

Appendix 1

ICT Strategy 2010 – 2015

The Royal Borough Windsor & Maidenhead

Update June 2013



Efficient services delivering excellent outcomes for Residents and Businesses across Windsor and Maidenhead

Contents

Executive Summary.....	4
Introduction	6
Outcomes.....	7
Business Vision.....	7
Legacy Systems	9
Technology Horizon	11
The Service Perspective of the ICT Strategy	12
#1 - Business Application Consolidation and Upgrades.....	12
#2 - Improving Customer Access and Tackling Digital Exclusion	13
#3 - Tackling Inequality through Better Use of Data and Customer Insight	14
#4 – New Ways of Working (Smarter Working).....	15
#5 - Service Integration and Multi Agency Working	16
#6 - Better, Faster, Reliable Infrastructure	17
Reshaping the ICT Service	19
Shifting Resource from Support to Transformation	19
Reshaping ICT.....	19
Commissioning and Strategic Partnerships	20
Governance and Prioritisation	21
Managing Project Resource Allocation	21
Shifting Spend Across Portfolios	21
Prioritising within Portfolio’s	22
Managing Conflicting Priorities.....	22
Update on Projects to Deliver the Strategy	23
Progress to Date.....	23
#1 Server Virtualisation.....	23
#2 Virtual Desktop Infrastructure	24
#3 Office Collaboration and Productivity Tools	24
#4 Document Management.....	25
#5 Mobile Telephony	25
#6 Wireless Networking.....	25
Future Projects.....	25
#1 Public Services Network.....	25
#2 Data Centre	26

#3 Fixed Telephony	26
#4 Business Applications Consolidation and Upgrades	27
Other Delivery Aspects	28
#1 Security.....	28
#2 Availability, Continuity and Recovery	28
#3 Sharing Services	29
Focus on the Business Applications Roadmap.....	30
Document and Content Management Systems.....	31
Case and Customer Relationship Management Systems	32
Enterprise Resource Planning Systems.....	33
Miscellaneous Key Systems	34
Other Systems.....	34
Conclusions	35
Appendix A – Technical Work Streams	36
Appendix B – Timetable for Infrastructure Initiatives	37
Appendix C – Forthcoming Reports to Senior Management / Members	38
Appendix D – Projected Savings and Costs Avoided.....	39

Executive Summary

The corporate ICT Strategy was agreed by Cabinet in 2010 and runs through to the end of 2015. It is designed to support Council plans by enabling service integration and multi-agency working. It will improve management of key corporate projects through the adoption of common tools, governance and processes. It will support channel shift for residents to more effective and economic means of engagement with council services. It will help tackle inequality and vulnerability in the community through access to improved business intelligence. It will also provide a modern and robust infrastructure that provides the capacity and reliability needed by the Council in coming years. **The service benefits of the strategy are covered in more detail in “The Service Perspective of the ICT Strategy”, starting on page 11.**

The key outcomes from this strategy include: the eradication of costly periodic upgrades to council IT systems; the provision of a common platform for data storage and retrieval; a device-agnostic environment where brand becomes irrelevant; the avoidance of short term capital investment needs; longer term reductions in running costs.

The Council will achieve these outcomes through specific projects including: virtualisation of servers in the data centre, which is now complete; the rollout of new office desktop computers across the council estate, due for completion in late summer 2013; replacement of the existing Blackberry mobile phone service with a modern, cost effective solution based on the 4G high-speed network being rolled out across the UK and already available in Windsor and Maidenhead. This is already contracted out and is scheduled for deployment later this summer.

Other projects due to complete this financial year include: an enhanced wireless networking across the main council offices, providing an improved quality experience for all visitors and users of council facilities; replacement of several aging county-wide networks with a single, modern network; transfer of the data centre from in-house to accredited, secure, cloud-based service providers; upgrading of corporate software collaboration tools including email and word processing to the latest version, hosted in the cloud.

These projects build upon those identified in the 2012 update to the ICT strategy (from page 7 onward in that document). These included:

- **Updating workstations:** This is underway, with new workstations deployed in St. Mary’s House and in Zone A of Town Hall. This project is scheduled to complete later in 2013;
- **Upgrading applications:** This is also underway, with Microsoft Office and Email scheduled for rollout in late summer, the Serengeti document management system currently being upgraded and a project up and running to improve the look and feel of the public website;
- **Wireless networking:** This is already available across parts of Town Hall, St. Mary’s House and York Stream House. An improved system is planned for installation during the summer;
- **Business transformation:** Over the course of 2012/13 dozens of Lean Reviews have been carried out across the breadth of the organisation. In June 2013 the council senior management team attended a half day training session on Lean and Agile with further training sessions being made available to staff throughout the year;

- **Utilisation of resources:** Staff are busy working on delivering the strategy, the result of which will be a change in their focus from reactive to proactive service delivery.

More details on the technology aspects of implementation can be found in “Updates on Project to Deliver the Strategy”.

With over thirty core business applications and hundreds of minor ones, we have devised a high level roadmap covering the general direction of travel for core systems over the next two to five years. This is highlighted in appendix E. Over the coming year our focus will be on forming a number of directorate specific steering boards, where each one takes ownership for the strategic business direction of their core systems. ICT will provide the trusted advocacy necessary to support each directorate in formulating their own roadmap, with robust decisions based on the benefits to residents, the business need and economics. Details of our roadmap can be found in **“Focus on the Business Applications Roadmap”**.

The vision resulting from executing this strategy is to deliver value for money business applications from almost anywhere, providing excellent, responsive services for residents, staff and partners.

Introduction

The Royal Borough of Windsor and Maidenhead's ICT Strategy, covering the period through to 2015, was agreed by Cabinet during 2010. This set out the vision for a Council that would be enabled to deliver excellent services by exploiting both mature and emerging "Cloud Computing" technologies. The long term plan was to improve services to residents, to accelerate Lean service practices throughout the Council and reduce costs in all regards.

Today, we recognise that local government will have to continue making significant savings over the coming years. This imperative is driving radical change, innovation and new service models that aim to transform the quality of services to residents and businesses across Windsor and Maidenhead.

The ICT Strategy is designed to support Council plans by enabling:

- Service integration and multi-agency working, including Health, Police and the Voluntary Sector, allowing agencies to improve our area, share assets, streamline processes and intervene sooner to help residents and communities, particularly those who need our support most.
 - *By linking up our processes to share data, "joining-up data" to create an integrated view of need and connecting our data and systems to public service networks (PSNs) in Health, Government and partners.*
- Key corporate projects which will radically change how services are provided, reducing red tape and costs whilst empowering front line staff to get things done.
 - *By rationalising the number of systems we have, opening them up to run on the web, automating processes and maximising innovative solutions, including shared services.*
- Smarter Working to support the accommodation strategy, greater workforce mobility, increased collaboration and partnership working along with more multi-disciplinary working between staff.
 - *By making access to ICT systems available from most devices in most locations, digitising paper and harnessing the power of flexible working across the Council and our partners.*
- A channel shift strategy to transform the experience of doing business with Windsor and Maidenhead on-line, shifting transactions to more economic channels and addressing the digital exclusion divide.
 - *By providing on-line access to do business with the Council, remodelling the website so it is easy to use and providing free, accessible access to the internet through public Wi-Fi and the early delivery of high speed broadband into areas of social and economic deprivation.*
- Tackling inequality, and supporting our most vulnerable residents and communities.
 - *By delivering better business intelligence about our communities, families, businesses and customers that is not just drawn from one service but across services so we have a more holistic view of need underpinned by better data that we process securely.*
- Building firm foundations for all of the ambitions above through a secure infrastructure that has capacity and reliability to meet our needs both now and in the foreseeable future.
 - *Delivered through a superfast digital network, a low cost, high availability cloud solution, with modern equipment for front line services; engineered for high security and reliability.*

Outcomes

The Royal Borough of Windsor and Maidenhead's ICT Strategy was published in 2010. A progress update to this document was published in 2012. This document provides a further update as of June 2013. It restates the theme of a Council enabled to deliver excellent services by leveraging mature and emerging "Cloud Computing" technologies.

The original outcomes of the strategy, still valid today, were identified as:

- The eradication of the costly applications upgrade / maintain / refresh cycle avoiding future capital requirements
 - *this will be achieved through delivering a cloud hosted data centre;*
- A common data platform, avoiding expensive connectors and middleware that are currently required for systems to interoperate with each other
 - *This will be achieved by consolidating and upgrading business applications;*
- A device-agnostic environment where the brand of hardware device is irrelevant
 - *This will be achieved by delivering a virtual desktop infrastructure;*
- Common versions of operating systems and productivity suites
 - *This will be delivered through hosting Microsoft Office in the cloud;*
- Capital cost avoidance and savings on hardware and software circa £1.29m
 - *This will be achieved as shown in appendix D;*
- ICT on-going staff and revenue service savings, post-implementation, of just under £500k
 - *This will be also achieved as shown in appendix D;*
- An ICT team moving from reactive to proactive support and services
 - *This will be enabled by the adoption of a corporate project governance process;*
- Support for and enablement of the ICT work stream for the Smarter Working programme
 - *This will be achieved by delivering a virtual desktop infrastructure.*

Business Vision

The ICT vision is to deliver value for money business applications on devices from most anywhere, providing excellent, responsive services for residents, staff and partner organisations. It will:

