PROPOSED REPLACEMENT OF THE COUNCIL’S TELEPHONY SYSTEMS

Report of the Deputy Chief Executive

1 Introduction

1.1 The Council currently operates three phone systems that have reached end of life and are unsupported by the system manufacturers. While support can be sourced via third-party suppliers, this is expensive and the ageing technology leaves the Council open to the risk of systems failure, potential compliance issues and unable to take advantage of modern telephony features.

1.2 The Council has the opportunity to replace all three systems with a single system which would simplify the management and administration of the telephony infrastructure. A new single Unified Communications (UC) system would improve the Council’s voice telephony service and include a host of advanced features that enable flexible and mobile working, such as Video Conferencing, Instant Messaging, Presence Awareness, and Collaborative Working tools (see section 3.0 for further details).

2 Background

2.1 The Council currently operates a fragmented telephony service that has grown by adding ad-hoc telephony solutions to an ageing core in order to provide new functionality. These consist of:

2.2 Siemens DX Phone System (DX). This the oldest element of the Council’s telephony service and was originally the core Council telephone systems. The legacy system is still used to handle incoming and outgoing calls to the Council. These are then handed over or received by other elements of the telephony service. This is an important element of the overall telephony service which shouldn’t be trusted to such an old platform.

2.3 Cisco Voice Over IP (VOIP). A Cisco VOIP telephony system was implemented across the council in 2007. This was a significant technological advancement over the old DX system and provided greater flexibility, simplified management and reduced costs. This is the primary telephony system with approximately 2,600 handsets currently in use.

2.4 Microsoft Lync (now named Skype for Business). The IT service piloted a Unified Communications system called Microsoft Lync in 2013. Some of the (UC) elements of Lync proved popular, such as Instant Messaging and Presence Management (described in section 3.2) and remain in use today, however the telephony aspect was deemed poor due to the call quality so a widespread rollout was deferred.

2.5 The Contact Centre System. The Council’s Contact Centre is supported by a specialist standalone telephony system that remains fit for purpose. It will need to be replaced in the next couple of years so the proposed upgrade to the
Council’s telephony system will be progressed in a way that supports the future replacement of this system.

2.6 The Council currently provides telephony services to Stockport Homes, Solutions SK, Pure Radio and one school. A condition of the continuing relationship is the need to provide a reliable and effective telephony service that supports their ambitions. This is a particular challenge for Stockport Homes who require Unified Communications functionality in time for the move to their new head office and to support their mobile working initiative.

2.7 The Council also needs to consider closer working with Stockport Together partners, such as the Stockport Clinical Commissioning Group (CCG), Pennine Care and the Stockport Foundation Trust (FT). The CCG have recently procured a BT hosted Cisco system and the FT are in the early stages of considering a new phone or Unified Communications system. The Council is working with Stockport Together partners to explore joint opportunities or, as a minimum, assurance that chosen solutions can easily integrate with each other. Using the same phone system manufacturer (Cisco) makes future integration easier.

3 Unified Communications Solutions

3.1 The term “Unified Communications” (UC) refers to a collection of communication tools that allow people to choose the most appropriate method of communicating with colleagues in real time and is now seen as the standard communications platform for organisations. It reflects that a flexible and mobile workforce’s communication needs go beyond the traditional phone call or e-mail.

3.2 The ‘UC’ elements of the Lync have been popular with those that have piloted it, these include:

- **Instant Messaging (IM)** – IM allows you to type a quick message, hit “send” and your message pops up on the recipient's screen. IM tends to illicit an immediate response for short questions eliminating the lag with e-mail responses. IM is used to augment other communication channels, for example using IM to check facts with a colleague while on the phone to a customer.

- **Presence Awareness** - Presence awareness provides a quick view of whether colleagues are logged onto their IM/Phone service and what their status is, e.g. in a meeting or on the phone. Presence awareness is often used as a quick way to find the right person to handle an urgent matter.

3.3 UC also provides facilities for video and desktop conferencing which allows video, sound and on-screen presentations to be shared across individuals or groups. Most of the devices the Council supplies have video capability built in (video cameras and microphones) but additional equipment can be purchased if these are not available. The platform will also support, but does not include, more advanced video conferencing suites with dedicated large screens and intelligent cameras should the Council wish to offer this functionality.
4 Telephone System Replacement Options

4.1 The IT function have undertaken a soft market test exercise to better understand what technology is available, how the supplier market operates and to help consider the best option for the Council. A range of suppliers, including BT, Virgin and Siemens, were invited to discuss how they could potentially meet Stockport’s outline requirements and where they could add value.

4.2 A number of options are available that cover different technology choices (e.g. Cisco or Microsoft) and hosting arrangements (e.g. Council’s Data Centre or the Cloud). The IT function has continued to research and discuss these options with suppliers, STaR Procurement and Health partners following the soft market testing and has formulated a series of options and recommendations for consideration.

4.3 **Option One - Retain the existing systems.** This could be achieved by paying a third party to provide support and maintenance on the existing phone systems. This type of support is expensive and is only on a best endeavours basis as the suppliers no longer maintain parts, provide guidance or assure the system is secure. This does not appear to be a viable option for a key Council system and is therefore discounted.

