



OXFORD CITY COUNCIL

Telephony Strategy 2012 - 2015

DRAFT TELEPHONY STRATEGY

Telephony Strategy 2012 – 2015

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1. . PURPOSE

- 1.1. The City Telephony Service was reviewed in 2012 following the loss of a key member of staff and increasing demands upon a changing technological environment within a new economic age. The service has drifted in recent years and clear direction is required to support the Council's Customer First Programme and the advancements in flexible and mobile working.
- 1.2. The Council has undertaken significant organisational change over the last 12 months to manage service demand and our customer experience. It is necessary for the Telephony Service to support these improvements.
- 1.3. This strategy outlines the future direction of telephony within the Council and provides the basis for a robust, reliable and efficient service that meets the Council's GOLD aspirations.

2. BACKGROUND

- 2.1.**The development of this document has been stimulated as a result of the recognition of the increasing significance of our customer contact via the Customer Contact Centre, the efficiencies that can be achieved by staff through flexible working and emerging new technology enabling desk based staff to use alternative technologies to collaborate and work efficiently.
- 2.2.**The Council's telephony estate delivers services to over 1300 telephone extensions in nearly 70 premises within the city of Oxford. Other locations receive telephony services through a Virgin Media Centrex Service (a centralised system) or via Direct Exchange Line services.
- 2.3.**The large sites are served by a network of Mitel SX2000 and Mitel Communications Director (MCD) telephony systems of varying sizes, operating as a single system with a single dial-plan.
- 2.4.**Mitel have announced that from October 2015 the SX2000 will no longer be supported.
- 2.5.**Management of telephony is currently distributed across services resulting in multiple contract and charges and no centralised control of budgets or strategy.
- 2.6.**Use of Voicemail varies across the Council and call recording facilities are limited and not FSA compliant.

3. VISION

A Robust and Resilient Service

- 3.1. The Service has been, in the past, affected by power failure and although some resilience is in place it is limited to keeping the switch available for a short period and is not sufficiently robust to maintain full service.
- 3.2. Systems have grown organically over time to support immediate demands without a clear structured approach to the design. Clear planning will secure a foundation to allow future growth to be based on a solid platform that will reflect the criticality of the service.
- 3.3. A Service Level Agreement (SLA) will be published for the business to clarify the quality and consistency of service and provide a basis for monitoring performance and reporting to the business.
- 3.4. The SLA will be reviewed annually in line with business need and to review improvements and developments in technology.
- 3.5. The City Council will provide a resilient infrastructure to ensure the Telephony Service is maintained in the event of power loss or connectivity interruption and detailed recovery plans will be documented and aligned to the Corporate Business Continuity Plan.
- 3.5. Provision of links to the Public Network (PSTN) will include flexible options to re-route incoming lines in the event of loss of access to the main Council telephone switch area.

Supporting Our Customers

- 3.6. The Service will adopt an open standards approach to delivering telephony which will support greater opportunities in how users access services. We will challenge the traditional model of a phone on the desk, replacing it with options to use softphones and messaging clients, twinning to users mobile or home phone lines.
- 3.7. All telephony systems used will be compliant with the Session Initiation Protocol or SIP standard of connectivity to enable seamless integration with alternative solutions and to avoid lock in to specific suppliers.
- 3.8. The service will leverage technology to allow calls to follow the staff and improve opportunities to collaborate and communicate. Integration with messaging clients and fax servers will present customers with a single point of communications and allow them to choose the method of receiving calls.

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- 3.9. As we develop our Customer Contact Centre the ICT team will shadow and support improvements to the Contact Centre Solution and ensure the telephony platform integrates seamlessly in the delivery of this critical service.
- 3.10. Mobile phones are a core element of our communications infrastructure and we will continue to offer options to improve mobile working such as Blackberry and Smartphones and SMS gateway whilst managing costs within service budgets.
- 3.11. Support for Video Conferencing and Voice Conferencing will offer opportunities to reduce the cost of communications for larger groups and supplement the flexible working improvements already attained.
- 3.12. Fax machines, whilst an older technology, are still a part of many Business Units. Implementing a Fax Service will reduce the number of fax machines used in the Council and secure a reduction in line rental whilst offering the service on a more efficient basis.

