CORPORATE
ICT STRATEGY
2008-2013

Contents

ICT STRATEGY 2008-2013
CONTENTS

INTRODUCTION

This document sets out the corporate ICT strategy for Dudley Council for the period 2008 to 2013. The strategy sets the standards for ICT equipment and services that will be adopted by the council to allow it to deliver its plans for transformation of services it provides to Citizens and businesses of the borough. This strategy is developed against a background of a rapidly developing business need, driven by the need to deliver improved customer services and greater efficiency.

The strategy is part of a continuous series of corporate ICT strategies going back over 20 years which have steered the many successes Dudley has been able to achieve in this area. The strategy has been drawn up in consultation with a wide of Council employees.

Aim of Strategy

The aims of this Strategy will be:-

> *To support the Council in delivering its key objectives and to provide infrastructure and services necessary to drive the transformation of council services.*

These aims will be achieved by:

- Recognising that ICT equipment and services is critical to the day-to-day operation of the Council, and must be reliable, secure and cost effective;
- Ensuring that key components of our infrastructure are replaced as necessary to ensure reliable operation of services;
- Developing, improving and modernising business and professional systems to deliver greater efficiency, meet changing business need or exploit new technology;
- Ensuring that ICT infrastructure is developed to support the Council's objectives and to be responsive to new opportunities;
- Continuing to exploit the existing investment in ICT Solutions, in particular ensuring that the Council's workforce has the necessary skills to use equipment and services effectively and identify opportunities to improve their work practices.

- Implementing services and systems that support improved information Management, Flexible working, Self service provision of services and increased integration of services
- Meeting national and local targets and priorities;

Scope of the Strategy

ICT is a wide-ranging group of services and equipment, impacting on every part of the Council, dealing with the provision of Business systems, Administration Systems, Desktop and Mobile Technology and Communications infrastructure to all parts of the Council.

The scope of the strategy includes

- A wide range of user equipment, ranging from mobile phones to desktop PC's, and multifunction Printers/Photocopiers
- A single integrated communications network, providing secure connectivity across the whole council, capable of supporting data, voice and video communications.
- Standard administration services, including e'mail, word processing spreadsheets etc.
- A wide range of software applications ranging from personal productivity tools to corporate systems
- The Council's Data Centres housing the processing power and data storage necessary to support these applications
- Secure communications with those outside the council, be they partners, suppliers, citizens, businesses or homeworkers.
- A framework and toolsets for managing the flow of information across the Council

The detail of the strategy will be split into two parts, Business and Professional Systems and ICT Infrastructure. It is expected that a separate Transformation strategy will be developed when new arrangements for managing transformation corporately are put in place.

OVERVIEW AND ENVIRONMENT

Background

The Council has had a number of Corporate ICT Strategies since the first one was produced in 1986. Since that time the emphasis has changed from a focus purely on technology, through a process of using the technology to improve the business systems operated by the council, to the current strategy which is intended to support the transformation of the way the council delivers its services and interfaces with its citizens.

The Council is now totally reliant on ICT systems and services to deliver many of its essential front line services. Effective and successful direction and management of the ICT Services provision, and the continued achievement of key performance indicators and targets is therefore extremely important. The reliance on ICT also means that Risk Management, Disaster Recovery and Business Continuity must also play a major part in the ICT Strategy.

The rapid pace of change against which this strategy is developed means that it is essential that the strategy is taken as guide. Future developments in the needs of the Council, and the technology on which this strategy is based, may result in significant changes to the strategy being required during its life.

