ABERDEEN CITY COUNCIL

COMMITTEE	Enterprise, Planning & Infrastructure	DATE	23-02-10
DIRECTOR	Gordon McIntosh		
TITLE OF REPORT	PAN-GRAMPIAN RADIO NETWORK – TENDER FOR THE REPLACEMENT OF THE TWO WAY RADIO SYSTEM		

REPORT NUMBER: EPI/10/069

1   PURPOSE OF THE REPORT

1.1   To bring to the Committees attention the current state of the radio network within the Roads Services

2   RECOMMENDATIONS

2.1   That the committee note the contents of the report, but do not progress any further with the purchase of this radio system

2.2   That the Director of Enterprise, Planning and Infrastructure examines options for improving overall communications through the use of either a replacement microwave network or the provision of suitable mobile phone technology .

3. FINANCIAL IMPLICATIONS

3.1.   The Capital cost of providing the necessary hardware for the replacement system is £840,141. The cost sharing basis for the partnership approach based on usage is:

The Moray Council	16%
Aberdeen City Council	21%
Aberdeenshire Council	63%

Aberdeen City's share is therefore £176,430.

3.2.   There would also be ongoing site rental, management and maintenance costs of £208,120 per year for the 10 year term of the contract. This equates to an annual Aberdeen City cost of £43,705

3.3.   Project Management, acceptance testing, training, installation and commissioning costs equate to an additional £180,918 with an Aberdeen City share of £37,992.

3.4. Overall costs for Aberdeen City would therefore be £258,127 plus £651,474 over 10 years giving a total cost of £909,601 or £90,960 per year. (Note: Were the three sites referred to in 2.7 confirmed to be in Council ownership this cost would reduce by around £10,000 per year).

3.5. Under the present arrangements Aberdeen City's costs in 2008/09 covering license fees, maintenance charges from Grampian Fire and Rescue Services were £18.600. Annual costs are met from the Services Revenue budgets. From 2010 onwards there may be a cost of £10,000 for the use of the hilltop site at Brimmond

3.6. The net increase in annual operating costs would therefore be around £62,360.

3.7. An alternative contact system using mobile phones and the current vehicle tracking system could be provided at an annual cost to Aberdeen City of around £10,000 per year. However this would not have any links to Confirm or Tranman and would more than likely be unavailable at times of major emergencies.

4. SERVICE & COMMUNITY IMPACT

There are no obvious links with the Single Outcome Agreement or the Agreed Adminstration policy other than to improve service delivery through cost effective means

5. OTHER IMPLICATIONS

None

6. REPORT

6.1 A similar report to this is being submitted to the appropriate Committees in Aberdeenshire Council and The Moray Council and that they are recommending to proceed with the award of the tender. The project does not require all three Councils to accept the proposals for the scheme to proceed. Aberdeen City can remove itself from the tender without affecting the costs of the other two

6.1. The current Radio Network was created by the former Grampian Regional Council to provide voice communications between frontline road maintenance staff and also voice and telemetry communication for Water Services within the Grampian Area.

6.2. Following re-organisation of Local government in 1996 the three Councils created from the former Grampian Regional Council (Aberdeen City, Moray and Aberdeenshire) along with Scottish Water (the successor organisation to Grampian Water Services) continued to operate joint arrangements to maintain and operate the existing radio network.

6.3. As a result of the development of national arrangements for voice and telemetry services Scottish Water withdrew from the group in 2006 and all their equipment

has been removed from the radio network. The radio network now only provides voice communications principally for the operational staff who provide the road and winter maintenance services for the three local authorities who are now responsible for the system. There is also limited use by Landscape Services in Aberdeenshire.

6.4.   The estimated useful life of the current radio system is now limited as more of the equipment becomes obsolete and spares are no longer available.

6.5.   Grampian Fire and Rescue Services have managed and maintained the Local Authorities Pan-Grampian Radio Transmission system.

6.6.   The backbone of the system is a network of radio masts at various hilltop sites across the Grampian area that are interconnected by VHF radio and fixed microwave links.

6.7.   Ownership of the hilltop sites has been unclear. Aberdeen City Council may own one hilltop site, Aberdeenshire Council three, and Moray Council another two. Currently discussions are being held between Grampian Police, Grampian Fire and Rescue Service and the three Councils to clarify the matter. Space required for equipment and aerials on other hill-sites is being rented from a number of owners including Scottish and Southern Energy and Crown Castle Estates Transmission.

6.8.   Voice communication is provided by means of radio sets installed in vehicles and operational depots that allow one-to-one or group communication between operational staff.

6.9.   The rapid pace of recent developments within telecommunications services and equipment, particularly in relation to the mobile phone networks, is rendering the voice-only service of the Councils obsolete.

6.10.   The infrastructure of the current network is nearing the end of its useful life and alternative ways to provide communication between operational staff will be required in 2010.

6.11.   Whilst mobile telephone networks now provide more comprehensive coverage they are often jammed in a major emergency and retention of a privately operated radio network would provide continuity in these circumstances. Howard Martin Consultancy Ltd was commissioned to prepare a report reviewing the current system and providing advice on how the service could be provided and, if possible, extended in the future. The report recommended that a tender be issued for the replacement of the existing mobile radio network.

6.12.   Howard Martin Consultancy Ltd were subsequently instructed to prepare, in consultation with the Central Procurement Unit, tender documents for the future management, maintenance and service provision of a replacement for the current Pan-Grampian Radio Network jointly owned by Aberdeen City, Aberdeenshire and Moray.

6.13.   The contract documents invited bids for a replacement radio system which would be capable of linking to existing software applications including Confirm (for road

maintenance management) Tranman (for vehicle maintenance management), Cybit (for vehicle tracking) and Symology (for registration of roadworks). Tenderers were also asked to identify the potential for enhanced communication systems such as improved broadband access for schools and remote offices.

6.14. The tender evaluation system was based on a combination of quality and price. Following a tender process in 2009 only three firms were assessed as complying with all the requirements of the specification and contract documents.

6.15. Howard Martin Consultancy Ltd assessed the returned tenders and advised on the one that best meets the future needs of Aberdeen City Council, Aberdeenshire Council and Moray Council for radio telephone communications within an overall communications strategy.

6.16. In alphabetical order the three compliant bids were submitted by

Bridge
Scot-Tel
Selex

6.17. The assessment scores in descending order were

1766.2
1304.3
1144.1

6.21 Member will be advised verbally at the Committee the supplied considered to provide a best value solution.

6.22 The costs to carry on the Pan Grampian Radio are excessive for Aberdeen as some of the additions benefits of the system are already being provided by other systems such as Broadband links to schools. As the development of technology and the potential applications of the systems move with such speed there are likely alternatives using wi-fi or other mobile devices that could be more cost effective. In the circumstances officers believe that the costs involved in the system far outweigh the benefits and we should therefore explore the other technical solutions which could be applicable to a wider group of services.

7. REPORT AUTHOR DETAILS

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