

**ALASKA STATE LEGISLATURE  
HOUSE STATE AFFAIRS STANDING COMMITTEE**

Anchorage, Alaska  
January 3, 2008  
1:07 p.m.

**MEMBERS PRESENT**

Representative Bob Lynn, Chair  
Representative Bob Roses, Vice Chair  
Representative John Coghill (via teleconference)  
Representative Craig Johnson  
Representative Andrea Doll (via teleconference)  
Representative Max Gruenberg

**MEMBERS ABSENT**

Representative Kyle Johansen

**OTHER LEGISLATORS PRESENT**

Senator Con Bunde

**COMMITTEE CALENDAR**

Department of Administration Briefing on the Alaska Land Mobile  
Radio Project (ALMR)

- HEARD

**PREVIOUS COMMITTEE ACTION**

No previous action to record

**WITNESS REGISTER**

RACHEL PETRO, Deputy Commissioner  
Department of Administration  
Juneau, Alaska

**POSITION STATEMENT:** Presented information related to the Alaska  
Land Mobile Radio (ALMR) project.

MATT LEVEQUE, Major  
Administrative Commander  
Division of Alaska State Troopers  
Department of Public Safety  
Anchorage, Alaska

**POSITION STATEMENT:** Demonstrated the ALMR system.

JIM KOHLER, Program Manager  
Alaska Land Mobile Radio System  
Department of Administration  
Anchorage, Alaska

**POSITION STATEMENT:** Answered questions during the presentation on ALMR.

MICHAEL O'HARE, Project Manager  
Alaska Statewide Emergency Communications/Information Technology (ASEC/IT)  
Administrative Services Division  
Department of Military & Veterans Affairs  
Fort Richardson, Alaska

**POSITION STATEMENT:** Responded to questions related to ALMR.

TIM WOODALL, Federal Project Manager  
Alaska Land Mobile Radio (ALMR) System  
United States Department of Defense (DOD)

**POSITION STATEMENT:** Presented information related to ALMR.

#### **ACTION NARRATIVE**

**CHAIR BOB LYNN** called the House State Affairs Standing Committee meeting to order at [1:07:29 PM](#). Representatives Coghill (via teleconference), Johnson, and Lynn were present at the call to order. Representatives Roses, Gruenberg, and Doll (via teleconference) arrived as the meeting was in progress. Also present was Senator Bunde.

#### Briefing on Alaska Land Mobile Radio Project

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CHAIR LYNN announced that the only order of business was the briefing on the Alaska Land Mobile Radio Project.

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RACHEL PETRO, Deputy Commissioner, Department of Administration, presented information related to the Alaska Land Mobile Radio (ALMR) project. She stated that the project was at a critical juncture and that the department has been working diligently to address the issues and questions surrounding the project since May of 2007. Moreover, millions of federal and state taxpayer dollars have been invested in the project to date. Ms. Petro

said the administration must address the issues raised in the 2005 audit, complete the project build-out, and move the system into an operations and maintenance phase. She informed the committee that her presentation would be based on the "white paper" and the "frequently asked questions" provided in the committee packet.

MS. PETRO introduced the following: Public Safety Commissioner Walt Monegan, ALMR Executive Council member for the State of Alaska; Anand Dubey, Enterprise Technology Services Director for the Department of Administration; Jim Kohler, ALMR program manager since May, 2007; Dave Blaisdell, Enterprise Technology Services Deputy Director; Major Matt Leveque, Deputy Director of field operations for the Department of Public Safety and ALMR User Council chair; Jeff Tucker, chief of the Northstar Fire Department and representative of the Alaska Municipal League on the ALMR executive council; [Kathie Wasserman, Executive Director of the Alaska Municipal League]; Tim Woodall, program manager for the Department of Defense; Del Smith, ALMR operations management office coordinator; and Mike O'Hare, project manager for Alaska Statewide Emergency Communications/Information Technology, Department of Military & Veterans Affairs.

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MS. PETRO offered a brief history of ALMR. She said discussion of an interoperable communication system in Alaska began in the early 1990s and continued with the chartering of an executive council to oversee a request for information (RFI) in 1997. That RFI ultimately resulted in the signing of a memorandum of understanding (MOU), in 2001, by the State of Alaska, the U.S. Department of Defense (DOD), non-DOD federal agencies, and the Alaska Municipal League. Those entities agreed to cooperatively design and build a wireless, interoperable communication system in the interest of public safety and emergency response. Ms. Petro noted that the ALMR executive council consists of three voting members: the State of Alaska, DOD, and a representative from the non-DOD federal agencies. She also named one current and one anticipated associate member; the Alaska Municipal League and the Municipality of Anchorage, respectively. The executive council, she related, is the governing authority responsible for oversight direction, as well as management of the system. The user council, which is made up of twelve members representing four constituency groups, is to make recommendations to the executive council regarding operations and maintenance decisions affecting the system.

MS. PETRO defined the ALMR system as "a wireless, digital, trunk, wide-area network, shared system between state and federal agencies and local municipalities." She explained that the land mobile radio system is a two-way system used by first responders and public safety officials for instant effective and private communications during everyday operations. The system also provides the efficiency, security, and flexibility required during emergencies, on demand and in real time. Agencies utilize the ALMR system for their daily communication system, as well as for interoperable communications for large interagency emergency responses.

MS. PETRO said the ALMR system also satisfies the federal mission and role requirements for 911, Homeland Defense, Homeland Security, and defense assistance. Furthermore, the system also satisfies the FCC-mandated narrow banding requirements for 2012, "within its footprint."

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CHAIR LYNN asked what ALMR can offer that is not currently being provided.

MS. PETRO responded that the system will allow local, state, and federal agencies the ability to communicate on one system. She offered her understanding that there was a time when Anchorage's emergency medical technicians could not communicate with its firemen, even though they were a part of the same municipality.

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MATT LEVEQUE, Major, Administrative Commander, Division of Alaska State Troopers, Department of Public Safety, demonstrated the ALMR system, by using it to contact an intelligent transportation systems project manager in the Department of Transportation and Public Facilities, a deputy chief of the Fairbanks Police Department, a dispatch center supervisor for the Denali National Park Service, and finally, an ALMR systems technician at Fort Richardson. In response to a question from Chair Lynn, he explained that, with the exception of the call to the Fairbanks Police Department, the other calls were made on a common channel and the people being called could hear the other calls being made. He stated his hope that the committee will walk away with a sense of confidence about the current ability of law enforcement, first responders, and federal and state agencies to communicate with each other.

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MAJOR LEVEQUE, in response to a question from Representative Gruenberg, said he is unaware if there has been a list compiled of agencies who could conceivably be reached through the system. He noted that there are common frequencies built into the radios; therefore, anyone using a "national standard common radio" would be able to interoperate with others using that frequency. He said he does not know if the system is currently designed to communicate with other countries. In response to a question from Senator Bunde, he said there is a "satellite reachback capability" which would make it possible in the future to communicate at great distances; however, the system is not currently set up to do that on a "day-to-day" basis. In response to a follow-up question from Senator Bunde, as to whether other states use the ALMR system, he offered his understanding that "there are similar systems with similar capabilities designed differently."

MS. PETRO added, "But all to a basic P-25 standard." She suggested that Jim Kohler could speak on the capabilities of other states.

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REPRESENTATIVE GRUENBERG asked whether there was federal legislation on this issue and whether the federal government could mandate that other states [use similar technology]. He noted that the Federal Emergency Management Agency (FEMA) has "some question as to its efficacy so far."

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JIM KOHLER, Program Manager, Alaska Land Mobile Radio System, Department of Administration, explained that the system operates through what is known as the P-25 standard. By the Rockefeller-Morella Act [Public Law 104-113], federal agencies were given the authority to establish a standard for an open environment. Under the aegis of the Association of Public Safety Officers, a [federal] agency worked directly with the Telecommunications Industry Association (TIA) and gathered a statement of need from local municipalities, state agencies, and federal agencies. Mr. Kohler explained that it is through that process that the TIA ultimately established and adopted a single set of standards for an interoperable public safety communication system, which is known as the P-25 system, or the P-25 standards. He said the

answer to Representative Gruenberg's question is that communications are possible with other states and other states are trying to generate this kind of system. Furthermore, he said that all of those states are building their system under the same P-25 system. He said he knows of 15 to 18 states that are in various stages of building and operating "this kind of system." Most of those states, however, have not yet attempted to build a system that reaches from border to border, but instead are focusing on their large population centers. He remarked that Alaska's system is unique because it is the most integrated and interoperable of any system currently being built in the country.

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REPRESENTATIVE GRUENBERG said he would like to know what percentage of the funding is from the federal government, what is the source of the remainder of the funding, and whether the federal funding will be ongoing.

MS. PETRO said the total cost has not yet been projected; however, the cost to date is \$150 million, two-thirds of which is being supplied by the federal government. She said the DOD is committed to the program. The next step is to study the cost of ownership and to determine what it will take to operate the system. Following that will be to determine "how we're going to share that across the users." She emphasized the seriousness of the issue and the commitment to it by all involved. In response to a question from Representative Johnson, she said the total cost of ownership study should be completed by the end of February [2008], and the ALMR executive council should begin discussing the results in March.

MR. KOHLER, in response to a question from Senator Bunde, said he is not aware of a federal requirement that all states develop an interoperable system; however, he said any state that does try to develop an interoperable system will follow the P-25 standards.

MS. PETRO continued her presentation. Regarding slide 4 of the PowerPoint, she reviewed the reasons that ALMR is important: for day-to-day use, for emergency use, and for the benefit of cost efficiencies.

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MS. PETRO said cost efficiency is a concept at this point; however, ALMR would enable various entities to share costs of implementation, operations, and maintenance, which would make the use of the ALMR system possible for many agencies that would otherwise not be able to afford it. However, she reiterated that although the total cost is yet unknown, a significant investment has already been made. She said she would address this issue later on in the presentation. Referring to the information on slide 5, Ms. Petro noted that there are currently 12,000 radios in use in 55 local state and federal agencies in Alaska. Failure of the ALMR system would mean smaller entities would have to bear the cost of individual systems, and this could cause some of them to return to a conventional system that does not provide the capacity that the trunked ALMR system provides. The result could be a limited interoperability of communications among agencies, because an individual system may not be able to meet the federally mandated security requirements. Those federal requirements, she explained, make the interoperable communication possible.

