



**26<sup>th</sup> September 2017**

**Agenda Item: 5**

## **REPORT OF THE SERVICE DIRECTOR, ICT**

### **ICT PROGRAMMES AND PERFORMANCE QUARTER 1 2017-18**

#### **Purpose of the Report**

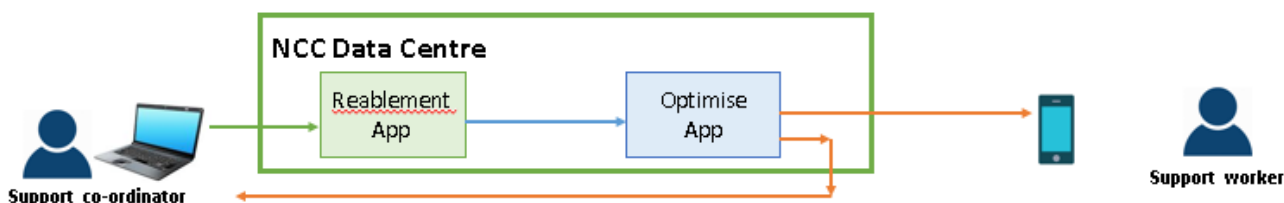
1. To provide the Improvement & Change Sub-Committee with the 1st quarter progress update on key projects and performance measures for ICT Services and to outline the major planned activities over the next 6 month period.

#### **Information and Advice**

##### **Programmes Update**

2. The ICT Strategy 2017-20, approved by Policy Committee on 19<sup>th</sup> July 2017, 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 new ICT strategy for the period 2017-20 was developed, and subsequently considered and approved by Policy Committee.
- ii. 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. The Cloud Programme is a significant range of projects that will consume a lot of our resources, but will provide a more modern, flexible and scalable model of delivery where the County Council pays only for the data centre services it consumes. The plan is to exit the County Hall data centre by the end of 2019. Work is now underway on the discovery phase that assesses the current technology estate, identifies suitable cloud models for future delivery and identifies the transition plans. This work will inform the subsequent procurement and contractual arrangements. As part of this work we have upgraded the software and infrastructure platform that runs Microsoft SharePoint software (*used for OneSpace project and team spaces*), saving £250k on licences over the next 3 years.
- iii. The pilot project for the use of automated scheduling technology, to improve the processes of managing appointments and monitoring home care visits for the Short Term Assessment and Reablement Team (START service within the ASCH Department), has been completed. Initial feedback has been very positive and plans are in place for the roll-out of this technology to all START teams. A presentation was given to this sub-committee in July 2017. A project summary is as follows:



Outcome overview	Project Summary
<ul style="list-style-type: none"> <li>• Caseload productivity has increased by 27% compared to the baseline – visiting more users per period</li> <li>• Referrals received and accepted from hospitals has increased by 28%</li> <li>• Worker downtime has reduced by 38%</li> <li>• £26k savings p.a. in Support Co-ordinator (Better Care Fund)</li> <li>• Reduced mileage as paper timesheets &amp; travel claims are removed &amp; calls assigned to nearest available worker</li> <li>• Optimise App provides greater and real-time visibility of capacity, demand and performance</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot with Broxtowe, Gedling &amp; Rushcliffe</li> <li>• Support Co-ordinator enters Care Plan details into the Reablement App (e.g. the job, time, duration, location)</li> <li>• This App fires all Care Plan jobs into the scheduling App (Optimise)</li> <li>• Optimise uses business rules (e.g. district, distance from home, gender, worker attributes, worker tolerances) to assign all work</li> <li>• Optimise fires job details to Support Worker smartphones</li> <li>• Optimise fires job details to the dashboard accessed by Support Co-ordinators</li> </ul>

