



**ALASKA LAND MOBILE RADIO EXECUTIVE COUNCIL  
(A Federal, State and Municipal Partnership)**



**MEMORANDUM FOR ALMR Executive Council**

**August 9, 2017**

**FROM: SOA Co-Chair**

**SUBJECT: August 17 Meeting Agenda**

**TO: See Distribution**

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1. **Call to Order.** Deputy Commissioner Bill Comer, State of Alaska (SOA) Co-Chair will call the meeting to order. The roll will be taken.
2. **Opening Statements and Other Announcements.**
3. **Approval of Previous Meeting Minutes.** (Deputy Commissioner Comer) Review of the draft minutes from the July Executive Council meeting. (Atch 1)

The following motion is offered to the council for consideration.

**Motion: Approve July 20 Executive Council meeting minutes, as presented.**

4. **Old Business.**

a. Revenue Generation. At the July meeting, Mr. John Rockwell briefed he had nothing new to report and there was no traction on any of the ideas that had been floating at this point.

b. Cooperative Agreement Update. At the July meeting, Colonel Timothy Maxwell stated there was no update on the agreement and it was still at the Judge Advocate General (JAG) office.

c. Telephone Interconnect for the Transportable Communications System. At the July meeting, Mr. Tim Mr. Woodall briefed, as soon as the Cooperative Agreement is signed, Article 22 will form the basis for the Memorandum of Agreement to cover this requirement.

d. System Upgrade Assistance (SUA) and Equipment End of Life (EOL). At the July meeting, Mr. Woodall advised everything was status quo and he didn't anticipate any of the monies they have asked for would be degraded.

e. MotoBridge System. At the July meeting, Mr. Woodall briefed he would like to get a decision on whether to sustain or remove the MotoBridge components.

Mr. Smith stated he would put it on the User Council August agenda for them to make a recommendation to present to the Executive Council final decision.

**NOTE:** Motorola will present a briefing on the MotoBridge and WAVE systems.

f. Executive Council meeting. At the July meeting, Deputy Commissioner Comer proposed moving the meeting to a quarterly basis and there were no immediate objections. Members were also polled via email and a quorum concurred with the recommendation.

**Motion: The Executive Council approves the change of frequency of their meetings from a monthly to a quarterly basis, unless circumstances dictate the need for an interim meeting.**

5. **User Council Update.** (Mr. Ocie Adams)

6. **Operations Management Office.** (Mr. Del Smith)

- a. Annual subscriber audit
- b. Third quarter Master Site rollover
- c. FY19 OMO/SMO Budget
- d. July System metrics (Atch 2)

7. **New Business.**

8. **Next Meeting.** (Deputy Commissioner Comer) The next meeting is scheduled for October 19, 2017, 1:30 p.m. at the Enterprise Technology Services Conference Room, 5900 E Tudor Road.

9. **Adjourn Meeting.** (Deputy Commissioner Comer)



Bill Comer, Deputy Commissioner  
Department of Public Safety  
ALMR Executive Council

2 Attachments:

- 1. Draft July Meeting Minutes
- 2. July System Metrics

**Distribution:**

SOA/DPS, Deputy Commissioner Bill Comer  
USNORTHCOM ALCOM J6, Colonel Timothy Maxwell  
FBI, ASAC Tony Jung  
AML, Ms. Linda Murphy  
MOA, Captain Dave Koch  
SOA ETS, Mr. Jim Steele  
SOA ETS, Mr. Scott Stormo  
ALCOM/J64, Mr. Timothy Woodall  
MOA, Mr. Trygve Erickson  
SOA DOT, Mr. Ocie Adams  
OMO, Mr. Del Smith



**ALASKA LAND MOBILE RADIO EXECUTIVE COUNCIL  
(A Federal, State and Municipal Partnership)**



**MEMORANDUM FOR ALMR Executive Council**

**August XX, 2017**

**FROM: SOA Co-Chair**

**SUBJECT: July 20 Meeting Minutes**

**TO: See Distribution**

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**Executive Council Members Present:**

Deputy Commissioner Bill Comer	State of Alaska – Department of Public Safety
Colonel Timothy Maxwell	Department of Defense (DOD) – Alaskan Command (ALCOM)/J6
ASAC Antony Jung	Alaska Federal Executive Association - Federal Bureau of Investigation (via teleconference)
Captain Dave Koch	Municipality of Anchorage- Anchorage Police Department
Ms. Linda Murphy	Alaska Municipal League

**ALMR Support Team Members and Guests Present:**

Mr. Ocie Adams	User Council Chair (via teleconference)
Mr. Del Smith	Operations Manager
Mr. Tim Woodall	DOD ALMR Program Manager
Mr. Jim Nicholl	Motorola Solutions
Mr. Bruce Richter	OEC Region X Coordinator
Mr. John Rockwell	DPS 911 Coordinator
Ms. Sherry Shafer	Operations Management Office (via teleconference)

**1. Call to Order.** Deputy Commissioner Bill Comer, State of Alaska (SOA) Co-Chair called the meeting to order at 1:58p.m and the roll call was read.

**2. Opening Statements and Other Announcements.**

There were no opening statements or other announcements.

