TORONTO DISTRICT SCHOOL BOARD

BOARDROOM A/V REPLACEMENT AND WEBCAST HUB FOR MULTI-USER GROUPS

TO Planning and Priorities Committee  12 April 2017

RECOMMENDATION  IT IS RECOMMENDED that the Board approve the proposed plan to upgrade the existing Boardroom equipment to provide a multi-user audio visual hub for Board, committee, community and staff use that is compliant with the Association of Accessibility for Ontarians with Disabilities’ Act. That staff be authorized to issue a Request for Proposal for both audio visual equipment and the modular work stations as outlined in the staff report.

STRATEGIC DIRECTION  Make every school an effective school.

RATIONALE  Staff mapped a process to conduct an A/V needs assessment which included meeting with Trustees in committee to get their input on modernizing and replacing the Boardroom A/V system and to widen the scope of the use of the Boardroom A/V to include system stakeholders.

Staff also engaged the expertise of a consultant (Global Unified Solutions Services Inc) to advise on replacing current aging Boardroom A/V technology with a modern, integrated A/V system. The consultant was also asked to devise an A/V replacement plan that would not only service Board and committee meetings in the Boardroom, but allow the Boardroom A/V system to be used by system stakeholders. The consultant was also asked to come up with a cost estimate range for equipment purchase and installation and should the Board approve, assist in developing the specifications for a competitive tender.

The process has been guided by an inter-departmental staff group with representation from Government, Public and Community Relations, Board Services, IT, Purchasing, Web Services and Marketing and Creative Services. Two sessions were held with Trustees through House Committee. At the April 3 House Committee, staff
and the consultant reviewed a proposal to replace the A/V system, and reviewed details of the main hardware and software components (e.g. cameras, sound, computer and interface hardware, internet broadcast system, software and meeting management hardware and software). The presentation also included budget and cost projections on the major components of the proposed A/V system. See Appendix B.

For the past four years, the TDSB has been experiencing technical difficulties and A/V and webcasting failures during Board meetings and special events held in the Boardroom. The source of the problems is the aging audio visual integrated platform, microphones, cameras and wiring. The equipment is 14 years old (with a maximum 12-year life span) and this, along with out-dated and failing processors and circuit boards has created not only poor audio visual performance, but now poses significant reliability risks including complete and catastrophic system failure. In addition, the TDSB is incurring additional overtime costs to have staff present to trouble shoot in case of failures. Where possible, parts of the system have been replaced (most recently the projectors and a processor) however, due to the age of the equipment and wiring, many older parts are no longer compatible with current A/V, webcasting and sound technology components.

Moreover, our current equipment does not allow for effective hosting of live webcasts or virtual meetings within the 5050 Yonge site. As the TDSB has recently embarked on a community engagement and communications strategy that utilizes live and at times interactive webcasting, the failing system at 5050 has become a significant impediment to realizing the full potential of this effective and accessible communications and engagement strategy. Poor A/V performance, coupled with an aging and at times unreliable webcast system has resulted in frequent webcast interruptions which in turn reduces viewership of the live broadcast. Finally, the current A/V system does not allow for the addition of closed captioning, and therefore undermines the TDSB’s commitment to deliver accessible webcasts of Board meetings.

As mentioned above, the TDSB is now embracing webcasting as a means of reaching far more parents and stakeholders. Last year we ran pilot interactive webcasts that allowed the TDSB to reach thousands of parents and employees in ways we could not before. Post webcast participant surveys (from parents and employees) show overwhelming support for us to deliver more.
Recently, the Special Education Advisory Committee requested using the Boardroom A/V system to webcast and/or video record their meetings to improve participation, communication, transparency and the ability to archive meetings for post meeting viewership. No doubt other advisory committees will follow suit and express interest in doing the same.

The current A/V system cannot support this additional use. Its current tenuous status and unreliable functionality means that any added use could contribute to a catastrophic system failure.

**Central A/V Webcast, Multi-User Hub**

The A/V Boardroom upgrades will allow for more flexibility. This means we can be guided by strategic considerations to extend the use and benefit of a new A/V technology well beyond its current use for board meetings.

When equipped with modern A/V technology, the Boardroom can become a hub for A/V and webcast outreach that can be made available not only for Board meetings, but also serve other purposes including:

- Community advisory committee meetings;
- Community consultation using interactive webcasts;
- Budget presentations/consultations;
- Student SuperCouncil meetings;
- Parent and employee webinars;
- Virtual ward council meetings.

