WEST DUNBARTONSHIRE COUNCIL

Report by Executive Director of Corporate Services

Corporate & Efficient Governance Committee : 24 June 2009

Subject: Feasibility of Video Conferencing Facilities within WDC

1. Purpose

1.1 The purpose of this report is to outline options to be considered regarding the feasibility of creating two Video Conferencing suites within the Garshake Road and Rosebery Place offices.

Background

2.1 As the Council has two main offices, staff often travel needlessly between the two offices for meetings where the journey may last longer than the meeting itself. The impact of staff travelling back and forth along the A82 also contributes to the traffic problems and the Council's carbon footprint.

2.2 As part of the Revenue Budget Proposals 2009/2010 & 2010/2011 (An Improving Council – A Greener West Dunbartonshire point 40) the Council has agreed to examine the feasibility of creating two video conferencing suites, one at Garshake and one at Clydebank.

3. Main Issues

3.1 Video Conferencing is separated into three distinct types each satisfying different requirements and providing different levels of functionality.

Desktop Video Conferencing

3.2 This form of video conferencing is designed for use by individuals, as a small screen on the desk is used. It is now possible to display images for up to eight other conference participants, using high quality video, excellent voice communication and integrated document and application sharing. This form of video conferencing is also available on laptops, which provide a mobile communication platform. The limitations of this type of video conferencing platform are, reduced number of participants possible, poorer video quality, reduced viewing angle of camera and solitary headsets used. This type of system is not suitable for board room type video conferences where multiple people are present at each location.

Set-top Video Conferencing

3.3 These are compact video conferencing units. These units consist of a camera, which can pan, tilt and zoom, a microphone and are designed to sit on top of a monitor. For added flexible use in different locations within a building, they can also be used on a purpose built roll trolley unit, these units would give added flexibility in that they can be moved between offices turning them into

video conferencing facilities. These systems are usually used for small groups of people. They provide a high quality visual and audio meeting facility, which can be enhanced with the use of additional presentation equipment. The majority of Set-top systems do not have the complete functionality that the integrated systems have such as echo and background noise cancellation. If moving the trolley unit between locations is employed then performance may be an issue as the performance of the system is dependant on the network infrastructure if not using an ISDN (Integrated Services Digital Network) solution. If using a trolley unit and ISDN solution then an ISDN point would have to be available at each potential office destination, incurring additional cost for each ISDN line installed.

Integrated Video Conferencing

3.4 These are video conferencing systems that are generally built into larger rooms, such as board rooms and conference rooms. They are a highly professional communication facility and can provide a variety of presentation displays, depending upon the equipment used. Typically, they are used for groups of ten or more people. This type of solution is generally the most feature rich and expensive solution. External factors need to be taken into consideration when employing this solution such as room lighting and background wall colour.

Combined Integration of Video Conferencing Types

3.5 A combination of the three types of video conferencing can be employed across multiple sites, for example, Garshake offices may have a requirement for an Integrated Video Conferencing solution and Rosebery place may only have a requirement for a Set-top based solution. Each of the different types of video conferencing types have the facility to link to each other in some capacity.

4. Personnel Issues

4.1 Existing resources within ICT would be required for the procurement and deployment of a Video Conferencing Solution

5. Financial Implications

5.1 The financial implications of any implementation are completely dependant on the type of solution employed. A solution that facilitated a dual site Integrated Video Conferencing solution would cost approximately £25,000. This cost does not include any internal building works (e.g. changing background wall colour).

5.2 There could be further ongoing costs dependant on the underlying architecture that supports the solution, if for example, an ISDN (Integrated Services Digital Network) system is deployed then costs would be £750 circuit installation charge and then £450 per quarter at each site. An ISDN solution would be employed to provide dedicated bandwidth for the solution so that the quality of transmission could be guaranteed. If ISDN

was not employed and the solution instead relied on the underlying infrastructure (IP Based) then by default bandwidth would not be guaranteed and both performance on the system and underlying network may be impacted.

5.3 If the WDC network infrastructure was used as the underlying architecture then there would be no ongoing charges.

5.4 If the underlying network infrastructure was to be used as the underlying architecture then at the time of installation the feasibility of adding Quality of Service (QOS) to the network architecture can be investigated. This QOS can provide the dedicated bandwidth that they system would require as it can reserve a specified amount of bandwidth for the protocol (H.323 – International standard for multimedia over IP).

6. Risk Analysis

6.1 If the solution employed is to use the underlying WDC network architecture then the risks would be that the video conferencing system experiences performance issues and also that other network users experience performance issues due to potential high utilization of bandwidth. Any potential performance issues would manifest themselves at the links between sites (e.g. between Garshake offices and Rosebery place offices).

7. Conclusions and Officers' Recommendations

7.1 A video conferencing solution is completely feasible and could reduce the requirement to travel between sites.

7.2 There are a number of different solutions that provide video conferencing, each varying in complexity and cost.

7.3 The Committee is asked to agree that:

7.3.1 ICT will arrange supplier demonstrations of the different types of video conferencing solution.

7.3.2 Officers and Elected Members will attend these product demonstrations which will provide a more comprehensive overview of each solution type and will give a better indication of the limitations and benefits of the systems.

7.3.3 ICT will collate and solidify the Council's requirements to ensure that the Council receives the best value, fit for purpose solution that they require.

7.3.4 ICT will undertake a bandwidth impact analysis for any potential solution to identify any performance issues.

7.3.5 ICT will provide a fully costed proposal for the preferred solution following requirements gathering and bandwidth analysis.

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Date: 5 June 2009

Ward Affected:	**None**
Appendices:	**None**
Background Papers:	**None**
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