SCHOOL BOARD ACTION REPORT

DATE: April 5, 2018
FROM: Dr. Larry Nyland, Superintendent
LEAD STAFF: John Krull, Chief Information Officer, jckrull@seattleschools.org
Jim Young, IT Manager Technology Infrastructure, jyoung@seattleschools.org

For Introduction: April 25, 2018
For Action: May 23~~9~~, 2018

1. TITLE

BTA IV: Approve purchase of equipment from Black Box to replace existing voice network that supports desktop telephones and 5-year software and hardware support for $3,671,575.40

2. PURPOSE

This action approves a 5-year contract for the Telephone System Upgrade with Black Box in the amount of $3,671,575.40.

3. RECOMMENDED MOTION

I move the Board of Directors authorize the Superintendent to execute a 5-year contract with Black Box to provide a Telephone System Upgrade, in the amount of $3,671,575.40, plus Washington State Sales Tax, and to take any necessary actions to implement the contract.

4. BACKGROUND INFORMATION

a. **Background –** Seattle Public Schools' (SPS) current telephone system install started in 1999 and was completed in 2003. Newer equipment from the same manufacturer, Nippon Electric Company (NEC), has been purchased at new schools since the original installation. However, most of the hardware is outdated, and parts and software changes are no longer supported, which makes it difficult to continue operating.

The telephone system was identified to receive an upgrade/replacement as part of the Buildings, Technology and Academics (BTA IV) Levy approved in February 2016. SPS went out to bid via the Request for Proposal (RFP) process to secure a new system that meets present and future needs. The requirements call for an estimated 9,100 new phones and 108 switches at a total of 108 sites. Also, with safety and emergency communication (e911 access) as a key requirement, the system must be able to run during a power outage without significant upgrades to our current battery backup and generator infrastructure district wide. The system must also take advantage of existing building wiring and wide area networking that connects our schools and buildings.

The District received seven responses to the RFP ranging in price from $3.5M to $9.5M. The vendor that received the highest score on the evaluation rubric included in the RFP, Black Box, met the requirements and took advantage of existing NEC investments. Cost

savings will be realized because the proposal is the same manufacturer of the equipment we have today. Black Box Leveraged NEC Loyalty promotions as part of their bid and added some assumptions that we should be able to remove and reduce purchase costs to utilize existing supportable NEC equipment recently purchased under previous capital projects. We know of 15 Schools and about 1000 phones that will not have to be replaced.

Black Box will remove and recycle all displaced equipment through E-Cycle Washington's electronic recycling programs. https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Electronics.

Features include but are not limited to this list:

- Intercom like feature known as "Speaker Phone Call"
- Full Duplex speakerphone
- Headset compatible
- Message Waiting Indicator
- Caller ID
- Conference Calls
- Transfer Calls
- 911 location tracking

b. **Alternatives –** We can refuse the RFP. This option would mean outdated hardware will stay in use and there can be a possibility of longer phone outages while parts are obtained. Future technology capabilities will be costly to try and add compatibility to the system, increasing security potential security issues.

c. **Research –** A Request for Information (RFI) was created and sent out to the vendor community to learn more about available technology.

5. FISCAL IMPACT/REVENUE SOURCE

The fiscal impact of this action will be up to $3,671,575.40 over 2 years of the contract covering a 5-year hardware and software maintenance contract. Breakout of costs is as follows:

Equipment & Installation	$	2,962,927.99
5 Year Software Assurance & Maintenance	$	708,647.41
Total	$	3,671,575.40

The revenue source for this motion is Buildings, Technology and Academics capital levy (BTA IV) Telecommunications Systems Modernization account Y06310000T.

Expenditure: ☐ One-time ☐ Annual ☒ Multi-Year ☐ N/A

Revenue: ☐ One-time ☐ Annual ☐ Multi-Year ☒ N/A

6. COMMUNITY ENGAGEMENT

With guidance from the District's Community Engagement tool, this action was determined to merit the following tier of community engagement:

☐ Not applicable

☐ Tier 1: Inform

☒ Tier 2: Consult/Involve

☐ Tier 3: Collaborate

Being part of BTA IV, the Department of Technology Services (DoTS) used the guidelines of the district's Community Engagement Toolkit. DoTS consulted the Security department on their needs from a phone system, involved district staff in the selection process and solicited feedback and suggestions from schools for desired features through communication channels including the School Leader Communicator.

7. EQUITY ANALYSIS

A goal of information technology and communication equipment is to support staff using an equity lens. Being part of BTA IV, DoTS used the guidelines of the district's Equity Toolkit.

The process of selection of projects for BTA IV started in 2015 so early in the planning and decision-making process a broad set of community segments and district experts were engaged. The RFP process employed clear, open, and consistent communication.

Throughout the RFP process, administration has strived to engage on important questions and acknowledge views, aspirations, and contributions. Final selection followed an approved process.

