

BUSINESS PLAN FOR ICT SHARED SERVICE 2022/2023

Service Leads				
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	Cambridge CityHuntingdonshireSouth CambridgeshireCouncilDistrict CouncilDistrict Council			
Director of Shared Service	Fiona Bryant	Oliver Morley	Anne Ainsworth	
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3C Reporting timetable

Progress reports on Business Plan implementation and progress against key measures will be monitored at the quarterly 3C Management Board meetings. Quarterly performance reports will be submitted to the Joint Shared Service Board prior to consideration by each partner at executive and scrutiny level as they see appropriate.

Progress updates in quarterly reports will inform the preparation of annual reports, to be submitted to the partners' decision-making bodies in May 2022 as part of the strategic review process set out in Schedule 2 to the Partnership Agreement.

Version	Date
V1.1 DRAFT	11/05/2022

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 2022/23. 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.

Summary

Within the business plan for 2022/23 there is a continued focus on stabilisation, delivery of value and supporting transformation initiatives and Council priorities. Covid-19 continues to have an impact throughout 3C ICT – in the way we operate and the way in which the service we deliver have to change to meet the needs of a world that has changed – employees, residents and business alike.

The impact of the crisis and the work that was required by 3C ICT to support the Councils, both staff and members, had an unprecedented impact on 3C ICT. In 21/22 the teams have continued to deal with the back log of work and projects that built up last year and all while new work requests keep arriving. The importance of prioritisation has never been more apparent as a result because 'throwing' resources at the backlog isn't practical or affordable. This year there has been a growing demand for 'Can you just' type requests that sit outside of the formal project request and prioritisation process. These range in scale from small non BAU pieces of work through to larger pieces of work where a project manager is not necessarily required. We have started to raise awareness of the scale and volume of these requests with the directors and IC's. Initial feedback has been positive and we have been asked continue to highlight these cases on a quarterly basis due to the impact these have on planned work.

All staff throughout the department have remained committed and flexible to the rapidly changing priorities and requirements. The fact that the Council Anywhere, Teams, use of O365, etc still continues to attract praise and endorsements from across the councils demonstrates not only how much technology can change the way in which we work, but also provides benefits long after the fact.

The impact that development work by the digital teams had on residents and businesses also draws a direct line between technical delivery and benefit to the customer. Following these successes in 21/22, this is something we intend to build upon further in 22/23.

B. DESCRIPTION OF THE SERVICE

Vision & Objectives

The 3C Shared Services agreement has been extended from the original five year term through to 2026 and 3C ICT have supported renewal work. The Councils recognised Technology can be key enabler of organisational change when used and applied effectively. There is an appreciation that to fulfil this role the objectives of ICT need to continually evolve. Changes to the overarching objectives of Shared Services have also been discussed and agreed, and these have been used as the framework for the objectives for 3C ICT, below.

Objectives for residents

- High availability.
- Ability to access more (potentially in future the majority) of services at a time of their choosing, rather than during core opening times.
- To begin to provide a more holistic service, which removes complex and artificial boundaries between organisations. Where we can pass on relevant requests we will.
- "I want the council to deliver services in the way I want them" Informed by the Councils using data around customer desires and uses more effectively.

Objectives for staff

- Services have high availability. Moving toward a more 'always on' service in the future.
- New tools which can improve service delivery are made available.
- Artificial boundaries between services (where close working is beneficial) and systems are reduced where they can be.

Objectives for services

- That 3C ICT supports the delivery of technology which enables services to continually improve efficiency and effectiveness.
- That ICT are able to act as technical advisors on tools that can deliver the kind of business improvements that services define.
- That ICT supports the achievement of objectives that services are assigned.

Objectives for the organisations

• That 3C ICT enables the Councils to continually modernise and evolve to meet the changing needs of 21st century residents, and face the financial and demographic challenges that we face.

- That 3C ICT enable change that does not respect traditional structures and ways of working, but enables radically different delivery where outcomes and effectiveness can be improved by doing so.
- That minimises the spend on 'internal administration' and enables finances to be focussed on key value adding activity.

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 supports improved reliability and availability. Increased investment in more robust infrastructure will reduce likelihood 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.

• 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.

During the discussions around refreshed objectives, it has been agreed that the councils would further progress the move towards further harmonisation of systems and processes mapped against a single set of essential requirements across all partners. This can also be referred to as 'minimum

viable product' or 'Margherita pizza' approach. Harmonisation is a critical part in achieving the most efficient and effective shared service for all partners, but the complexities, interdependencies and difficulties cannot be underestimated.

The **Technology Roadmap** together with the **Service Catalogue** are the primary documents outlining the strategic intent for the service and describes the current service and technical offerings provided by the ICT Shared Service. These important documents will continue to evolve throughout the life of the ICT Shared Service, with the service catalogue being published on the 3C ICT site as a 'living document' that is regularly being updated and amended. In the coming months this document will be linked to the applications matrix (soon to be services and systems matrix) to provide a more thorough view of available services. Not just those directly provided and supported by ICT, but those in use by service areas procured and adopted separately.

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.

Appendix D 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** describes service characteristics and plays an important role in the lifecycle management of specific areas of technology (hardware and software) coupled with the applications matrix it (when fully populated) provides a complete 'map' of applications and systems lifecycles prompting when systems are reaching end of life and thus adding risks to the organisation.

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.

Regular reviews between the ICT Shared Service management team and the Intelligent Clients of each of the partner councils have taken place, where services are monitored, reported, and proposals for refining and improving the delivery of services offered by 3C ICT are discussed, agreed and progressed. The inclusion of prioritisation of requests (development and project work) generated from service areas, through project initiation, annual bid process and ad hoc requests has been a critical point of discussion over the past 12 months as demand for time and resources from ICT far outstrips the availability and capacity. During the early part of the year, there was a lot of emphasis on maintaining the availability and stability of systems (following service interruptions that were experienced in Q3 2020, but as we moved through the year we were able to start rebalancing effort to cover more strategic and forward looking matters.

In summary – BAU priorities can described as:-

1. Working systems and Incident management - Priority 1 will always be Major Incidents/P1 where ability to work is compromised.

2. Safe and secure systems and data - ensuring the councils systems are patched/security up to date, protected and data secured appropriately. (Immutable backups, PSN, Cyber, Patching, etc)

3.Legislative/Audit requirements (FOI/SAR/ICO etc) The stuff we get fined for, or have committed to from Audit perspective if we don't do. (all audit actions but have corresponding project and prioritised accordingly in projects list so if contributes to Audit action carries higher priority than 4. below)

4. ICT Critical Core Projects/cost savings and cost avoidance. (Windows server migrations (and linked projects that support this) Data centre replacement, Desktop OS, Mobile OS, Hardware replacement, Core Zero trust data sharing abilities etc. Excess charges, Late fees, Recharging and wastage

5. Council Projects with ICT elements + other ICT "Nice to have" projects. (This is the part that councils and shared service board can direct our priorities on via IC's)

1-4 are the core elements led by ICT and we are entrusted to deliver. Part of 4 is influenceable e.g no. of users, breadth of service, etc/risk based decisions which should be jointly agreed.

5 is influenceable (via IC function) and agreed between/across partners, but in some cases may be partner specific which could incur additional costs if it adds demand to 3C ICT that can't be shared or benefits the other partners.

The agreed list of priority projects requests as of end of FY 21to22 can be found in Appendix E.

In addition to the work with the 3 Councils the 3C ICT Service will continue to work with Peterborough City Council and Cambridgeshire County Council so that any mutually beneficial opportunities to use, share and exploit digital and ICT services can be considered and shared with the partner councils. This includes opportunities brokered directly between the groups but also those led by external bodies such as LGA, DLUHC and other central Government bodies.

Benefits Realisation

The largest financial savings are still being achieved through the standardisation of the existing 3 environments and review + consolidation of software/licensing agreements. 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. For example – on numerous occasions over the past 12 months and since the start of the pandemic, the benefits of the Council Anywhere technology and the introduction of collaboration tools such as Teams, O365, etc have been highlighted as 'game changers' at team, service area and corporate level. However, there is still much more that the councils can gain and benefit from through ongoing training and use of the full suite of O365 tools and software. Its vital that not only should all service areas see O365 as the preferred solution rather than looking at 3rd party packages, but the councils are the lead in delivery of training and championing the use of O365 for local transformation and business process improvements. 3C ICT

will continue to provide this advice when being consulted on service design, development and transition initiatives.

Whilst 3C ICT continue to support Individual service areas and Transformation teams in the delivery of their projects, initiatives and planned improvements, savings such as these will be realised and should be reported by the relevant service areas.

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 as part of the business case agreement to show a pragmatic stepped approach to savings over the coming years, recognising that (a) significant dependence on hired resources during the first year of the shared 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. However, during this time opportunities to jointly procure and share implementation of systems and services have been taken and as a result not only are the year on year 15% savings against the baseline is still being achieved, but significant cost avoidance is being realised.

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 the new Project and Portfolio reporting tool (Jira) implemented in Q4 20 to 21 and Q1 21 to 22. Due to increasing demands from the need to update and patch systems an increasingly significant amount of time and resource is spent on this BAU activity.
- (2) Project Costs In most cases, 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. More recently, the IC's have agreed, with support from the project sponsor that, an equal 1/3 split of costs can be adopted for selected joint projects – e.g. telephony implementation.
- (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. Over time the costs associated to legacy systems are reducing, but this is dependent on the speed at which each of the partners is able to review and go out to market to adopt new systems and services and the opportunity to do this jointly with one or more of the other partners.
- (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.

Work continues with Finance officers at all three councils to update the business case contributions so it includes all the relevant costs and charges. It has been recognised that the recharges each quarter skews the overall financial picture of ICT costs for the council and includes items that should have been included in the baseline business case. Whilst initially this might appear as a cost increase, the finance officers at the council agree that these are just corrections that should have been included when the costs were agreed at the start of 3C Shared Services. This covers both the ongoing investment requirements and 'standard' business case contributions

It's clear that the partner Councils are facing difficult financial challenges as the country emerges from the pandemic and the need to reduce costs over the next few years. 3C ICT will support the partners and identify opportunities to achieve this and where necessary adjustments will be agreed to the business case contributions each year.