Leaner Delivery

- 3.13. The Management of telephony and associated budgets will be centralised in the City ICT Team with responsibility for support and maintenance.
- 3.14. This consolidation will reduce the costs of processing invoices and assist in securing greater savings on contracts and investment.
- 3.15. The service will be rationalised to reduce the number of telephone switches currently used throughout the Council and maximise the benefits of telephony available on the core telephone switch.
- 3.16. Centralising the telephony around a single core service will reduce ongoing maintenance and risk in supporting out of date systems and increase resilience. The legacy equipment used in the Town Hall and at Horspath Road attracts a premium for support not associated with newer technologies.
- 3.17. The Telephony Network will be designed to leverage newer equipment over existing data links allowing us to reduce the number of dedicated telephony circuits and associated costs.
- 3.18. The resilience of the data links will be improved to reflect the criticality of the system..
- 3.19. Longer term opportunities for exploring savings through alternative providers will be explored once the service baseline is set.

In step with Corporate Objectives

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- 3.23.** The Telephony Strategy underpins a key strand of the Council's Customer Contact Strategy and supports the delivery of Corporate Objectives.
- 3.24.** Value for Money will be delivered by working with partners and suppliers to drive down maintenance and management costs whilst protecting the quality of service.
- 3.25.** As we develop the service we will acknowledge our commitments to the Carbon Agenda within our Carbon Management Programme and try to maximise our investment in equipment, where it is fit for purpose and to adopt technologies that assist in reducing our carbon footprint.

4. DELIVERING THE VISION

4.1. The Strategy seeks to provide a robust and fit for purpose telephony infrastructure based on the following key deliverables:

Central Management

4.2. The Council will centralise responsibility for all Council telephone services. City ICT will be responsible for delivering a business class level of service supporting and maintaining the entire Council telephone estate. A proactive approach to support and maintenance will reduce costs and improve the efficiency, reliability and response of the service.

Business Continuity

4.3. The Council will provide power protection for the Mitel Communications Director system to safeguard telephone services in the event of a power supply failure. This will ensure service is maintained and customer contact preserved.

4.4. A robust business continuity and recovery plan for the Telephony Service will be put in place. Physical separation of the critical components of the telephone system should increase its ability to survive in the event of a disaster. The infrastructure supporting the core system processors and incoming/outgoing circuits will be designed to provide redundancy.

4.5. Users will be migrated from the older unsupported platforms to the Mitel Communications Director telephone system. From October 2015 the old SX2000 systems will no longer be supported by the manufacturer; the Council will migrate all users off these systems before this occurs.

4.6. Following consolidation and improvement to the service, the Council will review the appropriateness of moving to a managed service or cloud based service from 2014. This assumes that cloud based telephony services develop during the intervening period.

Infrastructure and Topology

4.7. The current mixed telephone estate will be replaced with a single corporate telephone network. The infrastructure will be rationalised to reduce unnecessary costs and overheads whilst delivering a uniform high level of service.

4.8. Any future review of the feasibility of moving to a hosted or cloud based telephony solution will seek to maximise investment in the existing Mitel systems; hardware, software and user licenses.

5. SUPPORTING OUR CUSTOMERS

Unified Communications and Flexible Working

- 5.1. Unified communications will be delivered as part of the development of the telephony service. By enhancing the way that messages can be controlled the service will greater support the accessibility of information to our staff. A flexible “Universal Inbox” approach will encourage all messages to be handled in a single location simplifying management and reducing the need for multiple applications.
- 5.2. The Council will offer multiple solutions for users to make and answer calls. Traditional telephones will be supplemented with softphone’s and other technologies including “twinning” to offer alternatives in the way that service users in the business answer their calls. Users are more mobile and the technology will support roaming and dynamic working via a variety of methods. The Council is almost at saturation point on IP Phones and adoption of cheaper flexible clients is required.
- 5.3. Use of Video and Voice conferencing will reduce the need to travel to meetings and support home working and remote working. Linkage into more widespread products such as Skype can be explored.

Voicemail

- 5.4. The Council will implement voicemail across the organisation as part of the Universal Inbox approach. Current policy is determined at a local department or team level and is frequently not enforced, which can result in messages being missed or never checked. Without a policy the Council’s approach is inconsistent and presents a confusing picture to callers.

Contact Centre

- 5.5. Telephony for the contact centre will be developed to support the Council’s Customer Contact Strategy. Systems will enable in queue messaging and self service; utilising interactive voice response (IVR) and assist in driving down call waiting times.
- 5.6. The service will provide support for the Contact Centre Management and advise wherever necessary to ensure seamless integration between any contact centre solution and the core telephony service.