- iv. The use of scheduling technology has also been used for assessment appointments with the Occupational Therapy teams within the ASCH Department. This has enabled the Adult Access Team to directly enter assessment appointments into calendars. The pilot recorded that occupational therapy assessments completed within the 28 day target went from 25% to 67% for the Ashfield and Mansfield Community Assessment Team, and social work assessments within target increased from 61% to 77% in the Rushcliffe Team. Appointments with service users are now confirmed almost immediately and there has been a 15% reduction in mileage costs from a reduced need for “*work allocation meetings*”.
- v. The Smarter Working Programme, which was approved by Policy Committee in November 2016, includes the provision of 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. During this quarter new technology (tablet/laptop, docking station solution) has been rolled out to social care staff working at Queen’s Medical Centre (this is also a pilot to inform shared site working), staff at Chancery Lane and deployment has commenced at Lawn View House. Feedback to date has been very positive.
- vi. The first phase of the *Business Intelligence Hub* has gone live, delivering social care reporting for ASCH and CFCS departments. There was a demonstration to this sub-committee in June 2017. ICT Services has been working alongside the Performance Team and ACUMA (NCC appointed partner) to define and deliver the ICT requirements in support of this project, which aims to improve how data is extracted, displayed, reported and used from the wide range of ICT systems that are in use. This will result in a more uniform and consistent approach to reporting in order to enhance decision making. The project seeks to replace the current plethora of reporting solutions and approaches with a more holistic way forward. The next phase of the project is now being scoped.
- vii. A pilot project at King’s Mill Hospital (KMH) has used technology with social care and health service teams to automate and integrate some of their work activities. The pilot project provides an App to nurses in the Emergency Assessment Unit at KMH that provides relevant contact information from County Council ICT systems for those frail and elderly patients that have a social care plan. This immediate access to baseline social care information has had a significant impact:

- The nurse no longer needs to retrieve this information from a social care worker based at KMH, which could take a number of days due to work volumes.
- This data is available immediately and 24 hours a day.
- 15% of access to this information was at times outside of social care hours, enabling hospital discharges outside of normal hours.
- 62.5% of usual social care queries to social workers were resolved by the App.
- 5% of social care worker time has been freed up for more complex

queries.

- An independent review of this project has identified 28-40% productivity benefits to both social care and health front-line teams from innovative automated workflows such as this.

- viii. A new partner Wi-Fi solution (*device.wifi*) has been endorsed by Nottinghamshire health trusts and the City Council following a proposal by the County Council. This will enable a consistent approach to staff Wi-Fi access across the organisations and enable staff to connect their devices on partner premises as if they were at their own base. It will be for each organisation to implement this solution.
- ix. An Election Results system was developed and used to record and present the results for the May 2017 County Council elections.
- x. A web portal (a website that brings information together from a number of separate systems) has been developed with the ASCH Department to potentially support those service users living independently. It is a prototype solution to help shape future thinking and requirements. The web portal would present a service user's information onto their personal website to show details such as care plans, social care and health contacts, calendar of events, planned social care visits, planned meals service, day centre visits etc. The next step is for the department to consider whether there is a case for further investment in and development of this type of solution.
- xi. The upgraded social care records system (Mosaic) was implemented successfully in May 2017. This was a significant upgrade and complex project as this system has a number of *connectors* to other staff workflow solutions e.g. automated link to King's Mill Hospital. This system has some 3,000 users.
- xii. The Customer Services Centre (CSC) have been using an SMS text messaging solution and some electronic forms as part of a revamped Blue Car Badge process. There are some 26,000 annual telephone calls associated with the 15,000 applications, with a further 3,000 chase up telephone calls. The revamped process has improved the time taken between contacting the CSC to receiving a decision/badge from 8-12 days to 3-5 days, and reduced the number of chase up telephone calls by 10%. The SMS text messaging solution is now available for wider use.
4. Over the next 6 months the major focus of activity will include the following:
- i. The scoping and resourcing of the programmes of work required to deliver the ICT Strategy for the period 2017-20.
  - ii. The Cloud Programme will, subject to governance approval, proceed to the procurement stage.
  - iii. The automated scheduling and rostering technology piloted for the START service within the ASCH Department will be rolled out to all START teams.

- iv. The Smarter Working Programme (SWP) will complete the delivery of phase 1 of the mobile devices deployment at Lawn View House, consider and review the pilot project outcomes at QMC and will scope and plan phase 2 of the programme. A new IT support model for devices will also be implemented, with a next-day break-fix/swap-out arrangement that better aligns with mobile working.
- v. Some planning activity will be undertaken in readiness for introducing the Microsoft Windows 10 operating system on smartphones and computers.
- vi. The second phase of the Corporate Performance Reporting Project for the further development of the business intelligence hub, which is expected to include information from the SAP-based Business Management System, 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 will be scoped and initiated. Discussions will also proceed with other health trusts in order to widen the future scope of this activity. A proposed technology approach for ensuring a consistent approach for such workflow automation and systems integration will be proposed to *Connected Nottinghamshire* (encompasses the Nottinghamshire health trusts, East Midlands Ambulance Service, City and County Councils).
- 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 public Wi-Fi solution to replace the current guest Wi-Fi solution at County Hall will be scoped, procured and implemented.
- x. A project will be scoped and initiated for introducing the new staff/partner Wi-Fi solution (*device.wifi*) – see 3 viii above.
- xi. There will be a procurement exercise for the mobile voice and data services contract, currently held by Vodafone.

