EAST HERTS COUNCIL

OVERVIEW AND SCRUTINY COMMITTEE – 5 NOVEMBER 2019

REPORT BY HELEN STANDEN DEPUTY CHIEF EXECUTIVE

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) JOINT
STRATEGY

WARD(S) AFFECTED: None

Purpose/Summary of Report

- To present the joint ICT Strategy 2019-2022

RECOMMENDATIONS FOR OVERVIEW AND SCRUTINY COMMITTEE: **That: Members Scrutinise the report and submit Members' comments to the Executive.**	
(A)	**Comments on the recommendation to ask the Executive to approve the Stevenage Borough Council (SBC) and East Herts Council's (EHC) Joint ICT Strategy 2019-2022., and**
(B)	**Reviews the recommendation that the Executive will be asked to approve For delegated authority to be granted to the Deputy Chief Executive in consultation with the Head of Legal and Democratic Services and the Head of Strategic Finance and Property to negotiate and agree a new ICT Shared Service Agreement with Stevenage Borough Council.**

1.0   Background

1.1   The Joint ICT Strategy was last published in 2015. The majority of recommendations and actions in the strategy have now been completed or superseded.

1.2   Following a series of independent reviews an ICT Improvement Plan was established in November 2017 to enable the ICT Partnership to take immediate action to improve the foundations of the ICT service with a primary focus on strengthening the resilience and security of the ICT infrastructure and to enhance ICT governance and service management.

1.3   Key outcomes achieved since the adoption of the plan include:

• Decommissioning of legacy business applications and servers to improve the security of the Council's systems
• Closure of the Hertford Data Centre
• Improved power resilience through the installation of a new power generator at Daneshill House and new uninterruptible power supply units that contain batteries to maintain power to the Daneshill data centre in the event of a power surge or outage.
• Completion of the Microsoft Exchange 2013 Migration Project
• Implementation of mobile device management
• Public Sector Network Accreditation in May 2019 following over 100 actions being completed over the preceding 9 month period.
• Award of a packaged software contract to enable direct purchase of 'off the shelf' software products
• Appointment of an ICT Strategic Partnership Manager with the right level of technical ICT knowledge
• Establishment of a New Security and Networking Team to look after the security and performance of ICT systems and network

- Creation of a Programme Management Office (PMO) to drive forward key ICT projects
- Procurement of Microsoft 365 and Hosted Desktop licences (to be implemented and rolled out during 2019/20)
- Installation of enhanced telephony technology

1.4 Despite this progress being made the adoption of a new ICT Strategy for the ICT Partnership is critical and will ensure that the operational services across SBC and EHC are provided with the appropriate technology, and that the technology is supportable, updated when needed, and that users are assisted in making the best use of it.

1.5 The Council's Corporate Plan relies on the efficient and effective operation of many services of a diverse nature. One factor that unites them all is a reliance on information technology. Technology continues to evolves at pace, and that means that user expectations are constantly changing, and so continual investment is required. The technology must not only be actively maintained, to keep it secure and fully operational, but regularly updated as older solutions become obsolete and unsupportable. It is important that this is done in a planned and coordinated way.

1.6 This approach extends beyond staff and Members to residents, who will need to be provided with the means to obtain many of their services online that is simpler, quicker and easier for them to use and cheaper for both authorities. This aligns closely with the Corporate Plans of SBC and EHC.

2.0 <u>Report</u>

2.1 In developing the ICT Strategy it has been necessary to take an incisive and realistic view of the current state of ICT across both SBC and EHC. This has helped determine how fit for purpose the existing infrastructure, applications and end user equipment is, how well the ICT Team serves the two organisations currently in terms of its structure, processes and

relationships, and what shape the team is in to move things forward. Many ICT strategies focus only on the new and exciting projects to be done to move the organisation forward, but these must be built on a sound base if they are not to fail in the future, and an honest appraisal must be undertaken to understand what must be remedied, to underpin future success.

2.2   The relevant key ICT issues and challenges faced by the Council that have helped to inform the development of the new ICT strategy include:

2.3   Changing customer expectations: The last decade has seen major changes to how customers engage with business, public services and each other, and the pace of change is increasing. It is vital that the Council exploits these channels to provide responsive engagement with its customers.

2.4   Digital Technology is now of even greater importance than 'traditional' ICT. Digital is disrupting everything and providing unprecedented opportunities, and we are living in a time of enormous change. It has been said that change is happening 10 times faster and at 300 times the scale of the first Industrial Revolution—and thus is having a major impact.

