

BARKING AND DAGENHAM SCHOOL FORUM

(Tuesday 25 June 2013)

Title: Update on Schools' VoIP Telephony Project	
Report of: CORPORATE DIRECTOR	
Open	For Decision / For Information
Wards Affected: All	Key Decision: No
Report Author: Sheyne Lucock – General Inspector (IT)	Contact Details: Tel: 020 8227 2747 E-mail: Sheyne.lucock@lbbd.gov.uk
Accountable Divisional Director: Jane Hargreaves – Divisional Director (Education)	
Accountable Director: Helen Jenner – Corporate Director (Children's Services)	
Summary: The purpose of this report is to update the Barking and Dagenham School Forum on: - The progress being made in the implementation of the schools' VoIP telephony project	
Recommendation(s) N/A	
Reason(s) None	

1. Introduction and Background

- 1.1 The Schools Forum at its meetings on 21/02/2012 and 25/10/2102 allocated funding totalling £974K to be used for a like-for-like replacement of the ageing Centrex telephone lines in schools with an extension of the Council's advanced VoIP telephony system.
- 1.2 Centrex is an old analogue telephone system previously used by the Council and all schools, libraries and other sites in which all telephone extensions are part of a single internal exchange, meaning that free calls can be made anywhere within the Council just by dialling the 4-figure extension number.
- 1.3 When the original contract for Centrex was negotiated, the call volumes and scale of the system meant that there were very competitive monthly rental charges per extension.
- 1.4 A disadvantage of Centrex is that a separate telephone line has to run to every extension location across a site, making it difficult and expensive to move the existing extensions and to install new ones.
- 1.5 The Council's contract prohibits attaching anything other than a single telephone handset to any Centrex line, and therefore schools that have installed their own switchboards or VoIP systems are breaking the terms of the contract.
- 1.6 Modern digital telephony systems make use of the IP networks in buildings which are part of the computer/IT network infrastructure which is why they are called 'Voice over IP' or VoIP systems for short.
- 1.7 This means that any of the network sockets around a school can be used to support a VoIP telephone handset, making it very easy to move handsets around or install new ones.
- 1.8 The Council has now moved most of its telephone extensions off Centrex to its new VoIP system, and the original contract has come to an end, making it inevitable that extensions remaining with Centrex will see rises in monthly rental charges.
- 1.9 The proposals agreed to by the schools Forum involved a one-off project to replace all the existing Centrex lines in schools with new VoIP handsets connected to the Council's VoIP system, thus leveraging the significant investment made by the Council over the previous three years for the benefit of schools.
- 1.10 Schools moving to VoIP would have the same advanced feature-rich system as the Council and continue to benefit from highly competitive call tariffs for external calls, as well as free calls to any other school or Council extension.

2 Progress to date

- 2.1 A Project Board was established with representatives from schools. The members are:

Rachel Mahon - Schools Representative (Primary Heads)
Niki Elsey – Schools Representative (Business Managers)

Julie Pearman – Schools Representative (Business Managers)
Karen Sayers-Irving – Schools Representative (Secondary Heads)
Sheyne Lucock – LBBB, Project Sponsor
Rupert Hay-Campbell – LBBB, LBBB Client Team
Steve Winman – Elevate East London, Networks Services
Yele Ojo – Elevate East London, IT Project Manager.

The Board meets monthly to review progress and to take any decisions needed.

- 2.2 Schools were surveyed by Elevate, the Council's ICT service delivery partner, to determine the numbers and types of new telephone handsets required, and then a cost model was developed to see how the funding would be allocated. It is a complex model because the project has to deliver a like for like replacement and there are wide variations between schools on numbers and locations of existing handsets.
- 2.3 A further complication was that in order to estimate the total capital required, assumptions had to be made, in advance of any surveys, of the availability of existing network sockets next to where telephones are located. In the event, once the surveys were completed, it became evident that more cabling than had been thought was needed in some schools to provide sufficient network sockets in the right places. Again, this varied widely between schools.
- 2.4 It became apparent that there was a shortfall in the capital of around £150K due to these extra cabling requirements in some schools. The cost model therefore needed to find a fair way of apportioning this extra cost. The project board decided that the cabling capital funding would be capped at £3K, with a percentage contribution above that amount, meaning that most of the smaller schools would have no further contribution to make. Those schools who needed the most extra cabling would make a contribution above the cap.
- 2.5 The capital funding is sufficient to provide a full-featured switchboard handset for each school plus a standard handset everywhere else. Where schools expressed a wish for deluxe handsets then they would need to contribute only the difference in cost of the two types of device.
- 2.6 An email was sent out to all schools in the Spring term explaining all of the above, and giving any contributions that needed to be made for any deluxe handsets (if requested) and the extra cabling over and above the £3K cap. Figures were also given for the annual per handset revenue charge for the system which were more than the heavily discounted existing Centrex charges but less than the expected future Centrex charges. Schools were asked to confirm their participation in the project.
- 2.7 To date, only one school has declined to participate on grounds of cost, and an offer to spread the capital cost of £398.58 over more than one year is still being considered by the school.

3 Next Steps

- 3.1 A monthly newsletter is being sent to all schools giving details of progress. The first one was sent out in the week beginning 10th June 2013.

- 3.2 A Cabling Forum was due to be held on 18th June 2013 (after the date of submission of this report) for the cabling companies carrying out the works. In the newsletter, schools with their own cabling companies were asked to provide contact details so they could be invited. The purpose is to ensure that the works are carried out to the right specification to support the VoIP system.
- 3.3 The switches (to go in the cabinets to support the VoIP system to keep them separate from the schools' networks) and the handsets have been ordered.
- 3.4 Once the cabling works have been completed, the switches will be installed in the cabinets and the handsets can be delivered and installed.
- 3.5 Schools' existing numbers will be transferred to the new system.
- 3.6 30th March 2014 is the target date for all aspects of the project to be completed, but it is expected that most schools will be completed well before the end of the Autumn term, depending on when the cabling permits.

4 Other Issues

- 4.1 Schools with their own VoIP systems connected to Centrex lines (which is not permitted under the terms of the contract) have been offered a way of connecting their own system to the Council's system, thus needing no new switches, cabling or handsets. The project has funded the capital works required on the central infrastructure to enable this inter-connection, to ensure these schools can still benefit from the project. Discussions will take place with these schools individually but this transition can take place at any time.
- 4.2 A separate conversation will be initiated with Academies and Free Schools.
- 4.3 For most primary schools, the connection to the Civic Centre to be used for VoIP is already in place, and already paid for as part of the Internet Traded Service. For a primary school (e.g, George Carey) that does not have this link because they connect directly to RM for the Internet, one would have to be installed and current estimates for the installation and rental for new lines make this un viable if used for VoIP alone.
- 4.4 For secondary schools, although they also connect directly to RM for the Internet, their direct links to the Civic Centre are still in place (in anticipation of VoIP). However, the annual rental still needs to be factored in to the revenue costs, but the large numbers of handsets in secondary schools make this viable. It is also likely that the lines can provide a fail-safe roll-over for the internet.
- 4.5 Billing for external calls will be done as now. The annual revenue per handset cost (including full managed service support and helpdesk from Elevate) will be added to the Traded Services.

5 Other Implications

6 Risk Management - None

7 Contractual Issues - None

- 8 Staffing Issues – None**
- 9 Customer Impact - None**
- 10 Safeguarding Children - None**
- 11 Health Issues - None**
- 12 Crime and Disorder Issues – None**
- 13 Property / Asset Issues – None**

Background Papers Used in the Preparation of the Report:

None.

List of appendices: