

Alaska Land Mobile Radio System

FY2018 Request: \$1,534,600

Reference No: AMD 54931

AP/AL: Appropriation

Project Type: Information Technology / Systems / Communication

Category: General Government

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Cheryl Lowenstein

Estimated Project Dates: 07/01/2017 - 06/30/2022

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Brief Summary and Statement of Need:

The Alaska Land Mobile Radio (ALMR) is an interoperable system that provides radio service to local, state and federal agencies. This project contributes towards the necessary upgrades to 911-dispatch and public safety radio communications system components in order to meet the state's requirements for its share of the ALMR system. This project provides a portion of the total funds needed to bring the State components current. An additional \$3 million is included in the Governor's FY2017 Supplemental Budget, bringing the combined project funding total to \$4,534,600.

Funding:	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
1004 Gen Fund							\$0
1243 SBR	\$1,534,600						\$1,534,600
Total:	\$1,534,600	\$0	\$0	\$0	\$0	\$0	\$1,534,600

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Prior Funding History / Additional Information:

Sec17 Ch2 SLA2016 P35 L18 SB138 \$1,274,571

Sec4 Ch2 SLA2016 P24 L10 SB138 \$1,000,000

Project Description/Justification:

What is the purpose of the project?

Public Safety mission critical communications systems typically run in five to fifteen-year life cycles for the hardware and equipment components. Like any other computer, the hardware and software components that make up the system require continuous software updating and patching to maintain cyber security protections. The current ALMR system has been in operation since 2003. The components to be refreshed are at the end of those life cycles. In 2013, ALMR underwent an upgrade to the major core components at the center (known as zone controllers) and a system software upgrade. Those components and software are at end-of-support. The manufacturer provides a new system release each year and only supports the last five releases. The components and software in our current 7.13 release are at end-of-support from the manufacturers beginning fall of 2017. This project is expected to take a year minimum to implement once funded and on contract. The plan with

the 2013 upgrade was all ALMR partners would fund a service agreement (SUA II) to keep those components refreshed every two years and always current.

The purpose of this project is to upgrade the major core components at the center (known as zone controllers) and perform a system-wide software upgrade. The core operating system hardware and software will be out of support by the various manufacturers in the fall of 2017. This project ensures the State of Alaska (SOA) zone controller is brought to a current release that will be manufacturer-supported and maintained current through the SUA II program. The Department of Defense (DOD) and the Municipality of Anchorage partners have implemented plans to fund the upgrade of their zone controller and needed system software upgrades and fund the SUA II maintenance program for their zone controllers. Because all three zone controllers must be upgraded simultaneously in a shared system, once the State has allocated the total funds necessary, these systems can be refreshed.

Is this a new systems development project, or an upgrade or enhancement to existing department capabilities?

This is a lifecycle upgrade to portions of the existing 911-dispatch and public safety communications system aimed at maintaining current services and also refreshing technology that is now at the end of its supported and useful life.

Specifically, what hardware, software, consulting services, or other items will be purchased with this funding?

These funds will go towards purchasing hardware, software, services, staff time, travel and training required to support the upgrade along with ancillary components required to successfully remove the aging (7.13) state-owned zone controller equipment and replace it with newer (7.17) equipment. The specific hardware, software, services and other items will be determined when the project proposal is provided to the vendor. Any available funds will be applied toward the 7.17 upgrade, the SUA II Agreement and the base station upgrades in that order. Contracts will be established to assist in this effort.

	FY2018
System Upgrade Agreement II (SUA II) Coverage	\$931,700
Core Systems Upgrade from 7.13 to 7.17	\$3,602,900
Total	\$4,534,600

How will service to the public be measurably improved if this project is funded?

Funding this project will ensure continuity of services and increase Alaska’s first responder’s ability to communicate and provide mutual and interoperable aid to themselves and other jurisdictions.

Will the project affect the way in which other public agencies conduct their business?