Service Imperatives

This strategy supports a number of high level 'service imperatives' which ensure that the Council's ICT provision meets its service needs. These are the need to be able to:

- Deliver reliable, cost effective services to the rest of the council to enable them to achieve their business objectives.
- Maintain good stewardship by ensuring the information held in the Council's systems is used for proper purposes, is secure from loss and inappropriate access and is managed to ensure maximum benefit.
- Ensure that the proportionate redundancy and back-up procedures are in place to mitigate risks of equipment, environment or software failure
- Ensure continuous development of standards and codes of practice;
- Communicate effectively and in a timely manner within and across the organisation;
- Exploit new technologies to achieve efficiencies and continuous improvement;

- Increase systems integration to provide front line staff and citizens with better quality information;
- Improve the Council's Management of Information and reduce paper storage by indexing, storing and archiving information electronically;
- Offer our citizens and businesses the opportunity to self-serve wherever it is appropriate, whilst supporting other forms of access for those who prefer a mediated access channel;
- Ensure that the operation of ICT equipment across the council is operated in such a way as to minimise its carbon footprint, and that the systems the council employs consider the potential for reducing environmental impact

In order to address these challenges it will be necessary to ensure that the council's has in place adequate resources to procure appropriate technical solutions, an ICT infrastructure that is robust and flexible and an appropriate ICT Service Delivery function.

Strategic Issues

This strategy also provides a framework upon which the Council can build its response to a number of strategic issues. These strategic issues are both internal and external and include:

- CSR07, and the need to meet stringent efficiency targets by promoting effective procurement; increasing the use of Shared Services; redesigning business processes and improving the use of assets
- Varney report, which recommends that Council reduce the cost of Contact Centres, reduce avoidable contacts, increase Web site usage for information requests and sets targets for the number of Service requests dealt with at first point of contact.
- Service Transformation Agreements, Published as part of CSR07, which includes a new measure of "avoidable contacts"
- Accommodation Strategy, the Council is currently moving forward with the Quadrant, which will deliver a modern, flexible working environment for about 1,800 staff. Even if this project fails to get off the ground the benefits offered by more efficient use of office space will be required in some form in the near future.
- Flexible working, Closely coupled with accommodation strategy are the efficiency opportunities offered by allowing staff to work either wholly or partially from home, or to become more mobile.
- Closer partnership working, Local Authorities are increasingly expected to work more closely with other public bodies such as the PCT, Police and Community Safety organisations, the voluntary sector etc.

- Modernising Customer contact, continuing the work of Dudley Council Plus to provide a single point of contact for all citizens, for the widest possible range of services.

- Improving the skills the workforce as a whole to ensure that they are able to exploit the technology provided by the Council and identify opportunities to change the way they work to improve Customer Service and Efficiency;

- Ensure that the Council's management team have necessary skills in Project and change management to deliver improvements;

- the renewal of the Council's Voice Communications Contract, currently with Virgin (formally Telewest) supplying the Council's Centrex Voice Service which terminates in March 2009.

- external accreditation of the council's information security procedures in order to participate in a number of information sharing partnerships and to ensure that citizens are comfortable with the Council's ability to store and process their information safely.

- the need to evaluate the opportunities presented by the issue by Centro of new Concessionary bus passes to eligible citizens in the West Midlands. These passes will be Proximity read Smart cards, with significant spare capacity available to Local Authorities for their own use.

Technology Challenges

There are a number of technical issues that the Council must face within the lifetime of this strategy.

- The Council's main data centre is housed in Tower Street, in accommodation that is scheduled for disposal although no replacement location has yet been identified.

- The Councils Server infrastructure is based around Microsoft Server 2000 Products. That has already been superseded by 2 major new releases, offering better facilities and improved performance, and will soon cease to be supported. The Council needs to develop within the next two years a funded strategy to deal with this situation.

- The Council's desktop software infrastructure is based around Microsoft Office 2000, again this has been superseded by new releases of the Office product offering a wider range of facilities. These facilities are more suited to the flexible working arrangements, and the opportunity should be taken an appropriate point in the next few years to implement a significant pilot of the latest available desktop infrastructure.

- The council's desktop provision relies on PC's on the desktop, (known as Fat client) these are more expensive to buy: support and run than the equivalent Thin Client solution. The Council has implemented approximately 1,000 thin

client solutions, mainly in the Directorate of Adult, Housing and Community services, and fully understands the implications of using this equipment. Thin Client Computing should become the default option from now on, whilst recognising that there will still be significant requirements for PC based solution in some areas.

