirm UPS load and run time.		

		amount of power, the larger the UPS the more power available but with finite limits. If a longer period of cover is required then generators are required – these are then configured to kick in automatically to ensure that the UPS power is not drained and that power remains available to the systems as needed. There is no generator in PFH. This risk was raised at the server consolidation project board on 26th April 2019 and the board have accepted the recommendation of 3C IT to purchase a generator for PFH. Shire Hall – the data centre at Shire Hall is supported by a UPS to provide short term cover in the event of power cuts or power spikes. This is linked to two generators configured to kick in	run time	A budget bid has been submitted to purchase a generator.		

		automatically in the event of power cuts. The responsibility for the systems at PFH sits with 3C IT & HDC Facilities Management. The responsibility for the systems at Shire Hall sits with Cambridgeshire County Council under a contract with 3C ICT. Recommendation: This risk was raised at the server consolidation project board on 26th April and the board have accepted the recommendation of 3C IT to purchase a generator for PFH.				
CCC/HDC/SCDC (joint risk)	**Witness Host**	A Witness Host server is required to monitor connectivity to the Pathfinder House and Shire Hall datacentres. Its purpose is to detect a failure at either site and initiate migration of server hosts to the remaining live datacentre and redirect network traffic	This server is itself clustered and can be considered resilient in terms of hardware. However, it is still reliant on power and AC availability.	Recommendations: Tolerate the risk of having a single witness server which is IT industry accepted practice in all but high availability scenarios. Next actions – Council to confirm if risks are to be tolerated.		

		accordingly. Due to the function of this server it needs to remain at SCDC.				
HDC	**(UPS & Generators)**	At Eastfield House all network equipment is connected to a single bottom of the rack UPS providing approximately 30 mins standby power. The UPS is covered by support and maintenance contract. There is no backup generator at Eastfield House.	• Install generator at Eastfield House. • Implement a secondary backup UPS system	Next actions – HDC Facilities to conduct review and provide recommendations.		
HDC	**Air conditioning**	Server rooms must be kept to an even temperature and humidity to ensure that the IT equipment does not overheat and shutdown. The server room at Eastfield House contains units to provide this cooling. They will still be required to protect the remain servers along with	Ensure that cooling solutions are available on an N+1 basis Ensure that cooling systems are also covered by UPS protection so that there is no heat damage to hardware in a power cut. Install environmental	Next actions – HDC Facilities to conduct review and provide recommendations.		

		core and edge network hardware which will continue to be hosted there. The units are routinely checked and serviced every 6 months under the responsibility of the HDC site facilities team. To prevent heat damage to equipment that has UPS protection during a power cut, all cooling should also receive UPS protection as well. The scope of the server room consolidation project does not include any changes to these facilities, and they are reliable as long as they are receiving power.	monitoring systems with the ability to integrate in to a VESDA capable system (see fire suppression for more information)			
HDC	**Firewalls**	The hardware to host firewalls for Eastfield House is local to the site and cannot be migrated to the new data centre as it has to be located there in order to secure the	In the event of a failure the work to remove the firewalls would be brought forward.	Recommendations: Tolerate the risks. In the event of a failure the work to remove the firewalls would be brought forward.		

		network at its perimeters. It is supported by the room-based UPS. Following the recent layer 2 bridge work should this hardware fail then work would be accelerated to remove these firewalls which needed to remain in situ until the layer 2 bridge work was completed.				
HDC	**Network – Switches/Routers**	This hardware, comprising of core switches, routers and edge switches for endpoint devices cannot be migrated to the Pathfinder House server room as they support local (site) access. The Core switches and routers at each site are supported by the room-based UPS which provides about 30 mins resiliency. Should an edge switch fail then parts of the network affected (such as rooms or floors in a building) would be down and staff	HDC use Alcatel switches which are all on support contracts. There are some hot spares for switches but only a single core which would be replaced under the support agreement. Not having a hot standby core switch would cause service outage until replacement was sourced, installed and configured. If a site is considered a key	Recommendation: Tolerate the risk to temporary loss of network and review BCP arrangements so that responses (such as remote working plans) are agreed and understood.		

		would need to relocate to nearby offices or work remotely. The core switches and router are covered by warranty and replacement contracts in the event of failure and some of the edge switches that are less cost effective to keep supported on contracts would be swapped out in the event of failure. If the core network or CPSN router is down then the whole site would need to invoke DR working arrangements.	location or critical then money could be spent making the core network more resilient (perhaps standby core hardware) and getting a backup link to CPSN (either new fibre link or a line-of-sight beaming solution). Indicative costs for a standby link are an additional £5k per year with line of sight solution costing approximately £10k to install but no ongoing costs. Standby network infrastructure costs vary but core Cisco modules (e.g. 65xx) can be around £60k and edge switches (e.g. Cisco 2960X) left unconfigured on standby for quick deployment could be £2k each.			

