	London Borough of Hammersmith & Fulham
h&f putting residents first	**CABINET** **22 JULY 2013**

TELEPHONY – OPENSCAPE : RESILIENCE AND UPGRADE
Report of the Leader of the Council – Councillor Nicholas Botterill
Open Report A separate report on the exempt Cabinet agenda provides exempt information regarding the cost implications of the proposal.
Classification - For Decision **Key Decision:** Yes
Wards Affected: All
Accountable Executive Director: Jane West, Director of Finance and Corporate Governance

Report Author: Howell Huws, Head of Business Technology	**Contact Details:** Tel: 020 8753 5025 E-mail: Howell.Huws@lbhf.gov.uk

1.   EXECUTIVE SUMMARY

1.1.   As an early stage of the SmartWorking Programme in 2008, H&F selected the Siemens Openscape telecommunications system as a key technology enabler for the more flexible use of accommodation and working styles. The Openscape solution supports the objectives of the SmartWorking Programme by allowing staff to re-direct phone calls to any extension number, mobile or external telephone number where staff are working, and to hold web conferences to enable virtual collaboration with meeting attendees able to view and update documents simultaneously from multiple locations.

1.2.   The solution implemented in 2009 as a pilot for 100 users had a number of resilience features to protect against failure, and was scalable to meet the anticipated needs of being deployed across the whole council. At the time, Siemens were not able to offer a solution that offered full protection against the risk of server failure. After the successful initial pilot, the SmartWorking programme rapidly expanded its deployment to the current position where 2,097 staff across the council depend on its ability to direct calls to where they are working.

1.3. The Council currently spends approximately £140k pa for Openscape support. In common with other business applications, these support charges include the costs of minor upgrades, but major changes require separate funding.

1.4. This proposal will bring H&F's telephony up to the modern standards required to deliver efficient, flexible working. This will support staff to deliver services from the most appropriate location, improving both customer service and value for money eg it will reduce travelling requirements significantly and allow officers to interact with customers wherever they are. It will provide a resilient telephony system that meets requirements for business continuity, operating from a technology base which allows for upgrades and accommodates future expansion of usage eg more tele-conferencing. It will also offer functionality improvements that will assist tri-borough working.

2.   RECOMMENDATIONS

2.1. That the proposed upgrade of the Siemens Openscape telecommunications system be commissioned at a cost of £117,435.

3.   REASONS FOR DECISION

3.1. Telephony is the most common interface between the Council and its residents. Over 7000 calls are received each day by the Council (excluding those that are dealt with by the Contact Centre). Openscape underpins the Council's telephony. Without it, no calls will be received by Council officers.

3.2. In addition, the Council's SmartWorking has now extended to such an extent that Openscape has become a critical application. Tri-borough working in teams will also be considerably enhanced by the ability to manage incoming calls across a range of internal and external extensions. A significant number of officers now work across sites throughout the Tri-borough office estate,

3.3. It is therefore crucial that the Openscape system is brought within the resilience offered by the Council's business continuity arrangements.

4.   INTRODUCTION AND BACKGROUND

4.1. Telephony is the most common interface between the H&F residents and the council. H&F currently utilise the Siemens Openscape Unified Communications (UC) system to ensure staff can respond to the

telephone calls and work efficiently. Openscape is instrumental in supporting H&F's SmartWorking programme allowing staff to work from any location, whilst also routing calls from the public to the correct destinations seamlessly to the caller.

4.2.   Openscape UC was deployed during 2010 and 2011 and is used by over 2,000 users. Openscape UC enables H&F staff to designate which physical phone they wish to receive their calls on. This allows staff to communicate with colleagues and residents very efficiently from any location. Openscape UC also provides advanced web conferencing facilities (desktop sharing).

4.3.   The existing Openscape UC solution is very complicated to support and is operating with out of date software on physical hardware platforms that are reaching end of life. The current version of hardware is not supported by the latest Openscape UC release, which prevents any upgrade of the system. This represents a significant risk to H&F as, if the system were to fail, staff would be unable to pick up their calls.

