



12th March 2018

Agenda Item: 8

REPORT OF THE SERVICE DIRECTOR, ICT

ICT PROGRAMMES AND PERFORMANCE QUARTER 3 2017-18

Purpose of the Report

1. To provide the Improvement & Change Sub-Committee with the 3rd quarter progress update on key projects and performance measures for ICT Services and to outline the major planned activities over the next 6 month period.

Information and Advice

Programmes Update

2. The ICT Strategy 2017-20 identifies the four ICT strategic themes supporting business transformation across the County Council. These themes shape much of the activity and priorities within ICT Services (covered in the progress and planning sections of the report - paragraphs 3 and 4). The four key themes are:
 - **Smarter working:** *Technology supporting a workforce able to work flexibly, where and when it best suits them, their customers and service users and managed by results*
 - **Health and social care technology integration:** *Improving the health and wellbeing of the local population through technology enabled integrated health and social care services*
 - **Business intelligence:** *Technology providing robust, timely and accessible information that drives informed decision making, service commissioning and business transformation*
 - **Cloud services (off-premise data centres):** *A flexible, scalable and secure cloud infrastructure where service cost is tied to applications and usage and user experience is managed*
3. Progress has been made across the priority ICT projects over the last quarter and a summary of progress is as follows:

- i. A programme of work is ongoing to plan, scope and deliver the transition of ICT services away from the County Hall data centre to *cloud* based solutions by the end of 2019. A comprehensive update report was presented to this sub-committee in November 2017. The procurement phase is now well underway and the anticipated composition of cloud service models is as follows:

Model	Description
Software as a Service (SaaS)	<p>This model enables an organisation to rent an application and its underlying infrastructure. This is often chargeable on a per user per month basis.</p> <p>The first solution delivered through this model will be Microsoft Office 365. This is Microsoft's SaaS solution for the delivery of their office productivity software e.g. Outlook (e-mail, calendar, contacts), Word, Excel, PowerPoint, SharePoint (team and project spaces), OneNote, OneDrive (file and folder storage and sharing), Skype for Business etc.</p>
Infrastructure as a Service public cloud (IaaS)	<p>The supplier builds, provides and supports the server infrastructure that the software, databases and data are hosted on. This is delivered through the provider data centre(s) in the form of <i>virtualised</i> servers (physical servers that are segmented to run multiple systems) and accessed through secure network connections. The County Council would retain responsibility for the provision and support of the systems.</p>
Co-location model	<p>The County Council will retain a small amount of infrastructure and some systems in a supplier provided data centre(s), in the same way that we currently use the Node 4 data centre. This is because not all technologies currently lend themselves to the above 2 models.</p>

- ii. The Smarter Working Programme is providing mobile technology over the next 3 years to replace much of the desktop computer estate. This will assist many more staff to be able to work more flexibly and allow for better use of the property assets. Following the successful repurposing of accommodation and deployment of new technology at Lawn View House, work has now begun in rolling out new technology (tablet/laptop, monitors, docking station solution) to support the restacking at County Hall.
- iii. A new *public* Wi-Fi solution, provided through O2, has been installed as a replacement for the current *guest* Wi-Fi solution. This service is operating in parts of County Hall

and Trent Bridge house as we test the impact on the network. A wider deployment can then be considered.