4.4 **Option Two - Replace the existing systems entirely.** This would involve the procurement of a single UC solution through a Crown Commercial Services (CCS) Framework to replace the Council’s existing telephony systems. This route was estimated to cost £300k more than the upgrade route and would take considerably longer with no perceived additional value so is therefore discounted.

4.5 **Option Three - Upgrade and expand the existing Cisco system.** During the soft market testing it became apparent that an upgrade and extension of the existing Cisco system would be possible and would be the most cost effective way to achieve a new single UC solution. There are numerous advantages to this approach and therefore this is the recommended option. Some of the benefits are listed below:

- An upgrade path for the existing Cisco solution is significantly cheaper than procuring a new solution and provides the quickest implementation route.
- The Council has a large number of handsets that may be re-used on a Cisco solution.
- The council already has in-house skills to support a Cisco solution.
- The Cisco products provide the best opportunity to integrate telephony with partners such as Stockport FT and CCG.
- A single UC system provides a stable telephony platform which is less complex to support and administrate.
- Gartner, the world’s leading independent information technology advisory company, consistently place Cisco as leaders in UC.

5 Further considerations with Option Three

5.1 The upgrade route presents the best option for the Council’s telephony system replacement but there are a number of additional aspects to consider with how
the upgrade is implemented.

5.2 **Aspect A - Cloud Hosted or On-Premises.** In a cloud hosted solution the Council’s Cisco UC system and data would be operated from another organisation’s Data Centre and accessed through the internet. The Council’s IT function always investigates cloud hosting opportunities with any new system, irrespective of the recent investment in the new Data Centre, as there could potentially be savings or increased flexibility. This was not the case on this occasion as it would be more expensive over the five-year life-cycle, didn’t offer flexibility as licence numbers were fixed for three years and is based on revenue expenditure rather than capital which presents a funding challenge. It is recommended that the Council pursues an on-premises solution.

5.3 **Aspect B - Handset replacement.** Some of the Council’s existing handsets (approximately 480) will not work on the new version of Cisco we plan to implement. A like-for-like replacement of these handsets would cost in the region of £65k however the new UC solution allows PCs, laptops and tablets to operate as phones with the aid of a headset. This presents an opportunity to rollout headsets as a direct replacement for handsets in those areas with the right equipment and a willingness to participate, and to redistribute their handsets to those areas in need of a new handset. Council supplied smartphones can also be integrated into the new system and can be used as a sole telephony unit therefore releasing further desk handsets. This will reduce the cost of the replacement units to £15k.

5.4 The bulk of the remaining handsets (approximately 2,200) are also end-of-life, which means they will work on the new version of Cisco but may not be supported on future versions. On the rare occasion that a handset fails we could purchase a new one, so the biggest risk is that these handsets become inoperable on a future upgrade. Renewing all handsets as part of this upgrade would future proof the solution for the 5-year life-cycle but would be expensive and is potentially not necessary.

5.5 The proposed approach is to defer replacement of the end-of-life handsets until a Cisco upgrade has actually been announced that will render these handsets inoperable. There would be enough time for the Council to plan, procure and deliver these handsets before a Cisco upgrade had to be applied. This would allow procurement of the latest phones available at that point in time, thus extending the lifetime of the handsets. It also provides time for the new system and features to bed in and to explore further opportunities to replace desktop handsets with PC connected headsets and mobile smartphone integration.

6 **Costs and Funding**

6.1 The cost to replace the three existing systems with an updated Cisco solution that includes advanced UC features is estimated to be a single £443k capital investment and approximately £85k per year for hardware and software maintenance. These figures have been provided following detailed discussions with Cisco and our incumbent supplier and were expected to be quite accurate, but potentially subject to change through the procurement process. **However, we have been warned by our supplier on 29 November that these prices could increase by up to 20% due to the volatility of the pound against the dollar.**
6.2 The new system will operate for at least 5 years although telephony systems typically remain operational for much longer, the current system has served the Council well for over ten years. The maintenance contract provides the Council with the option to upgrade to new versions as they become available.

Therefore, the total cost for 5 years will be:

<table>
<thead>
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<th>Description</th>
<th>Cost</th>
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<tr>
<td>One off</td>
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</tr>
<tr>
<td>5-year maintenance</td>
<td>£425k</td>
</tr>
<tr>
<td><strong>5-year total</strong></td>
<td><strong>£868k</strong></td>
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*Subject to handset options detailed in section 5.3 and 5.4.

6.3 This upgrade was going to be funded from an IT reserve but following the changes to corporate reserves an application has been submitted with Finance to meet the capital costs of the upgrade. IT can fund the annual revenue costs from existing budgets and the recharge process currently in place for telephony services.

**Capital Expenditure**

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<th>Year</th>
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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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**Revenue Expenditure**

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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
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<tbody>
<tr>
<td>£85k</td>
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<td>£85k</td>
<td>£85k</td>
<td>£85k</td>
<td>£425k</td>
</tr>
</tbody>
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*Year one costs includes 480 new headsets at an additional £14,400.

*Note – All costs are based on current $ exchange rates.*

7 Recommendation for consideration

7.1 CRMG are asked to consider and endorse the proposed upgrade to the Council’s telephony systems set out in this report.