- The Council has successfully introduced new telephony systems exploiting the capacity of the data network to deliver a telephony solution closely integrate into other ICT solutions. This technology is used to support a number of Call Centres throughout the council. The Council must decide how extensively to exploit this solution.

- In dealing with the desktop replacement strategy and the introduction of new voice technology the Council can integrate these two areas into a single unified communications infrastructure, supporting e'mail, instant messaging, voice communications and video conferencing via a single integrated user interface

- The Council's Intranet and document storage facility are based around old and highly manual software. Work is well underway to replace the Council's intranet with a Content Managed System, using the same technology as employed on the Council's external web site. However no replacement has yet been identified for the council's document storage facility.

- The introduction of Radio Frequency Identification (RFID) into libraries as part of the Library modernisation plan will introduce a new technology into the council. This technology will allows books to be withdrawn and returned to the library without the manual scanning processes currently in use may applications in Asset Management in other areas of the Council.

- Potential introduction of Public access Wi-fi services in Brierley Hill and public libraries may offer further opportunities to provide services to the Council's citizens, particularly young people in education.

- During the lifetime of this strategy the Council's PFI contract with Research Machines to provide ICT Service to the Schools as a managed service will terminate. This will offer a variety of technical challenges to ensure that the Council continues to obtain best value for money from its investment in school services.

Current Achievements

The Council is however well placed to identify and meet future challenges:

- Strategic investment in ICT has resulted in an infrastructure which is capable of providing integrated solutions

- Investment in the data communications network allows electronic service delivery to almost every location used by the Council

- Mobile computing solutions have been developed to enable remote/outreach and home working

- The office system strategy enables staff to communicate electronically with each other, partners and suppliers and citizens

- The extensive internet site www.dudley.gov.uk uses modern content management features to allow easy, devolved maintenance and a wide range of Self service facilities;

- The in-house ICT supplier is well regarded by its customers, in a recent nationally organised survey covering over 100 local authorities we were in the top 10% and the best performing Metropolitan authority;

- The in-house ICT training Unit is established to provide training in a wide range of software products and is accredited by the Institute of IT Trainers;

- There is a high level of member engagement with 70 out of 72 members equipped with a variety of ICT solutions, ranging from networked PC's laptops, tablet PC's and Blackberry's;

- There is a high level of co-operation between the in house Corporate ICT Services Division and directorate based Customer Located ICT support staff.

- The Audit Commission reported that Dudley "a sound infrastructure of information technology (IT) with good equipment, well developed intranet and website and good user feedback".

Sources of Information

This strategy has been developed as a response to a number of Council and Governments Initiatives, it has drawn from a number of sources including:

- Previous ICT strategies containing local targets for achieving the Government's Electronic Service Delivery targets and Best Value performance indicator BVPI 157

- The Council's six Implementing Electronic Government (IEG) Statements which have been approved by Central Government

- Updated Directorate 5 year Strategies where available

- Involvement with Dudley Council Plus (DC+) in support customer access, and with the Customer Access To Services (CATS) team in re-engineering services to support the DC+ model.

- The 'Transformational Government – enabled by technology" paper published by the Chief Information Officer Council, and the subsequent "transformational Local Government" discussion paper.

- The Service Transformation Agreement included in the Comprehensive Spending review for 2007 – 2010.

- The Council Plan 2010, which sets out key improvement priority areas.

GOVERNANCE ARRANGEMENTS

The delivery of this Strategy will fall under the overall control of the Assistant Director of Finance, ICT and Business Transformation who is responsible for delivering corporate infrastructure projects associated with Service Transformation, Information Management and the delivery of technology to support transformation.

A Corporate Steering Board, e-dudley, Chaired by the Director of Children's services, will meet at least every other month to ensure activities outlined in this strategy are co-ordinated. Senior Representatives of every directorate, together with Personnel Services and Marketing and Communication representatives will attend.

Scrutiny of this process will be undertaken by the Select Committee on Regeneration, Culture and Adult Education who will receive an annual report on the ICT Strategy

An Annual report on progress against this strategy will be taken to the Corporate Board and the Cabinet.