2.5   As Digital becomes ubiquitous, it is rewriting the way local authorities are delivering their corporate priorities and meeting business challenges. As local authorities continue to face austere times, the need for change has never been more important and the need for Digital transformation more relevant. It provides the opportunity to redesign the way in which the Council delivers services, to allow residents to have more control over how and when they access their services, to collaborate efficiently with communities and partners, and to support a culture of innovation. A Digital Strategy will need to be developed to demonstrate how the Council will effectively use new digital platforms and web based digital technologies to improve service delivery and help drive efficiencies.

2.6   An ageing Infrastructure: Following the creation of the ICT Shared Service in July 2013 between Stevenage Borough Council and East Herts Council, significant effort in the first couple of years went into the creation of ICT services that met the needs of both councils and delivered savings in the region of £400,000.

2.7   To this end the ICT Shared Service has delivered a shared network, data centres, corporate Wi-Fi, an ICT Service Desk and hosted desktops and delivered a range of projects from mobile working to customer payments. However over a period of several years, primarily due to austerity in the Public Sector, much of the technical infrastructure that supports the Council's ICT has been under-invested in, and become aged, unreliable, difficult to support operationally, and hard to maintain in a secure state. A substantial 'catch up' programme of work is now essential and needs to be built around sound strategic and architectural principles.

2.8   Cyber Security: the changing nature of cyber-attacks means that the ICT Partnership must manage the risk exposure of both councils and ensure that appropriate controls are in place to protect the information and data that is held.

2.9   ICT skills gap: Similarly to the ICT infrastructure until recently there has been a lack of investment in staff skills which has meant that the service has been lacking key technical capabilities to support the current infrastructure and the adoption of new technology. This has been addressed in part through the ICT Improvement Plan, however, there will be a need to permanently fund the additional capabilities and skills that have been recently recruited into the ICT Service.

2.10   A complex and inefficient business application landscape: Until recently ICT investments have been based on a bottom-up tactical approach, whereby operational teams within both councils have selected the technology solutions for their local

area and presented these to the ICT team to implement. This approach has created a complex variety of systems, a lengthening list of outstanding requirements for new business applications, and a burgeoning need to update the supporting infrastructure technology. This has resulted in both a complex and inefficient application landscape (143+ applications across the ICT Partnership), a heavy burden on the ICT team to maintain them, heightened security risks (as keeping them all fully patched and updated is a huge challenge), and insufficient free effort to address the ever-growing list of requested projects. Thus, the ICT Service has become a service that is both overloaded and often too busy to help, despite the best efforts of its dedicated staff, leading to reduced user satisfaction of services, the infrastructure receiving insufficient attention, and a significant degree of 'technical debt' accumulating.

2.11 The key considerations is that the underlying technical debt must be addressed, applications must be rationalised, the journey to the cloud must accelerate, governance must be further strengthened, and an overall strategic approach (as opposed to a reactive approach), in line with mandated principles of a new enterprise architecture that determines the type and number of business applications and systems, must be adopted. It is important that this is done in a strategically planned and co-ordinated way, to avoid unwise tactical investments in short term fixes, duplicated solutions, and the procurement of hard to manage systems. In addition the digital revolution is changing both the way that customers want to engage with council services and the consequent efficiencies and increases in productivity with which the council can achieve through the adoption and deployment of ICT and digital solutions.

2.12 The need for a strategic ICT approach: For the ICT Service to properly support both organisations, the ICT Partnership needs a sound ICT Strategy that matches and supports its

strategic aims and enables both councils to keep in step with developing technology.

2.13   The Council is facing challenging financial circumstances over the next three financial years and one of the main challenges for the ICT Partnership will be how to harness the potential of ICT to help maintain priority services and enable changes to service delivery all within the context of reducing financial and staffing resources. The contribution ICT will make to these endeavours is must be set out in future.

2.14   As part of the Council's integrated planning activities, a revised ICT Strategy in partnership with Stevenage Borough Council (SBC) has been prepared to cover the period 2019 to 2022. The ICT Partnership strategy is contained in ERP B.

2.15   Best practice, as encapsulated in the new ICT Strategy, requires that SBC and EHC jointly take a strategically-planned, top-down, approach to technology, which will represent a change to past practice.

2.16   The strategy has been developed in consultation with the ICT Team, Business Transformation teams, service teams, collaborative workshops, technological reviews, IT and service capability assessments and through an Informal Executive session.