As each council develop their plans and approaches to meet the financial challenges 3C ICT have already started analysing costs and expenditure so that any financial targets that are set can adopted in to next years programme of work and included as part of the prioritisation and work assessment process.

Costs, budgets, expenditure will be separated into different categories so that the impact of reduction can be carefully considered.

Non controllable costs – Fixed costs that make up core services, must have non optional services and systems e.g. Service operations staff costs, core infrastructure, backup, monitoring, antivirus, etc Variable costs – costs based on usage or consumption e.g. mobile phone usage, numbers of laptops, licenses based on staff numbers (known as 'named users'), number of sites and network bandwidth/performance, Overtime and out of hours work.

Optional costs – Projects/Project delivery, additional service requests / 'can you just', etc Shared costs – across the 3 councils where cuts or reductions will potentially affect services across all three.

There will be risks, issues and impacts to take in to account when agreeing any changes to costs associated with any of these categories. 3C ICT will present back to stakeholder groups via the Shared Services Board, Project boards, Transformation teams and SMT/CMT/SLT's, etc before cuts, impact to services or changes to project delivery are agreed.

- Proposals and initiatives being developed for 22/23 and 23/24 include the following:-
- Review of contracts and renewals to ensure we take advantage of discounts and multi year deals. This needs support from service areas as there is missing legacy documentation and many service areas have just taken the option to renew year on year without reviewing needs and requirements. Focussing on the larger systems and services it's not uncommon to achieve 10's of 000's of savings over 3 to 5 years in either cost avoidance or cashable savings.
- Decommissioning under used/under utilised systems and services This links with the item above but will require a closer examination (almost forensic in some cases) on actual usage.
 E.g. getting rid of 3 more printers within PFH can save approx. £5k in lease costs + any per click/print costs per year.

- Mobile phone/Mobile device review There is potentially £10k per year cashable savings by ceasing every SIM with Zero calls made. Over the past 3 years there has been a massive increase in mobile phones across all 3 councils. There are also device and asset management efficiencies to made with this kind of reduction.
- Aligning license purchase model with longer term work force planning will allow ICT to purchase license much more efficiently and avoid the more costly monthly subscription based costs. There is £10k to £20k of cashable savings and cost efficiencies to be made here.
- Improve the project review and assessment process so that hidden costs are no longer just absorbed by 3C ICT as part of project delivery as well as BAU. This will result in project delivery of business led initiative appearing more expensive where is the costs will now be more realistic. E.g. Tascomi EH implementation. Charging for 'can you just' non planned project work. This was estimated to be £15k worth of time and effort last year some of which was eventually 'abandoned' or ceased before completion.
- No more planned maintenance out of hours. The O/T bill for 21 to 22 was almost £25k (>10% of our finance savings target). Although this has to be balanced against an increase in demand from Councils to carry out work after 8pm and at weekends.
- Remove duplicate applications to save on support and maintenance costs. E.g. Matrix bookings Vs outlook calendar. Accepting limited functionality this could save £15k per annum.
- Reduce the capacity or performance of the RDS environment if more staff return to working
 in the office. This could be targeted to specific service areas who make more use of the RDS
 services and be covered by a recharge. (Possible idea submission to pay for a one off piece of
 work to accurately assess the 'compute' cost used by Planning Dept to feed in to
 recharging/cost recovery model.

3C ICT Revenue Budget for 2020/21

The 3C ICT Budget for 2022/23 reflects the changes agreed as part of the original business case, this includes changes to the structure of the service and the service being offered. This now includes a balancing of the contributions for the digital team (see table P7 - summary of digital team funding)

Budget category	Year 6 2021/22	Year 7 2022/23	Year 8 2023/24	Year 9 2023/24
Baseline Staff	£3,621,681	£3,681,498	£3,742,512	£3,817,362
Baseline Other	£4,101,759	£4,182,695	£4,265,250	£4,350,555
Baseline Total ICT	£7,723,440	£7,864,193	£8,007,762	£8,167,917
Budgetary Staff Costs	£3,143,045	£3,206,786	£3,271,801	£3,337,237
Budgetary Other Costs	£3,438,847	£3,507,626	£3,577,780	£3,649,335
Budget	£6,581,892	£6,714,411	£6,849,582	£6,986,571
Forecast Staff Savings vs baseline	£478,636	£474,712	£470,711	£480,125
Forecast Other Savings vs baseline	£662,912	£675,069	£687,470	£701,220
Total Savings vs baseline	£1,141,549	£1,149,782	£1,158,181	£1,181,345
	15%	15%	14%	15%
Savings Percentage vs Baseline				

Cost of 3C ICT Shared Service by Partner

ICT Shared Service per partner	Year 6 2021/22	Year 7 2022/23	Year 8 2023/24	Year 9 2024/25
Cambridge City Council	£3,052,222	£3,107,923	£3,164,693	£3,239,673
Huntingdonshire DC	£2,127,233	£2,173,885	£2,221,496	£2,258,060
South Cambridgeshire DC	£1,402,437	£1,432,604	£1,463,393	£1,488,838
Grand Totals	£6,581,892	£6,714,411	£6,849,582	£6,986,571

Figures shown 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

TOTAL SUMMARY OF 3C ICT FORECAST OUTTURN October 2021/22 (Q2 report)

	21/22 BUDGET	21/22 FORECAST	21/22 VARIANCE AGAINST BASLINE BUDGET
CITY	3,189,909	3,189,909	0
HDC	2,127,233	2,167,233	(40,000)
SCDC	1,602,437	1,602,437	0
	6,919,579	6,959,579	(40,000)

Overall savings of 15% for the shared service in 2022/23 compared to the baseline budget continue to be delivered and built into the budget contribution profiles for future years. However, it is recognised that this may need to change in the coming years depending on the needs of the partner Councils to meet their broader financial challenges.

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 continue to be charged directly back to the originating council based on actuals, and where agreed with the council built in to the business case contributions. This maintains the integrity of the original baseline so it can be accurately monitored (in essence anything not transferred, newly identified or requested to be added as part of the original budget will be charged back direct to the partners).

The savings represented within the tables above are based on changes that have been made to rationalise existing partner support arrangements and leverage the benefits of scale across the three partners.

FUNDING 3C DIGITAL TEAM

Funding requests were submitted and approved by CCC & SCDC as part of the 2019/20 budget process and this additional funding has now balanced the contributions from all three Councils (see table below) and put the 3C Digital Team on a sustainable footing to support the transformational work being organised by the transformation teams within each partner council. Even though there have been recruitment difficulties during 21 to 22 and likely to extend in to 22 to 23, this additional funding will help ensure that the digital team is adequately resourced for the agreed programme of work.

Summary of Previous and Current Digital Funding

Apportionment of Costs	Year 4 2019/20	Year 5 2020/21	Year 6 2021/22	Year 7 2022/23
Cambridge City Council ¹	115k	200k	204k	208k
Huntingdonshire District Council	200k	200k	204k	208k
South Cambridgeshire DC	54k	200k	204k	208k
Grand Totals	369k	600k	612k	624k

3C ICT CAPITAL BIDS FOR 2022/23

The table below is a summary of bids submitted by 3C ICT - At the time of writing, each of the partners are still part way through their 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
Datacentre Racks, Cooling, UPS, and Fire Suppression	£75k	£103k	£244k	£422k
Network Switch refresh for SCH	£100k	0	0	£100k
Datacentre extended support for hardware and software	£36k	£92k	£62k	£190k
SIEM Solution	£3k	£8k	£5k	£16k
SQL Server Migrations	£12k	£17k	£20k	£50k

Key Financial Risks/Observations.

- The financial challenges impacting the councils over the coming years will have to be reflected in the programme of work, project delivery and service operations over the coming years. In 22/23 plans to deliver up to 7% reduction in ICT costs for HDC (£180k) have been proposed which mean choices needing to be made about quality, timeliness or cost of work carried out. It's highly likely that similar targets will be set by the other councils which will also need to be taken in to account.
- 2. Brexit and global supply chain issues has affected cost of equipment, in particular laptops, monitors and wifi equipment. Costs of hardware have increased by almost 30% and estimates are the global chip shortage will last till at least 2023.
- 3. As a result of the pandemic and more organisations working flexibly and offering greater benefits, staff salaries for key skills become difficult to recruit and retain. There is a predicted overspend on staffing budget for 21 / 22 due to hired staff, contract staff and professional services to fill critical gaps.
- 4. Exchange rate variances continue to pose a genuine risk to the ICT budget forecast due to a large number of non-UK software suppliers and the impact this has on global supply chains which much of the technology sector rely on.
- 5. 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. A good example of this are the continuing benefits that Council Anywhere is delivering given the ongoing remote working and flexible working arrangements that the 3 partner councils have adopted.

- 6. The Out of Hours (OOH) support arrangements which are done on a best endeavour's basis for specific areas .e.g. car parking services are still being scoped and agreed with the councils and IC's. Even though skills and knowledge has improved across the teams, the current arrangement carries with it a number of issues and gaps because it's not a formal arrangement and not consistent across partners. There has been and there will continue to be an increase in costs for a formal on-call rota as well as any costs associated with call outs and out of hours maintenance as a greater proportion of the organisations work extended hours and expectations and service demands from residents and users change. Therefore 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 out of hours support is currently provided on a good will basis rather than as a formal service offering. Extended support could be provided for and it is estimated this would be at a cost of £8,000 per council. This could be clarified and confirmed if a formal offering is required.
- 7. 3C ICT will take every opportunity to bid for external funds for specific lines of work (most likely to be cyber security related) as we've been successful for the past 3 years in obtaining financial support for training, services, software and hardware to date approx. £200k worth has been successfully awarded to 3C ICT by LGA/DHLUC. This will help offset or subside costs that the council would otherwise have to bear themselves.