ALMR is an enterprise class, mission critical, public safety grade communications system. It supports communications for over 125 agencies across the state including State of Alaska, federal, municipal, and first responder volunteer organizations. There are over 20,500 radios (known as subscriber units) operating on the system at a rate of over 1.2 million voice calls per month.

State of Alaska agency operations depend upon ALMR for their core communications and operations. Key Alaska agencies include: Department of Public Safety, Department of Transportation and Public

Facilities, Department of Corrections, Department of Natural Resources, Municipality of Anchorage, Fairbanks North Star Borough, City of Fairbanks, Mat-Su Borough, Wasilla Police Department, Soldotna Police Department, Valdez Police and Fire Departments, Kenai Police and Fire Department, and many other communities where ALMR coverage exists and many more when 911-dispatch services are considered. All DOD agencies and numerous federal agencies including the Drug Enforcement Agency, Federal Bureau of Investigation, Federal Aviation Administration, Federal Emergency Management Agency, National Park Service, Transportation Security Administration, and the US Marshal Service. The current list of 125 agencies can be found at: <http://alaskalandmobileradio.org>

What are the potential out-year cost implications if this project is approved? (Bandwidth requirements, etc.)

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
System Upgrade Agreement II (SUA II) Coverage	\$ -	\$ 939,200	\$ 947,000	\$ 955,000	\$ 963,300	\$ 971,800	\$ 4,776,300
Quantar Base Station Upgrades	\$ 5,944,060	\$ 7,987,157	\$ 8,670,157	\$ -	\$ -	\$ -	\$ 22,601,374
Total	\$ 5,944,060	\$ 8,926,357	\$ 9,617,157	\$ 955,000	\$ 963,300	\$ 971,800	\$ 27,377,674

The above figures are based on current estimates for equipment refresh.

The core system upgrade is required in order to maintain support and security services within the ALMR system and must follow the Gold Elite console replacement project that is currently underway using funds appropriated last year. The DOD and Municipality of Anchorage have already completed their console upgrades and Soldotna’s is currently underway. Wasilla Police Department (MatCom) and Valdez have both identified their funding source and will be executing their console upgrades prior to this project. This project provides a substantial portion of the funding necessary to upgrade the Core System Upgrade, SUA II program and Quantar Base Station efforts.

The Quantar Base Station upgrades must be done as well as the next phase of the ALMR. This equipment is located at sites around the state and provides the radio communications coverage for the users. The State has over 70 sites with Quantar Base Stations that need to be upgraded to current, supportable Base Station models. The DOD has been upgrading their Quantar Base Stations at their sites and has funding planned to complete that work. The Municipality of Anchorage has the current model of Base Stations already installed at their sites.

What will happen if the project is not approved?

ALMR is comprised of software and hardware that has various lifecycles and requires updates and replacement just as any Enterprise-class network does. If the components of this system are not kept current, we risk a failure of the system and we risk the loss of support from both our partners and the manufacturers; we expose our network and its users to undue risk – both in terms of cyber-security and overall functionality. Our existing partnerships will also be at risk as federal law requires its users to operate in a cyber-protected environment.

Other ALMR cooperative agreement members who are also infrastructure owners have all agreed to continue supporting the ALMR system. The State of Alaska is at risk of losing support for a unified enterprise public safety communications system. Without the ALMR system, Alaska faces a risk of

reverting to a time when agencies all provided their communications independently. This would be significantly more expensive to all parties who use ALMR and its services. Individual agency systems would not be able to communicate easily with one another. That lack of interoperable communications has throughout history, repeatedly proven detrimental to public safety and the ability of first responders to work together and communicate with one another during day-to-day operations and emergencies.

The vast majority of the over 120 user agencies of ALMR would likely not be able to replicate the 911 and radio dispatched services; not only because of the equipment costs, but also the staff and operating costs required to implement and operate an Enterprise-class, public-safety radio dispatch system.

This project will take the State over a year to implement. This means we will be past the end-of-support life for many of the hardware and software components identified in this project. The SUA II program's purpose is to keep the State and its partners on a funded, planned maintenance and refresh plan ensuring it is always supportable by manufacturers.