ICT Strategy
2010-2011

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Cheshire East Council

1. Summary

An ICT strategy is a key success factor for a modern organisation. This strategy summarises how the ICT Strategy team, ICT Shared Service and partners contribute to the success of Cheshire East. The strategy is based on three key principles:

- To transform services through prudent investment in technology
- To drive costs down
- To work with partners in ways which maintain Cheshire East's freedom to innovate and act, while at the same time achieving the benefits of economies of scale and understanding of industry good practice that come from sharing services

An ICT Strategy ensures that everyone who needs to be is aware of the vital importance of ICT to the achievement of business objectives. At the end of the strategy there is a glossary which explains acronyms and technical terms.

2. Business context

Cheshire East has broken new ground in using Information and Communications Technology (ICT) to improve processes and much more importantly, it can bring about improvements for citizens in their daily lives. It used to be said that ICT is a key enabler of local authority services. Now it is more than that – it is at the heart of everything the Council does.

The ASPIRE core values of the Council are embedded in our approach to the delivery of ICT services. For example, we:

- Take **action**, by implementing new technology to support new, lean business processes
- **Support** clear and effective communication with service users using the internet and phones
- Put **people** at the heart of what we do by engaging directly with citizens and providing ICT services to the community
- Demonstrate **integrity** in our dealings with our staff, as we rationalise arrangements for the delivery of ICT
- **Recognise** the contribution that investment in ICT makes to the achievement of corporate objectives
- Draw on industry best practise to deliver **excellent** ICT solutions in response to customer requirements.

Every service Cheshire East provides benefits from the innovative approach to ICT to which Cheshire East is committed to. This includes the development of partnerships with other organisations, ranging from our immediate geographical neighbours such as Cheshire West and Chester, through to partners in service delivery such as the NHS, Police and Fire and partnerships with the voluntary and private sectors.

Environmental considerations will be at the forefront of the Council's approach to ICT, both to assist in the delivery of the Council's policy on the environment and to drive down costs, achieving both objectives through measures such as investing in the Council's ICT estate to reduce electricity usage. Investment in energy conservation must in the future be rigorously based on an assessment of return on investment.

Cheshire East has adopted a Corporate Plan which is embedded within a strategic planning framework for the whole community. This framework envisages strengthening communities through devolving service provision while at the same time reducing the inequalities between different geographical areas of Cheshire East.

The local agenda

Localism values the unique local features which give strength to a community. This ranges from local culture to local enterprises, especially in the agricultural and food industries. Cheshire East is an area of contrasts, from remote sparsely populated areas, to major townships. The local agenda is a concept with a long provenance that has received broad support over many years from a wide variety of political opinion. However, too often in the past the financial argument of economies of scale has meant that the specific needs of local communities have not been reflected in local, national and regional policies.

Digital communications, which can reach and empower local communities, is a technology which can change that. For the first time we can reflect local needs and drive costs down.

Cheshire East is working with partners in all sectors of the economy to bring affordable high capacity digital communications to all the citizens of Cheshire East. This will embrace not only existing technologies using fibre optic cable, copper telephone lines and wireless connection, but will also explore new technologies to increase the capacity and coverage to citizens and businesses. Furthering the local agenda achieves some of the other objectives set by Cheshire East, for example the economic development of local businesses in rural areas by affordable digital communications.

3. ICT contribution to business success

Appropriate and cost-effective use of Information and Communications Technology (ICT) is essential to the success of any local authority. Effectively without ICT the Council would not exist to a majority of citizens.

There are many services which become dramatically better and cheaper with the effective application of technology. These range from registering a birth, through to arranging a funeral and encompass a huge range of other services which impact on the daily lives of citizens.

The Cheshire East website is one of the key means by which the public transacts with the Council. This high quality website has been recognised by SOCITM, and been awarded three star status.

Cheshire East is committed to prudent and cost effective financial management and the only way that this can be achieved is through investment in technology. Cheshire East will, at the same time, be proactive in seeking out investments in technology that will benefit the citizen.

The national drive to reduce public spend that has strengthened during 2010 is entirely consistent with the approach adopted by Cheshire East from day one. Specific requirements and objectives will crystalise during the forthcoming months. Themes so far identified are:

- Driving out cost
- Service transformation: A better service for citizens and businesses, a better deal for the taxpayer, electronic data sharing between professions, citizen access to electronic records, modern methods of accessing services/choice of channels, access to broadband for citizens and businesses. ICT is the key enabler of business transformation
- Open Government: transparency of how the local authority conducts business
- Privacy: the safeguarding of the personal data of citizens

People want improved quality and access to services, but they also require their personal, financial and family privacy to be protected. Identity theft is an increasingly global concern and as an organisation, we have the responsibility to ensure that information is protected. We must ensure that the right people get the information they need, whether on paper or by electronic means, while working to prevent misuse by others. Cheshire East is committed to safeguarding the data of citizens using all means of information security at our disposal based on industry best practice and national government legislation.

Of crucial importance is the Council's belief in electronically enabling every citizen through broadband technologies. These will include the more familiar means of communication such as DSL technology, but will embrace new technologies such as ethernet over power lines which use the existing electricity distribution infrastructure to bring high capacity broadband into all homes with mains electricity. This new technology has the power to dramatically reduce power consumption not only of the Council itself – but, much more importantly, for local communities in their entirety. Because it achieves much more effective capacity planning, it reduces the need for power generation.

Digital communications is so vital, that a new emphasis will be placed on business continuity through the development of innovative ways of providing data centre services. This will locate processing and data storage simultaneously in more than one geographical location to safeguard against service outage.

Containing the cost within what can be afforded will be done through partnerships with other organisations. Potential partners will be chosen from the public, private and voluntary sectors.

4. ICT principles

- We align ICT services with the organisational development and business transformation agenda
- We deliver value for money by sharing services and costs with partners
- Our contribution to business change initiatives is achieved through alignment with a corporate project management methodology
- Technology is selected and deployed in a way that reflects the environmental agenda and thereby ensures environmental sustainability as well as driving down running costs.
- We provide a single point of contact
- ICT services are integrated with mobile/flexible working initiatives
- Service delivery is client-focused, offering local training and support
- We provide a timely response to problems
- Service metrics are integrated with corporate performance management processes
- Technology is used to enable the corporate policy to centralise common business processes
- Technology is used to standardise, streamline, automate and optimise business processes across organisational units
- We design systems and processes so that data entered once is applied many times thereby significantly reducing manual handling
- We will complete the consolidation and optimisation of the underlying infrastructure, supporting ICT and delivery business processes to achieve efficiency savings
- We continue to identify best practice in the marketplace and strive to optimise to best of breed performance standards
- We will create capacity to develop and expand services to include additional partners and customers.

