DRAFT - Report to the Cabinet

Report reference: C/ /2005
Date of meeting:

Epping Forest District Council

Portfolio: ICT and Support Services – Cllr S Metcalfe

Subject: Corporate ICT Strategy – Review 2005

Officer contact for further information: Adrian Scott – Head of ICT

Committee Secretary:

Recommendations/Decisions Required:

(1)   To agree the new technical objectives of the Corporate ICT Strategy for 2006/2008 as set out in the report.

1. The Council's Corporate ICT (Information and Communications Technology) Strategy was first introduced in 1998. The Strategy sets out clear objectives and plans for addressing the key elements of the technical ICT environment. This is the 4th review of the Strategy that is now limited to a 24-month period to ensure the Strategy remains current and adaptive to the potentially beneficial changes in new technology. These potential benefits are currently being targeted by the various e-Government initiatives and the current efficiency drive from Central Government by the Office of the Deputy Prime Minister (ODPM). These benefits have been further emphasised by the report 'Transformational Government enabled by Technology' published by the Cabinet Office on 2 November 2005. The Prime Minister introduces this report by saying:

    "Within the public services we have to use technology to join up and share services rather than duplicate them. It is a simple fact that we are stronger and more effective when we work together than apart. It is also self evident that we will only be able to deliver the full benefits to customers that these new systems offer through using technology to integrate the process of government at the centre."

    It is clear from this new report that Central Government is expecting a wholesale change in the way Public Sector services are delivered by exploiting the transformational nature of ICT.

    The Corporate ICT Strategy aims to create an environment in which business information systems can, if appropriate, be shared and data enabled to flow in a seamless manner that is transparent to the user of that information or data regardless of whether they are a member of the public c, Member or Officer of the Council or indeed any other relevant government agency. Above all, the Strategy must be kept Corporate and its content mainstream. These are the key factors that have been taken into account in the review process.

    In addition to these requirements, the review considered the implications of the Council's e-Government Strategy and the main central government technology drivers. These drivers are currently the 'Government Connect' and 'DirectGov' projects that underpin the 'transformational government' objectives. The details of these are covered under the applications section of the strategy.

The Corporate ICT Strategy is divided into six key headings: standards, hardware, operating systems, databases, applications and networks.

The actual projects that result from the agreement of this strategy will be detailed in the ICT annual Business Plan. Each project will be listed in the Action Plan along with its priority and relevance to this Strategy. The ICT Action Plan is currently monitored by the Overview and Scrutiny ICT Standing Panel on a six monthly basis.

Option for Action

2. **Corporate ICT Strategy – Review 2005**

    Appendix A details the 2005 review.

3. **Corporate ICT Strategy – Summary of Adopted Standards and Policies**

    Appendix B details the active standards and policies introduced by the implementation of the Corporate ICT Strategy over the past seven years.

Statement in Support of Recommended Action

4. This Strategy is a key enabler of the Council's e-Government and efficiency initiatives and underpins the vision and objectives set out in the Council's annual Implementing Electronic Government (IEG) Government Returns (available on request).

    This report covers the 6 part Corporate ICT Strategy. The above objectives and programme of works for 2006/2008 will be funded from the combination of the Central Government IEG capital grant for 2004/5, IEG match DDF funding, IEG CSB funding and the Council's ICT Capital programme.

    The projects that are developed under this Strategy will be funded from existing resources as detailed above. But, it must be noted that the total project implementation costs will not be calculated until this strategy is agreed and each relevant project initiated. If at that point there is insufficient funding available from existing resources Members will receive a further report detailing the relevant project business case and additional costs required to deliver the perceived business benefits.

Consultation Undertaken:

5. Due to the mainly technical nature of the Strategy the consultation process was limited to the ICT service, the Council's ICT suppliers and partners, Overview and Scrutiny - ICT Standing Panel and Management Board.

Budget Provision:

£150,000 from ODPM IEG Capital Grant in 2004/5
£60,000 DDF IEG Match funding
£45,000 CSB IEG Maintenance funding
£600,000 ICT Capital Programme (over two years)

Personnel: Nil

Land: Nil

Community Plan/BVPP Reference: BVPI 157, ODPM Priority Service Outcomes

Relevant Statutory Powers: None
Background Papers: Implementing Electronic Government Return, e-Government Strategy, e-Procurement Strategy, Transformational Government enabled by Technology
Environmental/Human Rights Act/Crime and Disorder Act Implications: None
Key Decision Reference: **None#**

Appendix A

The Corporate ICT Strategy – Review 2005

1.   **Standards/Policy**

1.1.   **Overview**

Standards within an ICT service are designed to reflect levels of attainment and achieve a common approach over a long period of time. It is therefore advisable to formalise these standards in a written document with sections for each discipline. Standards addressing key activities within the ICT function are needed to ensure consistency of usage and compliance with rules designed to protect the integrity of the ICT service and related functions.

1.2.   **Main aim**

To introduce codes of practice or formalised standards and policy that covers the whole ICT environment. It is extremely important that new standards and policies are created as new technologies and working practices are adopted.

