

CPR.17 16/17

Corporate Policy & Resources Committee

Date: 28th July 2016

Subject: Members Update on ICT related matters; specifically:

- *Progress against ICT Action Plan
- *Development of ICT Strategy (Incorporating considerations and options with regard to ICT Hardware & Operating Systems Upgrades)

Report by: Director of Resources.

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To present to Members:

Purpose / Summary: 1.Progress against the ICT Action Plan which was

presented to Members in Nov '15

2. Current position in relation to the development

of the ICT Strategy

3. The considerations taken into account when upgrading ICT hardware and operating systems

RECOMMENDATION(S): Members support the approach taken and note associated developments

IMPLICATIONS

Legal: None						
Financial: FIN- 35/17 Capital Budget in place for renewal of ICT desktop						
Staffing: None						
Equality and Diversity including Human Rights: None						
Risk Assessment: None						
Climate Related Risks and Opportunities: None						
Title and Location of any Background Papers used in the preparation of this report:						
10th November 2015 Paper C relates						
Call in and Urgency:						
Is the decision one which Rule 14.7 of the Scrutiny Procedure Rules apply?						
i.e. is the report exempt from being called in due to urgency (in consultation with C&I chairman)						
Key Decision:						
A matter which affects two or more wards, or has significant financial implications Yes						

1 Introduction

- 1.1 In November 2015, Members were presented with a Strategic Overview of ICT for the period 2015-2020 and an associated action plan. Members were asked to agree that:
 - The actions set out would support the Corporate Plan and could be implemented subject to development with the Service Leadership Team.
 - An update report be presented back to the Committee within six months.
- 1.2 This report provides Members with
 - 1. The current position re completion of actions contained within the action plan
 - 2. An update on the development of the Council's ICT Strategy
 - 3. The considerations taken into account when upgrading ICT hardware and operating systems (see Appendix One)

2 ICT Action Plan Update

- 2.1 The Action Plan that was presented to Members in November 2015 was broad in its scope. It included the following themes:
- 1) Customer Self-Service
- 2) Modern Working Practices
- 3) Governance Arrangements
- 4) Information & Data Security
- 5) Budgetary Considerations
- 6) Future Thinking
- 7) Organisational Issues
- 2.2 Since its production, a great deal of work has been undertaken to develop out many of the actions. The current position is illustrated within the document available at Appendix Two.
- 2.3 Highlights include:
- The implementation of the Council's new web-site incorporating selfserve and improved design/layout
- The appointment of a replacement ICT Shared Services Manager
- The creation of the role of Intelligent Client to support systems development
- The implementation of 'Enterprise Architecture' and associated principles to facilitate consistent yet robust ICT related decision making
- Identification and reporting of relevant ICT related performance metrics
- Implementation of a shared ICT help-desk across both WLDC & NKDC with improved automation and reporting facilities
- Consideration paid to the Council's ICT refresh approach
- Revised ICT Incident Management Policy produced
- Commencement of review of telephony requirements

3. ICT Strategy

- 3.1 In addition to the activity detailed above, officers have also focused on the production of an ICT Strategy (2016-2020). This will build on the ICT Strategic Overview document and the good work underway against the action plan.
- 3.2 The strategy is in draft format at present and is in the process of being shared among stakeholders to ensure it meets with requirements and also supports the Council in the delivery of its Corporate Plan.
- 3.3 It is intended that the ICT Strategy will be made available for this Committee in September 2016/October for review and adoption.

4. Conclusion

- 4.1 From within the organisation there is much activity underway in relation to ICT and systems development. The work to implement the ICT Action Plan and to develop out of this the ICT Strategy provide evidence of this.
- 4.2 It is anticipated that such activity provides Members with a high degree of assurance that ICT issues are being effectively addressed. Members are therefore asked to note the work undertaken and the approaches that have been adopted and support their intentions.

