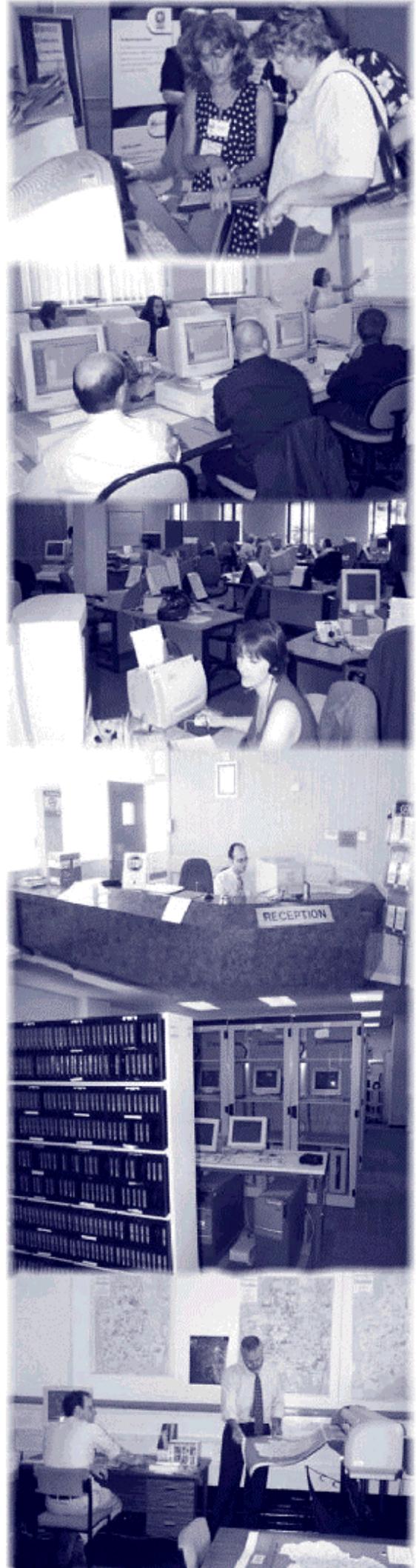


**ICT  
STRATEGY  
2003-2007**



# **ICT STRATEGY 2003-2007**

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## INTRODUCTION

This document sets out the corporate ICT strategy for Dudley Council for the period 2003 to 2007. It will be considered by the Executive on 19th March 2003, having been reviewed by the Select Committee on Economic Vitality and Jobs. The strategy is the next step in a continuous series of corporate ICT strategies going back over 15 years, and outlines the crucial role ICT will play in modernising local services for the citizens of Dudley.

The strategy is the second strategy to have been developed in conjunction with the Council's Best Value review of ICT services. The process for ICT strategic development involves annual review of an ongoing 5 year strategy. This will require:

- the development of departmental 5 year ICT business plans as part of an annual ongoing business planning cycle;
- recognition and incorporation of all Council plans, strategies, cross-cutting themes and Best Value reviews in developing strategic ICT goals;
- following a defined process for approving, reviewing and scrutinising the ICT 5 year strategy;
- nominated officers with accountability for the ICT strategic planning process.

To date, individual departments have been consulted on their likely plans for the next 5 years in order to produce the Council's Implementing Electronic Government (IEG) statement. These plans have been used to help compile this strategy and will be refined as the new process is developed during next year's business planning cycle and beyond.

### Aim of Strategy

***To support the Council in delivering its key objectives and to transform the methods of interaction between the citizens of Dudley and their public service providers.***

The aim will be achieved by focusing the strategic plan in the following areas:

- developing, improving and modernising business and professional systems;
- transforming access to information and services to suit the needs of citizens;
- ensuring that ICT infrastructure is developed to support the Council's objectives and to be responsive to new opportunities.
- Improve efficiency of the business and professional processes

### Principles

ICT strategy and provision will also be driven by the following key principles:-

- Flexibility – responsive to the continuing need for change.
- Innovation – exploiting the potential of new developments and technologies, including supporting new ways of working.
- Public Access – recognising the important role of ICT in communicating with and providing services directly to the public by ensuring they are socially inclusive.
- Partnership – enabling the creation of new services based on partnership with the public sector, private and voluntary bodies.
- Value for Money – continuing to deliver relevant, cost effective and efficient services.
- Reliability – ensuring that the ICT systems in use by the council are available for use when required.
- Security – ensuring that we protect the Council's information assets from corruption or misuse.

### **Service Imperatives**

In developing this ICT strategy a number of high level 'service imperatives' have been incorporated which will apply generally to the overall strategy. These are the need to be able to:

- Interact with our citizens, partners and businesses in the manner most appropriate to them
- 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 Best Value and continuous improvement
- Ensure our staff are trained in the necessary ICT skills and have access to appropriate ICT equipment and systems.
- Ensure that staff across the council are properly trained to use and exploit the systems provided for them.
- Access systems and information capable of meeting customer needs
- Maintain good stewardship by ensuring the information held in the Council's systems is used for proper purposes and is secure from loss and inappropriate access

The actions and targets for this strategy have largely developed from departmental 5 year ICT Plans, previous ICT Strategies, and the Council's Implementing Electronic Government Statement. In order to deliver these outcomes it will be necessary to ensure that the council's ICT infrastructure is robust and flexible enough to meet future challenges.

## OVERVIEW AND ENVIRONMENT

### Background

The Council 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 if fully implemented will completely change the way the council delivers its services and interfaces with its citizens.

The Council's ICT services have been developed and managed in the context of:-

- agreed corporate and departmental strategies, which have been reviewed and updated on a regular basis;
- being "just behind the cutting edge" – to maximise the benefits and minimise the risks and pitfalls;
- well defined business needs and project appraisals;
- strong central corporate leadership.

This has been subject to a Best Value review which confirmed our approach and scored us as 'a good service with excellent prospects for improvement'.

The Council's ICT systems are based around a corporate network serving over 200 locations used by the Council. This data network supports over 3,500 PCs and provides access to a wide range of applications.

The way the service has developed over the years can be demonstrated by:

- the number of desktops on the network has more than trebled over 10 years and that these are now all PCs rather than dumb terminals;
- the number of locations served has trebled;
- the number of IT staff has doubled;
- the total cost has increased by just over half;
- the dependence on the mainframe has decreased by more than 50%.