HDC	**Telephony**	HDC telephony is provided by an Alcatel Lucent Oxe platform. This system is maintained and fully supported by GCI Telecom (formerly Freedom) The on premise Alcatel Lucent Oxe relies on DHCP services to provide IP addresses and connectivity settings to the VOIP handsets. If the DHCP service is not available then the telephone handsets are unable to connect to the Alcatel Lucent and will not function. An additional external link exists to Speke House to provide connectivity to the County's telephony system and provide HDC with additional Contact Centre functionality for their in-house Contact Centre. With the deployment of Council Anywhere		Recommendations: • Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. • Publicly accessible numbers such as service helplines could be setup so that if the County's telephony fails and calls cannot be routed to the telephone where they need to be answered then they could be rerouted to an alternative option such as someone's mobile. • Expedite telephony replacement proposal Next actions – Council to Review BCP arrangements to make		

		however the reliance on traditional desktop telephony will reduce over time. 3C ICT have a future telephony proposal for the next telephony phase based around Skype for Business and Microsoft Teams. The telephony system is out of scope for the server consolidation project. • they could be rerouted to an alternative option such as someone's mobile. • Expedite telephony replacement proposal Next actions – Council to Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed.		sure that response times to failures are appropriate and expectations managed.		
HDC	**Email**	A number of HDC mailboxes are currently stored onsite. Part of the Council Anywhere		Tolerate the risks until the shared mailboxes are migrated into O365		

		programme of improvements is to move all the email into the Office 365 cloud.				
SCDC	**Resilient power**	Within the SCDC server room there is a room-based UPS unit that delivers power to all connected devices providing short term cover in the event of power cuts or power spikes. By their nature UPS systems can only provide a limited amount of power, the larger the UPS the more power available but with finite limits. If a longer period of cover is required, then generators are required – these are then configured to kick in automatically to ensure that the UPS power is not drained, and that power remains available to the systems as needed. There is no generator in SCDC. This is a legacy issue. It is believed the room-	Install a secondary backup standalone UPS to extend power for up to 3 hours at both SCDC and Waterbeach Depo. Install generator at SCDC & Waterbeach Depo	Recommendations: Implement a backup standalone UPS system at SCDC and provide UPS for Waterbeach Depo. This will require downtime on some systems to enable the reconfiguration of UPS and will also require a budget allocation to purchase support of the UPS systems. Next actions – Council to confirm if the risks are to be tolerated or if recommendations should be implemented.		

		based UPS is not covered by support and if replacements were needed this would be supplied by SCDC Facilities. The room-based UPS is site specific and therefore not in scope for the server room consolidation. It may still be required after the servers have all gone as core and edge switches can run on it. This is a single point of failure. At Waterbeach Depo all network equipment is connected to a bottom of the rack UPS providing approximately 30 mins standby power. There is no maintenance agreement in place to cover any failures which would be dealt with by purchasing replacement units as and when required by 3CS ICT. There is no backup				

		generator at Waterbeach Depo				
SCDC	**Air Conditioning**	Server rooms must be kept to an even temperature and humidity to ensure that the IT equipment does not overheat and shutdown. The server room at SCDC contains units to provide this cooling. They may still be required after all systems have gone so that core and edge network hardware can be cooled. The two units installed are routinely checked and serviced every 6 months under the responsibility of the site facilities teams. However these units were installed in 2004 & 2006 and are ageing and there have been recent issues with the air conditioning with a failure over the summer 2019. To prevent heat damage to equipment that has	Ensure that cooling solutions are available on an N+1 basis Ensure that cooling systems are also covered by UPS protection so that there is no heat damage to hardware in a power cut. Install environmental monitoring systems with the ability to integrate in to a VESDA capable system (see fire suppression for more information) Consider providing AC units to protect network equipment at Waterbeach Depo	Next actions – Council to either arrange for site facilities team to make the changes outlined above or initiate discussions with 3C ICT to take over this responsibility.		

