

## EXECUTIVE

### 19<sup>th</sup> May 2022

<b>Report Title</b>	<b>Enterprise Telephony including IT Infrastructure, Architecture and Contact Centre</b>
<b>Report Author</b>	Lisa Hyde, Director of Transformation
<b>Lead Member</b>	Councillor Lloyd Bunday, Executive Member for Finance and Transformation

<b>Key Decision</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Is the decision eligible for call-in by Scrutiny?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Are there public sector equality duty implications?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Does the report contain confidential or exempt information (whether in appendices or not)?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Applicable paragraph number/s for exemption from publication under Schedule 12A Local Government Act 1972</b>	

#### List of Appendices

##### Appendix A: Glossary of Terms

#### 1. Purpose of Report

---

- 1.1. The purpose of this report is to seek the approval of the Executive to start a procurement process for a new unified telephony system taking into account the infrastructure, architecture and user areas such as contact centres for the Council.

#### 2. Executive Summary

---

- 2.1. This report outlines the current position with regards to telephony platforms across North Northamptonshire Council and the rationale to procure and implement a new cloud-based telephony system (Software as a Service) to upgrade and unify the Council's telephony estate in order deliver a single system to staff and customers interacting with the Council through Customer Services and to complete roll out by December 2023.

### **3. Recommendations**

---

3.1. It is recommended that the Executive:

- a) Approve the commencement of the procurement process to purchase and implement a new cloud-based telephony system (Software as a Service) for North Northamptonshire.
- b) Delegate authority to the Executive Member for Finance and Transformation in consultation with the Director of Transformation, to take any further decisions and /or actions required to conclude the procurement and implementation of the new system.

3.2. Reason for Recommendations:

- a) Replace the analogue lines and end of life telephony infrastructure, which in a number of areas, will cease to work as BT Openreach will decommission in 2024, with a digital network.
- b) Scalability: A cloud system does away with having to purchase expensive hardware or dedicated lines as the Council grows, which is key whilst disaggregation of services takes place from West to North.
- c) The Council will gain efficiencies from a unified telephony platform. It will enable services to make savings as a result of restructuring and harmonising their processes such as Customer Services team, Future ways of working
- d) Enable standardisation of telephony systems across NNC which makes it easy to adapt to changes in business operations.
- e) To align with the green agenda – the organisation will be greener because of this when the Council moves off the old infrastructure to a newer infrastructure that is more climate friendly i.e., energy efficiency

3.3. Alternative Options Considered – All the current telephony platforms across North Northants are separate, with a number of different suppliers and this causes a number of issues with services being able to create efficient processes and a good experience for residents. The current telephony infrastructure is also end of life and unscalable in majority of the Council's legacy areas. BT Openreach will also switch off the analogue public telephone services; Public Switched Telephone Network (PSTN) and Integrated Services Digital Network (ISDN), which most sites utilise in 2024, moving to a digital Internet Protocol (IP) network ready for the future. Doing nothing is therefore not a viable option. Of the options for the new telephony platform, a new cloud-based telephony system (Software as a Service) to replace existing telephony systems is the preferred option as set out in this report.

## 4. Report Background

---

- 4.1. Telephony refers to the telephone infrastructure and platforms utilised by North Northamptonshire. This includes the traditional copper phone lines and the devices used to answer phone calls such as phones which can be desk or soft phones which are able to utilise Voice Over Internet Protocol (VOIP) technology.
- 4.2. The telephony systems utilised across the unitary council in North Northamptonshire are hosted on different platforms; East Northants, Wellingborough and Kettering sites are on the Mitel platform whilst Corby is on Alcatel. In addition, former Northamptonshire County Council staff working from One Angel Square and other sites are being supported by West Northamptonshire Council infrastructure, Avaya communication Server 1000 (CS1000) and as a result, any change request is reliant on the West ICT to implement.
- 4.3. Telephones are still a key communication channel between the Council and its residents and businesses. The Council's telephony system is a front door to its residents as it receives approximately 1600 calls per day across the five contact centres. Almost 50% of these calls are related to Revenues and Benefits. This volume does not include the automated payment lines, which enable customers to pay the Council for a variety of services using their handset.
- 4.4. In addition to the 1600 calls received directly into the contact centres, there are approximately 2500 calls daily split between individuals with their own extensions, and departmental lines which can be answered by any individual within that team, either by utilising a hunt group, duty officer or a more informal arrangement. Many of these calls are internal transfers between the various contact centres and individuals/teams in the back offices. The Council does not have the technology at present across all sites to differentiate the exact number of calls received direct from customers, and those transferred from contact centres to back offices.
- 4.5. The existing telephony infrastructure across the Council is still in the state as per pre vesting day, and the operational constraints of disparate customer service and back-office teams have led to a compromised position which negatively affects the customer journey. Where services are not aggregated and operate on different systems, processes and procedures, the customer still needs to be directed to the service hub in the area they live. As a result of the area choices (aligned to the four former districts) customers are given for many services, and the mix of former countywide services, customers contacting the Council via the main 0300 telephone line experience a complex journey which relies on their knowledge of who provides what services and leads to customer service agents being limited in their ability to resolve queries without additional transfers.
- 4.6. These constraints hamper more effective customer service as well as the financial and process efficiencies that one single integrated Customer Services

