

Item: 19

Policy and Resources Committee: 26 November 2019.

Replacement Telephone System.

Report by Executive Director of Corporate Services.

1. Purpose of Report

To consider a Stage 2 Capital Project Appraisal in respect of a new telephone system for School Place, and connected locations.

2. Recommendations

The Committee is invited to note:

2.1.

That, on 29 June 2019, there was a significant outage following a lightning storm that damaged the BT phone lines that connect to the Council's phone system.

2.2.

That the consequential power surge on the BT phone lines is understood to be the reason for the failure of the Integrated Services Digital Network interface card, responsible for Direct Dial In lines and a power supply to a unit responsible for 52 extensions within the Council.

2.3.

That, following urgent repair work, the Council's telephone system was fully restored on 5 July 2019.

2.4.

That, in the event of another failure, further service recovery is threatened by the age of the equipment, in that older systems become harder to recover, and there is now a risk that the Council's telephone system may soon suffer an unrecoverable failure.

2.5.

The proposal that the cost of the Council's new telephone system, estimated at £240,000, be funded as follows:

- £80,000 from the IT Capital Replacement programme for financial year 2020 to 2021.
- £160,000 to be re-provisioned from the approved Disaster Recovery capital project, for which alternative delivery options are being explored.

It is recommended:

2.6.

That the Stage 2 Capital Project Appraisal in respect of a replacement telephone system for School Place and connected offices, attached as Appendix 1 to this report, be approved.

2.7.

That, as an exception to process in that the risk of failure to the existing telephone system is high, provision of a replacement telephone system for School Place and connected offices be added to the capital programme for 2019 to 2020 onwards, at a gross capital cost of £240,000, to be funded as follows:

- £80,000 from the IT Capital Replacement programme for financial year 2020 to 2021.
- £160,000 to be re-provisioned from the Disaster Recovery capital project.

3. Background

3.1.

BT has announced that in 2025 it shall cease the Public Switch Telephone Network (PSTN) and the Integrated Services Digital Network (ISDN) phone line services in the UK, in preference to moving phone lines to be delivered via the Internet – known as Session Initiation Protocol, or SIP. As the current telephone system within School Place and connected buildings is not SIP compatible it will need replacing in advance of that date.

3.2.

As the Council's main phone system is not SIP capable, this system will require to be replaced with a new system that is compatible with SIP ahead of the 2025 end date. Work was scheduled to start this upgrade in 2020 to 2021, and complete well in advance of the switch over to SIP.

3.3.

The lightning storm on 29 June 2019 and the consequential power surge on the BT phone lines is understood to be the reason for the failure of the Integrated Services Digital Network interface card, responsible for Direct Dial In lines and a power supply to a unit responsible for 52 extensions within the Council. Urgent work to the system did enable some recovery within a couple of days, but the damage to the lines and the equipment was very severe. Full system recovery was achieved on 5 July 2019.

3.4.

Future full service recovery is threatened by the age of equipment. Older systems, such as the one currently in use in School Place, become harder to recover over time and there is a real risk that this system may soon suffer an unrecoverable failure. This is the reason for the urgency of this request.

4. Stage 2 Capital Project Appraisal

4.1.

Given the problems in June 2019, an urgent review of telephony provision was carried out and reported to the Information Services Programme Board (ISPB) in September 2019. The ISPB approved the principle of bringing forward the planned replacement of the telephone system to 2019 to 2020, given the high risk of the system failing beyond repair.

4.2.

On 16 October 2019, the Capital Planning and Asset Management Sub-Group noted an interim submission for this project which was reviewed as work in progress, and agreed that, due to the risk of a critical business failure, the application should be submitted to the next available Senior Management Team Capital Programme Board.

4.3.

On 12 November 2019, the Senior Management Team Capital Programme Board agreed that a Stage 2 Capital Project Appraisal should be prepared for consideration by the Policy and Resources Committee. This is attached at Appendix 1.

5. Corporate Governance

This report relates to the Council complying with its governance and financial process and procedures and therefore does not directly support and contribute to improved outcomes for communities as outlined in the Council Plan and the Local Outcomes Improvement Plan.

6. Financial Implications

6.1.

The report is seeking approval for the purchase of a replacement telephone system for School Place, and connected locations at an estimated capital cost of £240,000.

6.2.

