

# Issue Analysis Form

**Date:** 10/22/2019  
**Item:** Award of Contract –  
Public Safety Radio  
System  
**Lead Department(s):** Police Department, Fire/EMS,  
Finance  
**Contact Person(s):** Keith Early; Brad Owens;  
Betsy Drewry



## Description and Current Status

The Board of Supervisors received information regarding a recommendation of contract award for a new Public Safety Radio System during the September 24, 2019 Board meeting work session.

Following the presentation on September 24, the Fire/EMS Advisory Board met (October 1) and expressed interest in more radios for volunteers. Those increased numbers were provided to Brad Owens, Director of Fire/EMS. Those increased quantities of radios (59 additional portable radios and 14 additional mobile radios) result in an **increased cost of \$273,625.17** (net of increased discount).

Original proposal \$11,240,745.96  
Revised proposal total \$11,514,371.13  
**Increase - \$273,625.17**

As a result of these additional radios, the cost of the maintenance agreement also increased by \$53,493 in total; \$2,815.42 annually, years 2-20. Original maintenance agreement total \$10,712,647; revised total \$10,766,140.

Please see updated October 22 presentation as **Attachment A**.

**RFP #18-0117-1 “P25 Public Safety Digital Trunked Radio System”** was issued on January 17, 2018 with a May 17, 2018 closing date. RFP and related documents can be seen using the link below.

[https://www.princegeorgeva.org/Prince%20George%20RFP%20Procedural%20Information\\_01-17-18%20v1.pdf](https://www.princegeorgeva.org/Prince%20George%20RFP%20Procedural%20Information_01-17-18%20v1.pdf)

Two vendors, **L3Harris (formerly Harris)** and **Motorola** met pre-qualification requirements and submitted proposals. Proposal review, due diligence, evaluation and technical negotiation was conducted as follows:

- Proposal Review – May 2018 through October 2018
- Oral vendor presentations – October 2018
- Visits & Due Diligence – November and December 2018

- Technical Negotiations – October 2018 – April 2019
- Contract Development – August 2019 – September 2019

The staff panel consisted of:

Colonel Keith Early, Chief of Police  
 Brad Owens, Director of Fire/EMS  
 Captain Mike Taber, Police Department  
 Lieutenant Sean Moore, Police Department  
 Lieutenant Chris Taylor, Fire/EMS

Wayne Stack and Jaime Martinez with Altairis Technology Partners, provided technical consulting services to the committee.

The committee considered **compliance to technical specifications; quality of implementation services; experience and qualifications; price; and the quality of proposal and presentation.** The scoring of the firms is provided as **Attachment B.**

Committee members made visits to New Kent County and to the City of Chesapeake. They spoke with a representative from Spotsylvania County also. Information and feedback provided by those visits and discussions is found as **Attachment C.**

Updated pricing comparisons are shown below.

<b>SYSTEM PRICING SUMMARY COMPARISON</b>			
	<b>L3HARRIS UPDATED*</b>	<b>L3HARRIS Original</b>	<b>MOTOROLA SOLUTIONS</b>
<b>SYSTEM PRICE</b>	<b>\$ 11,514,371</b>	<b>\$ 11,240,746</b>	<b>\$ 15,285,114</b>
<b>LMR SYSTEM MAINTENANCE &amp; LIFECYCLE PRICING WORKSHEET</b>			
	<b>L3HARRIS UPDATED*</b>	<b>L3HARRIS Original</b>	<b>MOTOROLA SOLUTIONS</b>
<b>GRAND TOTAL</b>	<b>\$ 10,766,140</b>	<b>\$ 10,712,647</b>	<b>\$ 14,996,376</b>
<b>NUMBER OF REFRESHES</b>	<b>2 (complete core refresh including hardware replacement)</b>	<b>2 (complete core refresh including hardware replacement)</b>	<b>5 (may not include core replacement unless dictated by hardware obsolescence)</b>
<b>*WITH ADDITIONAL VOLUNTEER RADIOS [NOT IN MOTOROLA TOTALS]</b>			

**The committee unanimously selected L3Harris and staff is recommending award of contract to L3Harris.**

Final **updated** turnkey system pricing for **L3Harris** with negotiated scope and equipment, **including additional volunteer radios**, is **\$11,514,371.13**. *This price does not include a local contingency for unforeseen needs or to address any coverage concerns. Additionally, the price does not include the possible purchase of station alerting systems that the committee recommends.*

Sufficient funds to enter into the contract with L3Harris and to pay for consultant services for implementation have been borrowed.

Series 2017 Bonds (spring 2017): \$6,737,452

Series 2018 Bonds (spring 2018): \$7,442,773

**Total Bond Proceeds on Hand: \$14,180,225**

Component	Price
Radio System [ <b>Updated</b> L3Harris turnkey price]	<b>\$11,514,371</b>
Consulting Services (AECOM & Altairis)	764,708
Alerting Systems [price could change; 08/19 quote]	425,797
Available Contingency	<b>1,475,349</b>

**Board Action Requested:**

Authorize County Administrator to execute a contract with L3Harris in the amount of \$11,514,371.13.