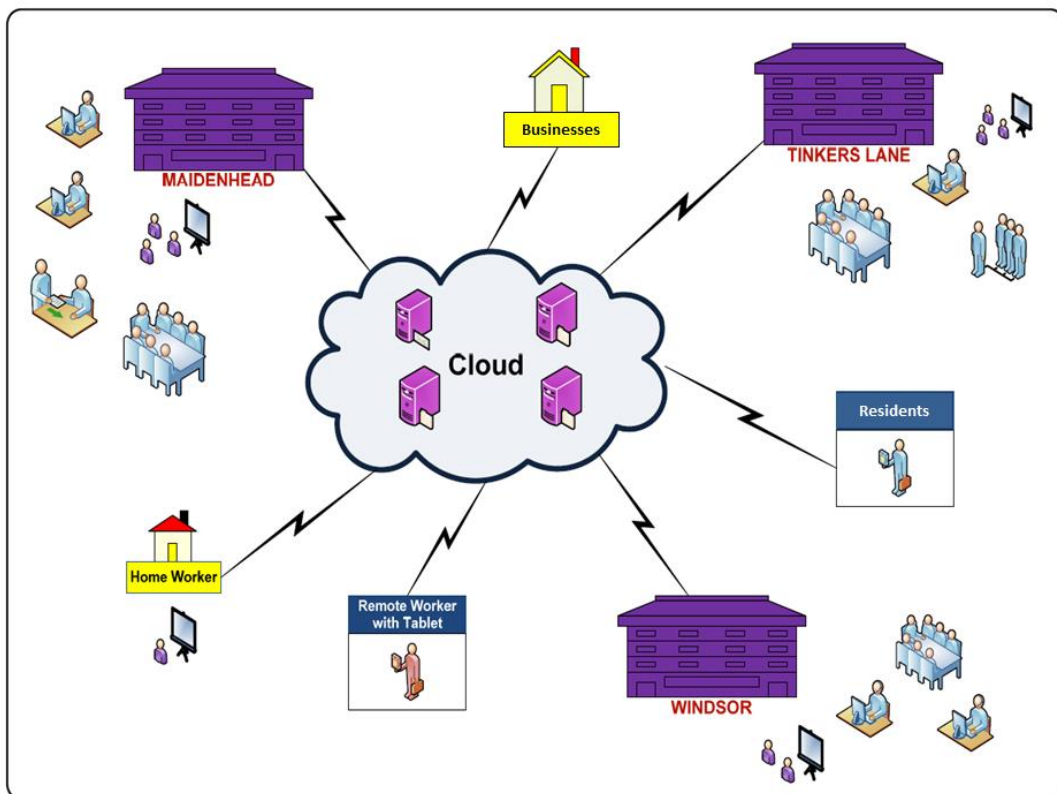
- Create a technology platform that is enabling and responsive to change
- Allow the business to define its requirements free of technology constraints
- Develop a service that is device, platform and application agnostic
- Enable true work from anywhere through Smarter Working
- Deliver repeating benefits through a 'do once for all' deployment methodology

This will be achieved through a number of deliverables, namely:

- Thin client devices deployed throughout the Council
- A common Operating System
- A common productivity application suite

- A culture of collaboration using a standardised toolset
- A mobile workforce utilising the principle of 'presence' for communication
- A reduction in email traffic through the use of communication tools such as instant messaging and audio conferencing
- Applications running a pay-for-what-you-use model know as Software as a Service (SaaS)
- Infrastructure migrated off premise, know as Infrastructure as a Service (IaaS)
- Highly efficient, lean business processes

The following diagram shows some of the ways that officers, residents and businesses will interact with the new cloud-based ICT infrastructure.



Legacy Systems

RBWM’s current architecture has evolved over many years and is a relatively complex mix of circuits, switches, servers and networks.

Two data centres, one primary, the other secondary, house all data storage equipment and applications. There is remote access via a portal that is sized to handle approximately 100 to 200 users at any one time although current demand is much greater than this.

The council’s telephony requirements are relatively simple with the exception of the Customer Service Centre which requires integration with their Customer Relationship Management software. Fixed telephony utilises a proprietary protocol to negate site to site telephone costs. Mobile telephony is currently discreet from fixed with the exception of a minor gateway that routes outbound mobile calls dialled from a landline automatically out over the GSM network to save costs.

A comprehensive project was completed during 2011 to centralise printing around departmental multi-functional devices (MFD’s). This project resulted in the removal of over 100 desktop printers.

As highlighted in the following diagram, our workstation estate is split 70% desktops and 30% laptops. Over 70% of these are over five years old, in excess of 30% are 9 years old or more and 73 devices in use are over eleven years old.

Council’s application portfolio comprises approximately thirty major applications and over four hundred smaller applications.

RBWM WORKSTATION ESTATE					
	Desktops	952			
	Laptops	469			
	Total	1421			
		Under 4 Years Old	4 - 7 Years Old	8 – 11 Years Old	Totals
Desktops	223	355	374	952	
% of Estate	23.4%	37.3%	39.3%	100%	
Laptops	171	223	75	469	
% of Estate	36.5%	47.5%	16.0%	100%	
All	394	578	449	1421	
% of Estate	27.7%	40.7%	31.6%	100%	

The applications portfolio can be divided into four categories:

- Productivity
- Corporate and Back Office
- Line of Business
- Point Solutions

The Microsoft productivity suite, Office 365 which is due to be rolled out later this year, is charged on a per-user per-annum basis. The current annual cost is £151k for an estimated 1,500 users based on a three year contract.

The Corporate and Back Office and Line of Business applications are mostly licensed annually and the total annual support & maintenance costs for the application suite are in the region of £1.23m. These annual costs are for keeping systems running and do not include purchase or upgrade costs.

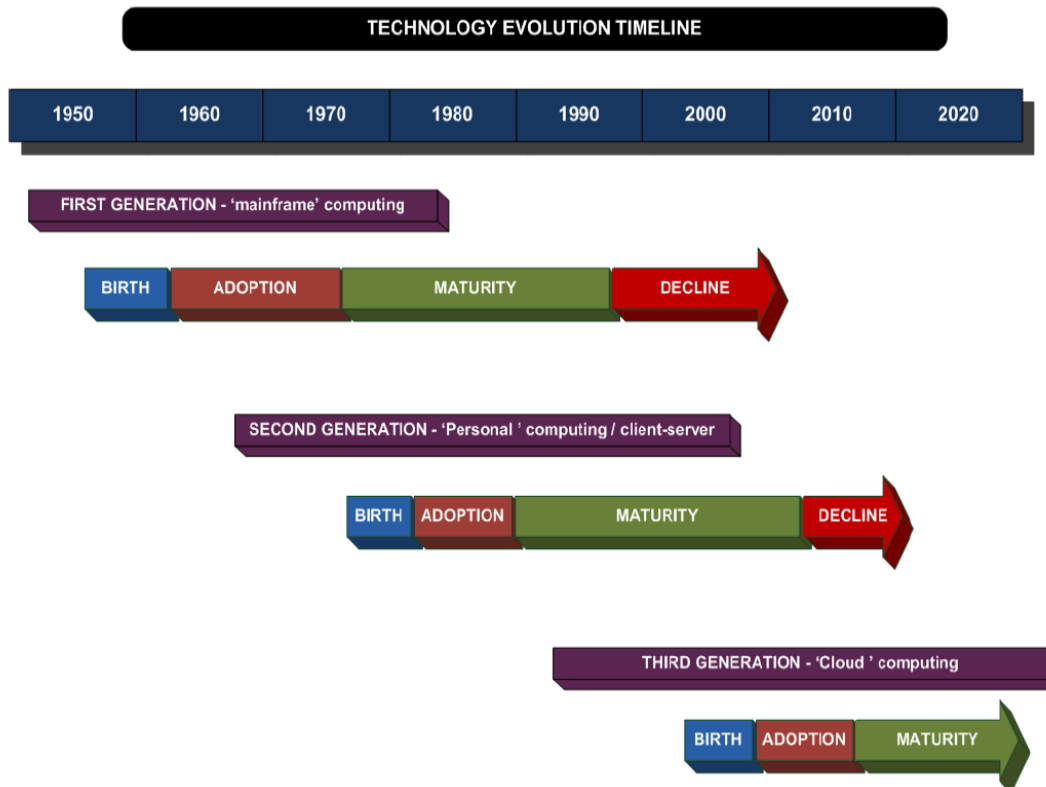
The core ICT team comprises forty-five full time staff across four primary areas:

- Desktop and Service Desk
- Applications Support
- Infrastructure
- Relationship Management

The budget for the ICT staff totals circa £2m annually. The complexity of ICT service provision will reduce through the deployment of standardised thin client devices, common operating systems and consistent application versions. In addition, moving infrastructure off premise will result in not having to manage or administrate servers and databases. All of these activities will allow the freeing up of various ICT resources that should amount to 20% - 25% of the current establishment and deliver projected savings, post implementation, approaching £500k.

Technology Horizon

Alongside the financial imperatives, technology advances are creating further pressure to transition to a more flexible environment such as bring-your-own-device, ad-hoc acquisition of web based applications, mobile applications, more-with-less and the adoption of other cloud technologies.



Creating a flexible platform to respond to Council requirements is already underway. Through the Virtualisation and Virtual Desktop projects we have already virtualised all of our major applications such that they will run on 'thin client' devices, updated our underlying infrastructure of storage, servers and circuits and we will soon be rolling out "thinned" versions of business applications as well as our new cloud productivity suite, Office 365, including SharePoint 365 for record and document sharing, storage and management.

The next step, under the auspices of the Smarter Working programme, will be to create a secure wireless network and deploy thin client devices throughout the reconfigured Town Hall site. This will deliver true "work-at-any-desk" flexibility for our staff.

Whilst short term tactical improvements to business applications have been, and will continue to be implemented during 2013/14 and whilst it may be possible to transition some discreet applications to Software as a Service (SaaS) versions during 2013, the majority of the applications portfolio consolidation and upgrade programme will take place between 2014 and 2016. Improvements in service and cost savings will follow hand in hand.