1.3   **Objectives for 2006/2008**

One of the major outstanding issues from the previous review is the implementation of a corporate desktop strategy. This was delayed due to the lack of ICT human resources. However, Members recently approved a new staff structure for ICT and as a result the Council can now move forward positively with its implementation. The new corporate desktop environment will be controlled from the centre using Microsoft's active directories. This product allows all users to be profiled so they only have access to an ICT environment that is appropriate to their job function. The 'active directories' solution was implemented as part of the previous review and is currently used to control access and resources of the Servers in the computer suite. As well as a new method of user control the strategy will also introduce a new standard hardware, operating system and office application model. The specific technical details of this model are covered in the relevant sections of this strategy. The model will assist the Council in achieving a greater return on investment (ROI) by ensuring that the desktop is only replaced when the desktop functionality is no longer adequate to complete the tasks required by the relevant member of staff. The ROI period will be set initially at 48 months. Although in this period a request for a desktop enhancement may be made these would need to be supported by a full business case and subject to both Head of ICT and Portfolio Holder approval. The Council needs to ensure that the Desktop environment is securely controlled and perceived only as being a tool for the job and not an extension of an individuals home PC. There is a real danger that the Council will fail to realise any ROI if its corporate ICT strategy is influenced by the 'entertainment' factor of the Home PC market.

The current e-Government initiative, which is overseen by the ODPM, is due to come to a close in March 2006; at this point central government will move the focus of e-Government onto the efficiency agenda that is closely linked to the Comprehensive Performance Assessment (CPA) process. The ODPM believe that the investment made in ICT systems over the past four years should now be delivering greatly improved efficiency across the whole of the public sector. Although at this point the Council is not able to directly make the link between its ICT investment and any real reduction in the bottom-line costs of delivering services, the Council has used this investment to dramatically improve access to information for both officers and the public. This is clearly evidenced by the improvements made in information provision and transactional interaction on the Council's website and the implementation of the Committee Management System. This coupled to the Member connectivity project has lead to a quiet revolution of information access methods.

The ODPM, however, are still continuing with the Implementing e-Government (IEG) Government Return that is used by central government to assess how the Council is progressing with BVPI 157 (This measures the percentage of e-enabled interaction with the public) and the 78 'priority service' outcomes. IEG 5 is due to be submitted by 19 December 2005 and IEG 6 has a draft deadline of April 2006. The Council will need to consider these returns in due course.

The Essex Online Partnership (EOLP) that consists of all the Essex Districts the County Council, Health, Fire and Police Services has assisted the Council in its e-Government projects. The EOLP is funded by contributions from each partner. The Council currently contributes £22,000 per annum for membership to the EOLP. Now that the current e-Government initiative is drawing to a close the Council will need to review the benefits of belonging to the EOLP and consider that if it remains a member, how the EOLP should be used to assist the Council in future projects.

The ongoing development of the Customer Services Transformation Programme (CSTP), which is currently at the Programme Planning stage, will require the Council to develop a Corporate Information Strategy. The information strategy acts as the linchpin between the Council Plan and the ICT strategy. It identifies what information is required and where the information is held that supports the primary tasks, or key goals, of the Council Plan. It also questions the appropriateness of the critical assumptions behind the Council Plan in the light of the changing environment and changing perceptions of the Council's local community and their relationship with other government services. Therefore this strategy should have both deterministic and emergent elements that when coupled with the ICT strategy will give the Council its first overarching information systems strategy. This will bring together the business aims of the Council, an understanding of the information needed to support those aims, and the implementation of computer systems to provide that information. It is effectively a plan for the development of systems driven by the informational/transaction needs of the business and customers of the Council.

In July 2005 the Re-use of Public Sector Information Regulations came into force. This new regulation is being overseen by the Office of Public Sector Information (OPSI). OPSI were previously known as the HMSO (Her Majesty's Stationery Office). The main aim of this legislation is to ensure that where appropriate a charge is levied for the re-use of documents and information made available under the Freedom of Information (FOI) legislation. In order to comply with this new statutory requirement the Council will need to establish an Information Asset Register (IAR) that sets out clearly what information is available for re-use and how this is licensed (the cost). The policy development for this will be undertaken by the existing Freedom of Information Framework Group (FOIFG) that was set up to oversee the implementation of the Freedom of Information Act. The Council will also need to review and amend its existing Freedom of Information and Data Protection Policies to ensure compatibility with this new requirement.

Finally under this theme, ICT will be undertaking reviews of three existing policy areas namely the underlying use of the Internet, ICT security standards and access to information policy. The existing policies have been in force now for up to five years and best practice suggests that a formal review is now required.

With regard to the review of the security standards and access to information policy the Council will need to address compliancy issues relating to ISO27001 (an information security standard) and consider the implications of the Information Commissioners (IC) current review of the format and content of the Publication Scheme produced under the Freedom of Information legislation. The Council will be required under statute to review its Publication Scheme in line with the IC's findings that are due for publication early in 2006. A new Publication Scheme will need to be submitted to the IC by November 2006.

The review process will include all Members, Heads of Service and the Council's ICT partners. The revised policies will be submitted to Members for ratification before being issued to all relevant parties.

1.4 **Strategy for 2006/2008**

➢ Implement the Corporate Desktop strategy that creates a single point of management and control of all peripheral ICT resources. The technical details of this are listed under the Hardware, Operating System and Application sections of this document

➢ Review and update the Council's IEG Government Return.

