

COUNCIL – 16 JULY 2012

BUSINESS CASE FOR A NEW TELEPHONE SYSTEM (HPSN2)

1. PURPOSE OF REPORT

- 1.1 The NFDC telephone system is coming to the end of an extended managed service arrangement by Virgin Media Business (VMB). Support for the current telephone system was transferred to VMB from Unisys as part of the handover to VMB, following their successful bid to supply the technical infrastructure and support for the Hampshire-wide Public Services Network (HPSN2). VMB will cease to support the current telephone system (which is over 10 years old) in December 2012. ICT Services have been working with VMB to plan a full migration to a new “partnership” telephone system ahead of this deadline, as part of NFDC’s commitment to the HPSN2 partnership.
- 1.2 There is a capital cost of **£231,000** and a further revenue cost of **£74,000** this year but this gives a total overall return of 12% on the total investment.
- 1.3 By making this investment NFDC would:
- a) secure support from VMB for an upgraded telephone system for a further seven years,
 - b) have access to state-of-the telephone technology helping the council organisation to be agile and flexible in response to changes.
 - c) provide a good return on investment.

2. WHY IS CAPITAL FUNDING REQUIRED FOR THE NEW SYSTEM?

- 2.1 The current system had been provided under a managed service agreement whereby support for the system was outsourced entirely to *Unisys* (and then VMB) as part of the original HPSN framework agreement. The core network, servers and other devices were provided on a subscription basis (totalling £104,000 per annum) to NFDC. This arrangement worked reasonably well but any and all variations or changes (e.g. adding or removing extensions or handsets) were charged for separately. This means that office moves and other “local” changes to the system were chargeable.
- 2.2 The proposed new system is being provided on a partly-managed service basis where some equipment will be owned by NFDC and deployed locally. This will enable ICT Services to make changes and manage the technical administration of the NFDC segment of the wider HPSN2 Telephone system locally, so avoiding variable charges and reducing the annual subscription. Capital funding is required for the hardware and software components that NFDC would own under this new arrangement.

3. BREAKDOWN OF COSTS FOR THE NEW TELEPHONE SYSTEM

- 3.1 ICT Services have been working with Hampshire County Council and VMB on the detailed costing of the proposal. Whilst there is a substantial one off cost of **£305,000** (£231,000 capital funding plus £74,000 one-off revenue funding) to switch to a new telephone system, there are also significant annual cost savings arising from the ongoing operation of the HPSN2 Telephone system. The cost is broken down as follows:

Table showing breakdown of the proposal from Virgin Media Business

Component	Estimated Cost (£)	Funding
System Hardware & Software	141,000	Capital
Analogue Gateways	2,000	Revenue
3 rd Party Professional Services and Training	58,000	Revenue
Software Support & Upgrades	14,000	Revenue
System Support	12,000	Revenue
Total	227,000	

3.2 As part of the changes to the telephone system there is also a requirement to upgrade NFDC's local area network electronic switching equipment to a technology standard known as *Power over Ethernet* (See Glossary at Appendix B). This new electronic switching equipment is an additional hardware component for which capital funding of **£90,000** is required.

3.3 The budgetary details (which are set out in Appendix A) now require approval.

4. SAVINGS ARISING FROM THE PROPOSED INVESTMENT

4.1 The ongoing revenue costs of the proposed HPSN2 telephone system (e.g. annual support together with financing and depreciation costs for the telephony system and the network hardware) are lower than the costs of the present managed service. These savings are in the region of **£36,500** per annum in a full year.

5. CONCLUSION

5.1 There is a need to upgrade the current telephone system as it will no longer be supported at the end of the year and because it is reaching the end of its life. The annual revenue costs would be less than the current service cost of £104,000 per annum, producing annual savings of £36,500 in a full year, after allowing for repayment of the hardware and software capital costs.

6. RECOMMENDATION

6.1 That the Council approve capital expenditure of £231,000 in 2012/13, to approve net additional revenue expenditure of £74,000 in 2012/13 and note ongoing annual revenue savings.

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APPENDIX A

SCHEDULE OF COSTS AND SAVINGS ARISING FROM A MAJOR UPGRADE TO THE HPSN2 TELEPHONE SYSTEM

Capital Cost	2012/13 (£)	2013/14 (£)	2014/15 (£)	2015/16 (£)	2016/17 (£)
IP Telephony Upgrade	141,000				
Local Area Network Upgrade	90,000				
Total Capital Cost	231,000				
Revenue Impact					
Current Annual Revenue Budget (Managed Service)	104,000	104,000	104,000	104,000	104,000
VOIP Telephony Upgrade (HPSN2)					
Initial "Third Party" Set Up Costs (para. 4.1)	86,000				
Annual Support and Maintenance	n/a	21,000	21,000	21,000	21,000
Contribution to the HPSN2 Core Network	4,000	4,000	4,000	4,000	4,000
Projected HPSN1 and 2 Costs (Year One)	66,000				
Revenue Sub Total	156,000	25,000	25,000	25,000	25,000
Net Operational Annual Revenue Saving/Cost(-)	-52,000	79,000	79,000	79,000	79,000
Repayment of capital Cost of £231,000	-22,000	-42,500	-42,500	-42,500	-31,500
Net Revenue Saving/Cost(-)	-74,000	36,500	36,500	36,500	47,500

GLOSSARY OF TECHNICAL TERMS

a) HAMPSHIRE PUBLIC SERVICES NETWORK 2 (HPSN2)

HPSN2 is the Hampshire and Isle of Wight Partnership's high speed core network, which allows the efficient delivery of data and voice services. The partnership is a joint management agreement, maximising shared infrastructure and investment, allowing partners to select the bundle of services to meet their needs at both local and strategic levels.

The benefits of the HPSN2 partnership include;

- Greater value for money and economies of scale.
- Increased network capacity, lower cost and better quality voice services and faster connections.
- Enabling staff to connect to shared services, from any site.
- Common infrastructure for shared services and applications.
- Shared technologies, resilient lines and improved security.

The HPSN2 telephone system provides an opportunity to further exploit technology developments to access the following benefits:

- Greater resilience against system failure because the new system that the council would link to is now well established as part of the HPSN2 infrastructure. This infrastructure has an enhanced set up, working in tandem across two core Virgin Media Business sites at Southampton and Cosham, such that one site is capable of working on its own in the event of a failure at the other site or when maintenance is required to be undertaken at one site.
- Improved operational efficiencies would be gained through devolved system administration providing the ability to undertake routine system changes in-house in a more timely fashion than at present, whilst no longer being liable for the cost of such changes.
- The *Netcall* platform is fully compliant with the proposed VOIP HPSN2 telephone system.

b) **POWER OVER ETHERNET**

The term ***Power over Ethernet*** refers to a technology that integrates data, voice and power on a standard Ethernet infrastructure providing new options for power distribution. This allows IP telephones, wireless LAN access points, surveillance cameras and other embedded appliances to receive power as well as data over existing CAT 5 cabling.

For network designers and administrators, PoE simplifies the task of powering devices in remote locations. In the case of NFDC, it would enable the deployment of VOIP telephones in places where there are no current AC outlets.

The primary benefits of PoE include;

- Cost savings by reducing the need for electricians to install conduit electrical wiring and outlets throughout the offices.
- Flexibility as a PoE appliance can be located anywhere without the need for AC outlets.
- Reliability because PoE networks have fewer wires, there is less likelihood of an inadvertent power failure.
- Network Control as network administrators can monitor and control powered devices, including re-setting and shut off. This allows increased security as devices can be powered down when not in use.