2.17   A series of independent reviews of the ICT service have also been undertaken over the last two financial years to help inform the new strategy, these have included:

•   Socitm (Society of IT Managers in the Public Sector) Review and Security Assessment - 2018
•   SIAS Disaster Recovery Audit - 2018
•   Annual Public Sector Network Assessment (and associated independent health check)
•   Microsoft Navigator Discovery and Planning Sessions - 2018/19
•   Service Governance Review completed in May 2018

Socitm, Microsoft and other external partners have helped to also validate the strategical approach outlined within the strategy to delivering a resilient and secure ICT offer that meets the future requirements of both SBC and EHC. An examination of best practice in the sector, based on recently published ICT and digital strategies of other councils, along with advice from Central Government, shows that the Council is strategically aligned with others. The vital importance of a sound ICT infrastructure is universally recognised and the technical approaches (Enterprise Architecture, Digital Strategy, Software as a Service, a focus on cyber security, etc.) have been widely adopted.

3. <u>Aim and Vision</u>

3.1 The ICT Strategy articulates the ICT vision and objectives now and in the future. The Partnership vision is to create a modern and transformational ICT service that drives and supports delivery of joined up services to customers through the effective use of technology.

3.2 The strategy comprises the following:

- An introduction to the ICT Strategy, including reference to how the strategy aims to build on existing technologies and investments, support organisational transformation programmes, accelerate customer digital self-service and increase staff productivity.
- The ICT Partnership vision and the benefits of the Shared ICT Service
- The strategic ICT ambitions and strategic technology objectives and outcomes
- A clear commitment to green ICT and a set of ICT Guiding Principles
- The impact, benefits and strategic actions/deliverables for each strategic ambition

- The future profile of the ICT Service, describing the structure, operating model and the governance and monitoring arrangements
- The appendices to the strategy include further information of the investment priorities and the roadmap for delivery.

3.3   The Strategy sets out a framework for technological change and adoption. A series of four ambitions have been identified that capture the underpinning strategies, plans, and actions that will be required in order to deliver the ICT vision.

3.4   The Council will invest and deliver new digital customer facing services through its Digital East Herts Programme. In providing this the Council will improve the responsiveness, availability and usability of services. This will accelerate the take up of online services by customers. The Council as a result will deliver end to end solutions that provide a more responsive and cost effective service offer to its customers.

3.5   Digital by Choice: It is the ambition of the Council to be 'Digital by Choice', so that customers will choose to interact with services through digital channels, rather than by phone, email, letters or face-to-face, because digital interaction will be compellingly easier, quicker, and more convenient.

3.6   Ensuring residents and businesses can access key transactional services and information 24 hours, 7 days a week is a key priority of the Council.

3.7   Digital Strategy: The Council is committed to develop and published a Digital Strategy during 2020 and to redefine/refresh the Digital East Herts Programme, aimed primarily at streamlining the way customers interact with the Council, but also seeking to achieve internal efficiency improvements. There is an opportunity to do this in partnership with SBC and/or align digital programmes and projects in the future that benefit both councils.

3.8   The current estate of 143+ applications is extreme and best practice elsewhere indicates that an estate across SBC and EHC of 100 or so applications is a realistic goal to aim for. This may require some compromises, but will be overall far more efficient and cost effective for the ICT Partnership as a whole, will allow applications to be properly supported, and will assist in the provision of training and recruitment of local super users. Any future investments in business applications must be based on full business cases, approved through the ICT governance structure, and incorporating planned benefits realisation, metrics and the recouping of planned financial savings. This has already commenced with the formation of the IT Steering Group, which has been meeting regularly since September 2018.

3.9   The ICT Strategy aims to build on existing technologies and investments and will deliver a high performing, resilient and secure infrastructure that will give both councils the confidence to take forward their digital delivery ambitions to the benefit of local residents.

3.10 **Network devices**: the current network devices are ageing in most areas, with some elements such as switches being 13 years old (8 years beyond its expected life span). This is unsustainable and is seriously affecting the performance of core systems. The benefits of constructing a new network will be an improvement in the speed of business applications, improve availability of systems and the reduced chance of security breaches. Dependent upon the Enterprise Architecture that is adopted there may be a future requirement to put in place web acceleration technology that allows the prioritisation of data flow to cloud based services.

3.11 **Technology lifecycles**: The introduction of technology lifecycles and rolling change programmes will ensure every component of the ICT infrastructure has a defined usable lifespan, which will be determined by a range of factors, the speed at which it runs, supportability, reliability and

compatibility with new systems.Financial forecasting must take into account these life cycles to ensure systems are and continue to be 'fit for purpose' and the ICT Partnership in future avoids a future technology debt. An infrastructure replacement programme will be established by the ICT Programme Management Office to enable good financial planning.