➢ Implement the agreed Member connectivity strategy.

➢ Review the benefits of being a member of the Essex Online Partnership and only continue to participate if new projects deliver clear benefits to the Council and its community.

➢ Develop a Corporate Information Strategy that creates the framework for future information systems planning.

➢ Develop and implement a corporate Re-Use of Public Sector Information policy

➢ Review of the following Internet and access to information related policies:

- Internet Usage Policy
- Email Policy
- ICT Security Standard
- Freedom of Information Publication Scheme
- Freedom of Information Policy
- Data Protection Policy

2. **Hardware**

2.1. **Overview**

The hardware is the machinery and equipment used to deliver the ICT service to the user. The Council's hardware consists of standard HP ProliantR Servers (based on Intel technology) at the Centre (Computer suite) and HP Deskpro Personal Computers (PC) and HP 'thin client' terminals on the desktop. The Council uses Epson and HP printers both centrally and on the desktop.

2.2. **Main Aim**

To ensure that the Council maintains a fully supported and standards based hardware profile across all levels throughout the Authority.

2.3 **Objectives for 2006/2008**

ICT will ensure that all current operational servers have adequate resource capacity (Processor, Memory, and Network) to accommodate the other planned elements of this review. This work will be coupled with the commissioning of Computer Suite 2 to ensure that adequate disaster recovery provision exists for core data processing activities.

ICT will implement a new standard HP desktop hardware model to support the aim of providing a secure and controlled peripheral network. The HP solution will be procured through the proposed Office of Government Commerce (OGC) contract that is being negotiated between HP, Dell, IBM, Microsoft and Oracle. This contract will ensure that the public sector obtain the best pricing model for all ICT equipment and software purchases without the need for a full tendering exercise. The existing HP desktop hardware currently in use will be reallocated and reused wherever possible subject to its age and specification. Due to the high turnover of current desktop equipment, which is funded directly by Services, this should reduce the actual initial cost in hardware significantly.

All new equipment for desktop hardware in future will be funded directly from the corporate ICT capital programme. This will release, on current estimates, over £100,000 per annum of service area revenue budgets. This coupled to the new aim of achieving a real ROI should create real bottom-line savings for many Council Services. The Head of Finance will undertake an analysis of the financial implications and report back to Members separately with these findings.

2.4   **Strategy for 2006/2008**

➢   Carry out a full review of server capacity and upgrade servers as appropriate.

➢   Implement the previously agreed disaster recovery plans for core ICT systems that are summarised below. These services will be implemented in the new Computer Suite that should be ready for occupation in August 2006.

- Hot standby systems for Email, Web Services, ERDMS, Housing services, Revenues, Housing Benefits, Financial Management and ICT Help/Service Desk.
- Cold facilities for other Council services.

➢   Design and implement a desktop hardware model based on the corporate HP equipment standard using the following criteria:

- Thin Client devices (terminals, mobiles) to be used unless ICT in discussion with the relevant Head of Service determine the user requires a PC or Laptop (thick client)
- Both Intel and AMD based processors are acceptable
- LCD monitors to be used with a minimum size of 17"
- Wireless optical wheel mouse and keyboard. Wired where wireless is impracticable
- All devices to support the current Universal Serial Bus (USB) standard (currently 2.0)
- All devices to have appropriate access to the Council's ICT Network
- All devices to have access to a networked printer service where appropriate
- The use of networked workgroup based HP multifunction printers (Scanner, fax, copier and printer) to be used in preference to standalone or networked printers.
- All devices are to be compatible with the Institute of Electrical and Electronics Engineers (IEEE) 802.x security protocol to enable the Council to implement peripheral network security measures. This effectively means each device will be required to authenticate itself before gaining access to the Councils Network 'EppNet'.
- Mobile devices to support a minimum WiFi (Wireless network) standard of IEEE 802.11b (this entry level will be reviewed as necessary)

3. **Operating Systems**

3.1. **Overview**

The operating system is the means whereby the applications communicate with the hardware and is also the mechanism for managing hardware resources (disk space, memory, etc) and enforcing security measures.

3.2. **Main Aim**

To standardise and maintain the server and client (PCs) to the (current) Microsoft Windows operating System. To ensure that the Microsoft server environment is maintained to an adequate level of resiliency.

3.3 **Objectives for 2006/2008**

The main area to be addressed under this theme is the implementation of the new desktop environment. The Council is fully committed to Microsoft's family of Windows operating systems (OS) as agreed by Members in 1998. Although it would be possible to consider a review of the Council's OS provider, with the current commitment to both the underlying hardware and overarching applications there is not really any practicable alternative. In order to successfully deploy a new hardware model the OS will need to be brought up to date. The procurement of a new corporate Microsoft OS site licence to support this work will be achieved through an OGC contract as detailed in section 2.3. Microsoft will be shortly releasing a new version of Windows called 'Vista' the terms of the site licence will allow for a free upgrade to this version if required.