- iv. A new *corporate* Wi-Fi solution (for staff and partners) is also being piloted. The proposal is to replace the current “staff” Wi-Fi” access arrangement with the “device.wifi” solution. This provides for greater security, but also facilitates a flexible, shared working environment with other organisations adopting the solution. It enables users to auto-connect to their own organisation from each other’s sites. This solution has been adopted by Connected Nottinghamshire for a shared wireless network, and is initially being deployed in the City and County Councils.
 - v. The project to transition mobile voice and data services from Vodafone to EE is under way. It is anticipated that savings of £300k per annum will be delivered, once the transition from Vodafone has been completed.
 - vi. A Microsoft Office 365 secure e-mail solution has been successfully implemented. This has replaced the Vodafone “Go Portal” solution which was coming to the end of its support contract. This secure e-mail solution is used by teams to communicate sensitive data to organisations that are connected to the Public Services Network (PSN).
 - vii. The innovative work recently reported to this sub-committee on health and social care technology integration was submitted for the 2018 Local Government Chronicle Awards. The County Council has subsequently been shortlisted as a finalist and commended for the high quality of the entry.
4. Over the next 6 months the major focus of activity will include the following:
- i. The procurement and contractual arrangements for the Cloud Programme will be agreed and the delivery of the programme of work will begin.
 - ii. As part of the Smarter Working Programme, phase 1 of the delivery of mobile devices at County Hall will be completed. A number of older desktop computers at other sites will also be replaced as part of an ongoing ICT equipment refresh programme.
 - iii. The Smarter Working delivery plan for 2018-19 will be agreed.
 - iv. The implementation of the *public* Wi-Fi solution to replace the *guest* Wi-Fi solution at County Hall will be completed.
 - v. Following Microsoft’s announcement that it will no longer focus on developing its Windows 10 operating system for smartphones, a technology roadmap and supporting plans will be developed to define the future direction for smartphones.
 - vi. The next phase of the Corporate Performance Reporting Project for the further development of the business intelligence hub will be scoped and initiated. There will also be a full technical review of the supporting technology infrastructure.

- vii. The next phase of workflow automation with King's Mill Hospital, which includes automatic assessment notices, discharges and shared health data, will be scoped and initiated.
- viii. Options for the better use of technology will be explored and reviewed ahead of the next tender for home care services in 2018.
- ix. A project will be scoped and initiated for introducing the new *corporate* Wi-Fi solution.
- x. Some planning activity will be undertaken in readiness for introducing the Microsoft Windows 10 operating system on computers.
- xi. The project to transition mobile voice and data services to EE will be completed.
- xii. New ICT contracts with Inspire and VIA will be agreed, as the initial two year contracts established when the ASDMs were created are about to expire.

Performance Update

- 5. To provide a balanced assessment of performance, ICT Services measures four groups of indicators that cover business activities, customers, staff and finance. Performance for the 3rd quarter of 2017-18 is attached as an Appendix.

Business Activity Indicator

- 6. The business activity indicators measure some of the key day to day operational performance areas, with the two most significant being systems availability and incident resolution. The focus is to ensure that business critical systems are operational during business hours and that any incidents are resolved speedily and within service level agreement (SLA). Systems availability continues to remain at high levels with aggregate availability of 99.95% in the quarter.
- 7. The speed with which ICT Services and suppliers respond to incidents improved over 2016-17 to bring performance up to the target level. There was a short dip in performance in quarter 2 (88.2% resolution rate) as we transitioned to a new break-fix support arrangement for devices with an external supplier. The changes have now been implemented and performance has improved in quarter 3.
- 8. The County Council is increasingly reliant on its ICT provision and so disruptions to services need to be avoided wherever possible. In November 2017 users at the Piazza (MASH – Multi Agency Safeguarding Hub), Prospect House and Meadow House reported an issue with their telephone system. This was identified as a system fault within the Virgin Media managed network and was resolved by them as part of an emergency change procedure. Also during November there was a partial failure on one of the internal firewalls, which controls and monitors access to and from our network. The failure meant that services, including access to our Internet and e-mail services,

were unavailable for periods over a weekend. Access to systems was restored by using the secondary firewall whilst the fault was fixed.

9. The business activity indicators also show two project performance indicators that are used by CIPFA (Chartered Institute of Public Finance and Accountancy). The project delivery index is used to measure conformance to good project management standards e.g. adoption of PRINCE 2 methodology, business case produced, delivery to timelines, business benefits achieved etc. Performance against this indicator remains consistently good since we reorganised the service and incorporated dedicated programme and project management resources. The second indicator is related to delivery of milestones, and measures the overall percentage of milestones delivered by the planned timelines. Progress has been very good in the period, see paragraph 3, with 89% achieved in the quarter.