It is proposed that £80,000 will be allocated to this project from the £420,000 IT Capital Replacement Budget for financial year 2020 to 2021. It is proposed that the balance of £160,000 be sourced through the re-provision of £160,000 from the £420,000 allocated to a Disaster Recovery capital project which was added to the capital programme in 2014 for delivery starting in 2017 to 2018. This project has not progressed in its original form and, as technology has developed, it is highly likely that the project will not be delivered as originally envisaged with a physical building but will be a combination of a cloud-based project, which has more revenue implications, together with back up file servers for a data centre in a Council building, which will be delivered for a lower capital cost.

6.3.

The financial implications of the proposals are detailed in the revised Stage 2 Capital Project Appraisal attached as Appendix 1 and including the revised budget estimates.

7. Legal Aspects

7.1.

Section 95 of the Local Government (Scotland) Act 1973 requires the Council to make arrangements for the proper administration of its financial affairs. As part of this, the Council is expected to have regard to economy, efficiency and effectiveness in its use of resources.

7.2.

In terms of Section 35(1) and (2) of the Local Government in Scotland Act 2003, the Council must determine and keep under review the maximum amount which it can afford to allocate to capital expenditure. In so doing, the Council must comply with regulations made by Scottish Ministers.

8. Contact Officers

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9. Appendix

Appendix 1 – Stage 2 Capital Project Appraisal.

STAGE 2 CAPITAL PROJECT APPRAISAL

Capital Programme: General Fund
Client Service: Corporate Services
Project Name: Replacement Telephone System for School Place and connected Council Buildings

1. Background

- 1.1 BT has announced that in 2025 it shall cease the Public Switch Telephone Network (PSTN) and the Integrated Services Digital Network (ISDN) phone line services in the UK, in preference to moving phone lines to be delivered via the Internet – known as Session Initiation Protocol, or SIP.
- 1.2 As the Council's main phone system is not SIP capable, this system will require to be replaced with a new system that is compatible with SIP ahead of the 2025 end date. Work was scheduled to start this upgrade in 2020/21, and complete well in advance of the switch over to SIP.
- 1.3 However, the operational performance of the telephone system has been poor recently with a significant outage taking place on 29 June 2019 following a lightning storm that damaged the BT phone lines that connect to the OIC Phone System. The consequential power surge on these phone lines is understood to be the reason for the failure of the ISDN interface card responsible for Direct Dial In (DDI) lines and a power supply to a unit responsible for 52 extensions.
- 1.4 With three major sections of the system affected, the impact on normal service was severe. Business Continuity arrangements were instigated to mitigate disruption where possible, including the deployment of a small pool of four emergency phone handsets in Customer Services. These handsets have no facility for call transfer to staff internally and struggled to cope with the ensuing volume of calls to handle.
- 1.5 The telephone system was restored on 5 July 2019 but further instabilities in service recurred which required further repair work on 16 July 2019 to completely resolve the incident. The key issues concerning this incident to recognise are:
 - Phone systems using copper phone lines are vulnerable to surge damage typical of lightning storms.
 - Any loss of service affecting telephony has an immediate critical impact on operations ("too important to fail"), regardless of the supplier/vendor Service Level Agreement.
 - Service recovery is threatened by the age of equipment. Older systems become harder to recover and there is a real risk that this system may soon suffer an unrecoverable failure.

- 1.6 Given the problems in June 2019, an urgent review of telephony provision was carried out and reported to the Information Services Programme Board (ISPB) in September 2019. The ISPB approved the principle of bringing forward the planned replacement of the telephone system. On 12 November 2019 the Senior Management Team agreed that a Stage 2 Capital Project Appraisal should be prepared for consideration by the Policy and Resources Committee.
- 1.7 It has already been assumed that £80,000 will be allocated to this project from the IT Capital Replacement Budget for financial year 2020/21, subject to approval by the Asset Management Sub-committee. As it is likely that the overall costs of a new telephone system may be significantly closer to an estimate of £240,000, additional capital funding of £160,000 is being sought.

2. Options Available

- 2.1 **Do nothing until later in 2020/21, as originally planned** - to remain with the current timeline to replace the system would expose the Council to continued risk of a total loss of service for a substantial period of time, certainly into 2021/22.
- 2.2 **Bring forward the replacement telephone system, funded from within the existing annual IT Capital Replacement Budget** – to take the full amount from the annual IT Capital Replacement Budget of £420,000 would have a highly detrimental impact on other projects urgently planned for the rest of 2019/20, and into 2020/21. This would risk the stable delivery of IT Services in the Council and create a further risk that the Council fails to meet its obligations with regards to service availability and cybersecurity.
- 2.3 **Bring forward the replacement telephone system, with additional funding** – by bringing forward £80,000 of funding from the 2020/21 annual IT Capital Replacement Budget to this project, with an allocation of new capital funding to bridge the estimated shortfall of £160,000, a new SIP based telephone solution would be implemented at the earliest opportunity.