3.4 **Strategy for 2006/2008**

➢ To implement the latest version of Microsoft's Windows operating system on the new standard desktop models. The latest versions of the Windows operating systems that will be used are listed below against the relevant hardware model:

- Windows Terminals (thin client) – embedded Windows XP/CE.Net 5.0
- Personal computers and Laptops (thick client) – Windows XP (Windows Vista to replace XP shortly)
- Mobile Devices – Windows Mobile 5.0

4.   **Database Management System**

4.1.   **Overview**

The database management system (DBMS) deals with the storage and retrieval of user data and provides the programming development environment. It also deals with the security of data and provides the tools to enable end users to extract and manipulate data outside of its normal application.

4.2.   **Main Aim**

To change the current strategy of a single standardised DBMS (Oracle) environment for a new strategy based on an open database management system approach. This change is required due to the IT industry changing its methods for the development of Local Government systems that use an underlying DBMS.

4.3.   **Objectives for 2006/2008**

Since the turn of the century the software industry that serves Local Government has been through a major change in business focus. During the late 1990's most software the Council purchased was based around a server/client model. This model required the server to hold the data in a DBMS and the client PC to run the application that retrieved the data from the server. With the rise of the Internet and its related web browser application (Internet explorer, Netscape, Firefox etc) the IT industry focussed its attention to making all application accessible through this new web browser application. The larger suppliers of DBMS such as Oracle and IBM were slow to respond in providing low cost development tools for the software industry to adapt systems to use a web browser to run business applications. This left the market open to other proprietary DBMS players, such as Microsoft with SQL Server and Progress with OpenEdge DBMS as well as open source players such as Ingres, in providing many software developers with alternative development tools. As a result many software providers that had classically used Oracle or IBM were now providing lower cost web-enabled applications supported by other lower cost DBMS providers.

Over the past five years Oracle and IBM have responded to this change and are now also providing cost effective development tools, however the Local Government software market has now changed and there is no longer any one single provider of this technology to Local Government software developers. The Council now needs to reflect this change in its strategy. Therefore it is proposed that the Council allow non Oracle solutions to be implemented if they provide the Council with the best business solution in terms of both quality and support costs. They must also fully integrate with the Council's standard Microsoft Windows OS and Office application environment.

4.4   **Strategy for 2006/2008**

➢   Allow the use of Oracle, IBM, Microsoft, Progress, Sybase and Ingres DBMS in the support of database driven systems.

5. **Applications**

5.1. **Overview**

The application is the system that delivers the service to the user via the terminal , PC or handheld device and is normally the only method that staff can access any data or information. It is critical to the success of the overall ICT Strategy that all new applications apply the strategies set out in each of the other key areas. The application is normally the only element visible to the end user of ICT services and therefore is the only real indicator that both staff and managers have to measure the overall success of the Strategy.

5.2. **Main Aim**

To ensure that the Council maintains an up to date and relevant set of applications that allow the delivery of all Council services in a staff efficient, cost effective and customer focused manner. The application layer of the Strategy is critical to the overall success of the Council e-Government and Customer Services Transformation programmes. Managers throughout the Council will in the future be directly measured on the success of their business applications and the way these applications integrate and connect with the Council's service delivery partners and most importantly our customers.

5.3. **Objectives for 2006/2008**

Moving towards an efficient and effective Local Government has been a fundamental theme of Central Government since the publication of the Gershon Efficiency Review in 2004. A key element of achieving this objective has been the so called 'e-Government' initiative that demands all relevant Local Government services be available electronically (where appropriate) by March 2006.

With these two major Government initiatives now being targeted by the latest CPA review process it is critical that the Council's computer applications maximise efficiency and allow easy access to relevant information and transactional services via a number of evolving electronic channels.

The Council has recently agreed to develop and implement a CSTP that will be spearheaded by a Customer Contact Centre. It is therefore essential to the success of the CSTP that the underlying voice, data and email support systems together with the core business systems are kept up to date in order to facilitate the new crosscutting business applications that support this type of programme.

The implications of the CSTP will be drawn into this Strategy after Members have agreed the Programme Plan that is currently being developed. It would be inappropriate to estimate the Programmes requirement at this stage.

The introduction of a corporate Geographical Information System (GIS) forms part of the new planning system that went live in October 2005. A GIS basically allows maps to be displayed on a computer screen showing an outline (overlay) of any relevant information. In the case of planning the overlay may show the boundary of a property or a tree that has a tree preservation order. The real point of GIS is that a graphical representation of objects on a map makes it clear (visually) to the user what parcel of land or property is being discussed. This avoids any confusion over the description of land that currently leads to a unique property or parcel of land being entered as a different entity on each system. However, the current support of this GIS is fragmented between Planning and Environmental Services and this is creating issues regarding system ownership and simple day-to-day support. The Head of ICT will be putting forward a GIS support plan to address these shortcomings during 2006 with the intention of setting up a single corporate support

function for the GIS environment.

The e-Government initiative is now starting to have wider implications on the technical design and capabilities of many Council core business systems. This is due to the requirements set down by Central Government to allow the 'citizen' to access information and carry out transactions directly through the 'DirectGov' website without the need for officer intervention. DirectGov is the new central government website that aims to be the single point of electronic access for all government services. This will mean that many of the services offered through the Council's local website will in the future be subsumed by this single point of access. This method of 'self service' makes a great deal of sense and will, in the mid-term reduce the cost of front-line support services. However, the systems required to support this way of providing services are not currently in place.