RISKS

In any strategy of this nature it is essential that potential risks are identified and mitigating actions planned. The following table sets out the risks identified from this interim strategy.

Risk	Impact H/M/L	Probability H/M/L	Mitigation Actions
Government Strategy on Transformational Government will Change	High	Low	Re-write the Strategy to reflect new Government Direction
Insufficient buy-in at High levels in Dudley MBC to drive changes	High	Low	Re-write the Strategy to reflect level of commitment
Dudley's approach to transformation will radically impact on this strategy	High	Medium	Re-write the strategy to reflect new corporate transformation arrangements
Citizen feedback indicates Change is not required	Medium	Medium	The strategy needs to be flexible enough to respond to changing citizen needs
Insufficient buy-in from partners and other community groups, which may result in a change in strategy.	Medium	Low	Seek feedback and commitment from partners
Resistance to change in directorates	Medium	Medium	Ensure High Level commitment to strategy
Insufficient internal dedicated resources, capacity and competencies will be available to deliver Transformational Government?	High	Medium	More accurately identify resources when needs are better understood

5. Finance

FINANCE

Recognising the importance of and the benefits from ICT, the Council has invested significant amounts in ICT over the years.

We have reviewed the likely levels of additional investment required over the next five years up to the end of the current period of the strategy to:-

- meet ongoing commitments,
- replace key core items of ICT infrastructure
- Continue to support e'government initiatives to improve self service access to services.

Many of the projects planned will require significant capital investment and ongoing support costs, in all cases a detailed business plan identifying the costs and benefits of each proposal will be developed. Many of the proposals will be closely linked to the efficiency agenda, and will be an integral pat of delivering the savings set out in the 2007 comprehensive spending review. Commitment to spend will only be made once all the necessary funding has been identified.

The Council continues to make a substantial contribution of c£420,000 per annum to towards the corporate ICT strategy and this funding is used to fund specific projects agreed by the e'dudley steering group, and refresh of some of the major items of infrastructure.

BUSINESS AND PROFESSIONAL SYSTEMS

Introduction

This Section of the Council's ICT Strategy deals with the systems and processes that support the council's service delivery.

Definition

The Council's Business and Professional systems are the ICT solutions delivering business benefit across the Council, they range form the Corporate Financial Systems, to a spreadsheet operated by a single officer. However the nature of this strategy is that it concentrates on those larger applications that have an impact across more than one Directorate.

Aims

> *To provide efficient and effective ICT solutions to meet service and business needs.*

In order to deliver this aim, our key objectives will be:-

- To ensure that information systems are provided to meet the Council's core objectives;
- To ensure that information systems are implemented that improve the effectiveness and efficiency of the Council's operations to help deliver the targets set out in 2007 Comprehensive spending review;
- To allow closer integration between the council's business systems improving both efficiency and customer service;
- To maximise the benefit the Council obtains from the information it uses to support its business processes;
- To use information and new technology to enhance and enable flexible service delivery;
- To maximise the benefits of technological innovation;
- To ensure that corporate and directorate systems are capable of sharing information with each other and with outside agencies in an effective, and secure way with the minimum of intervention;
- To provide reliable systems that are available at time that match the increasing expectations of our customers and provide support services to meet these aspirations
- To ensure that systems comply with data protection and freedom of information legislation, and are delivered in a robust way according to latest professional standards.