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.

Information Governance:

The Information Governance manager post had to be backfilled in the summer of 2021 following the resignation of the previous postholder. The new IG manager is picking up and will continue to

develop the IG function for the 3 councils where the previous post holder left off. Initiatives relating to Data processing agreements, DPIA's, supporting projects with their IG requirements are all improvements that the councils have benefited from. The continual review of the work-load of the team lead directly to the identification of a gap with regards to skills and resource to provide advice to the councils on PCI/DSS compliance. The IG Manager presented a paper to the board who supported the need to create a post – a bid for which has been submitted for consideration for 22/23 for the 3 councils. Training and development of skills across the teams is also taking place during 22/23 so that the FoI/SAR and EIA work can be more evenly shared and distributed across the teams especially where specific councils have a peak in demand or there are resource issues due to sickness absence. However, the demand on the FoI resources are increasing with ever more complex FoI being submitted and referred to the team. The ever increasing volume of data being stored that has to be checked and searched by the team is also adding to the demand. This is being analysed now to determine whether a bid for additional resource (temp Vs perm) and or training needs to be submitted. There may also be a demand for service areas to carry out more work and take on decisions relating to FoI in order to meet the required demands and timescales.

Network / Infrastructure:

This team continues 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. 3 attempts were made at the end of 20/21 and in to 22/23 to recruit a replacement team leader due to employment market conditions and temporary contract resources had to be engaged to ensure critical work did not slip. The new post holder is now in place, but they also had to contend with 2 infrastructure engineers leaving for jobs in the private sector. The retention risk in this team is increasing given the fact that salaries are much higher locally. A bid for Cyber security resources has been submitted to the council for 22/23 in light of the increasing demand on the council infrastructure just to keep up with the need to update systems and patching.

Digital Team:

The digital team restructured their team and changed their working practices to take in to account the additional resources that were able to be recruited following the balanced funding that was provided. This included the introduction of a 'Flex' resource who could be allocated to urgent pieces of digital development that couldn't wait for the next sprint. This was to meet the request from the IC's on having some flexibility on dropping work into the team. Even though previously (20/21) there was a demand for this, the resource hasn't been called upon by the councils as often as was indicated. A review on how this resource can be best used will take place in 22/23 as well as an updated agile approach to digital developments to support the transformation teams at each council improve the scheduling and sequencing of delivery of work. There is expected to be a short to medium term squeeze on digital resources in Q4 21/22 to Q1 22/23 whilst backfilling, on boarding and training of new staff takes place.

IT Service Desk:

Similar to other teams, retaining a recruiting Service desk staff has been difficult and the temporary resource brought in to support the increased demand following Covid has been stopped following the ending of funding. However, the improved performance of the service desk has minimised any the impact of losing a member of the service desk team. The team structure is still working, but the capabilities are being enhanced through more training and upskilling – which started in summer 2021 and will continue on a quarterly basis.

GIS Spatial Team:

This team has undergone significant changes as a result of consolidation of systems and processes during 21/22. This project is close to completion and recruitment of a permanent GIS lead is concluding this month. This will allow the team to offer more advanced GIS and spatial services to the 3 partners on a modern up to date system that opens up further opportunities for GIS spatial to be used by more service areas.

Cyber Security:

The demand and growth of cyber security related work has grown significantly over the past 12 months. Whilst growth in demand was expected given the global industry trend, the magnitude of growth has taken everyone by surprise. This is compounded by the fact that most public sector – 3C – included, are already playing catchup when compared to the private sector. However, this issue is being picked up and recognised at the correct senior levels within all 3 councils and has resulted in a partially successful bid for resources. 1 additional resource – Cyber Security lead will be recruited, with follow up work to review and update the business case for 2 cyber security analysts/engineer for next year.

General:

There are a number of acting up arrangements that are in place at the moment and have worked well during 21/22. It's our intention that for 22/23, these arrangements will go through the relevant competitive processes to make them permanent and allow any gaps that emerge deeper within the structure to be seen as potential development opportunities and where necessary lead to internal reviews of team structures, roles and responsibilities. This will take in to account the future needs and direction of the councils and the technology that will be in place/adopted e.g. opportunities to move more services in to externally hosted environment will have an impact on the skills needed to support applications and systems.

Further training on 'cloud' / Microsoft Azure skills features heavily in the training plans for 22/23 across a number of teams.

E. LOOKING BACK

Achievements (2021/22) – as of Oct 2021)

This year has been dominated by our need to support and managing the risks associated with the council's response to Covid19. Without exception, all ICT projects and workstreams during the year have been impacted in some way by Covid 19. Whether that was risk of delays in supply chains for goods and services, suppliers and partners not being able to be on council premises or our own staff having to work remotely, the impact was widespread and persistent. Alongside this, because all three councils went through rapid transformation of working practices, 3C ICT also had to respond quickly to new and additional demands and then continually adjust throughout the year to ensure staff / members were able to work effectively remotely and provide service to residents and members of the public.

This started in March 2020 when within a very short period of time after government announcements, staff were being asked to work from home, but needed to operate and access systems, services and support as if they were in the office. Within weeks, the vast majority of the office-based workforce were using their Council Anywhere devices to support home working. Consequently, there were heavy demands on multiple teams within ICT to support and guide users in the use of the technology and tools – Connecting remotely, how to use teams, diagnosing home broadband issues, requests for equipment to be shipped to home addresses, etc.

A combination of the design of the CA solution and the timing of the Council Anywhere roll out project made the switch to remote working possible in such a short period of time. Overall, staff feedback indicates a very positive experience and take up of the new technology that was delivered – numbers increased from a few hundred active users in Feb 2020 to over 1000 at the end of Q1. By the end of Q4 we have seen 2000 active users of Teams.

1 - Project delivery and performance – key projects

Covid 19 response:

Even though the Council Anywhere project completed roll out last year we are of the view that the benefits were not able to be fully realised or recognised until the impact of Covid hit the councils. Until that point the project had delivered the infrastructure improvements and replaced old laptops, but the value of enabling the work force to work remotely immediately and to allow continuity of service has only really been felt over the past 12 months. In addition, the ability to add telephony functionality to teams has allowed the council to continue to work from home and handle phone calls as if they were in the office. This was unplanned technical configuration work, but the phased roll out has meant by the middle of the year almost 1/3 or staff were already using Teams Telephony and valuable lessons were being learnt and able to be fed in to the formal telephony replacement programme.

Infrastructure and Data Centre:

The project to disconnect the infrastructure from the legacy CPSN core network (which marked the closure of the EastNet Programme of Work) was achieved ahead of the hard cutoff date. As well as the migration of the City Unify telephony and contact centre on to EastNet. This included a test of the fall back service which had never been proven until that point. Infrastructure projects also accounted for 2 of the biggest pieces of work over the past year. First off was the installation of the generator at PFH which greatly enhanced the resilience of the data centre services in the event of power supply issues in Huntingdon. Secondly the move of the Data Centre from Cambridge to Peterborough. Both projects required significant risk management relating to the availability and continuity of all on premise hosted services but these were managed successfully with no unscheduled downtime. These projects also provided the opportunity to run all hosted services from each half of the data centre infrastructure which provided assurance to each council that the integrity of data and services is protected in the event of a catastrophic failure at one site. There is one more test to perform during Q4 21/22 or Q1 22/23 which is running all services from the new site in Peterborough. This will be scheduled with agreement from the IC's and Directors in due course once peak activity relating to annual billing and elections is complete as well as reviews and updates of local service area BC plans.

SCDC Telephony migration to Teams:

Telephony service migration for SCDC was also another major project achievement during the year. This project not only migrated services for the entire council without any interruption to customer facing services, but significant unnecessary / unmanaged costs were identified with the legacy service. This is being fed in to the wider Telephony and contact centre programme of work for the 3 councils taking place during 21/22, with final delivery in to 22/23 depending on the sequence in which the 3 Councils will be moved across.

Single print environment:

This has delivered a truly integrated and seamless print service across all 3 councils allowing any member of staff to be able to print to / collect prints from any MFD device on any of the council sites. At the same time the number of MFD devices have also been reduced (by almost half) to allow further efficiencies and savings to be realised.

Waste Services:

Follow on go live phases of the Yotta Alloy project have continued throughout the year with major go live milestones achieved – one for City and two for HDC.

CPCA:

The decision by the CPCA to go out to market for their ICT support and project services required a lengthy and complicated hand over process to an interim service provider, and as a result, changes were able to be made to the remit and responsibilities to the infrastructure team and desktop team. There are many lessons that have been learned from this relationship with the CPCA and 3C ICT will be in a much better position to assess and respond to any future request for offering their service on a pseudo commercial basis.

Tascomi:

For the majority of the last year 3C ICT were delivering the technical elements of the programme of work, supporting service areas with their data migration processes and technical transition from separate legacy systems into a single cross partner solution. However, following the departure of the programme manager in Dec 2020, 3C ICT were asked to act as 'caretaker' programme manager to ensure risks that had emerged and put the overall programme at risk were adequately managed and that a basic implementation could go ahead on time so that legacy services could be decommissioned and avoid costly renewals. The programme of work has now been re-assessed and split up into several follow up stages and is able to be handed over in a more manageable state to the service areas to pick up again. The project delivery work still requires senior manager oversight in order to apply the right pressure to the supplier, which has taken almost 12 months so far. However this is not sustainable and with agreement between the sponsor and Head of ICT and Digital, it is expected that service area leads will need to take on BAU management of the system and follow up development phases before the start of 22/23.

PSN:

The project for the PSN renewals for all 3 councils was completed with certificates of assurance being issued and for the first time a joint submission was made. This puts the 3 partner councils into a small group of leading organisations to have been able to achieve this and allows future efficiencies with regards to annual IT health checks and simplifying what is an already very complex and involved submission process to the cabinet office. This is a great example of do once and use three times.