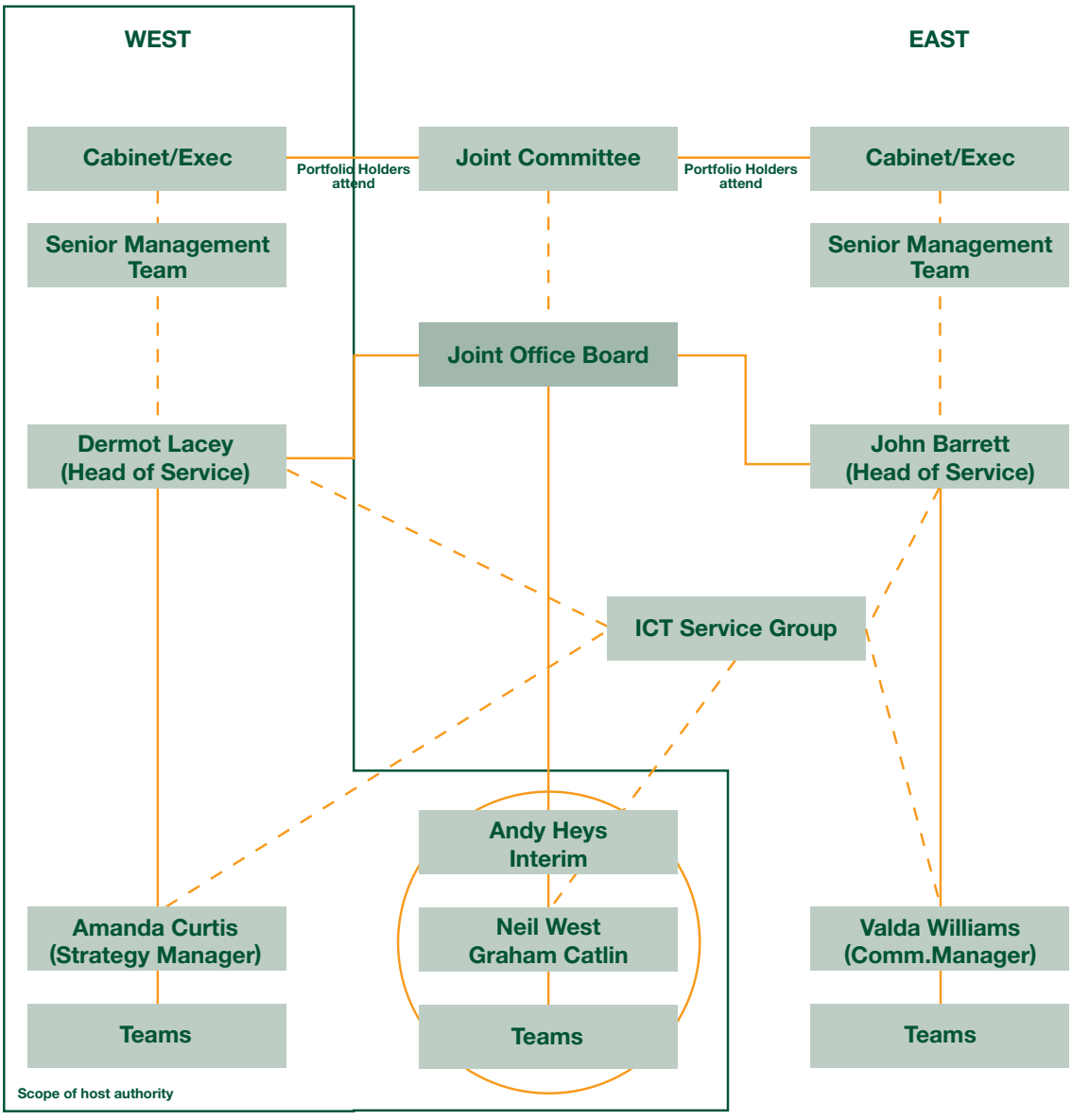
5. ICT governance

Cheshire East is committed to the concept of shared ICT services across and beyond the public sector. Schools are already an important component of this shared service. An ICT Shared Service has been developed with, and hosted by, Cheshire West and Chester. Over the past year, ICT Shared Service has:

- Supported approximately 12,000 users, 600 sites, 500 servers and 450 applications;
- Introduced formalised out-of-hours support;
- Supported staff and office moves as both Councils move staff across their estates;
- 200 projects in progress, with 130 projects delivered to date. Key projects include new Council internet sites, completion of a new data centre and compliance with Government

Connect requirements;
- Achieved ISO9000 (Quality) certification following an external audit;
- Won a SOCITM award for project delivery.

The diagram below illustrates the current governance arrangements for ICT Shared Services:



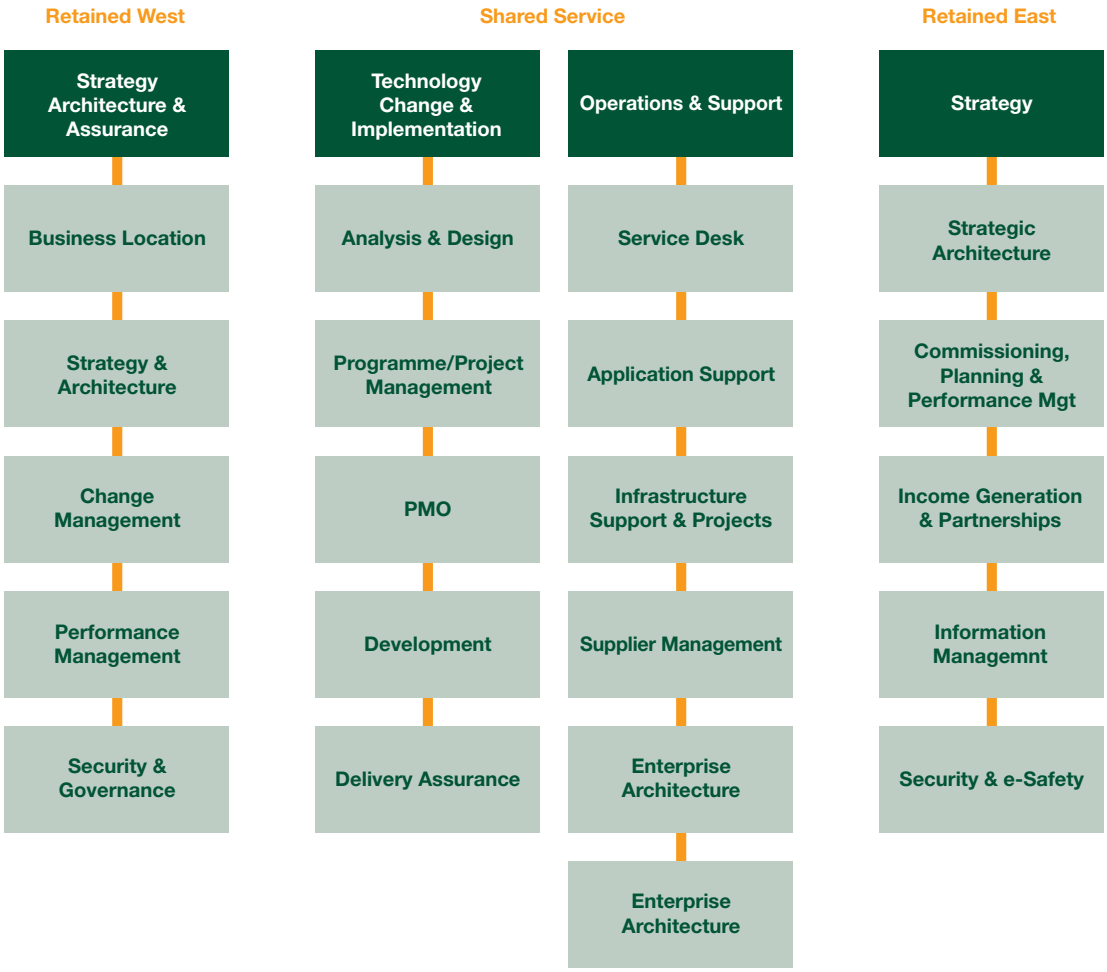
The 2 main bodies that formally govern all shared services are:

- Joint Committee (JC). This is a formal governance body, consisting of members from each client with constitutional powers delegated from each authority, so is effectively the ultimate power for these services and all shared services are accountable to the JC.

This committee mirrors the role of shareholders in a business, i.e. they are investing the resources of the two Councils to get a return on their decision to share, through a more efficient and effective set of services;

- Joint Officer Board (JOB). ICT Shared Services is accountable to a formal JOB which is chaired jointly by the section 151 officers of both councils. The JOB's role mirrors that of a board of directors and oversees business strategy and planning, operational and financial performance, issue management and transformation.

The diagram below shows the structures of the Cheshire East, Cheshire West and Chester and the ICT Shared Service organisations:



The current ICT shared service arrangements have had to be developed from scratch. This has taken time and is a maturing model, with all parties learning and adapting as we go. However, overall a number of key milestones have been achieved:

- Legal agreements have been put in place covering the overarching sharing arrangements for and the specific arrangements ICT
- An ICT Business Plan 2009-10 has been agreed and will need to be revised soon for 2010-11
- An ICT Service Catalogue has been drafted and is currently being negotiated, which will lead to the identification of key tasks and associated service level agreements
- ICT Shared Services has already made significant contributions to financial savings and income; whilst further savings are anticipated in the future after projects such as Oracle optimisation and ICT harmonisation are completed.