The first areas that are being targeted by this requirement are Housing Benefits and Revenues. The Council is required under the ODPM's 'priority service' outcomes to be in a position where it can offer its customers online access to individual benefit claims and Council Tax and NNDR account information. Central Government is assisting in this process by providing a common method of authentication for customers across all Government agencies. This method of access and authentication is called 'Government Connect' and it is the same system that central government currently use for authenticating people who submit online tax returns. This system will handle all the issues of authenticating identity and gives the Council the assurance that it is safe to let them access and view information and participate in transaction with regard to their Benefit/Council Tax/NNDR account and in the future any other relevant function in the Council.

This is obviously a major change in the way the Council currently handles a customer's account where all current system access is done via an officer of the Council. However, the main issue for this strategy is the fact that currently the Council's Benefits and Revenues system was not designed to allow connection to the 'Government Connect' solution and further more it is not economically viable for the supplier to make it compatible. The only viable way forward for this mandated requirement to be achieved is to change our current Benefits and Revenues System to one of the three currently 'Government Connect' compliant solutions. Therefore the Head of Finance in consultation with the Head of ICT will be reviewing the current Benefits and Revenues System with a view to migrate to a new solution within the next 18 to 24 months; co-terminus with the end of the current contract for these two systems.

ICT are currently reviewing all the other core business systems to ensure they all have the technical ability to join the 'Government Connect' project when required. Based on initial discussion with the suppliers of these systems it would appear that these systems could, for an additional cost, be given the functionality to communicate with 'Government Connect'. Further reports will be presented to Members on 'Government Connect' as it becomes clearer as to the financial implications of engagement.

A major requirement of the application layer of the strategy is to provide appropriate Office System tools. These are typically a word processor, desktop publishing, business diagramming, spreadsheet, web browser and email applications. As part of the new Desktop strategy the tools currently in use will need upgrading. The current standard is based on Microsoft's Office 2000 application that was purchased in 1998 as part of the first ICT Strategy. This product has now been through two major releases and the version currently in use is now becoming less able to cope with the requirements of the core business systems. The providers of these core business systems have mainly brought this about by incorporating new features within its system that rely on later versions of the various Microsoft products. Again as with the Microsoft Operating System (OS) it would be possible to consider alternative solutions, however, for the same reasons for retaining Microsoft as the Council's provider of OS the Council has no real alternative to retaining Microsoft Office for its main Office System tools. There are however other tools within the

Council's office tools standard that are not provided by Microsoft and at least these offer some degree of fair competition against Microsoft.

The actual level of access that any individual will have to the new office tool set is determined by the requirements of their job function. In addition to this control the Council has recently implemented a software asset management tool that will monitor the usage of all desktop software to ensure the Council is only using licenced products. This will also assist the Council in the efficient procurement of licences as previously there have been cases of licenced software being installed on PC's and remaining unused.

The procurement of a new corporate Microsoft Office site licence to support this work will be achieved through an OGC contract as detailed in section 2.3. It should be noted that Microsoft intends to release a new version of 'Office' in the later part of 2006. The terms of the site licence will allow the Council to upgrade to this version at no additional licence cost. The products used for this update are covered in detail under the strategy heading.

Finally, Members have agreed to the implementation of various new applications over the past 8 months. These have been agreed by Cabinet and originated from either the Council's e-Government Strategy or from individual reports via the Service areas. They are summarised below with the details of the system function and their system owner.

- Performance Management System – Head of HR and Performance Management
- Corporate Electronic Records and Document Management System – Head of ICT
- Web casting Pilot – Head of Research and Democratic Services
- Essex Marketplace e-Procurement System – Head of Finance
- E-Bookings System - Head of Research and Democratic Services

5.4   **Strategy for 2006/2008**

➢   Assist the CSTP Programme Board by providing technical and business analysis services in designing and implementing the required crosscutting business applications

➢   Ensure all underlying technical support applications (security, web, email, file, backup etc) are maintained in accordance with the suppliers recommended upgrades, updates and patches.

➢   Develop and implement a single GIS support function

➢   Undertake a review of the 'Government Connect' and 'DirectGov' implications and develop a plan for their implementation

➢   Undertake a review of the current Benefits, Council Tax and National Non-Domestic Rates System and develop a plan for its replacement in supporting the wider e-Government requirements.

➢   Implement the 'Office Tools' element of the Corporate Desktop Strategy by using the following standard products on all desktops:

- Microsoft Office 2003 standard edition (Office 12 to be released in 2006) This includes a word processor, spreadsheet and email
- Microsoft Access – Only when supported by a business case This allows for small applications to be developed, only when there is no other corporate alternative (see appendix b - applications section)
- Microsoft Visio – Only when supported by a business case This is a diagramming application
- PDF Factory - (Server edition)

This allows for the creation and editing of Portable Document Format (PDF) files.
- Adobe InDesign - when supported by a business case
  This is a desktop publishing application
- Microsoft Internet Explorer
  This is a web browser

➢ Implement the following systems as agreed by Council:

- Performance Management System – 'TEN'
- Corporate Electronic Records and Document Management System – Anite@work
- Web casting Pilot – UK Council
- Essex Marketplace e-Procurement System – IDeA
- E-Bookings System – Business Web Software
- Choice based lettings – external provider
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6. Network Infrastructure and Services

6.1. Overview

The network infrastructure is the physical cable and hardware that link the Phone/PC/terminal to the relevant network/server/mobile device. The existing data network infrastructure is based on the Ethernet standard that is used by nearly all major organisations worldwide. Our current implementation is based on a data rate (speed) of 100/1000 million bits (10 bits equal one character) per second (Mbs). The Council also has links to remote sites using digital public circuits, the in-house voice network or older private analogue connections and the Essex wide secure extranet that connects to all Essex Local Authorities, Fire, Health and Police Services. The technical terms used to describe these networks are local area network (LAN) and wide area network (WAN). Collectively the network is known locally as the 'EppNet'. The Essex wide data network is known as the 'Essextranet'.