		UPS protection during a power cut, all cooling should also receive UPS protection as well. The scope of the server room consolidation project does not include any changes to these facilities, and they are reliable as long as they are receiving power. At Waterbeach Depo there are no dedicated Air Conditioning Units to specifically protect ICT equipment. Instead reliance is placed on the building Air Conditioning to provide adequate cooling potentially leading to possibility of network loss. Next actions – Council to either arrange for site facilities team to make the changes outlined above or initiate discussions with 3C ICT to take over this				

		responsibility.				
SCDC	**Fire suppression**	Fire suppression is required in order to protect equipment in server rooms in the event of fire. The current fire suppression in SCDC server room is FM200 and is gas suppression. It is tested and inspected routinely at 6 month intervals under the responsibility of the site facilities teams and is assumed to be fit for purpose. The scope of the server room consolidation project does not include any changes as they are part of the facilities and will continue to be required after services have been migrated to the new environment. There is no dedicated Fire Suppression equipment for ICT equipment at Waterbeach Depo. Additionally, there is no		Recommendation: Consider installing Fire Suppression system which is zoned and VESDA capable such that it continually samples the air for particulates so early warning is picked up from small amounts of smoke / burning components rather than fire/heat sensors being tripped. Next actions – SCDC Facilities to conduct review and provide recommendations. Separate consideration should be given to providing dedicated Fire Suppression to ICT equipment in Waterbeach Depo.		

		Fire Suppression system in place to cover the building as a whole.				
SCDC	**Firewalls**	The hardware to host firewalls is local to the site and cannot be migrated to the new data centre as it has to be located there in order to secure the network at its perimeters. It is supported by the room-based UPS. Should this hardware fail then connectivity between the SCDC/Waterbeach sites and the internet would be affected preventing access to key cloud hosted Council applications for staff and access to backend systems for members of the public. Any failure would involve DR being invoked with Virgin Media/MLL to repair or replace and affected applications would require their BCP to be invoked. The infrastructure is site	Alternative standby hardware could be purchased but this would be disproportionately expensive and incur additional cost for the length of time it will be required. Hardware costs for firewall modules can vary but an indicative estimate is £20k	Recommendations: Tolerate the risks as having a single firewall is IT industry accepted practice in all but high availability scenarios. Review BCP arrangements to make sure emergency responses are agreed and understood. Next actions – Council to confirm if risks are to be tolerated and review BCP arrangements to make sure emergency responses are agreed and understood. Once the Server Room Consolidation Project is complete a follow on recommendation to design out the need to retain firewall at SCDC will be put forward.		

		specific and firewalls are part of the core services offered through CPSN and managed and maintained solely by Virgin Media. Management of firewall and internet access will be migrated to MLL and Eastnet later in the year. This system is out of scope for the server consolidation project.				
SCDC	**Network Switches/Routers**	This hardware, comprising of core switches, routers and edge switches for endpoint devices cannot be migrated to the new data centre as they support local (site) access. The Core switches and routers are supported by the room-based UPS which provides about 30 mins resiliency. Should an edge switch fail then parts of the network affected (such as rooms or floors in a building)	If a site is considered a key location or critical then money could be spent making the core network more resilient (perhaps standby core hardware) and getting a backup link to CPSN (either new fibre link or a line-of-sight beaming solution). Indicative costs for a standby link are an additional £5k per year with line of sight solution	Recommendation: Tolerate the risk to temporary loss of network and review BCP arrangements so that responses (such as remote working plans) are agreed and understood. Next actions – Council to confirm if risks are to be tolerated and to review BCP arrangements to make sure emergency responses are agreed and understood		

		would be down and staff would need to relocate to nearby offices or work remotely. The core switches and router are covered by warranty and replacement contracts in the event of failure and some of the edge switches that are less cost effective to keep supported on contracts would be swapped out in the event of failure. If the core network or CPSN router is down then the whole site would need to invoke DR working arrangements.	costing approximately £10k to install but no ongoing costs. Standby network infrastructure costs vary but core Cisco modules (e.g. 65xx) can be around £60k and edge switches (e.g. Cisco 2960X) left unconfigured on standby for quick deployment could be £2k each.			
SCDC	**Telephony**	SCDC telephony is provided by a legacy Avaya CS1000 system linked to BT iCloud hosted platform. The Avaya CS1000 goes end of support in March 2020 and already there is only limited nationwide engineering support available from BT and limited spares availability		Recommendations: • Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. • Publicly accessible numbers such as service		

		The on premise Avaya CS1000 relies on DHCP services to provide IP addresses and connectivity settings to the handsets. Additionally, the telephones connect to the BT iCloud telephony services. If the DHCP service is not available, then the telephone handsets are unable to connect to the BT iCloud and will not function. With the deployment of Council Anywhere however the reliance on traditional desktop telephony will reduce over time. 3C ICT have a future telephony proposal for the next telephony phase based around Skype for Business and Microsoft Teams.		helplines could be setup so that if iCloud cannot route calls to the telephone where they need to be answered then they could be rerouted to an alternative option such as someone's mobile. • Expedite telephony replacement project Next actions – Council to Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. SCDC Contact Centre manager to set up publicly accessible numbers such as service helplines so that if iCloud cannot route calls to the telephone where they need to be answered then they could be rerouted to an		

