Replacement of Storage Area Network (SAN)

To: Strategy and Resources Committee

Meeting Date: 29th March 2022

From: Sam Smith, Assistant Director of IT & Digital Services

Electoral division(s): All

Key decision: Yes

Forward Plan ref: 2022/046

Outcome: This report sets out the background to the request to procure a

replacement for the existing computing and storage infrastructure (SAN) and associated services for Cambridgeshire County Council.

The outcome, if agreed, is a fit for purpose infrastructure that will support the future strategic ambitions of Cambridgeshire County

Council in line with the joint IT Strategy approved by both

Peterborough City and Cambridgeshire County Councils in July 2019.

Recommendation: The Strategy and Resources Committee is asked to:

 Agree to the procurement of replacement infrastructure via an approved framework agreement; and

b) Agree to delegate the award of this contract to the Section 151 Officer in consultation with the Chair and Vice Chair of the Strategy

and Resources Committee.

Officer contact:

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1. Background

- 1.1 Prior to October 2020, IT services were provided through the LGSS shared service. This included key infrastructure services such as the Storage Area Network (SAN). That solution is still in place and functional but in line with the agreements made by the LGSS Lead Authority Board all the LGSS partners need to plan the move away from that infrastructure.
- 1.2 The IT & Digital Service are currently reviewing options for this migration in line with the Joint IT Strategy approved by Cambridgeshire County Council in July 2019.
- 1.3 The IT strategy is a Cloud first strategy, which reflects changes to the nature of IT solutions and systems over the last few years.
- 1.4 Since 2019 a lot of work has been undertaken as part of the IT Strategy, including the move of the Data Centre from Shire Hall to Sand Martin House in Peterborough and upgrades to many systems and processes. As a result the Council is now well placed to take advantage of new cloud based solutions.

2. Main Issues

- 2.1 The existing infrastructure will reach the end of its current support contract (June 2023). The option to extend this support is being considered but this option will be time limited, and the infrastructure will need to be replaced, either in 2023 or the following year.
- 2.2 Whilst replacing the existing equipment like for like will provide what is needed in the short term, technology has, and continues to change. It is therefore unlikely that such a replacement would provide the fit for purpose, modern, flexible, secure, scalable and cost-effective solution that the Council needs for the future. Such a solution does not align with the Cloud first principles agreed as part of the IT Strategy and will keep the Council locked in a cycle of continual future capital expenditure.
- 2.3 As the landscape changes and the services that users consume move to an increasingly cloud based model, this infrastructure is better suited to being hosted in the cloud rather than in a local datacentre.

3. Recommended Approach

- 3.1 The recommended approach is to review the options for extended support on the existing infrastructure whilst commencing a procurement process for a longer-term replacement.
- 3.2 The rationale for this approach is:
 - To ensure that the Council maximises the existing investment it has made in the current infrastructure whilst transitioning to a modern and future proofed replacement.
 - To build on the work that has been undertaken in recent years to upgrade and virtualise IT systems.
 - To improve the future flexibility and security of the Councils infrastructure.
 - To minimise future risk by providing resilience for Cambridgeshire County Council and Peterborough City Council in the future.

- 3.3 As noted in the IT Strategy approved in 2019, IT Services delivered from the Cloud realises multiple benefits, such as:
 - Innovation
 - Security and governance
 - Citizen self-service
 - Flexible and collaborative working
 - Access to a far greater range of digital services
 - Automation of services where possible
 - Rationalisation of business systems
 - Integration of IT systems

For the infrastructure covered by this paper the benefits around security and resilience are important to note. From a security perspective cloud-based service providers are able to identify and mitigate security threats almost immediately. From a technical perspective they are also able to configure services to maximise the resilience of the systems. Collectively this ensures that systems are available and ready to be used at all times with less downtime and less change of a cyber security breach.

4. Cost and Governance

- 4.1 The procurement and implementation of replacement infrastructure will be within the established governance of the IT Strategy programme and follow the internal financial governance of the Council.
- 4.2 Capital budget has been allocated to the replacement of the SAN infrastructure and it is not expected that any additional spend will be required in the financial year 2022/23. As the procurement process progresses and technical options are refined if any further financial investment that is required, either capital and/or revenue, it will be identified and taken through the business planning process. No additional budget is being requested at this time.
- 4.3 A full procurement exercise will be undertaken to ensure that the council gets best value for money and this will include technical design work to finalise the solution.

5. Alignment with corporate priorities

5.1 Communities at the heart of everything we do

There are no significant implications for this priority although having effective, reliable tools for staff to use across the Council is fundamental to our ability to deliver services to our communities.

5.2 A good quality of life for everyone

There are no significant implications for this priority although having effective, reliable tools for staff to use across the Council is fundamental to our ability to deliver services to our communities.

- 5.3 Helping our children learn, develop and live life to the full There are no significant implications for this priority.
- 5.4 Cambridgeshire: a well-connected, safe, clean, green environment.

 The hosted data centres that we are looking to use, are driving towards a net zero carbon output within 20 years.
- 5.5 Protecting and caring for those who need us There are no significant implications for this priority.

6. Significant Implications

6.1 Resource Implications

The following bullet points set out details of significant implications identified by officers:

- There are several solutions for the replacement of this equipment, all of them carry significant cost. If necessary, funds over and above that already allocated will be requested through the business planning process.
- Each solution also requires significant data migration, this will need to be carefully managed. The most appropriately skilled people in ITDS will need to be assigned to this work. There is also likely to be some impact to the business while migrations are taking place, this will be minimised, but staff may need to accept some disruption.
- 6.2 Procurement/Contractual/Council Contract Procedure Rules Implications
 - The Cambridgeshire procurement team has been engaged throughout and we will be using a recognised local government framework for both procurements.
- 6.3 Statutory, Legal and Risk Implications
 - Advice has been received from LGSS Law in support of this procurement.
- 6.4 Equality and Diversity Implications

There are no significant implications within this category.

6.5 Engagement and Communications Implications

There are no significant implications within this category.

6.6 Localism and Local Member Involvement

There are no significant implications within this category.

6.7 Public Health Implications

There are no significant implications within this category.

- 6.8 Environment and Climate Change Implications on Priority Areas
- 6.8.1 Implication 1: Energy efficient, low carbon buildings.
 Cloud based providers are aiming to be NetZero and therefore if a replacement is cloud based the implication would be positive.
- 6.8.2 Implication 2: Low carbon transport.
 Neutral
- 6.8.3 Implication 3: Green spaces, peatland, afforestation, habitats and land management.

 Neutral
- 6.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.
 Neutral
 - Should the services be moved to a cloud-based solution there won't be any new equipment and therefore there would be no plastic used, generated or wasted.
- 6.8.5 Implication 5: Water use, availability, and management:
 Neutral
- 6.8.6 Implication 6: Air Pollution.
 Neutral
- 6.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.

 Neutral

Have the resource implications been cleared by Finance? Yes Name of Financial Officer: Helen Boutell

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the Head of Procurement? Yes

Name of Officer: Claire Elias

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law? Yes Name of Legal Officer: Fiona McMillan

Have the equality and diversity implications been cleared by your Service Contact? No Not applicable

Have any engagement and communication implications been cleared by Communications? Yes

Name of Officer: Christine Birchall

Have any localism and Local Member involvement issues been cleared by your Service Contact? No Not applicable

Have any Public Health implications been cleared by Public Health? No

Not applicable

If a Key decision, have any Environment and Climate Change implications been cleared by the Climate Change Officer? Yes Name of Officer: Emily Bolton

7. Source documents

7.1 There are no source documents