City of Portland

# Public Safety Systems Revitalization Program

# Radio Replacement Project

# Periodic QA Evaluation Report

**For January 2014**
**Deliverable: Radio.C.14**

V2.0 Final Version
2/14/2014

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Incorporated

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# Periodic QA Evaluation Report
## For January 2014

## Table of Contents


Executive Summary 3
Executive Steering Committee Watch List 3
Project Status and Progress 4
Overall Project QA Status 4
Overall Project Health 5
Quality Focal Points Rated Alert 5
Quality Focal Points Rated Attention 5
Quality Focal Points Rated Stable With a Suggestion 5
Quality Focal Point Summary Chart 6
Quality Focal Points 8
Communications 8
Risk and Issue Management 9
Radio System Acquisition 10
Project & Quality Management and Reporting 11
Radio System Architecture 12
Appendix A – CASE Associates Status Report A


| Version | Date | Comments |
|---|---|---|
| V1.0 | 2/6/2014 | Initial Version for PSSRP Review. |
| V1.1 | 2/7/2014 | Incorporate PSSRP POM feedback. |
| V2.0 | 2/14/2014 | Final Version. |
| | | |

# Periodic QA Evaluation Report
## For January 2014

# Executive Summary

### *Executive Steering Committee Watch List*

This section identifies potential issues that the ESC should be watching closely. The "watch list" documents program related concerns that have come to CAI's attention but have not yet been completely assessed. As of this report, the following are on the watch list:

NEW

There are no items on the watch list for this report.

Two items that have been reported in previous reports have been moved to QFP tables:

1. The planned microwave tower at Walter's Hill. This item is now detailed in QFP #13 Radio System Architecture.
2. Subscriber Units purchase. This item is now detailed in QFP #6 Radio System Acquisition.

# Periodic QA Evaluation Report
## For January 2014

# Project Status and Progress

The PSSRP Radio Replacement Project is to replace the current City of Portland Public Safety radio communications system with a modern all digital P25 Phase I compliant system.

This is the 14th Radio Replacement Project Periodic QA Evaluation Report intended to assess the health of the project and provide independent observations (positive or negative) and recommendations for avoiding and/or responding to any future negative impacts.

The Radio Replacement Project is in two major phases:

1. Phase I - Infrastructure. The project is in the Detailed Design Review process.
2. Phase II - Subscriber Units. PSSRP and Procurement are determining the next step for the Subscriber Unit acquisition,

### *Overall Project QA Status*

The Bureau of Technology Services (BTS) completed the street-level coverage analysis. This data is necessary for the contract negotiations and will be used as a baseline against which to compare the new system.

Motorola completed its tower site visits. This survey will determine the readiness of each tower to receive the new equipment. Any needed improvements to a tower will be the city's responsibility. Motorola has not indicated when they will provide the resulting reports for each site.

The City Council unanimously approved the contract at the 10/9/13 City Council Meeting. The City and Motorola signed the contract 11/12/13. PSSRP sent Motorola the official "Notice to Proceed." The project kickoff was held at Fire Station 1 on 11/14/13.

The project expects to complete the Detailed Design Review (DDR) in March 2014. The project will establish the schedule after the DDR is complete.

NEW

In January the project received five responses to the RFI for Subscriber Units. PSSRP and Procurement are presenting are presenting purchasing options to the Mayor. In February, they will decide how to proceed with the acquisition. The subscriber units need to be in place in time to swap out the existing units.

In the previous report, three Quality Focal Points (QFP's) were rated Attention. Each is related to a recommendation that the project finalize planning documents. The project developed all the recommended planning documents as sections in the Project Management Plan (PMP). In January, the Project Sponsors reviewed and approved the PMP. As a result, the ratings for the QFP's have been changed to Stable.

All other QFP's are rated Stable.

The Overall Health rating is Stable, indicating that the project is well run and requires no immediate intervention.