				alternative option such as someone's mobile. 3C ICT to progress the telephony replacement project		
SCDC	**Email**	A number of SCDC mailboxes are currently stored onsite. Part of the Council Anywhere programme of improvements is to move all the email into the Office 365 cloud.		Tolerate the risks until the shared mailboxes are migrated into O365		
SCDC	**SVS Application**	This is a legacy Housing Maintenance system that provides surveyors with information on Council Housing properties. This application will be replaced/incorporated into the Orchard Housing Replacement		Recommendations: Tolerate the availability risks.		
SCDC	**Mapping Application**	This system is a key line of business system for the GIS Mapping service. This system will continue to be hosted at SCDC until it can be integrated into a combined system with Hunts District Council to	Review the local BCP arrangements to make sure that recovery times are agreed and understood.	Recommendation: Tolerate the risk and review local BCP arrangements to make sure that recovery times are agreed and understood. Next actions – Council		

		save costs.		to confirm if the risks are to be tolerated until the new Shared Planning system is in place.		
CCC	**(UPS & Generators)**	Within the Mandela House & Guild Hall server rooms there is a combination of different UPS systems providing short term cover in the event of power cuts or power spikes. By their nature UPS systems can only provide a limited amount of power, the larger the UPS the more power available but with finite limits. If a longer period of cover is required then generators are required – these are then configured to kick in automatically to ensure that the UPS power is not drained and that power remains available to the systems as needed. There is no generator in Mandela House. This is a legacy issue. The majority of the UPS	Install a generator at Mandela and Guildhall. Move everything onto dual UPS support. Review support contracts for all UPS hardware to make sure they have appropriate cover.	Recommendations: Implement dual UPS support for all servers and get all UPS under maintenance and support. This will require downtime on some systems to enable the reconfiguration of UPS and will also require a budget allocation to purchase support of the UPS systems, Costs have been provided for this work		

		are what is known as 'bottom of the rack' UPS and these only provide cover for systems in that specific rack. There is also a larger UPS in Mandela House which can provide more general support for systems in that server room – this was installed by Northgate specifically to provide support to the Telephony system and was not configured or set up to support the other systems in the room. The bottom of the rack UPS are not covered by support and if replacements are needed these will be on a case-by-case basis. The UPS is site specific and therefore not in scope for the server room consolidation. It may still be required after the servers have all gone as core and edge switches				

		can run on it				
CCC	**Air conditioning**	Server rooms must be kept to an even temperature and humidity to ensure that the IT equipment does not overheat and shutdown. The server rooms at Mandela House and Guildhall contain units to provide this cooling. They may still be required after all systems have gone so that core and edge network hardware can be cooled. The units are routinely checked and serviced every 6 months under the responsibility of the site facilities teams. To prevent heat damage to equipment that has UPS protection during a power cut, all cooling should also receive UPS protection as well.	Ensure that cooling solutions are available on an N+1 basis Ensure that cooling systems are also covered by UPS protection so that there is no heat damage to hardware in a power cut. Install environmental monitoring systems with the ability to integrate in to a VESDA capable system (see fire suppression for more information)	Next actions – Council to either arrange for site facilities team to make the changes outlined above or initiate discussions with 3C ICT to take over this responsibility.		
CCC	**San**	The legacy SAN and are now only used to support the Business Objects server within Cambridge City - see business	There is a new Business Objects server	Complete the migration of the Business Objects server to the new data centre. At which point the San and the ESXi		

		systems		environment can be decommissioned		
CCC	**ESXi**	Legacy virtual servers (ESXi) are used to support the Business Objects server within Cambridge City (see business systems) and additional Active Directory servers (see AD)	Business Objects - The new server can be used now and any additional report can be created by external resource if required There are additional AD servers providing resilience	Complete the migration of the Business Objects server to the new data centre. At which point the San and the ESXi environment can be decommissioned		
CCC	**AD**	Active Directory Windows network login authentication. New AD servers already operate in the new data centre. It remains for 3C ICT to find a suitable time to safely remove legacy AD servers (remove AD roles & demote) and shut down. The impact of losing the legacy domain controllers is much slower login times.	AD can be configured so that AD roles can be offered from a primary and secondary location in the event of a failure.	Recommendations: Review the AD setup so that AD roles can be offered from a primary and secondary location in the event of a failure until the legacy servers can be safely removed		
CCC	**DHCP**	All sites and telephones rely on DHCP to provide IP addresses to network connected		Implementing changes to DHCP as part of migration to Eastnet		