Appendix One: ICT Hardware & Operating Systems

1. Introduction

- 1.1 The ICT Action Plan referenced at points 2.2 and 5.2 that we would look to review our current thinking around the purchase of equipment PC's, laptops and printers to ensure that we are:
 - using facilities that are flexible and as future proofed as possible
 - maintaining our position with regards to the most modern and appropriate technology whilst maximising the lifespan of existing equipment
- 1.2 Para 6.2 of the overview paper advised that the purchase of such equipment is made from a centralised contract using a corporate revenue budget. This contains circa £150k.
- Just over three years ago the Council decided to adopt a 'one device fits all' user device policy on a five year device refresh cycle. The policy supported the Council's ambitions to create a flexible working environment where staff could work from any work station, safe in the knowledge that each work station would be setup in exactly the same way. This gave staff a consistent approach to docking and using their device. Additionally it minimised the number of different devices that required support.
- 1.4 From a business standpoint the policy was robust. The Council were early adopters of such technology and in the main its performance has been acceptable. However, from the technology angle some challenges have materialised:
 - As with any device new models are soon released to the market.
 Some of these have had to be purchased to fill the supply required for new officers/starters.
 - There are some incompatibility issues with the latest model and the docking stations.
 - After three years we are experiencing a slight degree of failure in regard to peripheral devices such as docks and detachable keyboards.
- 1.5 To mitigate these issues, the Council has recently approved a number of new devices to be procured to help create a 'stock' of working devices. The new devices complement the working practises enabled via the introduction of the existing devices. The new devices are held by the ICT Team and are preconfigured to supply members of staff with a device in the following situations:
 - New starters

- Lost or stolen device
- A broken device that is not financially worth fixing
- 1.6 Currently our device 'stock' stands at approximately 15 devices.
- 1.7 It is felt that from experience of this situation, the business should reexamine whether the 'en masse' replacement policy is the best option and whether it effectively meets business, technical and financial requirements.

2 Proposal

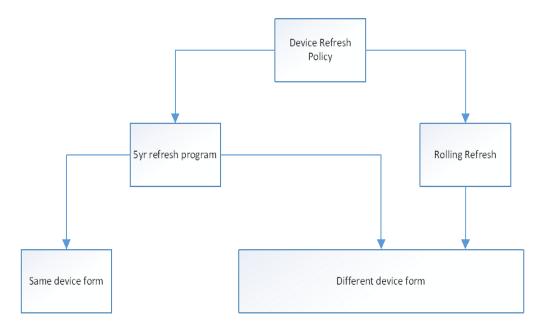
- 2.1 To ensure that we maximise the use of our assets, consideration has been paid to moving to a rolling refresh approach as opposed to the current 'en masse' replacement approach which occurs every five years.
- 2.2 To inform such considerations, due attention must be paid to a number of integral factors:
 - · Assessment of Business Need
 - Agile Working
 - Operating Systems
 - Trialling of Devices
 - Deployment and Business Continuity
 - Governance and Change Management

3 Meeting Business Need

3.1 To ensure that any devices purchased are fit for purpose, we will assess business need (both present and future). Additionally any potential devices would be assessed for compatibility against our current IT architecture. This information will be fed into the refresh programme. Regular meetings between the services and the 'Intelligent Client' (acting as the conduit between the business and ICT Team), will enable this. During such reviews, a business area's agile working approach will be reviewed which may be enabled by either thin client desktop provision, laptop or tablet device, depending on their requirements.

4 Refresh Approach and Agile Working

4.1 Because the device refresh policy is linked to elements of the agile working policy it is felt one cannot be examined without the other. The diagram below shows the relationship between the device refresh policy and agile working program; which to re-emphasise introduced the benefit (among others) of officers being able to work from any work station within the Guildhall.



4.2 The implication of addressing our agile requirements as part of the rolling refresh, is that we must acknowledge that at any one time we will be supporting a limited number of devices (one thin client, two types of tablet/laptops) and a maximum of two operating systems. We must take account of capacity and service continuity issues to ensure we can effectively support business development.