MS. PETRO stated that, in the process referred to as "refarming," the Federal Communication Commission (FCC) adopted requirements in 1992 to enhance spectrum efficiency in the VHF and UHF land mobile radio band. The FCC requirements, known as the FCC mandatory narrow banding, moved mobile radio licenses from the 25 kilohertz bandwidth to a 12.5 kilohertz bandwidth. Although those requirements were adopted in 1992, FCC has extended implementation deadlines along the way. The current deadline, Ms. Petro noted, requires all current 25 kilohertz licenses to relocate to the 12.5 kilohertz by December 31, 2012.

SENATOR BUNDE asked whether it would be accurate to say that the differentiation between state users and municipality users is an artificial one, because the state will probably be providing the radios.

MS. PETRO replied that that is a decision that has not yet been made. She said there are costs not only associated with the equipment, but also in operating and maintaining the infrastructure of the system. Both issues will be addressed, and the legislature will be involved in that process. She stated that she is aware of the concerns of the municipalities and agencies.

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MS. PETRO, in response to a follow-up question from Senator Bunde, said she does not know the cost of each radio.

CHAIR LYNN surmised that the cost of the radios will be much less than the cost of operating and maintaining them.

MR. KOHLER reported that 2,155 radios in use by the state represent a dollar investment of approximately \$10.6 million. A "smart box" costs approximately \$5,000.

MR. KOHLER, in response to Representative Johnson's questions, said the initial radios were manufactured by Motorola, but other manufacturers have started entered the market in response to the growing demand. In terms of the total number of users, it is estimated that, when everything currently under construction is completed, the number of users will increase from the current 12,770, to approximately 15,000, and as the system expands, so will the number of users. The final number that will be reached will depend on two factors: how much expansion there is to parts of the state not currently covered, and how many entities currently using the system expand their use to other people. He offered an example.

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MR. KOHLER, in response to Chair Lynn, said whoever buys the radio owns it, and he estimated the typical lifespan of a radio is well beyond that of a cell phone and would extend three to five years. He suggested that each manufacturer could supply that information.

MS. PETRO, in response to Chair Lynn, pointed out a map included in the committee packet that shows the areas of Alaska in which there are infrastructures that allow the radios to work; it shows "line of sight."

CHAIR LYNN pointed out that there can not be line of sight between "here and Barrow."

MR. KOHLER said the system has several components to it, and the critical component is the microwave system that the state operates, known as the State of Alaska Telecommunications System (SATS), which is a string of microwave sites that cover the extent to which "our microwave system exists in the state." The ALMR system, he explained, is equipment that is attached to those microwave sites. The ALMR system is plugged into

approximately 80 of the 160 SATS sites, from which point it can get where it needs to go.

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MR. KOHLER, in response to Chair Lynn, confirmed that if one connection is lost, it does not affect the other connections. In response to a follow-up, he estimated the cost of making connections to the microwave system is, on average, \$500,000; however, if an antenna already exists, the cost would be considerably lower.

MS. PETRO, in response to Chair Lynn, said the cost for preventive maintenance is still being determined.

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REPRESENTATIVE JOHNSON observed, "When I look at that map, I see almost all those places are connected by fiber optics. Why are we using what I consider antiquated technology with a microwave?"

MR. KOHLER confirmed that a significant amount of the connections have commercial fiber optic capability that would be available; however, he explained that the system must be robust and independent enough to exist even in the event of a "fiber failure." He recalled an event that severed both fiber connections between Anchorage and Fairbanks. He emphasized the importance of having a system that operates separately in the event of an emergency. He said there is no doubt that a fiber optics system can handle many types of issues that a microwave system cannot. Furthermore, Mr. Kohler acknowledged that he is not saying that fiber optics will not be used in the future, but said, "The system you have now was built on the foundation of those project demands and those project decisions."

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REPRESENTATIVE JOHNSON suggested that a satellite system would probably be the most secure choice, and Alaska could have one launched to orbit over the state for \$20 million. He asked if that option could be considered.

MR. KOHLER responded that there is no perfect system; each one has its advantages and disadvantages. He said satellite ultimately does have a place and the system is being built to be able to "utilize that architecture."

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MS. PETRO returned to her presentation, offering a history of the ALMR system. First, she said, the system began with a plan to construct 49 sites jointly by DOD and the State of Alaska. The design for the system expanded to include 41 additional sites to be constructed by the state, and later expanded again to include the construction of an additional 15 sites by the Municipality of Anchorage on its Anchorage Wide Area Network (AWARN) system. The ALMR system was designed to provide interoperable communication along the road system, but, as demonstrated by the map on slide 6 of the PowerPoint, grew to include Kodiak and Southeast Alaska. Since the 2001 MOU was signed, seventy-four active sites have been built, and seven sites are under construction and are scheduled to be operational by the end of August or September of 2008.

MS. PETRO noted that, of the two maps in the committee packet, one names the Juneau [and Skagway] area sites [because it does not include Southeast Alaska], while the other shows those sites on the map. With the completion of the sites under construction, the system will include a total of 81 sites at a cost of up to \$150 million. She explained that that number was thought to be firm a couple of months ago; however, after examining the total cost of ownership study, that number is anticipated to go down. She noted that there were nine sites planned for construction in 2008; however, the expected federal grant funding was not received, so those sites are pushed "into a future space" and could cost \$5 million to \$7 million to complete.

MS. PETRO, in response to a question from Chair Lynn, said she is not certain why the federal funding was not received. She noted that the governor's original fiscal year '08 (FY 08) budget included a \$14.1 million federal authority for receipts. She continued, "In February, we learned that we weren't eligible for [\$14.1 million], we were eligible for [\$10 million]. And then, in May, we learned that the feds were redoing the entire grant process, and that the state ..., including municipalities ..., would only be eligible for about \$6 million, and, of that, [there was] only one entity ... - I think it was in Fairbanks - that received any funding."

CHAIR LYNN asked if the Congressional delegation has been made aware of the situation.

MS. PETRO confirmed that those involved with ALMR speak with the delegates regularly concerning interoperable communications. She offered that Mr. O'Hare would provide further details.

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REPRESENTATIVE JOHNSON asked for confirmation that the cost of building the remaining sites is already included in the aforementioned plus or minus \$150 million.

MS. PETRO answered that is correct.

MICHAEL O'HARE, Project Manager, Alaska Statewide Emergency Communications/Information Technology (ASEC/IT), Administrative Services Division, Department of Military & Veterans Affairs, in response to a concern expressed by Representative Gruenberg regarding the grant process, noted that there had been a collaborative application between the Department of Military & Veterans Affairs and ALMR system to provide further development of the ALMR application, as well as development of DMVA's statewide emergency communication system. That joint application was denied with no reason given. He confirmed that Ms. Petro was correct in her recollection that Fairbanks was the only area awarded the Technology Opportunities Program (TOP) grant money.

REPRESENTATIVE GRUENBERG asked whether Ms. Petro had developed a plan B [for funding].

MS. PETRO said DOD is dependent on the ALMR system and will not be abandoning it; however, the cost sharing issues have not yet been determined. She said she would be willing to speak on the topic of the aforementioned nine sites and plans B and C.

REPRESENTATIVE GRUENBERG asked that the board develop a plan B for funding when it meets in March.

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SENATOR BUNDE said ALMR would be good for Alaska, and although many would have proceeded in a more cautious manner initially, he said, "We are where we are." He posited that the crux of the issue is that DOD is deeply involved, but the state and municipalities are not necessarily the responsibility of DOD. Senator Bunde suggested that the State of Alaska may need to commit to a "trust me" contract - one in which all the blanks are not filled in. He said he does not know what the future is

in terms of federal funding, but most people realize that Alaska is not going to be "at the head of the line" like it has been in the past. He expressed his hope that there will be further discussion about signing a contract without knowing the details and the cost to the state.

MS. PETRO said she would discuss the cooperative agreement and subsequent agreements that need to be formed to move the system forward. Regarding contracts, she stated, "From a state perspective, we are obligated by our parent system to make sure that anything that we sign and commit to, not only goes through that process, but also has the appropriate appropriation from the legislature to fund it."

TIM WOODALL, Federal Project Manager, Alaska Land Mobile Radio (ALMR) System, said DOD got involved in this cooperative approach with the State of Alaska because of the need to provide "(indisc.) authority" and its need to be able to interoperate with state and local agencies. He said DOD typically operates within its "fences" on land mobile radio, which is a service that Congress has mandated must be used by first response entities and operated on specific spectrums allocated to public safety. The spectrum, he explained, is divided between state and local agencies and governed by the FCC. On the federal side of the House it is governed under the executive branch through the Department of Commerce, National Telecommunications Information Administration (NCIA). In both cases, he said, Congress, as a result of agreements in Geneva, under the worldwide radio administrative committee, required public safety agencies to carry land mobile radios. This is true anywhere in the world.

MR. WOODALL relayed that land mobile radio is a dispatch-centric technology, which is why the Association of Public Safety Communications Officials had to define a standard. The previous barriers to interoperability, he noted, were proprietary standards being used by different companies. He offered an example. The other barrier, he said, was the lack of joint planning to build compatible systems. The lack of standards made it impossible to communicate.

MR. WOODALL spoke of the aforementioned change to a narrowband spectrum from the 25 kilohertz channel spacing. He said both the FCC and the NCIA saw the demand for public safety land mobile radio requirements and interoperability and the need to follow Homeland Security Presidential Directives-5 and -8, which said that federal, state, and local agencies must follow the

National Incident Management System and be able to operate with each other. The president, through executive order, established Statewide Communications Interoperability Planning Methodology (SAFECOM), an organization that is driving the public safety operability communications grant, for which the state has just worked a statewide interoperability plan. Local government and state agencies, he said, cannot get grant money to buy the land mobile radios from the federal government, unless they have federal, state, and local agencies planning together on how to interoperate and have shared systems within federal, state, and local agencies. Mr. Woodall named the states that are following these mandates in order to receive grants, including: New York, Pennsylvania, Michigan, Ohio, Colorado, Nevada, Wyoming, and California.

MR. WOODALL said DOD is committed to Alaska; it has put up approximately \$72 million to date in infrastructure and subscriber equipment. In addition, the DOD has hosted equipment in state sites and it has done so in a partnership with the state, so that there is interdependency.

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MR. WOODALL stated that spectrum is shared between the federal executive branch and the FCC public safety so that DOD spectrum is paired with state and local spectrum. Furthermore, DOD is sharing infrastructure and the cost of building the system. In terms of operations and maintenance, he said he concurred with Ms. Petro that all of the costs are not known. Notwithstanding, he noted that the system has been operating since 2004, and it was built in phases. He stated, "We do have an operational cost basis for what that costs to operate, and that's what the TCO [(total cost of ownership)] is documenting." He said there are contracts that are paid annually that maintain the current infrastructure of the system.

MR. WOODALL reminded the committee that land mobile radio is designed under a public safety standard to meet public safety demands. Agencies responsible for public safety cannot buy any other type of radio on which to operate other than that which uses the particular spectrum allocated by Congress. Thus, because there are but few entities that have a detailed and technical requirement for communicating, the costs of the radios they use are much higher than a cell phone. He noted that FCC mandates that public safety systems be privately owned by the state. The purpose for that, he explained, is that "the FCC

will not let you compete for communications with the public in an emergency."

MR. WOODALL pointed out the features of the radio on display in the committee room. For example, there is a red button that is pushed to indicate that an officer has been shot. There are many safety and security factors built into the radio that allow firefighters to take it into a fire. He listed the longstanding barriers to interoperability between public safety agencies: planning, technology, funding, and spectrum. He said Congress, through the Telecommunications Act of 1934, divided the radio frequency spectrum into "islands," separating state and local agencies from federal agencies that required spectrum for national defense purposes. Mr. Woodall said Congress did not want the president to be able to take spectrum from state and local agencies. He referred to the spectrum sharing agreement that resulted as a response to the House of Representatives Conference Report 1705, which emerged from a defense appropriations bill in the year 2000. The agreement is that the Department of Defense will work cooperatively with the FCC and the Department of Public Safety to work out the ability to share spectrum between federal and state agencies.

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MR. WOODALL continued to explain that the U.S. Office of Management & Budget mandates federal agencies, including DOD, the U.S. Department of Justice, the U.S. Department of Treasury, and the U.S. Department of Homeland Security, to attempt, in all cases, to share systems for public safety purposes among federal, state, and local agencies. He concluded, "For all of those reasons, we, the Department of Defense in Alaska, are engaged with the state and local agencies, ... in working together for an infrastructure, and we're committed in the long run for maintaining this system in this type of shared environment."

REPRESENTATIVE ROSES asked whether the mobile units used by the National Guard are part of the system to which Mr. Woodall referred.

MR. WOODALL said yes. He further explained that the ALMR system addresses four pillars of interoperability: fixed infrastructure which provides general coverage along roadways; critical infrastructure inside buildings such as hospitals; at gateways, such as utilities, so that they can communicate with public safety agencies; and, through the use of transportable

equipment, the ability to restore communications within two hours in the event of a breakdown, and to expand coverage outside of the permanent infrastructure.

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REPRESENTATIVE ROSES observed that the mobile units and their operators are very impressive and the vast coverage and interoperability provided by them is important. He expressed his belief that the cost of the units is not a concern because public safety agencies need the best tools possible. However, he is concerned about whether this system will be obsolete when it is finally operational. Representative Roses stated that his experience with the DOD, the active military, and the National Guard, indicates that Alaska is the standard all states should be trying to achieve. He hoped to continue that standard with the interoperability of Alaska's public safety units.

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MR. WOODALL advised the committee that the technology being implemented is the latest technology in land mobile radio systems. The state agencies were previously operating on 30 year old conventional radio equipment and he questioned how often systems should be updated. The DOD was on a trunked system for 18 years and the Alaska system was not replaced until the narrow band mandates required replacement. He pointed out that this equipment should last the life cycle of the system. Furthermore, the technology that the state is moving from, which is the standard two way radio, is now a true, digital, voice over [Internet technology] integrated system. As a result, the radios are software defined and enhancement for the future is available for software upgrades, without throwing equipment away. The cost of updating the system is simply "running software."

CHAIR LYNN asked what will be the biggest challenge to implementation, cost sharing or legislative funding.

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MS. PETRO said this issue will be addressed later in the presentation.

REPRESENTATIVE JOHNSON pointed out that the cooperative agreement was signed in December, 2007. He asked whether the

federal funding was not received because the agreement was not in place prior to the time of the application.

MS. PETRO opined that the agreement required is the local agreement for the operation of the radios. She added that the cooperative agreement was in draft form for almost three years and the goal for it to be signed in June "slipped."

REPRESENTATIVE JOHNSON clarified that his point is whether the state did everything possible to qualify for the federal money and did not "drop the ball."

MS. PETRO opined that the state did not drop the ball, in fact, it worked closely with [U.S. Office of Management and Budget] and consistently received the funding for the past several years. She said, "The feds totally redid their grant program" and stated her intention to pursue the issue.

REPRESENTATIVE JOHNSON encouraged the acquisition of federal money.

CHAIR LYNN pointed out that federal money "is still our money."

SENATOR BUNDY observed that the MOA is a precursor to a contract; however, there are no details on cost. He questioned whether, after taking three years to execute the MOA, all of the cost details will be known in five months.

MS. PETRO re-stated her intent to address that issue. She returned to her presentation and referred to the nine sites that were not federally funded. The reason ALMR has not included a request for a state fund to replace the federal funding is that her department believes it is critical to complete the sites that are currently funded and to address the 2005 legislative audit concerns. The plan is to complete the project as inherited from the previous administration, and it is currently funded by the legislature. Secondly, the system needs to transition to an operations and maintenance mode, which forces the cost issues to emerge. She indicated that there are many issues, policies, and procedures that have to be worked through prior to making the system bigger through more sites and expanded coverage. The most critical of these is the cost component. She concluded that the success of the ALMR system depends on an umbrella governance agreement that allows the system, with its partners, to move from the build-out phase to the operations and maintenance phase. Furthermore, the total

cost of ownership agreement becomes an appendix of the cooperative agreement and shows the cost.

