



**Report of** Shona McFarlane, Deputy Director Social Work & SC Service, Adults & Health  
**Report to** Director of Adult Social Services

**Date:** 25<sup>th</sup> March 2020

**Subject:** Permission to go out to tender to procure a digital Alarm Receiving System

Are specific electoral wards affected? If yes, name(s) of ward(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has consultation been carried out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Will the decision be open for call-in?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## Summary

### 1. Main issues

- This report will outline the background to the Leeds Tele Care Alarm Receiving Centre (ARC) platform and the requirement to procure a replacement digital ARC.
- In 2025 the UK will cease to use traditional analogue phone lines and these will be replaced by digital networks using internet protocols (IP).
- The telecare alarm equipment and alarm receiving centre (ARC) have used analogue tones for over 40 years.
- The Leeds Tele Care service has used Piper Network Controller (PNC) for the past 12 years supplied by Tunstall Healthcare (UK) Ltd. The Leeds Tele Care Service upgraded from version 5 (PNC5) to version 7 (PNC7) in 2014.
- Approval has been given to extend the contract with Tunstall Healthcare (UK) Ltd for PNC 7 for a further 12 months until 1<sup>st</sup> August 2020.
- PNC 7 is an analogue solution relying on analogue lines. This solution will not support the digital switch over.

### 2. Best Council Plan Implications (click [here](#) for the latest version of the Best Council Plan)

- Council Business Plan – Telecare services contributes the outcome of people being able to live with dignity and stay independent for as long as possible.

- Best Council Plan 2019 – 20 – Telecare Services contributes to meeting the Age-Friendly Leeds KPI by enabling people to live independently in a place of their choice

### 3. Resource Implications

- The cost of a digital Alarm Receiving Centre, as a new emerging technology, cannot be established without going out to tender.
- Capital approval for £1.6m for the digital switch over cost was approved in March 2019. This includes start-up cost of replacing the analogue ARC as well as the replacement of the Telecare equipment installed in customers' homes.
- It is expected that there will be an annual increase in the revenue cost for the digital ARC. The current annual charges for the analogue solution is £20k plus additional charges for the uninterrupted power supply (UPS) back up batteries maintenance and replacement. The service currently has two UPS, one at Assisted Living Leeds and the other at the back-up disaster recover (DR) site at Cross Green, Knowsthorpe Gate site. The cost of the replacement batteries is £3k per UPS every 3 years equalling £2k every year for both UPS. The cost of the telephone lines for the back-up at the DR site is £4.3k per year. The total current annual expenditure is £26.3k. The service will still require some phone lines but the number maybe reduced depending on the system purchased.
- The estimated cost for the digital ARC is £70k per year. The cost are based on the number of connections to the ARC. The current connections are just under 10,000. This is an increase of £43.7k based on the current level of connections as the service grows and connections increase there may be further costs and the annual budget will need to be increase accordingly. This report seeks approval to go to tender only. Once a preferred supplier has been identified and full cost implications are known a further report will be produced asking for approval to award.

### Recommendations

The Director of Adults and Health is requested to –

- (a) Approve the service go to tender for a replacement digital Alarm receiving Centre". A further report will be presented for the award of the contract giving details on revenue implications and solutions.
- (b) Note that –
  - (a) Implementation discussions will take place with the suppliers once the contract is awarded;
  - (b) The proposed timescale for implementation is 1<sup>st</sup> August 2020.
  - (c) The Service Delivery Manager- Assisted Living Leeds will be the officer responsible for the implementation.
  - (d) The estimated revenue cost of the contract is £350k over 5 years. There may be some start-up capital costs which have been accounted for in the capital budget.

