

# WEST NORTHAMPTONSHIRE COUNCIL CABINET

16<sup>TH</sup> JANUARY 2024

**CABINET MEMBER FOR HR & CORPORATE SERVICES: COUNCILLOR MIKE  
HALLAM**

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**Report Title**                      **Commissioning a unified digital network for WNC**

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## List of Approvers

<b>Monitoring Officer</b>	Catherine Whitehead	20/12/2023
<b>Chief Finance Officer (S.151)</b>	Martin Henry	20/12/2023
<b>Other Director</b>	Rebecca Purnell	15/12/2023
<b>Communications Lead/Head of Communications</b>	Craig Forsyth	05/01/2024

## List of Appendices

None

### 1. Purpose of Report

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- 1.1 To seek approval to procure a new single unified digital network covering the entirety of the West Northamptonshire Council (WNC) estate and providing continuing provision of contractual services to our partners in the Northamptonshire Children's Trust (NCT) and North Northamptonshire Council (NNC).

## **2. Executive Summary**

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- 2.1 The current WNC network comprises equipment and service contracts inherited from our four predecessor authorities. The hardware is old, difficult to maintain, prone to failure and poses an increasing cyber security risk. As it is four networks joined together and not a single design, it inhibits the continued aggregation of staff and services and does not facilitate working as a single organisation.
- 2.2 The network requires consolidation from four separate networks into a single high performing agile network suitable for a modern workforce. This delivers significant benefits and, after a short dual-running period, will also cost less to run annually for a better service.

## **3. Recommendations**

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- 3.1 It is recommended that the Cabinet:
  - 3.1.1 Delegate to the Assistant Chief Executive in consultation with the Chief Information Officer and the Executive Director of Finance authority to award a contract for the provision to the Council of replacement network equipment and services, in compliance with the Council's procurement processes and procurement legislative requirements.

## **4. Reason for Recommendations**

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- 4.1 Ensure the Council has secure network hardware that receives manufacturer support.
- 4.2 Erase service differences across former council sites and equipment.
- 4.3 Reduce the complexity and effort (and thus money and risk) in running network services.
- 4.4 Make cost efficiencies where possible.
- 4.5 Allow for other dependent systems and tools to be unified, speeding up service delivery.
- 4.6 Meet our continued contractual obligations to NNC via the IAA.

## **5. Report Background**

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- 5.1 Upon vesting WNC in April 2021, the Council inherited four sets of digital networks from its four respective predecessor authorities. Given the long contract times on some of the third-party services that form the network (e.g. Internet connectivity) and the usable lifespan of inherited equipment (e.g. WiFi access points, firewalls), we have only now reached the point where most of these are due for renewal – and so making this the most economical time to procure a new single, unified network to replace the four we inherited.
- 5.2 During the local government reform (LGR), the Council also inherited the responsibility of sole IT provider to the newly created Northamptonshire Children's Trust (NCT). It also retained responsibility for the provision of IT services for all former Northamptonshire County Council staff and services and their successors, including those now at North Northamptonshire Council (NNC). This responsibility is codified in the Inter Authority Agreement (IAA) between the Council and NNC and requires the provision of fit and proper digital networks unless or until this responsibility is disaggregated under the provisions of the IAA.

- 5.3 A major part of our existing digital network service is supplied by contract by EastNet, a consortium of local councils and this arrangement runs until September 2025. This contract does not have scope to be extended further and therefore new services must be procured in any event.

## 6. Issues and Choices

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### 6.1 Issues

- 6.1.1 The current digital networks within the Council carry several risks and deficiencies, owing to the lack of a single architecture design as well as advances in technology since their original implementations.
- 6.1.2 *End of Life Hardware* – a significant proportion of the existing network hardware is already “end-of-life”. This means it will receive less contractual support from the manufacturer and be increasingly expensive and time-consuming to manage, pose an increasing security risk, and be increasingly incompatible with newer technologies.
- 6.1.3 *No Support for hybrid working (WAN design)* – as we have four legacy digital networks, it is not possible for our staff and users to securely access their required applications interchangeably in any location, complicating office location and HR planning.
- 6.1.4 *Low resilience* – there are several single points of failure across the existing networks as well as a heavy reliance on the One Angel Square datacentre, the location of most WNC applications. Any failure at these locations will adversely impact the availability of services and applications.
- 6.1.5 *High management/maintenance overheads* – the variety of models, manufacturers and ages of network equipment inhibits both efficient management of the network (as it is difficult to train staff effectively in so many different standards) and comprehensive reporting, making administration difficult.
- 6.1.6 *Staying abreast of network security* – with continual advances in the sophistication of cyber security attacks, equipment digital and services must constantly be kept up-to-date to ensure protection of vital data and public services. As our current equipment approaches end-of-life, we will need to invest if we intend to stay protected against ever-evolving cybercrime.

### 6.2 Choices

#### 6.2.1 Option 1 – **Do Nothing.**

- 6.2.1.1 It is possible to continue running the existing network equipment and opt not to replace it, negating any planned short-term costs.
- 6.2.1.2 This carries significant risks that may materialise at short notice and require significant investment to address, including but not limited to: loss of manufacturer support and problem resolution; inability to replace broken equipment; escalating maintenance overheads; failure to meet required security and compliance standards; incompatibility of new systems and tools.
- 6.2.1.3 Whilst this remains an option for considerations of cost, the risks are not considered acceptable from a professional IT perspective.
- 6.2.1.4 We would not have a compliantly procured network should replacements not be sourced before the existing EastNet arrangement ends in September 2025.