SCDC Unified Comms migration:

The SCDC BT 'black box' legacy Unified Comms solution was in deprecated support and had been due for upgrade/replacement several years ago, but the work was never scheduled or progressed by the service areas. A risk assessment carried out placed the risk of failure and extended outage as high so work was carried out during the year to provide a Microsoft Teams based solution with the 3C telephony project implementing the full contact centre CRM solution. This was done successfully in time and within budget and aligned with the Telephony migration plans for City and HDC.

AV Kit redesign and implementation:

This was a general rip out and replacement of equipment across the council with the largest most complex of the stages involving the main council chamber. A complicated project made more difficult by a provider who underperformed during the design stages and special requirements/limitation due to the council chamber layout and fabric of the building/room.

NSX-V (ready for NSX-T) pre work:

Critical and highly intrusive technical work to unpick and upgrade the heart of our data centre server infrastructure on which all the key elements of our new reliability and availability improvements were built up on. This is mandatory pre work ahead of introducing a new version of the technology later in 2022 to 2023.

Data Warehouse for HDC forms:

Digital team design and development work for what was initially only supposed to be a proof of concept but then changed in to a small but scalable production ready environment. Special care and attention had to be paid to the security, data protection and reliability of the solution given the ambition to use it for more forms and allow more analytics to be carried out without impacting performance. The next steps also include making this available to the other council partners.

Cambridge live Infrastructure and technical service review and update:

This late notice project involved limited on boarding/adoption of full support of some services, but was technically complex in terms of breadth and depth due to the unusually wide mix of technologies and designs employed by the previous service providers. The project delivery included provision of desktops, laptops, migration of telephony services, new network link without interruption to service in timescales 30% shorter than the norm for such work.

GIS Consolidation:

Completion of the GIS system review and consolidation of 3 environments / 2 different software product sets in to a single shard environment and rebuild links and integrations in to existing systems and services. Reskilling/retraining the entire team and an updated line management structure of the team was also delivered bringing this team in line with the rest of ICT.

Immutable backups:

This was a design from scratch project (ie. No design pattern available as this was an introduction in to new technology / service for ICT) to deliver highly secure backups that are our 'last ditch'/'Nuclear' option for data recovery in the event of a cyber attack. Trends globally (but close to home as numerous councils and public bodies had been hit during the year) have resulted in conventional back-ups being destroyed as part of a cyber attack or breach. This solution provides backups that are secure and safe from tampering or deletion in the event of an incident. This service will be built upon/enhanced in 2022 to 2023 as a result of further recommendations and advice (updated threat assessments) from central government.

Process improvements:

One of the objectives set last year was to implement changes to further develop the project and work request commissioning process. Previous feedback from within ICT, IC's and requestors pointed to issues relating to the transparency of scheduling and prioritisation decisions. Working

closely with the IC's and key stakeholders a process review was undertaken and an updated assessment and scoring process was implemented and made visible to staff via SharePoint. This has been an enormous help in ensuring drivers and priorities are agreed collectively and all relevant parties are kept updated with decisions made. However due to volume of requests for projects and work requests, demand has far exceeded capacity. A backlog of 120+ items over and above what has been agreed with the IC's has built up. The interim Strategic Portfolio Manager implements changes on how to effectively and efficiently manage and report on the portfolio of work across the 3 councils. Initial findings show that the 130+ project requests over the past 3 years, combined with just 6 basic project monitoring points makes the overall portfolio of work unmanageable in its current form. A new management and reporting tool is now in place and the processes will continue to be refined over time – as is expected when applying / following agile processes. So far this has been regarded as a success albeit a few months later than anticipated.

Other achievements

Applications Matrix

The development of the applications matrix showing risks, support issues, support contract information continued throughout 21/22 and is delivering benefits on a number of fronts. E.g. it allowed analysis of common applications to support negotiations of renewals to provide better, lower cost multi year multi council deals as well as highlighting applications that are up for renewal or where agreements are set to expire so that plenty of notice can be given to service areas to start reviewing options and starting any negotiation. Tech1 was notified to the Service lead 12 months ahead of the expiry. The work on the applications matrix is being expanded in 22/23 with support from the IC's to include other systems and services that ICT do not directly support as well as widening the scope to cover infrastructure and network components.

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 2021 and can be found in Appendix E.

Cyber security risks:

Growth in the cyber security capacity and capability within ICT is needed as demonstrated by the unplanned for work during the year. Strategic and operational options and decisions required on what kind of approach we want to take. This has included proposals for recruiting a cyber security lead with follow on options for creating a cyber security team to help the organisations turn the remaining amber risk areas (see cyber security risk table) as well as maintaining the current green risk areas. There has been a 5 fold increase in the number of vulnerabilities being disclosed and exploited over the past 2 years and this has needed more time, skills and resources just to keep up with the alerts and warnings. The aim is to put the right people and skills in place to be able to deal with cyber security proactively rather than reactively.

Increased estate:

Growth in devices across the estate has had an impact on the sustainability of 3C ICT support and management systems. Impact of the increases have been highlighted in the regular reporting and in conjunction with the Council Finance leads recommendations are being developed regarding what additional resources might be required in specific teams. In addition, the bids submitted to the 3 council include a significant number of additional posts, all of which will add more staff, devices,

licenses, load and storage to the estate. During 22/23 3C ICT will start reporting on a cost per device/use model so that the impact of growth over the past 3 years can be addressed.

Budget/baseline business case costs:

Following the financial analysis last year associated with providing and developing ICT services the costs and charges respective finance teams would like to see included in the main business case are now being introduced. This has required detailed work to identify the items, and in 22/23 it should result in a reduction in the amount being recharged, and thus more accurately representing the ICT costs in a single place. Notwithstanding any increase in the adhoc or new ICT costs/expenditure the councils incur during the year.

The finance support team within 3C ICT have been carrying vacancies for a large portion of 21/22 inspite of multiple recruitment campaigns. We have once again turned to kick-start and apprentice options to try and develop the skills and increase resources, but this will take time. It is hoped by Q1 22/23 the team will be fully staffed and up to speed. For the moment, the highest impact and highest risk finance and procurement activity will be prioritised above others – with agreement from IC's and project boards.

Transformation projects:

All 3 councils have significant Transoformation programmes of work lined up for 22/23 and beyond. The timescales of delivery, benefits realisation, cost and budget management have major risks and impacts attached to them not all of which are under the control of 3C ICT, but it's already clear that 3C ICT are a critical element of the success. The importance of BA and PM resources being owned by and embedded within the service areas is clearly evident as part of this and the success of delivery (all all technical stages of Transformation Programmes) is directly linked to this.

Flex resource for digital team:

With more requests for integration of data and systems to support the digital growth agenda as well as the expected growth in interest in developing mobile applications, the flex resource within the digital team is available and should be called upon more often this year. We understand that service areas are finding it difficult to plan sufficiently far ahead to secure time in sprints, and rather than pushing work to the back of the queue, this option provides the IC's and Service Area's with more flexible options to obtain digital team resource at short notice if funding is available outside of the annual bid process. The flex resource was under utilised last year and 3C ICT took the finance impact (as outlined in the risk element of the original proposal) even though there was a demand. We will be seeking views and advice from a wide range of stakeholders as to whether this is something there is value in maintaining. 'On paper' and as indicated by transformation plan timescales there should still be a demand to use the Flex resource for the coming year.

Benefits realisation and review of project delivery approach:

This year CA has evidenced the benefits and value from the project to implement and roll out the new technology, but this is not done as a matter of routine by project/programme sponsors. The councils should consider if and how this needs to be covered within the project and programme management processes as it can fundamentally change project briefs and business cases. The way in which ICT projects and work requests are commissioned, managed and delivered are also undergoing change now that scoring and prioritisation by the IC's is embedded. During Q1 we expect to consult on and issue guidance on key roles, responsibilities and accountabilities and process for ICT managing projects as well as controlling and reporting on the backlog.

Telephony and Contact Centre:

The core telephony plus contact centre replacement will be a major technology transformation programme of work this year and benefits realisation will extend beyond 22/23. It links to a number of major work streams that support multiple council priorities. This work has the potential to impact and transform every service area in each council and will need strong sponsorship, support, significant technical and non technical resources to be delivered successfully and provide the expected benefits.

Supplier management:

Whilst this has improved a lot this year (as shown with City R&B renewal) and the Microsoft license consolidation work) it has also shown this area still needs a lot more time and effort if it's to continue to deliver financial and service benefits across more services. Complexities due to the 3 council partnership arrangements and 3C ICT legal status are now emerging that were not fully appreciated previously. 3C ICT will continue to invest as much time as practical to ensure best value is derived from the priority and critical contracts as agreed with the IC's and councils. A pilot process covering 5 key/strategic suppliers is being introduced with the support of the HDC IC and if successful options can be presented back to the councils on whether to expand this and if investment in addition time/resource is supported.

Member and Public meeting support:

This is subject to an updated/revised proposal from the councils. SCDC have a more extensive requirement where details and requirement need further clarity to provide a full proposal. Options for extended support for Members with council provided equipment would have additional cost implications for licences, staff time and out of hours support. Currently BYOD is not being considered based on initial discussions with Democratic Services.

3C:

3C ICT will continue to work with the three partner councils towards greater harmonisation as agreed last year as well as to explore what changes or increases in the range of services would benefit the Councils, including a flexible resource model. This will involve activity around service engagement and will be linked to possible changes in structure. Other areas where the engagement with 3C and the possible changes to 3C ICT structure are linked is around supplier management where this is an opportunity for 3C ICT to add value to the Councils but would require greater visibility of and accountability for delivery of all the elements of supplier solutions. Now is also the right time to review the way in which 3C ICT and the Intelligent clients interface with each other and with the business.

The role of the Intelligent Clients have changed considerably since the inception of the shared services. Roles and responsibilities vary considerably across the 3 partners now, and greater recognition needs to be given to the value and impact that these roles have. Therefore it appropriate that the way in which 3C ICT and the Intelligent clients interface with each other and with the business is reviewed. The first step for the coming year should involve reviewing and updating the ToR which needs to be consulted and agreed upon by the wider service area 'community', the Shared Service board and 3C ICT.