6. Business and Professional systems

Achievements

Over the past twelve months, since the previous strategy was introduced the Council has made considerable progress in this area. This includes:

- Introduced a mobile workforce management system for housing operatives, integrating systems from several suppliers
- Delivered a high level of integration between the Council's CRM system, an Street Lighting system to improve the handling of incidents by DC+
- Extended the facilities of the Council's HR system to include training records, and recruitment.
- Delivered significant improvements to the Planning Applications systems to support on-line planning process.
-

Key ICT issues

In order to meet our aims we believe the strategy needs to address a number of key ICT issues, which will involve :

- Improving the availability of information to support business processes that are available to citizens on the Internet and to staff on the Intranet;
- Developing an integrated GIS (Geographic Information System) system, particularly to support the CATS programme, and other national Initiatives;
- Exploiting the potential of Electronic Document Management, particularly in Social Services to support Electronic Social Care records;
- Developing ICT provision in schools through the Dudley Grid for Learning (DGfL);
- Extending our existing support arrangements to meet the changing needs of the business;
- Maintaining awareness and compliance with appropriate Information Management legislation and standards;
- Creating and maintaining a corporate inventory of information held in various systems throughout the council.

Corporate Developments

Information Management

As the use of electronic systems grows across the council the challenge of gaining maximum advantage from the important asset of information held in these systems increases.

- Operational pressures from the DC+ programme and the Transformation Agenda require the development of a "One Council" approach, which means that it is essential to share information. So we need to understand

what information is held where, who is responsible for maintaining it, and develop a corporate approach to classifying it.

- Organisational pressure to deliver better services for lower cost mean that we need to use all the available information to ensure that we are targeting scare resources in areas of greatest need, and to plan future developments.
- The Local e-Government Strategy insists that we manage our information according to agreed standards. This requires us to understand what information is held where.
- The need to answer requests made under the Freedom of Information act, and the Data Protection act makes it essential that the council manages its information assets correctly.
- There is a strategic need to ensure that all our policies and procedures comply with the latest Standards in this area, ISO27001.
- We need to ensure that there is no leakage of private or confidential information from the Council.

Internet Services

Many systems are being delivered directly to citizens via the Internet. These allow citizens direct access to authorised information held in business systems, such as the Planning Application/Building Regulation system, and to transact online with the Council for some services. The council's GIS system also has an Internet front end to enable information in that system to be made available to the public over the internet.

In order to ensure that these services are delivered in a user friendly way we need to develop a single authentication system and portal for citizen's to allow them to identify themselves to the council and conduct business with whichever services they require. This system can also be used to distribute information to citizens electronically, tailored to the citizens expressed need to reduce unnecessary communications.

The use of these electronic communications methods will also help to reduce the Council's carbon footprint by reducing the need to travel to deal with services and reducing the volume of paper output.

Intranet

The framework for the Council's Intranet, primarily to act a communication medium to serve staff, is now firmly in place. The intranet will be upgraded with a Content managed facility, using the same tools that we provide for the Internet service to allow Directorates direct control of the information publish on it. The Net-it solution currently used to provide access to selected electronic information across the council will be improved by the delivery of an improved client interface, but will remain in place until a corporate Electronic Document and Record system is acquired. Increasingly we will seek to

introduce Self-Service Web enabled corporate solutions to reduce the Administrative workload on Council staff.

Corporate GIS system

The Council's corporate GIS system not only holds the Council's Land and Property Gazetteer, and the Council's Streets Gazetteer, it also links to a wide variety of information sources that can be related to spatial geography. It is already widely available over the council's intranet and the Council's web site. The system is used to support the CATS programme, making information available to front office staff about the location and attributes of a wide variety of assets, and supporting the integration of the Streets Lighting system with the CRM. Additional features, such as 3D photography, height data, topographic information and additional data sets will be added, and early discussions are in place with the Black Country Consortium to provide an exciting visualisation toolkit for certain areas of the borough.

Integration of existing systems

Integration of different computer systems is the "holy grail" of Business Transformation. It offers many benefits in terms of sharing information, reducing the amount of information required, reducing errors, and streamlining processes, Unfortunately integrating systems is a bespoke exercise, requiring detailed investigation and engineering to ensure that the solution finally delivered meets the business needs of the customer at a sustainable cost.

Integration technology is still in the early phases of development, and many of our Business Systems software suppliers have no products in place to allow integration outside their own product range.

The council will develop a separate integration strategy which needs to include issues such as preferred integration methods, software acquisition, integration tools etc.