**3. Approval of Previous Meeting Minutes.** Deputy Commissioner Comer asked the Executive Council (EC) members if they had reviewed the June meeting minutes and requested a motion for their approval, if there were no changes.

**Motion: Approve the June 22 Executive Council meeting minutes, as written.**

The motion was made by ASAC Antony Jung and seconded by Colonel Timothy Maxwell. There were no objections. **The motion was carried and approved.**

**4. Old Business.**

a. Revenue Generation. Deputy Commissioner Comer asked Mr. Rockwell for an update.

Mr. Rockwell briefed he had nothing new to report at this time, but was still looking at other avenues. He noted there was no traction on any of the ideas that had been floating at this point.

ASAC Jung asked if the council had considered a partnership with Alyeska Pipeline to help add funds toward the infrastructure and assist them with their radio communications.

Mr. Del Smith noted it had been discussed in the past, but had not resulted in any concrete effort.

Mr. Timothy Woodall explained the State had previously met with Alyeska and that because they were not a government entity, they were ineligible to participate in the cooperative.

Mr. John Rockwell also pointed out that north of Fairbanks there was no infrastructure to support Alyeska.

b. Cooperative Agreement Update. Colonel Maxwell stated there was no update on the agreement and it was still at the Judge Advocate General (JAG) office.

Mr. Woodall advised they had previously sent the agreement over with changes to two articles, the first was Article 22, which was new and covered mutual aid, and would be the basis by which the Department of Defense (DOD) could participate in the cooperative and the second article under review was Article 12 on security certification, which had had a significant change from the Defense Information Assurance Certification and Accreditation Process (DIACAP) to the new Risk Management Framework (RMF). He noted there were some other minor changes to the body, as well. Mr. Woodall added once the JAG okays it, it could be sent to Lieutenant General Wilsbach, and he hoped to have it by the next meeting.

c. Telephone Interconnect for the Transportable Communications System. Mr. Woodall briefed, as soon as the Cooperative Agreement is signed, Article 22 will form the basis for the Memorandum of Agreement to cover this requirement.

Mr. Woodall gave a synopsis for the good of the group regarding the process for telephone interconnect through the transportable systems, which is part of the Defense Support of Civil Authorities mission.

d. System Upgrade Assistance (SUA) and Equipment End of Life (EOL). Mr. Woodall advised everything was status quo and the services were tracking the funds for 2018 and are above the red line. He doesn't anticipate any of the monies they have asked for would be degraded.

Mr. Smith stated he thought the Capital Budget may get some attention on the 27<sup>th</sup> if the Legislature calls itself back into session. He noted money for the System update and the SUA are included in the budget. Mr. Smith briefed they should know by next week if these items survive and the System updates can proceed.

## **5. User Council Update.**

Mr. Ocie Adams noted he didn't have anything from a User Council perspective, but provided a summary of the SATS/ALMR capital projects provided by Mr. Scott Stormo for the upcoming FY19 State budget.

Mr. Rockwell also stated there needed to be an increase in the SATS staffing levels to do more in-house installs rather than have contractors doing them.

## **6. Operations Management Office.**

a. Annual Subscriber Inventory. Mr. Smith advised the last confirmation form was received on July 5 and this item was completed for 2017.

b. Third Quarter Master Site Rollover. Mr. Smith briefed the next quarterly rollover would occur the week of August 7 – 11. He stated the process would be the same as the previous rollovers between 4 – 6 a.m. with the primary controller being updated on Wednesday and the secondary controller being updated on Thursday, with the sites being in site trunking approximately 15 – 30 seconds during the rollover. Mr. Smith advised he had distributed the first notification to the dispatch centers this week.

c. Genesis Software Update. Mr. Smith advised the Genesis system software was updated last week and now provides much more detailed reports, which will be very useful.

d. FY19 OMO/SMO Budget. Mr. Smith stated the draft was sent to the User Council today and should be forwarded to the Executive Council for their August meeting. He noted he had talk to Mr. Stormo this morning and as nothing was occurring with the

Quantars this year, the costs would be restricted to two years increasing next year's amount to \$11M.

Mr. Smith noted the inserts in the back of the document regarding software updates and end-of-life equipment updates are provided by Motorola. He advised he had spoken with Mr. Jim Nicholl prior to the meeting and updated information will be provided prior to the budget going to the Executive Council in August.

e. June System metrics. Mr. Smith briefed the push-to-talks were still down in June. He noted the new reports from Genesis will provide the number of actual calls and the push-to-talks within those calls and the data from this new breakout will begin starting in July.

Mr. Smith explained one difference is the addition of the MCC7500s reduced the number of talkgroups down to one, whereas the Gold Elites saw all the talkgroups. He stated eh can't confirm if this had an effect on the voice call numbers but it was looked at as a possible cause.

## **7. New Business.**

a. MotoBridge. Mr. Woodall explained ALMR had an extensive MotoBridge network with two SIP servers and with gateways units at most of public safety locations. He noted it had not been well received by the dispatch community in Alaska and does not get used. Mr. Woodall briefed he would like to get a decision on whether to sustain or remove the MotoBridge components. He pointed out the rescue center and ranges use it extensively so those areas would be upgraded, but at the other existing locations, those units would be decommissioned.

