CASE STUDY / MAJOR UTILITY

Engineering and Delivering a $13M Mission-Critical Communications Program



Southern California | Analog-to-digital radio and dispatch modernization

Vlad Erofeev | Principal Project Manager

Vlad developed the business case, personally led substantive negotiations and the design / proof-of-concept phase, and retained Principal PM responsibility through full deployment, changes and support.

40+
Communication sites

~200
Dispatch consoles

2,500
Radio subscribers

$13M
Program value after scope additions

REPRESENTATIVE NETWORK FOOTPRINT



FROM ANALOG TO DIGITAL



Integrated operations

Digital radio and dispatch in one operating environment.

Improved record-keeping

Digital capabilities beyond the previous analog system.

New man-down capability

Emergency-response functionality for field personnel.

TECHNOLOGY

Motorola DMR Linked Capacity Plus (LCP)
Avtec Scout dispatch consoles

Defining the Solution



Business case, integration and accepted proof of concept

CUSTOMER CHALLENGE

Modernize analog radio and dispatch across a geographically distributed utility.

The program had to connect field communications, dispatch workflows and enterprise interfaces while planning the transition to digital operations.

DESIGN & TECHNICAL LEADERSHIP

Vlad developed the technical and economic case for DMR and helped secure customer and user approval.

He led design and POC delivery with hands-on technical involvement, working with engineering, manufacturer and utility teams.

RADIO, DISPATCH & ENTERPRISE INTEGRATION

FIELD RADIOS



Portable and mobile subscribers communicate through the radio sites.

RF ⟷

IP-LINKED RADIO SITES

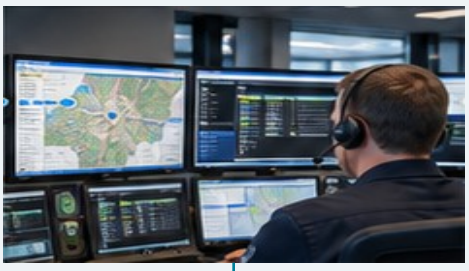


Motorola DMR Linked Capacity Plus (LCP)

Site planning addressed spectrum, talkgroups and network requirements.

IP ⟷

AVTEC SCOUT DISPATCH



Avaya PBX
SIP integration

NICE recording
UDP/RTP + metadata

Migration path: Avtec Outpost interfaces connected the new consoles to the existing analog radio system before digital cutover.

ACCEPTED PROOF OF CONCEPT

Vlad led the engineering and POC delivery before broader implementation.

2 sites

Radio pilot

An LCP system installed, configured and tested ahead of the full radio replacement.

12 consoles

4 dispatch centers

New Avtec consoles integrated with the analog system; user sessions refined dispatch requirements.

End-to-end

Integrated testing

One Avtec console, two repeaters and subscriber radios brought together for testing.

CUSTOMER-ACCEPTED POC → FULL SYSTEM BUILT AND IMPLEMENTED

CASE STUDY / MAJOR UTILITY

Managing Scope, Risk and Delivery



Substantive negotiation, change control and continuing program responsibility

PROGRAM LEADERSHIP THROUGH DELIVERY

01
Business case
Developed the solution and economic rationale.

02
Negotiation
Resolved technical, commercial and delivery terms.

03
Design + POC
Hands-on design leadership and accepted POC.

04
Implementation
Oversaw assigned project managers through completion.

05
Support + expansion
Retained major-decision, change and escalation ownership.

Vlad retained authority over major decisions and the work needed to resolve them throughout the program.

SCOPE EVOLUTION & CHANGE CONTROL

$11.2M
Original contract

$10.5M
After subscriber reductions

$13M
After additions, primarily consoles

Vlad personally managed the deductions, additions and associated change orders, including their technical, commercial and delivery consequences.

SUBSTANTIVE NEGOTIATION

Vlad personally led the customer negotiations, resolving scope, integration, delivery and lifecycle-support commitments.

DEFINED INTEGRATION — NOT UNLIMITED DEVELOPMENT

He challenged an open-ended requirement for no-cost hardware or software development, distinguishing included integration from additional development that had not been committed.

SITE WORK & LIFECYCLE SUPPORT

He separated site-development obligations requiring audits and defined scope, while addressing warranty, software maintenance, training and long-term support.

DELIVERY FOUNDATION

PERSONALLY AUTHORED PM DOCUMENTS

Vlad created the complete original project-management document package, including the project-management and risk-management plans.

PRINCIPAL PM OVERSIGHT

After POC acceptance, he oversaw the PMs assigned to implementation and remained the customer's primary program contact and escalation point.

DEFINED IMPLEMENTATION & TRANSITION

Design, integration, cutover and acceptance-test requirements established the basis for deployment and production transition.

Outcomes and Ongoing Value



Operational capability, full implementation and post-project expansion

DELIVERED RESULTS

System delivered

Full system built and executed according to plan.

Digital operations

Integrated digital radio and dispatch environment.

Record-keeping

Digital capabilities beyond the analog environment.

Man-down functionality

New capability supporting emergency response.

Dispatch flexibility

Additional consoles enabled home-based dispatch.

WHAT CHANGED FOR OPERATIONS

Dispatchers

Digital radio and dispatch with improved record-keeping.

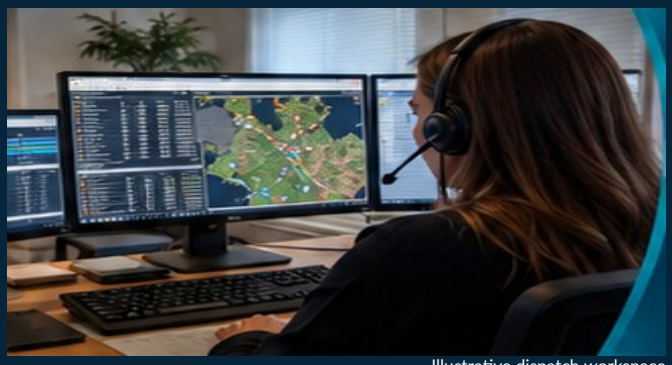
Field personnel

New man-down functionality supporting emergency response.

POST-PROJECT EXPANSION DURING COVID

After the original deployment, **Vlad handled additional consoles** so dispatchers could work from home while using the **same digital dispatch and radio system**.

The expansion extended the established operating environment to meet a new dispatch requirement.



Illustrative dispatch workspace

THE PROGRAM AND ITS DELIVERY

A DELIVERED DIGITAL PLATFORM

A $13M radio and dispatch program across 40+ communication sites, with an accepted POC, completed deployment and capabilities extended after implementation.

CONTINUING PROGRAM LEADERSHIP

Vlad's contribution connected business-case development and substantive negotiation with hands-on design / POC leadership, Principal PM oversight and later expansion.