

# COUNCIL REQUEST FOR DECISION

**MEETING DATE:** January 27, 2020

**SUBMITTED BY:** J. Graham, Chief Information Officer

**PREPARED BY:** J. Graham, Chief Information Officer

**REPORT TITLE:** Attachment 1 Technology Requirements Update - 2020-CR-0004.docx

---

## EXECUTIVE SUMMARY

The need to upgrade the technology in the City of Leduc Council Chambers came from two business drivers. Firstly, in September 2018, Council members identified issues with the audio and media capabilities in chambers (see Attachment 3 for details). Secondly, the implementation of the eSCRIBE Meeting Management system will provide functionality that requires updated technology in Chambers in order to deliver the expected benefits to Council, the public and administration.

Administration met with the Mayor, members of Council and other stakeholders to understand the needs of each group (see attachment 4 for details). Comtec Associates Ltd were engaged to assist in understanding and identifying the audio-visual options that will meet these business needs.

Options developed by Comtec were presented at Committee of the Whole October 21, 2019. Information from other municipalities was provided on October 28, 2019 at which time a motion was passed requesting Administration to bring forward additional options, with price points. This report provides these additional options for Council's consideration and decision.

Two lower cost options have been provided in this report. The first option is based on the system design that was presented on October 21, 2019 but is limited to just the components needed to address the "pain points" related to reliably displaying and controlling presentation content. The remainder of the components from the October proposal can be added at a later date to achieve all the audio and visual functions that are needed. This design was proposed as it provides a system that has a high life time value. By integrating multiple components, it is flexible and expandable as components can be added as needed and resilient in that if one component fails the others will still function.

The second option provides media/presentation switching and control and audio processing built into the same device, with lower costs than Option 1 which provides only media/presentation switching and control. However, because it is a single piece of equipment, it cannot be expanded if needed in the future and, if it fails, will leave Chambers without audio-visual functions.

Once an option is selected, Administration will develop the request for proposal (RFP) to procure the solution and work with Facility and Property Services to determine any renovation requirements and develop a complete implementation schedule.

Given the budget constraints expressed by Mayor and Council and the functionality that is desired, Option 2 provides the greatest value for the City.

## RECOMMENDATION

1. That Council directs Administration to proceed with the procurement processes for the acquisition, installation and implementation of Option 2, and Additions A and B as set out in this report, for estimated hardware, labour, electrical and renovation costs not exceeding \$74,600.

# COUNCIL REQUEST FOR DECISION

- That Council approve that the funds allocated for this project being \$55,000 in 092.370 Meeting Management Software project and \$19,600 from 092.360 IT Governance project, be carried forward into the 2020 Budget.

## RATIONALE

At Committee of the Whole 2019 October 21, Mayor and Council reviewed options developed by Comtec to upgrade audio-visual technology for the City of Leduc Council Chambers. Mayor and Council moved that this item be brought forward to the City Council meeting on 2019 October 28 for decision. (Refer to Attachment 5 for report 2019-CoW-031, “Council IT Support Update - Chamber Technology Requirements, 2019 October 21” and to Attachment 6 for details on the Estimates for Audio Visual Technology for City of Leduc Council Chambers, presented on October 21, 2019.)

On October 28, 2019 J. Graham, Chief Information Officer, provided Council with further supporting information on council chamber technology options from neighbouring municipalities. At this time, Council passed a motion to request Administration to bring forward additional options, with price points, relative to the Council Chamber Technology upgrades.

In response to this motion, Comtec has prepared designs and estimates in addition to those that were reviewed on October 21, 2019. Attachment 1 provides details for each new option. These products offer performance, reliability and contractor support while presenting a lower investment approach.

The alternatives provided in the Committee of the Whole report October 21, 2019 were based on mid-range cost technology using a system design that integrates multiple components to provide flexibility for growth and expansion as well as redundancy so that if one component fails, others will still be operational. Option 1 is less expensive than the alternatives presented on October 21, 2019 because it includes just the components from the original design needed for media and presentation control.

Option 2 provides media/presentation switching and control and audio processing built into the same device, with lower cost than Option 1 that provides only media/presentation switching and control. However, because it is a single piece of equipment, it cannot be expanded if needed in the future and, if it fails, will leave Chambers without audio-visual functions.

Costs for additional items are provided for video camera and streaming, for replacement of projectors and wide format screens and for a discussion microphone system and gallery speaker upgrades. These additions A, B or C may be combined with either Option 1 or Option 2.

The following budget estimates include the “turnkey” supply and installation of equipment as well as programming and optimization of all systems. These estimates do not include electrical infrastructure and renovation costs which are estimated at \$10,000.

| Item   | Budget Estimate |
|--|-----------------|
| <b>Option 1: Presentation and Media Delivery System – IP Computer Network</b>  | \$37,000        |
| This option provides administration with a control panel for easy control of 4 media inputs (e.g. laptops or tablets) so that any laptop or tablet can be shown on any display. It also ensures that audio for video presentations will be heard over the existing speakers.                             |                 |
| This option is part of a design for a fully networked system which can change and grow as needed using standard off-the-shelf equipment. It allows devices for audio, displays, control etc. to be connected for a complete system which limits exposure to total system failure if any one piece fails. |                 |