The Service Perspective of the ICT Strategy

#1 - Business Application Consolidation and Upgrades

THE CASE FOR CHANGE

Business applications are the fundamental bedrock of day-to-day operation of the Council. They support all of the Council's processes and activities from finance, to payroll through to social care, housing and planning. By opening up our applications so they can share data with other systems, moving to web-based systems, tapping into location based data and making our applications mobile friendly we can change the Council's way of doing business:

- By web enabling our key applications they can work on tablets, smart phones and mobile devices which opens up new possibilities for working on the move. This means our field workers can avoid coming back into the office to update ICT systems and re-key data;
- By presenting applications in a smarter way, with fewer screens to navigate, we can make more data available in dashboards and web browsers so staff could become perform multiple roles. Staff that are out on the street can not only undertake a food inspection but could also perform other tasks such as a health and safety visit;
- By tapping into location data services and mobile devices we can ensure that staff are deployed optimally across the Borough and, where appropriate, are pro-actively alerted to related cases or developments in a premise or area they are visiting;
- By taking control of how information is presented and the workflow that supports it we break our dependency on waiting for suppliers to do this. So, if as a result of lean thinking, we need to change a process or add a new data entry screen, we aren't stuck with this having to be included in the supplier roadmap or charged an exorbitant fee for a non-standard change. It also means that small changes can be delivered rapidly;
- Rationalising applications will reduce complexity and save money.

WHAT SUCCESS SHOULD LOOK LIKE

HOUSING REPAIRS

The ICT Department can focus on "prototyping" using "Lean Development" of the system so users can immediately see how the ICT would work in the new set-up. This will allow both ICT and the stakeholders to quickly rule in and out how the system would work. Additionally, rather than wait for suppliers to catch-up, the ICT service can develop its own workflow and data entry screens using SharePoint integrated with housing so things can get done quicker. As a result, with no documented requirements, the service could implement right first time changes in a pilot which could then be rolled out across the Council.

STREET PRESENCE

A cloud based application, available in a browser, with a much friendlier interface, so it could be accessed on a smartphone, Ipad and tablet computer would allow front line staff to enter data directly and spend more time meeting clients and less on form filling.

#2 - Improving Customer Access and Tackling Digital Exclusion

THE CASE FOR CHANGE

The world is being transformed by the internet and there are significant opportunities to make the web simpler to use, personalised to individual need and better integrated with our ICT systems. Additionally the bulk of Windsor and Maidenhead residents fall into socio-economic groups that have a preference to conduct their business with the Council either through the phone or the web. The outcome is potentially quite significant:

- Integration of e-channels and applications means we eliminate activities such as rekeying information, manual checking of paper applications and renewing services (e.g. permits) which divert resources from front line services.
- Integration across systems means we can expedite on line applications that rely on information from multiple systems. In the past when systems weren't linked up it wasn't possible for systems such as e-permits or free school meals to check residency or benefits information held in another system. Integration of applications means decisions can be made instantly which is particularly helpful for vulnerable groups that may need our help quickly for benefits processing or free school meal applications.
- Through personalisation residents can choose to be kept pro-actively alerted about local services and developments that matter to them such as planning applications, parking bay suspensions, consultations and news by subscribing to on line information service within their portal.
- Through a business or resident portal our customers can find out what's happening for themselves right away with a service they have requests and hold services to account more easily by being able to track the progress on line.
- Online collaboration using social networks means we can involve residents and businesses more collaboratively and efficiently in shaping policy and providing feedback about how services are delivered.

WHAT SUCCESS LOOKS LIKE

APPLYING FOR SERVICES

All e-forms could be overhauled and redesigned to make them user friendly and integrated into our systems so customer services staff do not need to re-key them into other systems. As part of the application process the CRM would be kept up to date with the process so actions could be tracked and escalated where appropriate and agents could use the power of the single, unified CRM system to have a single view of residents.

TELL US ONCE SERVICES

A new on line form would collect the information once and make it possible for the data to be consistently and automatically fed into the relevant ICT systems. Services, pro-actively aware of someone moving into the Borough could automatically send out additional information about the services the Council offers.

DIGITAL EXCLUSION

Free Wi-Fi services available to residents and businesses and income generated from new services could be reinvested back into projects that reduce digital exclusion

#3 - Tackling Inequality through Better Use of Data and Customer Insight

THE CASE FOR CHANGE

Information is one of our key assets and has the potential to fundamentally change how policies are developed, resources allocated and services commissioned. Advances in business intelligence and statistics are enabling much more transparency and better support for decision making. Equally important are information quality and governance. Like everyone else the Council has a duty to comply with the law, including Data Protection. Key opportunities include:

- Cleaner, consistent data will make it much simpler to “join-up” and deliver integrated services as they can easily check whether they are working with the same client.
- Accurately held data is also more efficient as staff are not having to constantly update and change information as the quality isn’t right or pieces of data (e.g.: email address) are missing.
- Better business intelligence, delivered promptly will inform policy development, service commissioning and performance management both within the Council and across partner agencies.
- New insights mean that we’ll be better informed about how individual service investments are adding up to improve community cohesion, drive economic regeneration and deliver safer places to live.
- Older forms of information management such as shared drives and personal e-mail stores will be replaced by slicker systems for sharing information and working together
- The Data Protection Act and associated regulations require the Council not to retain information longer than it needs to. This requires information to be destroyed in line with retention schedules and new systems can help us do this.

WHAT SUCCESS LOOKS LIKE

EXECUTIVE DASHBOARDS

Executive dashboards would be available to senior management and Members, drawing upon information held in multiple systems allowing pro-active action on alerts, unexpected developments

and use of resources. This could include an Executive Dashboard to report across all departments for financial data to provide better forecasting and early warning of overspends.

SUPPORTING VULNERABLE FAMILIES

A cross cutting data universe could be created that pulls together information across all sectors on vulnerable families. An executive dashboard is placed on this information that is preprogrammed to identify exceptions and alerts which can then be drilled into using the software.

COMPLIANCE WITH THE DATA PROTECTION ACT

New ICT systems could be introduced to actively manage digital data. As a result information that isn't regularly accessed would be automatically archived in line with an agreed service retention schedule ensuring the Council complies with the Data Protection Act and resources are freed up to be used more efficiently elsewhere in the Council.

#4 – New Ways of Working (Smarter Working)

THE CASE FOR CHANGE

Technology can fundamentally change the way we work today helping us to deliver the flexibility needed for multi agency and multi disciplinary working. It can also help us to collaborate and communicate differently. The key opportunities to make a step change improvement include:

- Through mobile working we will enable a significant reduction our accommodation costs as staff are able to work in co-located teams, at home or in the field as opposed to being tied to a desk at a specific location.
- By moving to electronic records keeping we can remove the paper we have in our buildings and all the inefficiencies that go with it such as increased support costs (necessary to store paper), the manual handling needed to process and share it .
- We will support a collaborative style of working by allowing staff to use social networks to develop ideas, share thinking quickly and tap into existing experience and knowledge pools that exist in the organisation. So, for example, if we have staff in different parts of the organisation who want to work together we can use social media technologies to connect them up to collaborate and work together.
- We can change the way we communicate, moving away from hierarchical and formalised communications, typified by e-mail, and make much more use of personal communication such as video and audio conferencing rather than e-mail to get things done
- We can take advantage of the revolution in technology in the outside world by making it possible for any personal device to connect and use Windsor and Maidenhead's resources. This means that, in future, staff can work with the equipment of their choice be it an IPAD or personal device saving the Council having to refresh equipment.

WHAT SUCCESS LOOKS LIKE

MOBILITY

Staff would be able to work in any location with all applications, shared folders and drives available to them. Instead of having to manually configure the phones the ICT system knows where staff are located so anyone wishing to contact them knows their availability and can use conferencing tools to contact them.

PAPER

Millions of individual records and documents would be made digitally available in the Council's records management system which would be searchable across departments to pull out historical case information relating to the development within a matter of minutes.

BRING YOUR OWN DEVICE

Staff could be allowed to use their personal devices at work and connect to the Council's network without charge. A Bring Your Own Device scheme could allow staff to buy their own equipment at discounted prices, reducing the level of equipment to refresh. The number of mobile phones used by staff would be more than halved.

#5 - Service Integration and Multi Agency Working

THE CASE FOR CHANGE

Shared data, common ICT systems and inter-connectivity to partner organisations offers significant benefits to multi- disciplinary teams that are safeguarding children, tackling unemployment and supporting vulnerable families. There are also significant benefits for internal service provision as well by linking up systems so they can share data. Key opportunities include:

- By having a holistic view of our support we can work to remove replication and duplication of activity across specialist multi-disciplinary teams working with the same clients and families.
- "Joining-up" the individual client interactions across services so we have a better chance of spotting problems sooner and targeting resources earlier which is far more cost effective than reacting to longer term and more deeply ingrained problems.
- Recognising a key change of circumstance (e.g. a new adult moving into a home where a child is at risk) early means that social workers can act sooner than they might otherwise be able to if systems weren't linked up.
- A cross cutting view of customer data will pinpoint fraudulent activity which frees-up resources that could be better targeted elsewhere;
- Helping staff work more productively as they can search across the Council's information assets to pull together information from different sources including applications,

documents, emails and other sources. In other words, something akin to the capability that Google puts at our fingertips as on the internet.

- Linking up internal systems such as finance and HR, or those of our partners in Health, reduces re-keying and administrative overheads associated with keeping data consistent across multiple services.

WHAT SUCCESS LOOKS LIKE

INTEGRATED CARE PLANS

Special Educational Needs finance functions could be integrated into the Social Care system to give a joined up view of care plans and cost across various teams.

ONE STOP APPLICATIONS FOR HELP

Parents would be able to complete a free school meal online form and, because the ICT systems would be integrated, the application could be immediately verified with the Benefits systems allowing an instant decision. So instead of taking days and incurring administrative cost the process would take minutes and the benefits to a family in need of our help would be delivered instantly.

FRAUD PREVENTION

By linking up our CRM, Council Tax and Housing Systems we could check whether other people are living at the property instantly and follow this up saving money and potentially releasing scarce housing.