**Government Path**

- Does this require IDA action?  Yes  No
- Does this require BZA action?  Yes  No
- Does This require Planning Commission Action?  Yes  No
- Does this require Board of Supervisors action?  Yes  No
- Does this require a public hearing?  Yes  No
- If so, before what date?  Yes  No

**Fiscal Impact Statement**

Series 2017 and 2018 bond proceeds are sufficient to accommodate contracted price with L3Harris leaving a contingency available to address unforeseen items.

**County Impact**

Award of contract will allow County to move forward with replacing the existing radio system (purchased in 2006).

**Notes**

Board of Supervisors  
County of Prince George, Virginia

Resolution

At a regular meeting of the Board of Supervisors of the County of Prince George held in the Boardroom, Third Floor, County Administration Building, 6602 Courts Drive, Prince George, Virginia this 22<sup>nd</sup> day of October, 2019:

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Present:

Vote:

Donald R. Hunter, Chairman  
Floyd M. Brown, Jr., Vice-Chairman  
Alan R. Carmichael, Jr.  
Marlene J. Waymack  
T. J. Webb

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A-4

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_, which carried unanimously, the following Resolution was adopted:

**RESOLUTION; AWARD OF CONTRACT (\$11,514,371.13 PUBLIC SAFETY RADIO SYSTEM)**

WHEREAS, On January 17, 2018 a Request for Proposals was advertised by the Police Department, Fire/EMS and the Finance Department to obtain proposals for replacing the existing Public Safety Radio System (RFP 18-0117-1). The RFP closed on May 17, 2018 with two (2) responses from pre-qualified vendors. The most qualified, highest scoring and firm with the best pricing was L3Harris. The final negotiated pricing with L3Harris for a turnkey system is \$11,514,371.13, with additional Fire/EMS radios, and staff is recommending an award of contract to L3Harris for this amount; and

WHEREAS, \$11,514,371.13 is available from bond proceeds from Series 2017 and Series 2018 borrowings; and

WHEREAS, Staff is requesting authorization for the County Administrator to enter into a contract with L3Harris in the amount of \$11,514,371.13 to move forward with replacing the County's existing Public Safety Radio System.

NOW, THEREFORE, BE IT RESOLVED That the Board of the Supervisors of the County of Prince George this 22<sup>nd</sup> day of October, 2019, hereby awards the contract for Public Safety Radio System replacement to L3Harris in the amount of \$11,514,371.13 and authorizes the County Administrator to execute a contract with L3Harris.

A Copy Teste:

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Percy C. Ashcraft  
County Administrator

ATTACHMENT A



# Prince George County

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PUBLIC SAFETY LAND MOBILE RADIO PROJECT  
BOARD OF SUPERVISORS MEETING

10-22-19

ATTACHMENT A  
**System**



- 9 Towers
- County-wide In-Building Coverage
- 911 Dispatch Center Equipment
- User Radios
- 20-Year Maintenance



# ATTACHMENT A User Equipment

## Police (with ECC, Sheriff, Animal Control)

Handheld	104
Vehicular	85

## Fire (with EMS and Emergency Management)

Handheld	269
Vehicular	71
Pagers	200

## General Services

Handheld	17
Vehicular	3

## Schools

Handheld	22
Vehicular	108

## Grand Totals

Handheld	412
Vehicular	267
Pagers	200





## ATTACHMENT A Changes made after Fire/EMS Advisory meeting

- Handheld Radios Increased by: 59 (From 210 To 269)
- Vehicular Radios Increased by: 14 (From 57 To 71)
- System Cost Increased by \$273,625
- System Total, Original: \$11,240,746
- System Total, Revised: \$11,514,371
- Maintenance Cost Increased By \$53,493
- Years 2-20 Total Original: \$10,712,647
- Years 2-20 Total Revised: \$10,766,140



ATTACHMENT A

## Cost Summary

SYSTEM EQUIPMENT	\$ 5,280,384
TOWER SITE EQUIPMENT, DEVELOPMENT, DESIGN, & INSTALLATION	\$ 1,917,314
USER RADIO EQUIPMENT & INSTALLATION	\$ 2,819,434
SYSTEM INTEGRATION SERVICES	\$ 2,419,632
SYSTEM EQUIPMENT LABOR/INSTALLATION	\$ 836,287
TOTAL SYSTEM DISCOUNT	\$ (1,758,679)
<b>TOTAL SYSTEM PRICE:</b>	<b>\$ 11,514,371</b>



ATTACHMENT A

## 20-Year Maintenance

- Infrastructure Maintenance
  - Hardware Refresh, Years 7 and 14
  - Software Updates (Infrastructure & User Radios)
  - User Radio Maintenance
  - Annual Cost (19 years, fixed): \$566,638
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**Total Maintenance Cost: \$10,766,140**



ATTACHMENT A  
**Project Timeline**

**Total Project Duration: 27 Months**

- Completion of Detailed Design Feb 2020
- Completion of Manufacturing Jun 2020
- Completion of Factory Testing Sep 2020
- Delivery to the County Oct 2020
- Completion of Installation Apr 2021
- Cutover from Old to New System Oct 2021
- Final System Acceptance & Warranty Commencement Dec 2021