As part of the recent Senior Management restructure (2003) the Voice Communication function of the former Legal and Administration Service was subsumed into the new Network Services division of the new ICT service. As a result ICT is now responsible for all network services across the authority including telephone services and the provision of the main telephone switchboard function.

6.2. Main Aims

To provide a standards based resilient data and voice network that provides access to corporate ICT resources throughout the Council's offices (both locally and remote) and to allow access to external resources where appropriate.
To ensure that the 'EppNet' is capable of delivering all the Council's data and voice transport needs required by this Plan.

6.3. Objectives for 2006/2008

Following on from the successful restructuring of the newly formed ICT service the Council is now in a position to standardise on one single data network that could provide both data and voice (telephone) services. The Council has a highly evolved network cable infrastructure already in place that has the capacity to handle both voice and data; however the current legacy analogue switch could not effectively make use of this infrastructure. The way forward for the Council is to adopt the new industry standard for providing telephone services. This new standard is called Voice over Internet Protocol (VoIP). This technology digitises speech and converts it into the same protocol that PC's and servers use to

communicate; as a result the telephone handset can use the same network as all other corporate computer devices. In the case of the Council this would mean the telephone switchboard and the telephone handsets would be plugged into the 'EppNet' and therefore share a single corporate network. The main business benefits of VoIP are:

- **Simplified infrastructure.** With VoIP on the Council network there would no longer be a need for separate cabling for the telephone system and the existing investment in network management systems for data would also manage the VoIP environment.

- **Scalable.** Traditional proprietary PABX (Private Automatic Branch Exchange) based phone systems come in many size ranges and it is often necessary to upgrade existing systems and replace hardware in order to add features and expand; this is not the case with VoIP systems that add features and capacity in software at minimal cost.

- **Reduce operating costs.** Because a VoIP exchange has no proprietary hardware and is based on software, it is easier to alter and maintain.

- **Improve productivity.** VoIP treats voice as if it were any other kind of data, so users could attach documents to voice messages or participate in virtual meetings using shared data and videoconferencing.

- **Flexibility.** The Council could reduce the use of privately leased connections to remote sites by using broadband services and combining voice and data over a single lower cost service.

In addition to moving over to a VoIP based telephone solution the Council now needs to upgrade its existing 3Com workgroup data switches. These switches connect all the Council's terminals, PC's and printers to the core network. They have been in operation since the late 1990's and have now come to the end of their expected operational life. 3Com have also announced their obsolescence with regard to support, this will be withdrawn from October 2006. The Council has recently (March 2005) upgraded its core network to the latest generation of 3Com enterprise data switches (8800 series) and although these operate in an open standards environment it is being recommend that the Council retains its commitment to 3Com for supply of all its data switches to ensure complete compatibility and reduce the burden and inefficiency of support staff understanding multiple proprietary environments. 3Com have recently announced the introduction of its 5500 workgroup series of data switches that are the replacement product for the Council's existing 3300 series switches. The new 5500 series also offer the Council a network speed increase for connection to the core data switches. Currently the core network is connected to the workgroups at 1Gigabits per second the new standard introduced by the 5500 and supported by the existing 8800 series is 10Gigabits per second. This increase will allow for the expected growth in network traffic introduced by other parts of this strategy.

6.4 **Strategy for 2006/2008**

➢ Replace the existing legacy workgroup data network infrastructure with the current 3Com workgroup 5500 series switches.

➢ Replace the current Siemens analogue telephone switch the with the newly introduced Siemens VOIP switch. The Switch will be fully Session Initiation Protocol (SIP) compliant to ensure multi-vendor handset support.

➢ Replace the existing analogue telephone handsets with a combination of standalone VOIP handsets, software handsets linked to terminals/PC's and mobile WiFi smart phones. All handset are to be SIP compliant to allow for multi-vendor procurement.

Epping Forest District Council

Information and Communications Technology

Corporate ICT Strategy

Summary of Adopted Systems, Standards and Policies

October 2005

Corporate ICT Strategy

Overview of the Strategy

A successful Corporate ICT Strategy is one that creates a technical environment in which information can, if appropriate, be exchanged and data can flow in a seamless manner that is transparent to the user. The Strategy must also accommodate the rate at which technology becomes obsolete and therefore will be a constantly evolving document that is reviewed on a regular basis. Above all, the Strategy must be kept corporate and its content mainstream. These are the key factors that have been taken into account during the development of the Strategy over the past 7 years

The Corporate ICT Strategy is divided into six key headings: standards, hardware, operating systems, databases, applications and networks. This document summarises the standards and policies in each key area that have been adopted by the Council to date.