Mr. Rockwell advised that Motorola Solutions was phasing out MotoBridge and replacing it with WAVE and on the FirstNet side, if Alaska opts in, they were looking at putting in a WAVE7000 system coupled with FirstNet and ALMR for non-mission critical push-to-talk.

Captain Dave Koch stated Anchorage utilized WAVE and it was part of their last update. He asked if it was already on one of the zones, is it a matter of licenses for other users.

Mr. Woodall stated the concern was a lot of money was spent to provide a gateway for agencies with disparate radio system to communicate in an emergency and provide a level of interoperability you don't find in other on any other LMR. He explained this was a way where second and third-tier responders could be quickly bridged into incident command. Mr. Woodall noted it is a really good idea but if agencies are not going to train with them and utilize them, the expense can't be justified.

Mr. Smith stated he would put it on the User Council August agenda for them to make a recommendation to present to the Executive Council final decision.

Deputy Commissioner asked this be added to the next meeting agenda.

b. Change of Executive Council meeting frequency. Deputy Commissioner Comer asked if the council if they had objections to moving the meeting to a quarterly basis to have fewer but more meaningful meetings.

Mr. Woodall stated, from a historical perspective, the meeting was originally held monthly, while ALMR was in the “project phase” due to the programmatic actions that required executive level decisions.

No one seemed to have any objections and Mr. Smith stated the Operations Management Office (OMO) would take a look at the documentation and send out an email after the meeting requesting everyone’s input. He requested they still meet in August to address the budget approval.

**8. Next Meeting.** Deputy Commissioner Comer advised the group that the next meeting is scheduled for August 17, 2017, 1:30 p.m. at the Enterprise Technology Services Conference Room, 5900 E Tudor Road.

Ms. Linda Murphy advised the group she would not be available for the August meeting.

Mr. Smith and Mr. Rockwell both advised the council members they would at APCO in Denver, Colorado, at this time. Mr. Smith advised he would still be calling in to brief the OMO portion.

**9. Adjourn Meeting.** Deputy Commissioner Comer asked the group if there was any further discussion and hearing none requested a motion for adjournment.

The motion was made by ASAC Jung and seconded by Deputy Commissioner Comer. There were no objections. **The motion was carried and approved.**

The meeting adjourned at 2:38p.m.

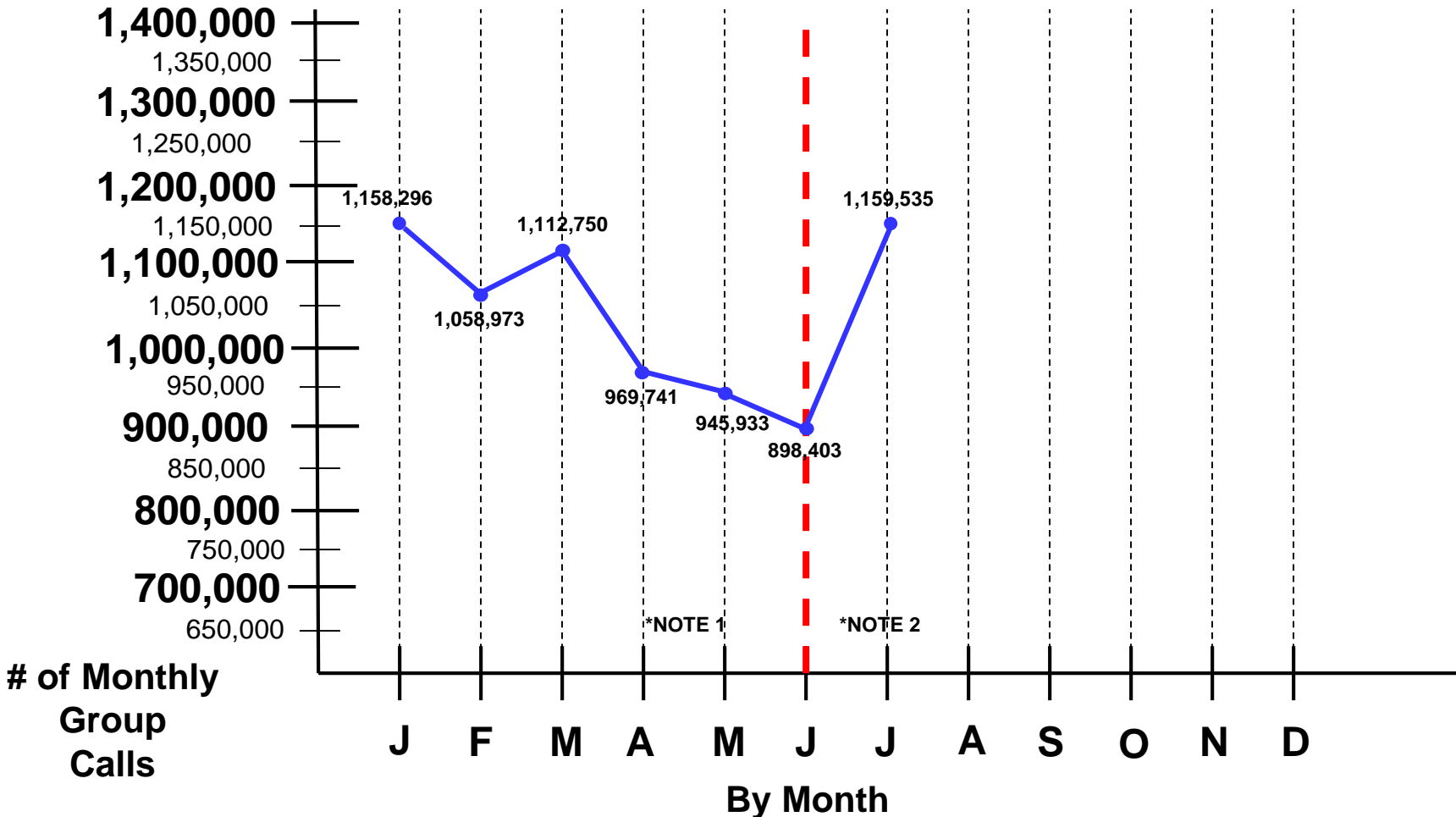
Bill Comer, Deputy Commissioner  
Department of Public Safety, State of Alaska  
ALMR Executive Council