5 Operating Systems

- 5.1 To ensure that the current operating systems meet the users' business needs and requirements to fulfil their roles effectively, consideration is paid to the current supported specification of 3rd party systems. As a principle we have adopted a position whereby we deploy current versions of operating systems and support the previous version, thereby ensuring compatibility is maintained. Prior to the end of life support of previous versions of operating systems we will have already migrated to a newer version, thereby ensuring business continuity.
- 5.2 In terms of 3rd party systems, we also ensure that new releases are managed within the agreed release schedule and our supporting operating systems remain compatible.

6 Trialling of Devices

- Our approach to this is to test the specification of any device e.g. number of USB ports, camera functionality, and physical characteristics. If a new device is built upon a new operating system we test the backwards compatibility against a system testing schedule. A decision can then be made re the procurement of a supply of devices.
- 6.2 Upon completion of trials and the decision being made to procure, then a base image would be created and used to support deployment of the device to the rest of the organisation.

7 Deployment and Business Continuity

- 7.1 To ensure that service delivery is maintained we work to a schedule agreed with service areas to take ownership of a new device. Training and support are provided at this point.
- 7.2 If an individual device is damaged beyond repair, then a replacement device will be provided that meets and supports business need and is compatible with the current technology architecture.

8 Governance

8.1 Any decisions made in relation to the purchase of devices follow the standard governance procedure. Any upgrades in connection with operating systems/software are overseen by the Corporate Systems Group.

9 Refresh Options

9.1 Option 1 – Five Year Device Refresh Policy

This is our current position and is in line with industry norms. Most staff members will have the same device and the docking procedure at each desk will be identical.

Advantages	Disadvantages						
All devices have the same operating system	Much larger rollouts, with potentially more business disruption						
More likely to be built to a Larger single hit on Capital budg standard image							
Achieve the financial benefit of bulk purchase	Would need to procure as much as 15% more devices than required to provide 'stock' cover for new starter, lost/stolen or 'broken beyond financial repair' scenarios						
Easier to achieve a standard desk setup							
Fully supports the agile working concept of being able to sit at any desk (assuming a proprietary dock is used)							
An additional resource can be brought in for a temporary period to allow smooth rollout of devices							

- 9.2 Option 2 Rolling Device Refresh Policy
- 9.3 There is no formal refresh period for devices. Instead a decision taken to replace a device is based on one of the following triggers:
 - The device is no longer fit for purpose performance or form
 - The device is faulty and out of manufacturer's warranty (financially written off)
 - The device is lost or stolen unlikely scenario
 - New member of staff
 - The operating system is not supported.
 - User applications do not support the operating system

Advantages	Disadvantages
Allows organisation to 'sweat	
assets' by extending usage of	forecast; some years may see
device beyond the five year	larger budget increases than
manufacturer warranty	others
Enables easier change of device	Lose any potential discount for
should business and/or function	bulk purchase
requirements change	
Smaller deployments needed so	ICT team could be supporting
potentially easier to plan	many versions of operating
	systems and device types
	Makes it more complicated to
	create a standard work station
	desk setup without incurring
	additional cost
	To support agile working, the use
	of a generic docking station which
	would dock using USB over a
	propriety connection would be
	necessary
	ICT team would need to absorb
	this work within current limits, as
	an additional temporary source
	would not be available
	Compatibility risks with existing
	devices and/or software.

- 9.4 Option 3 Adopt a 'Mixed Economy' Approach
- 9.5 This option is in reality our current approach. Within this method, the flexibility exists to trial new devices/technologies and/or take advantage of system developments. Within this methodology a limited number of a new device would be purchased, built and delivered to the most appropriate staff members for effective trials and feedback to take place.