This document is a critical element within the Council's E-Government strategy and will be used to ensure all ICT systems and services are delivered using clearly defined standards that will provide the correct balance of end-user functionality and corporate accessibility.

7. Standards/Policy

7.1. Overview

Standards within an ICT service are designed to reflect levels of attainment and achieve a common approach over a long period of time. It is therefore advisable to formalise these standards in a written document with sections for each discipline. Standards addressing key activities within the ICT function are needed to ensure consistency of usage and compliance with rules/law designed to protect the integrity of the ICT service.

Active standards and policies

- Corporate ICT Security Standard.

- Corporate ICT Procurement Standard

- ICT Help Desk Policy

- Corporate E-mail Policy

- Corporate ICT Contingency Strategy

- Corporate Data Protection Policy

- IEG Government Return

- Corporate Internet usage Policy

- Freedom of Information Policy

- Home Working Policy

8. Hardware

8.1. Overview

The hardware is the machinery and equipment used to deliver the ICT service to the user.

Adopted hardware standards

- ➢ All servers and related technology to be based on the HP Proliant rack mount series hardware. (Reviewed 2002)

- ➢ All Workstations/PC's/Terminals/Mobile devices to be based on HP hardware. (Reviewed 2002)

- ➢ Using windows terminal technology (thin client), as appropriate, in preference to PC's for corporate desktop computing. (Reviewed 2004)

- ➢ Supporting all hardware platforms (Servers) from a single external contract (April 1998).

- ➢ All core backup hardware to be based on LTO technology. (April 2000).

3.0   **Operating Systems**

3.1   **Overview**

The operating system is the means whereby the applications communicate with the hardware and is also the mechanism for managing hardware resources (disk space, memory, network access etc) and enforcing security measures.

Adopted Operating system standards

➢   All Servers to use Microsoft's Windows 200x/.Net Server operating system.

➢   All Terminal Servers to use Microsoft's Windows 200x/.Net operating system combined with the Citrix Metaframe enhancement.

➢   Basing desktop computing on a thin client model in preference to thick client (PC's).

➢   Basing desktop computing operating system on Microsoft's Windows 9x/200x/CE environment. Moving all desktop operating systems to the Windows 200x/.Net/CE model by April 2005.

➢   Using Microsoft's Active Directories to control and manage the entire 'EppNet' Domain.

9.   **Database Management System**

9.1.   **Overview**

The database management system (DBMS) deals with the storage and retrieval of user data and provides the programming development environment. It also deals with the security of data and provides the tools to enable end users to extract and manipulate data outside of its normal application.

Adopted Database standards

➢   The Council will use the Oracle RDBMS for all new applications. (P&C – 29 September 1998). The version of Oracle used will be based on Oracle's support policy at the time of purchase.

➢   The Council will consider the use of Microsoft SQL server (RDBMS) for new applications, subject to resource implications incurred by the corporate ICT service. (April 2001)

10.   Applications

10.1.   Overview

The application is the system that delivers the service to the user via the PC or terminal and is normally the only method that staff can access any data or information. It is critical to the success of the overall ICT Strategy that all new applications apply the strategies set out in each of the other key areas.

Service Specific Applications implemented (Major systems)

➢   Financial System – Anite/E-Financials (Implemented 2002)

➢   Debtors System – Anite AIMS/HBOPS (Implemented 2002)

➢   Local Land Charges System – NorthgateMVM (Implemented 2002)

➢   Housing Management System – Anite/OHMS (Implemented 1999 – 2002)

➢   Cash Receipting System – Spectrum (Implemented 2001)

➢   Highways System – SBS/Confirm (Implemented 1999 – Transferred to ECC July 2005)

➢   Environmental Health System – Northgate MVM/PP Wizard/Monitor
➢   (Implemented 1999)

➢   ICT Help Desk System – Datawatch/Quetzal (Implemented 1999)

➢   Electoral Registration System – Express (Implemented 1998)

➢   Estate Management – GVA Grimley (Implemented 2003)

➢   Benefits, Council Tax and NNDR – Anite/Orbis (Implemented February 2003)

➢   Human Resources – KCS kEM (implemented April 2004)

➢   Telephone Payments System – Spectrum – (Implemented 2004)

➢   Content Management – Harlequin - Punch/Business Web Software - Achieve Forms (Implemented 2004)

➢   Planning and Local Land Charges – Northgate MVM M3 – (Implemented 2005)

➢   Local Land and Property Gazetteer – Northgate MVM M3 – (Implemented 2005)

➢   Electronic Online Payments System – Capita – (Implemented 2005)

➢   Committee and Civic Management – NTE – Modern.Gov (Implemented 2005)

➢   Electronic Forms – BWS Achieve Forms (Implemented 2005)

Corporate Office Applications Implemented (Corporate Standard software)

- Office Productivity System - Microsoft Office 2000 (Implemented 1998 – 2000)

- Digital Mapping/Geo-graphical Information System – MapInfo (2000)

- Database reporting tools – Crystal Reports and Business Objects (2000)

- Desktop Publishing - Adobe InDesign (EOLP 2003)