Data Centre and hosting:

3C ICT will continue to highlight and identify opportunities to move services to externally hosted models to reduce the reliance on 3C ICT infrastructure. In order to support the expected increase in the range of application providers offering this capability, 3C ICT will need to invest time and

resource in to maintaining a total cost of ownership model for servers and storage. The output from the data centre technical review is currently in draft and will be presented shortly. This will also include cost models for migrating to fully hosted services. This will give the Councils options to consider on how quickly or whether moving to externally hosted solutions provides the right balance of risk/cost/benefit. Depending on bids submitted by service areas, planned service reviews and transformation team plans, 22/23 may offer some opportunities to test migration paths. 3C ICT will be in a good position to support these plans if appropriately prioritised and supported by the service areas. It should be noted that not everything can be migrated to externally hosted services therefore some sort of server room/data centre will always be required – be it on premise or shared with a partner.

Digital Team:

As well as the planned digital work from the councils various transformation programmes, 22/23 will see the digital team embark on a major upgrade on the content management system. This activity will take place over 3 quarters and will benefit the content writers from service areas as well as the digital team themselves. The new software will provide new functionality, much needed enhancements to the system, more powerful and easier to use editing tools as well as access to a 'market place' of plugins – saving the digital team even more time when it comes to delivering solutions. The next steps of the data warehouse development is also set for 22/23 with work to connect forms. The digital team are also planning to implement changes to the way in which internal testing and quality testing is carried out to improve the quality of work being output. When developing digital integrations clear and concise requirements are needed and are recognised as the most difficult part for the councils to deliver on. Understanding their existing business processes and how these need to change to adopt digital channels and integration is an issue we run in to frequently. Transformation teams are key to councils understanding these processes and delivering the clear ask of 3C ICT Digital. The digital team will continue to work with the partners to help them become better customers and ultimately improve the quality of outcomes of projects.

Service Handbooks:

Continue to implement Service Handbooks for additional services. 3C ICT are now moving on to CCTV, Revs and Bens, and Car Parks as these have seen recent issues where 3rd party suppliers and contracts aren't necessarily meeting expectations from the service areas.

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. Cyber Security has always been an important area but the increase in the number and nature of attacks being experienced globally and in particular against the public sector it is critical that these threats are monitored and managed closely. The current view of Cyber Security risks is included in **Appendix C**

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

Diale Description	
Risk Description	Update

	· · ·
Demand Management BAU and Project.	Recruitment and retention has been an issue across a
	number of teams including digital, network and
	infrastructure, desktop support and technical
	architecture. Risks are having to be managed through
	the use of temp staff, repeating recruitment campaigns
	and 3 rd party professional services to not only meet
	with BAU/Service operations, but for projects and
	development too. It's is expected that we will go
	overspent on the salary budget by £40k to £60k as a
	result. We are working with finance teams at the
	councils on how to mitigate the impact. Impact of Covid
	on absence is low at the moment, but Covid has had a
	big impact on the jobs market locally where we can't
	attract enough suitable candidates.
Service standards are set at different	Active governance arrangements exist to ensure that
levels across the three Councils, leading to	service standards can be appropriately developed and
customer and Member complaints about	approved.
differing service levels from a shared	To support standardisation where this is appropriate
service.	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.
Compliance with documented processes	The updated project and portfolio process has been in
and procedures	place and managed via a new tool (Jira) for a full
	quarter now and has resulted in a better understanding
	of the impact of work requests that don't follow or
	aren't received via the standard process. The IC's have
	advised that they are happy to allow 3C ICT to put a
	separate process to manage SWP's themselves. This is
	being reviewed due to the high volumes.
Overall financial savings targets are	Savings targets to be regularly reviewed as part of
unrealistic and unachievable, leading to	performance monitoring and evaluated as part of the
service 'cuts' being required elsewhere to	development and delivery of the Shared service
meet the shared service saving shortfalls.	business case
	Quarterly meetings with Council finance leads to
	highlight areas of concern and potential variances to
	the planned spend or savings.
	Allocate time from Applications support and
	architecture to explore cost reductions, cost avoidance
	and savings as and when renewals, reviews and
	purchase/procurement processes are carried out – No
	resources to do this proactively.
Shared Services do not deliver the	Agreed service standards to be developed and
expected good quality services to internal	approved.
and external customers	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. This is being reviewed with finance leads. In addition, changes and adjustments to the 3C ICT operating model will be incorporated where appropriate .e.g. Team structures or numbers could change as support services are scaled up or down. Recommendations to project boards and sponsors by 3C ICT as and when these opportunities arise. If necessary escalate to Shared Services / Directors for a decision. E.g. Telephony service procurement and alignment with Teams licensing model.
Service availability and continuity.	service availability and continuity has improved further over the past quarter. Not only have we seen a reductions in P1's and Major incidents, the incidents that have occurred are shorter in duration – due to either 3 rd party managed services activity/escalation or making use of in built resilience/fault tolerance. E.g automatic switch of firewall, automatic server failover etc. There have been a couple of exceptions e.g. City Crem system, but these have been highlighted in the applications risk matrix and we are working with service areas to help manage their service providers.
Cyber Security	The trend from previous quarters hasn't changed with high profile incidents still being reported regarding cyber security threats. Work/Activity is having to take place out of hours more regularly to keep services up to date (e.g. July PrintNightmare, Sept iOS critical updates to be deployed, etc. Through our systems monitoring we've noted a 5 fold increase in the number of email document attachments containing active malicious content (being blocked) From our research, we suspect that this is a new trend and not a spike. In the use of this particular attack method.
Covid 19	Staff work remotely and follow all appropriate procedures to minimise the spread of Covid 19. Follow / adhere to local council and site specific process and procedures Ways of Working principles developed with staff to ensure common understanding of effective ways of working remotely away from the office. Establish and document recruitment and onboarding 'remotely' in conjunction with HR to ensure compliance with legal and statutory rules.

SECTION 2: OPERATIONAL PLAN 2022/2023

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>(i.e. ICT</i> <i>strategy)</i>	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 contracts to administer.	The Partner Authorities are confident that we are getting value for money from the ICT investment
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	ICT and Digital	Council Anywhere Business	Flexible Working	Allow flexible working, staff are able to have a
	to work	Strategy	Case and Project.	Home working	better work life balance with home or remote
	flexibly			Remote Working	working. Better use of accommodation as staff are
				Office Space Rationalisation.	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	Long term remote working arrangements still pose a risk to	
KPI-2	Service Availability	ICT	meeting and maintaining customer satisfaction as staff are used	
KPI-3	Incident Performance	ICT	to a much more responsive service when in the office and able	
KPI-4	Service Desk Response	ICT	to 'walk in' and receive an immediate response.	
KPI-5	Service/Work Order Request Performance	ICT	Strong prioritisation and regular management review and	
KPI-6	Project Delivery Performance	ICT	oversight to monitor fluctuations in performance. Risks relati staff recruitment and retention will impact capacity to handle demands. Keeping Directors, IC's, service areas updated thro good comms plans will mitigate impact.	
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 more flexible recruitment practices, casting the net further afield to allow more remote working, 'selling' the council as a responsible employer and 'contributing the local community/business' and career progression, apprenticeships and also opportunities to work across the wider area.	

PI-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 following 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 Shared Service Board / 3C Management Board in line with routine reporting and service governance.

KPI Reference and Description		Reporting frequency	2021/22 Target	2022/23 Target
KPI-1	Customer Satisfaction (Partial) ¹	Quarterly	85%	85%
KPI-2	Service Availability	Quarterly	95%	97%
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%	85%
KPI-4a	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
Custom	er 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 (as agreed with the Councils due to noted survey fatigue during Covid19 c).

 $^{\rm 2}$ These savings are already built in to the business case (V7)

KPI-1 Customer Satisfaction (Target 85%)

KPI 1 Customer Satisfaction with 3C ICT as measured by receipt of both unsolicited (complements, complaints and comments) and solicited feedback (feedback requests for all resolved calls and quarterly surveys), average remained just under target for the first 3 quarters of the year, mostly due to service outages during Aug (security certificate issue) and Nov (Data Centre networking issues). However, a rally with customer feedback during Q4 allowed the overall performance to be recovered and meet the annual target of 95%. The achieved across the year was 97%.

KPI-2 Service Availability (Target 95%)

• Through 21/22 (to date) service availability has been significantly improved over last year where we had major issues relating to the data centre and network card compatibility. Since the start of 21/22, 3C ICT have developed a new method of reporting from availability and this is currently being agreed and refined with the Shared Service Board directors.

A detailed list of the main outages reported and recorded for the year are available within the quarterly reports, however For the first 2 quarters of the year the following can be reported showing a mon to fri 7am to 6pm figure as well as a 24/7 figure :-

Service Type	Q2		Q1	
	24/7	M-F 7 to 6	24/7	M-F 7 to 6
Network	99.713%	99.115%	99.462%	99.347%
Centralised	99.968%	99.902%	99.903%	99.702%
Infrastructure				
Telephony	99.987%	99.927%	99.992%	99.975%
Applications	99.947%	99.821%	99.998%	99.831%

The improvements in service availability and reliability is a result of additional time, effort and resources being put in to keeping systems and services up to date. This is over and above the need to keep systems updated with security updates. It's also important to note that the vast majority of planned maintenance work is taking place late in to the evenings and overnight because of the flexible hours many staff are working.

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

The Service Desk incident resolution performance has remained above target throughout the year. This fit well with the change of support model with the vast majority of staff having few options to come back in to the office for support and therefore relying more on the service desk. Ability to meet the high demand earlier in the year was only possible due to the additional 'covid fund' funded additional service desk resource.