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SENATOR BUNDY assumed that executing a cooperative agreement would be a commitment on the state's part.

MS. PETRO indicated yes. She then relayed that there is a choice, in fact, the attorney general's office has ensured that there are exits and for commitments not yet made. The DOA has moved forward in good faith and does not intend to withdraw; however, there are serious issues to address, such as how to pay for it, how to share cost among state users, and how to share costs with other users. The state could walk away, she said. Ms. Petro noted that a TCO study in March of 2005, reported \$92 million expended in that fiscal year. However, the study did not project a final "all in" cost. The time line for the latest estimate, compiled with the DOD, is that the estimate will be available for discussion by the ALMR executive council in late February. After the completion of the estimate, her department and the cooperating partners will be able to estimate operating and maintenance costs. Until then, the strategy to move forward is in the following phases: phase one, completion of the ALMR build-out; phase two, transition of the system to an operations and maintenance phase; phase three, system enhancement or upgrades. She advised that, if the TCO indicates that the system should not, or can not, be maintained, "We will need to revisit the strategy, and we are very aware of that." Meanwhile, the primary documentation and policy for the build-out phase, through the operation and maintenance phase, expires at end of the current fiscal year, in June of 2008. She stressed that, even though the phase that is funded by the DOD will expire, the DOD will continue to be a key ALMR cost sharing partner. Another challenge is the development and execution of the multiple sub-agreements that are necessary to transition the system to its operation and maintenance phase. After the transition to the operation and maintenance phase, ALMR will work with its partners on on-going tasks and to identify future expansion.

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MS. PETRO continued to explain that the cooperative agreement must be finalized by all partners by the end of June. The agreement will include total project cost, and how maintenance and operation costs will be shared. The sub-agreements are in

draft form and now also must be finalized and agreed to by all partners, in fact, the ALMR executive council must decide unanimously. The agreements include: system description, which defines all the components of ownership; service level agreement, which defines minimum operational requirements; the total cost of ownership study; the cost sharing agreement, which details apportionment of annual ALMR operations and maintenance costs; membership agreement, which defines the terms, conditions, and charges for access to the system; and an organizational structure. In phase two, as the sub-agreements are finalized, there will be thousands of tasks to complete the transition to operations and maintenance, in fact, human and fiscal resources needed to complete four thousand tasks are planned. She stressed that her team is very committed to its goal to complete this phase prior to the end of the fiscal year. Examples of the tasks to be completed are: developing site specific equipment and facility site sharing agreements; the transfer of equipment from the DOD to the state; resolution of the radio frequency conflicts; developing spectrum management and security and asset management and policy procedure; and the development of standard operating procedures. She pointed out that the policy and procedures completed in phase two will help ALMR and its users to build a business case to support future expansion. She returned to the subject of the nine sites that lost federal funding and identified them as: Wrangell, Sitka, Petersburg, Craig, Rugged Island, Mt. Susitna, Curry, Tunnel and Gilmore.

CHAIR REPRESENTATIVE LYNN asked for clarification on the "tunnel sites."

[(Indisc.) response.]

CHAIR REPRESENTATIVE LYNN said, "So, this would be for emergency inside the tunnel, ... but you can talk to people outside the tunnel?"

[(Indisc.) response.]

MS. PETRO continued to explain that there is also proposed expansion of the system for the Tok Glennallen Highway corridor, north of Fairbanks along the Steese Highway, and Kodiak Island launch facility. Enhancements and upgrades to the system are proposed for North Pole and near Houston.

CHAIR LYNN opined that the launch facility expansion is for national defense.

MS. PETRO identified key strategies to keep the project on task. The first strategy is for Commissioner Kreitzer to appoint a volunteer advisory group that will have collective experience across telecommunications; large project management; and multi-agency project implementation and planning. In addition, the advisor group will be charged with reviewing the major decisions facing the DOA through the final stages of the ALMR project, including the TCO study. Another strategy is the control of the project's growth. It will be essential to focus on the details that will allow the system, as built , to operate successfully and move to the operating and maintenance phase. Thirdly, Commissioner Kreitzer has requested an Office of Management & Budget (OMB) audit to help determine what areas of concern identified in the 2005 legislative audit remain and what issues have been resolved. The OMB has agreed to conduct an audit and is currently drafting its scope. Finally, there is a focus to separate ALMR from SATS. She reminded the committee that ALMR use SATS sites throughout Alaska, in fact, the ALMR and the SATS team is basically the same. Funding for SATS has languished as funding for ALMR has been secured. Only SATS sites where ALMR equipment has been placed have received appropriate maintenance. It is critical that the SATS system, be maintained so it can continue to provide support to all state telecommunications as well as ALMR. To do so, the SATS team and budget will be separated from the ALMR project team in FY09. She further explained that SATS is the 160 microwave site system that serves as the state's telecommunication system backbone. Outside of Anchorage's and Juneau's fiber links, SATS supports wide area networks, data, television, the Alaska Rural Communications System (ARCS), highway call boxes, ALMR, video conferencing, and carries dedicated voice and video transmission capability. The SATS also supports the state's convention two way radio and paging system, which operates outside the current ALMR service areas. Again, she stressed that all state agencies along with a wide variety of local agencies rely on the SATS backbone.