- Novell GroupWise Email System (Server and Client) – Upgraded to 6.5 – (2005)

- Electronic Records and Document Management System/DIPS – Anite@work (Implementation due to start in December 2005)

- Geo-graphical Information System Viewer – ProPrinter (2004)

- COLD System – PTC Oxalys (2000)

Corporate Technical Applications Implemented

- Corporate Backup Systems – Veritas Backup Exec/Symantec V2I (2000)

- Corporate Antivirus Systems– Symantec/Sophos (2000)

- Corporate Firewall System – Watchguard (2002)

- Corporate Remote Access – F5 Firepass SSL VPN – (2005)

- Corporate Data Management – Veritas Storage Central/ExecSoft Diskeeper (2004)

- Network Management System – Castlerock SNMPc (Implemented 1998)

- Network Monitoring System – Network Instruments - Observer (2005)

- Corporate Log Management – PTC Console Manager (2004)

- Corporate System Scheduler – PTC Scheduler (implementation start October 2005)

- Corporate Software Asset Management System – Express Metrics (July 2005)

11.   Network Infrastructure

11.1.   Overview

The network infrastructure is the physical cable and hardware that link the Phone/PC/terminal to the relevant network/server/mobile device. The existing data network infrastructure is based on the Ethernet standard that is used by nearly all major organizations worldwide. Our current implementation is based on a data rate (speed) of 100/1000 million bits (10 bits equal one character) per second (Mbs). The Council also has links to remote sites using digital public circuits, the in-house voice network or older private analogue connections. The technical terms used to describe these networks are local area network (LAN) and wide area network (WAN). Collectively the network is know locally as the 'EppNet'

The telephone network consists of copper wire cable infrastructure connecting telephones and fax machines to the Councils Private Automatic Branch Exchange (PABX). The interface between the Councils telephone network and the PABX is the Test Jack Frame (TJF). The TJF provides complete connectivity between the PABX ports (extensions) and the telephone network wiring. The TJF also interfaces between the PABX and the BT Public Telephone Network (PSTN). Remote sites are connected to the main PABX using digital or analogue leased lines.

Adopted Network standards

➢   The Councils LAN 'EppNet' is based on 3Com 100/1000Mbs Ethernet technology. The network will migrate to 3Com 8800/5500-based technology when available (2006/2007).

➢   The Council will base all wireless network access on 3Com 8700 series products. Wireless connectivity will only be available through RADIUS access.

➢   The Council operates a TCP/IP (V4) only protocol standard. Migration to V6 will be considered when appropriate to the needs of the Council.

➢   The Councils WAN is based on Cisco router technology and operates over leased digital services with on-demand digital backup services.

➢   The Council will migrate the existing legacy WAN to VPN based technology.

➢   A fully redundant network topology has been designed and implemented across the whole civic office site (completed June 2000).

➢   All computer based remote sites are linked to the 'EppNet'.

➢   The 'EppNet' is linked to the Internet. Both Web access and E-mail facilities are now generally available (see standards for other related issues

➢   The 'EppNet' is linked to the 'Essextranet'. This gives all users of the EppNet access to all Essex District and County Networks.

➢   Cat5e copper cable (350Mhz) is used for all 100Mbs circuits. Multimode Fibre (62.5/125 -250-500Mhz) is used for all 1000Mbs (SX) circuits. Cat5e circuits are terminated with standard cat5e RJ45 sockets. Fibre sockets are terminated with ST

(patch panels) and use ST to SC patch leads (legacy) or ST to MT-RJ patch leads (current).

➢ Cables of various sizes (10/20/60/100 pairs) radiate from the TJF in a star formation. These cables are terminated on either non-structured (70%) or structured (30%) systems.

➢ Non-structured : Cables are terminated at a Distribution Point (DP). Individual 3 pair cables connect the DP to Line Jack sockets, which are floor or wall mounted. Telephones are connected directly to the Line Jack socket. (The DP offers localised flexible connectivity for telephone user moves and changes.)

➢ Non-structured standard component specifications: TJF jumper wire copper CW1423 Blue/Yellow; TJF to DP Internal cabling copper CW1308 (20/40/60/100 Pair + Earth); DP to socket Internal cabling copper CW1308 (3 Pair without Earth); Line Jack 2 (single) and Line Jack 4 (double) BT 631A sockets; Plugs BT 631A (6 pins 6 wires) or BT 431A (4 pins 4 wires) right-hand latch; All Connections use IDC terminations.

➢ Structured: each cable from the TJF is terminated on a telephony patch panel. A patch lead allows connection to the data network, from the patch panel through to the RJ45 sockets, which are floor or wall mounted. Telephones are connected either directly to the RJ45 socket or through a 'PABX Master' line adaptor (providing the ring circuit). Localised flexibility being achieved using the patch panels and cords.

➢ Structured standard component specifications: TJF jumper wire copper CW1423 Blue/Yellow; TJF to Patch panel: Internal cabling copper CW1308 (20/40/60/100 Pair + Earth); Patch cord: Cat5e copper cable with BT 431A/631A plug and RJ45 plug termination; Patch panel to socket: Cat5e copper cable; Standard cat5e RJ45 sockets; Plugs RJ45 (8 pins 8 wires); All connections use IDC terminations.