| Item   | Budget Estimate |
|--|-----------------|
| <p>It includes the presentation and media portion of the original proposal presented on October 21, 2019 as well as the control systems that allow other components to be added later.</p> <p>Since this option uses existing microphones, Addition B is needed to increase audio quality within Chambers and especially for recorded and/or streamed audio.</p> <p>To provide the same functions as Option 2, additional components for audio processing will need to be added at a later date.</p> <p>Cost Breakdown: Hardware: \$27,150 / Labour: \$9,850</p>   |                 |
| <p><b>Option 2: Presentation and Media Delivery System - Matrix Switcher</b></p>   | \$34,800        |
| <p>Like Option 1, this system allows administration to control which laptops or tablets are shown on any display. The “Matrix Switcher” includes is a control processor, audio signal processor and amplifier, making this option an excellent value when considering its initial investment cost. The device can also be managed over the computer network.</p> <p>However, this option is based on a proprietary media delivery protocol and is configured with a fixed number of inputs (laptops or tablets) and outputs (monitors, display screens, laptops). This limits the flexibility to expand in the future and requires the right number of inputs and outputs to be purchased upfront to allow for any growth. As well, since this system is all in one component, any failure of this device will result in a total loss of audio-visual operations.</p> <p>Since this option uses existing microphones, Addition B is needed to increase audio quality within Chambers and especially for recorded and/or streamed audio.</p> <p>Cost Breakdown: Hardware: \$24,500 / Labour: \$10,300</p> |                 |
| <p><b>ADDITION A: Fixed Camera and Streaming Video Appliance</b></p>   | \$6,000         |
| <p>Cost Breakdown: Hardware: \$5,100 / Labour: \$900</p>   |                 |
| <p><b>ADDITION B: Discussion Microphone System and Loudspeaker Upgrade</b></p>   | \$23,800        |
| <p>The Discussion Microphone System will significantly improve audio clarity, remove feedback and provide improved discussion management for council discussions. It also improves the quality of the audio that is recorded and/or streamed outside the building for public viewing.</p> <p>The discussion microphone system includes 15 microphone stations and gooseneck mics and a main conference processor. Meeting audio can be recorded on a USB storage device such as a memory stick. Speakers in the gallery will be upgraded to maximize sound quality and coverage.</p> <p>Can be combined with either Option 1 or Option 2.</p> <p>Cost Breakdown: Hardware: \$18,600 / Labour: \$5,200</p>  |                 |
| <p><b>ADDITION C: Projectors and Screens Upgrade</b></p>   | \$32,500        |
| <p>Two 6000 Lumen Laser projectors with lens and two replacement widescreen format motorized screens.</p> <p>Cost Breakdown: Hardware: \$26,500 / Labour: \$6000</p>   |                 |
| <p><i>Budgetary estimates include the following and will be supplied by the winning bidder.</i></p>  |                 |

# COUNCIL REQUEST FOR DECISION

1. *Turnkey supply and installation of Audio Visual with Control Systems.*
2. *Audio Visual System Programming and Optimization.*
3. *Budgetary estimates do not include electrical infrastructure and renovation costs which are estimated at \$10,000.*

## STRATEGIC / RELEVANT PLANS ALIGNMENT

The audio-visual technology upgrade for Council Chambers are in support of the following action identified in the 2019-2022 Strategic Action Plan.

GOAL 1: A City Where People Want to Live, Work and Play

STRATEGY 1: Enhance citizen engagement, with a focus on youth, in shaping and building our community.

ACTION: Implement enhancements to Meeting Management (i.e. document search, meeting recording/live feeds, etc.)

## ORGANIZATIONAL IMPLICATIONS

### ADMINISTRATION:

Once an option is selected, Comtec will create the infrastructure and specification documents and Corporate Information and Technology will develop the request for proposal to procure the solution.

### RISK ANALYSIS: FINANCIAL / LEGAL:

All budget estimates include the “turnkey” supply and installation of audio-visual equipment with control systems as well as programming and optimization of all audio and visual systems. The hardware and labour budget estimates for each option do not include electrical infrastructure and renovations. The budget for electrical infrastructure and renovations is estimated at \$10,000 for both options. The RFP and procurement process will determine quoted costs for hardware, labour, electrical infrastructure and renovations.

### IMPLEMENTATION / COMMUNICATIONS:

Corporate Information and Technology will plan and execute the implementation project and collaborate with Facility and Property Services to determine physical renovation requirements and develop a complete implementation schedule.

### ALTERNATIVES:

1. That Council directs Administration to proceed with the procurement processes for the acquisition, installation and implementation of Option 1 and Additions A and B for estimated hardware and labour costs of \$66,800 and estimated electrical renovation costs of \$10,000 with additional components needed for a complete audio-visual system (identified in attachment 6) to be acquired at a later date and that funds allocated for this project, that is, \$55,000 in 092.370 Meeting Management Software project and \$21,800 from 092.360 IT Governance project, be carried forward into the 2020 Budget
2. That Council directs Administration to proceed with the procurement processes for the acquisition, installation and implementation of Option 2 and Additions A and B for estimated hardware and labour costs of \$64,600 and estimated electrical renovation costs of \$10,000 and that funds allocated for this project, that is, \$55,000 in 092.370 Meeting Management Software project and \$19,600 from 092.360 IT Governance project, be carried forward into the 2020 Budget.



## COUNCIL REQUEST FOR DECISION

3. That Council directs Administration to proceed with the procurement processes for the acquisition, installation and implementation of a combination of Option 1 or 2 and Additions A, B and/or C as they deem appropriate and that appropriate funds allocated for this project in 092.370 Meeting Management Software project and 092.360 IT Governance project, be carried forward into the 2020 Budget.

### **ATTACHMENTS**

Attachment 1: Estimates for Audio Visual Technology for City of Leduc Council Chambers, 2020 January 27

Attachment 2: Chamber Audio Visual Technology Presentation, January 27, 2020

Attachment 3: Information Technology Services and Support Model for Leduc City Council, September 18, 2018

Attachment 4: Council Chambers Audio Visual Business Requirements

Attachment 5: Report 2019-CoW-031, Council IT Support Update - Chamber Technology Requirements, 2019 October 21

Attachment 6: Estimates for Audio Visual Technology for City of Leduc Council Chambers, 2019 October 21