INTEGRATED ASSESSMENTS

By having a “joined-up” view of support specialist teams would be able to share information about the support they have given and co-ordinate next steps together using common systems and information

#6 - Better, Faster, Reliable Infrastructure

THE CASE FOR CHANGE

The Council’s infrastructure underpins the Council’s operational needs through our network, data centre and support services. We will drive out cost from ICT over the course of the Medium Term Financial Strategy. There are several opportunities to lower cost, including:

- New technologies in the Datacentre mean that it is possible to lower the cost of running servers, storing data and keeping down building costs (particularly cooling) saving the Council money and lowering our carbon footprint.
- Advances in telecommunications allow us to do more digitally and at much lower cost because of instead of having two networks we only need one.
- Falling infrastructure costs mean that we can build in more resilience and reliability at an affordable cost. For example, we believe that disks storage is less than 30% of its cost 5

years ago meaning that we could hold copies of the all the Council's systems at a very low cost giving us much more reliability and resilience day to day and in an emergency

- New "cloud based" delivery models, including "software as a service" and "infrastructure as a service" mean that there are opportunities to share assets, avoid start-up cost and benefits from economies of scale through the Government Cloudstore.
- The withdrawal of funding for BSF has given the Council an opportunity to step in and help schools modernise their equipment and benefit from shared procurement
- Advances in ICT service automation mean that routine administration tasks (e.g. software distribution) that required engineering support can be increasingly automated
- Services will need much more capacity to store and process the exponential expansion of information that we envisage emerging from the digitisation of information, the much wider use of business intelligence and the expansion in collaboration systems across Windsor and Maidenhead.

WHAT SUCCESS LOOKS LIKE

MODERN INFRASTRUCTURE

The Council could improve network capacity, moving it to being fully digital and reducing the operating costs.

In a cloud-based, secure hosted data centre, services would be able to store vast quantities of transactional information to support business intelligence systems at a fraction of today's cost.

RESILIENCE

By keeping a back-up of the Council's data in a cloud hosted environment it would be able to recover in a matter of hours, rather than days, weeks or months if we lost our primary datacentre.

BENEFITING FROM CLOUD COMPUTING

The Council with a migrated data centre running in the Government Cloud could offer professional hosting solutions to other Local Authorities and the third sector.

Reshaping the ICT Service

Developments within the Council and proposals within this Strategy require us to rethink how we provide services and what we need to focus on.

Shifting Resource from Support to Transformation

Within the base budget there are broadly three things that drive the bottom line spend within ICT:

- Expenditure that is concerned with “Running the Council” which is all the day to day; operational activity (e.g. fixing faults, making small changes , administering user accounts)
- Expenditure that supports “growth” activity which is generally project and ICT changes that are generally more than 5 days;
- Expenditure that is concerned with “transform” activity which allows the Council to implement radical change.

Currently the vast majority of the Council’s ICT revenue budget is spent on “keeping the lights on” activities with little invested in transformation and service development.

The balance between run, grow and transform changes with the inclusion of capital programme which is now primarily focused on funding technology that supports business change.

If we are to deliver our transformational objectives then the balance of resource allocation across run, grow and transform will need to shift.

According to McKinsey innovative and transformational organisations are spending up to 30-40% of their ICT budget on bigger projects that deliver fundamental changes in how organisations are run.

So this strategy assumes we will spend less of our budget on small changes and keeping the “Lights On” and more of our resources on transformation including Agile Working and Customer Access to reflect what high performing organisations are achieving outside of Windsor and Maidenhead.

The implications of this are:-

- Run activities will take longer to deliver than they do today or may be stopped;
- Grow activities will, similarly be squeezed;
- Transform activity will be increased.

We anticipate these changes being managed and controlled through new governance and control arrangements established as part of this ICT Strategy.

Reshaping ICT

As a service we will need to adapt. The ICT service will need to:

- Focus on delivering innovation into the organisation faster than it does today;

- Streamline existing control processes to enable more risk taking;
- Adopt new ways of working that are more agile and less process heavy.
- The structures will also need to be altered. ICT was previously designed to support departmental and technical functions rather than delivering cross cutting transformation.

We will, therefore, bring forward proposals to remodel the service. This remodelling at its heart assumes the following:

- A more flexible workforce that can move between projects and activities as demand rises and contracts in particular areas or activities within the organisation
- The establishment of cross cutting teams to deliver support to key change programmes including integrated services, agile working and customer access;
- Bringing in local apprentices and talent to help local employment and regeneration
- A stronger commissioning role as more activities are bought in, on demand, to support the Council's ambition going forward;
- Integration of ICT teams with other Councils through shared service initiatives

Commissioning and Strategic Partnerships

Alongside changes to our internal structures we need to fundamentally change the relationship with our suppliers.

Part of this involves rethinking our suppliers and the value that they provide. Some are suboptimal and have created difficulties for services and we intend pushing those suppliers harder through stricter performance and improvement frameworks.

We also need to move to a position where we are doing significantly less ourselves and much more through commissioned services delivered by external organisations who are better integrated into market and product innovations than we can be.

This means that we will enter into strategic partnerships with local businesses that are innovative, cut costs and add significantly to our development capability so we can expand and contract on demand to meet new needs. We see strategic partners emerging for:

- Application development
- Data integration
- Business intelligence
- Process automation

It also means that we must pro-actively develop our shared services approach with other Councils, be that with point solutions such as sharing key skills or with wider reaching initiatives.

Governance and Prioritisation

Today we have dozens of projects either waiting for approval or representing work in progress. Whilst this is a challenging position it is fairly typical of most of organisations. However, the Council cannot achieve the step changes necessary if we do not adopt a new framework to decide what gets done and in what order. It also needs to be underpinned by a clear governance process going forward so that new developments and changes are appropriately prioritised and scheduled.

Managing Project Resource Allocation

As a first step towards prioritising projects we have mapped the Council's ICT development projects into four themes:-

- Project expenditure on "Core Provision" which is about replacing worn out or unsupported assets, adding capacity;
- Project expenditure on "Unavoidable Pressures" which are generally about ensuring compliance with the law. Examples include technology that supports the Council comply with its obligations under the Data Protection Act;
- Project spend on "Optimising" activities which deliver improvements on an incremental basis but don't deliver fundamentally different ways of doing things; and
- Spend on "Transformation" projects which deliver new service models or radically different ways of doing things. These are generally high risk but high return.

The categories "Core Provision" and "Unavoidable Pressures" generally have to be done, with the primary strategic choice being when to invest and how much.

By contrast investments in optimising and transformational projects are discretionary and, for the most part, should come with an invest-to-save requirement (although this may not always be the case).

Shifting Spend Across Portfolios

Once the Council's projects and investments have been categorised into the four portfolios we have a process to take decisions about what to do and when.

One of the key strategic choices available to the Council is how much to invest, at any given time, into each of the areas above. So, for example, in one year we may decide to push on with more "transformational investments" and less on "core provision".

Clearly, Core Provision and Unavoidable pressures have to be done so projects and investments in that category have relatively few choices and those are primarily about timing.

Projects and investments that are either "transformational" or "optimising" are discretionary and should be linked to a robust "invest to save" case before they continue.

Given there are ceilings within the available resources for discretionary spend we will need to further prioritise projects and investments to a ranking can be delivered within the existing portfolio.

However, we anticipate this more granular assessment being necessary for a smaller sub set of projects rather than every project that the Council has either started or waiting to start.

Prioritising within Portfolio's

To achieve further prioritisation within each portfolio we will need to establish a ranking mechanism. Measures could include:

- Strategic Alignment. That is the extent to which the project enables the realisation of the Council's ambition.
- Benefit to residents. That is the impact on services to our residents.
- Business Process Impact. The level of process and partner change to support the project.
- Direct Payback. This is primarily around Return on Investment and by when.
- Technical fit. The extent to which the proposal fits with, or enhances, the existing architecture of the Council.
- Risk. The level of exposure the Council is exposed to as a result of this project.

Projects will be ranked against the above and all projects that fall within the affordability envelope will be delivered. Those that fall above the line should only be progressed on an invest-to-save basis.

Managing Conflicting Priorities

The Corporate Programme Office will play a fundamental role with senior management teams to establish a pipeline of candidate and work in progress projects classified into core provision, optimising, unavoidable pressures and transformation.

The Council already has a critical path for investments in customer service and agile working so they, by default have to be funded and will have first call on available capital outside non discretionary spend to meet unavoidable pressures and core provision where kit is worn out or capacity is needed to support the Council's requirements (e.g.: more storage for documents).

We expect staff to actively manage the allocation of projects into portfolios and to work pro-actively with their departmental leads to manage resource conflicts and any trade-off's that might become apparent.

Update on Projects to Deliver the Strategy

From a technical perspective, implementation of the ICT Strategy can be divided into a number of well-defined projects, namely:

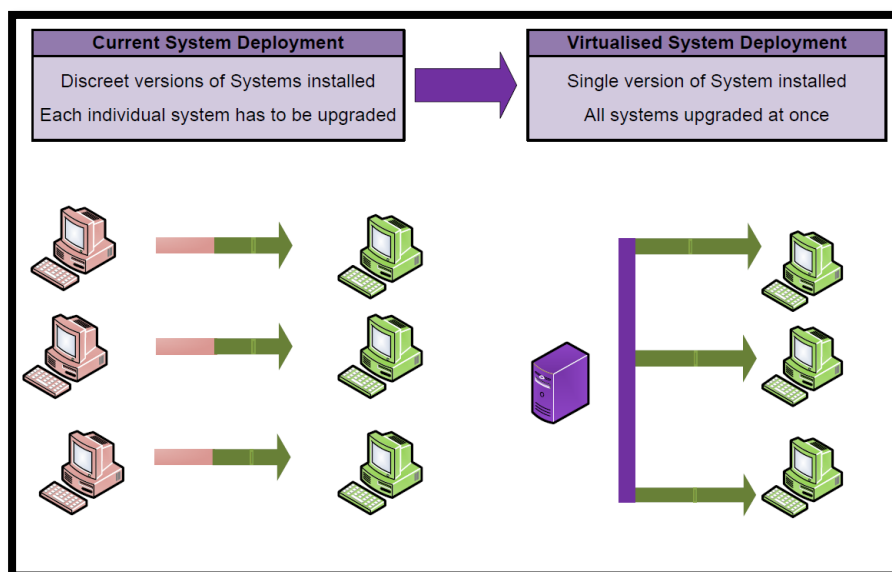
- Server Virtualisation – reducing the number of physical servers in the data centre;
- Virtual Desktop Infrastructure – replacing old computers with new web-based ones;
- Office Collaboration and Productivity Tools – updating Microsoft Office (Word, Excel, etc.);
- Document Management – reducing the several systems down to a couple of key ones;
- Mobile Telephony – bringing our mobile phone service up to date and down in cost;
- Wireless Networking – upgrading Town Hall wireless access to residents, staff and Members;
- Public Services Network – consolidating the county-wide networks down to one;
- Data Centre – moving most of the data centre equipment to a secure, hosted environment;
- Desktop Telephony – replacing aging in-house systems with a modern, cloud-based solution;
- Business Applications Rationalisation – consolidating and/or upgrading business systems;

Around all of these projects is the security wrapper. Using certified external expertise to provide embedded assurance in all of the work we do to provide secure data storage solutions. More details can be found in appendix.

