

Report of the Strategic Director

ICT STRATEGY 2017-2021 REVIEW

1. Purpose of report

To provide an update for Members on the progress made with the Council's ICT Strategy 2017-2021.

2. Background

Members adopted the current ICT Strategy 2017-2021 at Policy and Performance Committee 3 October 2017.

The strategy is made up of two documents. The first is the scene setter and contains the five strategic ICT themes which support the strategic objectives namely:

- Enabling efficiency
- Responding flexibly and with agility to customer needs
- Increase our ability to work in effective partnerships
- Modern architecture supporting efficient and agile working culture
- Robust arrangements for business continuity, information management and governance and security.

Each theme is presented in terms of its impact, its benefits and its deliverables in relation to ICT service delivery.

The second document is a technical delivery plan which supports the strategy and gives all of the actions along with the necessary detailed technical information required by ICT employees to inform their on-going work programmes. The appendix provides a detailed analysis of the progress against these strategic actions.

3. Financial implications

All of the financial implications associated with the delivery of the ICT Strategy are subject to the normal budget process.

Recommendation

The Committee is asked to NOTE the progress made against the Council's ICT Strategy 2017-2021.






Background papers

Nil

ICT Strategy 2017-2021 progress report




The key to the symbols used in the is as follows:



Action Status Key




Icon	Status	Description
	Completed	Action/task has been completed
	In Progress	Action/task is in progress and is currently expected to meet the due date
	Warning	Action/task is approaching its due date (and/or one or more milestones is approaching or has passed its due date)
	Overdue	Action/task has passed its due date
	Cancelled	Action/task has been cancelled or postponed






The Technology Roadmap below identifies both On-going Actions and Targeted Actions; these are shown in chronological order and separated into the respective financial years.




On-going Strategic Actions






Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	1	The Council will further extend the capability and function of Active Directory both within the authority and across authorities by continuing to leverage Federation Services.	ICT and Business Transformation Manager	80%	Annually	Active directory has been assessed annually and appropriate enhancements have been made as required.
In Progress 	2	The Council will continue to build on existing success in working towards a Single Sign On authentication solution.	ICT and Business Transformation Manager	80%	Annually	As each system is brought into the Councils network Single Sign On is the de facto standard.
In Progress 	3	The Council will continue with the Microsoft Enterprise Agreement therefore supporting the direction of travel determined by a single standard desktop and aiding further partnership alignment.	ICT and Business Transformation Manager	80%	Annually	While the Council has utilised some elements of Microsoft 365 during the COVID-19 pandemic this will need to be further investigation to determine how the mail filtering off premise will ensure cyber security before the Council utilises more components of this environment.




Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	5	The Council will continue to review the email content management arrangements on an annual basis to ensure that it remains fit for purpose and to ensure opportunities are taken to strategically align these technologies with our partners.	ICT and Business Transformation Manager	80%	Annually	The email content management has been assessed annually and remains fit for purpose.
In Progress 	13	The Council will for users that need to work from a satellite office continue to assess their network usage profile. The total requirement of all users will be collated and used to determine the type of network connectivity required informing the Business Case supporting any such development.	ICT and Business Transformation Manager	80%	Annually	The network capacity arrangements at remote site is reviewed as part of the annual Business Account Management meetings. While no current changes are planned this will continue to be part of the new ICT Strategy once it is developed during 2021.





Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	14	The Council will maintain a range of different types of network provision based upon the actual demands of the satellite offices. These will range from Business Broadband type (VPN) connections to dedicated IPVPN Extension type circuits which provide dedicated and guaranteed bandwidth other solutions such as Superfast broadband services will be considered as the services develop.	ICT and Business Transformation Manager	80%	Annually	The types of network capacity arrangements in operation is reviewed as part of the annual Business Account Management meetings. While no current changes are planned this will continue to be part of the new ICT Strategy once it is developed during 2021.
In Progress 	16	The Council will provide hot desk facilities to support the business utilising either fixed cable connections or by enabling Wi-Fi where practical.	ICT and Business Transformation Manager	90%	Annually	This strategic action is linked with the New Ways of Working programme (NWOW), the majority of which has now been delivered. There is a small amount of work remaining to complete on the 2 nd floor following the last set of office moves.
In Progress 	20	The Council will ensure that where possible and financially feasible network devices such as routers and backbone switches are provided with redundancy by creating a failover situation where if one router fails the other seamlessly takes over as provided within the Data Centre.	ICT and Business Transformation Manager	80%	Annually	This strategic action is kept under review annually as equipment is changed and where developments in the market can be exploited to benefit the business of the Council






Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	21	The Council will ensure future infrastructure technology conforms to Cisco standards in order to ensure the skills built up within the technical teams are maintained from a configuration and interface perspective.	ICT and Business Transformation Manager	100%	Annually	This is built into the training and skills assessment arrangements within ICT Services.
Completed 	22	The Council will where possible use the same supplier for network services and will work towards strategic alignment with partner sites.	ICT and Business Transformation Manager	100%	Annually	This requirement is built into the ICT Services assessment process prior to procurement.
Completed 	23	The Council will maintain its Network Infrastructure Architecture Standards which is reviewed annually.	ICT and Business Transformation Manager	100%	Annually	An annual desktop review is undertaken and the ICT and Business Transformation Manager ensures that relevant Network Infrastructure Architecture standards are followed during any procurement exercise.
In Progress 	24	The Council will continue to investigate the benefits of using tablet technology within the business to replace the need for Laptops as the technology evolves.	ICT and Business Transformation Manager	80%	Annually	Where appropriate tablets have been provided if laptops are not a suitable platform. Review ongoing subject to requirements.
Completed 	25	The Council will continue to maintain mobile email facilities to senior management and where appropriate critical business users.	ICT and Business Transformation Manager	100%	Annually	The current solution is reviewed annually to ensure it remains fit for purpose and providing value for money.






Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	26	The Council will consider the provision of appropriate connectivity for employees using laptops or other appropriate technology when working away from the office.	ICT and Business Transformation Manager	80%	Annually	Appropriate solutions are in place and have been enhanced as part of the New Ways of Working (NWOW) programme and response to the COVID-19 pandemic. Employees are currently able to work from home to ensure the delivery of services.
Completed 	27	In line with the appropriate recommendations within the Flexible Working Policy the Council will continue to support the use of ADSL/cable networking connections.	ICT and Business Transformation Manager	100%	Annually	Appropriate solutions are in place as demonstrated through New Ways of Working (NWOW) programme and response to the COVID-19 pandemic. It is anticipated that once 5G services are more widely available this could change all remote site options.
Completed 	28	The Council will continue to consolidate its Server Estate by utilising and enhancing the Virtual Environment giving future consideration to rationalising data centres with partner sites to provide enhanced failover High Availability (HA) and Disaster Recovery (DR) capability.	ICT and Business Transformation Manager	100%	Annually	Work has been completed on the assessment for rationalising data centres and cloud options – the current cost associated with communication links means that smaller local data centres are still the most cost effective solution for the Council. ICT Services will continue to monitor the market including enhancements in technology in order to ensure that the Council is best placed to benefit from these developments where they are for example, economically advantageous.






Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	30	The Council will maintain code of connection standards and look to reduce costs by investigating aggregated links with partners through PSN or other routes that may emerge to maintain PSN connectivity.	ICT and Business Transformation Manager	80%	Annually	PSN accreditation is maintained on an annual basis
In Progress 	31	The Council will consider opportunities within the PSN environment.	ICT and Business Transformation Manager	80%	Annually	Requirement for PSN services moving forward are being reviewed and alternative methods of connectivity actively being assessed and implemented where appropriate
Completed 	32	The Council will ensure that all future application and developments have commitments toward latest compliance standards.	ICT and Business Transformation Manager	100%	On-going	This is built in to the due diligence arrangements followed during the investigation and procurement process.
In Progress 	33	The Council will ensure that reports continue to be generated to utilise the information asset captured by the telephony solution to improve services.	ICT and Business Transformation Manager	50%	On-going	Full reporting was in place but this has become more difficult recently. The data is still available but has become more time consuming to report on. The arrangements are under review with the aim to ensure that this specific business intelligence can be generated easily and assist with business improvement activity.
Completed 	34	The Council will roll out the use of VoIP telephony for remote and home workers where appropriate and bandwidth allows.	ICT and Business Transformation Manager	100%	Annually	Roll out of Cisco telephony system to remote and home workers is complete including customer facing services such as the Contact Centre.







Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	36	The Council will continue to evaluate its SIP Trunking solution for its overall security and cost effectiveness.	ICT and Business Transformation Manager	100%	Annually	A review was carried out in November 2019 and the current solution was determined as fit for purpose in terms of security and value for money. A further review was carried out in September 2020 as part of the Microsoft Teams project and it was determined that while still fit for purpose in terms of security there may be an opportunity to improve value for money as part of this project.
In Progress 	38	The Council with its preferred 'Cloud First' approach will continue to investigate opportunities for growing the existing IaaS and SaaS solutions including consideration of Public Private or Community Cloud (or hybrid) deployment models to take advantage of economies of scale improve resilience and promote alignment of software technologies and services.	ICT and Business Transformation Manager	80%	On-going	Cloud First as a principle is built into the Council's business case approach and is considered where the solution is cost effective
Completed 	41	The Council will ensure that a diverse suite of anti-virus and anti-spyware engines are maintained to mitigate risks of failure of a single vendor product when reviewing the Messaging System protection as part of the EA agreement.	ICT and Business Transformation Manager	100%	Annually	This strategic action has been maintained throughout the life of the current strategy as part of the Council's arrangements to mitigate against cyber security threats.





Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	42	The Council will work towards the further development of its Information Security Management System (ISMS).	ICT and Business Transformation Manager		On-going	<ol style="list-style-type: none"> 1. An assessment based on ISO27001 has been completed. The actions identified as a result of the assessment are being implemented. 2. The Senior Information Risk Owner (SIRO) audit is completed annually and actions addressed. 3. The Council was certified as meeting the Cyber Essentials criteria as part of GDPR. However, the criteria has changed and the Council is now working towards compliance with the changes and certification against the new standard.
In Progress 	43	The Council will review and enhance existing physical security arrangements where necessary.	ICT and Business Transformation Manager	80%	Annually	The New ways of working programme (NWOW) has introduced enhanced physical security measures, for example clear desk arrangements covering all data.
In Progress 	44	The Council will arrange for social testing as part of its security arrangements to take place annually.	ICT and Business Transformation Manager	80%	Annually	Arrangements are reviewed annually and consideration is given to social testing in various forms. Mandatory training for all employees is used to raise awareness.
Completed 	45	The Council will continue to ensure that there is a split between the web servers intended for public web access and the internal Intranet either physically or virtually.	ICT and Business Transformation Manager	100%	On-going	The Council's web services are Cloud based. The requirement within this strategic action was part of the procurement arrangements when introducing the Cloud based solution.

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	47	The Council will maintain a patching policy to ensure the Council's network software and computer systems are protected from both malicious code and hacking attacks.	ICT and Business Transformation Manager	100%	On-going	The Council maintains all patches in line with the requirements of the annual PSN accreditation and is externally audited as part of this process of accreditation.
In Progress 	48	The Council will investigate appropriate technologies to secure the wider network.	ICT and Business Transformation Manager	80%	Annually	The current solution is fit for purpose in terms of cost effectiveness and security. Reviews are ongoing as technology changes.
Completed 	51	The Council will continue with Secure Tokens for enhanced access control for Remote Workers and Third Party access.	ICT and Business Transformation Manager	100%	On-going	Solution is in place and being maintained.
In Progress 	53	The Council will investigate the implications of Self Service and User Provisioning for tasks such as password reset and file recovery.	ICT and Business Transformation Manager	50%	On-going	A self-service password reset solution has been implemented in a neighbouring council, which may be suitable for Broxtowe to consider. Contact and learning is being shared.
In Progress 	55	The Council will invest in the infrastructure as appropriate in line with the strategic approach to maintain the rolling programme of replacement/refresh.	ICT and Business Transformation Manager	70%	On-going	The Council continues to invest as part of its capital and revenue budget. During the COVID-19 pandemic a greater focus has been placed on laptop devices in order to increase agile working arrangements for employees.





Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	57	The Council will where appropriate providing the support life of the equipment allows 'sweat' the assets in order to obtain the greatest value from the technology investment.	ICT and Business Transformation Manager	100%	On-going	The process of "sweating" assets, where this is feasible, is embedded within the current ICT Services working arrangements.
In Progress 	58	The Council will use Windows Server 2012 as its standard server operating system.	ICT and Business Transformation Manager	90%	On-going	Windows Server 2016 is now the standard although where necessary Windows Server 2012 may still be deployed. Ensuring that the latest software is utilised ensures that more recent features can be exploited and security maintained. Where necessary final migration arrangements are in progress.
Completed 	61	The Council will continue to enforce policies through Active Directory.	ICT and Business Transformation Manager	100%	On-going	The process of enforcing policy through Active Directory is embedded within the current ICT Services working arrangements.
Completed 	63	The Council will continue to use .MSI installer where this is considered to be the most efficient method of deployment.	ICT and Business Transformation Manager	100%	On-going	The process of using MSI installer, where this is the most efficient method, is embedded within the current ICT Services working arrangements.
Completed 	65	The Council will continue to work to keep the number of suppliers to a minimum aligning with partner authorities where possible.	ICT and Business Transformation Manager	100%	On-going	The process of keeping the number of suppliers to a minimum is embedded within the current ICT Services working arrangements.





Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	66	The Council will monitor the support arrangements for all of its purchased software products.	ICT and Business Transformation Manager	80%	On-going	Supplier Account Management meetings are held regularly with a proforma used to ensure consistency of engagement and documentation of outcomes.
In Progress 	67	The Council will continue to adopt good practice in ensuring periodic reviews of Business Applications are maintained with key stakeholders to ensure the products remain fit for purpose.	ICT and Business Transformation Manager	80%	Annually	An annual process of System Review is being maintained and reported to GMT.
Cancelled 	68	The Council will maintain the Socitm Application index to inform alignment opportunities as part of the Making ICT Ready Nottinghamshire T-Government Group initiative.	ICT and Business Transformation Manager	N/A	Annually	The Socitm application index was abandoned by Socitm. The Council maintains its own software asset register.
In Progress 	69	The Council will continue to maintain and review the use of its license management framework in aligning the process with other partner organisations.	ICT and Business Transformation Manager	80%	On-going	The ICT and Business Transformation Manager reviews the software asset register annually to ensure that the licencing arrangements are optimal and in addition, the supplier account management arrangement informs this process.
Completed 	73	The Council will continue to use an appropriate web statistics package and monitoring tool to ensure web facilities are maintained	ICT and Business Transformation Manager	100%	On-going	The Council has a solution in place to monitor web usage internally. In addition, another solution monitors customers use of the Council web site in order to inform such as Top 10 Transactions.




Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	74	The Council will continue to implement the ITIL service management processes.	ICT and Business Transformation Manager	80%	On-going	The ITIL arrangements are documented and in place including such as the ICT Service Desk and the service level agreement (SLA) used to monitor response times.
In Progress 	76	The Council will continue to enhance and develop its online presence and in doing so improving the accessibility of the information and services provided to the public.	ICT and Business Transformation Manager	80%	On-going	This is delivered as part of the Council's Digital Strategy.
Completed 	77	The Council will continue to maintain a centralised Storage Area Network (SAN).	ICT and Business Transformation Manager	100%	Annually	The Council's SAN was replaced in 2018/19.
Completed 	78	The Council will maintain its Data Centre.	ICT and Business Transformation Manager	100%	Annually	The larger Data Centre in the Town Hall was decommissioned. A smaller data centre was commissioned in the Council Offices in 2019/20
Completed 	79	The Council will continue to ensure that all related costs are considered at the procurement stage including disposal costs and energy consumption.	ICT and Business Transformation Manager	100%	On-going	This strategic task is linked with the Technology project strand as part of the Climate Change and Green Futures programme. The process is embedded as part of the ICT Service working arrangements.
In Progress 	80	The Council is committed to GREEN IT and will work to reduce the energy consumption of its ICT estate.	ICT and Business Transformation Manager	80%	On-going	This strategic task is linked with the Technology project strand as part of the Climate Change Green Futures programme. Opportunities are taken as technology is refreshed to ensure sustainability is a key component of any decision making.