## 1. Purpose of this report

- 1.1 The purpose of this report is to seek the Authority to go out to tender to procure via a delegated decision of the Director of Adults and Health to establish a five year contract for a digital Alarm Receiving platform.
- 1.2 The Director of Adults and Health is requested to approve estimated annual budget increase to replace the Alarm Receiving Centre

## 2. Background information

- 2.1 The Leeds Tele Care Alarm Receiving Centre has been using PNC 7, supplied by Tunstall Healthcare (UK) Ltd for over 5 years.
- 2.2 The Leeds Tele Care service is currently based at Assistive Living Leeds (ALL) with the Disaster Recovery (DR) site at Cross Green.
- 2.3 The main ARC at Assisted Living Leeds has its own server with 25 BT analogue lines. The ARC is operated independently to the Councils system.
- 2.4 The DR site consists of an office accommodating 5 desks and a server room. The room is set up with the Tunstall Alarm Receiving IT equipment and is therefore kept locked with the service holding the key. This room and the equipment has to be maintained and available to the Leeds Tele Care Services at all times. When the service are required to disaster recovery the ARC function is transferred to the Cross Green site. The DR site also has its own server with 25 BT analogue lines.

## 3. Main issues

- 3.1 In 2025 the UK will cease to use traditional analogue phone lines and these will be replaced by digital networks using internet protocols (IP). From 2020 there will be no analogue line installed in the UK and already some Telecoms/internet providers have stopped installing analogue lines for new customers.
- 3.2 The telecare alarm equipment and alarm receiving centre (ARC) have used analogue tones for over 40 years. These tones are known as Dual Tone Multi Frequency (DTMF).
- 3.3 The analogue tones and IP protocols are incompatible which for telecare equipment results in alerts from the analogue equipment in customers' homes not connecting over the digital (IP) network into the analogue ARC. This means that connections (alerts) are delayed or corrupted when they reach the ARC. The alerts will constantly try to connect but the ARC operators have no way of knowing who is trying to connect or what alert relates to e.g.: smoke alarm indicating a possible fire or a customer fallen or needing urgent attention.
- 3.4 The latest information from Telecare Services Association (TSA) is that since Open Reach started the digital switchover work there has been reports of;
  - **Call failures whereby the unit has to redial.** Example included call from a smoke and the operator was unable to provide any guidance to the client as to how to exit the property as per normal procedures
  - **Unit connects successfully but only with one way audio.** Example included a fall alarm call as the lady had fallen and was in extreme pain with a broken hip. She

did not receive any reassurance that her emergency call had got through and she did not know if anyone was coming to help her. An ambulance did eventually arrive but her confidence in the system has been lost. Another example was from a door exit alarm which was in place for a client with dementia who was known for wandering. The operator was unable to provide reassurance to the client and to assist them with returning to the property. Quick thinking on the operator's part led them to notify a neighbour who was able to help the client return to their property.

- **Incorrect alarm ID.** Missing analogue tones during the handshake with the control centre meant that numbers from the alarm ID were missing meaning the alarm call did not match the clients details
- **Incorrect alarm description.** Missing analogue tones during the handshake with the control centre meant that the alarm call showed it was from a smoke when in fact it was a pendant call

- 3.5 The short term solution is for the analogue telecare alarm equipment to be connected via a router device using an Analogue Telephone Adapter (ATA). This allows the equipment to function but delays or corruption will still occur. This would entail a visit to every customer to install the ATA. There are currently 8,500 customer with analogue equipment.
- 3.6 The current contract for the ARC is due to expire on 30<sup>th</sup> July 2020. The current analogue ARC currently uses "Integrated Services Digital Network." **ISDN** is a telecommunications technology that enables the transmission of digital data over standard phone lines. It can be used for voice calls as well as data transfer. These lines will also cease by 2025. The ISDN and the current ARC - PNC 7 platform will not support digital switch over.
- 3.7 In September 2019 the Leeds Tele Care service started to buy and use Digital IP equipment. These IP units will be used on all new installations and any requests for repairs will be replaced with the digital IP equipment. In 2019/20 the Telecare service will commence the replacement of all existing analogue units with digital IP units. By 31<sup>st</sup> March 2020 the service will have installed or replaced 1,600 IP units.
- 3.8 The IP units cost £172.00 each this is an increase of £98.00 per unit. The capital expenditure was approved in 2019 for the digital switchover. There is a capital budget of £1.6 million for this purpose.
- 3.9 The IP units work using SIM technology. The SIM is a global non steered roaming SIM which is a permanent roaming SIM with a device roaming algorithm which employs multi-path multi network architecture (A machine to machine SIM is not a consumer SIM) known as a medical SIM. This option is the one recommended by TSA. These SIMS are not suitable to be used in other non – telecare devices and if removed from the IP unit will stop working. These SIMS cost £4 per month each or £52 per year. The revenue cost for 1,600 SIMS for 19/20 is £83k. This cost has been funded from within the telecare budget. If roll continues there could be a pressure of £180k for 20/21 and by 22/23 the full roll out pressure could be £460k for SIMs. This is a new cost for the council and therefore options are being considered as to what would be the financial impact of passing these SIM costs across to customers and what would be the financial impact for the council. The service is also identifying if these costs were to be passed on to service users would this constitute a price increase or a change in policy requiring consultation. Due to these questions this report only seeks to start the tender process for a digital arc. Any purchase of SIMs and equipment that effects the expenditure budgets will only begin after a further report has been presented to DLT outlining the ongoing financial implications