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

KPI 4 (3C ICT Resolution) performance has missed out on meeting target by a couple of % during Q1 (Amber) but was improved enough during the rest of the year to achive the required performance (85%). This was still achieved with a 10% increase in demand during Q4. As we move in to 22/23, there are changes to processes where more management oversight on a more frequent basis will allow corrective actions to take place sooner if performance starts to dip (weekly reviews Vs monthly reviews). This is already delivering the required improvements at the end of Q4 21/22 and with management oversight (until it's embedded as standard practice) we expect to be able to meet the required performance. If however, changes or cuts to service are agreed as part of the financial savings measures, this SLA target may need to be adjusted or a greater level of tolerance to exceptions accepted.

KPI-5 Service Requests Resolution (Target 85%)

Similar to KPI4, KPI5 performance only missed out on meeting the target by a couple of % in Q2, but with improvements later on in the year was able to meet the required performance overall for the year (89%) The same action being taken to address KPI4 will benefit the management and monitoring of KPI5.

KPI-6 Project Delivery (Target 80%)

Projects update

Project(s) Summary Status

How many are currently green (on track)?

How many are currently amber (some slippage, but not significant)?

How many are red (significant slippage)?

For each red project, please provide a commentary below on the situation, what is being done to recover it, and a prediction of when progress will be back on target.

14

2

2

Telephony – Escalated to Senior Manager to call service review meetings with the supplier and 3rd parties. Renegotiations concluded to keep programme manager on for 2 more months until the programme of work is complete. New dates agreed by the sponsor with the councils for after the elections. Discussions taken place with each council regarding additional budget allocation to keep the programme manager and project team on.

Tascomi / EH system – Programme is nearing the stage where phase 1 can be considered complete. HDC Sponsor and Head of ICT and Digital worked closely with suppliers and service areas to reach this agreement including payment of project costs. Quarterly Service management meetings now in place to monitor delivery and performance of the supplier and service areas.

Destad	
Project	Commentary
Immutable Backups – P0166	Good progress made this quarter for this project. New
	hardware procured, commissioned. Set up and config
	completed with first successful immutable backups underway
	in Mar. Development roadmap being agreed before close down
	of the project.
Shared Housing – P0026	In Jan board accepted project will be closed by end Mar.
	Closure report is in draft and as awaiting for input from City and
	SCDC. All items scoped in the project were delivered. Will be
	fully closed next Q when reports have been signed off.
PSN 2022 – P0132	Workshops for updated scope completed in Jan. Procurement
	process completed during Mar for the pen test supplier and
	awarded. Workshops with the supplier scheduled to take place
	in April ready for the testing to take place shortly after that.
Environmental Health	Escalation meetings continued during Q4 overseeing the
System Tascomi (P0091)	resolution of the baseline remediation plan. By end of March
	only one issue (publication of public register) is outstanding.
	Currently under test by the partners before sign off. Phase 2
	scope has been signed off be the board (technical integration
	work) with all other issues relating to the ITT responses being
	managed by the service areas. Although RAG status is red,

	agreed issues are being closely managed. Service management
	meetings taking place too.
GIS Infrastructure Consolidation	Project now completed and closure report is in final draft and will is expected to be signed off by partner governance groups in April. This will be fully closed next quarter once sign off complete.
Yotta Phase 3 Grounds –	City element of project is in closure awaiting resolution of one
P0075.3	last issue. HDC project in closure – report is in draft at the moment and is being reviewed with the service area. Service areas now need to make a decision about the implementation and delivery of an updated trade waste module for the system which will need an appropriate new
EDRMS Review – P0114	project request (Sponsor + Business project). Discussions in Feb with IC's to assess potential savings and efficiencies linked to the project. However, the level of savings is not as high as required. Therefore decision needed on whether to close down, change scope or other follow up actions.
Revs and Bens hosting options (HDC)	Delay in architecture team completing the paper due to information required from NEC relating to I@W dependencies. Still green as new delivery date for paper has been agreed (end of May 2022)
Shared Telephony Implementation – P0087	HDC CSC, Revs&Bens and One Leisure contact centres have now gone live.
	City CSC went live in Feb and has gone through several rounds of issue fixes working with the project team.
	Both HDC and City port requests hit supplier issues where they will need the supplier to lead on new dates that we can be agreed with both partners and existing commitments. Billing, finance closedown, elections, etc. Risk of programme manager leaving at the end of March also resolved following activity from ICT management.
	New dates are being agreed by the sponsor and board.
NSX upgrades – P0130	Migration designs completed. Working dates for changes have been identified with supplier. Internal Change control processes have been completed. Deployment of the changes are now scheduled after the elections in May.
City Network switch refresh – P0133	Project is current green, but at risk of slipping into Amber in May as the supplier has warned of delays with delivery of the next batch of hardware. Provisional roll out starting in April. Some time being clawed back with bulk configuration of switches.

Windows Server 2008 Migration	Progress slowed down this quarter. Early on due to Log4J, but also because the last few servers to be decommissioned have dependencies within service areas that are yet to be resolved. Mitigation in place with additional monitoring, locking down and cyber security tools, therefore able to maintain this at green.
Connections Direct to Cloud hosted services	Progress delayed in Jan due to Log4j response. By end of Feb, technical teams resolved some complex config issues that had impacted the system since Q3. New / parallel infrastructure running and being tested by ICT staff now. If signed off, roll out to all officers and staff will commence. This is scheduled to start early May (post elections) and last 6 to 8 weeks. Will remain Amber until testing completed.
WiFi AP refresh	Project now closed (Mar) and report was signed off by ICT Project Review group.
Cambridge Live – P0083 Transition to CA desktop services	Project now closed (End of Jan) – follow up actions agreed and are in progress rather than change or extend the scope of the original project.
IDOX TLC upgrades -	Idox have now delayed the release of the software which pushes the work from applications support back. Unlikely that this will be done before May, and will now have to avoid other large change activity that is taking place immediately after the elections.
Information@Work upgrades	Project priority has changed because supplier has extended the support period of the current version.
Decommissioning of legacy network fibre	Technical project activity completed during Q4, and therefore allows the councils to avoid unnecessary costs. Project close down reports are being prepared for April sign off.

Appendices

Appendix A – infrastructure Risk Registers HDC

4.1 Air conditioning	Probability	Impact			
(Chillers) Data centres/Server rooms must be kept to an even temperature and humidity to ensure that the IT equipment does not overheat and shutdown. The data centres at PFH & Shire Hall contain units to provide this cooling. The units are routinely checked and serviced every 6 months.					
To prevent heat damage to cooling should also receive		otection during a power cut, all			
	ystems at Shire Hall sits with	& HDC Facilities Management. Cambridgeshire County Council			
Future risk: The chillers are aging, and	replacement will be required	d in future.			
Mitigations: Manual checks are routinely done during the week and a temperature monitor has been installed in the racks to provide additional alerts to 3C IT mobile phones should any thermal events be triggered.					
Maintenance and repair works and parts replacements taken place throughout Q3 and Q4 20/21, also additional chillers have been installed to serve PFH as a backup in the event the main units fail. Procedures have been written and tested. In addition, bids are being prepared for 22/23 to replace the in-situ cooling and monitoring system in consultation FM team.					
4.2 Monitoring	Probability	Impact			
 4.2 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. Mitigation: Additional modules are available and can be purchased. Solarwinds monitoring has now been put in place for on premise systems and services. 3rd party monitoring tools are used for some externally managed services. As we gain knowledge and experience we may need to invest more money in to improving these tools and functionality to match the on premise capability. 					

4.3 Witness Host	Probability	Impact		
	is required to monitor cor	nnectivity to the Pathfinder House and		
		ailure at either site and initiate migration		
of server hosts to the	remaining live datacentre	and redirect network traffic accordingly.		
Due to the function of	this server it needs to rem	nain at SCDC.		
Mitigations:				
Design agreed and wo	rk is underwav to move th	e server/service to a more suitable		
location with protection	-			
	Duchahilita	luce of		
6.2 Network Switches/F	Probability Routers	Impact		
devices cannot be mig (site) access. The Core	rated to the Pathfinder Ho	ters and edge switches for endpoint buse server room as they support local each site are supported by the room- ncy.		
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.				
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.				
Mitigation: HDC switches have been replaced and are under support and maintenance. Impact and likelihood of this risk has been reduced. Architecture change has improved the fault tolerance if failures occur,				
Recommendation: Keeping the switches up to date and maintained with a recognised/approved supplier.				
Recping the switches up to date and maintained with a recognised approved supplier.				
	Probability	Impact		
7.1 Telephony	alad have a Alast 11			
• • •	•	Oxe platform. This system is maintained		
and runy supported by	GCI Telecom (formerly Fr	eedom		
The on premise Alcate	Lucent Oxe relies on DHC	CP services to provide IP addresses and		
connectivity settings to the VOIP handsets. If the DHCP service is not available then the				
telephone handsets ar				

An additional external link exists to Speake 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 however the reliance on traditional desktop telephony will reduce over time.

The new Telephony solution (based on MS Teams) will be implemented by Q4 21/22.

Impact of incidents is lower now that most officers and staff are working remotely via Teams.

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
- Additional resilience and capacity added

Next actions – Council to Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed.

SCDC

4.1 (UPS & Generators)	Impact				
Within the SCDC server room there is a room-ba connected devices providing short term cover in By their nature UPS systems can only provide a UPS the more power available but with finite lin then generators are required – these are then c ensure that the UPS power is not drained, and t	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-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					

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

Mitigations:

- 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.

	Probability	Impact
4.2 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 units are routinely checked and serviced every 6 months under the responsibility of the site facilities teams. There have been recent issues with the air conditioning with a failure over the summer 2019.

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.

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.

Mitigations:

- Plans being progress re replacement of units
- Emergency response plans are in place with FM team if roof units fail (used twice during summer 2021)
- 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 Depot

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.