# Periodic QA Evaluation Report
## For January 2014

### *Overall Project Health*

Overall Rating: Stable

The overall health of the project is based on the three main factors described in the table below:

| Health Factor | Rating | Comments |
|---|---|---|
| **Schedule** | Stable | The project is proceeding according to expectations.<br>The Motorola contract was signed 11/12/13.<br>A final schedule will be available after a Detailed Design Review (DDR), expected in March 2014. |
| **Budget** | Stable | The project has a budget and contingency.<br>Most expenditures will be planned shortly after contract negotiations. |
| **Scope** | Stable | The project scope is clearly defined in the RFP and the Project Charter. |

### *Quality Focal Points Rated Alert*

NONE - No Quality Focal Points are impacting the project at this time.

### *Quality Focal Points Rated Attention*

NONE - No Quality Focal Points need attention at this time.

NEW

### *Quality Focal Points Rated Stable With a Suggestion*

The following QFP is rated as Stable because it is not impacting the project at this time. It includes a **Suggestion.** The suggested action is a preventive measure to keep the QFP stable.

- **Risk and Issue Management, QFP #5 Stable**

  **Suggestion 1:** To enhance Risk tracking, the matrix could include a column for a Contingency Plan. Also in the matrix, the Impact column could include an indication as to whether the impact is on Schedule, Budget, and/or Scope.

  **Suggestion 2:** The Project Charter includes Constraints, Assumptions, and Risks. Some of those may still be project risks. CAI suggests the PMs review the Constraints, Assumptions, and Risks to determine if any should be carried forward to the current Risk matrix.

# Periodic QA Evaluation Report
## For January 2014

# Quality Focal Point Summary Chart[1]

| Quality Focal Point | Impact | Prior as of: 11/6/13 | Prior as of: 1/3/14 | Current as of: 2/6/14 | Next Month[2] |
|---|---|---|---|---|---|
| 1. Meeting Milestones | High | Stable | Stable | Stable | ⇔ |
| **Planning** | | | | | |
| 2. Requirements Management | High | Stable | Stable | Stable | |
| 3. Project Schedule | High | Stable | Stable | Stable | |
| 4. Communications | High | Stable | Attention | Stable | |
| 5. Risk and Issue Management | High | Stable | Attention | Stable | |
| 6. Radio System Acquisition | High | Stable | Stable | Stable | |
| 7. Tech Transition | High | NR[3] | NR | NR | |
| **Monitoring and Control** | | | | | |
| 8. Project Organization and Leadership | High | Stable | Stable | Stable | |
| 9. Project Resources | High | Stable | Stable | Stable | |
| 10. Project/Quality Management and Reporting | Medium | Stable* | Attention | Stable | |
| 11. Budget Planning and Tracking | Medium | Stable | Stable | Stable | |
| 12. Scope and Change Control | High | NR | NR | NR | |
| 13. Radio System Architecture | High | Stable | Stable | Stable | |
| 14. Radio System Acquisition Management | High | Stable | Stable | Stable | |
| 15. Project Library and Configuration Management | Medium | Stable | Stable | Stable | |
| **Delivery** | | | | | |
| 16. System Design Process | High | Stable | Stable | Stable | |
| 17. Testing (Non-Functional) | High | NR | NR | NR | |
| 18. User Acceptance Process | High | NR | NR | NR | |
| 19. Training | High | NR | NR | NR | |
| 20. Implementation & Integration Process | High | NR | NR | NR | |

***This QFP should have been rated as Stable in October. A Project Management Plan was in place but was subject to revision in December because the Vendor had started.**

[1] The Quality Focal Point ratings are explained on the next page.
[2] The Next Month arrows are explained on the next page.
[3] "NR" indicates Not Rated for this report.

# Periodic QA Evaluation Report
## For January 2014

**Definition of QFP Ratings:**

Stable - The Quality Focal Point is stable and not currently impacting the project.

CAI may include a **Suggestion** in a QFP rated as Stable. CAI rated the QFP as stable because it is not impacting the project at this time. The suggested action is a preventive measure to keep the QFP stable.