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SOA DOT, Mr. Ocie Adams  
OMO, Mr. Del Smith

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# 2017 System Performance Monthly Group Calls

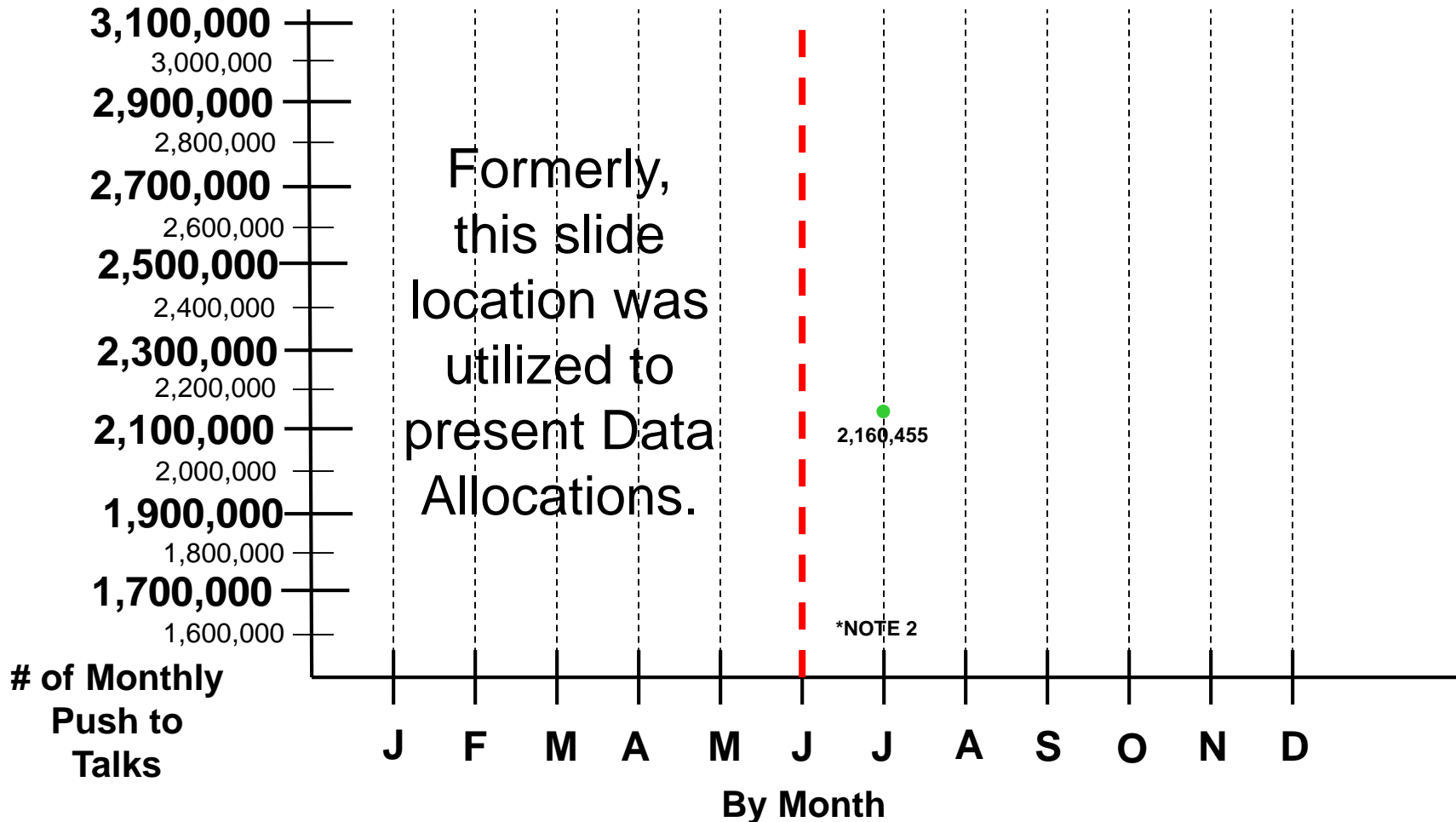


**NOTE 1** : April has five days and May has one day of data collection missing for Zone 2 due to Genesis software update issue.