***"The LEA provides very good support for the curriculum use of ICT through the Dudley Grid for Learning"***  
**OFSTED**

The Dudley Grid for Learning (DGfL) provides major benefits in teaching and learning to 110 schools throughout Dudley. As a Public Private Partnership (PPP) procurement arrangement with Research Machines (RM Plc) for the provision of a ten year managed ICT service, it is the first PFI/PPP project to link the impact on pupils' learning and teachers' competence and confidence in using ICT, to payment

and performance. Now 2½ years in, Dudley pupils and teachers make excellent use of 6000 PC's and 1500 Laptops. Down the 600 kilometres of high speed Local Area Network (LAN) cable they access thousands of software licences plus an integrated Management Information System (MIS), Internet, e-mail and the Dudley Virtual Resource Centre (DVRC).

The Council is now almost 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 Division, and the continued achievement of key performance indicators and targets is, therefore, extremely important.

Technically it is felt that the Council is well placed to meet future challenges:-

- the e-dudley steering group provides the necessary steering mechanisms and responsibilities to deliver the e-government targets;
- strategic investment in ICT has resulted in systems which are already capable of providing integrated solutions;
- investment in the data communications network allows electronic service delivery to every location used by the Council;
- the new office system strategy enables staff to communicate electronically with each other, partners and suppliers and citizens;
- the internet site is well established;
- investment in technical training and good employment practice results in low staff turnover and the retention of key technical staff;
- the ICT training facilities at Abberley Street and Claughton Centre provide high quality training to all staff and Members.
- for many years the Council has enjoyed an excellent reputation for the innovative use of ICT, particularly in the classroom. In 1999 the Education Services took the bold step of entering into the first PFI Pathfinder contract to focus on the provision of a large-scale ICT infrastructure to support learning.

### **Sources of Information**

The strategy has been developed from a number of sources, including:-

- Previous ICT strategies containing local targets for achieving the Government's Electronic Service Delivery targets.
- The Council's Implementing Electronic Government (IEG) Statements which were approved by Central Government in 2001 and 2002.
- Departmental 5 year Strategies, which were developed by nearly every department of the Council to support the strategy development process. These reviews have flagged up a number of "key" common themes:-
  - Communication
  - National Initiatives
  - Access to Services
  - New ways of working
  - Performance Management
  - Strategic Developments

- ICT equipment
  - Management of Information
- DGfL
- Regional working
- The Dudley Borough Community Plan which sets out a vision for the community looking forward to 2005, The priorities of the Community Plan form a cornerstone for the future work and direction of the Council, creating a fairer society by encouraging local communities and individuals to become active citizens.
- Member's proposed core vision and values which embody the concepts of:
  - Inclusion
  - Fairness
  - Integrity
  - Partnership
  - Empowerment
  - Democracy
  - Good Stewardship
- The 'National Strategy for Local e-Government' published by the Office of the Deputy Prime Minister is a core part of the drive to improve and modernise Local Government. It aims to transform services, renew local democracy and promote local economic vitality.

### **The Strategic Planning Process**

A new annual process of developing departmental 5 year ICT business plans as part of the annual business planning cycle with due consideration to the council's wider planning processes is now in place. The annual business planning cycle also provides for review of budget options, which will include consideration of investments in ICT to facilitate e-government, and ensures that the council's ICT strategy is always high on the agenda of both Members and the Council's management teams and is fundamentally rooted in the council's strategic policy decisions.

To ensure the success of the ICT strategy process the Council has

- established a robust and flexible mechanism for ICT strategic planning with clear links to the Council's wider plans and strategies;
- created a Member Working Group chaired by the Leader of the Council, and allocated ongoing scrutiny of ICT Strategy to the select committee on Economic Vitality & Jobs;
- recognised the important role of Chief Officers' Group in establishing a vision and championing the strategy whilst ensuring it fits in with other council plans and priorities, which is then progressed through Members for approval;
- created an e-Dudley Steering Group, chaired by the Director of Education and Lifelong Learning, who is the council's e-champion and a member of the council's management team, to drive forward and co-ordinate work on the ICT strategy. It provides a forum for ongoing consideration and development of the Strategy. The e-Dudley Steering Group consists of e-champions from all departments, and is supported by a series of groups dealing with specific technical issues;

- ensured every department will produce a rolling 5 year ICT strategy document as part of its annual business planning process, which will be used to shape the corporate ICT strategy each year;
- created an approvals process which requires involvement of Central ICT Services Division for all ICT development and expenditure to ensure compliance with this Strategy;
- appointed Service Account Managers in the ICT Services Division with responsibility for promoting a co-ordinated, strategic approach to ICT and e-government issues with all departments;
- recognised the need to focus on ICT within each department by nominating an e-champion on each departmental management team to have specific responsibility for developing ICT within that department.

- and the process of strategy management is augmented by a variety of activities such as customer account reviews, project steering groups and partnership groups and boards.

ICT has an important role to play in the delivery of Best Value. All Best Value Reviews should now be considering the impact and effect of ICT and the conclusions from reviews should feed back into the ICT strategic planning process.

### **Monitoring Arrangements**

The Best Value review of ICT Services resulted in improved monitoring arrangements for the ICT Strategy, including scrutiny by the Economic Vitality and Jobs Select Committee and their working group.

The Council Plan includes key developments arising from this strategy, which are monitored as part of that process. The e-Champion and the e-Dudley Steering Group monitors the overall performance against the ICT Strategy as part of its ongoing role in taking forward e-Government.

Individual targets and overall financial management are monitored by the Chief Finance Officer, supported by the Senior Assistant Chief Finance Officer, the Head of ICT Services, and the Strategy and Best Value Manager, and reported as part of the Finance Department performance management.

Targets of particular relevance to ICT Services are incorporated into their delivery plans and are monitored by the ICT Services Management Team.

## 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.

### Aims

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

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

- To ensure that information is provided to support accessible services,
- To ensure a close integration between the council's business processes and citizen's contact services,
- To use information and new technology to enhance and enable flexible service delivery,
- To maximise the benefits of technological innovation,
- To re-engineer processes to minimise costs and maximise service delivery,
- To integrate our processes, where possible to speed up our response and work as one organisation,
- To ensure that our systems are capable of sharing information with our partners in an appropriate secure way,
- To ensure that systems comply with data protection and freedom of information legislation, and are delivered in a robust, secure way according to latest professional standards.