The A/V replacement plan also includes use of wireless technology; meaning that the configuration of the Boardroom can be changed to suit different set-up options. Currently the Boardroom desks are hardwired and cannot be moved. A wireless A/V retrofit would allow the Boardroom to be reconfigured to offer the look and feel of a smaller committee room or to theatre, lecture, or classroom style suitable for various presentations and consultations and more intimate meetings.

**Proposed Major Component Replacement Plan**

Appendix A is a brief Q&A based on questions of staff, the consultant and questions about the slide deck presentation.
Appendix B is a slide deck prepared by Global Unified Solutions Services Inc. and presented to the House Committee. This proposed plan outlines the key major component replacements and features including:

1. Conferencing/microphone/audio;
2. Broadcasting;
3. Video infrastructure system;
4. Work stations and interactive screens (also shows who is conferencing);
5. Voting/speakers list.

Cost Projections

To replace the Boardroom A/V system based on the major components outlined above for Boardroom use and for use as a Central TDSB A/V webcast hub, the projected costs for the hardware and software is between $450k and $530k which includes installation, but not any furniture replacement. The consultant has used a cost range at this time. The procurement process will bring more precision to the actual costs. Funds will be allocated from the capital budget (multi-user audio visual hub) for this project.

To create the A/V Webcast Hub with universal work station that can be reconfigured, the additional cost would be between $65k and $75k. As staff worked with the consultant and the House Committee, the concept of a more multi-purpose, multi-user A/V Hub evolved. More precise cost projections may be needed and staff are also investigating whether the existing Boardroom desks can be salvaged in whole or in part to give the universal functionality that a hub would require.

Recommendation

That the Board approve the proposed plan to upgrade the existing Boardroom equipment to provide a multi-user audio visual hub for Board, committee, community and staff use that is compliant with the Accessibility for Ontarians with Disabilities’ Act.

That staff be authorized to issue a Request for Proposal for both audio visual equipment and the modular work stations as outlined in the staff report.

IMPLEMENTATION  Pending a decision to proceed, installation will take place over the
AND REVIEW summer months and into September if necessary.

APPENDICES
- Appendix A: Q & A’s
- Appendix B: Boardroom AV Costing PowerPoint

FROM Ross Parry, Executive Officer, Government, Public and Community Relations
Appendix A

Common Questions and Answers

1. Q: Has staff explored the cost variance of replacing parts of the A/V system gradually to reduce costs?

   A: Yes. Compatibility is the major factor. Replacing projectors recently created compatibility issues with the central functionality hardware. The A/V system is an intelligent system with components that work in conjunction with one another. Replacing parts would be akin to finding parts to upgrade a VCR to use Blu-ray technology.

2. Q: Explain the workstation concept – what does it involve?

   A: A workstation is comprised of a wireless mic and a 17”-19” Windows touch screen. The screen is similar to a dash board, and displays agenda materials (a paperless agenda is possible), a speakers list, touch screen voting and displays speaker’s time allotment remaining.

3. Q: Can webcast viewers see the vote results?

   A: Yes, visitors in the Boardroom would see the vote results displayed as would viewers watching the webcast.

4. Q: If the room is reconfigured can the cameras also be adjusted?

   A: Yes.

5. Q: Will the live portion of a webcast for Board meetings be closed captioned to meet AODA (accessibility) compliance?

   A: Under provincial AODA legislation we are required to provide closed captions in archived Board meetings. A new A/V system will allow the TDSB to exceed minimum AODA compliance by exploring closed caption for live Board meetings and web broadcasts.

6. Q: Is there interest from other groups to use the technology?

   A: Yes. SEAC has made this request. We are very certain that other advisory committees would choose to webcast if the option is available to them.

7. Q: Is there any staff savings gained from the current system?
A: Yes. Currently, we have as many as three technicians including a standby trouble shooting technician for Board meetings. The new system would require at least one less technician resulting in less overtime costs.

8. Q: Will senior staff seated in the Boardroom also have work stations?

A: Yes. We are estimating approx. 50 stations (wireless mic and touch screen)

9. Q: Currently the desks are very small. Can they be made larger?

A: Yes. This has come up in our discussions about furniture. It will be considered in the furniture cost allotment.