Advantages	Disadvantages
Allows organisation to be early	Effectiveness of trialling
adopters of new technology	compromised if unsuitable roles
and/or working practices	undertake testing.
No significant capital spend	
incurred	
No impact on service delivery	
Smaller deployment so easier to	
plan and not time critical	
Control environment created to	
enable test and review	
Limited risk of compatibility issues	
arising	

10 Conclusion

- 10.1 Considering the most appropriate means of refreshing hardware and upgrading operating systems, ensures that we continue to assess the value for money we achieve in respect of ICT related matters. However, any benefits of moving to a rolling refresh approach have not been evidenced based on the analysis undertaken so far. As set out above: Financial savings may not necessarily materialise and budget planning becomes difficult to forecast; pressures on the ICT team to support a number of differing devices and potential incompatibility issues may arise; work station genericity would be compromised without additional costs in the form a generic based USB docks; adding approximately £20k to the refresh budget.
- 10.2 It is acknowledged that at any one time, more than one device may be in deployment across the Council for reasons connected to replacement or trialling purposes. For reasons previously stated it is intended to attempt to keep the number of different devices in issue to a minimum (two).
- 10.3 It is concluded therefore that the Council continues with its limited 'mixed economy' approach underpinned by a five year refresh policy. This allows the Council to keep abreast of technological developments. From experience, this approach has worked satisfactorily and is the industry norm. However, if on-going monitoring identifies an ICT hardware asset that is repeatedly problematic, causing a break in service, the equipment would be considered for replacement 'en masse' before its scheduled five year life-span.

Appendix Two: ICT Action Plan

IT Action Plan					
Outcome	Action	Position	Owner	Timescale	Status
1. Customer Self Service					
1.1 To be successful in encouraging citizens to use	To procure and implement a new Content Management System	New web site launched 01/04/2016	J Anderson – web.	Gone live 31/3/16	Closed
the web access to services and information	(CMS) and develop a new website to encourage and increase online usage by citizens and businesses.	01/04/2016	M Carrington - CRM	Planned Mar 2017	Underway
1.2 All access channels need to be supported by a 'single customer view'	(Appendix A – Activity 4) Following the introduction of the new website, a single customer view should be developed that captures an individuals or businesses activity with West Lindsey District Council. We will also work with the County Council to see how we might provide a single view across a resident's engagement with both organisations.	New web site implemented	J Anderson – federated search with NK, CoL, LCC currently being developed.	By July 2017	Under way
2. Modern Working Practices					
2.1 All new ICT projects will be based on whole of life	Develop a whole life costing approach that is applicable and	Enterprise Architecture	Enterprise Architect - J	31/7/16	Under way

costing with benefits and efficiency savings identified	sufficiently flexible for the range of activities undertaken by the Council.	developed, which could	Anderson		Not started
in advance.		incorporate this template.	Template - ?	?	
2.2 We are using facilities that are flexible and as future proofed as possible, reducing the number of devices that someone needs to carry.	Develop a project to integrate our telephony systems (mobile and desktop) to reduce the range of numbers available and ensure availability of individuals.	Project underway	D Mellors & L Marlow leading	December 2017	Under way
	Consider a rolling refresh of mobile ICT kit to ensure regular updating and developing the benefits of a mobile and agile workforce.	Paper produced outlining options	J O'Shaughnessy	December 2017	Under way
2.3 The ICT Service will embed ITIL (Information Technology Infrastructure Library) to improve the quality and efficiency of the service	Establish a project within ICT to introduce ITIL and provide appropriate training for members of the team.	Qualification requirement of new Shared ICT Manager	J Anderson – waiting on approval from HR	30/6/16	Under way
2.4 We will embed best practices Programme and Project Management processes and standards.	The programme and project management processes now in use, are becoming normalised and good habits are being developed. The organisation is still at an early maturity stage with regards to programme and project management and the quality and completeness of documentation continues to improve. A review of	Work to improve maturity of project management in development. Introduction of Enterprise Architecture principles will govern ICT	Enterprise Architect - J Anderson	31/5/16	Completed just needs signing off