3.12 **Cloud Strategy**: The Council will look at cloud based solutions when applications and systems need to be replaced or during the implementation of new solutions. If a cloud solution is the only available solution, is cost neutral or brings considerable other benefits then it should be considered. However where there are also self-hosted solutions these will also be appraised in light of the restricted finances of the Council and the significant increase in revenue costs that most clouds solutions bring.

3.13 **Microsoft Office 365**: A key deliverable of the strategy will be the provisioning of Microsoft Office 365 which will move email, word, excel and unstructured data into the cloud during 2019-20. The benefit of Microsoft Office 365 is that it provides a wide range of additional Microsoft services such as Intune, Teams and many others. Being a cloud hosted solution it will bring improved system resilience and performance. As an evergreen product the ICT Partnership will benefit from timely upgrades and patching as this will be automatically delivered by Microsoft.

3.14 **New Virtual Desktop Infrastructure (VDI):** The ICT Partnership is at present using end of life VMWare software to host business applications. New VDI technology has been procured and through rolling out the proposed strategy the ICT Service will implement new hosted (VMWare) desktops during 2019/20. New Virtual Desktop Infrastructure will be a core component of the ICT Service with the benefits of increased flexible working, reduced process and file sharing,

improved security, centralised backups and reduced costs as it is much easier to support and maintain.

3.15   The ICT Partnership will build a culture of innovation where SBC and EHC make the best use of the creative talents of staff, Members, partners and customers to improve working practices and processes. The ICT Partnership will provide mobile ICT and digital services and tools that allow staff and Members to work anywhere at any time.

3.16   **Service Transformation and Modern Working Practices**: The ICT Partnership will use ICT to allow each council to embrace modern working practice, rationalising office accommodation requirements, eliminating unnecessary bureaucracy and administration, and supporting community based service delivery. Change is difficult to achieve and requires input, direction and support from the leadership team to deliver the ICT vision and ambitions set out in the ICT Strategy. Both SBC and EHC have aspirations to deliver service transformation through ICT and digital solution enablement. The Council will develop new digital transformation strategies that set out how the organisation will use digital platforms, hosted desktops, Office 365, business applications and innovative technology to redesign service delivery models and supporting processes.

3.17   **Innovation Board and Forum**: The Partnership will create an Innovation Board where staff and members can present ideas on how existing and new technology could be used to improve service delivery and remove inefficiencies in the way that they work. An Innovation Forum to discuss emerging industry trends and technology will promote idea generation across the Partnership. This will help embed a change culture across the Partnership, limiting duplication of effort and investment and increasing knowledge sharing.

3.18   **Digital enablement of council staff and Members**: An internal culture change and training programme will need to

be a significant part of the Digital Programme. This is an area that has had insufficient attention in the past, when it has been apparent that simply introducing a technology into the business has not always led to its successful adoption, or the realisation of anticipated benefits.

3.19 **Hardware Devices**: The ICT Strategy makes specific proposals in terms of end-user devices, service desk support, and the need to rationalise the number and type of devices (2000+ devices) and the number of operating systems (20+) that need supporting across the ICT Partnership. The move to a more flexible and digital workforce where staff are empowered to work in the community, at home and via hot desking will be facilitated through the effective provisioning of hardware such as laptops, tablets and smart phones.   Currently there are no budgets in place for device replacement for Officers or Members. In future it is proposed that the Council will correct this by allocating an annual capital budget to ensure the timely provisioning of new devices for staff and Members. Members should receive new devices during 2020/21 as part of the programme.

3.20 **Good Governance**: The importance of good governance is outline in the strategy, covering both the business as usual operations, but also projects for new ICT systems. Strong governance through the ICT Partnership Board, ICT Steering Group and a new Member ICT Group will allow progression from the current era of order-taking, with a long list of projects to be done, into a new era of strategic planning, robust business cases with future savings factored into budgets, and a strong focus on benefit realisation. A standardised policy framework will ensure a high level of security is met across the entire ICT Partnership's network. To continue to have differing ICT policies applied across SBC and EHC is not only technically difficult but will cause problems when it comes to enforcement, so in future where applicable all policies will be universal to the two councils.

3.21   **Information Security**: is a critical focus within the strategy given the increase in the amount of cyber threats faced by the ICT Partnership and the diverse ways that information can now be shared. The strategy places a great emphasis on protecting ICT systems against threats and maintaining constant vigilance to protect both councils against any new threat. Cyber security risk assessments will be carried out when selecting new systems, online services or implementing digital processes.

3.22   **ICT Team**: The functions of the ICT Service are described within the strategy, and it is proposed that a future permanent structure be formed along these functional lines. These include the permanent funding of a new Security and Networking, ICT Programme Management Office and strengthening the Service Desk. A proposal is being developed on how a new joint Information Governance Team could be established for SBC and EHC to cover the ICT Partnership's data protections statutory requirements.