## **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 1<sup>st</sup> 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 99.86% 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. This level of performance has continued in this quarter with responses almost at the target.
8. The County Council is increasingly reliant on its ICT provision and so disruptions to services need to be avoided wherever possible. Within the period there was significant disruption reported worldwide due to the impact of the 'WannaCry' ransomware virus which impacted nationally on health care services. Whilst County Council services remained fully protected throughout this period and internal service delivery remained consistent, there were some slow response times across the ICT network as external suppliers (such as Microsoft and Google) implemented extra and urgent security updates. Within the period there was also loss of access to files and folders on *home drives* (H: drives) for some users following a hardware failure.
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 remained largely on track during the period, see paragraph 3, with 80% 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 within the corporate annual target. 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.

### **Financial Indicator**

12. Revenue spending for the quarter is in line with the overall annual budget plans and planned financial savings of £479k will be 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 finance, equal opportunities, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service 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: (SLB 31/07/2017)**

Improvement and Change Sub-Committee is the appropriate body to consider the content of this report.

### **Financial Comments: (CSB 31/07/2017)**

Financial performance is outlined in paragraphs 12 and 13. ICT Services continues to monitor against key performance indicators to improve value for money.

### **Background Papers**

None








**Electoral Division(s) and Member(s) Affected**





All











## ICT Services Overall Performance: Quarter 1 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	2016-17	Performance 2017-18				Comments
	Q4 Actual	Q1 Actual	Q1 Target	Status	Trend	
Average availability to users of NCC's business critical services during business hours	99.8%	99.86%	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)	39%	42%	41%			<p>At the end of Q4 there were 9,884 devices (excluding smartphones) within the ICT estate, rising to 10,023 by the end of Q1. Mobile devices (Laptops and Tablet PC's) accounted for 42% of the overall estate. With the advent of the Smarter Working Programme many desktop PC's will be replaced with mobile devices, assisting many staff to work more flexibly and allow better use of the property assets.</p>









Business Activity Indicator	2016-17	Performance 2017-18				Comments
	Q4 Actual	Q1 Actual	Q1 Target	Status	Trend	
% Incidents resolved within agreed service levels	92%	91.5%	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 8,223 incidents reported (7,944 last quarter).
% of ICT changes successfully completed	100%	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 182 changes (254 last quarter) with one failed changed that was backed out (limited service disruption) as part of the BRMI project. There were less changes this period due to an extended <i>change freeze</i> being enforced due to risks associated with the WannaCry virus.
Compliance to CIPFA project delivery index	9	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. Three projects were closed in this quarter.
% of project milestones delivered	86%	80%	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 IT resourcing (Daycare Portal, Windows 10 planning) and technical issues (NHS numbers).

Customer	2016-17	Performance 2017-18	Comments
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Indicator	Q4 Actual	Q1 Actual	Q1 Target	Status	Trend	
Customer satisfaction score: Corporate / School users	4.5/4.9	4.3/4.9	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 <sup>st</sup> call resolution	46%	46%	50%			First call resolution measures the effectiveness of the Service Desk at first point of call. The 50% target 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	5.27mins	5.41mins	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	9%	8.72%	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 year in call handling management. This is reflected in a more ambitious target for 2017/18 (from 12% to 10%).

Staff	2016-17	Performance 2017-18	Comments
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Indicator	Actual	Q1 Actual	Target	Status	Trend	
Average Number of sick days per staff member	7	1.27	1.74			This level of staff sickness is currently within 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	4.6	1.06	0.75			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	22%	20%			Planned budget reductions of £479k are being delivered in 2017-18. Forecast spending for 2017-18 is in line with budget plans.
Expenditure against capital	25%	22%			Capital spending plans are currently in line with budgets but the timing of payments will largely depend on the Cloud Programme, which is currently in the discovery 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.