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MS. PETRO re-stated her belief that it is critical to complete the build-out, and determine operating and maintenance costs, before requesting additional capital or operating funds for FY09.

REPRESENTATIVE JOHNSON asked whether there are private users of SATS.

MS. PETRO said she was unsure.

[Unknown speaker and (indisc.) response.]

REPRESENTATIVE ROSES asked what system is used by the Alaska Marine Highway System.

MS. PETRO said she was unsure.

[Unknown speaker and (indisc.) response.]

REPRESENTATIVE JOHNSON noted that the DOD has a gateway or windows system that allows some standard communication systems into SATS. He stressed the importance of figuring into the final operating and maintenance costs the installation of broad gateways that allow many users, such as a local fire department, the AMHS, and private airplanes, into the system.

CHAIR LYNN suggested that cell phones or telephones could be patched in.

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[Unknown speaker and indisc. response.]

REPRESENTATIVE JOHNSON acknowledged that these systems are not cheap and advocated that, when the final costs are presented to the legislature, the installation of broad gateways should be included.

MS. PETRO said, "That is a challenge ... we don't have future plans other than those nine sites." As far as future infrastructure cost, phase three is a "placeholder" because there is not capital funding for the expansion of core infrastructure. Once her department has the TCO study, there will good data for the development of a business case.

REPRESENTATIVE JOHNSON pointed out that, if the state is going to have a resilient system that will serve in the future, these are options that need to be discussed.

MS. PETRO concurred.

MR. O'HARE informed the committee that, over the past six months, the DMVA, the DOA, and the Department of Public Safety (DPS), have also been involved in an application for a Public Safety Interoperable Communications (PSIC) grant that required

the state to provide to the federal government a statewide emergency plan. Development of the plan was a collaboration of those departments and encompassed a statewide perspective. He shared that the DMVA's concern is for remote communities that ALMR will not serve. The PSIC grant would provide tactical, regional, communications packages that facilitate a quick response and provide internet protocol (IP) gateways available to first responders. There would also be a "reachback" capability to allow communication with state troopers and the National Guard. He advised that communication bridges and gateways are available now and allow communication with a wide variety of systems.

REPRESENTATIVE JOHNSON asked, "Why don't we have a bunch of gateways, instead of building \$500,000 microwave towers."

MS. PETRO said, "I don't have the answer to that."

REPRESENTATIVE JOHNSON gave an example of Bethel preferring a gateway.

[Unknown speaker] indicated there are different types of gateway systems. The gateway system planned with the ALMR system is a dispatched centric gateway system, meaning that the control of the gateway system is at the dispatch location. A stand alone gateway cannot be connected and disconnected as required. We have conducted a system design and analysis and do have a cost basis for the implementation of a gateway system on the ALMR system. In addition, there is a concept of operations for how the system would be employed. The DOD has awarded a contract to put in its portion of the gateway system, and operational management control stations are located at the Fairbanks and Anchorage emergency operations center locations.

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REPRESENTATIVE JOHNSON re-stated his question. "Why would a community buy into the ALMR system, when ... everything can be attached to that [gateway] system so that we, in Anchorage, could talk to every policeman in Bethel through a gateway as opposed to through a ... \$3,000 hand held unit?"

[Unknown speaker] stated that Bethel would still need to buy the unit, and would then need to tie to infrastructure on its own, instead of sharing infrastructure.

REPRESENTATIVE JOHNSON recalled previous testimony that a gateway could connect with a cell phone. He then asked why Bethel would need individual boxes when the gateway would connect with its internal dispatch.

[Unknown speaker]re-stated that Congress has defined that public safety communications must operate in the land mobile radio band and can not be in a system that competes with the public.

MS. PETRO clarified that there is a mandate for all public safety entities to move from the 25 [kilohertz bandwidth] to the 12.5 [kilohertz bandwidth], therefore, the ALMR system, within its current footprint, enables connections to the system at a greater cost efficiency, even though the entities will have to buy the radios.

REPRESENTATIVE JOHNSON surmised that, sometime prior to 2012, there will be a revenue sharing request from every community in the state for radios.

MS. PETRO acknowledged that there is the possibility of requests from communities for funds, either to develop their own system, or to join the ALMR system.

CHAIR LYNN asked for questions from the members who are online.

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REPRESENTATIVE DOLL expressed her concern about the misuse of funds audit items and then asked whether the timeline presented a "crisis." She also asked what the presenter wanted the committee to do.

CHAIR LYNN also inquired as to whether the presenter expected the committee to sponsor legislation.

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MS. PETRO opined that the timeline does not present a crisis situation, but rather a challenge. The DOA has set out an aggressive path to success and she said that she has confidence in the team. This process of enterprise technology service and the project management philosophy has changed dramatically from how the state has done business in the past. She will keep the committee informed with regard to the timeline and other challenges that may arise. She explained that the presentation today was an opportunity to show the committee the progress on

the project and its current status. Ms. Petro noted that recommendations and input from the committee are always valued. She confirmed that she has already met with several individual representatives and those in the Senate and House Finance Committees.

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REPRESENTATIVE DOLL asked whether there was a bill to be expected.

MS. PETRO said there would not be a bill this year.