Systems Exploitation

Although the council has an excellent track record for implementing new systems within agreed targets it must be taken into account that the work does not stop there. Each new system brings with it the opportunity to change working practices and to work smarter, doing more with less. This becomes increasingly important with need to identify further efficiency improvements. In order to identify and achieve these gains it is important that we do not see the delivery of a system as the end of the process. Delivery should be backed up with proper training of all staff involved, together with ongoing review and overhaul of existing processes where necessary.

6. Business and Professional systems

Staff Professionalism

In order to ensure that the Council is prepared to take advantage of the benefits improved use of ICT can bring it is necessary for the Council's ICT Staff to demonstrate a professional understanding of both ICT issues and the Council's business drivers. Developing the professionalism if ICT Staff is one of the government's key priorities, and we will be ensuring that the Council's ICT staff are involved in these initiatives. In the interim we will continue to ensure that staff are trained to employ the IT. Infrastructure Library (ITIL) procedures, adopted the latest version, (Version 3) of these standards as they become more universally adopted. We will also ensure that staff in project management are trained in the government approved Prince methodology, and staff involved at a strategic level are also training in Managing Successful Programmes Framework sponsored by the Office of Government Commerce.

It is also essential that non-ICT staff in the authority achieve basic skills levels in the ICT at use in Dudley so that they can be employed more productively. To this ICT Services will be promoting the European Computer Driving Licence as a basic standard of Computer literacy to be applied across the council's staff.

Directorate based developments

In the same way as Corporate systems need to respond to developments in technology and changes in environment and legislation existing business systems in use throughout the council similarly require upgrade and replacement on a regular basis. New systems will need to be acquired that not only meet the business need, but also support the council's ambitions to develop improved access to services and comply with national government standards on data interchange. This regular refresh process will provide the opportunity to increase integration of systems and enable a greater range of services to be delivered directly to the citizen.

Challenges that are faced by each directorate will be reflected in their 5 year development plans, and will be added to this strategy when available.

6. Business and Professional systems

What we intend to do

In order to achieve the aims we have set the following programmes of work::-

Target Area	Actions	Target
National strategy	Ensure the new and existing systems are developed to comply with national e-gif standards and support National Initiatives	On-going
	Enable measurement of "Avoidable Contact" for all service delivery channels	
Web site Development	Implement Content Management on the Council's Intranet site	2008
	Support the introduction of Self Service Personnel functions on to the Intranet	2008-9
CRM Integration of Systems	Review the Aspire CRM System and consider if alternative solutions are capable of significant improvements	2008
	If necessary procure and implement a replacement CRM system	2009
	Develop and Publish an Integration Strategy setting standards for the procurement of new systems to facilitate future systems integration	2008
	Ensure that integration is consider as party of the process of bringing new service lines into DC+_	Ongoing
Corporate GIS	Continue to ensure all directorate systems 'integrate' with corporate GIS	Ongoing
	Integrate systems to support development of solutions based on life episodes	As required by Gov't Targets
Directorate Operational Systems	Implement EDM in Planning Services	2008
	Ensure back office systems exploit features offered by mobile working	2010
Information management	Continue to respond to requests under FOI Act within legislative timescales.	Ongoing
	Ensure business systems / back office systems achieve statutory targets for FOI / Data Protection / ISO 15489 during the life of this strategy	2013
	Complete an inventory of all information held electronically across the Council	2008
	Develop a File Plan capable of supporting the information Management needs of the whole Council	2010
Systems Exploitation	Continue effort to support the exploitation of the Corporate Office Strategy	Ongoing

ICT INFRASTRUCTURE

Introduction

This Section of the ICT strategy deals with the Council's ICT Infrastructure and how the technology underpinning the infrastructure will be implemented and developed.

Definition

The ICT Infrastructure consists of far more than just "Tin and Wires". It includes a number of important services that are used across the council to support communication and daily operations. It includes both the data and voice network, the servers and software on which our Internet and Intranet servers are built , the corporate exchange and Microsoft Office systems.