4.4.   In June 2012, the Openscape UC redirection solution failed, with users unable to login to Openscape. As a result, users were unable to receive calls, redirect their phones or pick up voicemail. Effectively H&F staff could not be contacted by phone, either by the public or by other H&F staff. This failure, together with increased dependence on the Openscape UC redirection system as a result of tri-borough working, highlighted the need to improve resilience and business continuity for the Siemens Openscape UC system.

4.5.   At the time of the failure, all Openscape users were contacted and asked whether they wanted to provide a default number that could be used to temporarily receive calls whilst the normal service was unavailable. The resulting database of alternative numbers is very incomplete and there is no systematic way of it being kept up to date eg when officers leave and their Openscape numbers are allocated to new starters. This would entail considerable management and staff effort both as a one-off exercise as well for the on-going maintenance of such details for any change in working arrangements.

4.6.   This is not a sustainable business continuity option. The Openscape UC redirection solution controls the calls to 2,097 of the 2,500 H&F staff. In the event of a future failure, resident calls will be diverted to predominantly personal mobile numbers where these have been made available. If specific officers are not available the calls will simply be lost. Some calls will go to people who have subsequently left H&F. Even where the default numbers are operable, this would not be able to offset the loss of key team-working functionality allowing calls to be routed to a single line and allowing a number of staff to deal with the calls on rotation.

4.7.   The result of another server failure would therefore inevitably be a loss of efficiency and impaired service to the public, as a high proportion of calls from the public could not be answered, and staff would spend a high

proportion of their time trying to work out where staff are working today in order to direct the phone to them.

4.8. This is of serious concern to the Council's Service Resilience Group as a failure of this kind might mean that a significant number of staff (potentially 2,097) are unreachable by phone, significantly impacting on the council's ability to serve its residents. Although this impact has been mitigated through the use of a default phone number in the event of such failure, this number is not updated sufficiently frequently to be fully reliable and in any event does not reflect the diverse working arrangements currently in place. Moreover, the wide range of team working arrangements enabled by the Openscape UC redirection solution would be disabled, significantly hampering the ability of H&F staff to respond to public calls directed towards teams rather than individuals.

5.   PROPOSAL AND ISSUES

5.1. The Openscape UC redirection solution enables staff to redirect phone calls to any phone. As such, Openscape UC has been instrumental in supporting H&F's SmartWorking programme allowing staff to work from any location and helped to realised significant accommodation savings.

5.2. This redirection facility enables staff and members to redirect external phone calls to any phone, including their own mobile phone or own home as required, without giving this phone number out to members of the public. This reduces the requirement for the Council to provide staff with mobile phones or landlines, and therefore achieves savings for the Council.

5.3. This is taken further in the proposed upgrade with the "soft phone" capability, allowing users to take calls through the computer rather than a phone. This enables staff to use headsets from any location and will further reduce the requirement to issue mobile phones to staff undertaking contact centre activities from out-of-office locations.

5.4. This proposal will provide H&F with a resilient telephony system that meets business continuity requirements operating from a technology base which allows for upgrades and accommodates future expansion of usage eg. more teleconferencing. In particular, the proposal will:

- Upgrade the existing hardware to virtual platforms, offering improved resilience, and also the standard benefit from virtualised platforms of not needing to replace the specific hardware of the core telephony system.

- Replicate the Openscape UC redirection solution at the Council's two data centres, providing full business continuity for this critical service.

- Provide network integration that will enable calls to be routed between H&F and RBKC across existing lines, saving an estimated £5,000 pa on line rental costs, as well as increasing trunk resilience.

- Upgrade the Openscape UC redirection components to current versions, offering a range of improvements in functionality, detailed in the Appendix.