From an operational perspective, ICT Shared Services have effectively kept the business running whilst going through the period of transition following Local Government Reorganisation. Alongside this, for the most part, income and customers associated with current contracts and service agreements, such as those for schools have been retained.

The main purpose of the ICT Shared Service is to develop, operate and deliver a cost-effective, quality and efficient ICT service, reducing costs through the introduction of lower cost technology while enabling each authority to pursue their transformation agendas and introduce fundamental business change. In order to drive efficiency and further progress the collaborative working agenda, the ICT Shared Service will actively identify opportunities for implementing common and shared applications and infrastructure between the two authorities. The shared service promotes a single infrastructure that is flexible enough to meet the needs of both CE and CWAC.

For equipment, the scope of the shared service can be summarised as:

- Procure, install, maintain and operate ICT-related assets and equipment at data centres and other agreed core processing locations, including servers and related ICT equipment
- Procure, install, maintain and operate a data and voice network, including Wide Area Network (WAN) and Local Area Networks (LANs) at each site along with remote access functionality
- Procure, install, maintain and operate ICT-related desktop assets including desktops and/or portable computing equipment, telephony equipment and other agreed peripheral equipment.

Once commissioned by ICT Strategy; for ICT project and development services, the scope of the shared service can be summarised as follows:

- Provide resources to develop system analysis, design documentation and test specifications
- Provide programme and project management specialist skills, using standard programme and project management methodologies based on good practice and industry standards
- Provide development and configuration resources for new infrastructure and applications
- Undertake robust and coordinated assurance of business solutions to ensure that testing is robust and fit for purpose and that systems are accepted by users.

For support services, the scope of the shared service can be summarised as follows (including other external organisations and schools, in accordance with agreed service levels and funding arrangements):

- Provide support for, and attempt to resolve, issues and problems, including issues associated with ICT and telephony equipment, applications and information
- Handle requests for additional, replacement or disposal of ICT and telephony related assets and equipment, in accordance with agreed approval and budget arrangements
- Maintain technical documentation.
- Manage joint ICT-related suppliers, contracts and licences, as commissioned, by the ICT Strategy team.

Generally the ICT Shared Service will adhere to all legal and statutory obligations, including operating to recognised standards, supported by certification by industry bodies as required by the client authorities and maintaining the appropriate level of security for data and ICT

equipment as documented in the ICT security policies developed by each authority.

These sharing arrangements have been in place and operational for a year. During this time significant work has been done to address corporate ICT issues, such as finance and procurement protocols and manage a large programme of work required to disaggregate transitional shared services and drive changes through shared services to reduce costs and increase efficiency to benefit all involved.

At the Shared Services Joint Committee on 31st March 2010, Members recognised the achievements of the ICT Shared Service over the first year of operation; through a period or great transition and upheaval for both Cheshire East and Cheshire West and Chester councils and confirmed their ongoing commitment to these arrangements. Looking to the future, however, it was agreed that, in principle, ICT Shared Services should form a separate legal entity to the Councils which would allow ICT to adopt a more commercial approach to service delivery. ICT Strategy will work with ICT Shared Services (and others) to develop the new entity; and ensure its successful implementation by March 2011.

6. ICT financial management

The adoption of a sound financial model for ICT services is as important as the choice of the right technology. Cheshire East inherited a complex financial scenario from the four previous authorities. A key objective over the 2010/11 financial year is to simplify this picture and streamline the financial management of ICT.

The ICT service currently relies on revenue and capital from a number of different sources in order to run services and deliver its programme of work. The sections below set out the risks and issues for each of these funding sources.

The permanent revenue resources for the central ICT services are funded by:

- Base budget
- Charges to schools
- Staff recharges to capital
- Other recharges to services

Two thirds of revenue is spent on staffing costs. Not all permanent employees are funded from revenue. Instead, they are recharged to the capital programme. An annual capital programme of approximately £900k is required to provide sufficient funding for all these staff.

Capital costs are funded by capital reserves, unsupported prudential borrowings and grants. The use of the capital reserve to fund significant new ICT investment is probably not sustainable over the medium term. As a result, the use of unsupported borrowings is likely to increase. This has a revenue impact.

In addition to ICT Strategy, many individual Services hold significant budgets covering licences, maintenance contracts and staffing. We continue to exploit opportunities for consolidating these budgets.
Appendix C contains further details in relation to financial management.

7. ICT infrastructure strategic direction

The technical strategy for Information Technology should meet the following principles:

- Cost effective and value for money (including total cost of ownership)
- Environmentally friendly
- Manageable
- Scalable
- Sustainable
- Secure
- Interoperability including standardisation
- Maximise use of resources

Generally ICT Strategy will try to select the most suitable, widespread and / or the de-facto industry standard products. Harmonisation of the standards from the legacy councils will be continued to ensure that there is common functionality to maximise continuity, good practice and lower support costs.

There is a “position statement” document which details the considerations for application assessment. See Appendix B - strategic direction for IT Infrastructure

8. ICT services and processes

Cheshire East, in conjunction with partners, adopts a flexible approach to the use of international standards and methodologies. We avoid a bureaucratic approach and use simple processes with clear documentation. Where it is beneficial we will obtain accreditation for our processes. ICT Strategy is looking to achieve ISO 38500.

Cheshire East ICT Strategy has worked with the ICT Shared Service’s Service Improvement Group to ensure that national best practice is adopted in project and programme management, using PRINCE2 to manage projects and MSP to manage programmes. ITIL will also be used to support the management of ICT services. A Technical Design Authority is operating to ensure that new systems can interoperate with existing technology and that they conform to the Council’s standards.

An internal Quality Management System is operated and has been accredited through ISO 9000 within the ICT Shared Service. Cheshire East ICT Strategy is keen to work with ICT Shared Services to adopt ISO 20000 standards in relation to the Service Catalogue.

ICT services and processes will also be judged against the Council’s green agenda.

Subscriptions to representative bodies will be maintained where these give good value. These will be limited in number to ensure focus on benefits. They will include SOCITM, and international consultancies such as the Corporate IT Forum (tif), Ovum and the Gartner Group.

9. ICT application portfolio

Business applications are integrated into the front-line business processes and are essential for everything the Council does. The current application infrastructure encompasses both shared and CEC specific systems, support tools and common technical services inherited from the four predecessor authorities.

The application portfolio has evolved through the implementation of bespoke systems, packages and self service applications. These have different life spans, support requirements and business continuity capabilities.

There have been significant opportunities for the consolidation and convergence of systems over the past year. These continue to be exploited to drive out economies of scale and improve operation and support.

Partnerships with other agencies are being explored to strengthen delivery and maximise agility and flexibility.

We have developed and will maintain roadmaps for business applications, designed to support the business processes of the authority. These plans are aligned with the IT infrastructure principles described in section 4 and also address:

- business application harmonisation requirements
- environmental considerations
- business continuity requirements
- the demands of a mobile workforce
- growing data volumes within a national data sharing context
- the need for flexibility to support an agile business

See Appendix A for detailed information on the strategic direction for key applications.

10. ICT infrastructure

The existing ICT infrastructure consists of the following layers:

A Wide Area Network, which has capacity to meet the needs of Cheshire East, its present partner Cheshire West and Chester, and other potential partners such as the Fire Service, for some years to come. It will require ongoing investment, but as a consolidated and converged network it represents a major strategic asset comparable with international best practice.

Cheshire East inherited three data centres which are wholly owned and used exclusively by Cheshire East (Macclesfield Town hall, Sandbach and Crewe). It also shares the use of other data centres with Cheshire West and Chester (Backford Hall, Minerva Avenue and Chester Town Hall). This mixed estate of data centres presents a clear opportunity to reduce ongoing costs and to improve resilience through rationalisation and harmonisation.

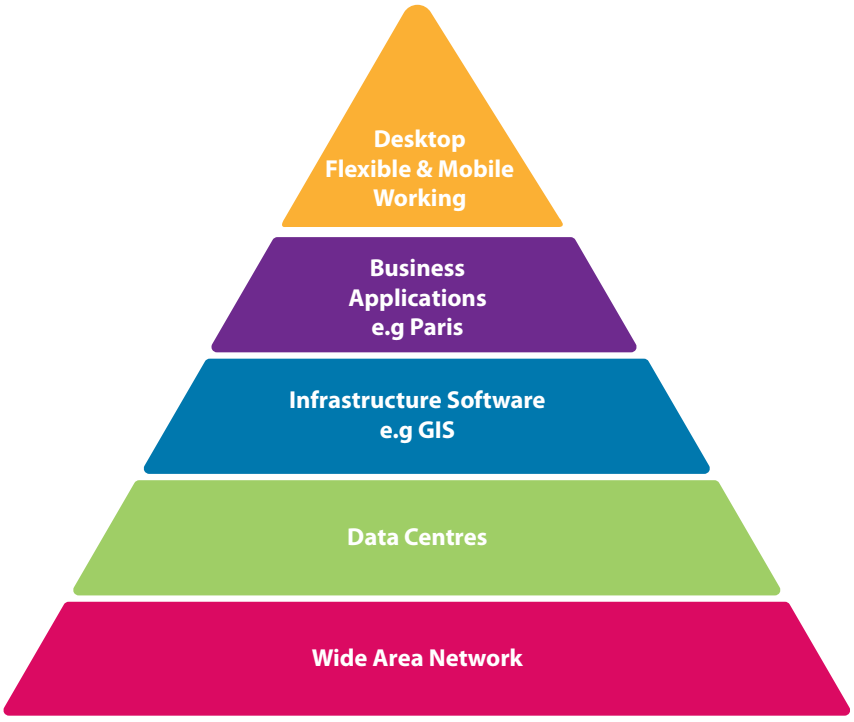
The Data Centre in Macclesfield Town Hall is being refurbished during the summer of 2010. This is being undertaken as a project integral with the development of a new CCTV monitoring centre which will be based on the Macclesfield Town Hall Data Centre. When the Macclesfield Data Centre and CCTV centre are complete, the Data Centre and CCTV monitoring facility at Sandbach will be decommissioned.

Cheshire East inherited an estate of servers and storage which is mixed but comprises for the most part Oracle on an AIX Unix platform and Microsoft SQL. Significant virtualisation has already taken place. With about 75% of servers virtualised this represents industry best practice already, but even greater benefit can be achieved from further virtualisation and harmonisation.

Opportunities are being taken to reduce cost and reduce the impact on the environment through adopting best practice in energy management and where possible these are synchronised with the harmonisation of business applications. Underlying infrastructure software such as geographical information systems (GIS) will be further developed and maintained in partnership.

Cheshire East inherited an estate of some 6000 desktop computers and laptops from the previous councils. A desktop strategy is being finalised to achieve rigorous standardisation to drive down running and support costs and to improve the overall experience of the user. From the beginning of the 2010-11 financial year the budgets for replacement and new desktop equipment have been unified and centralised under the control of the Cheshire East ICT Service. This includes desktop and laptop PCs, telephones, both desk and mobile, handheld devices such as Blackberries and network printers, scanners, copiers and Multi-Function Devices (MFDs).

The following diagram represents the different layers that make up the ICT Infrastructure;



11. Information Management

The scope and portfolio for Information Management (IM) covers the following broad areas:

- Governance
- Security
- Data Quality
- Records Management
- Compliance

IM considers information in any format – paper and electronic documents, email, photographs, maps, throughout its lifecycle from when it is received, created or captured until it is archived or destroyed.

Through a programme of work we will provide a set of corporate tools, standards, and protocols to enable this to be done in the most efficient and effective way to support the business and ensure that the authority's legal and statutory obligations are observed. This will ensure that the right people have the right information at the right time to do their jobs.

There will be a long term strategy to ensure that the majority of information being created and retained by the authority is electronic. This will ensure flexible and mobile working initiatives are supported as well as reducing the pressures upon the authority's estate. Appendix D provides a summary from a more detailed IM, ECM, Records Management, and Business Intelligence Strategy.

12. ICT structure, staffing and sourcing

Effective workforce planning is fundamental to the achievement of ICT Strategy service goals and objectives in the short and longer term. It's about, understanding the people implications of achieving service priorities and putting in place plans to ensure the **right people**, with the **right skills** are available at the **right time**, in the **right place**. This helps ICT to develop a workforce profile which continues to be 'fit for purpose' and is 'agile' in supporting the service to initiate and adapt to change.

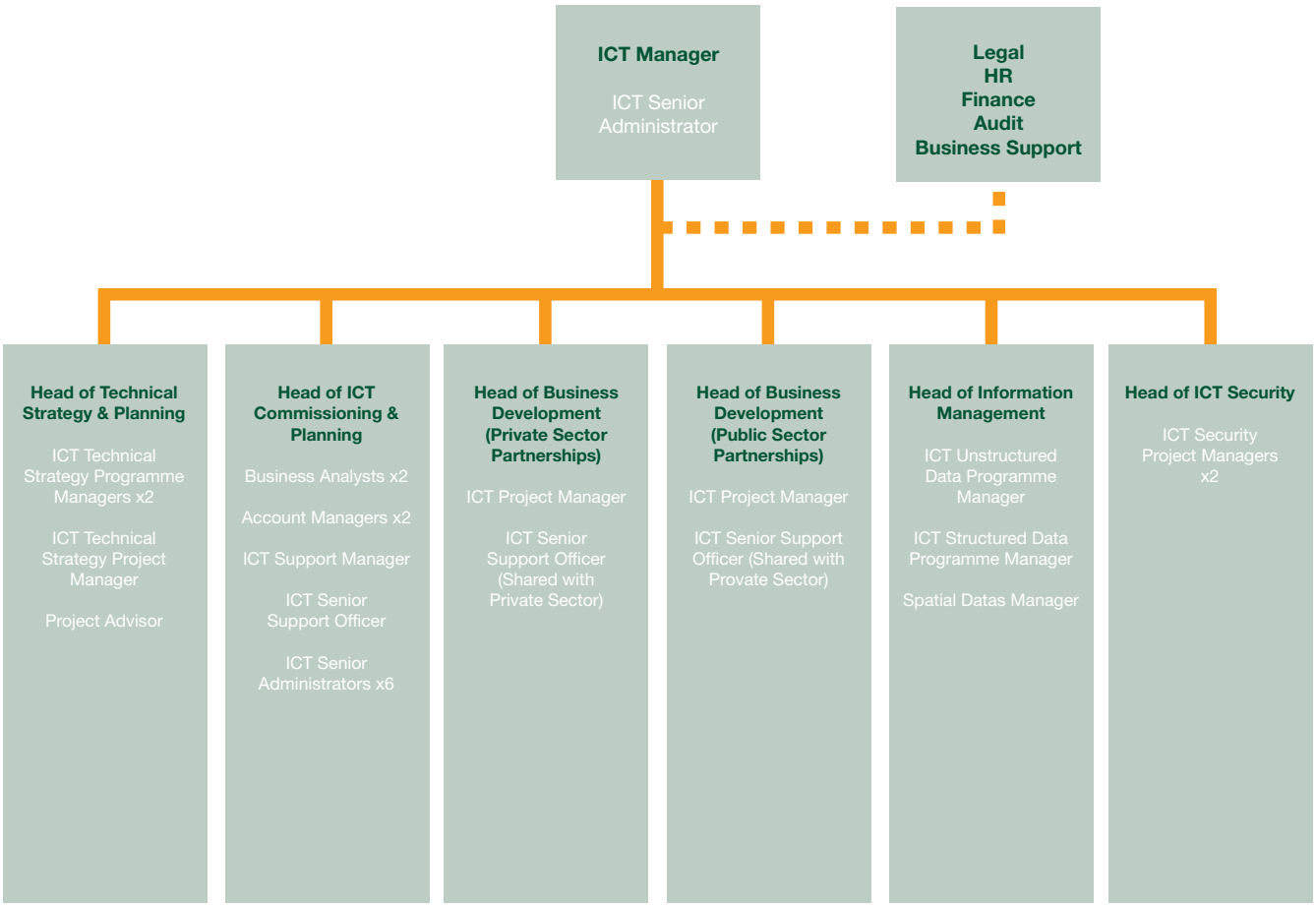
The skills and resources available within the ICT Shared Services and ICT Strategy teams are supplemented by the use of contractors, consultants, temporary staff including student placements and implementation partners. In addition, some work is commissioned externally. ICT managers use their knowledge of industry trends and corporate plans to consider the immediate and long term resource requirement of the department before deciding how to fill vacancies.