### Achievements

Since the introduction of the first of this style of ICT Strategies the authority has:

- Implemented over 2,500 users on the new Office System,
- Implemented a Corporate Asset Management System and the Social Services Swift system,
- Completed the roll out of Electronic Document Management in Council Tax and Benefits,
- Provided access to the Electoral Register from the Council's GIS System,
- Introduced and made widely available the Intranet version of our GIS system,

- Reduced dependency on legacy services such as the mainframe and OfficePower,
- Commenced e-forms and introduced an A-Z of forms on the Council's web site,
- Provide access to Council Tax payments and balances to citizens via the Internet,
- Provided access to council services to 75% of members,
- Promoted compliance with Data Protection Legislation,
- Implemented our Freedom of Information Publication scheme which has been approved by the Information Commissioner.

### **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 :

- Modernising our office and administration systems,
- Replacing legacy mainframe systems,
- Improving the availability of information to support business processes that are available to citizens on the Internet and to staff on the Intranet,
- Improving mechanisms for cash collection,
- Developing an integrated PLANES/GIS system, particularly to support national government initiatives,
- Improving systems for committee management/Members,
- Exploiting the potential of Electronic Document Management,
- Implementing business Performance Management systems.
- Developing the Council's Internet/Intranet site as prime communications channels'
- Developing systems to provide better citizen's interfaces,
- Supporting departmental initiatives to modernise their operational systems,
- Developing ICT provision in schools through the Dudley Grid for Learning (DGfL),
- Maintaining awareness and compliance with appropriate Information Management legislation and standards.

### **Corporate Developments**

- Internet

The strategy set out in the Delivering Accessible Services section of this strategy puts great stress on using Internet technology to support a wide range of service delivery channels. For this strategy to be effective most of the business systems of the council will need to be able to deliver information through this interface.

A pilot of a middleware product proven to be able to link legacy systems to the Internet has been delivered, and will be expanded.

Other systems will also have to be able to provide information to the public, or to council staff, via Internet technology, depending on the speed of development by package suppliers – e.g. the Planning Application/Building Regulation system.

Work is also underway with the council's GIS system supplier to implement an Internet front end to the GIS system to enable information in that system to be made available to the public over the internet.

These initiatives, taken together with initiatives in other parts of this strategy to improve the management of information on the Internet, will allow the Council to develop a fully transactional web site and address in part the Government's targets for Electronic Service Delivery.

- Intranet

The framework for the Council's Intranet, primarily to serve staff, is now firmly in place. Work continues to populate it with the necessary information, and to put the infrastructure in place to ensure that information is available on a timely basis and kept up to date. Work has started to develop a range of standard administration systems to be made available across the Authority to cover a range of simple administration tasks, such as sickness reporting, leave requests, furniture inventory etc.

- Membernet

Membernet is a version of an Intranet designed to meet the information needs of Councillors.

This has been developed to provides access to the Decision Database of delegated decisions, agendas, minutes and reports of all area committees, maps of the borough, election results, Councillors details, etc.

More work is required to populate other areas of the systems including a committee diary, other minutes reports and agendas of other meetings etc.

- Extranets

Extranets are a secure version of an Internet site designed to meet the needs of more than one organisation. An extranet therefore needs to be accessible from all interested organisation's networks, but not from outside those organisations.

An extranet framework for sharing information between Dudley Area Health services and Social Services Department of Dudley Council has been developed and the information to be provided is under development.

Other areas where extranets may be required include community safety and the Dudley Community Learning Partnership.

- Citizen Relationship Management

A Citizen Relationship Management (CRM) System will hold details of every contact between the council and the citizen, irrespective of which contact channel the citizen chooses to use e.g. letter, phone, personal visit, email etc. An efficient CRM is a key ingredient in a successful call centre/customer contact centre operation.

The introduction of a CRM is going to be a major undertaking, requiring information from a wide variety of sources and the commitment of everyone in the Authority. It will probably be appropriate, therefore, to pilot the system based on either an operational service or a specific access channel before full implementation.

- Integration of existing systems

In order to maximise the benefit from a “whole Council” approach to Customer contacts it will be necessary to provide some integration between Customer Service Systems and Business Systems.

- Supporting departmental initiatives to modernise their operational systems.

Developments in technology and changes in environment mean that existing business systems in use throughout the council 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.

- Developing ICT provision in schools through the Dudley Grid for Learning (DGfL)

The contract with Research Machines (RM) provides for a major upgrade (£7m min.) around the halfway stage. The DGfL Client Team will, with RM, teachers, and management staff in schools, develop a refresh implementation plan to continue to provide an outstanding ICT environment for teaching and learning. The need to ensure improved integration with the Council’s corporate ICT systems will be incorporated into the refresh process.

### What we intend to do

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

Target Area	Actions	Target
Intranet common business systems	Identify and agree a prioritised programme of work and funding to deliver common business systems on the Intranet	2003
National strategy – systems initiatives	Ensure the new and existing systems are developed to comply with national e-gif standards and support National Initiatives	2007
e-Forms / A-Z / e-bookings	‘250’ forms on website	2003

Target Area	Actions	Target
e-Forms / A-Z / e-bookings	'500' forms on website	2004
e-Forms / A-Z / e-bookings	All forms e-Bookings, A – Z services	2005
Cash receipting / payments / ATP	ATP solution implemented	2003
Cash receipting / payments / ATP	Review cash collection across the council	2003
CRM	Identify requirements for a corporate CRM solution	2003
CRM	Procure CRM solution for pilot	2004
Integration of systems	Ensure all departmental systems 'integrate' with corporate GIS	2007
Integration of systems	Integrate systems to support development of solutions based on life episodes	2007
Mainframe systems replacement	Replace LAFIS	2006
Mainframe systems replacement	Replace CTAX and BRATES & Benefits	2006
Mainframe systems replacement	Replace all other mainframe systems	2005
Completion of office strategy	Exploit facilities of new office systems strategy	2005
EDM	Double number of users on corporate EDM systems	2004
EDM	Create corporate EDM steering group	2003
GIS	Replace existing land charges system with NLIS compatible solution	2004
GIS	GIS enable a citizen service delivered via the Internet – 2004	2004
Mobile / remote working	Ensure back office systems exploit features offered by mobile working	2004
Electronic committee papers	Implement corporate committee management systems	2003
Performance management and processes	Investigate requirement of executive information system containing high level performance management information	2003
e-Dudley Steering Group / e-Champions network	Develop the role of e-Champions as the leaders of e-Government initiatives	2005
DGfL	Improve availability of corporate information systems on refreshed DGfL network	2004
Information management	Ensure business systems / back office systems achieve statutory targets for FOI / Data Protection / BS7799 during the life of this strategy	2007
Information management	Implement BS7799 standards throughout ICT Services	2005

## DELIVERING ACCESSIBLE SERVICES

### Introduction

This section of the Council's ICT strategy indicates how the strategy will contribute to the delivery of more accessible public services.