3. Land Purchase Requirement

None required.

4. Project Appraisal

| | Criteria | Response |
|----|--|---|
| 1. | Protects Existing Statutory Provision | <p>The Council must be able to be contacted by the public and by other Agencies as and when required. Similarly, the Council must be able to contact others.</p> <p>Whilst there is an announced cessation of ISDN phone line services as used by the Council it is not expected that the requirement to handle telephone calls will disappear over the next 10 years.</p> <p>There is a need to migrate to a new telephone system to fulfil a statutory obligation.</p> |
| 2. | Meets Corporate Priority / Community Planning Goal | <p>Orkney Islands Council shares its missions and values with The Orkney Partnership and the Council Plan supports the strategic priorities of the Community Plan. Critical to this is the shared mission, which is “working together for a better Orkney”.</p> <p>The Council's strategic priorities for 2018 – 2023 are:</p> <ul style="list-style-type: none"> • Connected Communities. • Caring Communities. • Thriving Communities. • Enterprising Communities. • Quality of Life. <p>Communication with service users and citizens is vital in order to meet these priorities.</p> |
| 3. | Protects Existing Assets | Not applicable. |
| 4. | Minimises Capital Cost | <p>A full procurement exercise will be completed in order to get the best value telephone system that is available, and which meets our specification.</p> <p>Current estimate is that capital funding of £240,000 in total will be required.</p> |
| 5. | Maximises Investment from External Sources | None available. |

| | Criteria | Response |
|-----|---|--|
| 6. | Beneficial Impact on Revenue Expenditure | Service charges are market driven and, therefore, there is no absolute pricing model. However all available market information describes the services currently used by Orkney Islands Council, namely ISDN, as “costly” in comparison to the equivalent costs of the SIP services being recommended. Therefore it is expected that switching to SIP is an opportunity to reduce revenue expenditure on telephone lines and calls. Until this can be evidenced, it is assumed that this project will be revenue neutral. |
| 7. | Linked to Other Council Provision | |
| (a) | Enhances Statutory Provision | Essential communication tool. |
| (b) | Protects or Enhances Discretionary Provision | Essential communication tool. |
| 8. | Re-use of Derelict Land or Building | Not Applicable – no additional land or buildings required. |
| 9. | Promote or Enhance Orkney's Environment | Council services promote and enhance Orkney's environment. |
| 10. | Promote or Enhance Orkney's Heritage | Council services promote and enhance Orkney's heritage. |
| 11. | Economic Prosperity or Sustainable Communities | Council services promote economic prosperity and sustainable communities. |
| 12. | Enhances Council operations or Improves Health and Safety | Business critical for the safe, reliable and efficient provision of all Council operations, including health and safety. |

5. Financial Implications

- 5.1 The financial implications of the proposals are detailed in the Financial Assessment of Capital and Revenue Expenditure attached at Annexes 1 and 2.
- 5.2 There is not anticipated to be any change to annual running costs as the project is to provide a replacement for an existing system.

6. Risk Assessment

- 6.1 Risks if project progressed:
- Budgeted project capital cost exceeded.
 - Project creep jeopardises progress and affordability of project.

- Actual revenue costs exceeds current costs, leading to ongoing affordability issues.
- Transition to a new telephone system causes disruption.

6.2 Risks if project does not proceed:

- Existing telephone system ceases operation and cannot be repaired.
- Major impact on the ability of the Council to carry out its statutory duties.

7. Conclusion

7.1 A Council needs to be contactable, and to be able to contact others. Whilst there are several ways to do this, including face to face, by mail, by email and by other on-line tools, contact via a telephone call remains a key requirement.

7.2 Any telephone system needs to be fit for purpose, reliable and efficient. The current OIC system has reached the end of its useful life and repairs are unlikely to be possible should there be another major system failure.

8. Recommendation

8.1 It is recommended that a replacement telephone system be added to the capital programme for 2019/20 and 2020/21, at a capital cost of £240,000.