**NOTE 2**: Starting in July, data from Genesis will be utilized as it provides a more accurate calculation of actual group calls, push-to-talks and busies.

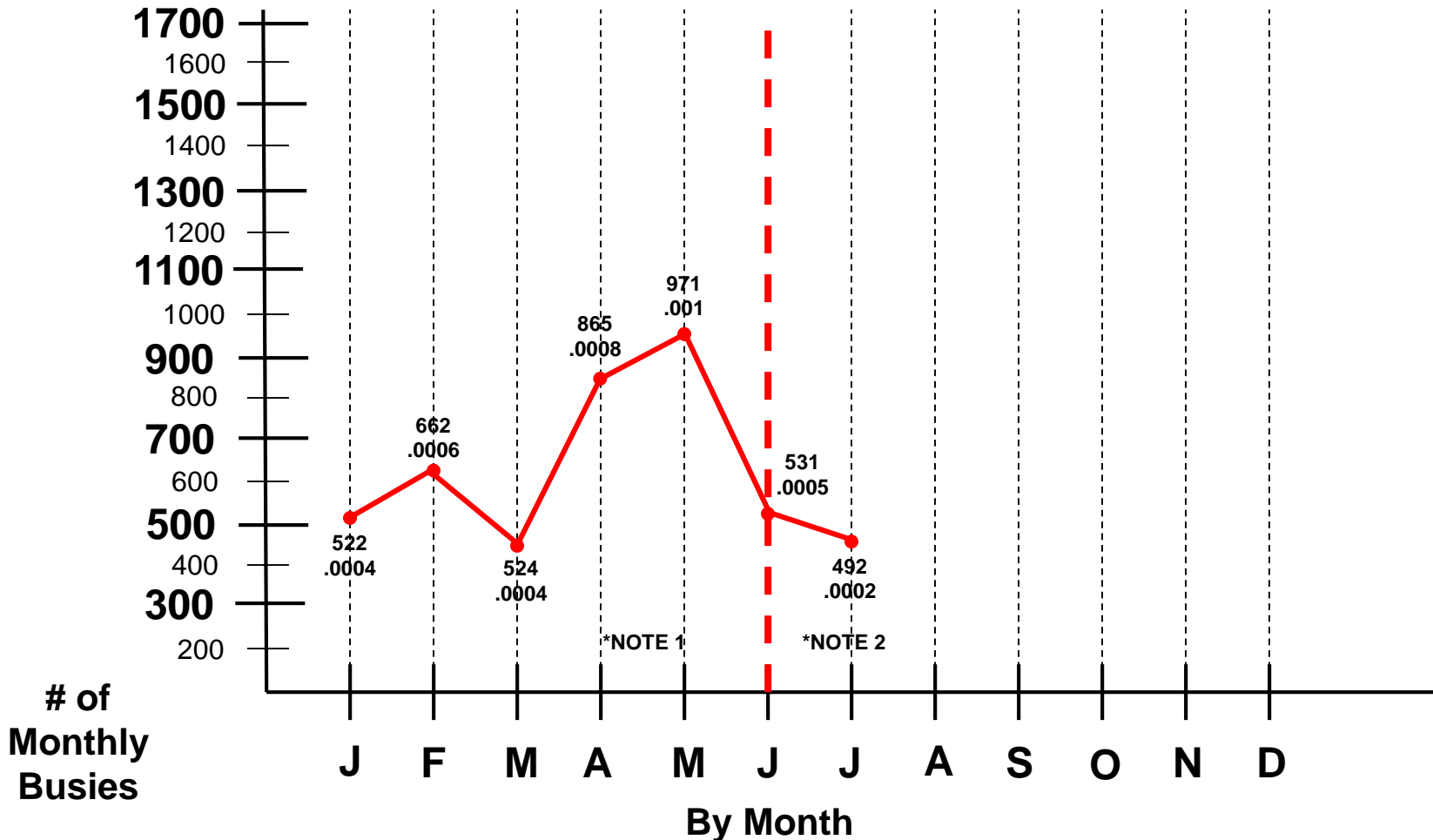
# 2017 System Performance

## Monthly Push-to-Talks



**NOTE 2:** Starting in July, data from Genesis will be utilized as it provides a more accurate calculation of actual group calls, push-to-talks and busies.

# 2017 System Performance Monthly Busies



**NOTE 1 :** April has five days and May has one day of data collection missing for Zone 2 due to Genesis software update issue.

**NOTE 2:** Starting in July, data from Genesis will be utilized as it provides a more accurate calculation of actual group calls, push-to-talks and busies.

*For SOA FY2019*  
**OMO/SMO Operating Budget**

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August 2017

**Alaska Land Mobile Radio (ALMR)  
Communications System**

**Operations Management Office &  
System Management Office**

Mr. Del Smith, Operations Manager

Operations Management Office

[delsmith@5starteam.net](mailto:delsmith@5starteam.net)

<http://www.alaskalandmobileradio.org>



## *OMO/SMO FY19 Operating Budget*

Alaska Land Mobile Radio

**OPERATIONS MANAGEMENT (OMO):** **\$300,000.00<sup>1</sup>**

### **Operations Management Office**

The Operations Management Office (OMO) consists of two assigned contractor personnel: the Operations Manager and the Documentation Specialist.