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REPRESENTATIVE GRUENBERG observed that the vast part of the state that is not covered by the ALMR network is in the Bush, and most of the disasters in the state occur in the areas that are not covered areas. In fact, these are the same areas where Village Public Safety Officers (VPSOs) have been cut. He stated that he has heard nothing about whether this system will help the Bush areas of Alaska. He then asked whether the system will interface with any of the Native Corporations or areas without VPSOs. In addition, he asked whether there will be interfacing with the Coast Guard or the [Marine Exchange of Alaska].

MS. PETRO explained that the ALMR system is designed for the coverage indicated on the [Alaska Land Mobile Radio "ALMR" Enterprise Network Map, ALMRmap13b Dec 2007.] She pointed out that it is the role of the DMVA to provide emergency communications throughout the state. However, she acknowledged that it is sometimes confusing to determine the different roles and responsibilities of the DOA and the DMVA. Under the DOA's primary role of providing services, the DOA is responsible for making sure that the ALMR is functional for the state users. Obviously, the ALMR cooperative and the governance model require coordination and planning, in particular to ensure the ability to interface with DMVA in their responsibility to provide emergency communication capabilities to the state.

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MR. O'HARE confirmed that the ALMR system primarily focuses on the road system and the Railbelt. The DMVA is required by statute to provide emergency communication services throughout the state should the typical lines of communication go down. He agreed that many disasters occur outside the network of the

ALMR system, and re-stated that his department has applied for a federal grant under the Public Safety Interoperable Communications program to provide a statewide strategic communications solution that would provide regional response tactical communications packages. For instance, should a community in the Kotzebue, Nome, Barrow, and Dillingham region require assistance, there would be a tactical responder that would travel to the community and plug into the interoperable communication capability. The grant will provide funding for the technology, and in addition, will provide training for the manpower needed for operations. He concluded that the DMVA is answering the call with a very good plan to provide service to the vast and diverse areas of the state, including communities that lack funding or modern equipment. Mr. O'Hare mentioned that the development of the statewide emergency communications plan also identified the needs of communities and possible solutions to those needs.

CHAIR LYNN expressed surprise that there is not a future site planned for the North Slope.

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MR. O'HARE pointed out that Barrow would be a "fine hub." However, the North Slope is on a road system and he questioned the cost effectiveness of providing communications there over the satellite telephone system that is maintained by the oil companies.

MS. PETRO relayed that a major radio project is being developed for all of the companies on the North Slope.

There was a brief discussion on the priority of communications for the North Slope region.

REPRESENTATIVE ROSES asked for the anticipated timeline of the completion of "that plan."

MR. O'HARE indicated five years. He added that the application has just been submitted.

REPRESENTATIVE GRUENBERG asked who would be the lead agency.

MR. O'HARE responded that the Division of Homeland Security falls under the DMVA, thus in an emergency response the lead agency would be the DMVA. There is a "fine line" for the standard administrative communications and infrastructure that

the DOA is required to provide. He concluded that everybody will collaborate together.

MS. PETRO added that the technical answer is that the DMVA is the lead agency for emergency communications and, under the provisions of the PSIC grant, is responsible to coordinate with all other agencies. The DOA is responsible for the day-to-day operations and the basic infrastructure. She stressed the importance of constant communication and coordination with all agencies, including the Department of Public Safety.

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REPRESENTATIVE GRUENBERG observed that the DMVA role [in emergency communication] is mandated in statute. Furthermore, he noted that the agencies have a signed agreement and that the DOA is not seeking additional legislation at this time. One of the lessons from Hurricane Katrina, and the reverse of [the terrorist attacks of September 11, 2001], was that there were turf wars. He opined that this committee has a limited role in the day-to-day management of the agencies, but one thing the legislature can do is to make certain that the lines of authority are clear and widely understood in order to minimize turf wars. He asked, "How is that going to be accomplished?"

MS. PETRO agreed and assured the committee that the agencies work very hard not to have turf battles. Further, she stated that the DOA would like to work with this committee and the legislature to make these lines clear, particularly regarding the ALMR where responsibilities have switched back and forth. Currently, the statute is very clear about the DOA's responsibility for information technology and telecommunications.

REPRESENTATIVE ROSES expressed his preference not to refer this question to the legislature, but to continue the dialog until there is a necessity to make changes in statute. The committee does not want to outline protocol.

MR. O'HARE stressed the necessity of frequent exercises to test the technical and human elements of the system. He pointed out that ALMR has been involved in the governance and exercise aspect of emergency services and communication; this is how agencies figure out how things go wrong.

REPRESENTATIVE GRUENBERG responded to Representative Roses and said, "The legislature is a reactive body, we are used to

dealing with a bill that is brought to us." However, this is a technical communication problem, of which most of the members do not have a background. He encouraged Ms. Petro to develop legislation to resolve any problems that may arise.

REPRESENTATIVE ROSES opined that the active military and the National Guard have established protocol [to determine the lead agency in a crisis]. He expressed his appreciation of the presentation and offered his assistance.

REPRESENTATIVE GRUENBERG relayed that, in Anchorage, there are community patrols that receive small grants from the legislature for the purchase of radios. He noted the problem they have getting their grant funds.

MS. PETRO stated that the DOA does not manage those grants. She said she would find out whether the community radios are part of the AWARD program.

MR. O'HARE [indisc.--inaudible.]

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CHAIR LYNN thanked the presenters. He noted the paramount importance of public safety.

[3:42:30 PM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House State Affairs Standing Committee meeting was adjourned at 3:42 p.m.