### Aims

***To positively transform the quality of access, consultation and communication between the citizens, businesses and other stakeholders, and Dudley Council.***

In order to deliver the aim, our strategy will be:

- To enable services to be more accessible, providing a wider range of services at locations and times to suit the citizen,
- To enable services to be more convenient,
- To allow the citizen to select the access channel they wish to use,
- To support services in delivering better quality services, responding to citizen's at first point of contact and meeting the citizen's expectations,
- To improve communication, by pro-active as well as re-active communication,

### Achievements

This theme of access to services was incorporated in our previous strategy. We have therefore already made some progress, although the achievement of more accessible services is a long term strategy with many strands. Progress includes:

- Commencement of the Best Value Review of Access to Services with direct involvement of the Chief Executive,
- Identification of a model already deployed by East Riding based around high quality customer call centres accessible by personal visit and telephone and supplemented by video-conference facilities,
- Introduction of 'middleware' to enable Internet access to information stored in core business/back office systems – e.g. Council Tax
- Introduction of over 150 personal computers into the community, in libraries, providing free access to the Internet,
- Completion of a study into the future provision of telephony services that will support call centre based operations,
- Improved the infrastructure, including encryption and virus protection, to provide the foundations for greater use of the Internet for citizen transactions,
- Increased awareness and understanding of Data Protection, Freedom of Information and Information Security and an approved publication scheme under the Freedom of Information Act,

- Successful introduction of a Kiosk in a launderette in a deprived area of the Borough, raising publicity and the profile of access within the community,
- Commenced development of core facilities such as an A-Z of services, e-Forms and Automated Telephone Payments.

### 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 :-

- Further development of the Internet and Intranet services with increased attention to the content and its quality and fitness for purpose, and the processes and ownership required to ensure it is kept up to date,
- Development of the telephony service to provide call centre based facilities together with the management information required to develop access to services,
- Implications of the findings of the Best Value Review of Access to Services and the ICT facilities and funding required to deliver the outcomes,
- Further clarification and understanding of the requirements of any Customer Relationship Management solution for Dudley,
- Implementation of the Freedom of Information Act, Data Protection Act and Information Management to build confidence in Electronic Service Delivery,
- Implementing a system to ensure that citizen interaction with the Council can be viewed at the point of service delivery (i.e. Citizen Relationship Management),
- Achievement of the Government target of 100% availability of Electronic Service Delivery by 31<sup>st</sup> December 2005.

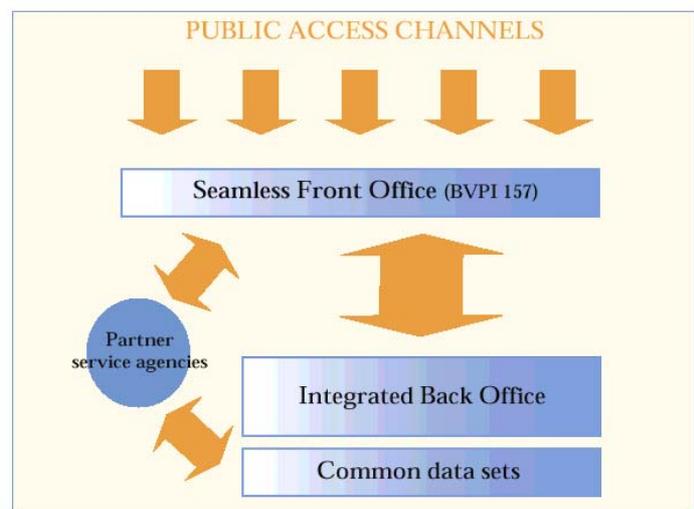
The main implications arising from these issues are considered more fully below.

### Easier Access to Services

Our long term strategic model for delivering accessible services adopts the model proposed by the government in the paper “Access for All” published in 2001.

This model, shown alongside, indicates that a wide range of public access channels, such as personal visits, phone calls, internet transactions, digital TV interaction etc. are all supported by a common access system based on Intranet technology.

This model will allow staff working on a front desk, or a call centre to have access to a wide range of information relating to all the services delivered by the council, whilst at the same time allow citizens access to the some of the same facilities from an Internet terminal or an interactive Digital TV or other device if they prefer.



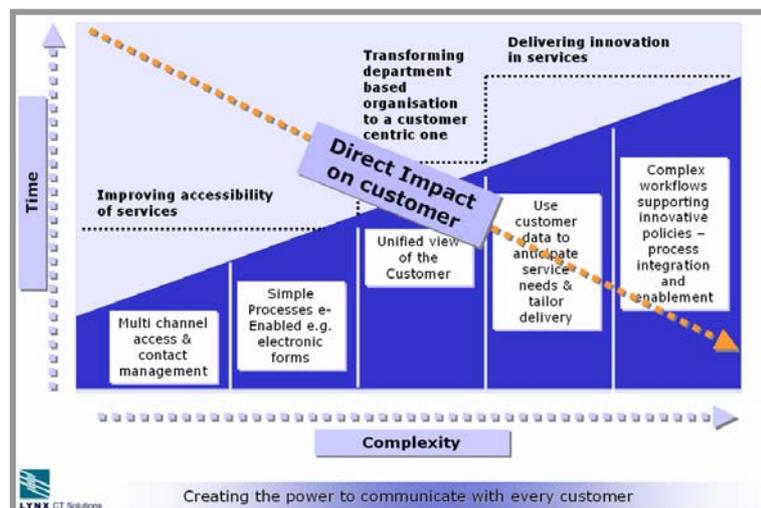
These interactions will allow for information about a service to be published, for forms necessary to request a service to be completed or printed on request, for appointments to be booked online, and in some cases for the service to be delivered completely electronically.