The ICT Strategy team is staffed predominately by ICT professionals; people who have graduated, have ICT qualifications or have trained and worked within an ICT department for a number of years. Key skills include:

- ICT infrastructure and application awareness
- ICT security awareness
- Business & Local Government understanding

- Strategic visioning
- Business analysis
- Commissioning and planning
- Negotiation skills

The diagram below shows the Cheshire East ICT Strategy structure and roles:



ICT Strategy currently employs 29 full time and 1 part time permanent staff (with 5 vacancies currently being recruited). It is a strategic ICT service that commissions the delivery of an ambitious ICT work programme which supports corporate transformation in 2010/11.
It has also:

- Worked with public and private partners to create a green and innovative ICT nfrastructure that puts Cheshire East on the map e.g. through the development of a state of the art Data Centre
- Made significant inroads into major efficiency opportunities through partnership working with both the public sector and private sector, building on the foundation work that has been done to date
- Continues to strive for improvement in the delivery of service to Cheshire East from the ICT Shared Service through effective liaison with the new ICT Shared Service Manager during 2010/11 and by contributing to the development of a new separate entity

- Continues to support the Council in complying with the stringent Government Connect requirements, all the time seeking to minimise the negative impact on day to day business

In principle, the ICT work programme is financed through Service held capital funding, and the ongoing work is funded from revenue. The ICT work programme changes in magnitude each year. There is active management of the proportion of contract staff and directly employed staff employed to deliver the ICT work programme.

The ICT Shared Service has skills in the following areas: project management, systems analysis, ICT technical infrastructure, ICT solution infrastructure, Microsoft development, web developments, SQL database administration, Social Care application development, Oracle eBusiness suite functionality and development, Oracle database administration, desktop hardware and software, flexible and mobile working solutions, networks, telephony, servers, geographical information systems, Business Objects reporting, service management and data centre operations.

Staff potential is maximised through formal training, coaching and providing role based developmental opportunities. The cost of training to developing new technical skill sets is built in to the capital cost of programmes.

13. ICT risk management

Risks are managed at project, programme, service and departmental levels. ICT risk management approaches are being aligned with corporate procedures as they develop.

Rapid change increases risk and disaster recovery arrangements are in place for key applications. However, resilience comes at a cost and a balance needs to be struck between the cost of engineering away a risk, and the likelihood and consequences of it happening. With the development of technical strategies which cover topics such as data centre services and infrastructure, decisions will need to be made by Cheshire East about what levels of service continuity can or should be funded.

14. Supporting technical strategy documents

Technical strategy documents support the overall strategy:

- Applications – Appendix A
- Infrastructure – Appendix B
- Finance – Appendix C
- Information Management – Appendix D

Further supporting documents are being developed. For timescales, please refer to the ICT Strategy Communications Plan.

Appendix A

Strategic drivers and the direction for key applications

Strategic drivers:

Business Continuity
- Implementation of pragmatic technical solutions to ensure that systems are accessible and business processes continue as new structures are put in place.
- Includes some disaggregation, consolidation and replication work.

Harmonisation
- Consolidation and convergence of systems and technologies from the predecessor authorities to drive out economies of scale and improve operation and support.
- Replacement and migration of systems that fail to meet the needs of the Local Authority

Development

– Improvement or replacement of applications supporting the business to
  - ensure manageable, scalable, sustainable, secure and cost effective system
  - provide flexible solutions to support new ways of working, greater work force mobility, increased collaboration and partnership working
  - strengthen transactional websites and other access channels to improve the interaction experience for our citizens

– Improvement or replacement of productivity tools and technical services to
  - provide flexible tools for developing new ways of working
  - support self service application synthesis within a context of sustainability and support

Appendix A – continued

Service Application Area	Current Applications	Strategic Direction	Drivers
Business	General Ledger & HR – Oracle e-business suite	Consolidated onto single platform with CWAC, Oracle e-business suite. Upgrade to Oracle Release 12.	H
	Cash Receipting – Northgate Paris	Consolidated onto single platform for CEC, aligned with CWAC solution	H
	Revenues & Benefits – Academy, Open Revenues, Pericles	Manage 3 applications in the short term, consolidate onto Northgate I-World solution for CEC by December 2010	H
Council Government & Democracy	Register of Electors - Strand	Continue with current system. Review strategy for CEC	B
	Modern Government Committee Management – NTE Modern Gov	Consolidated onto single platform for CEC, aligned with CWAC solution	H
Education & Learning	Children and Young Persons Database (CYPD)	Continue with current pan-Cheshire system until disaggregation protocols can be agreed	B
	E-Learning Platform – University	Continue with current externally hosted application. Review strategy for CEC.	B
	Integrated Childrens System (ICS)	Review marketplace. Procure new system to support business requirements.	B, H
	RBUSS – Redstor backup product	Currently an externally hosted application. Review strategy for CEC	B
	Securus – Desktop monitoring	Currently an externally hosted application. Review strategy for CEC	B
Environment	Highways Management – SBS Confirm	Continue with current pan-Cheshire system until detailed review can be undertaken	B
	Waste Management – Waste Information System	Continue with current pan-Cheshire system until detailed review can be undertaken	B
Health & Social Care	Social Care Management – Civica PARIS	Multi-organisational facilities are available. Review product capabilities. CEC and CWAC systems to be disaggregated. Adult financials replacement will go out to tender.	H
	Home Care Provision – Homecare Roster and Real Time Monitoring	Single instance to be shared by CEC and CWAC with data and team structures disaggregated.	H

Housing, Property & Infrastructure	Asset Management – Atrium	Review functionality as business requirements develop.	B
	Terrier Information – Atrium	Consolidated onto single platform for CEC. Not aligned with CWAC solution.	B
	Local Land & Property Gazetteer	Consolidate onto single platform for CEC, aligned with CWAC solution	H
Leisure, Culture, Community & Living	Library Management – DS Galaxy	Upgrade pan-Cheshire platform to multi-organisational implementation to permit CWAC and CEC data to be managed separately.	H
	Record Office archive management – DS CALM	Continue with current pan-Cheshire system	B
Policing & Public Safety	CWHIC partnership - Co-Star	Continue with current partnership system	B
Transport & Streets	Transport – Routewise	Continue with current pan-Cheshire system until detailed review can be undertaken	B
Policy and Planning	Development Management and Building Control – Swift APAS and Information@work	Consolidate onto single/new platform for CEC	B, H
Customer Services	Customer Relationship Management – MS CRM, LACRM, Capita	Consolidate onto single platform for CEC. Microsoft Dynamics CRM selected as corporate product. Partner to be procured via Buying Solutions.	B, H
Flexible and Mobile Working	Avaya IP telephony – extension to cellular, soft phone, ip agent, audio conferencing	Continue to review business requirements. Work with HR to define user profiles. Identify pilot users. Microsoft Office Communication Server – Instant Messaging, Presence, Video Conferencing Test and pilot VDI technologies	B