ATTACHMENT A

# Questions?

Prince George County, VA

P25 Radio System Vendors Evaluation Criteria	Weight
TECHNICAL SPECIFICATIONS	30
<ul style="list-style-type: none"> <li>• Compliance with System Technical Specifications</li> <li>• Demonstrated understanding of the Regional System and Sub-Systems' requirements for the County</li> <li>• Demonstrated understanding of Regional networking and expansion requirements.</li> <li>• System reliability and redundancy, Transport Network and System Network Management capabilities</li> <li>• Efficient System Coverage Design maximizing In-building portable coverage</li> <li>• Dispatch Consoles solution</li> <li>• Complement and capabilities of Subscriber Units offered</li> <li>• Extent to which the System provides an Intuitive End User Experience</li> </ul>	Harris: 25 Motorola: 20
PROJECT IMPLEMENTATION SERVICES	25
<ul style="list-style-type: none"> <li>• Compliance with Project Implementation Services Specifications</li> <li>• Turnkey Project Management and System Integration approach for projects of similar size, scope, and complexity</li> <li>• Project Plan and Schedule, current workload, and ability to complete required work within the County's schedule</li> <li>• Detailed Design, System Staging, Acceptance Testing, Coverage Testing, Site Development, Deployment, Subscriber Installations</li> <li>• Seamless Migration Transition plan from existing to new System</li> <li>• Availability, location, and qualifications of: local service and maintenance facility</li> <li>• Quality of Training Services for maintenance and user group personnel</li> <li>• Approach and ability to provide on-going Support and System Lifecycle services to ensure a 20+ year System Lifecycle</li> </ul>	Harris: 25 Motorola: 20
EXPERIENCE AND QUALIFICATIONS	20
<ul style="list-style-type: none"> <li>• Demonstrated past performance on complex P25 System Integration projects of similar size and scope</li> <li>• Extent to which the proposal addresses Offeror's experience and ability to provide services meeting the RFP requirements</li> <li>• Relevant experience, technical capabilities, competence and qualifications of the Offeror and all personnel assigned to the Prince George County project</li> <li>• Team organization and amount of experience as a team</li> <li>• Resumes of proposed staff</li> <li>• Customer References</li> <li>• Financial stability of firm</li> </ul>	Harris: 15 Motorola: 10

Prince George County, VA

<b>PRICE</b>	<b>20</b>
<ul style="list-style-type: none"><li>• Initial Purchase Pricing: System Infrastructure; Subscriber Units; Implementation Services</li><li>• On-going Subscriber Unit and Equipment Pricing</li><li>• On-going System Operating Costs</li><li>• On-going System Lifecycle Pricing</li><li>• Pricing Transparency</li><li>• Payment Terms</li><li>• Warranty</li></ul>	Harris: 20 Motorola: 5
<b>QUALITY OF PROPOSAL SUBMISSION AND ORAL PRESENTATION</b>	<b>5</b>
<ul style="list-style-type: none"><li>• Completeness, relevance, quality, conciseness, and insight displayed in response to the Request for Proposal</li></ul>	Harris:5 Motorola:3
<b>TOTAL</b>	<b>Harris: 90 Motorola: 58</b>

## Site Visits to jurisdictions with Harris P25 systems:

New Kent site visit was Monday 11/19/18

Harris P25 System

POC – Sheriff Joe McLaughlin Email: [jjmclaughlinjr@newkent-va.us](mailto:jjmclaughlinjr@newkent-va.us)

Est. Population serve: 21,682

- Had Motorola digital platform prior to switching to Harris P25
- Did have project installation team issues (contracted company, not Harris) at first – was fixed and became a smooth transition moving forward (we will not be using that company for our project)
- Currently deploying Harris subscriber radios (single band); no issues
- 4-tower sites to cover 223 sq. miles
- Only needed one (1) in-building solution (School)
- Pleased with operation of system – coverage increased with Harris system
- Satisfied with customer service
- Harris was much lower price
- Harris was recommended

Chesapeake site visit was Thursday 12/20/18

Harris P25 System

POC – Frank Allgood Email: [fallgood@cityofchesapeake.net](mailto:fallgood@cityofchesapeake.net)

Est. Population serve: 225,050

- Had Motorola digital platform prior to switching to Harris P25
- 4-tower sites system covering 350 sq. miles (flat)
- Currently deploying Motorola subscriber radios in field on Harris P25 system infrastructure
- System coverage improved with Harris system
- Satisfied with overall customer service, reliability, and functionality of system
- Harris was much lower price
- Harris was recommended

Spotsylvania (telephone interview only)

Harris P25 System

POC – Deputy Fire Chief Jason Irby

Est. Population serve 133,033

- Overall system performance is good – had some issues with Harris subscriber units on Fire/EMS side (not police side). Issue was resolved by Harris and was identified as a handheld mic issue, not a radio issue.
- PG Fire/EMS has more info if needed and has had contact with Spotsylvania Fire Department on above issue
- Limit information conducted over telephone was looking for overall satisfactory of system