## 6.2.2 Option 2 – Partial Implementation.

6.2.2.1 Commence a partial upgrade of the network, targeting specific areas of weakness.

6.2.2.2 A targeted partial upgrade would reduce the upfront costs of the work but fail to fully remedy any of the risks or issues; it would be akin to “patching up” a system in need of replacement.

6.2.2.3 The overall costs of reaching a complete replacement would likely increase substantially owing to the complexity of doing the work in phases.

6.2.2.4 Until such time as a full implementation could be completed, most of the risks and issues would remain.

6.2.2.5 While this remains an option to help spread the cost of the replacement, it does not represent a good overall value-for-money proposition for the Council, and perpetuates risks considered not acceptable from a professional IT perspective.

6.2.2.6 We would not have a compliantly procured network should replacements not be sourced before the existing EastNet arrangement ends in September 2025.

## 6.2.3 Option 3 – Full Implementation.

6.2.4 Commence a holistic, co-ordinated upgrade of the network ensuring that all devices are fully supported and the given issues in section 6 are resolved.

6.2.5 This options fully addresses the given risks and issues and is recommended as such from a professional IT perspective.

## 7. Implications (including financial implications)

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### 7.1 Resources and Financial

7.1.1 The following table shows the estimated capital cost of the proposed solution for the Council. This cost is included within the Council’s proposed capital programme. Separate advice will be given to NNC on the cost of any equipment it will need to make for sites owned by NNC and supported by the Council.

Capital Cost	2023/4	2024/5	2025/6	2026/7	2027/8	2028/9
WiFi - Replacement of EoL APs	£110,009					
WiFi - Additional APs		£84,200	-	-		
LAN - 106 Switches (config/install)		£682,640				
WAN - Infrastructure & Set-Up		£75,031				
Security - Firewall hardware		£150,000				
Security – VPN remote access		£240,000				

<b>Capital Total</b>	<b>£110,009</b>	<b>£1,231,871</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>
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7.1.2 The following table shows the estimated annual revenue costs needed by the Council to fund this system, compared with the existing system costs. It should be noted that a proportion of the current costs are recharged to NCT and NNC. Any overspend or underspend compared with the current costs would cause recharges to rise and fall proportionately.

7.1.3 As the numbers given are a ceiling of estimated costs, the final split of recharges and exact costs will be determined at the point of entering into new contracts. The below represents the upper threshold of those costs.

Revenue	2023/4	2024/5	2025/6	2026/7	2027/8	2028/9
WiFi – Replacement of EoL APs						£4,050
LAN - 188 License/Support		£11,280	£11,280	£11,280	£11,280	£11,280
WAN - Dual running cost		£21,719	141,174			
WAN – 138 circuits		£32,582	£390,982	£390,982	£390,982	£390,982
Proxy - Product (cloud Based)		£78,000	£78,000	£78,000	£78,000	£78,000

<b>Current budget</b>	<b>£506,751</b>	<b>£506,751</b>	<b>£506,751</b>	<b>£506,751</b>	<b>£506,751</b>	<b>£506,751</b>
<b>New revenue total</b>	<b>£0</b>	<b>£143,581</b>	<b>£621,436</b>	<b>£480,262</b>	<b>£480,262</b>	<b>£484,312</b>
<b>Current running costs</b>	<b>£506,751</b>	<b>£506,751</b>	<b>£253,391</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>
<b>Net change from current</b>	<b>£0</b>	<b>£143,581</b>	<b>£368,076</b>	<b>-£26,489</b>	<b>-£26,489</b>	<b>-£22,439</b>

7.1.4 The figures given above have been produced in consultation with industry specialists and represent a modest saving once fully implemented, mostly down to the selection of simpler and more effective technologies than those in our current estate (notably, a replacement of ‘MPLS’ with ‘SD-WAN’ technology).

7.1.5 The temporary surge in costs during 2024/5 and 2025/6 is due to the need for a lengthy dual running period; installation of a new digital network takes months and the organisation cannot be left without a working one in the interim. Budgetary provision has been made for this over the listed years.

## 7.2 Legal

7.2.1 The Council will comply with all relevant legislation during the commissioning, procurement, installation and operation of the new services.

## 7.3 Risk

7.3.1 Due to the age of the existing network equipment, if replacement solution is implemented, maintenance on the existing equipment will cease and the service will be unavailable.

7.3.2 In addition, WNC risk a breach in security if an upgrade to the network equipment is not completed.

7.3.3 It is a risk to colleagues, office optimisation projects if WNC does not have a suitable network to perform the necessary organisational changes due to the minimum standards of the current fragmented network.

## 7.4 Consultation and Communications

7.5 Following cabinet approval, the major stakeholders will be consulted. These will include Northampton Partnership Homes, Northampton Children’s Trust, Northampton Leisure Trust, the Libraries Service and Community Libraries groups, North Northamptonshire Council.

7.6 Clear and effective communications and consultation activities will be key to ensuring that all stakeholders are fully informed and engaged in the project and understand the key drivers and factors for these.

7.7 **Consideration by Overview and Scrutiny**

7.8 Overview and Scrutiny Committee have not considered this issue.

7.9 **Climate Impact**

7.10 Modern network devices use less energy than the ones in place currently. This will have a positive impact by reducing the overall energy used within the lifetime of the contract. In addition, the Council will seek to maximise energy and CO<sub>2</sub>e savings through delivery of the project.

7.11 **Community Impact**

7.12 With a unified and modern network making remote and office working easier and more secure and accessible, it is likely that those services can operate more effectively and meet community needs more easily.

**8. Background Papers**

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8.1 Glossary of Terms , WNC Future Network Design and Current Network Design.