The Operations Manager (OM) has oversight for governance structure, planning, System Management Office (SMO) compliance, and overall operation of the Alaska Land Mobile Radio (ALMR) System. In coordination with the User Council the OMO establishes policies, procedures, processes, organizational structure, and agreements.

The OMO maintains System programming and operations documentation, processes and procedures, and user manuals in a reference library. Included in this cost are periodic reviews and updates, and any newly defined requirements required to support the customers.

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**NOTE:** This is a new three-year contract, which began in 2016 and the cost figure will not change as there is no price escalation clause associated with the period of performance.



## **OMO/SMO FY19 Operating Budget**

Alaska Land Mobile Radio

# **INFRASTRUCTURE OPERATIONS AND MAINTENANCE SERVICES (IOMS): \$2,937,920.07**

## **System Management Office**

The System Management Office (SMO) consists of six full-time assigned contractor personnel: System Manager, two System Technologists, Security Manager, Asset Manager and Help Desk/Documentation Specialist. Contracted System support for after hours and emergency system issues is provided by the Motorola System Support Center (SSC) located in Schaumburg, Illinois. Also available are two Original Equipment Manufacturer (OEM) trained System Technologist who provide technical expertise and in state resources to meet ALMR maintenance requirements on a situational basis. Their services are billed to the contract on a percentage basis.

The SMO is responsible for the annual Preventive Maintenance Inspection (PMI) on each of the operational ALMR sites to verify the operational test and alignment on the customer's infrastructure equipment, to identify discrepancies at the sites, and to inventory assets for accountability.

## **Infrastructure Maintenance**

OEM trained technologists are provided by in-state resources to meet ALMR maintenance requirements. Out-of-state resources are available, as needed, for additional support if required to maintain the ALMR System. Infrastructure maintenance services include:

- Preventive Maintenance Inspection (PMI)
- OEM Authorized Technologist Services

## **Asset Management Services**

The following services are currently provided through separate contracts funded through Alaskan Command (ALCOM) and US Army-Alaska (USARAK). These services are available from the SMO to any user agency through individual contract.

- Track infrastructure equipment
- Manage suspect equipment\*
- Track and manage Field Replacement Units (FRU)
- Maintain spare infrastructure equipment inventory
- Conduct annual inventory

\*Suspect equipment is equipment that has been removed from a site and sent in for repair.



## ***OMO/SMO FY19 Operating Budget***

Alaska Land Mobile Radio

**NOTE 1:** Security Update Services (SUS), which covers testing of software patches prior to installation on the System, are included in this contract.

**NOTE 2:** The IOMS support contract enters its first option year in FY19 and the cost will be re-evaluated at that time. Any increase in FY19 would be contingent on the CPI being above five percent.

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### FY19 OPERATIONS & MAINTENANCE COSTS

The budget is based on the State of Alaska Fiscal Year (July 1 to June 30) timeframe and reflects **projected** annual costs based on **best estimates** available at the time of preparation.

#### SOA FY19 & DOD FY18/19 & MOA CY19/20 (July 1, 2018 - June 30, 2019)

CONTRACT SUPPORT – OMO			
TOTAL	DEPARTMENT OF DEFENSE	STATE	MOA
\$300,000.00 <sup>8&amp;9</sup>	\$54,000.00 <sup>9</sup>	\$246,000.00 <sup>9</sup>	\$0.00 <sup>8</sup>
CONTRACT SUPPORT – IOMS <sup>13</sup>			
TOTAL	DEPARTMENT OF DEFENSE	STATE	MOA
\$2,972,855.17 <sup>8,9&amp;10</sup>	\$1,306,683.53 <sup>9&amp;10</sup>	\$1,631,236.64 <sup>9&amp;10</sup>	\$34,935.00 <sup>8&amp;10</sup>
CAPITAL COSTS – ESSENTIAL EQUIPMENT			
TOTAL	DEPARTMENT OF DEFENSE	STATE	MOA
\$16,075,837.00 <sup>11</sup>	\$4,775,150.00 <sup>11</sup>	\$11,300,687.00 <sup>11</sup>	\$0.00 <sup>11</sup>
CAPITAL PRODUCTS – SYSTEM UPGRADE ASSISTANCE (SUA) II			
TOTAL	DEPARTMENT OF DEFENSE	STATE	MOA
\$2,044,683.00 <sup>12</sup>	\$603,800.00	\$939,000.00 <sup>12</sup>	\$501,883.00 <sup>12</sup>
ALMR FY18/19 GRAND TOTAL ALL COSTS BY STAKEHOLDER			
GRAND TOTAL	DEPARTMENT OF DEFENSE (USARAK, JBER & EIELSON)	STATE	MOA
\$21,393,375.17 <sup>8thru12</sup>	\$6,739,633.53 <sup>9thru12</sup>	\$14,116,923.64 <sup>9thru12</sup>	\$536,818.00 <sup>8,10&amp;12</sup>

8 - The MOA owns and operates the AWARN system. Although they have connectivity for interoperability purposes, they do not share costs of the ALMR System operations and maintenance.