		devices. Following the power outage in April 2019 a new server was provisioned to host DHCP services until it can be moved to the new datacentre.				
CCC	**Firewalls**	The hardware to host firewalls is local to the site and cannot be migrated to the new data centre as it has to be located there in order to secure the network at its perimeters. It is supported by the City data centre UPS that will give up to 10 hours of resiliency. Should this hardware fail then connectivity between the City sites and the internet would be affected preventing access to key cloud hosted Council applications for staff and access to backend systems for members of the public. Any failure would involve DR being invoked with MLL to repair or replace and affected	Alternative standby hardware could be purchased but this would be disproportionately expensive and incur additional cost for the length of time it will be required. Hardware costs for firewall modules can vary but an indicative estimate is £20k	Tolerate the risks as having a single firewall is IT industry accepted practice in all but high availability scenarios. Review BCP arrangements to make sure emergency responses are agreed and understood.		

		applications would require their BCP to be invoked. The infrastructure is site specific and firewalls are part of the core services offered through Eastnet and managed and maintained solely by MLL.				
CCC	**Network Switches/Routers**	This hardware, comprising of core switches, routers and edge switches for endpoint devices cannot be migrated to the new data centre as they support local (site) access. The Core switches and routers are supported by a UPS that gives about 10 hours of resiliency. Should an edge switch fail then parts of the network affected (such as rooms or floors in a building) would be down and staff would need to relocate to nearby offices or work remotely.	If a site is considered a key location or critical then money could be spent making the core network more resilient (perhaps standby core hardware) and getting a backup link to Eastnet (either new fibre link or a line-of-sight beaming solution). Indicative costs for a standby link are an additional £5k per year with line of sight solution costing approximately £10k to install but no	Tolerate the risk to temporary loss of network and review BCP arrangements so that responses (such as remote working plans) are agreed and understood.		

		The core switches and router are covered by warranty and replacement contracts in the event of failure and some of the edge switches that are less cost effective to keep supported on contracts would be swapped out in the event of failure. If the core network or Eastnet router is down then the whole site would need to invoke DR working arrangements.	ongoing costs. Standby network infrastructure costs vary but core Cisco modules (e.g. 65xx) can be around £60k and edge switches (e.g. Cisco 2960X) left unconfigured on standby for quick deployment could be £2k each.			
CCC	**VDI**	This is the application which allows users to connect into the Council if they are working from home, or run applications that do not work well on a small WiFi connection, such as IKEN. This setup went out of support from the vendors at the end of January 2019, and is therefore at a high risk until functionality is fully replaced by Council Anywhere. Following the recent power outage a new server has been	This risk could be mitigated by changing the agreed order of the Council Anywhere rollout to put City VDI users earlier in the process than they currently are (would require agreement from other partners) and decommissioning this service	There are risks to systems that need VDI for access but the VDI environment has been rebuilt as part of the remedial work from the April 2019 issues and is on relatively new and supported hardware. Additionally the Council Anywhere rollout is well advanced to deliver the VDi replacement and therefore moving VDi users earlier does not warrant or justify		

		provisioned to host this system however the Council are at risk should a VDi system issue occur through lack of any ongoing vendor support. The roll out of Council Anywhere Lite (approx 250 devices) has already significantly reduced the usage of the VDI system as more members of staff connect to systems via Global Protect from laptops. This system is out of scope for the Server room consolidation project as it will be superseded by the new devices under the Council Anywhere project.		rescheduling Council Anywhere deployment. Tolerate these risks until Council anywhere rollout replaces VDI.		
CCC	**Roaming Profiles**	This service needs to remain in Mandela House whilst Windows 7 devices and VDI is operational, which will be until the completion of the Council Anywhere project. This is to ensure acceptable	As part of the remedial work from the April 2019 incident, roaming Profiles are no longer stored on the legacy SAN and are instead stored on	Tolerate for the interim period and recover from backup when needed. Once users are migrated to Council Anywhere their profiles will be converted from Roaming to Redirected		

		login/logoff performance. Large roaming profiles will take longer than an hour to login/logoff if stored in the new data centre and downloaded across WAN links leading to possible increase in corruptions. Additionally, Windows 7/Outlook 2010 users have their Outlook OST stored in the Roaming Profile Roaming Profiles will be phased out as users adopt Windows 10 /Council Anywhere/Redirected Profiles. Current risks: Staff using VDI & Windows 7 devices could be unable to log in if the server hosting roaming profiles is unavailable and also may be unable to access their email inbox. This is a legacy issue.	supported hardware that is backed up to tapes which are stored off site.	Profiles.		
CCC	**Email**	A number of Cambridge		Tolerate the risks until		