This model also indicates two further principles of Electronic Service Delivery, those of partnership and integrated 'back office'. The Council will seek opportunities to join in partnerships with other public, voluntary or private sector suppliers, either in the Dudley area, sub-regionally or regionally to deliver integrated services to our citizens. Integrated back office will take longer to develop, as it will involve changes to all departmental business systems.

We will therefore be starting with the consideration of the benefits in terms of effectiveness and efficiency, together with improved customer service that can be achieved by the 'seamless front office' supported by appropriate telephony and CRM facilities. This is the area that the Best Value Review of Access to Services is considering.

This diagram suggests that the biggest impact on customer contact can be achieved within reasonable timescales and without the full complexity of a complete solution.

This has obvious attractions in the return on investment and time taken to realise benefits, whilst acknowledging that the 'integrated back office' provides the potential to redevelop services and policies, without having to be a pre-requisite for any customer based improvement.



Best Value Performance Indicator BVPI157 requires us to monitor progress on how we maximise access to services through different channels, so this approach also fits with Government targets.

### Personal Identification

One of the key requirements for any customer service system is to clearly and correctly identify individuals and to share certain information about them. Therefore, we will need to keep abreast of national developments that will provide facilities and guidance for council's such as Dudley to enable us to do this whilst complying with the law.

### Partnerships

Partnerships with other service providers play a key role in delivering accessible services. Electronic Service Delivery should make it possible for services from a wide range of providers to be made available via a single service channel. These are examples of local partnerships, within the Dudley area, but other partnerships will

operate at a sub-regional level (e.g. Black Country) at a regional level (e.g. West Midlands) or at a National Level (e.g. UKOnline).

The Council's ICT strategy will make provision for and actively promote key strategic partnerships in helping to support the Council's overall planning objectives.

### 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
Web site development	Procure content management solution and put in place management arrangements for continuing maintenance	2004
Voice Network	Renegotiate voice contact	2003
Voice Network	Pilot virtual call centre / customers contract centre solutions	2004
IEG	Account for IEG1 / IEG2 spend and develop IEG3 and take any action arising from issues identified in IEG2	2003
National Strategy for Local e-Govt	Consider the National Strategy check list, and the response and actions arising	2003
BVPI 157 / ESD toolkit	Management arrangements to ensure 100% e-enablement	2003
BVPI 157 / ESD toolkit	100% ESD enabled	2005
e-Forms / A-Z / e-bookings	'250' forms on website	2003
e-Forms / A-Z / e-bookings	'500' forms on website	2004
e-Forms / A-Z / e-bookings	All forms e-Bookings, A – Z services	2005
Cash receipting / payments engine / ATP / e-Payments	ATP solution implemented	2003
Cash receipting / payments engine / ATP / e-Payments	Review cash collection across the council	2003
CRM	Identify requirements for a corporate CRM solution	2003
CRM	Procure CRM solution for pilot	2004
Regional activity / joint agency working	Monitor developments – ongoing	
GIS	Replace existing land charges system with NLIS compatible solution	2004
GIS	GIS enable a citizen service delivered via the Internet	2004
e-Dudley / e-Champions	Develop the role of e-Champions as the leaders of e-Government initiatives	2005
24x7	Encourage Council to exploit ability of Internet to deliver 24x7 services	Ongoing
Life episodes	Develop Web site facilities to support citizens interfaces based on life episodes	2005
Provide information for citizens tailored to their needs	Develop capability to communicate pro-actively with citizens information that reflects their interests / needs	2006

Target Area	Actions	Target
Virtual call centre / CRM	Reduce number of phone numbers published to citizens – Phase 1	2004
Virtual call centre / CRM	Reduce number of phone numbers published to citizens – Phase 2	2006
Virtual call centre / CRM	Procure suitable technology to provide telephony support	2004
Information management	Use Internet to receive information to support FOI	2005

## ICT INFRASTRUCTURE

### Introduction

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

### 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 strategy will be:-

- To ensure that the community's needs for an information communication network is met,
- To ensure that the infrastructure and infrastructure support services will be able to support robust 24 x 7 working where required,
- To be effective in our use of existing technology, and to 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 and infrastructure development to promote working as one organisation,
- To ensure that our communications network is capable of sharing information with our partners in an appropriate and secure way,
- To develop the telephony network to meet the needs for greater management information and more sophisticated call handling.

### Achievements

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

- Developed the Internet infrastructure to handle increased usage and the increased availability of access in the community, such as at libraries,
- Developed mobile computing options to enable more homeworking and outreach or community working,
- Accelerated the roll out of Outlook and Exchange to replace our obsolete OfficePower systems, together with associated training and conversion,

- Implemented a high bandwidth private fibre backbone for our data network, to meet future demand,
- Implemented Windows XP and prepared for availability of Office XP,
- Implemented the infrastructure for a trial of video conferencing.

### Key ICT issues

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

- Developing our infrastructure, particularly the voice communications infrastructure to support access to services,
- Investigating new technologies to assess the potential for supporting new ways of delivering services electronically,
- Developing codes and procedures to provide information security and move us towards BS7799,
- Identifying a business case for 'Thin Client' and carry out a pilot,
- Supporting the refresh of DGfL with improved co-ordination with corporate ICT provision,
- Developing a printing strategy that encompasses all forms of printing and integrates this with Freedom of Information and electronic 'printing' or publication,
- Improving the management and control of server computers and their consolidation into efficient units located in properly managed Data Centres,
- Ensuring the council's infrastructure provides adequate security against misuse and increasing electronic attacks from outside.

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

### Communications Network

The whole of the Council's ICT infrastructure is based around the council's communication network. This consists of both the voice and the data networks. The data network consists of two elements, the internal networks within buildings, known as Local Area Networks (LAN's) and the connections between buildings, known as Wide Area Networks (WAN's). The fundamental principles used in developing our networks strategy are:

- Adherence to international standards, so that all types of equipment and service can readily be attached,
- Ensuring we deliver adequate capacity, without providing expensive overcapacity,
- Exploiting new network technology to either decrease costs or deliver greater capacity, or ideally both,

- Providing the correct management tools to ensure the network is operated reliably,
- Securing the network against threats from outside and unauthorised use from within the council.

### **Local Area Data Networks**

The councils Local area Networks are a mixture of legacy Thin Ethernet technology and more recent Category 5e technology. We have also started to implement wireless networks where there is a business case.