Progress to Date

#1 Server Virtualisation

The foundations of the Cloud Strategy were laid in 2012, with the consolidation of business applications from many tens of servers down onto just 15 servers; an important first step in creating a more modern environment to work in.



Work completed: December 2012

#2 Virtual Desktop Infrastructure

Work has also been on-going to support the Smarter Working programme through the “Virtual Desktop Infrastructure” (VDI) project. This project is replacing the ageing desktop and laptop computer estate with modern, web-based systems that offer access from almost any location with internet access, at any time, where appropriate. A pilot scheme began in late 2012, and is now rolling out across the Council. We expect this to be completed by late summer. The cost of this refresh is estimated to be in the region of £745,000. This figure was approved by Cabinet in 2012. Had we not carried out this investment, we would be looking at stand-still technology upgrades and license costs in the region of £130,000 this year alone, in addition to an annual refresh budget for desktop computers of around £150,000, equating to £750,000 over a five year cycle.

RBWM WORKSTATION ESTATE					
	Desktops	952			
	Laptops	469			
	Total	1421			
		Under 4 Years Old	4 - 7 Years Old	8 – 11 Years Old	Totals
Desktops	223	355	374	952	
% of Estate	23.4%	37.3%	39.3%	100%	
Laptops	171	223	75	469	
% of Estate	36.5%	47.5%	16.0%	100%	
All	394	578	449	1421	
% of Estate	27.7%	40.7%	31.6%	100%	

One of the major advantages of the VDI project is that of allowing near ubiquitous access, including from home. A brand new internet portal provides secure access to staff working on their home devices. This includes most popular brands of computer including the Apple Mac. Once rollout is complete across the Council, we will begin allowing access through mobile devices such as smart phones and tablets. This should begin in early 2014.

Completion timeframe: September 2013

#3 Office Collaboration and Productivity Tools

This rollout will bring with it the latest versions of cloud based productivity tools, known as Microsoft 365, including Word, Excel and PowerPoint. Once the desktop rollout is completed we will

upgrade the aged email system to the latest version of Outlook on a third party (Microsoft) secure hosted platform.

Completion timeframe: October 2013

#4 Document Management

At the same time we have been able to negotiate an improved contract with Microsoft, reducing the overall cost of rolling out Microsoft 365 significantly over five years. In addition we have been able to secure the Microsoft SharePoint Document Management system at no cost for five years.

Completion timeframe: November 2013

#5 Mobile Telephony

At the time of publication we have gone out to tender a replacement mobile phone service contract and are awaiting authorisation to award the contract. The new contract will form a further building block toward delivering the ICT Strategy. We are moving away from the significantly more expensive Blackberry in-house service to a 4G Windows Mobile service. As well as integrating far more effectively with our Office productivity software, the contractual savings are massive. Our year on year expenditure is set to fall from around £197,000 to £81,000; a saving of over £400,000 over five years.

Contract completion timeframe: July 2013 (implementation in September 2013)

#6 Wireless Networking

In parallel with the Smarter Working programme, which necessitates significant re-cabling of premises, we have taken the opportunity to begin installing a new wireless network in Town Hall. The cost of implementing this service is being recovered in-year due to lower running costs over existing solutions. The service has begun to come on line in May 2013, providing three separate and secure channels: one for Members, another for staff and a further channel for guests. This solution responds to the differing needs for access to information and security considerations. More access points will become available as the refurbishment of Town Hall continues.

Completion timeframe: July 2013

Future Projects

These are the first steps in delivering the ICT modernisation strategy. The next several months will see a sustained effort to implement other key technology changes in full. With support from senior management and Members, we are accelerating work, enabling efficient, cost-effective systems that support our drive for services that are responsive to the needs of staff, residents and businesses.

#1 Public Services Network

The council currently runs several networks which are supplied by different providers at differing costs and differing levels of service. Central Government has provided a neater, more cost efficient and effective alternative in the PSN, or Public Services Network. It is our intention to consolidate the various network provisions down to one, via the “G-cloud” procurement channel, delivering a more manageable and resilient network, at a lower overall cost. RBWM have had initial meetings with BT, Virgin Media and representatives from the Unicorn Framework to discuss options available for updating and migrating its current WAN. The best option appears to be where possible to move to a Multiprotocol Label Switching (MPLS) network which would give a fast, secure network using the same technologies as the PSN.

Initial Tender/Framework timeframe: November 2013

#2 Data Centre

The ICT service is currently delivered through two data centres which hold most of the business systems and data for all council services. Significant on-going investment is required to maintain and upgrade the systems and the environment. From perimeter security to high-power cooling systems, from the duplication of systems to provide backup resilience, through to the significant power consumption to keep those systems running 24 hours a day, the cost of running a dedicated data centre service is significant. Were we not to move to a cloud based solution, this year alone we would need to find over £800,000 of capital investment to replace our ESX environment and SAN Equilogic system.

More and more local government organisations are looking to third parties that offer specialised data centre services with greater security and failover services at a reduced cost. The ICT Strategy reflects this trend. Initial analysis has started as the Council aims to deliver savings at the same time as providing a more secure, resilient solution that better responds to the needs of residents, businesses and staff to have greater assurance of system availability to anytime, anywhere.

Full analysis of the total cost of ownership is being undertaken of the current VMware ESX data centre environment. This will include the full hardware refresh costs that are required at the end of 2013. A capacity planning exercise has been undertaken to understand the server and bandwidth requirements needed for a full transition to a cloud hosted service. Consideration must be taken with regards data security and service levels for critical RBWM systems. RBWM have met with a number of suppliers who believe they can offer the correct levels of service and security.

Initial Tender/Framework timeframe: November 2013

#3 Fixed Telephony

Current desktop telephony systems, including those in use across the Customer Service Centre (CSC) are based on in-house end-of-life infrastructure. The stand-still upgrade cost of those systems to the latest versions is in the region of £82,000. We have therefore been investigating modern, cloud based telephony systems. Today these are tried-and-tested solutions offered off-the-shelf by most major telecommunication providers. We also investigated whether our Microsoft 365 productivity suite could extend to a corporate-wide phone system. Unfortunately those capabilities are not yet

enterprise grade and have been discounted for the next 12-24 months. In collaboration with colleagues from the CSC, we have already developed scoping documents in draft and both BT and Virgin Media have been engaged to discuss options. Both have cloud/utility based offerings that could be accessed via MPSL/PSN and could potentially offer savings over existing solutions, with significantly improved services. We are preparing a formal cost analysis and business case.

Initial Tender/Framework timeframe: January 2014

#4 Business Applications Consolidation and Upgrades

Numerous elements of the application portfolio have not been upgraded for some time and many, including major applications such as Lagan (CRM), Paris (Social Care), and Serengeti (Document Management) are many versions behind the latest releases. Problems such as the interfacing with other systems or preventing further development as required by the business are prevalent. So far as the users are concerned, this presents a landscape of duplication, re-keying information and running two systems at the same time, all of which contributes to further frustration.

There is a pressing need to upgrade various applications. Some will become unsupported in the near future and others are not capable of delivering the requisite functionality and are holding back developments that could benefit our residents.

The council's website is another example of a system that hasn't had a recent upgrade and presents problems when changes are required. This also highlights the need for further cultural and organisational change as the website issues are predominately content and look and feel related and not simply technical.

The annual costs for third party support and maintenance of the application portfolio is c£1.23m and is treated as revenue. These costs are for keeping systems running and do not include any purchase, upgrade or improvement costs. The costs of upgrading systems are treated as capital investments and would normally be requested through a formal business case if significant. Should we continue with our current acquisition methodology of upgrading / maintaining / refreshing we could expect to spend in the region of £1.2M to £1.5M upgrading existing software. Council also spends in the region of £482k per year on staff costs supporting and maintaining our applications.

This expenditure does not guarantee applications adequately meet the needs of the business and some are quite outdated. In addition, some systems require 'middleware' to interconnect with each other which adds to the complexity of the portfolio, is inefficient and in need of rationalisation. Many of those systems are due for renewal. We now need to work together as one, across all parts of the Council, upgrading or replacing systems one by one whilst ensuring no interruptions to service. This will take time and the combined effort of business owners and the ICT department, working together to achieve our goal of providing fit-for-purpose, affordable business systems and eliminating costly, inefficient duplication of functionality and data.

By standardising systems, reducing duplication and implementing modern software, we will enable the move towards self-service and resident access to their own data and council services.

We are working across the Council on an applications roadmap, due to be published later this financial year. It is the pre-cursor to a programme of rationalisation, standardisation and automation of business processes which will require staff and management engagement across the Council and is likely to take two to three years to fully implement.