		City shared mailboxes are currently stored onsite on load balanced Exchange servers in Mandela House. Part of the Council Anywhere programme of improvements is to move all the email into the Office 365 cloud.		the shared mailboxes are migrated into O365		
CCC	**Telephony**	Telephones on desks throughout City offices rely on two things. Firstly, the Cambridge DHCP service provides addresses and connectivity settings to Unify handsets. Secondly, the telephones connect to the primary Unify data centre and telephony services in Newport (Wales) or failover site in Slough. If the DHCP service is not available then the telephone handsets are unable to connect to either of two Unify data centres and will not function. If the DHCP servers fail and cannot be restored		Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. Publicly accessible numbers such as service helplines could be setup so that if Unify cannot route calls to the telephone where they need to be answered then they could be rerouted to an alternative option such as someone's mobile.		

		then the network settings for telephones would need to be recreated on a new DHCP server that the telephones would connect to and pick up. These settings were successfully recreated during the recent power outage that affected the DHCP server in the Mandela House server room. However, due to the specific configuration required for Unify this is a laborious and time consuming manual process. This service has N+1 resiliency on telephone services provided that a telephone handset can connect to the 2 remote Unify data centres. With the deployment of Council Anywhere however the reliance on traditional desktop telephony will reduce over. 3C ICT have a future telephony proposal				

		for the next telephony phase based around Microsoft Teams.				
CCC	**Business systems – a small number of systems remain in Mandela House**	**M3 application (Environmental Health)** Project underway to procure replacement has been delayed. Work to migrate this to the new data centre will be investigated and scoped. **SVS Application** - This is a legacy Housing Maintenance system that provides surveyors with information on Council Housing properties. This application will be replaced/incorporated into the Orchard Housing Replacement **Business Objects (Reporting)** New system in place and configured awaiting sign off from business by end of 2019	**M3 & SVS Application** - The system is backed up and can be restored from the last good backup set if required. If there is a failure with this service in Mandela House then it would be restored according to priorities stated in the Business Continuity Plan. **Business Objects (Reporting)** The new server can be used now and any additional report can be created by external resource if required	Recommendations: Tolerate the availability risks. Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. For M3 3C ICT will scope out the work to migrate this to the new datacentre and agree timescales for this with intelligent client.		
All	**Cloud Hosting**	Many systems are hosted by 3rd party cloud hosting providers which are outside of the control of	SLA's with 3rd party cloud hosting companies	tbc	tbc	tbc

		3C ICT.				

Appendix B – Strategic Application Risk Matrix

	In support		Deprecated/De-support notice		Out of Support

Note – December 2019 is the first time that this risk matrix has been produced. It will be iterated in future versions to include more information.

Support and maintenance costs are above £5k a year unless stated otherwise.

Council	Service Area/Owner	Application Name	Supplier	Dec-19
City	Revs & Bens & Name	R&B SaaS Application (RB Live)	Northgate	
City	Corporate & Customer Services	Openscape	Unify Atos Collaboration Solutions	
City	Corporate & Customer Services	Openscape	Unify Atos Collaboration Solutions	
City	Housing	Orchard	Orchard Information Systems	System replacement underway - support from vendor in place during migration. Mar 20.
City	Corporate	Uniform	Idox Plc.	
City	Corporate	TLC	Idox Plc.	
City	Corporate	Public Access	Idox Plc.	
City	Corporate	IDOX DMS	Idox Plc.	
City	Env. Health	M3	Northgate	System replacement underway - support from vendor in place during migration
City	Corporate	GIS Desktop	ESRI	
City	Corporate	Intranet Mapping	ESRI	Current version is old and whilst in support plans are already underway to replace the entire GIS solution across all 3 authorities in first quarter 2020.
City	Shared Waste & Customer Services	Contender	Agile Applications	Extended support
City	Customer Services, Cashiers and	Capita Systems (including pay.net, ACR & website	Capita	

	Finance	payments, etc.)		
City	Customer Services	Front Office	Northgate	
City	Customer Services	Impact360 – Call Recording Software	Verint via ATOS (Unify)	
City	Corporate	EDRMS	Idox Plc.	
City	Estates and Facilities	CEMAR Online Contract management software used in Asset Management	CM Toolkit Ltd	
City	Revenues & Benefits	Citizen Access - Benefits Software	Northgate Public Services	
City	Customer Service Centre	Govmetric	ROL Solution	
City	Revenues & Benefits	Risk Based Verification Software - Xantura	Northgate Public Services	
City	Shared Legal Service	Legal Case Management	IKEN	
City	Elections	Eros	IDOX	
City	Environment & Waste	In-Cab technology domestic waste	Webaspx	
City	Democratic Services	Issue Manager	Modern Mindset	
City	Crematorium	Epilog	Gower Consultants	
City	Revenues & Benefits	Analyse Local Subscription	Inform CPI Ltd	Confirming use of this application in City. Dec 20.
City	Finance	Business Objects	Business Intelligence	Upgrade underway - support from vendor in place during migration. End Dec 19.
City	Housing	SVS Mobile	Castleton was South View Solutions (SVS) Contract is with Orchard	System replacement underway - support from vendor in place during migration. Mar 20.
City	Property Services/Planning	Contact Centre Audio Service	Premier Business Audio	
City	HR, Housing, Revs & Bens	Information@Work	Northgate	

