

Allied Radio Matrix for Emergency Response



ARMER

Project Status Report

Reporting Period June 1, 2016 through July 1, 2016

Executive Summary

Overall Status:

	Green (Controlled)	Yellow (Caution)	Red (Critical)	Reason for Deviation
Budget	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
Schedule	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>	Land acquisition delays will impact completion of some sites
Scope	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	

ARMER
Backbone
97%
On-the-air

Controls

Issue Status:

Change Status:

- No pending plan changes

Accomplishments

Accomplishments during this Reporting Period:

- The following sites went on the air:
- The land acquisition has been completed for the following sites:
 - Madelia

Budget

Construction Budget Status as of July 1, 2016

Project Funding	Original Budget	Spent to Date	Unspent Balance Remaining	Encumbered	Available Balance
Phase 3	\$45,000,000	\$44,952,397.19	\$47,602.82	\$0.00	*COMPLETE
SRB Funds (FY 09)	\$1,902,831.00	\$1,902,831.00	\$0	\$0	COMPLETE
Phase 456 (FY 09)	61,996,957.89	\$61,981,069.99	\$15,887.90	\$15,887.90	\$ 0.00
Phase 456 (FY 10)	\$62,015,407.77	\$61,912,097.77	\$103,310.00	\$103,310.00	\$ 0.00
Phase 456 (FY 11, 12, 13)	\$61,987,634.34	\$54,124,126.26	\$7,863,508.08	\$2,850,297.17	\$ 5,013,210.91
Total Phase 456	\$186,000,000.00	\$178,017,294.02	\$7,982,705.98	\$2,969,495.07	\$ 5,013,210.91
Projected Contingency as of July 1, 2016					\$308,210.91

Comments:

Scheduled Milestones / Deliverables

Status updated July 1, 2016

Milestone	Total Sites	Sites Not Started	Sites in Progress	Sites Complete
ARMER Backbone Construction	335 Sites			
Tower Site Acquisition	335	0	8	
Tower Construction & Site Development Work	335	8	5	
Microwave Connectivity & RF Deployment	335	11	0	326 On the Air

Some Sites are on the air, but on the old towers or temporary towers. They are counted as on the air, but still require construction and/or installation at the new tower sites before they are complete:

- o Finland
- o Duluth South
- o Eden Valley
- o Lake Crystal

Of the 326, 4 are on temporary sites; sites construct and move still in the works.

- SE – all sites completed
- SR – 1 land acquisitions remaining, 1 new site plus leased site replacement for Lake Crystal.
- SW – all sites completed
- CM – Leased site replacement for Eden Valley, construction in process.
- Metro – all sites completed
- NW – 2 land acquisitions remaining.
- NE – 3 land acquisitions remaining, 5 site under construction.

Completion Targets

ARMER all Phases:

4 original plan sites will be delayed due to delays in land acquisition.

Ongoing ARMER System Work

Motorola System Upgrade

- 7.15 upgrade in process. Master site upgrades completed. RF sites software upgraded. Working through dispatch center upgrades.
- Working on contracts for billing with local agencies involved in 7.19 equipment replacements under the Motorola contract.
- 2016 Motorola SUAll local agency billings received.
- SUAllPlus 7.19 equipment upgrades. Over the next 5 years before we can go to Motorola system release 7.19 all circuit based simulcast and Quantar based ASR sites need to be upgraded. The hardware and services are all included in our current SUAllPlus contract. We have meet with the agencies that this involves and we have come up with the following tentative implementation schedule for these upgrades:

<u>System</u>	<u>Equipment order</u>	<u>Install</u>
○ St Cloud subsystem	1 st half 2016(Rcvd)	2 nd half 2016
○ Stearns ASR sites	1 st half 2016(Rcvd)	2 nd half 2016
○ Enfield(Wright-Sherburne) subsystem	1 st half 2016(Rcvd)	2 nd half 2016
○ Goodhue subsystem	1 st half 2016(Rcvd)	2 nd half 2016
○ North Branch(Isanti-Chisago) subsystem	1 st half 2016(Rcvd)	2 nd half 2016
○ City Center	1 st half 2016(Rcvd)	2 nd half 2016
○ Olmsted subsystem	2 nd half 2016	2 nd half 2016
○ Hennepin SAT COW ASR	2 nd half 2016	2 nd half 2016
○ Norwood (Carver- Scott) subsystem	1 st half 2017	1 st half 2017
○ Hennepin West subsystem	2 nd half 2017	2 nd half 2017
○ Washington subsystem	1 st half 2018	1 st half 2018
○ Minneapolis subsystem	2 nd half 2018	2 nd half 2018
○ Dakota subsystem	1 st half 2019	1 st half 2019
○ Hennepin East subsystem	2 nd half 2019	2 nd half 2019
○ Anoka subsystem	1 st half 2020	1 st half 2020
○ Ramsey subsystem	2 nd half 2020	2 nd half 2020