This Ethernet wiring is gradually being replaced and all new installations are Cat5e, with wireless LANs being installed where appropriate.

There are new emerging standards still to be ratified that relate to network cabling, for example Category 6 & 7. Given the capabilities of Cat 5e there is little justification to adopt these new cabling types for the foreseeable future.

During the life of this strategy all thin Ethernet cabling will be replaced.

### **Wide Area Data Networks**

The council's wide area network provides connections to over 200 sites occupied by the council. There are major changes at each end of this scale which will require action over the next few years.

At the higher end of the scale the network has recently been completely redesigned and is now based around a very high speed network backbone. We will begin exploiting this capability to reduce existing costs, and improve levels of service.

At the smaller end of the scale some sites have traditionally been served with ISDN lines. As requirements increase these become increasingly costly, and have a limited maximum capacity. We are therefore replacing these lines with dedicated leased lines whenever the opportunity arises.

Broadband (high capacity/always-on data network) is now emerging as the single most important technical requirement for the future Web based delivery of e-learning, e-government, e-commerce and interactive digital multi-media.

### **Future developments**

Network technology is constantly developing; major areas of current developments are the increasing use of wireless and radio networks and the increasing ability to share different types of traffic over the same network. This is especially the case with voice and data over a single line, which is known as Voice Over IP (VOIP) Initial consideration of VOIP suggests this may not be a good fit for our needs, but over time it is likely that VOIP will become the norm. Quality of Service(QoS) will need to be considered in all future network developments to enable us to intercept this technology at the appropriate time.

Radio networks and mobile phone data services, e.g. GPRS, will allow more flexible working arrangements e.g. home and mobile working.

Virtual Private Networks (VPN) are already being exploited for remote access to our systems. Future developments may need to be synchronised with any developments on Thin Client which has different bandwidth requirements than we currently require.

### **Voice Network**

The council's existing voice network contract expires in 2003/4. This service provides a single voice network with the capability of routing calls between any of the council's extensions, and it also provides free telephone calls within the Council.

The development of Call Centre technology, and particularly the integration between Telephone lines and computer systems that support Call Centres and Citizen Relationship Management is being reviewed. The negotiation of any new or revised contract for the provision of voice services will take these developments into account.

The phenomenal increase in the use of Text Messaging (SMS) may provide a number of opportunities, for both outward communication to citizens and staff, and inward consultation from citizens and stakeholders.

### **Community Networks**

The original strategic aims of the Council's communications network was to support the administration services run by the council, and to provide accesses to systems run at the centre of the council to all council staff. To this use a number of other types of use have now been added. These include

- The Schools curriculum network,
- The Public Access Network,
- External access by staff,
- Members information services,
- Public information service,
- DGfL into the Community.

All these different types of access can be delivered through a single set of hardware. However, the needs of each type of use need to be carefully reviewed and steps taken to ensure that each type of use is segregated, so that members of the public are not able to access confidential staff information.

We are working to develop community access to a wide variety of learning content by equipping Youth and Community Centres, Libraries, LAC's etc. benefiting all learners especially young adults. DGfL access in Children's Homes is to be upgraded and development of home access may begin with a pilot scheme.

### **Information Security and monitoring**

One of the Council's most valuable assets in terms of business continuity, is the information and the infrastructure that supports it. We are assessing the work required to move towards BS7799 Information Security Management compliance.

Information Security Management covers all aspects of ICT provision right from initial identification of requirements, through to procurement, implementation and ongoing delivery and support..

### **Mobile Computing**

There are a number of potential benefits from increased use of mobile computing facilities. Mobile computing takes a number of forms, such as:

- Lap top and Tablet computers,
- Personal Digital Assistants(PDA) and smart phones,
- Hand Held Input terminals .

Each of these types of equipment have their uses, and each gives rise to specific technology requirements. The biggest area for potential growth in the next few years is the PDA and its derivatives, which offers compact flexible facilities

### **“Thin Client” Computing**

Development of the PC has meant that ever greater amounts of computing power are put onto people’s desktop. For many staff this power may be inappropriate, where a more constrained set of features, particularly those without multi-media requirements, may suffice.

To address these issues “thin client” computing was developed. In this model the processing power and memory are located in central servers. It is much easier to support as all the complex hardware and software is retained at the centre removing the need to keep updating PC hardware and distributed software.

We have proved that this technology can work in our environment, and are looking for a suitable opportunity to pilot the use of this technology.

### **Research and Development**

ICT is an area of continuous change and development. Corporate ICT Services are introducing more formal procedures for commissioning and carrying out research activities with appropriate documentation and follow up. Where there are developments that are of a wide interest, these will be communicated within the Council to e-Champions and other key staff.

### **Business Continuity**

To ensure that in the event of a disaster the ICT infrastructure will be operational in a time to fit the business needs of the Council, business continuity facilities are being developed. This includes identifying the business criticality of ICT systems so that suitable measures can be put in place to ensure the availability of those systems in a timely fashion should an unforeseen disaster occur.

## 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
Web site management	Procure content management solution and put in place management arrangements for continuing maintenance of information	2004
Intranet content management	Procure content management solution and put in place management arrangements for continuing maintenance of information	2004
Communication / developing voice strategy	Renegotiate voice contact	2003
Communication / developing voice strategy	Pilot virtual call centre / customers contract centre solutions	2004
CRM	Identify requirements for a corporate CRM solution	2003
CRM	Procure CRM solution for pilot	2004
Integration of systems – XML	Monitor e-Gif and other emerging national standards	ongoing
Office strategy / coverage targets	Complete roll out of office strategy	2003
Office strategy / coverage targets	Complete roll out of office strategy	2003
Information management	Meet legal requirements for FOI	2005
Information management	Implement BS7799 standards throughout ICT Services	2005
Information management	Develop strategy for rest of council	2005
Codes of practise	Complete revisions of codes of practise	2004
Regional activity – network developments	Increase participation on regional activities	2003
Regional activity – joint working	Monitor regional developments	Ongoing
EDM	Double number of users on corporate EDM systems	2003
EDM	Create corporate EDM steering group	2003
GIS	Replace existing land charges system with NLIS compatible solution	2004
GIS	GIS enable a citizen service delivered via the Internet	2004
Mobile / remote working	Investigate business requirements for mobile / remote working	2003
Mobile / remote working	Implement solutions to meet business need when identified	2004
24x7	Ensure evidence and availability of infrastructure supports 24x7 requirements as they emerge	Ongoing
ICTS Service Desk	(already monitored via ICTS) being delivered to targets in ICTS SCIP	

