Manchester City Council
Report for Information

Report to: Audit Committee – 5 October 2017

Subject: Progress on ICT Disaster Recovery, through the Data Centre Strategy Programme.

Report of: Bob Brown, Chief Information Officer

Summary

ICT last provided an update on Disaster Recovery (DR) to the Audit Committee on 6 October 2016.

This report is a further update on progress since 6 October 2016 and the work undertaken to date in order to achieve a DR capability.

The ICT approach is to create a DR capability through a Data Centre Strategy Programme which will be the method and governance to deliver the required activities to deliver the Data Centre Strategy and create the required DR capability.

Recommendations:

Committee members are requested to consider the contents of the report, and advise if the assurances detailed within, address the DR risk by delivering a DR capability which is anticipated to be live during September 2018.

The programme of work to deliver the DR capability will be governed and reported to the ICT Board and the Scrutiny and Governance Committee on a regular basis as well as updates to the SMT. It is further assumed that an update to the Audit Committee on further progress will be delivered within 6 months.

Wards Affected: None

Contact Officers:

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Background documents (available for public inspection):

Our ICT Strategy 2016-2019
ICT report to Audit Committee on 6 October 2016

1.   Overview

1.1   The Data Centre Strategy Programme aligns to the "Our ICT Strategy" presented to the Resources and Governance Scrutiny Committee on 21 July 2016. The Data Centre Strategy Programme (discussed below) is the mechanism to deliver the Data Centre Strategy which was presented to the Council's SMT on 16 December 2016.

1.2   As part of the ICT strategic approach, it has been agreed that such a complex capability like DR is better off in the hands of experts who specialise in facility and DR management. Therefore, the future of the Sharp data centre was subsequently discussed at the SMT meeting on 20 December 2016 where it was agreed that that the council would exit from the Sharp data centre facility by end 2018. This means that the ICT services provided to the council will move into a DR equipped facility that ICT will rent as a managed service facility rather than be responsible in the operations of a Data Centre with DR capability.

1.3   One of the key outcomes of the Data Centre Strategy Programme is to deliver a resilient and robust data centre solution for the Council, which incorporates DR capabilities thus, providing protection of critical ICT infrastructure and business applications.

1.4   Another key outcome of the programme will be the removal of the current requirement for the Council to own and manage a Data Centre facility, which will lead to exiting the Sharp data centre facility.

1.5   Regular updates of this work can be communicated to Audit Committee through the established ICT Programme and Project governance framework. This governance will include regular updates and oversight of the ICT Board and the Scrutiny and Governance Committee through highlight reports which will be produced for each of the projects in the programme. An overall programme status report will also be reported to the Programme Steering Group and ICT Board. A programme plan and full 'Risk, Assumptions, Issues and Dependencies' (RAID) log will be managed and communicated.

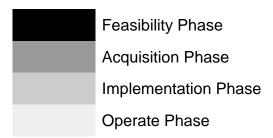## 2   Approach to getting a sustainable DR solution

2.1   The Data Centre Strategy Programme has three distinct but integrated projects as follows:

2.1.1   *Project 1 - Core infrastructure refresh* - this will deliver the new infrastructure / servers referred to as Hyper Converged Infrastructure (HCI) which makes it possible to make a live copy of a system and its data in 15 minute intervals which is then copied into another location (DR). The HCI also provides resilience so if you lose one of the HCI servers then there will be no disruption to service due to the configuration of the HCI;

2.1.2   *Project 2 - Network redesign and implementation* - this will redesign and upgrade the core network which is required so that we can use a new resilient

Data Centre facility and this work also builds in resilience into the Network which will reduce the number of current service disruptions through outages;

2.1.3   *Project 3 - Data centre facility migration* - this will get us out of the Sharp Data Centre and into the new facility which will actually be two geographically separate locations (Manchester East and West - at least 5 miles apart) that are interconnected so that if we lose one facility, we can operate out of the second facility (DR).

2.2   Each project needs to go through the following four phases and the timeframe of these phases is depicted below in the table:

2.2.1   *Feasibility Phase* - this involves discovery work, requirements elicitation and creating the specifications to go to market;

2.2.2   *Acquisition Phase* - this involves the tendering processes to go to market to acquire the products and services required that meet the specification identified within the feasibility phase;

2.2.3   *Implementation Phase* - this involves the implementation of the newly acquired products and services to deliver the outcomes of the programme;

2.2.4   *Operate Phase* - this is when the products and services become operable in the live environment and start adding value to the organisation and delivering the stated outcomes.

2.3   The following table depicts the road map of the three projects and the anticipated timeframe over the four phases.

Phases	Q2 Jul-Sep 17	Q3 Oct-Dec 17	Q4 Jan-Mar 18	Q1 Apr-Jun 18	Q2 Jul-Sep 18
1 Core infrastructure refresh					
2 Network redesign and implementation					
3 Data centre facility migration					

Diagram 1 Data Centre Strategy Programme road map

KEY

■ Feasibility Phase

■ Acquisition Phase

□ Implementation Phase

□ Operate Phase

2.3.1 As illustrated within the road map, the following key programme outcomes will be achieved by end September 2018: a) creation of a resilient and robust data centre solution with a Disaster Recovery capability, b) exit of the Sharp data centre Facility.