Appendix B

Strategic direction for IT Infrastructure

Technical element	Current	Strategic Direction
Servers - Hardware	Typically rack-mounted Intel servers. Mixture of Dell PowerEdge, HP and other. Escalas from Bull for AIX applications. Sun Solaris for other Unix.	Harmonisation of procurement. Regular review of models and provider as part of A&O / MDS contract and through other existing procurement routes in the meantime. Continue to utilise Bull (or equivalent) for largest AIX applications
Servers – Operating System	Windows 2003 as standard, unless derogation approved for application's requirements AIX for largest enterprise Oracle applications Solaris for Unix Small number of Linux for specialist technical applications	Windows 2008 32 and 64 bit as standard. Regular review of new releases from Microsoft. Latest versions of AIX, Linux and Unix to be reviewed
Servers – Virtualisation	Utilisation of VMware vSphere to replace physical servers for low usage and other suitable purposes.	VMware for the foreseeable future, but keep a watch on other virtualisation technologies. Further exploit virtualisation capabilities for greater business continuity
Domain	Number of separate AD domains operating with trusts. On-going activities to improve user experience. Very high level new AD design being produced.	New AD structure on Windows 2008
Servers – Storage	Local or attached disks for Intel solutions Shared storage (SAN) for largest applications and for clustered services. Equallogic, NetApp, HP SAN and direct attached storage Data Domain for selected disk to disk backup.	Consider exploitation of filer services eg. on NetApp storage, to replace file servers. Consider site to site replication of all storage devices for greater business continuity. Consider automated Hierarchical Storage Management.
Servers – Backing	NetBackup or BackUp Exec for intel estate. Mix of standalone or centralised backing for smaller servers, dedicated backing for larger servers TSM and snapshots used for AIX environment.	Harmonise as opportunities arise

Applications -	There are a series of applications (such as IBS, E-mail, Web and Intranet, mapping) which have been selected to provide functionality for the entire community. There are also applications that provide required functionality for specific departments (such as Paris, Confirm, Pupil database, Revenues and Benefits)	Continue to provide both corporate shared and department applications. Try to provide applications with synergy and links to other systems by using other core shared applications such as workflow, scanning and adaptors with middleware (Biztalk).
Application – packages	Packages are mainly used, balanced with some in-house development to meet client requirements.	Packages will continue to be purchased but with increasing requirements to meet Cheshire East, government and Microsoft standards. In house packages will continue to be written to strict standards. CEC to review Sofware as a Service where appropriate.
IBS (CSBS)	Key application for the both new authorities, and provides a range of essential business functions (e.g. payroll, payments, ordering)	Review of ongoing suitability.
Applications - topology	Typically n-tier solutions with presentation, business logic and database tiers.	N-tier seems to be ideal model for the foreseeable future, but will be reviewed regularly. Consider application virtualisation.
Applications - instances	If possible and cost-effective, instances are allocated for test, development and production.	Improving options for further testing and resilience
Applications – remotely provided	Internet connectivity to external providers (e.g. SAP, student awards)	Continued assessment of solutions according to technical criteria and cost effectiveness. Web browser strategy and standards to be reviewed CEC to review Sofware as a Service where appropriate.
Applications - servers	Co-existence on shared Intel hardware, if possible. Dedicated Intel servers for larger and non shareable applications. Virtualisation to reduce physical hardware, and increase resilience	Continue virtualisation to reduce physical hardware and preference for applications that conform to Microsoft technologies and government data sharing standards Consider application virtualisation.
Desktop – hardware	Range of models from Dell, HP and other suppliers with 5 year lifetime	Harmonisation of purchasing strategies. Regular review of models and provider as part of A&O / MDS contract and through other existing purchasing routes. Consider image management. Consider VDI technologies

Desktop – operating system	Windows 2000/XP now on majority of PCs.	Migration to Windows 7
Desktop - applications	Office XP now on majority of PCs	Harmonisation of desktop images, in line with new AD design. Migration to IE 7/8 Plan for migration to Office 2010 Test and pilot VDI technologies
Databases	Microsoft SQL 2000 and SQL 2005 for Intel servers. SQL 2000 now out of support. SQL 2005 migration and consolidation strategy being implemented. Oracle for enterprise databases	Review SQL strategy, including SQL 2008, across the new Cheshire East. Harmonise with partners, for delivery. Oracle may be reviewed if and when alternative IBS and PARIS systems are implemented.
Citrix	Citrix farms for non web-enabled applications and remote access Mix of approaches between authorities. Citrix PS4.0 in the main.	Harmonise Citrix strategies and implement a consolidation programme. Align with strategy for remote access gateways. Review when considering VDI technologies
Printing	Multi Functional Devices (MFDs) Shared system printers, where possible Mix of suppliers	Review printing strategy to achieve economies in toner costs and TCO in general. Implement follow me printing to support a mobile workforce.
Mobility devices	Mix of approaches Support only for authority supplied products e.g. Blackberry.	Strategy and projects to support an increasingly mobile workforce.
Communications – Wide area	Network of fibre and radio links with TCP/IP protocol. Converged IP telephony and data.	Regular review Migration to fibre backbone Review sharing arrangements with partners where appropriate
Communications – local area	A mix of provision. County currently provides Gigabit backbone with up to 100mb to desktop	Programme of improvement to ensure adequate bandwidth, performance and resilience for the new authority
Communications - remote	A mix of approaches. Citrix Secure Gateway Click into Cheshire secure gateway and dial-in facilities Mix of Business Broadband and private ADSL 3g broadband - a mix of 3g dongles from different providers	Align harmonisation strategy with provision of consolidated internet access. Reduce usage of traditional dial-in and increased usage of flexible solutions Review Microsoft technologies to support remote access Business broadband provider needs to be harmonised Standardise on Vodafone and upgrade older models to latest 3g devices

Telephony	A mix of approaches using IP telephony Avaya IP telephony solution and others	Strategy to harmonise on Avaya IP telephony to drive down costs, increase efficiency and support an increasingly mobile workforce. Consider OCS. Move towards one bill rather than paper billing
Mobile Telephony	Variety of mobile providers	Aim to standardise on Vodafone Standardising on a basic handset and an advanced handset
Internet connectivity	A 250Mb dual active passive link from Chester County Hall to the Cable and Wireless service provider.	Look for opportunities to link to alternative providers such as Education and Government in order to drive down costs and increase resilience and bandwidth. A fully resilient second internet link is a priority. Review internet connectivity resilience using dual ISPs.
Security	A tiered range of products with Ironport or MXtreme edge protection and McAfee anti-virus solution suite as core. Regular Microsoft and AIX patching	Exploit opportunities for costs savings through harmonisation of approaches. Ongoing regular evaluation of risks and current security estate. Consider Identity Lifecycle Management. Review options for enhanced security management across the corporate network.
Data Centre	Data centres at Macclesfield Town Hall, Crewe Municipal Buildings, Sandbach, and Kelly House.	Migration to the new primary data centre. Macclesfield Town Hall Data Centre is currently being refurbished. The move from County Hall to Kelly House is complete.
Partnerships	Mix of approaches.	Partnership working and shared approaches for economies of scale with Cheshire West and Chester. Explore further opportunities for partnership working with PCTs, NHS, Police, Fire and other local authorities.

Information Management	Linked but separate Microsoft Exchange (E-mail) systems	Migrate to consolidated Exchange
	Symantec Enterprise Vault and Mimecast for email archiving.	Review strategy and policies for email archiving and compliance. Identify and implement a single solution.
	Mix of document management and scanning solutions; Anite@Work, Sharepoint, Hummingbird, Kofax scanning.	Review document management, workflow and scanning solutions to identify opportunities for harmonisation and cost savings.
	Extensive use of fileshares	Review fileshare strategy with regard to consolidation and potential use of file capabilities provided by storage platforms. Further harmonisation of other products.
	Web and Intranet content management Immediacy selected for new authority external web hosting.	Further exploitation of products to extend use and support transactional websites. Try to support similar content and response through all citizen access channels
	Microsoft CMS and Immediacy used separately in house for Intranet.	Programme of harmonisation
	Collaboration No overall approach. Sharepoint and Moss 2007 pilot rollouts.	Review strategy to provide further access
	Data matching Multivue for Children's Services, but scalable beyond.	Review outcomes and assess suitability for further exploitation.