Target Area	Actions	Target
e-Dudley Steering Group / e-Champions	Develop role and ensure understanding and exploitation of infrastructure	2005
Desktop provision – refresh	Develop (and publicise) strategy for reducing problems based on technology obsolesce	2004
Desktop provision – thin client	Identify and carry out pilot implementations and consider wider strategy	2004
Output strategy	Conduct review of total printing requirements of the Council	2004
DGfL	Ensure DGfL refresh strategy improves co-ordination with corporate ICT solutions	2004
Network development	Continue development of corporate data network to service the needs of the council	ongoing
Office XP	Commence roll out of Office XP as standard corporate product	2003
Regional activity / smart cards	Monitor regional developments	ongoing

## FUNDING THE ICT STRATEGY

Recognising the importance of and the benefits from ICT, the Council has invested significant amounts in ICT over the years, and the current spend approximately £15 million per year (including the annual payment of £5 million for DGfL) or about 5% of its total budget.

We have reviewed the likely levels of additional investment required over the next five years to:-

- meet ongoing commitments,
- replace mainframe systems and implement network enhancements,
- address electronic service delivery issues, including call centres and citizen relationship management.

Many of the projects planned will require significant capital investment and ongoing support costs.

There is a potential funding shortfall of around £1 million to £1.5 million per year over the next five years as the table below shows. Clearly commitment to spend will only be made once the necessary funding has been identified. One thing that is emerging is that some Government funding is being made available, albeit limited at this stage (e.g. IEG grant) and projects emerging from Pathfinder sites are beginning to see more cost effective solutions becoming available in the marketplace which may ultimately enable us to scale down some of our cost assumptions.

Our development spending plans, identified resources and shortfall are summarised below:

	All costs in £'000				
	2003/04	2004/05	2005/06	2006/07	2007/08
• Back office systems/new working methods	225	155	1170	975	825
• Internet/Extranet/Intranet (e.g. e-transactions, forms, payments)	200	50	50	50	50
• Customer Service Centres, Middleware to support legacy systems and CRM system	350	850	850	850	750
• Network enhancements/service capacity/security	158	158	158	158	158
• Members ICT	15	15	15	15	15
• Developing GIS	-	125	125	125	125
• DGfL	5274	5363	5427	5499	5582
<b>TOTAL SPEND</b>	<b>6222</b>	<b>6716</b>	<b>7795</b>	<b>7672</b>	<b>7505</b>

	All costs in £'000				
	2003/04	2004/05	2005/06	2006/07	2007/08
• IEG	200	-	-	-	-
• Reinvestment of savings	390	531	687	674	1038
• Internal Capital/Reserves	2065	2282	2470	2660	2857
• PFI credits (DGfL)	3209	3081	2957	2839	2725
<b>TOTAL FUNDING</b>	<b>5864</b>	<b>5894</b>	<b>6114</b>	<b>6173</b>	<b>6620</b>
<b>SHORTFALL</b>	<b>358</b>	<b>822</b>	<b>1681</b>	<b>1499</b>	<b>885</b>
Note: Figures are best estimates of the likely effects of ESD initiatives at this time and take into account any savings which can be identified. None of the extra £250,000 proposed for 2003/04 onwards has been built in. IEG funding for 2003/04 (at this stage) assumes spending on Internet etc.					

The Council has previously agreed to making an extra c£400,000 per annum available towards the strategy and is recommending a further £250,000 per annum from 2003/04 onwards towards customer service centres. How this latest sum will be used is yet to be determined.

In the long term, as new ICT developments are embedded into the operational procedures of the Council, efficiency gains should be achievable, as back office staff spend less time dealing with simple issues, citizens are able to deal with single access points to gather information or to have their problems resolved and generally communication within the Council improved. However, experience to date suggests that improved customer service usually leads to higher operational costs. In the short to medium term, the Council will need to consider a mixture of potential funding sources to meet the projected shortfall, including:-

- additional direct Council funding through capital and revenue budgets,
- partnership and private finance,
- grants and other Government funding sources (including IEG grant support),
- local public service agreements.

## CONCLUSION AND ACTIONS

This strategy is a view of ICT in Dudley over the next 5 years. It needs to be robust enough to be a real planning document upon which actual decisions and investment can be made, but flexible enough to meet the changing demands from citizens for service and information needs and the ever-changing environment in which ICT operates. It is inevitable that targets and plans will change as time progresses and new initiatives emerge.

The Council has a vision of where it wants to be in 5 years time. This strategy is aimed at helping to deliver that vision. By the end of the strategy the way services are delivered will be very different and a summary of the “key changes” is shown below.

Key Changes	Timescale
The Council's Intranet will include a number of “standard” administration and information systems.	1-2 years
“Thin Client” technology will be developed to reduce the obsolescence of existing PC equipment.	1-3 years
Combined workgroup printers/photocopiers will become more common, and reduce the number of desktop printers. Large capacity colour printers will allow greater use of colour in documentation and be more paper efficient.	1-2 years
Electronic billing for monies owed to the Council will be available.	1 year
All forms necessary to communicate with the Council will be available from the Council's Web Site	1-3 years
It will be possible to pay for a range of services on the Council's Internet site	1-3 years
Use of multimedia on the Intranet will provide training opportunities in common issues, such as recruitment, disciplinary procedures, data protection, health & safety, use of software, etc.	2-4 years
Sharing network infrastructure for both voice and data traffic will improve quality of communications.	2-4 years
Wireless Wide Area Networks will improve the level of communications available to small locations, and will help to support mobile workers	3-5 years
Smart cards will provide access to buildings, time control, and access to PC's etc.	2-5 years
Use of mobile hand held computers, with radio based networking will provide e-mail/diary throughout the council's buildings	3-5 years
Working from home/out of the office for a larger number of staff.	2-5 years
Document Imaging will capture ALL incoming post and manage workflow.	3-5 years
Use of video Conferencing for meetings and interactions with the public will be in place.	2-5 years
The Council will communicate with citizen's electronically to notify them of events or information of relevance to them due to location or special interest	3-5 years
The Council will have implemented a Customer Relationship Management system to provide information on all citizen contacts with the authority	3-5 years
The Council's telephony system will be improved to enable citizens to contact the council with a guaranteed and proven level of service	2-4 years