3.23   **Sourcing Strategy**: The adoption of a single ICT Strategy for SBC and EHC and an associated ICT roadmap will enable the Council to make better strategic investment decisions, based on agreed objectives and outcomes as opposed to short term tactical business priorities. In future technology purchases will need to conform to the new Enterprise Architecture and the associated ICT design and guiding principles within the strategy. Making technology purchases in line with the strategy will be an important discipline. Failure to do so could impact the business and affect the ICT Services ability to execute the ICT Implementation Plan. ERP E

3.24   A strong project management approach will be taken to ensure the delivery of the plan. The intention of the ICT Partnership Board is for iterations of work programmes to be developed, each of which will be published with a corresponding implementation plan or roadmap. The plans will be submitted for approval in line with the ICT Partnership

governance arrangements, culminating in an evolving ICT Strategy. These plans in future will include, a new Enterprise Architecture that incorporates the consolidation, simplification and standardisation of business systems, the Digital Strategy and finally business priority led delivery projects such as the replacement of Geographical Information Systems.

3.25 **Performance Monitoring and Progress Reporting**: The ICT Partnership Board will receive a monthly performance report that will monitor progress against the ICT roadmap and ICT management KPIs.

3.26 **ICT Shared Service Agreement**: The Council entered into an ICT Shared Service Agreement for an initial five years with Stevenage Borough Council in 2013. The recommendation is that the Council should enter into a further 3 year partnership agreement to coincide with the lifespan of the proposed ICT Partnership Strategy. Both council's through the delivery of the strategy will continually look to achieve maximum value for money from their ICT investments. The success of the shared ICT Strategy depends on close working between SBC and EHC. This includes exploiting and promoting common software and hardware solutions across organisations.

3.27 It is therefore recommended that delegated authority should be given to the Deputy Chief Executive, who is the appointed EHC representative on the ICT Partnership Board to negotiate and agree a new 3 year Partnership Agreement and funding model having **c**onsulted the Executive Member for Financial Sustainability.

4 Options

4.1 Do Nothing: Failure to adopt the ICT Strategy will result in increasingly poor levels of service, and the risk that the Council will not be able to deliver its services effectively.

4.2   Propose spot fixes and short term extra resource: Spending additional funds by increasing the size of the ICT team short term, and adopting solutions that have been proposed to meet limited local needs would be an expensive way of propping up a fundamentally flawed ICT landscape, and would lead to spiralling costs and further declines in service quality. Such an approach would not be sustainable and would likely lead to the growth of 'shadow IT', with departments seeking their own solutions from external providers without the involvement of the ICT team, thereby risking overall security, achieving poor value for money for the Council, and limiting the Council's ability to make best use of its data.

4.3   Adopt a strategic approach: recommended. ICT exists only to support the needs and successful operation of organisation, and an ICT Strategy must operate top down if it is to achieve this. The approach recommended provides a logical flow from corporate to operational needs, examines relevant technology trends and best practice, examines where the ICT Partnership's current provision is and where it falls short, paints a vision of a desirable and achievable future state, and proposes how to get there, in the context of improved organisational governance. It is recommended that this approach is adopted. The ICT strategy and to follow a Digital Strategy will be significant enablers for the Council to meet its strategic needs, both will ensure that the present 'log jam' of poor service, frustrated users and a difficult to maintain ICT landscape is resolved.

4.4   The draft ICT Strategy has been presented and considered by Members at Stevenage Borough Council in October2019. Upon approval of the ICT Strategy a public facing digital document summarising the key ambitions and ICT projects will be produced and placed onto the Council's website. The ICT Strategy has also been captured as a 'plan on a page' as an easy reference document for staff and Members and can be seen in ERP C.

5.0 Implications/Consultations

5.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

5.2 Finance: Capital estimations are detailed in ERP D, revenue pressures are estimated:

ICT Revenue Pressures (indicative)	2019/20 £	2020/21 £	2021/22 £	2022/23 £
VM Ware Licences – (Hosted desktop)	45,000	45,000	45,000	45,000
Additional ICT Posts		137,926	137,926	137,926
Storage Support	9,600	9,600	9,600	9,600
Cyber Security Incident Management Procedure and Disaster Recovery		5,000		
Microwave Solution Support	3,500	5,000	5,000	5,000
Enterprise Architecture	43,000			
Technology Advisory Partner(s)	100,000	334,000		
Total	201,100	531,526	197,526	197,526

Background Papers

ERP B – Strategy
ERP C – One Page Plan
ERP D – Capital pressures
ERP E – Implementation Plan
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