Numbering

- 5.7. The Council will rationalise its use of published numbers. The seven options presented to callers to the Council is regarded as

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unacceptable by customers and staff alike, the council will expedite the reduction of the number of options as fast as possible. The Council's intention is to ensure that calls are answered as rapidly as possible.

- 5.8. The Council will review its use of Non Geographic numbers. Presenting a non-geographic contact number to the public is increasingly questioned. Many people now get free local calls and have to pay to dial a non-geographic number. The Fusion Lifestyle number only presents callers with the option of connecting directly to a Leisure Centre, which the caller could have dialled direct; other Fusion Lifestyle partners advertise local numbers for their facilities.

Fax Service

- 5.9. In support of the Universal Inbox approach and to reduce revenue costs of delivering legacy faxing a review will be undertaken to review the feasibility on introducing a centralised digitally delivered fax service which will deliver faxes via the email system.

Telephone Dial Plan

- 5.10. The Council will audit and consolidate the telephone numbers and circuits it uses onto BT One Bill. The Telephony Services review identified two Direct Dial In or DDI ranges used by the Council which were not documented or otherwise recorded as being Council numbers. The current DDI ranges in use appear to exceed the Council's requirements and could be rationalised to save cost without compromising service delivery. For those telephone circuits which are required they will be included within the BT OneBill which will centralise all data improving options longer term to achieve savings.
- 5.11. The number of DDI's (1300) and DDI Ranges will also be rationalised. This may be difficult to implement because some essential DDI numbers may exist at either ends of the DDI range and reducing the number of DDI extensions may require some extensions to be swapped around or renumbered.

6. LEANER DELIVERY

Budget and Control

- 6.1.** Telephony budgets will be centralised and managed by City ICT. Along with the centralisation of contract management this will provide greater opportunity to reduce costs and leverage investment.
- 6.2.** Once the Council has fully consolidated and documented its telephony services it will review the options for further savings to be made through a hosted or cloud based service..

Service Contracts

- 6.3.** Corporate management of the Council's telephony function will allow greater exploitation of Public Sector Network framework agreements and joint procurement support opportunities. It will also enable City ICT to proactively manage contracts going forward
- 6.4.** ICT will agree a SLA with the business for telephony services this will formalise the levels of service to be provided, improve relationships and help manage expectations.

7. IMMEDIATE ACTION PLAN

- 7.1. The action plan set out below sets out what is required to improve the service in the very short term. The list comprises both small tasks and larger ones and whilst the list is presented in an approximate sequence it does not necessarily follow that one action will be completed before another starts.
- 7.2. Much of the onerous work in consolidating billing has been done recently and will reduce unnecessary paperwork and processing costs.

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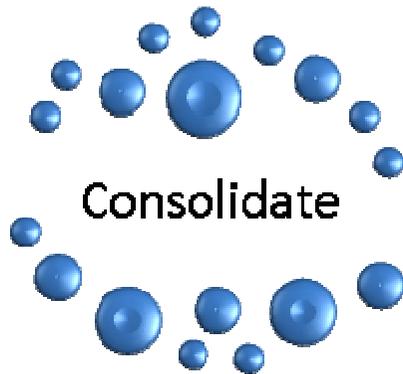
Short Term Action Plan	Owner	Target Date
Progress the purchase of UPS for the Mitel Communications Director systems before the end of August 2012		31/08/2012
Confirm all other Virgin Media Centrex sites in addition to the existing (01865 467050/1/2/3) and if so where the bills are being sent. (It is possible that all numbers commencing 01865 467xxx are Centrex circuits)		30/09/2012
Confirm where the ISDN30e telephone circuits on 01865 775613 (see Direct Services OneBill) are connected to and if they are required (i.e. being used)		30/09/2012
Establish a project to migrate users from the SX2000 to the Mitel Communications Director		
Establish what the DDI ranges 01865 335700 – 899 are being used for and whether they are actually being used		30/09/2012
Confirm whether every service included on the BT OneBill and Virgin Media Centrex bills are required (e.g. some lines are subscribed to BT Total Care whereas others are not)		30/09/2012
Conduct an audit of each telephone system to document exactly which extensions are being used, and for what use.		31/10/2012
Having audited the telephone systems identify whether it would be possible to establish 4 digit dialling at Horspath Road and match the extension numbers to DDI numbers		30/11/2012
Confirm the Council policy of displaying the caller-id of 01865 252000 on outgoing calls and establish that this caller-id is presented by telephones from each of the systems		31/08/2012
Confirm the requirement for the Council Freephone numbers including removal of the old Freephone number (0800 783 1957) is removed from Council literature		30/09/2012
Make sure that circuits and numbers relating to disposed property are no longer required and then removed from BT OneBill (e.g. “RH Red Care Alarm” “BB St Alarm Line”, – “Environmental Development-Ramsay House”)		30/09/2012
Call logging data indicates that the cost of weekend calls increased tenfold in January 2012 – confirm whether this level of activity has continued in subsequent months and if so then identify whether these calls are appropriate (i.e. where the calls are being made from and by whom; the largest costs appear to be calls to mobiles and local Oxford numbers)		31/10/2012
Ensure that the costs in the call logger for different destinations is correct – currently calls to 09xxxx and 08xxxx numbers in the call logging reports have no associated costs		31/10/2012