9 - Costs are normally based on total owned infrastructure.

10 - The Security Update Services (SUS) program cost are included in the IOMS contract. The MOA pays their SUS costs separately.

11 – Covers the cost of site radio equipment and subscribers only. (One half of three year total, since not funded in FY18.)

12 - This quotation is a budgetary submittal for the System Upgrade Assistance (SUA) and is not binding on Motorola™. It **does not** include the cost of major radio site component, console or subscriber end-of-life replacement. **NOTE:** All participating parties must move to the same software platform at the same time.

13 – The IOMS support contract enters its first option year in FY2019 and the cost will be re-evaluated at that time.



Travel and training expenses associated with items/events listed hereafter on page 7 are **NOT** included in the OMO baseline contract. They either must be budgeted for separately, or added to the baseline OMO contract cost provided on page 2.

**TRAINING AND TRAVEL**

User Council	Annual Training Conference ( <b>NOT</b> funded)	\$12,500.00
	Provides training in areas surrounding land mobile radio operations, interoperability and may present key note speakers from areas pertinent to the Public Safety field. Covers the cost of facility rental, lodging, and per diem, as appropriate. This cost is an <u>estimate</u> based on a fixed funding amount provided in <u>2011</u> .	
Communications Conferences	APCO –Las Vegas, NV August 5 - 8, 2018 ( <b>NOT</b> funded)	\$2,749.00
	IWCE – Las Vegas NV March 4 - 8, 2019 ( <b>NOT</b> funded)	\$3,095.00
<b>Travel &amp; Training subtotal (<b>NOT</b> funded)</b>		<b>\$18,344.00<sup>16</sup></b>

**NOTE<sup>16</sup>:** These cost figures are estimates, which are based on previous events as requested in support of services expected of the OMO. These items are not included in any previous contract amounts or other services previously listed.



**Any expenses associated with items/events listed hereafter are not included in any contract or service previously listed. Pages 8 and 9 are descriptors only of services previously mentioned, although not funded.**

## **System Upgrade Assistance (SUA)**

Motorola presented several options for ongoing Lifecycle management services. The one recommended to provide the greatest benefit to ALMR was the System Upgrade Assistance (SUA) Agreement. This provides for an upgrade once in a two-year period that ALMR could elect to perform at their convenience. This plan would also permit ALMR to budget for Firm Fixed Priced upgrades that would ensure the System is kept at a current release and would continue to be fully supportable.

This annual payment provides for a System software upgrade once in a two-year period that ALMR could elect to perform at their convenience. This maintains the System at the current software platform.

## **Training**

The annual training conference provides an opportunity for all primary and alternate User Council members to meet face-to-face where they can conduct extensive in-depth discussions/training scenarios in a focused environment and without interruption.

### **- Annual User Council Training Conference**

The User Council is afforded adequate time to focus on issues involving the System and public safety in general, in both the near and long term, which they may need to address or act upon. Focus areas can include, but are not limited to, coverage issues, future System expansion or enhancement, site maintenance and outages, technology advancements and System software/hardware refresh, training opportunities/deficiencies, cost share, Incident Command Zones, baseline System standards and metrics, and System security standards.

## **Communications Conferences**

Conferences keep ALMR staff members informed of the latest developments in technology and public safety interoperable communications. Additionally, conferences offer the ability to network with other land mobile radio users and public safety officials to gain insight into other state's challenges to interoperability issues and possible solutions.



**- *International Wireless Communications Expo (IWCE)***

The IWCE is the forum where all industries and communications IT professionals come together to share thoughts and ideas on wireless communications technologies. Individuals who are responsible for planning and implementing an organization's wireless technology future have the opportunity to interact with Enterprise Users from industries such as security, utilities, transportation, construction, education, retail, healthcare and facilities management, public safety professionals, wireless service providers, IT professionals, and dealers or consultants. The ICWE also provides an opportunity to attend content rich education and training sessions developed by industry experts.

**- *Association of Professional Safety Communications Officials (APCO)***

APCO International is the world's largest organization dedicated to public safety communications and has been around since 1935 - far longer than any other public safety communications association. It has more than 15,000 members dedicated to the public safety community to provide information from examining standards and issues to providing education, products and services. APCO members come from all types of public safety organizations: Emergency Call Centers Law Enforcement Agencies Emergency Medical Services Fire Departments Transportation Agencies & Facilities Emergency Management Centers Forestry Services Colleges & Universities Military Units Manufacturers Technical & Repair Services Engineers APCO is at the forefront, ensuring the public safety community is well-equipped. Conferences assist public safety organizations with updating their knowledge and getting the latest information for excelling at their job – protecting the safety and welfare of the general public.



## **Addendum A**

The following addendum pages reflect near- and long-term funding requirements, which are not part of the individual Operations Management Office or Infrastructure Operations and Maintenance Services contracts, but are part of the capital costs expected for lifecycle management and maintenance of an enterprise technology system.