The combined list of actions arising from the contents of the strategy are brought together to form a table of targets which is presented here in date order. This table will be the basis for monitoring the actions contained in the strategy:

Target Area	Actions	Target	Theme
BVPI 157 / ESD toolkit	Management arrangements deployed to ensure 100% e-enablement	2003	Accessible Services
Cash receipting / payments engine / ATP / e-Payments	ATP solution implemented	2003	Accessible Services
Cash receipting / payments engine / ATP / e-Payments	Review cash collection across the council	2003	Accessible Services
Communication / developing voice strategy	Renegotiate voice contact	2003	Infrastructure
CRM	Identify requirements for a corporate CRM solution	2003	Business Systems
EDM	Create corporate EDM steering group	2003	Business Systems
e-Forms / A-Z / e-bookings	'250' forms on website	2003	Business Systems
Electronic committee papers	Implement corporate committee management systems	2003	Business Systems
IEG	Account for IEG1 / IEG2 spend and develop IEG3 and take action arising from any issues identified in IEG2	2003	Accessible Services
Intranet common business systems	Identify and agree a prioritised programme of work and funding to deliver common business systems on the Intranet	2003	Business Systems
Mobile / remote working	Investigate business requirements for mobile / remote working	2003	Infrastructure
National Strategy for Local e-Govt	Consider the National Strategy Check List, and the response and actions arising	2003	Accessible Services
Office strategy / coverage targets	Complete roll out of office strategy	2003	Infrastructure
Office XP	Commence roll out of Office XP as standard corporate product	2003	Infrastructure
Performance management and processes	Investigate requirement of executive information system containing high level performance management information	2003	Business Systems

Target Area	Actions	Target	Theme
Regional activity – network developments	Increase participation in regional activities	2003	Infrastructure
Voice Network	Renegotiate voice contract	2003	Accessible Services
Codes of practice	Complete revisions of codes of practice	2004	Infrastructure
Communication / developing voice strategy	Pilot virtual call centre / customer contact centre solutions	2004	Infrastructure
CRM	Procure CRM solution for pilot	2004	Business Systems
Desktop provision – refresh	Develop (and publicise) strategy for reducing problems based on technology obsolesce	2004	Infrastructure
Desktop provision – thin client	Identify and carry out pilot implementations and consider wider strategy	2004	Infrastructure
DGfL	Improve availability of corporate information systems on refreshed DGfL network	2004	Business Systems
DGfL	Ensure DGfL refresh strategy improves co-ordination with corporate ICT solutions	2004	Infrastructure
EDM	Double number of users on corporate EDM systems	2004	Business Systems
e-Forms / A-Z / e-bookings	'500' forms on website	2004	Business Systems
GIS	Replace existing land charges system with NLIS compatible solution	2004	Business Systems
GIS	GIS enable a citizen service delivered via the Internet – 2004	2004	Business Systems
Intranet content management	Procure content management solution and put in place management arrangements for continuing maintenance of information	2004	Infrastructure
Mobile / remote working	Ensure back office systems exploit features offered by mobile working	2004	Business Systems
Mobile / remote working	Implement solutions to meet business need when identified	2004	Infrastructure
Output strategy	Conduct review of total printing requirements of the Council	2004	Infrastructure

Target Area	Actions	Target	Theme
Virtual call centre / CRM	Reduce number of phone numbers published to citizens – Phase 1	2004	Accessible Services
Virtual call centre / CRM	Procure suitable technology to provide telephony support	2004	Accessible Services
Voice Network	Pilot virtual call centre / customers contract centre solutions	2004	Accessible Services
Web site management	Procure content management solution and put in place management arrangements for continuing maintenance of information	2004	Infrastructure
BVPI 157 / ESD toolkit	100% ESD enabled	2005	Accessible Services
Completion of office strategy	Exploit facilities of new office systems strategy	2005	Business Systems
e-Dudley Steering Group / e-Champions	Develop the role of e-Champions as the leaders of e-Government initiatives	2005	Infrastructure
e-Forms / A-Z / e-bookings	All forms e-Bookings, A – Z services	2005	Business Systems
Information management	Use Internet to receive information to support FOI	2005	Accessible Services
Information management	Meet legal requirements for FOI	2005	Infrastructure
Information management	Implement BS7799 standards throughout ICT Services	2005	Infrastructure
Information management	Develop strategy for rest of council	2005	Infrastructure
Mainframe systems replacement	Replace all other mainframe systems	2005	Business Systems
Mainframe systems replacement	Replace LAFIS	2006	Business Systems
Mainframe systems replacement	Replace CTAX and BRATES & Benefits	2006	Business Systems

Target Area	Actions	Target	Theme
Provide information for citizens tailored to their needs	Develop capability to communicate pro-actively with citizens information that reflects their interests / needs	2006	Accessible Services
Virtual call centre / CRM	Reduce number of phone numbers published to citizens – Phase 2	2006	Accessible Services
Information management	Ensure business systems / back office systems achieve statutory targets for FOI / Data Protection / / BS7799 during the life of this strategy	2007	Business Systems
Integration of systems	Ensure all departmental systems 'integrate' with corporate GIS	2007	Business Systems
Integration of systems	Integrate systems to support development of solutions based on life episodes	2007	Business Systems
Life episodes	Develop Web site facilities to support citizens interfaces based on life episodes	2007	Accessible Services
National strategy – systems initiatives	Ensure the new and existing systems are developed to comply with national e-gif standards and support National Initiatives	2007	Business Systems
24x7	Encourage Council to exploit ability of Internet to deliver 24x7 services	Ongoing	Accessible Services
24x7	Ensure evidence and availability of infrastructure supports 24x7 requirements as they emerge	Ongoing	Infrastructure
Integration of systems – XML	Monitor e-Gif and other emerging national standards	Ongoing	Infrastructure
Network development	Continue development of corporate data network to service the needs of the council	Ongoing	Infrastructure
Regional activity – joint working	Monitor regional developments	Ongoing	Infrastructure
Regional activity / smart cards	Monitor developments	Ongoing	Infrastructure
ICTS Service Desk	(already monitored via ICTS) being delivered to targets in ICTS SCIP		Infrastructure