team could offer. They prevent the five separate teams joining together as one team.

- 4.7. Implementation of a new cloud-based telephony system (Software as a Service) allows the Council to move forward and deliver service and efficiency improvements. It also supports the delivery of efficiency savings in Customer Services, which are £264,000 in 2022-23 and a further £106,000 in 2023-24. It is expected that in 2024-25 additional savings will also be possible after other services restructure as the number of licenses will reduce by an estimated 10% in year 23/24 and a further 5% for subsequent years as the Council transforms and phone use requirement reduces.
- 4.8. A new cloud-based telephony system will allow the Council to provide better customer service and improved business intelligence, enabling more effective customer services, self-service and a greater understanding of customer needs.
- 4.9. The Council will also benefit from an improved picture of customers regardless of their access channel as it will extend more widely across Council services to enable a more holistic picture of customer needs where customer information is not currently shared. This will improve customer journeys and secure better outcomes.
- 4.10. The new telephony system will allow better integration with Council systems, such as payments/income management and also allow for the organisation to scale and respond to future needs.
- 4.11. The proposed contract duration is up to five (5) years.
- 4.12. The service will work closely with colleagues from Legal services, procurement and IT to support the delivery of a new telephony system.

## **5. Issues and Choices**

---

- 5.1. All the current telephony platforms across North Northants are separate, with a number of different suppliers and this causes a number of issues with supporting service areas to be able to create efficient processes and a good experience for residents.
- 5.2. Call routing to the back offices via the 0300 Interactive voice response (IVR) is so complex it has led to complaints from residents and Members.
- 5.3. The current telephony infrastructure is also end of life and unscalable in the majority of Council legacy areas.
- 5.4. The current capacity issues and limitations on the size of the phone system at Corby makes it difficult for customers to get through at busy times.

- 5.5. The existing traditional telephone systems need to be replaced because of obsolescence. The current telephony infrastructure is coming to its end of life, BT Openreach will switch off analogue public telephone services (PSTN and ISDN) in 2024, moving to a digital (IP) network ready for the future. If North Northamptonshire do not move to a digital network by then, no telephone calls using PSTN/ISDN can be made.
- 5.6. There has been little investment in the telephony infrastructure of some of the legacy councils.
- 5.7. Supporting the different legacy platforms and managing contracts is inefficient for ICT.
- 5.8. Lack of dedicated telephony skills around support leading to a heavy reliance on suppliers to resolve issues and incidents.
- 5.9. The end-of-life infrastructure and lack of resilience has resulted in customers not being able to contact the Council when they need to and in turn increased the complaints North Northants receives. The separate infrastructure also means that the Council currently spends four times the amount of time needed to support these infrastructures.
- 5.10. Service disruption due to downtime of the service being unavailable, loss of revenue to the council, compatibility for the new CRM (Customer Relationship Management) system for Customer services to increase efficiency and saving and inability to scale to meet the needs of the new unitary.
- 5.11. The telephony systems are overly complex due to existing different configuration arrangements of all the legacy councils.
- 5.12. There are three options for the way forward, these are evaluated in detail below.
- 5.13. The first option is to **“Do nothing.”** There is an option to continue with existing systems. However, this is not considered feasible. The current telephony infrastructure is at the end of its life, disparate, unscalable in some areas and BT Openreach will switch off analogue public telephone services (PSTN and ISDN) in 2024, moving to a digital (IP) network ready for the future. If North Northamptonshire do not move to a digital network by then, no telephone calls using PSTN/ISDN can be made.
- 5.14. **Procure a new cloud-based telephony system (Software as a Service) to replace existing telephony systems.** A new unified system with hardware, software, and all application support to be housed in the cloud, meaning no local installation, with the required elements housed offsite and responsibility for monitoring and maintenance held with the telephony supplier. It also gives the Council more in terms of greater resilience, flexibility, and the ability to meet this need and longer-term strategic aims. This option is beneficial to the environment and in line with the Green Agenda to reduce the Council’s carbon footprint by reducing the number of separate infrastructures needing to be run,