City	HR & Payroll	ResourceLink	Zellis (was NGA)	
City - There are 44 other applications under £5k a year which range from £120 a year to £4990 annual support costs. These are deemed to be low risk applications due to their use, size and number of users. There are 9 applications that are part of a larger application (for example M3 and Orchard).				
HDC	Leisure	MRM Plus 2	Gladstone	Extended support from Microsoft. Working with vendor on server migration. April 20.
HDC	Revs & Bens	Revenues & Benefits	Northgate	
HDC	Planning, BC and others	Uniform	Idox Plc.	Migration to update version underway but maintaining support from vendor. Feb 20.
HDC	HR/Payroll	NGA ResourceLink	Zellis	
HDC	Corporate	ArcGIS	ESRI	Current version is old and whilst in support plans are already underway to replace the entire GIS solution across all 3 authorities in first quarter 2020.
HDC	Env. Health	Flare	Civica	
HDC	Customer Services, Finance & Revs and Bens	AIM	Capita	
HDC	Benefits	IEG e-forms	IEG4	
HDC	Benefits	Housing Benefit Risk Based Verification ASP Services	CallCredit	
HDC	Leisure	Tableau	The Information Lab	
HDC	Fraud	InCase	Intec	
HDC	Elections	Xpress	Express\Civica	
HDC	Corporate	Information@Work	Northgate	
HDC	HR/Payroll	Webrecruitment	Zellis Group	
HDC	Democratic Services	Modern.gov	Modern Mindset	Extended support from Microsoft. Working with vendor on server migration. Apr 20.
HDC	Customer Services	Customer Relationship Mgt (CRM) Corporate CRM	IBM	

HDC	Leisure	MyWellness Technogym Wellness System	Technogym	
HDC	Document Centre	PRISMA ACCESS/PREPARE	Canon UK	Software being considered as part of an outsourcing exercise.
HDC	Revs & Bens, Resources	Business Objects	CACI Ltd	
HDC - There are 31 other applications under £5k a year which range from £276.99 a year to £4116.59 annual support costs. These are deemed to be low risk applications due to their use, size and number of users. There is 1 application that is part of a larger application (Datalink).				
SCDC	Revs & Bens	Open Revenues	Civica	
SCDC	Housing	Orchard Housing	Orchard Information Systems	System replacement underway - support from vendor in place during migration. Mar 20.
SCDC	Env. Health	M3 Public Protection	Northgate	
SCDC	Housing	Keystone Asset Management System	Civica	System replacement underway - support from vendor in place during migration. Mar 20.
SCDC	Revenues and Benefits	OpenHousing	Civica	
SCDC	Corporate	GIS GeoStore	Aligned Assets	Current version is old and whilst in support plans are already underway to replace the entire GIS solution across all 3 authorities in first quarter 2020.
SCDC	Corporate	Information@Work	Northgate	Migration to update version underway but maintaining support from vendor - able to run on RDS. Jan 20.
SCDC	Democratic Services	Xpress	Xpress/Civica	
SCDC	Licencing	Lalpac	IDOX	Upgrade being planned with the vendor and support being maintained. Feb 20. Users able to access the system via RDS on Windows 10 devices.
SCDC	Democratic Services	Modern.gov	Modern.gov Mindset	
SCDC	Revenues and Benefits	Cloud Service re Income Management	Capita	

SCDC	Housing	SVS Mobile Full Suite	Orchard Information Systems Ltd	System replacement underway - support from vendor in place during migration. Mar 20.
SCDC - There are 17 other applications under £5k a year which range from £132.31 a year to £4707 annual support costs. These are deemed to be low risk applications due to their use, size and number of users. There are 3 applications that are part of a larger application (Orchard for example).				
All 3	3C ICT	Yotta	Yotta	
All 3	3C ICT	Technology One	Technology One	
All 3	3C ICT	Mimecast Email Management Express	EACS Ltd	
All 3	3C ICT	Trend Micro Enterprise Security Suite	Phoenix Software	
All 3	3C ICT	Hornbill Service Desk Manager	Hornbill	
All 3	3C ICT	Matrix	Keytree	
All 3	3C ICT	Vuelio	Vuelio	

Appendix C – Service Catalogue

This contains the list of all live services. To date, the list has primarily been used by those who are involved in the support of the services listed.