Customer Indicator

10. The access channel into ICT Services is the Service Desk which receives and handles incidents, service requests and enquiries. The efficiency and effectiveness of this function is crucial for the user perception of the whole range of services provided. Daily customer satisfaction feedback is collected from corporate and school users of the Service Desk and is being measured against a target score of 4.5 (score 1-poor, 5-excellent). The feedback from users' remains very positive and above target. A new incident reporting system is being used in ICT Services and will enable easier reporting and tracking as these features are introduced.

Staff Indicator

11. The average number of sick days per staff member in ICT Services is at the corporate annual target level. Training activity for ICT Services staff is crucial to ensuring that the relevant and required skills are available, with training delivery continuing to be above the target level as we introduce and transition to new technologies.

Financial Indicator

12. Revenue spending for the quarter is in line with the overall annual budget plans and planned financial savings of £479k have been delivered in 2017-18 following the recent staffing restructure. The profile of capital spend will be updated as we plan the move away from owning and managing our own data centre and making use of off-premise (cloud) arrangements instead. The amount and pattern of capital spending will be largely determined through the Cloud Programme procurement exercise.
13. ICT Services also continues to provide very favourable cost comparisons with other public sector bodies with the cost of ICT support within the lowest cost quartile of the current annual CIPFA benchmarking.

Reason for Recommendation

14. To raise awareness of progress on the key ICT programmes and performance indicators for 2017-18.

Statutory and Policy Implications

15. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance, finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

RECOMMENDATION

That members consider the opportunities arising from this progress report and agree to receive a further report for the next quarter.

Ivor Nicholson
Service Director (ICT)

For any enquiries about this report please contact: Ivor Nicholson on 0115 9932557

Constitutional Comments: (SMG 31/1/18)

The Improvement and Change Sub-Committee has responsibility for considering performance reports in relation to the Council's ICT strategy and is the appropriate body to consider the content of this report.

Financial Comments: (SES 24/01/18)

There are no specific financial implications arising directly from this report.

Background Papers








None





Electoral Division(s) and Member(s) Affected









All









ICT Services Overall Performance: Quarter 3 2017-18





Key symbols table:









Status	Indicators	Trend	Base this on change from same period last year
	Below target by more than 10%		Improving trend
	Below target by up to 10%		Deteriorating trend
	On or above target		No change
	No reported data or no target		

Business Activity Indicator	Performance 2017-18						Comments
	Q1 Actual	Q2 Actual	Q3 Actual	Q3 Target	Status	Trend	
Average availability to users of NCC's business critical services during business hours	99.86%	99.94%	99.95%	99.8%			<p>There are 96 services identified as Business Critical to the County Council e.g. e-mail, internet, Mosaic, BMS, Capita ONE etc.</p> <p>Contributory factors to this high level of availability are the investment in the ICT infrastructure (such as the network, servers, cabling and data centres), a proactive approach to infrastructure alerts and monitoring (taking pre-emptive action where necessary), plus the rapid response of technical teams should issues occur.</p>
% of Mobile devices within the ICT estate (a mobile device is classed as a Laptop or Tablet PC. Smartphones are excluded from this indicator)	42%	44%	41%	44%			<p>At the end of Q3 there were 8,763 devices connected to the ICT network. Laptop and tablet computer devices accounted for 41%. With the advent of the Smarter Working Programme many desktop computers and small form factor tablets are being replaced with tablets/laptops. An updated security policy implemented this quarter removes more devices from connecting to the network, as it removes those that have not been active for 90 days.</p>