Finally, the same equipment is being put in all buildings and all rooms and administration will continue to work with the vendor and schools to meet its individual needs.

8. STUDENT BENEFIT

The safety of our students and staff is top priority and this upgrade will allow for 911 and other critical communications to all the rooms.

9. WHY BOARD ACTION IS NECESSARY

☒ Amount of contract initial value or contract amendment exceeds $250,000 (Policy No. 6220)

☐ Amount of grant exceeds $250,000 in a single fiscal year (Policy No. 6114)

☐ Adopting, amending, or repealing a Board policy

☐ Formally accepting the completion of a public works project and closing out the contract

☐ Legal requirement for the School Board to take action on this matter

☐ Board Policy No. _____, [TITLE], provides the Board shall approve this item

☐ Other: _____

10. POLICY IMPLICATION

Per Policy No. 6220, Procurement, any contract over $250,000 must be brought before the Board for approval.

11. BOARD COMMITTEE RECOMMENDATION

This motion was discussed at the Operations Committee meeting on April 5, 2018. The Committee reviewed the motion and moved the item forward to the full Board with a recommendation for consideration.

12. TIMELINE FOR IMPLEMENTATION

Upon approval of this motion, the vendor will start working Summer 2018 to install and upgrade the environment. The new system will be upgraded incrementally on a site by site basis with estimated completion date two to three years from start.

13. ATTACHMENTS

- Frequently Asked Questions ~~N/A~~

To: Seattle Public Schools Board of Directors

From: John Krull, Chief Information Officer

cc: Dr. Larry Nyland, Superintendent; Stephen Nielsen, Deputy Superintendent

Date: May 7, 2018

Re: Approval of a 5-year contract for the Telephone System Upgrade with Black Box in the amount of $3,671,575.40.

At the April 25, 2018 Introduction of the referenced Board Action Report (BAR), Board members posed questions that I documented and answered below:

1. **Are there any other products on the market currently that offer a longer life expectancy?**

Research shows that typical life expectancy for a telephone system is 5-7 years. NEC/Black Box have provided SPS with a 10-year support letter guaranteeing that their system will be supportable for 10 years. Note that many of the existing NEC products installed in our district have been in place for 20+ years.

The current NEC product in place at several locations in the district (NEAX 2400) was released in 1983 and migrated over the years. It was finally discontinued in 2009 with final support officially ending in 2012. That's nearly 30 years of support by NEC.

2. **Was life expectancy a component of the RFP? Was benchmarking used?**

Yes, the life expectancy and sustainability of the system was looked as part of the criteria for selection. No specific benchmarking was done except related to our history of performance of the existing NEC system as they are the same manufacturer.

3. **Since all phones do the same basic function (calling), what does the new proposed phone (system) do that our current ones don't? Any new features?**

The NEC communications solution is a very sophisticated solution that has significant built-in features and functionality enhancements from the current systems. It manages all internal and external telephony communications throughout the district. It provides calling restrictions and routing, 911 tracking, and mobile and desktop computer options. The new NEC solution provides the district with a modern Unified Communications platform that can grow with the district's future needs.

With new equipment we can more reliably support the more than million calls that are made on average each month as well as the over 100 average monthly 911 calls.

Most of the features of the system are not seen by the end users as it is related to sustainability and management of the entire system. Integration with new capabilities as they come out is needed and not supported on the older systems. For example, there is money saving potential of upgrading our connections to public telephone systems due to modern connection features of this system. As we upgrade our network in the next few years on a different RFP, the current phone system will not be supported by the changes. Survivability is much higher with the new system to keep things up in an outage and maintain the ability to call in an emergency for the safety of Staff and Students in the schools.

4. Did we ask for a spare parts depot on the contract or is that available?

The NEC/ Black Box 5-year support agreement maintains that all replacement parts will be covered with next-day service. SPS will evaluate this option at the end of the 5-year support agreement. Additionally, the core and hub systems include redundant processors and power supplies to keep the system functional in the event of a hardware failure. We will have additional phones to make sure we have spares to get users back online faster and after the 5 years these will be the spares to replace systems and keep things running.

5. Is there a guaranteed obsolesce date?

There is no guarantee of obsolesce, but the contract has 5 years support built in and NEC/Black Box have provided a 10-year support letter.

6. If model is discontinued, what recourse or safety net do we have to repair?

As stated above, 5 years of support is included, and a 10-year support letter has been provided. If/when current models are discontinued; NEC's track record shows that they will provide migration options to move to the latest platforms available.

Black Box typically maintains replacement parts and provides repair services for several years after NEC products are discontinued.

7. How long do replacement parts typically take?

NEC will provide parts on the next day. However, are set up a Service Level Agreement (SLA) of 2hrs for major incident response.

8. What about "rolling purchases" to maximize life of existing products?

Current systems are beyond support capabilities. Keeping any hardware and software present risk if not replaced as soon as possible.