6. OPTIONS AND ANALYSIS OF OPTIONS

6.1. The key options are therefore:

1) Do nothing
2) Upgrade the Openscape UC redirection software only
3) Upgrade the hardware only for the current Openscape UC redirection software
4) Upgrade both the Openscape UC redirection hardware and the software

6.2. These are assessed below:

Option	Pro	Con
1) Do nothing Cost £0k	• No cost • No disruption to users	• Continued risk of failure, with significant adverse impact on service to residents • Current hardware reaching end-of-life, no longer supported, further increasing risk of failure • Failure to converge on ICT Strategy (see below, 12.3)
2) Upgrade software Cost – n/a **Not viable**	• Improved functionality (see Appendix) • Converging ICT Strategy	• Software not compatible with current hardware – **not viable** • Current hardware reaching end-of-life, no longer supported
3) Upgrade hardware Cost - £60k	• Addresses hardware reaching end-of-life	• Existing software cannot operate in resilient mode → continued risk of failure • Failure to converge on ICT Strategy (see below, 12.3)
4) Upgrade both Cost £117k	• Resilient solution • Improved functionality (see Appendix) • Converging ICT Strategy • Addresses hardware reaching end-of-life	• Small amount of disruption to users with new features to learn

6.3. Based on this, HFBP, working with Siemens, have developed the fully resilient option 4 in greater detail, determining the hardware requirements, and the approach for the project that minimises the risks and timescales. H&F will conduct acceptance testing using a selected group of staff from across the business as a pilot, prior to rolling out the solution. H&F will work together with HFBP to test the Business Continuity.

6.4. H&F working with HFBP and Siemens will review the readiness for going live. If H&F agree to proceed then Siemens will move all users to the new solution, rerouting all calls. Following go-live, the option will remain to roll back to the legacy version of the Openscape system will be available for a period of two weeks. If invoked, the rollback would have no impact on the telephony services, the two platforms would run in parallel, and could be switched easily between the two systems, without affecting callers.

6.5. The key milestones for this project are as follows:

Milestone Title	Date
Project starts	22/07/2013
Upgrade to new production environment	28/10/2013
UAT Signed-Off	12/11/2013
Openscape voice and UC redirection version 7 live	18/11/2013

7. CONSULTATION

7.1. H&F have consulted the IT Strategy and Operational Group and the Service Resilience Group.

8. EQUALITY IMPLICATIONS

8.1. There are no direct equality implications arising as a result of the recommendations of this report, but it will mean greater flexibility for staff and will support tri-borough working, which aims to protect front line services. As such the recommendations will have an indirect positive impact on residents.

8.2. Implications verified by: Carly Fry, Innovation and Change, tel 020 8753 3430.

9. LEGAL IMPLICATIONS

9.1. There are no direct legal implications for the purposes of this report.

9.2. Implications verified/completed by: Tasnim Shawkat, Bi-Borough Director of Law, tel: 020 8753 2700

10. FINANCIAL AND RESOURCES IMPLICATIONS

10.1. The costs of £117,436 will be funded from the IT Enablers Fund.

10.2. There are minor savings of £5,000pa in line rental costs between H&F and RBKC plus £1,429pa in server support and maintenance. There will also be operational efficiencies across the council due to the functionality improvements but these are impossible to quantify.

10.3. The main financial benefit is cost-avoidance in relation to the potential additional service delivery costs should there be a total outage of telephony across the council.

10.4. Implications verified by: Andrew Lord, Corporate Strategy and Resources Manager, tel 020 8753 2531.

11. RISK MANAGEMENT

11.1. Openscape is noted on the Council's Enterprise Wide Risk & Assurance Register (Risk Number 6, Business Resilience) as a Corporate risk exposure due to the increased dependency on telephony across and beyond the Three Borough geographical area. Failure of the telephony system may impact on the reputational risk of the council, and the order of magnitude increasing on the period of non-availability. Alternate resilience is deemed as essential to maintain communication with vulnerable clients.

11.2. The proposed work will reduce the current risks posed by the lack of resilience on the part of the Openscape telephony system.