Business Activity Indicator	Performance 2017-18						Comments
	Q1 Actual	Q2 Actual	Q3 Actual	Q3 Target	Status	Trend	
% Incidents resolved within agreed service levels	91.5%	88.2%	91.9%	92%			This indicator assesses the performance of the ICT function in restoring service and responding to incidents within our Service Level Agreement (SLA). In this quarter there were 7,824 incidents reported (7,302 last quarter). Performance is now back to the level of the SLA.
% of ICT changes successfully completed	99%	98.4%	99%	98%			The ICT change management process aims to ensure that upgrades and new services are implemented without any negative impact on service provision and ensure that all changes to business critical services have been comprehensively planned, tested and authorised before being carried out. In this quarter there were 282 changes of which 2 failed and had to be reversed. These both related to updates to older versions of software and which have now been resolved.
Compliance to CIPFA project delivery index	9	8.7	9	8.0			This indicator measures the effectiveness of ICT project management and delivery by assessing approved projects completed in the quarter against a set of 9 defined criteria established by CIPFA and based around PRINCE 2. Five projects were closed in this quarter.
% of project milestones delivered	80%	81%	89%	85%			Each project and priority activity incorporates a series of milestones (both for ICT Services and the business) that are the basis for assessing progress. These can be updated by Project Boards to reflect revisions to scope, priorities etc. Progress has been made against all priorities as outlined in paragraph 3 of the report. In this period there have been some delays associated with the procurement of cloud services and some technical issues (Windows 10 planning, PSN upgrades).

Customer Indicator	Performance 2017-18						Comments
	Q1 Actual	Q2 Actual	Q3 Actual	Q2 Target	Status	Trend	
Customer satisfaction score: Corporate / School users	4.3/4.9	4.6/4.9	4.3/4.6	4.5			The access channel into ICT Services is the Service Desk which receives and handles the incidents, service requests and enquiries. The efficiency and effectiveness of this function is crucial for the user perception of the whole range of services provided. ICT Services collects information regarding customer's satisfaction (score 1-poor, 5-excellent) of the ICT incident management process for both corporate and school users (weekly sample sizes are approximately 30 corporate users and 20 school users).
Service Desk 1 st call resolution	46%	58%	59%	50%			First call resolution measures the effectiveness of the Service Desk at first point of call. The 50% target of incidents resolved at 1 st point of call is a balance of being able to manage the call volumes through the desk and maintaining a high percentage success rate within the allocated call period (6 minutes).
Average Service Desk call duration	5.41mins	5.45mins	5.4mins	6 mins			In order to manage call volumes and achieve a lower call abandonment rate, a target of 6 minutes (ICT industry practice) is allocated to each call to the first line Service Desk.
% dropped calls on Service Desk	8.72%	5.1%	7%	10%			This measures the proportion of calls unanswered by the Service Desk (including calls that are terminated by the user having heard recorded incident updates). Significant improvements have been made throughout the last year in call handling management. This is reflected in a more ambitious target for 2017/18 (from 12% to 10%).

Staff Indicator	Performance 2017-18						Comments
	Q1 Actual	Q2 Actual	Q3 Actual	Q2 Target	Status	Trend	
Average Number of sick days per staff member	1.27	3.01	5.72	5.25			This level of staff sickness is currently around the profile of the annual County Council target of 7 days per member of staff.
Average number of professional training days per member of staff	1.06	2.08	3.6	2.25			The annual target is 3 days per member of staff and based on completed timesheets. Training levels are above target. The approach incorporates attending training courses, gaining internal knowledge transfer/coaching across ICT and 'CBT' for people studying/exams for various technology disciplines.

Financial Indicator	Performance 2017-18				Comments
	Actual	Target	Status	Trend	
Expenditure against revenue	75%	75%			Planned budget reductions of £479k have been delivered in 2017-18. Forecast spending for 2017-18 is in line with budget plans.
Expenditure against capital	50%	75%			Capital spending plans are currently in line with budgets but the timing of payments will largely depend on the Cloud Programme, which is currently at the procurement phase and so the spending profile is unclear at this stage.
Cost of ICT support per user	£223	£217			Our current cost of £223 per user puts the County Council at the lowest cost quartile of CIPFA 2015 benchmarking. The target of £217 is based on remaining at the lowest cost quartile.
Cost of ICT support per workstation	£190	£243			Our current cost of £190 per workstation puts the County Council in the lowest cost quartile of CIPFA 2015 benchmarking. The target of £243 is based on remaining within the lowest cost quartile.