Application rationalisation is potentially the largest saving RBWM can realise from its ICT estate. The council current spend on annual maintenance could be radically reduced by removing and utilising like systems whether purchased or developed using the same capability. Existing applications are being grouped by capability and then road mapped over a five year period. Current and future suppliers are being asked to share their future visions to understand if the Council can follow the strategy and adopt a Software as a Service (SaaS) offering. Where this isn't an option the potential use of a developed application set using Force.com has been identified. This option not only reduces the total cost of ICT but also enables greater collaboration within the business as disparate data becomes a single source.

Timeframe: on-going through to 2014/15

Other Delivery Aspects

#1 Security

The universal wrapper around all of these work streams is security. It underpins every decision made regardless of whether that involves infrastructure or software. In particular, the considerations regarding the location of our data are being validated by independent CLAS consultants who advise on systems that handle protectively marked information. They are accredited through the CESG Listed Adviser Scheme, which is a programme run by CESG, to provide a pool of information assurance consultants to government departments and other public-sector bodies in the UK.

#2 Availability, Continuity and Recovery

An integral part of the strategy is ensuring that any cloud based solution provides guarantees around service availability, continuity and disaster recovery. As senior management and Members will be aware, there has been no formal out-of-hours ICT service provision for several years. As such all services provided outside of regular Monday to Friday office hours run at risk of interruption. The matter is one of affordability, requiring well over double the existing cadre of fifteen ICT technicians and quadruple the current salary investment, to provide adequate formal cover. As such, cloud computing with managed service levels and contractual assurances offers a more cost-effective and secure long term approach to availability, continuity and timely recovery of services. This approach is built into all new service discussions.

#3 Sharing Services

Although we are driving at pace to complete the strategy, avoid costs and realise the benefits, we acknowledge the need to work collaboratively with other local authorities. As well as an active information sharing network, we are proactively seeking to identify potential opportunities for sharing, joint tendering and leveraging existing partnership frameworks.

With regard to the Public Services Network, we are looking into the Unicorn framework which was developed for Berkshire local authorities and may provide a simple, cost effective solution to the replacement of our three existing wide area networks with a PSN compliant one.

We are in discussion with Bracknell Forest and other local authorities regarding sharing of key ICT staff, sharing services and maximising support coverage whilst avoiding additional on costs.

Latterly we have entered into dialogue with Camden Borough Council on the provision of free Wi-Fi across Windsor and Maidenhead as they have recently awarded a pan-council tender, generating a significant revenue stream for their council.

Focus on the Business Applications Roadmap

As mentioned in the previous section, much of the business applications portfolio has not been upgraded for some time and several major systems are many versions behind the latest releases.

There is also a significant overlap in the solutions adopted. This presents a landscape of duplication, re-keying information and running multiple systems at the same time, as well as significant cost.

Our analysis, carried out during the past six months in collaboration with key business representatives, has enabled us to group the Council software systems into five main categories:

1. Document and Content Management Systems (DMS/CMS);
2. Case and Customer Relationship Management Systems (CMS/CRM);
3. Enterprise Resource Planning Systems (ERP);
4. Miscellaneous Key Systems;
5. Other Systems;

In considering whether these systems are fit for purpose we assessed a number of factors, including:

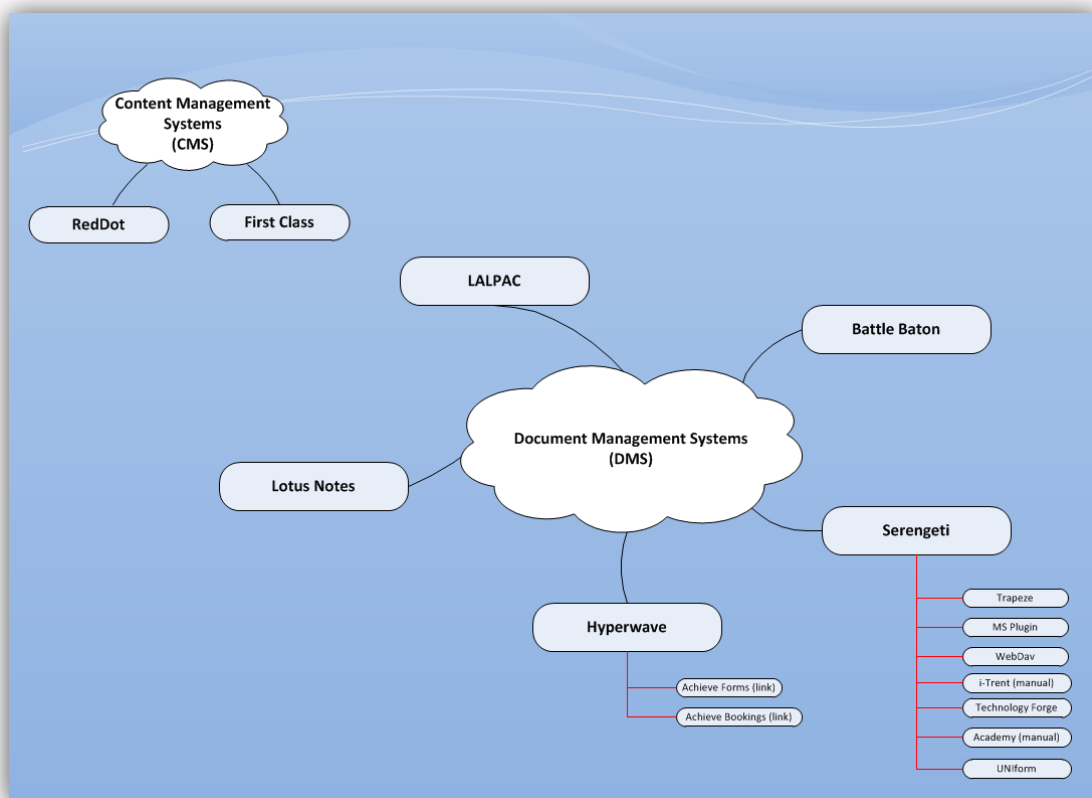
- a) Does the supplier intend to support the system in the future?
- b) Does the system work on our existing and future infrastructures?
- c) Does the system provide both staff and residents with the desired outcomes?
- d) Are there alternative approaches that would improve the quality of service?
- e) Are there alternatives approaches that would improve the value for money of the service?

The following sections discuss these five categories of business applications and the proposed approach to consolidating and/or upgrading them to improve services and reduce expenditure.

Document and Content Management Systems

The Council uses seven major document and content management systems as shown in the following diagram. These are used to store a wide variety of electronic and scanned documents. The most widely used systems are Serengeti and Hyperwave. Some products, such as Lotus Notes, have not been commercially available for several years and are no longer supported by their supplier. Other products have small user bases. Consolidating all of these systems to a smaller number of products will deliver a number following benefits:

- a) A consistent approach to storing and retrieving documents and information;
- b) A more reliable search mechanism;
- c) Less duplication of and therefore more consistent reliable information;
- d) Less licensing and maintenance costs.

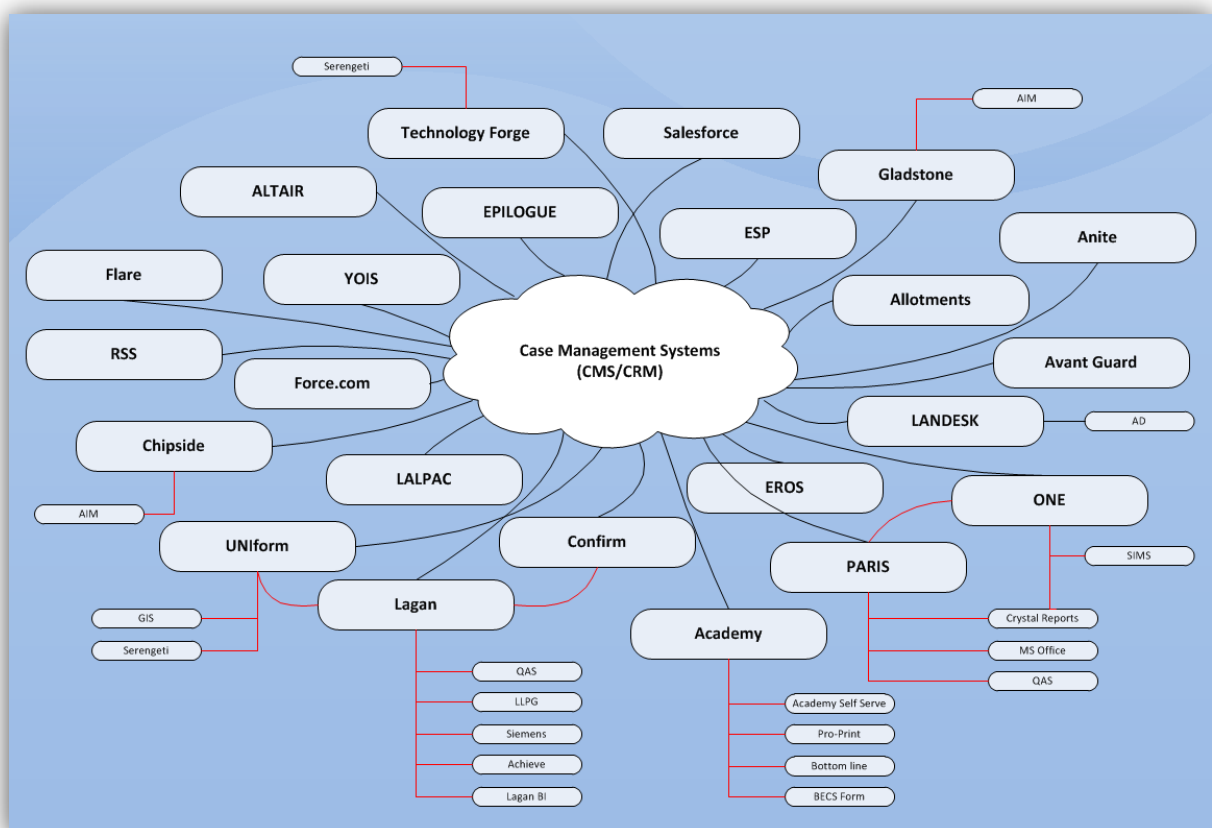


Our proposed approach is to replace Lotus Notes, Battle Baton, Hyperwave and TechnoForge with SharePoint. A number of other vertical business applications including iTrent, PARIS and UNIFORM will continue to be integrated with Serengeti. This should reduce our licensing costs over five years by an amount approaching £150,000. Work has already started on this consolidation project with SharePoint being introduced across the Authority later this financial year.