4.3 Fire suppression	Probability	Impact		
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.				
Depot.		r ICT equipment at Waterbeach lace to cover the building as a whole.		
capable such that it continu	ally samples the air for pa	n system which is zoned and VESDA articulates so early warning is picked nts rather than fire/heat sensors		
		provide recommendations. Separate Fire Suppression to ICT equipment		
5.5 Network Switches/Router	Probability	Impact		
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) 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.				
Mitigation: Bids being prepared for refresh and replacement of switches. Plans had to go through several revisions and delays due to local electrical work at SCH.				
Recommendation: Tolerate the risk to tempora responses (such as remote	-	view BCP arrangements so that 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

City

4.1 Cables	Impact	Probability
Untidy and unmanaged cabling in server room racks has the potential to cause significant delays to efforts to remediate hardware faults whilst in racks. This is because tangled cables are difficult to unpick and ascertain what is connected to where. It also restricts access to hardware because the unmanaged cables are in the way and prevent removal of racked equipment. This is a legacy issue.		
Mitigations: Services continue to be removed from this location and cabling has been improved Change architecture and design so that it becomes an edge site and benefits from infrastructure resilience.		
Recommendations: Tolerate the risk until services that will be migrated as part of the Server Room Consolidation project have been completed and then action the mitigation for services that will remain in Mandela House (Telephony, Network Switches, Firewalls) as part of the decommissioning work for that project.		
5.1 AD Domain Controllers	Impact	Probability
Active Directory windows network login authentication. New Domain Controller (DC) servers to provide Active Directory (AD) services already operate in the new data centre. 3C ICT have migrated certain AD roles from the on premise servers to reduce risk. Mitigations: AD has been 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 Also note the recommendation from the Email section where 50% of Global Catalogue domain controllers are required to be up for email to function. 		
Next actions – 3C to implement		
5.4 Network Switches/Routers	Impact	Probability
This hardware, comprising of core switches, routers and edge switches for endpoint devices is needed on site so is not in scope for the server room consolidation project. 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.		

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.

NB Waterbeach Garage is dependant on a fibre link to nearby Waterbeach Depot for IT connectivity. This link is not under a maintenance contract. Additionally, any major loss of power beyond local UPS capability at the Depo would cause loss IT network connectivity. An issue of this nature occurred in summer 2020 which called into question BCP assumptions that working out of the Depo was a viable mitigation.

Mitigation:

Bids accepted and now in the process of procuring the replacement switches. Implementation to be completed by the end of Q4 21/22.

	Impact	Probability
6.6 Telephony		

Physical telephones on desks throughout City offices rely on two ICT features. First, the Cambridge DHCP service provides IP addresses and connectivity settings to handsets. Second, the telephones connect to Unify data centres and telephony services in Slough or Newport. If the DHCP service is not available then the telephone handsets are unable to connect to either of the two Unify data centres and will not work.

If the DHCP servers fail and cannot be restored then the 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.

Post COVID-19 the risk profile has reduced due to implementation of Teams Telephony, home working and mobile telephony rollout contributing to a reduced dependence on desk based telephony

Recommendations:

- DHCP services to be migrated to servers hosted in the datacentre in December 2021 done
- 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.
- Make further use of MS Teams Telephony to route calls direct from Unify to MS Teams numbers

Next actions -

Telephony migration project is underway – decision to start migrating City in early Dec 2021 to a new MS Teams base platform.

Council to Review BCP arrangements to make sure that response times to failures are appropriate and expectations managed. CSC to hold list of publicly accessible numbers such as service helplines 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 a Teams telephony number or someone's mobile.

Appendix B – Strategic Application Risk Matrix

Council	Service Area	Application Name	Supplier	Oct-21
City	Revs & Bens	R&B SaaS Application (RB Live)	Northgate	Renewal negotiated this year has delivered significant cost avoidance over the next 5 years
City	Corporate & Customer Services	Openscape	Unify Atos Collaboration Solutions	Part of telephony project and options for migration are being explored
City	Housing	Orchard	Orchard Information Systems	
City	Planning, Revs & Bens, Community Service & Environmental Services	Idox Applications (including Idox Document Management System (DMS), Idox Public Access, Idox Uniform)	Idox Plc.	
City	Corporate	GIS Desktop	ESRI	Consolidation Project nearing completion. Technical delivery complete with integration and roll out due to complete before March 2022.
City	Corporate	Intranet Mapping	ESRI	Consolidation Project nearing completion. Technical delivery complete with integration and roll out due to complete before March 2022.
City	Shared Waste & Customer Services	Contender	Agile Applications	
City	Customer Services, Cashiers and Finance	Capita Systems (including pay.net, ACR & website payments, etc.)	Capita	

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 Solutions	
City	Revenues & Benefits	Risk Based Verification Software - Xantura	Northgate Public Services	
City	Shared Legal Service	Legal Case Management	IKEN	
City	Elections	Eros	IDOX	
City	Democratic Services	Issue Manager	Civica	
City	Cremetorium	Epilog	Gower Consultants	
City	Revenues & Benefits	Analyse Local Subscription	Inform CPI Ltd	
City	Finance	Business Objects	Business Intelligence	
City	Housing	SVS Mobile	Castleton was South View Solutions (SVS) Contract is with Orchard	System replacement underway - support from vendor in place during migration. Partial new system made live.
City	Property Services/Planning	Contact Centre Audio Service	Premier Business Audio	
City	HR, Housing, Revs & Bens	Information@Work	Northgate	New Version expected and upgrade being planned

HDC	Leisure	MRM Plus 2	Gladstone	
				Performance issues being managed with supplier – Database upgrade .
HDC	Revs & Bens	Revenues & Benefits	Northgate	
HDC	Planning, BC and others	Uniform	Idox Plc.	Programme of upgrades and enhancements throughout the year and forward schedule being mapped.
HDC	HR/Payroll	iTrent	Midland HR	
				Migrated to new hosted system in 2021. Outstanding tasks still means that project can't be closed yet.
HDC	Corporate	ArcGIS	ESRI	Consolidation Project nearing completion. Technical delivery complete with integration and roll out due to complete before March 2022.
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	Upgrade underway and support being maintained by vendor.
HDC	Fraud	InCase	Intec	
HDC	Elections	Xpress	Express\Civica	

HDC	Corporate	Information@Work	Northgate	Cycle of planned upgrades for next year continuing
HDC	Democratic Services	Modern.gov	Modern Mindset	
HDC	Finance	Efin	Efin	Out of support, but running in a restricted manner for security reasons. Difficult to support and maintain. Requires cross service area action to fully decommission.
HDC	Revs & Bens, Resources	Business Objects	CACI Ltd	
SCDC	Revs & Bens	Open Revenues	Civica	
SCDC	Housing	Orchard Housing	Orchard Information Systems	Orchard live, with follow on development work still taking place regarding digital integration.
SCDC	Revenues and Benefits	OpenHousing	Capita	
SCDC	Corporate	Information@Work	Northgate	
SCDC	Democratic Services	Xpress	Xpress/Civica	
SCDC	Licencing	Lalpac	IDOX	
SCDC	Democratic Services	Modern.gov	Civica Modern.gov	
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. Partial new system made live.
All 3	3C ICT	Yotta	Yotta	
All 3	3C ICT	Technology One	Technology One	Renewal due in Feb 2022. Service area leads are currently negotiating with the suppliers
All 3	3C ICT	MIMecast Email Management Express	EACS Ltd	Renewal options being explored. System acts as a Business Continuity / fall back option if O365 is interrupted.
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	

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

Appendix C - Cyber Security Risk

AREAS FOR MONITORING AND MANAGING CYBER SECURITY RISKS.

NCSC 10 Steps Theme	Rating ¹	RAG (0-3 red, 4-6	Direction of
		amber, 7-10	travel since las
		green)	Q. review
Risk Management	7	GREEN	$ \Longleftrightarrow $
Secure Configuration	8	GREEN	
Network Security	7	GREEN	\overleftrightarrow
Managing user privileges	7	GREEN	$ \Longleftrightarrow $
Incident management	6	AMBER	
User education and awareness	6	AMBER	
Malware prevention	8	GREEN	ţ
Monitoring	6	AMBER	\overleftrightarrow
Removable media controls	8	GREEN	
Mobile Working	7	GREEN	$ \Longleftrightarrow $

The Improvements in the Secure Configuration (increase in score) is due to new processes being put in place and new tools being used to record and monitor changes in configuration of key components related to security controls. In addition, there has also been a breakthrough with some additional capability with account auditing which we expect to move to Green next quarter once the processes associated with alerts and triggers are in place. The fact that most of the risk areas have remained the same isn't a reflection on the amount of time and effort being spent in this area. It does however illustrate that just to keep up is taking a greater amount of resource. The bids submitted for the creation of a Cyber security team will not only allow us to push the remaining ambers in to green, but it will also help maintain the green status elsewhere. Feedback from the IG groups on the 10 steps summary has also been positive and will now be a regular / standing agenda item from 3C ICT.

¹ Rating based on recognised good practice where zero is no controls in place or yet to be initiated, 5 is defined and managed and 10 is fully optimsed and mature controls.