to support telephony arrangements. All cloud providers have published their net zero carbon strategy.

- 5.15. **Procure a new on-premise telephony system to replace existing on-premise arrangements.** This option is technically viable but fails to offer the same opportunity for additional efficiencies and will be more resource intensive to implement and support. It is non cloud based and therefore misaligns with ICT strategy for ensuring the Council uses cloud where appropriate, especially with its highest priority applications. The indicative cost is estimated to be between £1,300,000 - £1,800,000 (excludes call and line rental charges). The figures must be viewed with caution, as the rigorous discovery work to fully understand Council infrastructure and data centre requirements has not been undertaken by any third party. More reliable costs would only be available during full procurement when providers have had chance to respond to the Council's full technological and user requirements.
- 5.16. The **recommended option** is that set out in section 5.10 above, to procure a cloud-based telephony system (Software as a Service).
- 5.17. Cloud-based telephony system (Software as a Service) enables NNC to move forward with Future Ways of Working, giving greater resilience to individuals and services by offering increased flexibility and utilising the 24/7/365 support provided by a supplier. There are benefits associated with reducing the Council's carbon footprint in line with the Green Agenda, and avoidance of costs associated with hiring dedicated support staff within ICT as well as infrastructure related costs, as total cost of ownership sits with the provider.
- 5.18. Cloud-based telephony system (Software as a Service) resolves the issue of end-of-life unsupported telephony from 2024. Scaling the system up or down is quicker and easier and any updates will not affect operational uptime.
- 5.19. Cloud technology offers new features such as intelligent reporting and applications that can increase staff productivity. The Council will be able to support peoples' way of working after the pandemic i.e., harmonising processes and supporting team restructure.
- 5.20. All customer service centres will be able to answer any call that comes into the Council at the first point of contact i.e., if a customer rings a designated number, Customer Services will have the ability to route that call to anywhere thereby enabling the service to work as one team and improving the customer journey

## **6. Next Steps**

---

- 6.1. Subject to approval of the way forward by Executive, these are the key milestones to deliver a cloud-based telephony system by December 2023: -

<b>Milestone</b>	<b>Date</b>
Business case approved by Executive	19 <sup>th</sup> May 2022
Procurement Gateway Group (PGG) Form approved	June 2022
Procurement to be completed and contract signed	December 2022 (dependent on call in period post Executive decision)
Implementation and Deployment	Discussion with potential Supplier to define timelines, currently estimated as December 2023
Supplier Onboarding completed	30 <sup>th</sup> April 2023
Proposed roll out completion	1 <sup>st</sup> December 2023
Decommission legacy telephony systems completed	31 <sup>st</sup> March 2024

## **7. Implications (including financial implications)**

---

### **7.1. Resources and Financial**

7.1.1. There will be financial implications with regards to implementing a cloud-based telephony system. It is proposed that to cover the project resource cost, including one-off implementation and 10% contingency for unknown cost of internal ICT costs for 2022/23 and 2023/24 Financial Years, currently estimated at £345,708, will be met from the Business Rates Retention (BRR) budget. This amount has been allocated to the Council to deliver customer service improvements using technology.

7.1.2. In addition, it expected that in 2023/24 the existing annual cost (including support and maintenance, line rental & call charges, former NCC telephony contracts) of £413,158 will run concurrently with the new cost. It is anticipated the existing cost will reduce as part of the new solution is delivered.