Appendix C

Financial Management Details

Revenue

The permanent revenue resources for the central ICT services are:

Expenditure	%
Staffing costs	56
Non-staffing costs	44
Total Expenditure	100
Funded By	
Charges to schools	12
Staff recharges to capital	To be determined
Other recharges to services	11
Base budget	77
Total Funding	**100**

Schools:

Each year schools are given the option to purchase a range of services from ICT. These services include connectivity, Internet services including content filtration, telephony, service desk and support for the software used for school administration. Schools have the freedom not to purchase these services, or to purchase from an external supplier.

Schools are charged for these services on a full-cost recovery basis. The economies of scale achieved avoid unnecessary spend.

The role of technology in learning is expanding rapidly and the participation of Cheshire East in the wider learning community, from pre-school to higher education is important to the effective delivery of lifelong learning in Cheshire East.

Staff recharges to capital:

A number of permanent employees are funded by recharges to the capital programme. An annual capital programme for the essential replacement of Core ICT infrastructure of approximately £990k is required to provide sufficient funding for all these staff.

In most years in-house resources will not be sufficient to deliver the Council's work programme. When this happens, external contractors on short term premium rate contracts are used to provide additional resources. The cost of these contractors are "pooled" with the cost of internal development staff and charged to projects at an average weighted

cost. The cost of external contractors is on average around £13 per hour more than a comparable in-house member of staff.

Assumptions about the proportion of external contractors used are reviewed annually. This will affect the average pooled rate charged to projects.

Capital
The table below sets out a summary of the funding for the current ICT capital programme:

Funded By	%
Unsupported prudential borrowings	30
Capital reserve	43
Grant	27
Total Funding	**100**

The use of the capital reserve to fund significant new ICT investment is probably not sustainable over the medium term. Reduction in the use of the capital reserve will probably have to be met by an increase in the use of unsupported borrowings. The revenue impact of borrowing is 22.5% pa for an asset with a 5 year life and 12.5% pa for an asset with a 10 year life.

Financial background

Departmental ICT provision.
In addition to the central ICT budget, Services hold significant Revenue and Capital budgets covering application licences and associated maintenance contracts. Grant funded ICT provision may also be held by some services.

Purchase of computer equipment such as PC's, laptops and printers:
Cheshire East has inherited an estate of around 6,000 desktop computers and laptops. In general, purchase of this type of equipment is made from a central contract using a central ICT Strategy held revenue budget. Spend on these items for Cheshire East is approximately £1.0m.

Schools.
There are approximately 9,500 administration and curriculum PC's in schools, of which approximately 3,300 are directly supported by the Schools ICT Shared Service and the rest by the schools themselves through other arrangements. Most school IT spend is funded from either the Dedicated Schools Grant (DSG) or the Harnessing Technology Grant (HTG).

Appendix D

Information Management

The Information Management Service will enable and support the authority to realise the council's vision to Work with Partners to deliver excellent services to improve Community life in Cheshire East.

The service will support the following priorities;

- **Put customers First**. Protect the integrity and the identity of customers by ensuring that personal and sensitive information is created, held, and disposed of in accordance with records management standards (retention periods) and statutory guidelines such as the Data Protection Act.

- **Provide Value for Money**. Improve efficiency and reduce the TCO in maintaining duplicate Line of Business (LOB) systems with Enterprise Content Management (ECM) capability by carrying out a systems appraisal across the organisation.

- **Enhance Partnership working**. Provide a toolkit and policy framework to enable information to be shared between internal and external organisations. This will include the use of encrypted channels whilst observing data quality standards and Data Sharing Protocols.

- **Develop our workforce**. Present self serve intelligence and reporting capability through the desktop which empower officers and services to make informed decisions and take personal accountability for the quality and integrity of data.

- **Be locally Responsive**. Present timely and consistent data through a number of channels to support neighbourhood working, customer access and flexible and mobile working initiatives. This will consider technical solutions for storage, searching, integration, presentation and collaboration of information and data sets.

The service will support the following priorities for **transformation** and;

- **Put customers First**. Information will be created or captured only once, but used many times in an electronic format. Using data matching facilities to view and present customer and property information held across systems and trusted data sources will enable the creation of a Single view of customer and property information, reducing duplication of effort and supporting initiatives such as 'Tell Us Once' and 'Right First Time'

- **Provide Value for Money**. Rationalise and decommission the number of local systems, files and databases using data cleansing and matching tools to ensure that data is comprehensive, accurate and appropriate for the purpose for which it has been collected. This will enable data from disparate sources to be combined and merged as well as identifying and removing duplicated data to establish a single definitive record. Information will be managed using corporate and enterprise tools and infrastructure rather than being service-specific, utilising ECM components such as e-Forms, scanning and workflow to improve process efficiency and reduce the total cost of ownership to the

authority. Archiving solutions will be implemented to deal with legacy data from decommissioned systems, ensuring that statutory and business requirements around retention and reporting are met.

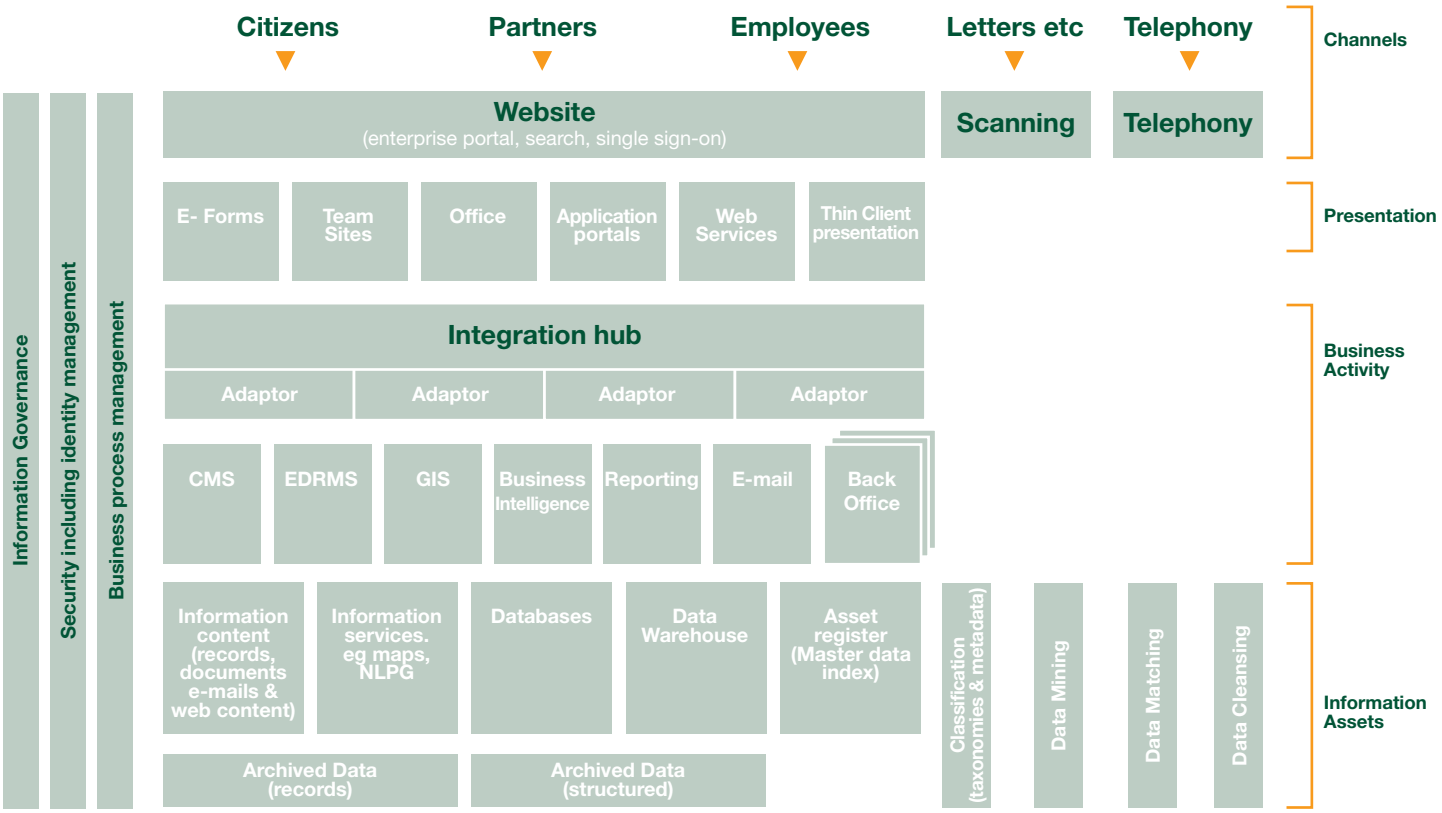
- **Enhance Partnership working**. There will be a single route (portal) for personalised access to relevant electronic information and services for staff and partners, and for those citizens able and willing to use online services. Data and Information from line of business systems will be consolidated to provide a corporate data warehouse enabling flexible reporting to meet operational and strategic needs. Presenting information through collaborative portals that incorporate, dashboards, business intelligence reports and Geographical Information Systems (GIS) will require additional efforts to ensure that data will be shared with partners in accordance with established protocols. Security measures are in place to protect confidentiality. `There will be a clear audit trail for all records to ensure authenticity.