	the current processes will be undertaken and a further level of maturity will be introduced over the next twelve months.	development decision making.			
2.5 We will drive the Council towards a 'paper light' policy.	The organisation has already reduced expenditure on paper and printing by £77k over the last three years. Future ICT developments will ensure that all systems are designed to be 'paper light'.		?	?	?
3. Governance					
3.1 We will ensure we align our ICT policy with our Corporate Plan.	This document has been developed using the 2014-18 Corporate Plan and will need to be aligned with any changes made during the current Corporate Plan renewal.	Corporate Plan for 2016-2020 approved. ICT strategy to support	J O'Shaughnessy	30/09/16	Under way
	Develop a set of metrics to assess the performance of the ICT teams, Development and Support.	Measures in place for 2016/17	J Anderson – P&D Report & monitoring in place. Customer satisfaction survey within helpdesk included.	01/04/16	Closed
3.2 We will introduce Architecture Governance into West Lindsey and an	The current collection of systems and processes has been developed over time without a consistent set of	Intelligent Client role established and work on	Enterprise Architect - J Anderson	30/6/16	Closed

Architecture Board to oversee the governance.	policies and principles to underpin what is appropriate for the organisation as well as the individual services. By creating such principles and introducing a Board to oversee how those principles are applied the organisation will have a better understanding of what is an appropriate system for the organisation and this can form part of the specification when inviting bids from suppliers.	Enterprise Architecture underway			
	A proposed set of principles are attached and these need to be shared with team managers and an understanding of the implications developed.	Present to SLT June/July	Enterprise Architect - J Anderson	31/7/16	Closed
	An architecture board needs to be established to become the 'Guardians' of the West Lindsey ICT Architecture.	CSG, CIGG & IC/ICT Manager meetings form the board	Enterprise Architect - J Anderson	31/7/16	Closed
3.3 An Enterprise Architect will be nominated.	An officer role will be created (this is not expected to be additional post but nomination of an existing post) that will understand the council's operations and business and be able to dive deeply into technology issues. This role will take the Corporate Plan and define the IT	Intelligent Client will take on this function	Enterprise Architect - J Anderson	31/7/16	Closed

	systems that support that strategy.				
4. Information and Data Security					
4.1 Roles and Responsibilities	In February 2015, the Director of Resources was nominated as SIRO (Senior Information Risk Officer). The first task in that role was to establish the Corporate Information Governance Group. This group will be tasked with ensuring the actions set out in 5.4 of the document are enacted.	CIGG in place and meeting regularly	J O'Shaughnessy		Under way
5. Budgetary Considerations					
5.1 Early in the lifetime of this document a review will be undertaken to verify the effectiveness of current budgetary arrangements.	The Head of Finance will be asked to review these budgets and discuss with the Corporate Systems Group (CSG) how this might be improved.	Review of applications architecture taken place, and analysis of all 3624 & 3625 budgets underway	Enterprise Architect - J Anderson	31/7/16	Under way
5.2 Purchase of Equipment – PC's, Laptops and printers	(Appendix A – activity 1) A rolling refresh policy should be introduced that ensures we are maintaining our position with regards to the most modern and appropriate technology whilst	Options paper re refresh of desktop ICT has been produced	J O'Shaughnessy	31/07/16	Under way

	maximising the lifespan of existing equipment.				
5.3 ICT Shared Services	Over the last two years West Lindsey has been working in Partnership with North Kesteven to introduce a shared infrastructure. This project was completed in September of this year and we are now exploring options with NK on the best structure to support the shared infrastructure. Proposal are expected to be finalised by the final quarter of 2016/17 financial year.	ICT Shared manager appointment process underway. Review of SLA and partnership arrangement in process with ER/JOS taking lead	J O'Shaughnessy	31/03/17	Under way
6. Future Thinking					
6.1 The Council needs to keep abreast of ICT developments and future proofs its investments	The document considers a range of current developments that are being discussed and considered by the IT industry. WLDC needs to establish a mechanism for ensuring that new technology is considered at the appropriate time and that we are constantly looking for improvement in the way we serve our residents and customers.	Intelligent Client in place and a schedule of support with service areas in development	Enterprise Architect - J Anderson	31/7/16	Closed
7. Organisational Issues					
7.1 Review of systems	(Appendix A – Activity 6) The legacy systems (61) will need	Corporate Systems Group	Enterprise Architect - J	31/7/16	Closed

	to be systematically reviewed with the service to ensure they are operating to an appropriate standard for the organisation and established opportunities for future efficiencies. This will be undertaken by the CSG along with Strategic Leads.	overview this and IC work with service areas looks to rationalise systems. Baseline positon requested to inform ICT Strategy	Anderson		
7.2 Audit & Governance	(Appendix A – Activity 7) A regular series of tests and audit will be implemented by the CSG/CIGG in order to ensure compliance with government standards and the security of our systems and data. This will include regular assessment of our Business	Disaster Recovery Procedures in place – require testing. Annual PSN Compliance	J Anderson & ICT Manager	31/12/16	Under way
	Continuity arrangements.				
Delivery of the Proposed principles (Appendix A)					
Deployment of the latest operating systems and desktop applications	Our current approach is to ensure that every laptop and pc has a standard 'image', we need to ensure this is constantly reviewed and have a managed approach to how new formats are adopted i.e. Windows 10		J Anderson & ICT Manager	BAU	Closed
Further infrastructure	The shared service with NK will be	Potential of	J Anderson &	BAU	Closed

modernisation including further virtualisation	required to ensure that we maximise efficiency within the infrastructure and managed by our Enterprise Architect we will explore the opportunities provided by virtualisation of servers and the use of hosted systems.	Cloud hosting assessed in all cases.	ICT Manager		
Further development usability of Minerva	Minerva has grown and developed over the last two years and whilst it has its issues it has become our central repository for all documentation and internal communications. It is now timely to review the way Minerva is used and developed and establish appropriate frameworks and templates for how we make the greatest use of such an asset going forward. We will therefore create a Minerva Improvement plan that will set out the principles for future development and standardise the current operation of Minerva and engage stakeholders in making it more user friendly.	Training undertaken by officers on Sharepoint 2016 and plan to be drawn up to implement new version	J Anderson	31/12/16	Under way
Improve Help Desk responsiveness by introducing new structure, electronic self-service and eforms	The shared Infrastructure with NK will require that we establish arrangements for a shared Helpdesk this will form part of the new shared service currently being	ICT helpdesk improvements underway. Common telephone	J Anderson & ICT Manager	31/05/16	Closed

	discussed with NK and improvements will be part of the SLA with the shared service.	number, new incident reporting facility on intranet with self-help advice, ability to produce performance reports and analysis of workload share between NK and WL.			
Review service performance and benchmark our performance internally and externally	Both our Systems Development Team and the ICT Operational team will establish criteria by which they can be monitored and assessed in terms of year on year performance and benchmarked with appropriate comparators.	Performance measures in place across both teams. Included in P&D Reports	J Anderson & ICT Manager	30/04/16	Closed
Leverage the benefit of Cloud solutions	Cloud solutions are becoming increasingly the norm in terms of offers from software suppliers. We need to explore the opportunities for maximising, in a secure way, the full benefit of cloud based computing. This will include exploring options for 'software as a service' (SAAS) e.g. Office 365, and the potential for online storage in preference to	Cloud benefits assessed in each case. Cloud ITT Due Diligence Document is being reviewed with a view to adopting a formal	Enterprise Architect - J Anderson	31/07/16	Closed

hosting our own data. NB – Given the recent European ruling with regards the data agreement between the EU and USA we need to undertake a review of any	approach.		
currently cloud hosted software and ensure that			
until a new agreement is in place any data we			
store in the 'cloud' is not held in the USA.			