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	81	The Council will ensure that it follows all appropriate legislation controlling the disposal of ICT equipment and where possible work with charitable organisations and community groups to extract the full use and value out of equipment before it is disposed of.	ICT and Business Transformation Manager	100%	On-going	The disposal of ICT equipment is carried out in line with the appropriate legislation and a certificate is obtained from the organisation used confirming that this is the case for each item of equipment disposed of.
Completed 	82	The Council will ensure that the ITIL service delivery model / standard is followed including the 1st, 2nd and 3rd line support functions.	ICT and Business Transformation Manager	100%	Annually	The relevant ITIL processes are embedded within the ICT Services delivery model at the Council.
Completed 	83	The Council will maintain a skills matrix a knowledge base (containing accurate documentation of the ICT environment) and will develop skills of ICT employees.	ICT and Business Transformation Manager	100%	On-going	The skills audit for ICT employees is maintained as part of the appraisal system in place at the Council.
In Progress 	84	The Council will conduct regular ICT Account Management meetings with key business employees in order to continuously inform the direction of travel.	ICT and Business Transformation Manager	80%	On-going	Business Account Management meetings are held annually with service areas. A less formal approach has been necessary during 2020/21 with a focus on responding to the needs of the business in regards to the COVID-19 pandemic.



2017/18 Strategic Actions




Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Overdue 	59	The Council will maintain Windows 7 as its standard Desktop/Laptop operating system with a view to migrating to Windows 10 as part of the equipment replacement programme.	ICT and Business Transformation Manager	95%	Q1 2017/18	Windows 10 is the council desktop Operating system. Some Windows 7 devices (11) remain in operation in a limited capacity in order to maintain for example legacy systems. Work is being actively undertake to sources alternative solutions.
Completed 	64	The Council will review the use of SCCM to manage the deployment of patches for desktop and server environments.	ICT and Business Transformation Manager	100%	Q3 2017/18	SCCM is used as a method to deploy patches.
Completed 	75	The Council will investigate an appropriate solution to deliver a shared ITIL compliant Service Desk system with partner authorities.	ICT and Business Transformation Manager	100%	Q1 2017/18	Completed to the degree necessary. A local council within Nottinghamshire provides a fit for purpose solution currently shared across three Council sites including Broxtowe Borough Council.
Completed 	40	The Council will undertake a review of the anti-virus and anti-spyware product suite giving consideration to Microsoft Endpoint as part of the Microsoft Enterprise Agreement.	ICT and Business Transformation Manager	100%	Q2 2017/18	An appropriate solution is installed.

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	54	The Council will assess appropriate technologies and investigate the network security, information assurance and policy implications of BYOD technology and solutions.	ICT and Business Transformation Manager	100%	Q2 2017/18	Security software is in place and consideration is being given to leveraging functionality available within the existing licencing purchased by the Council.
Completed 	56	The Council will replace its MFD estate and will consider opportunities to further consolidate and where possible provide additional facilities to enhance flexibility and security of the environment (e.g. Follow Me Printing).	ICT and Business Transformation Manager	100%	Q2 2017/18	Multi-Functional Device (MFD) estate rationalised and reduced. Follow Me Printer installed to support New Ways of Working (NWOW)
Overdue 	72	The Council will investigate a suitable network performance and availability monitoring tool.	ICT and Business Transformation Manager	90%	Q2 2017/18	A network performance monitoring solution is in place and is being assessed for suitability and possible enhancements. There is no business impact as a result of the extra time taken to evaluate the solution.
Completed 	39	The Council will consider investing in disk-based storage replacing the current tape backup process for short term backups to provide greater reliability. Tape based backup will still be used for archival purposes.	ICT and Business Transformation Manager	100%	Q3 2017/18	This strategic action was undertaken as part of the Storage Area Network (SAN) procurement. Tape remains a strategic operational tool used at the Council.



Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	52	The Council will review the use of BitLocker for Pre-Boot Encryption to secure data on portable and public access computer equipment.	ICT and Business Transformation Manager	100%	Q3 2017/18	Completed.
Completed 	4	The Council will upgrade to Outlook and Exchange 2016 during the 2017/18 financial year. The upgrade will include employee awareness training and appropriate communication.	ICT and Business Transformation Manager	100%	Q4 2017/18	Exchange 2016 installed
Completed 	60	The Council will continue to investigate technologies to aid delivery of a Zero-Touch Provisioning solution.	ICT and Business Transformation Manager	100%	Q4 2017/18	Zero touch arrangements were introduced for Windows 10 upgrades




2018/19 Strategic Actions

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	11	The Council will ensure that as external network opportunities are taken, internet bandwidth can be quickly (given reasonable notice) scaled up without requiring additional (and costly) installation work, in the event that existing network provision is being overloaded.	ICT and Business Transformation Manager	100%	Q1 2018/19	Facility to scale available with the current solution
Completed 	12	The Council will ensure that the Internet traffic can be prioritised based upon traffic type, so that traffic requiring a real-time' response can be prioritised over non time-critical traffic such as ordinary downloading, and hence provide a Quality of Service (QoS) capability.	ICT and Business Transformation Manager	100%	Q1 2018/19	Segregated arrangements in place e.g. for voice, streaming, customers


Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	15	The Council will monitor the environment and consider further enabling Wi-Fi facilities for fully mobile workers (those employees with no permanent desk, and for whatever reason do not work from home) they will need to be provided with a combination of wall ports to which they can connect, and the ability to connect to the councils wireless network.	ICT and Business Transformation Manager	100%	Q1 2018/19	Delivered as part of the New Ways of Working (NWOW) programme.
Completed 	29	The Council will Investigate appropriate solutions to replace the NetApp Storage Area Network considering strategic alignment with partner authorities.	ICT and Business Transformation Manager	100%	Q2 2018/19	Completed new solution in place
Completed 	71	The Council will review the In-house Network Server Monitor for Server availability, giving consideration to Microsoft server monitoring tools.	ICT and Business Transformation Manager	100%	Q2 2018/19	Microsoft solutions considered but thought overly resource intensive to be practical for use by smaller team.



2019/20 Strategic Actions


Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	18	The Council will continue to monitor the environment and further investigate 4G mobile communications which provides ultra-broadband internet and data network access on mobile devices to offer increased flexibility and capability to users out in the field.	ICT and Business Transformation Manager	100%	Q1 2019/20	5G is the latest market offering. ICT Services continues to monitor the opportunities to leverage the new technologies in a cost effective way.
Overdue 	35	The Council will further investigate Fixed Mobile Convergence (FMC) technologies to evaluate flexibility and cost effectiveness of single device connectivity to either mobile or VOIP networks if in range including VoWLAN technologies to provide flexible roaming VOIP connectivity.	ICT and Business Transformation Manager	50%	Q2 2019/20	The Council has investigated a number of solutions associated with FMC. A solution was implemented and initially provided a cost effective solution but was removed from the network following increases in cost. As other projects have developed this strategic task has become more aligned with the Microsoft Teams project. Progress has been made, for example telephone calls can be taken remotely using council laptop devices through the Council's current telephony solution. When Microsoft Teams is fully implemented this will include video calls. Mobile devices will also be enabled. There is no business impact as a result of the realignment of this project.