**NOTE: We are awaiting updated pages for the addendum from Motorola**

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ALMR Lifecycle Support and EOL Replacements											
Rough Order of Magnitude											
09/28/2016 (revised)											
<b>SOA Lifecycle Products</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	
System Upgrade Agreement II (SUA II)	931,700	939,200	947,000	955,000	963,300	971,800	984,700	997,900	1,027,837	1,058,672	
SUS (Included in ALMR Services Contract)											
<b>TOTAL:</b>	<b>931,700</b>	<b>939,200</b>	<b>947,000</b>	<b>955,000</b>	<b>963,300</b>	<b>971,800</b>	<b>984,700</b>	<b>997,900</b>	<b>1,027,837</b>	<b>1,058,672</b>	
NOTE: Activation of SUA II requires system to be at current release (as of date of this document current release is 7.17)											
<b>SOA ALMR Capital Upgrade</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	
Upgrade from 7.13 to 7.15	1,761,400										
<b>SOA ALMR Capital Upgrade</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	
Upgrade from 7.13 to 7.17	3,602,900										
<b>SOA Essential Equipment</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	
Quantar Updates	5,944,060	7,987,157	8,670,157								
Subscriber Radio Replacement (6,500)					5,590,000	5,590,000	5,590,000	5,590,000	5,590,000	5,590,000	

**NOTE: The above table was provided by Motorola in September 2016 and may not reflect the most current costs.**



**ALMR Lifecycle Support and EOL Replacements**  
 Rough Order of Magnitude  
 09/28/2016 (revised)

<b>DoD Lifecycle Products</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
System Upgrade Agreement II (SUA II)	596,500	603,800	611,300	619,000	626,900	635,100	643,500	652,000	671,550	691,707
SUS (Included In ALMR Services Contract)										
<b>TOTAL:</b>	<b>596,500</b>	<b>603,800</b>	<b>611,300</b>	<b>619,000</b>	<b>626,900</b>	<b>635,100</b>	<b>643,500</b>	<b>652,000</b>	<b>671,550</b>	<b>691,707</b>

NOTE: Activation of SUA II requires system to be at current release (as of date of this document current release is 7.17)

<b>DOD ALMR Capital Upgrade</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Upgrade from 7.13 to 7.15	1,143,700									

<b>DOD ALMR Capital Upgrade</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Upgrade from 7.13 to 7.17	2,315,800									

<b>DoD Essential Equipment</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Subscriber Radio Replacement (6,663)	4,775,150	4,775,150	4,775,150	4,775,150	4,775,150	4,775,150				

**NOTE: The above table was provided by Motorola in September 2016 and may not reflect the most current costs.**



**ALMR Lifecycle Support and EOL Replacements**  
**Rough Order of Magnitude**  
 09/28/2016 (revised)

MOA Lifecycle Products	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
System Upgrade Agreement II (SUA II)	459,500	465,900	472,400	479,200	486,100	493,300	499,900	506,600	521,798	537,452
SUS Platinum	34,935	35,983	37,063	38,174	39,320	40,499	41,714	42,966	44,255	45,582
<b>TOTAL:</b>	<b>494,435</b>	<b>501,883</b>	<b>509,463</b>	<b>517,374</b>	<b>525,420</b>	<b>533,799</b>	<b>541,614</b>	<b>549,566</b>	<b>566,053</b>	<b>583,034</b>

NOTE: Activation of SUA II requires system to be at current release (as of date of this document current release is 7.17)

MOA AWARD Capital Upgrade	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Upgrade from 7.13 to 7.15	855,400									

MOA AWARD Capital Upgrade	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Upgrade from 7.13 to 7.17	1,756,000									

MOA Essential Equipment	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Subscriber Radio Replacement (8,300)					7,138,000	7,138,000	7,138,000	7,138,000	7,138,000	

**NOTE: The above table was provided by Motorola in September 2016 and may not reflect the most current costs.**

**Rough Order of Magnitude (ROM) Budgetary Pricing**  
**Customer Reference Only – Not Valid for Quotation**

This quotation is a budgetary submittal. Please bear in mind that this quote is not binding on Motorola and is not intended to serve in itself as the basis for a contract or order.

The information provided in this quote is preliminary, and is based upon a number of assumptions regarding your agency's requirements. A formal quote or quotation would require more information from your agency and further detailed analysis of the requirements and circumstances surrounding this project.

There are no representations, warranties, or commitments with respect to pricing, price support, products, services or terms except as may be specified in a subsequent formal quote.

# Motobridge

- Motobridge is a supported product.
- Both State of Alaska and DOD use Motobridge.
- Motobridge is not affected by the ALMR 7.17 upgrade.
- Motorola will put together a quote to upgrade existing Motobridge which has only had one upgrade since procurement.

# WAVE

- Wave technology may complement the Motobridge existing deployments.
- Wave may extend the ALMR footprint to the cellular or Firstnet network.
- MOA has installed a WAVE server at their master site.
- Licenses for individual agencies as desired.

# 7.17 Upgrade and SUA, SUS

- Security Update Service (SUS) updates expire 6/30/2018
- 7.17 Upgrade is required to continue SUS.
- Executed contract necessary to schedule Upgrade Operations (UO).
- Weather and timing concerns.
- 7.17 is the last upgrade until Quantar replacement.