Appendix D – 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 E - Current ICT priorities agreed with Intelligent Clients and Shared Services board for the period up to Dec 31st 2020:-

Projects Logged

	Projects	Small Works Packages (SWP)
2022 (to date)	125	123

<u>PSWP-</u> 22266	1 - Highest	P0166-1 Implementation of Immutable Backup Solution
<u>PSWP-</u> 20977	1 - Highest	PSN 2021 Int Pen HIGH All High Vulnerabilities from Internal Penetration Test
<u>PSWP-</u> <u>872</u>	1 - Highest	Immutable Backup Costs and options for cloud storage of 3C backups
<u>PSWP-</u> 871	1 - Highest	Test recovery of Active Directory
<u>PSWP-</u> 752	1 - Highest	S0290 - IE11 and Edge Legacy retirement
<u>PSWP-</u> <u>161</u>	1 - Highest	S0159 - Dynamics CRM Decommissioning
<u>PSWP-</u> 69	1 - Highest	S0122 - Retirement of fibre connection between EFH and PFH
<u>PSWP-</u> 21945	2 - High	HDC Idox TLC Upgrade
<u>PSWP-</u> 21944	2 - High	GCP Idox TLC Upgrade
<u>PSWP-</u> 21943	2 - High	GCP Idox Public Access Upgrade
<u>PSWP-</u> 21942	2 - High	HDC Idox Public Access Upgrade
<u>PSWP-</u> 21665	2 - High	Group Managed Service Accounts Implementation
<u>PSWP-</u> 886	2 - High	Windows Server 2008 Migration (P0084) SCDC Server Migrations
PSWP- 885	2 - High	Windows Server 2008 Migration (P0084) CCity Server Migrations
<u>PSWP-</u> 881	2 - High	Windows Server 2008 Migration (P0084) HDC Server Migrations
<u>PSWP-</u> 834	2 - High	S0285 - SCDC - O2 Booster for Waterbeach Depot
<u>PSWP-</u> 748	2 - High	Trend System Data Points Pathfinder House
<u>PSWP-</u> 682	2 - High	O365 External Sharing/ Zero Trust

<u>PSWP-</u> <u>481</u>	2 - High	S0258 - HDC I@W Email Connect Module
<u>PSWP-</u> 449	2 - High	S0249 HDC Capita AIM V13 system upgrade and implementation of 3DSecure2 module
<u>PSWP-</u> <u>413</u>	2 - High	S0239 - Electronic Document Signing
<u>PSWP-</u> 389	2 - High	S0230 - Hornbill Contract Review
<u>PSWP-</u> <u>361</u>	2 - High	S0221 SCDC OpenAccounts migration off network
<u>PSWP-</u> <u>357</u>	2 - High	S0220 - HDC eFinancials migration off network
<u>PSWP-</u> <u>329</u>	2 - High	S0211 - Removal of witness host from South Cambs Hall
<u>PSWP-</u> <u>321</u>	2 - High	S0209 SCDC Capita AIM V13 system upgrade and implementation of 3DSecure2 module
<u>PSWP-</u> <u>105</u>	2 - High	S0142 - Exchange decomissioning (incl GCSX mailboxes)
<u>PSWP-</u> 85	2 - High	Deploy PatchMyPC Updates
<u>IB-16</u>	2 - High	S0289 - Windows 10 Feature Release Update - 20H2
<u>PSWP-</u> 21934	3 - Medium	SCDC I@W Enterprise Upgrade to v5.30
<u>PSWP-</u> 21653	3 - Medium	PSWP-21653 CCITY IKEN Upgrade
<u>PSWP-</u> 21652	3 - Medium	P0153 CCity Epic Uniform Upgrade to 10.6.1
<u>PSWP-</u> 21611	3 - Medium	Cambridgeshire Council Tax Compliance and Counter Fraud Initiative
<u>PSWP-</u> 21439	3 - Medium	P0128 - 3C - Sharegate Apricot - Teams Management
<u>PSWP-</u> 21421	3 - Medium	BC Planning Portal Connector Implementation
<u>PSWP-</u> 21333	3 - Medium	P0127 - Printer Authentication using 802.1x
<u>PSWP-</u> 21332	3 - Medium	P0126 - Printer Security Vulnerabilities
<u>PSWP-</u> 21317	3 - Medium	Define non domain joined machine spec
<u>PSWP-</u> 21308	3 - Medium	URL Web Filtering
<u>PSWP-</u> 21256	3 - Medium	P0125 - HDC Uniform 10.6.1 Upgrade
<u>PSWP-</u> 21254	3 - Medium	P0123 Body Worn Cameras (BWCs)

<u>PSWP-</u> 21138	3 - Medium	PSN 2021 Int Pen Medium All Medium Vulnerabilities from Internal Penetration Test
<u>PSWP-</u> 21137	3 - Medium	PSN 2021 Ext Pen All vulnerabilities from External Penetration Test
<u>PSWP-</u> 21119	3 - Medium	AD <-> HR Integration Joiners, Movers, Leavers.
<u>PSWP-</u> 21118	3 - Medium	P0117 - PCI-DSS technical compliance
<u>PSWP-</u> 20940	3 - Medium	Hybrid Mail at SCDC
<u>PSWP-</u> 20866	3 - Medium	P0116 - New Council Depot Project
<u>PSWP-</u> 880	3 - Medium	S0277 - Reopening High Streets Safely Fund Grant Action Plan (GAP)
<u>PSWP-</u> 833	3 - Medium	S0284 - Exchange Groups
<u>PSWP-</u> 760	3 - Medium	Greening South Cambs Hall
<u>PSWP-</u> 758	3 - Medium	S0281 - CCity DMS 5.1 Upgrade
<u>PSWP-</u> 757	3 - Medium	S0280 - Cambridge Live Networking - Future Options
<u>PSWP-</u> 755	3 - Medium	Member IT at SCDC
<u>PSWP-</u> 724	3 - Medium	P0115 CCITY New Meadows Centre
<u>PSWP-</u> <u>693</u>	3 - Medium	S0278 - Lenovo SCCM Updates Catalogue
<u>PSWP-</u> 643	3 - Medium	S0146 - Mimecast Review
<u>PSWP-</u> 576	3 - Medium	S0273 - Apple user phone refresh and scope
<u>PSWP-</u> <u>566</u>	3 - Medium	S0274 - Review of the existing Vuelio system used in 3C ICT
<u>PSWP-</u> <u>565</u>	3 - Medium	Review of the existing Trend Micro Enterprise Security Suite used in 3C ICT
<u>PSWP-</u> 545	3 - Medium	S0267 - Smart lockers for SCDC
<u>PSWP-</u> 517	3 - Medium	S0263 - Block TeamViewer Quick Support (Security risk)
<u>PSWP-</u> 453	3 - Medium	S0251 - AD Data Rebaseline
<u>PSWP-</u> 437	3 - Medium	S0246 - Implement Capita Secure Card Portal (SCP) at CCity
<u>PSWP-</u> <u>369</u>	3 - Medium	S0225 - Clay Farm Centre - remote connections to controls for plant & equipment controls
<u>PSWP-</u> <u>365</u>	3 - Medium	S0223 - Domain locked DNS records

<u>PSWP-</u> <u>341</u>	3 - Medium	S0214 - Upgrade of internal lighting at South Cambs Hall
<u>PSWP-</u> <u>337</u>	3 - Medium	S0213 Systm One Implementation
<u>PSWP-</u> 325	3 - Medium	S0210 CCity Capita AIM V13 system upgrade and implementation of 3DSecure2 module
<u>PSWP-</u> 285	3 - Medium	S0197 - GIS Support for the creation and management of a corporate land holdings data store
<u>PSWP-</u> 257	3 - Medium	S0190 - Planning Mobile apps for Idox
<u>PSWP-</u> 241	3 - Medium	S0186 - Consolidate separate PSN network provision
<u>PSWP-</u> <u>181</u>	3 - Medium	S0165 - O2 Contract Review
<u>PSWP-</u> <u>137</u>	3 - Medium	S0152 Matrix Contract Review
<u>PSWP-</u> 117	3 - Medium	S0145 - Economic Support CRM
<u>PSWP-</u> 57	3 - Medium	S0117 - Retire Virgin Media Centrex phone system at HDC
<u>PSWP-</u> <u>17</u>	3 - Medium	S0094 Hybrid Mail/ Print Solution
<u>IB-127</u>	3 - Medium	SPRINT 10 Planned Non Working Days
<u>IB-87</u>	3 - Medium	Test
<u>IB-86</u>	3 - Medium	Introduce immutable backup to veeam
<u>IB-55</u>	3 - Medium	Investigate MTA-STS & if relevant create proposal for TRG
<u>IB-24</u>	3 - Medium	Audit Actions DC/Comms Rooms Audit and refresh
<u>IB-23</u>	3 - Medium	SWP-Automating alerts in hornbill Epic created to manage Customer
<u>GB-34</u>	3 - Medium	Service Requests for the Spatial Services
<u>ARC-81</u>	3 - Medium	SCDC - SharePoint Intranet
<u>ARC-64</u>	3 - Medium	GCSP Growth Network Drive Moves solarwinds isn't being fully used and
<u>PSWP-</u> 21175	4 - Low	team has no visibility of license expiry, issues etc. needs merging with primary solarwinds solution
<u>PSWP-</u> 20903	4 - Low	O365 Licence Management
<u>PSWP-</u> 777	4 - Low	S0282 - Commend - Intercom calls
<u>PSWP-</u> 716	4 - Low	S0279 - Identity Access Management
<u>PSWP-</u> 457	4 - Low	S0252 - Gantner Locker System Upgrade

PSWP-		
377	4 - Low	S0227 - Office 365 Roadmap
<u>PSWP-</u> <u>349</u>	4 - Low	S0216 - Password Management for Revs & Bens Staff
<u>PSWP-</u> <u>333</u>	4 - Low	S0212 - Decomissioning of old Global Protect environments
<u>IB-127</u>	4 - Low	S0191 - HDC RE:Fit Project - Cloud controllors for BEMS
<u>IB-88</u>	4 - Low	S0189 - Netbox for Configuration Management
<u>IB-87</u>	4 - Low	S0155 - Change of Cllr email addresses
<u>IB-86</u>	4 - Low	S0110 - Compliance Dashboard and Retention periods in O365 for Information Governance
<u>IB-55</u>	4 - Low	create a self service solution for file and server restores
<u>IB-24</u>	5 - Lowest	P0106 Cyber Essentials Plus Submit Questionnaire
<u>IB-23</u>	5 - Lowest	S0233 - CA - Microsoft Store enablement
<u>IB-16</u>	5 - Lowest	S0207 - Consolodate VRF at each site
<u>GB-34</u>	5 - Lowest	S0196 - Digital Azure migration to 3C Azure
<u>ARC-81</u>	5 - Lowest	S0184 - Advanced Group Policy Management Server Updates
<u>ARC-64</u>	5 - Lowest	S0104 - HDC_PowerAutomate/Flow
<u>ARC-81</u>	Medium	SCDC - SharePoint Intranet
<u>ARC-64</u>	Medium	GCSP Growth Network Drive Moves