8. THE ROADMAP

The following sequence provides the Council with a longer term roadmap for the development and operation of telephony services.

A checkpoint review will be undertaken early in 2013 to establish whether the Council is ready and wishes to tender for the provision of a managed telephony service by 2014 and also establish the nature of the services to be procured before any tender process commences.

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- **0 - 12 months**
- Continue migration to IP Telephony
- Centralise Management and move to a single Budget
- Improve Resiliency & Business Continuity capability



Innovate

- **12 - 24 months**
- Implement Unified Communications applications
- Tender for a Managed Service



- **24 - 48 months**
- Transition to Managed Service
- Retire SX2000 platform before End-of-Life

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		2012						2013						2014												
		Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Organisation	Agree Telephony Strategy	X																								
	Establish Central Budget	X																								
	Operate Services / Deliver Business Requirements	X																								
	Manage Telephony Service Contract																			X						
Telephony System	Office Moves / BAU	X						X																		
	Consolidate Services	X																								
	Document Systems & Services			X																						
	Checkpoint Review											X														
	Managed Services Procurement											X														
	Managed Services Implementation																			X						
Contact Centre System	Managed Services Operation																			X						
	System Procurement	X																								
	System Implementation			X																						
	System Operation with Mitel Telephony Systems							X																		
	Integrate with Managed Services Telephony															X										
System Operation with Managed Telephony Service																			X							

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9. COST OF DELIVERING THE VISION

The existing traditional model of a phone on every desk is at saturation point. It is more flexible to work with other endpoints such as Softphone or twinning technologies and the costs of these options are outlined below.

It should be noted that whilst a telephone and associated licence is a one off capital cost it can be limited in its flexibility and therefore a multi client approach, using softphones or software clients will deliver increased flexibility but may attract a revenue costs though annual licensing.

Description	Unit Cost	Volume	Total	Ongoing Cost
Microsoft Lync SIP Client Licence	£14	300	£4200	£14 (unit) per annum -£4200
Mitel Twinning Licence	£85	100	£8500	£0
Mitel Telephone (5324)	£120	50	£6000	£0
Mitel User Licence	£72	250	£18000	£0
Mitel SIP Licence	£72	100	£7200	£0
County ICT Costs	£350	5	£1750	£3500 (based on Medium Gateway Server)
NG Bailey Configuration Change	£450	3	£1350	£0
Administration or Backfill (Champion)	£5000	1	£5000	£0
Fax Service (Optional)	£1000 estimate	1	£1000	£300
Total for All elements			£53000	£4500

The costs associated with non geographic numbers, call lines and DDI Ranges is as yet to be determined until an audit can be completed. It is expected to return some savings that could be re-invested.

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It is expected that some work will be required by County ICT and can be funded within the current contract. This is likely to include configuration of softphone integration with Microsoft Lync. A budgetary cost for 5 days work would be sufficient. Unit costs are based on estimates and may reduce if licences on Mitel are re-used. If the number of users is reduced further reduction in licence costs will be made.

NG Bailey charges for reconfiguration of routes and decommissioning of switches. This work is outside of the existing maintenance contract and will therefore be subject to charge.

10. RISKS TO DELIVERING THE STRATEGY

Description	Risk	Mitigation
Insufficient funding to develop or extend the service	Medium	<ol style="list-style-type: none"> 1. Reduce deliverables or seek Corporate Support for short term delivery 2. Accept loss of savings or scale back flexibility
Insufficient resources to deliver within timescales	Medium	<ol style="list-style-type: none"> 1. Acquire temporary resource or outsource project management 2. Extend roadmap timescales
Sufficient experienced and qualified staff to deliver improvements	Medium	<ol style="list-style-type: none"> 3. Training and use of technical external resources.

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