




M E M O R A N D U M

Date: December 8, 2022

To: California State Lottery Commission

From: Alva V. Johnson, Director 

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Subject: Item 8(b) – Juniper Network Hardware Refresh

ISSUE

The California State Lottery (Lottery) seeks California State Lottery Commission (Commission) approval to replace the aging Juniper network infrastructure and to procure Juniper network software and support before the current Juniper equipment and support is no longer available from the manufacturer. This project will ensure reliability and continuity of critical Lottery network services starting with Lottery Headquarters by replacing the aging Juniper access switches as part of infrastructure lifecycle updates. The total amount for this agreement is \$684,361 for a 3-year term beginning February 1, 2023, and ending January 31, 2026.

BACKGROUND

The Lottery network is essential to conducting Lottery business operations and supports critical functions within the organization. The Juniper network switches along with the associated network software, provides the conduit for servers and computers to communicate with each other and the outside world. This communication between computers and systems allows Lottery employees to send and receive email, access business applications, connect to gaming system applications, utilize the internet to conduct business, and collaborate with others. In addition, the network is essential for continued use of Voice over Internet Protocol (VoIP) in the headquarters building and other Lottery buildings for business phone services.

The Lottery's network hardware and associated software are subject to periodic updates, including software security updates. IT equipment has a finite lifespan and eventually the

hardware becomes end-of-life and, at some point, end-of-support. To ensure the Lottery network remains dependable and supported, new Juniper network hardware, software, and support must be procured before the current Juniper equipment and support are no longer available from the manufacturer. Safeguarding the network infrastructure through vendor support and an annual maintenance contract ensures that the Lottery network is protected from security vulnerabilities and that the hardware receives regular software updates which improves performance, stability, functionality, and addresses potential security vulnerabilities. Purchasing Juniper support also ensures that the Lottery's technical staff can obtain technical assistance from Juniper when necessary. Technical assistance from Juniper is essential to resolving network issues in a timely manner as manufacturer support, expertise, and experience with respect to its own equipment and software is superior in contrast to non-Juniper employees.

DISCUSSION

The Lottery network access switches are reaching End-of-Life (EOL). The current support contract ends in March 2023 and the hardware will be EOL in June 2024. The network switches must be replaced to avoid network performance issues and security risks. Since the last Juniper support renewal took place, the Lottery has been continuously improving the network infrastructure through hardware refreshes, configuration improvements, security patches, and operating system upgrades. These continuous improvement efforts require updated Juniper network hardware and corresponding Juniper support services to be in place to keep the business operating without interruption and to provide the ability for the Lottery to proactively address issues with the vendor. Additional benefits include device configuration analysis, software updates, advanced hardware replacement, and technical consulting support.

This Juniper agreement will provide essential benefits for the Lottery's network infrastructure. This agreement will enable the Lottery to refresh aging equipment at Headquarters and modernize the Lottery network with a new cloud management system. The new cloud management system will provide better support tools reducing time spent by staff traveling to remote offices. In addition, the new Juniper platform will increase the Lottery's capabilities for identifying and resolving issues that occur on the network by providing tools that leverage the most current Artificial Intelligence such as Juniper's Marvis, which reduces the average time to resolution for outages and downtime on the Lottery network. Investing in the Lottery's Juniper network infrastructure is critical to ensuring communication and other critical business services remain available to staff, partners, and players and ensures the Lottery's commitment to maximizing supplemental funding for California's education.

In March 2022, ITSD completed a thorough market analysis and solutions assessment that included an in-depth pilot to review the latest technology from leading network

manufacturers to determine the best fit for the Lottery. The last time an in-depth analysis and assessment like this was completed was in 2010. This analysis and assessment spanned nearly 10 months and involved key network and technical subject matter experts to evaluate all products. Juniper was identified as the solution that best fit the Lottery's need. As such, the Lottery will continue to be a Juniper shop for the foreseeable future until the next market analysis and solutions assessment is conducted again in approximately 10 years due to the complexity of the Lottery's network and the investment being made into Juniper.

The Lottery's formal competitive procedures will not apply to this procurement, pursuant to the exception set forth in Lottery Regulations Section 8.1.2.C as follows:

"The goods or services will be acquired using a standard United States General Services Administration Agreement or a State of California, Department of General Services Master Services Agreement, Multiple Award Schedule, Master Rental Agreement, or other such agreement which establishes a list of pre-qualified bidders who have agreed to contract terms and prices."

The Lottery utilized a leveraged procurement agreement, requesting bids from multiple resellers that participate in the Mandatory Statewide Contract administered by the State of California, Department of General Services (#1-19-70-19J-2). The lowest bid was submitted by Dynamic Systems Inc.

RECOMMENDATION

The Lottery recommends that the California State Lottery Commission approve the agreement with Dynamic Systems Inc. for the provision of Juniper network access switches, supporting software, and associated network maintenance and support. The maximum agreement amount is \$684,361 for a 3-year term beginning February 1, 2023, and ending January 31, 2026.