- 3.10 Once the digital ARC is installed there will not be a requirement to dual run this system with an analogue ARC. Therefore there will not be a switchover cost of two systems.
- 3.11 The Leeds Tele Care service is working closely with Housing Leeds on the digital switchover to ensure that any sheltered housing schemes remain connected to the ARC.
- 3.12 The Leeds Tele Care ARC is currently based at Assisted Living Leeds, Clarence Road. The services on this site are due to be relocated to Waterside Road, two miles away. As part of the refurbishment of Waterside Road, the requirements for the ARC replacement and infrastructure will need to be identified and incorporated into the design. The new solution must be in place for the relocation to avoid the need to re provide a system using current technology, and 25 BT lines, at the new location.
- 3.13 The current ARC (PNC 7) is a standalone server and is not linked to the internet. This limits the service being able to procure and monitor some of the Telecare products available. The current analogue platform is a barrier to innovation and development of the Leeds Tele Care service.
- 3.14 Once the service has an end to end digital solution, there may be opportunities to link equipment with customers own products such as “Alexa”, depending on the platform which is procured. This will support the Service Review of Tele Care which will commence in 2020 and seeks to take advantage of digital technology to maximise the reach and benefit of telecare, including considering opportunities in the private pay market.

## **4. Corporate considerations**

### **4.1 Consultation and engagement**

The Procurement process included officers from Telecare Services, ICT Services, and the process will be overseen by Strategic Sourcing Officer from Digital and Information Service.

### **4.2 Equality and diversity / cohesion and integration**

- 4.2.1 An Equality Impact Assessment screening tool (Appendix 1) has been undertaken for the purposes of this recommendation, and has indicated that an EIA does not need to be carried out. There will be no adverse effect on any particular groups of people within the city by the proposal.

### **4.3 Council policies and the Best Council Plan**

- 4.3.1 The service contributes to National Indicator 142: the percentage of vulnerable people supported to achieve independent living.
- 4.3.2 Council Business Plan – this work contributes to the target to increase the number of people successfully completing a programme to help them relearn the skills for daily living; increase proportion of older people (65 and over) who were still at home 91 days after leaving hospital into rehabilitation services; increase the percentage of service users who feel that they have control over their daily life.

4.3.3 Best Council Plan 2015 – 20 – this work contributes to the Better Lives programme and to the breakthrough project of making Leeds the best place to grow old.

#### **4.4 Climate Emergency**

4.4.1 At Full Council on 27 March 2019, Leeds City Council passed a motion declaring a Climate Emergency. In addition, the Leeds Climate Commission have proposed a series of science based carbon reduction targets for the city so that Leeds can play its part in keeping global average surface temperatures to no more than 1.5°C. A 'City Conversation' is planned for the summer of 2019, to raise awareness, review and refine the options and to start to build public, business and political support for transformative action.

4.4.2 Environment and Sustainability considerations will be taken into account while developing the specification. Provisions are included which advises that the service will work with suppliers to ensure that they assist Leeds City Council to achieve their carbon reduction targets and reducing emissions across its fleet and operations.

4.4.3 In terms of specifics for this contract, the provision of telecare equipment is a preventative measure that may reduce or eliminates the need for additional transport for the customer to hospital and also may reduce the package of care to the customer therefore reducing the number for visits from homecare staff. Both of these impacts are carbon positive in as much as they are removing the need for unnecessary journeys.