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Completed 	6	The Council will provide enhanced collaboration capability to facilitate Council employees in different locations (including home workers and mobile users).	ICT and Business Transformation Manager	100%	Q3 2019/20	Works on this have been expedited due to COVID-19 pandemic. Employees able to work from home with access to corporate systems and Microsoft Team video calling/meeting introduced to support collaboration
Completed 	19	The Council satellite offices can, where the business need generates the necessary financial backing, be provided with network redundancy by implementing multiple network links between the office and a hub site.	ICT and Business Transformation Manager	100%	Q4 2019/20	This strategic task is reviewed annually as part of the Business Account Management meetings.
Completed 	37	The Council will continue and investigate further its partnership approach to provide enhanced DR and failover capability based on SAN / Virtualisation technology.	ICT and Business Transformation Manager	100%	Q4 2019/20	ICT Services monitor opportunities that arise for enhanced disaster recovery (DR) arrangements. A share DR contract is currently in place between 5 Nottinghamshire authorities.

2020/21 Strategic Actions

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Overdue 	50	The Council will investigate with other local partners the practicality of a common security perimeter with appropriate protection.	ICT and Business Transformation Manager		Q1 2020/21	Little progress has been made on this action as a result of the COVID-19 pandemic. There is no business impact as a result of this delay.
Not started	62	The Council will invest time to consider new tools for deploying applications.	ICT and Business Transformation Manager		Q3 2020/21	
Not started	9	The Council will investigate the costs and feasibility of developing the current network by taking further advantage of IPVPN technology to give greater resilience for business continuity purposes, possibly utilising joined up partner authority networks.	ICT and Business Transformation Manager		Q4 2020/21	

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	7	The Council will investigate and assess, in collaboration with its partners, the use of Skype for Business as part of the overall strategic collaboration capability for the Council.	ICT and Business Transformation Manager	60%	Q4 2020/21	This strategic task was deferred to Q4 2020/21 (from 2018/19), there is no business impact as a result of this deferral. The Council is working with Microsoft and its partners to determine the best options for the Council when implementing the platform. As a response to COVID-19 the Microsoft Teams solution (the replacement for Skype for Business) was implemented in a limited capacity to allow collaboration etc... Further work is needed to be completed in order to add voice/telephony elements of the solution. This is actively taking place. Benefits have been achieved as a result of COVID-19 for example the work force are now familiar with the key elements of the system.
In Progress 	8	The Council will investigate and assess the requirement to upgrade and replace the Internal Core Network in line with the Replacement and Development programme scheduled for the 2018/19 financial year.	ICT and Business Transformation Manager	5%	Q4 2020/21	As part of the arrangement for sweating assets this strategic task was deferred to from 2018/19 to 2020/21. There is no business impact as a result of this deferral

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
In Progress 	10	The Council will consider the options to provide further enhanced Direct Internet Access (DIA) making a reliable, fully automated failover solution ensuring continuation of service by leveraging carrier-partners that are able to exploit circuits to any location utilising diverse underlying carriers.	ICT and Business Transformation Manager	50%	Q4 2020/21	This strategic task was deferred to Q4 2020/21 (from 2018/19) following the move of the data centre from the Town Hall to the Council Offices. The secondary failover link is now in place using a different provider/carrier. Work to conclude the project allowing automatic/seamless failover is still required.

2021/22 (to the end of December 2021) Strategic Actions

Status	Action	Action	Responsible Officer	Progress	Target Date	Comments
Not started	17	The Council will investigate modern WAN technologies to offer network flexibility and Business Continuity arrangements (i.e. Superfast Broadband Services, WiMAX long range wireless technology or other IaaS solutions).	ICT and Business Transformation Manager		Q1 2021/22	
Not started	49	The Council will continue evaluate the security and bandwidth implications of allowing public access to Internet facilities and services.	ICT and Business Transformation Manager		Q2 2021/22	
Not started	70	The Council will investigate new technologies which will automate software compliance.	ICT and Business Transformation Manager		Q2 2021/22	
Not started	46	The Council will consider introducing clustering the web server to provide increased resilience as part of the overall DR arrangements.	ICT and Business Transformation Manager		Q3 2021/22	