Aims

The aim of this section of the ICT Strategy is:

> ***To maintain and develop the ICT infrastructure to meet the Council's objectives.***

In order to deliver this aim, our key objectives will be:-

- To deliver a reliable, secure infrastructure on which the rest of the Council, our Partners and Citizens can rely,
- To ensure that the infrastructure will be able to support 24 X 7 working where required,
- To be effective in our use of existing technology and exploit new technology to enhance and enable flexible service delivery;
- To develop a secure infrastructure capable of meeting the Council's e-commerce needs, and providing secure processing of customers details;
- To integrate and co-ordinate the council's infrastructure to promote working as one organisation;
- To ensure that our communications network is capable of sharing information with our partners in an appropriate, secure way;
- To secure our network against the threat of computer virus and other forms of attack;
- To ensure that our infrastructure is used appropriately.
- To ensure that the community's needs for an information communication network are met;
- To ensure that citizen's of Dudley have confidence that the Council's infrastructure is capable of protecting their personal information;

- To continue to improve facilities to support new ways of working, such as Mobile working, home working, and hot desking;
- To support the developing Accommodation plan for the Council, with the most appropriate and cost effective technical solutions;
- To ensure that ICT solutions in Dudley are designed and implement in order to minimise impact on the Environment;
- To provide an internal Printing Service, offering quality, value for money and responsiveness to meet the majority of the council's printing needs, and to be able to organise external suppliers to meet print needs that are uneconomic for in house production.

Achievements

There have been a number of recent achievements arising from the previous ICT Strategy including:

- Implemented blade server technologies to reduce physical footprint, energy consumption and costs
- Identified and successfully completed the initial testing of server virtualisation technology as a way forward for further reductions in energy consumption and Total Cost of Ownership of servers
- Extended the capacity of the data storage systems to cater for the continued growth of data held electronically
- Expanded the use of IP telephony for both contact centre (including the Housing call centre) and everyday usage
- Introduced Video conferencing, SMS text messaging and FAX services across the data network allowing integration with various application systems
- Significantly increased the available bandwidth for Internet connection to meet growing requirements
- Commenced the redevelopment of the councils Intranet to provide council staff easier access to relevant information
- Developed and modified ICT infrastructures to support remodelling the council
- Continued to develop facilities to improve the availability and provide faster recover when failures/disasters occur.

Key ICT issues

In order to meet the Council's aims the strategy needs to address a number of key ICT issues, which will include:

- Developing our infrastructures to support the governments Transformation agenda
- Dealing with aging system software across the infrastructures which is coming to the end of its useful life (and in many cases the end of the manufacturers supported life)
- Investigating and implementing new technologies as they become available in order to help support the council in the delivery of its services

7. ICT Infrastructure

- Ensuring that the ICT provided continues to meet the needs of the council as it develops services, reorganises itself, changes the accommodation it uses and its workers work differently (e.g. from home, mobile etc.)
- Meeting the need to efficiently and cost effectively store and retrieve the growing amount of electronic data that the council uses
- Continuing to safeguard the councils ICT assets against malicious or accidental damage
- Making sure the investments already made in ICT infrastructures continues to be fully exploited
- Managing the process of reviewing / replacing major contracts for the supply of ICT products and services that are approaching their end date (e.g. the supply of voice communications and DGfL)
- Continuing to improve the availability of ICT systems and services and ensuring adequate Disaster recovery plans are in place in line with Business Continuity plans

The main implications arising from these issues are considered more fully below.

Server Software Refresh

ICT Services is a rapidly evolving technology and as suppliers produce new and updated products they remove support to older versions. This affects major areas of our ICT infrastructures and therefore plans need to be drawn up and implemented to ensure that these areas continue to provide the services necessary to support council services including:

- Server operating Systems
- Mail Systems
- Databases
- Server Support Systems

Data Centre Technology

With the final removal of the mainframe last year now is the time to ensure that the data centre infrastructures continue to develop to meet future requirements. At the same time we will consider the environmental impact of running large data centres and, for example, look to reduce energy consumption and heat generated. Some areas of work that will be considered include:

- Implementing server virtualisation technologies that enable several existing physical servers to be run on far fewer machines thus reducing the space occupied
- Expand the use of Blade technologies
- Enhance data storage facilities and implement Filestore archiving
- Replace aging servers as they are more expensive to run and more vulnerable to failure the older they get
- Exploit & develop remote monitoring facilities

7. ICT Infrastructure

Desktop Infrastructure

The desktop productivity of officers is paramount to the efficient working of the council and therefore it is essential that desktop computing facilities continue to develop and give a good return on investment. With this in mind we plan to:

- Adopt Thin Client solutions as the default option for the council's administrative work force
- Office 2007 – commence deployment
- Look to commence rolling out Vista, the new version of Windows on new PCs
- Consider the development of a Print Management Strategy
- Investigate Open Source software alternatives

Network developments

The network has for a long time been recognised as being essential to the successful deployment of ICT services to the council and citizens of Dudley. Continued integration of data, voice and other networks is key to the modern world that we live in. Work in this area over the 2-3 years will include:

- Review strategic direction of VOIP
- Produce strategy for the introduction of intelligent routing throughout the network.
- Expand the use of WI-FI & mobility
- Further exploitation of the corporate network to deliver CCTV & building management systems
- Investigate & implement appropriate areas of Unified Messaging

Output Strategy

There is a need to rationalise the range of number of devises that are used across the Council to produce paper output, to ensure that the most appropriate, cost effective and environmentally friendly solutions are applied in all cases. This will mean:-

- Review of existing printer provision
- Calculations and publishing the true cost of printing across a range of print devices;
- Providing Workgroup printer facilities wherever appropriate
- Exploiting the potential for multifunctional devises capable of Photocopying, Printing and Scanning, and integrating them into the ICT Network.
- Removing fax machines and replacing them with an outlook enabled e'fax service.
- Exploiting electronic means of communication, (SMS, e'mail, Web portals) to communicate with citizens wherever possible.

In order to achieve these objectives a separate Output Strategy will be developed.

ICT product & Services Contracts Review / Renewal Programme

A number of existing major contracts for the supply / maintenance of ICT products and Services are coming to the end of their contract period. It will be necessary to ensure that these are reviewed and either renewed or replaced as required to ensure the ICT requirements of the council continue to be met. Contracts needing to be reviewed include:

- The supply of fixed line voice communications
- The supply of high speed data communications
- The supply and maintenance of printers
- The DGfL Contract
- The supply of PCs
- Third Party Disaster Recovery Services

As always these lists are not exhaustive. Because of the sheer nature of the way technology changes, as does the needs of the council, this list can only be indicative of what may happen as no doubt it itself will be subject to change.

What we intend to do

In order to achieve the aims we have set the following programme of work and targets:-

Target Area	Actions	Target
Server Software	Upgrade Core server infrastructures to the latest release of Microsoft Windows Operating system	Mar 2009
	Upgrade Exchange email system to latest release	Mar 2010
	Enable core database servers to support the latest release of database software as required	Apr 2008
Data Centres	Pilot Server Virtualisation techniques	Jun 2008
	As servers need replacing utilise Virtualisation server technologies	From Oct 2008
	Investigate and implement Filestore archiving for general Filestore usage	Oct 2008
	Relocate Ednam Road and Tower Street Data centres in line with accommodation developments	Unknown
Desktop	Develop the services necessary to adopt thin Client solutions as the default desktop provision.	Sept. 2008
	Commence deployment of office 2007	Apr 2009
	Commence deployment of Vista the next generation of PC operating system	Apr 2009
	Evaluate Open Source desktop exploitation software alternatives	Mar 2010

7. ICT Infrastructure

Network	Review strategic direction of VOIP communications for general use	Jun 2008
	Produce a strategy for the introduction of intelligent routing throughout the network to support further exploitation	Mar 2009
	Develop network facilities to further enable mobile and remote working.	On-going
	Further develop Unified messaging techniques including instant messaging etc	On-going
Output Strategy	Develop and Publish a separate Output Strategy	Jun 2008