Planned system upgrades during this contract period are:

- 7.15 May of 2016
- 7.17 May of 2018
- 7.19 End of 2020

Site improvements

- Still working on the addition of card key reader to the equipment shelters. Working on installs, 98% of the sites completed.
- We are continuing our review of our leased sites/land. Plans had always been to build towers in these areas, but to get the project moving we leased sites to get on the air. In review of some of the land and lease cost it would make sense to find land in these areas and build towers. Also

looking at long term land lease from private parties, would prefer to have towers we own on state, County or City owned land.

- Replace Lake Crystal leased site with 2 new sites. This adds a new site to the area.

Microwave improvements

- At this point we have identified one bad path where an intermediate microwave site is needed. So we are looking to add a microwave site somewhere in the Cromwell area to split the Lawler – Moose Lake link. Tower contract awarded. Site construction in process.
- Still reviewing microwave performance, ongoing.

VHF interop layer

- VPN access for access to MotoBridge network has been worked out. Remote access is now working.
- Working on plans in the metro area to simplify the VHF interop layer as we move from Gold Elites to 7500s.

Old towers that need replacement

- We have a number of towers that are on the air for ARMER that are old towers constructed in the 50's. These towers did not pass structural when we added the new ARMER equipment. But the level of structural deficiency was not a risk that required immediate replacement. So we have held off on replacement of these towers to see where we were in the ARMER budget to build what we had planned. We are still holding off on these until we are a little further along with ARMER. Towers not replaced under the ARMER project will be scheduled for replacement as the ARMER maintenance budget allows, estimate 1 to 2 per year until completed.

ARMER Construction Budget (Remaining Work)

Unencumbered Fund Balance (As of July 1, 2016)					\$5,013,210.91
Site Name <small>(Green - site on air)</small>	County	Description	Land/ Construction	Estimate to Complete	Balance
Madelia	Watonwan	New tower	Ready	\$350,000.00	\$4,663,210.91
Finland	Lake	Replace Tower	Envir	\$440,000.00	\$4,223,210.91
NE Lake County	Lake	New tower	DNR/Envir	\$930,000.00	\$3,293,210.91
Lima Mt	Cook	New tower	DNR/Envir	\$880,000.00	\$2,413,210.91
Red Lake	Beltrami	New tower	Indent Land	\$505,000.00	\$1,908,210.91
Lake Crystal	Blue Earth	New tower	Envir/Lease	\$575,000.00	\$1,333,210.91
Molde	St Louis	Replace fire tower	DNR/Envir	\$320,000.00	\$1,013,210.91
Berner	Clearwater	New tower	Indent Land	\$505,000.00	\$508,210.91
PENDING WORK					
Site clean up, shelter and tower removals				\$200,000.00	\$308,210.91
				\$0.00	\$308,210.91
TOWER REPLACEMENTS (This work being held until above projects completed)					
Cass Lake	Replace tower	Working on spec for replacement		\$600,000.00	
Windom	Replace tower	Working on spec for replacement		\$600,000.00	
Freedhem	Replace tower			\$600,000.00	
Middle River	Replace tower			\$600,000.00	
Theif River Falls	Replace tower			\$600,000.00	
Virginia	Replace tower			\$600,000.00	
Viola	Replace tower			\$600,000.00	
Kimball	Replace tower			\$600,000.00	
Hoffman	Replace tower			\$600,000.00	
New London	Replace tower			\$600,000.00	
Woodland	Replace tower			\$600,000.00	
Littlefork	Replace tower			\$600,000.00	
Roosevelt	Replace tower			\$600,000.00	
Hewit: Land Purchase, replace tower.				\$500,000.00	
Scandia: Need to look at land purchase.				\$100,000.00	
Geneva: Need to look at land purchase, new tower ?				\$500,000.00	
Mapleton: Find land and build new tower				\$500,000.00	
Red Wing: Land purchase				\$100,000.00	