4.4.4 The use of an end to end digital solution will result in any maintenance and repairs being checked remotely and may not require a visit by a technician. Upgrades or timing changes can be completed remotely. This will reduce the number of visits to customers.

#### **4.5 Resources, procurement and value for money**

4.5.1 A full procurement process will be undertaken in order to ensure that the Council obtains best value for money, in terms of fit for purpose solution at the best price.

4.5.2 It is estimated that revenue costs will increase on an annual basis. Information from other authorities who have procured a digital ARC is that the revenue cost doubled. Therefore for the purpose of this report the estimated cost are £70k per year. There maybe a number of solutions available but until a tender exercise has been undertaken the cost of these solutions are unknown.

4.5.3 The current costs are £26.3k per year. The replacement cost could present a budget pressure of £43.7k. The service has a budget target of income generation from customers of £600k per year. Only the income for customers with Telecare as the only service or self-referrals for pendant alarms are shown in this income. The actual income as of 20<sup>th</sup> January 2020 was £667,528.00 this is an over achievement of £67,528.00. The service over achieved in 2018/19 by £20K. Finance have already accounted for the increase in budget for 2020/21 and set a target of £660,000.

4.5.4 This is an unavoidable cost increase and there are no efficiencies within the current budget, therefore approval is requested for the increase in additional budget to cover the unavoidable cost. The 20/21 costs will be contained within existing overall

resources or funded from available one off sources, with a view to meeting the full cost during future budget setting cycles. When the tender exercise has been completed, prior to award a further report will be presented asking to award the contract and giving more detail on revenue costs.

- 4.5.5 In 2019 capital funding for the digital switch over was approved (scheme 33084-Telecare from Analogue to Digital) this is a budget of £1.6million which includes the procurement of the ARC.

#### **4.6 Legal implications, access to information, and call-in**

- 4.6.1 The tender will be advertised in the Official Journal of the European Union (OJEU) to comply with the Procurement Regulations (2015). The tender will also be advertised on the Council's tendering website [www.YORtender.co.uk](http://www.YORtender.co.uk) and Contracts Finder.
- 4.6.2 This is a Significant Operational Decision and is not subject to call-in. The report does not contain any exempt or confidential information under the Access to Information Rules. The costs are estimated at this stage and following the tendering exercise if the cost exceed £500k a key decision notification will be completed before award.

#### **4.7 Risk management**

- 4.7.1 The current analogue ARC is not fit for the future and will cease to functional once the digital switchover has been completed.
- 4.7.2 There is an increased risk of alerts not coming through to the ARC whilst the transition from analogue to digital is ongoing. This risk will only be resolved once a digital ARC platform is in place.
- 4.7.3 It will not be possible to identify the requirements for the relocation of the ARC as part of the move to Waterside Road without going out to tender. The tender process will provide the details of digital platforms available and the infrastructure required.

### **5. Conclusions**

- 5.1 The Leeds Tele Care Service has a responsibility to provide high quality telecare monitoring for the people of Leeds.
- 5.2 The current ARC (PNC 7) is an analogue platform relying on analogue lines. This platform will not support the digital switch over.
- 5.3 The digital switchover has already commenced in the UK. From 2020 no new analogue lines will be installed. The Leeds Tele Care Service needs to be able to keep up to date with the Telecare market. Providing a digital ARC platform will also support innovation within the service.

### **6. Recommendations**

- 6.1 The Director of Adults and Health is requested to –
- (a) Approve the service go to tender for a replacement digital Alarm receiving Centre". A further report will be presented for the award of the contract giving details on revenue implications and solutions.

(b) Note that –

Implementation discussions will take place with the suppliers once the contract is awarded;

6.2 The proposed timescale for implementation is 1st August 2020.

6.3 The Service Delivery Manager- Assisted Living Leeds will be the officer responsible for the implementation.

6.4 The estimated value of the contract is £350K over 5 years. There may be some start-up capital costs which have been accounted for in the capital budget.

## **7. Background documents<sup>1</sup>**

7.1 None

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<sup>1</sup> The background documents listed in this section are available to download from the council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.