7.1.3. The new cloud-based telephony system will allow integration with applications such as CRM and Income Management System to improve customer and user experience

## **7.2. Legal and Governance**

- 7.2.1. Failing to procure a new telephony platform by December 2023 will result in the Council operating existing telephony systems that will fall out of support. This could result in licences to use them being withdrawn by the supplier(s) concerned. It is also not possible to extend the scope of existing systems without a procurement process. In addition, the current telephony infrastructure is coming to its end of life, BT Openreach will switch off analogue public telephone services (PSTN and ISDN) in 2024, moving to a digital (IP) network ready for the future. If North Northamptonshire do not move to a digital network by then, no telephone calls using PSTN/ISDN can be made.
- 7.2.2. Procurement advice has been sought and it is proposed that it is appropriate to use a procurement framework as the route to market.

## **7.3. Relevant Policies and Plans**

- 7.3.1. This project will meet all corporate priorities. It meets the corporate objective of modern public services by ensuring robust financial management of IT systems, improving the efficiency and effectiveness of services and using skills and technology most effectively. The recommended option aligns with the Council's Technical, Digital and Data draft strategy.

## **7.4. Risk**

- 7.4.1. The implementation of a cloud-based telephony system carries risks to the Council. Incompatibility of older computers with modern voice/video capability. ICT will need to ensure that new technology can service the need of service areas that will be impacted by the change.
- 7.4.2. Staff resistance to removal of traditional phone handsets from desks. ICT is already engaging with services to champion the benefits of the new system. Proactive communications will be undertaken to articulate the issues with remaining with current telephony system
- 7.4.3. The current issue with the back-office services will not be resolved until those services are aggregated. The service areas will need to understand how they will deliver geographical services until such a time when they are aggregated.

## **7.5 Consultation**

- 7.5.1 Consultation will take place with internal stakeholders as part of the procurement process



## **7.6 Consideration by Executive Advisory Panel**

- 7.6.1 Officers will consult with the Executive Advisory Panel for Service Delivery, Performance and Customers at the appropriate points during this project.

## **7.7 Consideration by Scrutiny**

- 7.7.1 The procurement process and /or any part of the requirement may be selected for consideration by Scrutiny.

## **7.8 Equality Implications**

- 7.8.1 The Council is committed to treating people fairly. Implementation of a new cloud-based telephony system that encompasses all services including translation services, will allow the Council to deliver the highest quality services to all customer groups so that they receive fair treatment in accordance with the Council's responsibilities under the Equality Act.

## **7.9 Climate Impact**

- 7.9.1 The Council, having declared a climate change emergency in June 2021, is committed to reducing its climate impact both within its own Council buildings and in working with businesses and the wider community to achieve net zero energy emissions. A unified cloud-based telephony system will allow the organisation to be greener because of this when the Council moves off the old infrastructure to a newer infrastructure that is more climate friendly i.e., energy efficiency. It will also reduce the carbon footprint by reducing the number of separate infrastructures needing to be run, to support telephony arrangements

## **7.10 Community Impact**

- 7.10.1 The customer journey will improve as residents can call any customer contact centre. This will also reduce the travel across the county by residents to visit the council and for staff reduction in time taken around activities that can be conducted over a more reliable phone/video facility.
- 7.10.2 Although, current issues like complaints from residents and Members due to call routing to the back offices via the 0300 IVR will persist unless those services are aggregated.

## **7.11 Crime and Disorder Impact**

- 7.11.1 There are no implications arising from any recommendations that are being proposed that have a crime and disorder impact.

## **8 Background Papers**

---

8.1 None.

## Appendix A: Glossary of Terms

Terms	Definition
IP	Internet Protocol  A set of rules governing the format of data sent via the internet or local network
PCI DSS	Payment Card Industry Data Security Standard  Credit and Debit Card security scheme for customer present, customer not present and e-commerce payments. It is the Council's obligation under the scheme to take card payments securely over the phone.
ISDN	Integrated Services Digital Network  Analogous public telephone services which will also be replaced by BT in 2024
PSTN	Public Switched Telephone Network  Are analogous lines also known as "traditional telephony" that BT are set to replace as part of a huge digital changeover in 2024
VOIP	Voice over Internet Protocol  Is a method and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol networks, such as the Internet.