9. Accountable Officers

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10. Annexes

10.1 Annex 1 – Financial Assessment of Capital Expenditure.

10.2 Annex 2 – Financial Assessment of Revenue Expenditure.

PROJECT APPRAISAL REPORT - STAGE 2
FINANCIAL ASSESSMENT OF CAPITAL EXPENDITURE

Committee: Policy and Resources

Capital Programme: General Fund

Project Name: Telephone System for School Place and connected Council Buildings

| CAPITAL COSTS | Total £ 000 | 2019/20 £ 000 | 2020/21 £ 000 | 2021/22 £000 | 2022/23 £ 000 | Onwards | Notes |
|--|----------------|------------------|------------------|-----------------|------------------|---------|-------|
| 1. Initial Costs (at inflated prices) | | | | | | | |
| Site / Property Acquisition | - | - | - | - | - | - | |
| Other Site Costs (including Fees) | - | - | - | - | - | - | |
| Construction / Improvements | | | | | | | |
| o Internal Alterations | - | - | - | - | - | - | |
| o Extension | - | - | - | - | - | - | |
| o External works | - | - | - | - | - | - | |
| Information Technology Costs | 240.0 | 80.0 | 160.0 | - | - | - | 1 |
| Plant & Equipment | - | - | - | - | - | - | |
| Vehicles | - | - | - | - | - | - | |
| Professional Fees - Consultant | - | - | - | - | - | - | |
| - D&I | - | - | - | - | - | - | |
| Gross Capital Expenditure | 240.0 | 80.0 | 160.0 | - | - | - | |
| 2. Initial Funding (at inflated prices) | | | | | | | |
| Government Grants | - | - | - | - | - | - | |
| Other Grants | - | - | - | - | - | - | |
| Other Financial Assistance | - | - | - | - | - | - | |
| Total Grants Recievable, etc. | - | - | - | - | - | - | |
| Net Capital Cost of Project | 240.0 | 80.0 | 160.0 | - | - | - | |
| Net Council Capital Expenditure | 240.0 | 80.0 | 160.0 | - | - | - | |
| Net Present Value | 221.3 | 76.2 | 145.1 | - | - | | |
| Cost of Capital | 5% | 5% | 5% | 5% | 5% | | |
| Year | | 1 | 2 | 3 | 4 | | |

Notes

1 Current figures are best estimates. System will be procured.

PROJECT APPRAISAL REPORT - STAGE 2
FINANCIAL ASSESSMENT OF REVENUE EXPENDITURE

Committee: Policy and Resources

Capital Programme: General Fund

Project Name: Telephone System for School Place and connected Council Bui

| REVENUE COSTS / (SAVINGS) | Total £ 000 | 2019/20 £ 000 | 2020/21 £ 000 | 2021/22 £ 000 | 2022/23 £ 000 | Onwards £ 000 | Notes |
|---|----------------|------------------|------------------|------------------|------------------|------------------|-------|
| 1. Full Year Operating Costs (at inflated prices) | | | | | | | |
| Staff Costs | - | - | - | - | - | - | |
| Other Staff Costs (incl. recruitment, relocation, etc.) | - | - | - | - | - | - | |
| Property Costs | - | - | - | - | - | - | |
| Supplies and Services | - | - | - | - | - | - | |
| Transport, Vessel and Plant Costs | - | - | - | - | - | - | |
| Administration Costs | - | - | - | - | - | - | |
| Apportioned Costs | - | - | - | - | - | - | |
| Third Party Payments | - | - | - | - | - | - | |
| Transfer Payments | - | - | - | - | - | - | |
| Miscellaneous Expenditure | - | - | - | - | - | - | |
| Gross Revenue Expenditure / (Saving) | - | - | - | - | - | - | |
| 2. Full Year Operating Income (at inflated prices) | | | | | | | |
| Government Grants | - | - | - | - | - | - | |
| Other Grants | - | - | - | - | - | - | |
| Rents and Lettings | - | - | - | - | - | - | |
| Sales | - | - | - | - | - | - | |
| Fees and Charges | - | - | - | - | - | - | |
| Miscellaneous Income | - | - | - | - | - | - | |
| Gross Revenue Income | - | - | - | - | - | - | |
| Net Revenue Expenditure / (Saving) of Project | - | - | - | - | - | - | |
| Increase / (Reduction) in Revenue Costs | - | - | - | - | - | - | |
| Net Present Value | - | - | - | - | - | - | |
| Cost of Revenue | 5% | 5% | 5% | 5% | 5% | 5% | |
| Year | | 1 | 2 | 2 | 4 | 5 | |

Notes