- Service Desk and End User Support.
- Network and Infrastructure Support.
- Communications Support.
- ICT and Digital Strategy Formulation.
- Supporting the development and delivery of the councils owns digital strategy
- Technical / Solutions Architecture.
- ICT Project, Procurement, Contract and Supplier Management.
- ICT Bespoke Service Delivery.
- Data Centre Management.
- Telephony Management.
- Data and System Backup and Recovery.
- Local Area Network (LAN) & Wide Area Network (WAN) Management.
- ICT Security Management.
- Email Support & Web Filtering.
- Desktop Provision / Replacement.
- Office Computer Provision.
- Flexible / Homeworking Service.
- Mobile ICT Provision (incl. smartphones & tablets).
- Print Facilities.
- Audio Visual Facilities (provision & support).
- Database administration and management.
- Application Maintenance and Support.
- Release Management (Infrastructure and Applications).
- GIS Management.
- Address Management.
- Information Governance/Management.
- Website and intranet Support (incl. web apps and web forms).
- Website development.
- SharePoint / Office 365 Support and Development.
- System Integration Support and Development.
- Training.
- Compliance (inc PSN / PCI).
- Licence Management / SAM.
- Test Plan Development.
- Client Service Management.
- Finance and Billing.
- System packaging (AppV / SCCM etc).
- Unix / Linux Physical Windows support
- Business analysis & Business support.
- Software development and integration e.g. dev of App integration by Digital team.

Appendix D

Current ICT priorities agreed with Intelligent Clients and Shared Services board for the period up to Dec 31st 2019:-

Eastnet MLL migration	Agreed High priority taking resources from all teams within ICT – Primarily all resources from Network and Infrastructure team are involved in the installation and commissioning of links and circuits as well as the cut over. Activity taking place daily with requests coming from MLL with no more than a weeks notice, but more commonly 2 or 3 days notice to attend a site. Critical dates – 3 to 4 days preceding 5th Nov + Nov 5th to Nov 8th for WiFi service migration for all 3 councils Critical dates - 4th Nov to 16th Nov for Firewall migration preparation and commissioning work. 18th Nov Firewall migration for all 3 councils and 3C ICT. Backfill resources are in place to cover BAU server fault support and network administration. Critical dates – HDC network infrastructure (Layer 2 bridge) change to support migration to MLL and implement Council Anywhere infrastructure at HDC. If not done significant network performance issues will impact CA roll out at HDC.
Council Anywhere	Agreed High priority – roll out continuing across all three councils, SCDC nearing completion, CCC held up due to Unify phone system upgrade issues. Backfill resources and temporary deployment resources are already in place. Critical dates – 4th to 12th Nov for prep and change to data centre networking at Pathfinder house to allow HDC Council Anywhere infrastructure to be fully implemented. This links to MLL EastNet migration work too.
Unify upgrade at CCC (Not a project, but Change / Incident management related)	Technical resources from Applications team supporting CSC resources for preparation and testing. As soon as this is successful the resources will be developing the Council Anywhere configuration for the CSC. All new devices must be rolled out by Dec 31st.

Shared planning implementation	Resources from Application support and network and infrastructure team needed 2nd half of Nov to complete implementation of the Service areas' plan-b due to data migration issues from the supplier and delays in testing. Preferred option would result in slip to go live. This work will need to be picked up again in the new year once the supplier has had the chance to fix the data migration issues.
Orchard housing implementation	Network and Infrastructure team resources are needed to complete the server build, but the schedule now clashes with MLL EastNet activity. Earliest date that servers can be built and ready for Orchard is 18th Nov. Enquiries with Orchard to confirm if they can accommodate this date as this is 2 to 3 weeks later than they'd prefer.
InTune implementation	Supports the management, support and security of the Mobile Phone estate. Resources from desktop team and application support team for Oct through to end of Dec. We must move off the legacy Airwatch system to avoid costly renewal fees. Back fill resources within desktop team are already assisting with this work.
Server room consolidation	Agreed completion by end of Oct, but the last few tasks have now slipped into Nov due to resources being focused on MLL Eastnet.
Site closures and moves – Inlcuding Akerman street	Project Management resources overseeing site closures and moves. Links to MLL Eastnet work due to ceases and deadlines to site moves.
PSN procurement	Project management resources starting the procurement process for the next IT Health checks in order to begin the PSN accreditation renewal process for all 3 councils.
Telephony system design	Project Management and technical architecture resources starting the system design and documentation work to support the project start up and requirements capture.

[i] Irina Popova Benefits study.