11.3. It will also enable tri-borough teams to operate more effectively, reducing risks arising from not being able to manage workload across the three councils.

11.4. Implications verified by: Michael Sloniowski, Head of Risk Management, tel 020 8753 2587.

12. PROCUREMENT AND IT STRATEGY IMPLICATIONS

12.1. There are no procurement related issues as the recommendations contained in this report relate to an order to be placed under the contract with H&F's strategic ICT provider, H&F Bridge Partnership.

12.2. Implications verified/completed by: Mark Cottis, e-Procurement Consultant 020 8753 2757.

12.3. The upgrade supports the current ICT strategy, as the proposal:

- results in a virtualised service which will provide more resilience and reduce the current infrastructure,

- is part of the telecommunications roadmap to provide a more efficient UC redirection solution,

- reduces the reliance on the out-of-date and expensive Hipath 4000 private automatic branch exchange (PABX) systems (the equipment that acts as the connecting point between the desktop phones and outside world).

12.4. The longer term strategy for H&F is to remove the PABX system at HTH by the end of 2016, gradually replacing the desktop phones with a mix of mobile phones and softphone capability, aligning with WCC and RBKC in having one device per user. The device provided would be based on user need. Removing the HTH PABX system, for which the Openscape upgrade is a critical requirement, is estimated to save £60k pa.

12.5. The Tri Borough telecommunications strategy is currently in the process of being reviewed, but the proposal is not expected to be inconsistent with that strategy. The upgrade to the Openscape voice platform will match the same software level in place at RBKC, and will allow the two systems to communicate more efficiently over the internal voice network.

12.6. Implications verified/completed by: Howell Huws, Head of Business Technology, 020 8753 5025.

LOCAL GOVERNMENT ACT 2000
LIST OF BACKGROUND PAPERS USED IN PREPARING THIS REPORT

No.	Description of Background Papers	Name/Ext of holder of file/copy	Department/ Location
1.	IT strategy - getting the basics right IT infrastructure renewal	Jackie Hudson ext 2946	FCS SmartSpace

Appendix: Improvements in functionality

The latest version of Openscape UC redirection offers a number of functionality improvements:

- Improvements for **team working**, including hunt groups and support for tri-borough and public facing team. Where there are tri-borough teams situated at Hammersmith, user team lines are created on the Openscape platform. The current solution is restricted and only allows calls to be routed to H&F physical deskphones. The new solution allows calls to be managed by the teams, routing calls to and enabling hunt groups with any numbers, which could be at Royal Borough of Kensington and Chelsea or Westminster City Council.

- Extending the potential for **tri-borough conferences**. Web conferences enable virtual collaboration with meeting attendees able to view and update documents simultaneously from multiple locations. Such conferences save travel time, especially for senior staff and members increasingly a factor as more teams operate across tri-borough locations. The facility available as a result of the upgrade enables the web conference to be started without requiring an H&F host to initiate the conference, thus further enabling flexible working practices. In addition, Openscape conferences (including desktop sharing) currently have to arranged prior to the call. The new platform will allow staff to activate the conferencing facility during a normal call, by just selecting an icon from the client.

- **Single sign-on** (no separate password for this service)

- **Mobile client**, enabling users to divert calls and set availability using a mobile app rather than having to log-in to the voicemail server. This method is more intuitive and quicker for the end-user. The Openscape mobile app will work with council provided Blackberry mobile phones, although implementation and deployment will be more convoluted than providing the same service to Android-based smart phones or iPhones. This is because of the hierarchy of the Blackberry solution rather than the Openscape solution. The use on the Blackberry will also be less intuitive and efficient compared to other smartphones due to the current design of the Blackberry user interface.

- **Client Integration** – enabling the user to call via any contact, calendar and task entries that contain contact information

- Integration into **social media** streams;

- **Soft phone** availability, allowing users to take calls through the computer rather than a phone, further enabling flexible workstyles by enabling staff to use headsets from any location.