- **Develop our workforce**. Foster understanding of the importance of managing information as a resource, ensuring that appropriate training is provided to enable the implementation of good information governance. Work with corporate HR to ensure that the internal knowledgebase / toolkit is supported with corporate training and induction programmes to improve the IM capability of the organisation. Furthermore, on leaving the organisation explicit and tacit knowledge held by officers will be captured through collaboration technologies and archiving solutions.

- **Be locally Responsive**. Integrate systems and information based upon trusted data sources and data warehousing technologies to enable the delivery of responsive, customer focussed services. In particular Geographical Information Systems (GIS) will be deployed to enable geographically referenced data to be captured, analysed and presented more effectively (e.g. addresses, postcodes, service points, catchment areas, information about roads). By linking spatial information with textual information GIS provide additional insights into the relationships between data sets, allowing analysis and interpretation through an accessible visual medium. GIS allow multiple data sets to be overlaid, and the identification of relationships and patterns that may not be immediately apparent through other forms of analysis providing key information for performance management, service planning and provision.

Appendix D

Information Management Infrastructure



Glossary

Active Directory (AD)	A Microsoft technology used to provide central management of information about an organisation's users, systems access and IT resources.
Architecture	It is Cheshire East policy not the use the word "architecture" to describe ICT infrastructure because of the specific association of the term with the architectural profession. However, the term is in common use within the ICT industry in this sense and therefore the term may appear occasionally in quotations from documents produced by other organisations.
Avaya call management	Telephone communications software used to route calls through the network, and administer features such as hunt groups and call queues.
Business Objects	Software used to develop and present reports and analysis of electronic data held throughout the organisation
CAS	Customer Access System
Citrix	Remote access software used to deliver applications over a network
Connectivity	The use of computer networks to link computers to one another, and provide information resources between computer systems and their final users
ContactPoint directory	A national database that will hold information on children. It has been developed to improve child protection by improving the way information about children is shared between services.
CYPD	Children and Young Persons Database, focused on managing data relating to education
Data Centre	A facility used to house computer systems and associated components, such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (air conditioning, fire suppression, etc.), and special security devices.
Data Cleansing	The act of detecting and correcting (or removing) corrupt or inaccurate records from a record set
Data Matching	The process of comparing like records, eliminating duplicates, and combining them into the best version of a record,
Data Sharing Protocols	A formal agreement between organisations that are sharing personal data. It explains why data is being shared and sets out the principles and commitments organisations will adopt when they collect, store and disclose personal information about members of the public.
Data Warehousing technologies	A repository of an organization's electronically stored data. Data warehouses are designed to facilitate reporting and analysis
Desktop	Desktop computer and associated software
DPA	Data Protection Act

DSL	Technology that provides digital data transmission over the wires of a local telephone network.
e-Forms	Software that creates forms on the Internet that allow people to send us particular information or make specific requests e.g. for a school bus pass
ECM	Enterprise Content Management: tools and strategies allow the management of an organization's unstructured information such as documents, wherever that information exists
Ethernet	A computer networking technology used in most local area networks
Exchange E-mail	A Microsoft application which provides electronic mail, calendaring, contacts and task management
Flexible & Mobile Working	Technology and policies to enable employees to cut down on travel time, improve productivity and performance
Gartner Group	Global ICT research analysts. Provide analysis of and reports on enterprise technologies.
GIS	Geographic Information System - a system for capturing, storing, analyzing and managing data and associated attributes which are spatially referenced to the Earth.
HR	Human Resources
ICT	Information Communication Technology
ICT Infrastructure	The information communication and technology (equipment and software) that is involved in providing ICT services to customers.
IM	Information Management - considers information in any format throughout its lifecycle from when it is received, created or captured until it is archived or destroyed.
In-house resources	Employees on the councils payroll
IPT	Internet Protocol Telephony **-** Is the routing of voice conversations over the Internet or through any other IP-based network.
ISO	International Organization for Standardization
ITIL	Information Technology Infrastructure Library - A set of concepts and techniques for managing information technology (IT) infrastructure, development, and operations
IT solution infrastructure	Defines information technology solutions that can be implemented to meet business requirements whilst ensuring alignment with the Enterprise Infrastructure.
LOB	Line of Business systems – a set of critical computer applications that are vital to running an organisation.

Metrics	A system of parameters or ways of quantitative and periodic assessment of a process that is to be measured, along with the procedures to carry out such measurement and the procedures for the interpretation of the assessment in the light of previous or comparable assessments. McAfee Antivirus,
Microsoft office	Word processor and Excel spreadsheet
MSP	Managing Successful Programmes - a structured yet flexible framework designed to manage and control all the activities involved in managing a programme through providing advice on organisation, processes, communication and ways of thinking. There is a close link between MSP and PRINCE2
MSProject,	Microsoft application used to develop and monitor project plans.
Oracle database	A relational database management system produced and marketed by Oracle Corporation
Oracle e-business suite -	Financial and HR/Payroll systems
PARIS -	Social care system, allowing several hundred users to manage social care information, payments to foster carers and payments to care leavers across Cheshire. This has centralised records, streamlined processes and reduced multiple versions of paperwork.
Peoples Network	High speed access to the internet available to the public, delivered by England's public libraries, and supported by lottery funding.
PRINCE2	An internationally recognised standard methodology for managing projects
Quality Management System	A set of policies, processes and procedures required for planning and execution of developments and services in the core business area of the organisation.
SBS Confirm	A software package that supports highways functions
Scanning	Electronic scanning on paper documents.
Sharepoint,	Microsoft software which provides a single, integrated location where employees can efficiently collaborate with team members, find organisational resources, search for experts and corporate information, manage information and workflow.
SIMs	Schools Information Management software
SOCITM	Society of Information Technology Management. Has a Local Government focus, provides information on best practise and benchmarking services
SQL database	A relational database management system produced by Microsoft

Technical Design Authority	A governance group that provides quality assurance for the design of ICT solutions developed in response to business requirements
TCO	Total Cost of Ownership – a method of cost analysis
Tif	Technology Infrastructure Forum: aims to improve practical knowledge and understanding of IT by stimulating sharing of experience between organisations.
Wide Area Network	Wide Area Networks (WANs) are computer network that covers a broad area. They connect LANs together so that users and computers in one location can communicate with users and computers in other locations.
Workflow	A term used to describe the tasks, procedural steps, people, input and output information, and tools needed for each step in a business process

References

Documents to which reference is made will be acknowledged.

Acknowledgement

Gartner Group provided the template which forms the structure of this strategy.