Case and Customer Relationship Management Systems

We have a large number of case and customer relationship management systems. These capture information from residents and customers, allowing our staff and partner agencies to act upon that information, depending on the request and/or requirement. The diagram below shows the complex reality or business systems we have to manage. Some of these systems offer document management capabilities; hence you can see them referred to in more than one category.

For ease of reading, the relationships between applications have been shown with red lines in the diagram below. Many of these applications share information through bespoke interfaces. This is a further consideration to be taken into account when considering changes to systems.



Discussions with key business users have identified a number of systems in need of upgrading to provide improved service. We are therefore carrying out preparatory work on the upgrade of several key systems whilst others may be consolidated into a single solution.

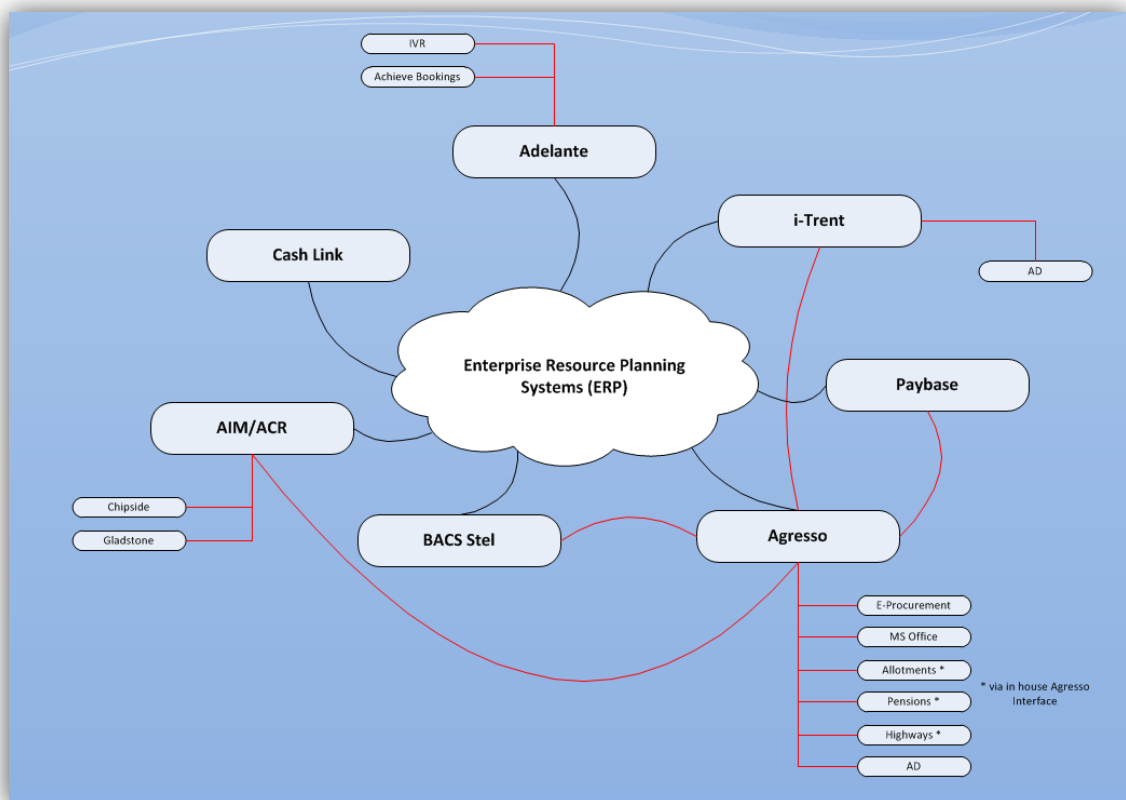
Considering that we have three CRM systems with similar functionality, the opportunity to deliver a more joined up service quickly becomes evident. With fewer points of ingress and less duplication, the quality of information should improve noticeably. With the Customer Service Centre able to access “single truth” information from one system rather than many, the quality of response to residents should be much better. With annual licensing costs in excess of £150,000, we anticipate major savings as we progressively integrate these systems.

Enterprise Resource Planning Systems

We currently utilise seven Enterprise Resource Planning systems:

- a) Agresso
- b) iTrent
- c) Paybase
- d) BACS Stel
- e) AIM/ACR
- f) Cash Link
- g) Adelante

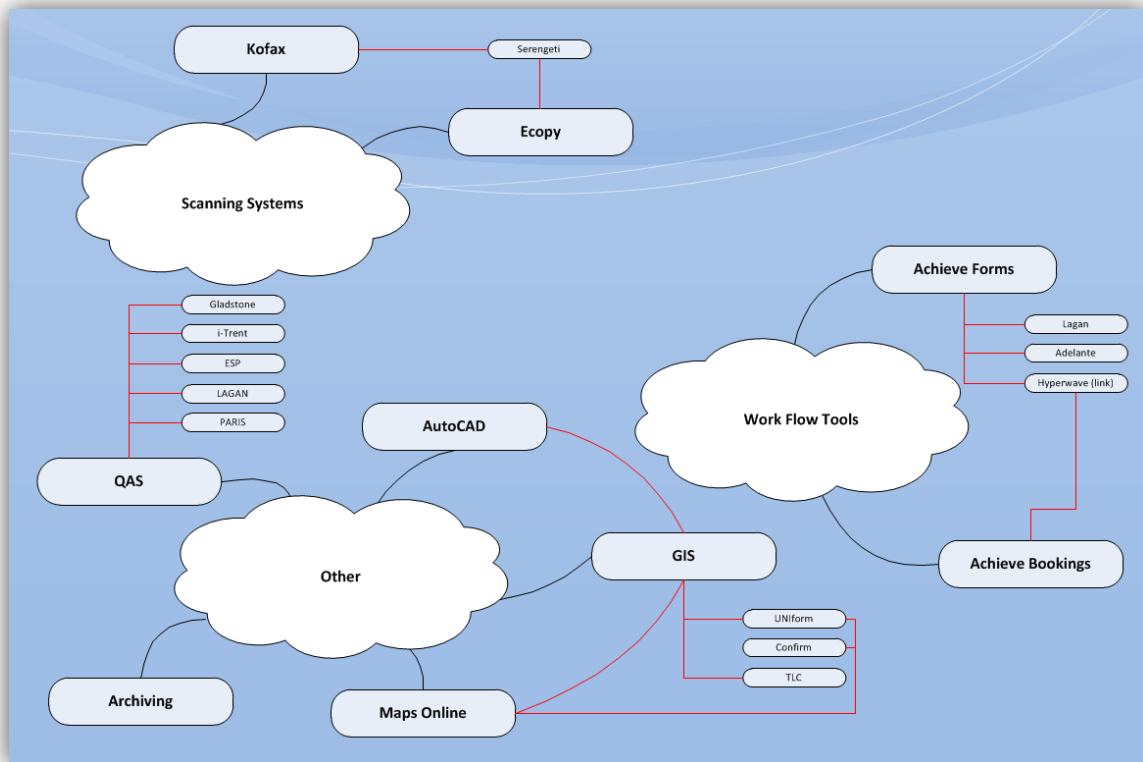
Each system is business specific and as such the group does not present opportunities for consolidation. They also have clear business ownership.



In order to improve the quality of services being delivered by these systems, and also to ensure they are indeed fit for purpose, we are proposing that steering groups be set up for each system, with clear business leadership. This way, moving forward, the best strategic and tactical decisions can be taken, by the business, to ensure continuous improvement in the provision of these tools and the processes and services delivered.

Miscellaneous Key Systems

Having considered the main groupings of systems and what opportunities for service improvement and cost savings there are, a further two groups remain. The first of these represents the most important stand-alone systems. In particular we have scanning systems which we intend to consolidate down to one corporate-wide solution. As the scanning, storage and retrieval of documents is a key part of the Smarter Working programme, a project is being set up to manage this and the opportunities a “paperless” work environment could provide.



With the exception of the scanning solution, all of the other miscellaneous key systems are stand-alone solutions which fit well in with their target services. For these products the approach we are taking is one of continuous improvement.

Other Systems

Having considered the first four categories, what remains is a long “tail” of a few hundred minor software packages, each providing individual departments with bespoke tools for their services. A review of these individual applications is currently not in scope of the ICT Strategy. Their review will form part of the directorate steering groups that are due to be constituted later in 2013.

Conclusions

Local Government is the first touch point for residents at critical stages in their lives. Demand for our services is increasing both in volume and complexity, whilst the funding to deliver the services they require is falling.

The ICT Strategy is responding to the challenge with ambitious objectives. Having now mapped out how we achieve those changes in our infrastructure we need to move rapidly toward implementation. Our goal is to complete all of the infrastructure changes within the current financial year. The business application rationalisation programme is due to be finalised, with agreement from all interested parties across the Council, in the next quarter. Implementation will then begin with a likely timescale of two to three years to complete the majority of work.

As well as significant cost avoidance, the ICT Strategy will deliver a fit-for-purpose infrastructure that leverages existing technologies to deliver a modern, flexible workplace. RBWM look set to become the first local government authority to implement a full cloud ICT solution, standing at the forefront of delivering a 21st century infrastructure that will support the delivery of excellent services to our residents across Windsor and Maidenhead.