10. Q: Given the ability to reconfigure the room, is it anticipated that the Boardroom would be used for some committee meetings?

A: Yes. It is anticipated that P&P would be in the boardroom with desks reconfigured to provide a less formal setting. The advantages will be the larger, lower and upper visitor, delegation and attending staff seating spaces, the ability to webcast or video record P&P and delegate presentations and improved air quality. Other smaller committees could continue to meet in Committee Room A.

11. Q: Will the new system allow for multi-media to be played such as videos, CDs etc.?

A: Yes, this functionality would be integrated into the new system.

12. Q: In terms of the A/V webcast hub concept, are there any limitations?

A: Not really. The user group can choose to video-record or webcast. They can also select a single camera to record/webcast the meetings or a camera configuration that tracks individual speakers, similar to a Board meetings.
Toronto District School Board
Boardroom Requirements

Global Unified Solution Services Inc.
Conferencing

- Microphone and hardware
- 15 hrs. of battery time per unit.
- Constant charge available
- Audio hardware included
- 50 stations = $1860 per station Installed
- $700-$1100 per addition
Broadcasting

Options
- Create overlays much like CSPAN or the House of Commons
- Show screen timers, names etc.
- Automated speaker track (follows speech system)
- State of the art cameras
- Automated meeting flow
- 9 cameras (2 at each position)
- Preset meeting scenarios
- Cost $90,000-125,000

GLOBAL
Video Infrastructure and systems

- Unlimited sharing ability
- Guest network available for sharing as well
- All relevant media can be managed in real time
- New Projection screens (Widescreen)
- Clerk and media specialist controls all media on large touch screens for easy management
- Wired infrastructure (Crestron DM) $65,000 to $72,500
- Wireless Presentation system $3000-5000
Workstations with Touch interactive screen

- Works as a Touch screen for voting interface
- Runs agenda software
- Local Login for members and auto seating configuration
- Guest sign in is available
- Must choose between key or login password (no price change)
- $700-$1000 per station $35,000 -$50,000k
Voting

- Very easy interface
- Incredibly customizable
- Sign in options for flexibility of seating
- Guest sign in is available (for other meeting types)
- Works with camera tracking and delegate speech system
- Interruptible timer available
- Public and Private options are available
# Programming Breakdown

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<tr>
<th>Service Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Delegate selection (microphone queue)</td>
<td>17,250</td>
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<tr>
<td>Security Integration (log in etc. assignments)</td>
<td>2,300</td>
</tr>
<tr>
<td>Camera Tracking</td>
<td>17,250</td>
</tr>
<tr>
<td>Broadcast Integration</td>
<td>9,600</td>
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<tr>
<td>Crestron Programming for all other AV elements, including Audio</td>
<td>17,500</td>
</tr>
<tr>
<td>Conferencing System (dialing out and in)</td>
<td>9,750</td>
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<tr>
<td>Remote voting app</td>
<td>7500</td>
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<tr>
<td>Voting</td>
<td>10,000</td>
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<tr>
<td>API (Application Programming Interface)</td>
<td>4,600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>91,150-95,750</strong></td>
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## Final Summary

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<tr>
<th>Service</th>
<th>Cost</th>
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<tr>
<td>Conferencing</td>
<td>85,000-93,000</td>
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<tr>
<td>Broadcasting</td>
<td>90,000-125,000</td>
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<tr>
<td>Crestron Products</td>
<td>62,500-70,000</td>
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<tr>
<td>Presentation</td>
<td>25,000</td>
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<tr>
<td>Workstations</td>
<td>40,000</td>
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<tr>
<td>Connective Infrastructure</td>
<td>50,000</td>
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<tr>
<td>Full Programming of System</td>
<td>100,000</td>
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<tr>
<td>API Integration</td>
<td>(+25,000)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>452,500-528,000</strong></td>
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A Single Multi-Purpose Room

- All new furniture.
- Redesigned formal furniture that can be collapsed into a smaller room
- Its not that much more to go with modular furniture
- Range of options is large $65,000-$75,000
Current Room Setup
Inner Table Orientation A.
Inner Table Reorientation.
Inner Table Orientation B.
Inner Table  Orientation C.

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Using a Second Room for Smaller Meetings

- Can use same microphones and infrastructure
- More wireless devices
- More in the presentation
- More Camera’s
- More programing and integration
- Integration costs add $250,000 plus