Rocco Labellarte

Head of Technology and Change Delivery

June 2013

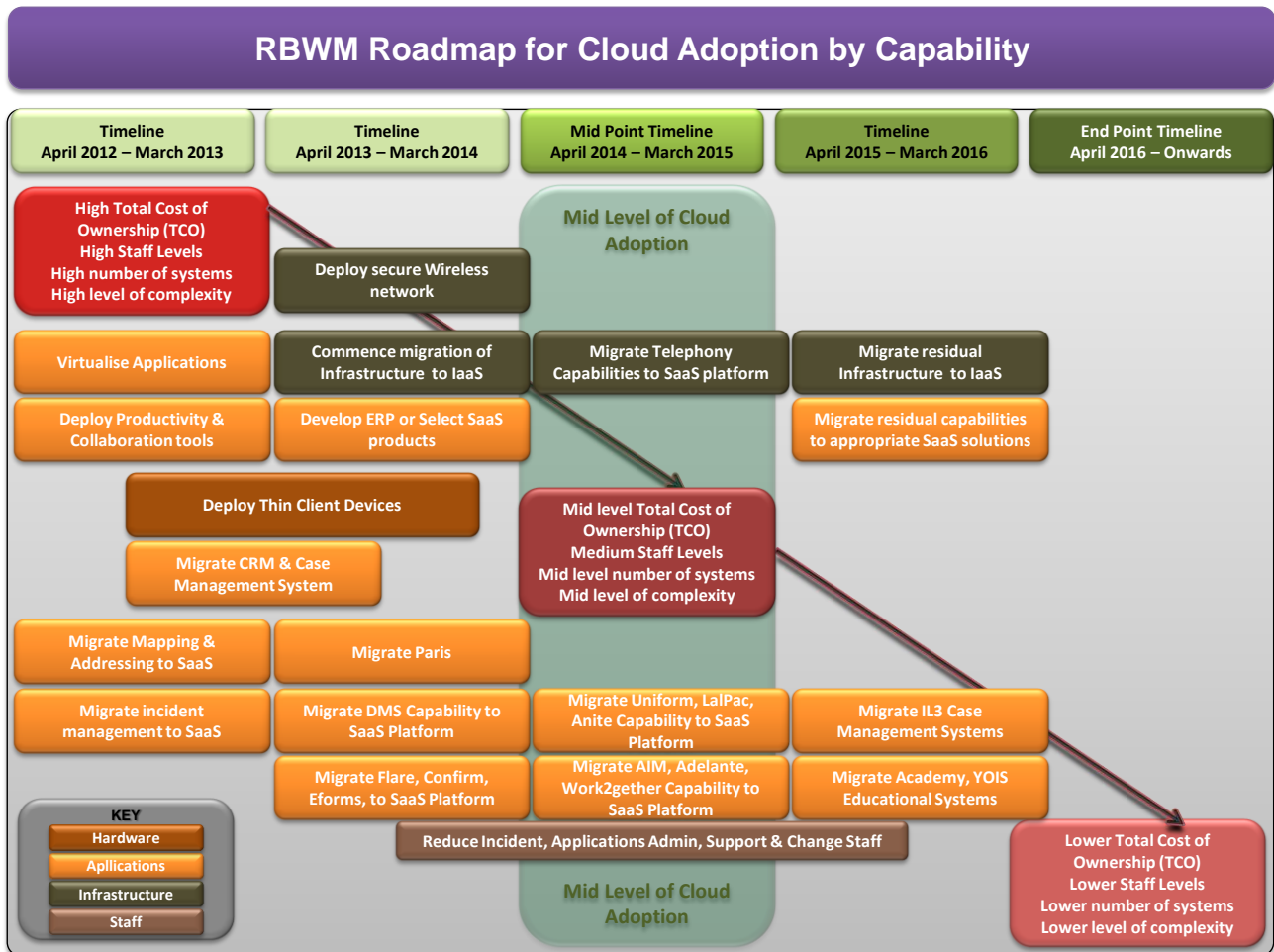
Appendix A – Technical Work Streams

Implementation of the ICT Strategy is divided into a number of technical work streams:

Security	Perimeter and data security are the fundamental foundations upon which any infrastructure should be designed. For this reason, security is at the very top of all design and implementation decisions.
Systems Integration	Today, the majority of ICT effort goes into maintaining and upgrading on-site infrastructure. Post implementation the focus of ICT will be on innovation and improvement.
Server Virtualisation	Modern ICT software runs on virtual servers, reducing the number of physical machines needed. This saves money and improves reliability as fewer devices mean fewer faults.
Infrastructure as a Service (IaaS)	On-site data centres are expensive to run, with frequent investments needed for upgrades, security and resilience. Third party dedicated hosting provides all of these services to a greater level of assurance at a lower overall cost.
Virtual Desktop Infrastructure	Desktop virtualisation is software technology that separates the desktop environment and associated application software from the physical device that is used to access it. This will allow us to move away from expensive desktop and laptop computers that carry all of our business applications. Our new environment will provide low cost thin client devices and the ability to work from any location with a council network or standard internet connection.
Public Service Network	Beyond the boundaries of council offices, we utilise a number of national networks to communicate across wide geographies. Running multiple networks causes duplication and therefore additional costs. Our objective is to replace all of those network services with just one, through a single service provider.
Telephony & Unified Communications	Our internal telephone systems, ACD (automated call distribution) switchboard and mobile phone contracts are all based on out-of-date, expensive technologies with much of that technology located within our offices. Modern telephony solutions have little or no on-site infrastructure and significantly greater functionality at a lower cost. We will be replacing all of our existing fixed desk and mobile phone solutions with up-to-date, integrated solutions with significantly lower investment and running costs. We will also be providing additional tools such as Lync for presence and instant messaging.
Email and Collaboration Tools	Our existing email system is rapidly failing. Based on technology that is over a decade old and no longer supported, we will be moving to the latest Microsoft internet service which will guarantee us continuous upgrades to the latest version of email software. As the solution is “cloud based”, not locally hosted, we will be assured of the best possible performance at all times. We will also be extending this service to include Word, Excel, PowerPoint, Project and Visio productivity tools.
Business Application Rationalisation	Setting aside the various document and case management systems. There are hundreds of business applications, many of which provide limited functionality to very few users. We will be working with third-parties to identify solutions that reduce the number of applications, drive up interoperability and reduce the overall cost of those services.

Appendix B – Timetable for Infrastructure Initiatives

The following diagram shows the timeline for delivering the ICT Strategy presented to Cabinet in June 2012:



Whilst some dates have slipped in the past, the recent acceleration means that overall we are bringing forward the end dates for implementing the infrastructure, as shown below:

Project	Timeframe
Server Virtualisation	December 2012
Virtual Desktop Infrastructure (VDI)	September 2013
Office Collaboration and Productivity Tools	October 2013
Document Management	November 2013
Mobile Telephony Tender	June 2013
Wireless Networking Tender	June 2013
Public Services Network Tender	November 2013
Data Centre Tender	November 2013
Desktop and Contact Centre Telephony Tender	January 2013
Business Applications Rationalisation	Through to 2014/15

Appendix C – Forthcoming Reports to Senior Management / Members

In June 2012, a number of reports were identified as being forthcoming to senior management and/or Members. For those reports presented, the current status is as follows:

- Work on Thin Clients began in December 2012 and is due to complete across the whole Council by September 2013.
- The Smarter Working programme began implementation in May 2013 with a projected end date of the end of this year.
- Changes to the Business Transformation team, project reporting, governance and processes began in January 2013 and were completed, with approval from Cabinet in May 2013.

A further report on Mobile Telephony, not included in the June 2012 update, has also been presented to and approved for the re-tendering of this contract. That process has since been completed and at the time of publication of this update, is at the preferred bidder stage.

The following reports are to be presented to senior management and/or Members during 2013.

TABLE OF FORTHCOMING REPORTS AS OF MAY 2013		
Reports to develop		
Report	Considering	Likely Timeframe
Infrastructure as a Service (IaaS)	Removing data centre infrastructure off-site	August 2013
Public Services Network	Consolidating our existing wide area networks with just one.	August 2013
Software as a Service (SaaS)	Replacing there Customer Relationship Management applications with a single version	September 2013
Fixed Telephony	Replacing the aging in-house telephone system with a modern, cloud based one	September 2013
Application Rationalisation	Plans to consolidate and/or upgrade a number of core business applications	October 2013

Appendix D – Projected Savings and Costs Avoided

The following two tables show ICT revenue expenditure projections and savings between 2012 and 2015. By implementing the ICT Strategy we should deliver £234,000 revenue savings for 13/14, with a further £450,000 during 14/15. When added to the £214,000 savings made in 12/13, overall we are reducing revenue expenditure by £898,000.

Description of Revenue Expenditure	12/13 £000's	13/14 £000's	14/15 £000's
ICT Team Revenue Spend (staff and infrastructure)	2,660	2,426	2,175

Description or Revenue Savings	000's
Organisational restructuring	214
Sub total 2012/13	214
Mobile telephony contract savings	116
Cancellation of Escrow agreements	4
Software house license reduction from £46.8K to £23.94	22
Five year total discount for adopting new document management system	34 ¹
Further infrastructure, licensing and structural savings	57
Sub total 2013/14 (¹ Document. Management saving is over five years)	234
PSN network consolidation (3 networks into 1)	100
VDI implementation – existing thin client decommissioned	41
Further infrastructure, licensing and structural savings	308
Sub total 2014/15	450
Total	898

Capital cost avoidance by implementing the ICT Strategy shows a total of £972,000 over the period:

Description of Capital Costs Avoided	000's
Cloud telephony – hardware upgrade not required	82
Data Centre transfer to IaaS - ESX environment not required	700
Sub total 2013/14	782
VDI implementation - network not required	90
Data Centre transfer to IaaS - SAN upgrade not required	100
Sub total 2014/15	190
Total	972

To date we have one capital expenditure bid for the VDI thin client rollout, shown below. As each business case is developed, additional capital costs may be identified.

Capital Spend	12/13 (000's)	13/14 (000's)	14/15 (000's)	Total (000's)
CN54 VDI Desktop Replacement	386	359	0	745