Attention - The Quality Focal Point needs some improvement so it won't impact the project.

CAI includes a **Recommendation** for every QFP rated Attention. The recommended action is a corrective measure to improve the QFP so it won't impact the project.

Alert - The Quality Focal Point is impacting the project and needs immediate attention.

CAI includes a **Recommendation** for every QFP rated Alert. The recommended action is a corrective measure to improve the QFP that is currently impacting the project.

**Definition of Next Month Indicators:**

The next month indicators signify expected changes in the QFP ratings.

⇔ - This Quality Focal Point (or group of QFPs) is expected to have the same rating in next month's Periodic QA Evaluation.

- Risk is decreasing on the Quality Focal Point. It may be upgraded to Stable in next month's evaluation.

- Risk is decreasing on the Quality Focal Point. It may be upgraded to Attention in next month's evaluation.

- Risk is increasing on the Quality Focal Point. It may be downgraded to Attention in next month's evaluation.

- Risk is increasing on the Quality Focal Point. It may be downgraded to Alert in next month's evaluation.

# Periodic QA Evaluation Report
## For January 2014

# Quality Focal Points

**NOTE: Only the Quality Focal Points that have changed since the December 2013 report are being reported this month per agreement with the PSSRP Program Office Manager. For the complete QFP detail for the Radio project, see the CAI Periodic QA Evaluation Report for October 2013 (CAI Deliverable: Radio.C.12).**

| | |
|---|---|
| **4** | Communications<br>**The project communications are effective and adequately controlled.** Assessment of the Communications QFP examines the project status reporting and communication processes for task completion and budget.<br>**Risk Level** Stable Attention Alert |
| **4.1** | Have communications been planned, identified and documented? **Finding:** Yes – The Project Management Plan (PMP) contains an effective Communication Matrix that articulates the communication needs of all project roles identified. It lists communication methods for each stakeholder role. |
| **4.2** | Is the Communications Plan being followed? **Finding:** Yes –The project has regular communications with stakeholders. When a detailed schedule is available, it will be easier to compare communication activities to the Communication Plan. |
| **4.3** | Are communications identified in the plan and produced by the Project effective? **Finding:** Yes. |
| **4.4** | Does the project receive appropriate and timely executive and project sponsor attention? **Finding:** Yes. |
| **4.5** | Are project status and activities being monitored and reported in enough detail and with enough frequency to ensure early detection of problems or schedule slippage? **Finding:** Yes, weekly reports are sufficient for the DDR (planning) phase. |
| **Recommendation**: The Radio project should update the Communication Plan to reflect current assignments. (See Related Recommendation QFP #10.)<br>Status: The Communication Plan is included as Section 6 in the PMP. The document was reviewed and approved by the Project Sponsors in January 2014. This QFP is now set to Stable. | |

# Periodic QA Evaluation Report
## For January 2014

| 5 | Risk and Issue Management<br>**Project risks are identified and appropriately managed.** The Risk Management QFP provides an assessment of the risk identification, mitigation strategy and contingency planning for high probability and/or high impact risks. It also assesses the continuing validity of high impact assumptions.<br>**Risk Level** Stable / Attention / Alert |
|---|---|
| **5.1** | Are project risks and issues identified and categorized as to likelihood and impact? **Finding:** Yes – Risks are a significant part of the regular status reporting. |
| **5.2** | Are appropriate risk and issue mitigation strategies in place with appropriate monitoring measures? **Finding**: Yes – The regular status reporting includes "Actions Completed/Planned." |
| **5.3** | For high probability or high impact risks, are contingency plans developed in case the risk mitigation strategy fails? **Finding**: Partially – The regular status reporting on risks and includes "Actions Completed/Planned." For some risks, this column describes contingencies.<br>Some other critical risks are identified and analyzed. Documentation is not available defining strategy, responses, and contingencies. (See Suggestion 1 below.) |
| **5.4** | Are ongoing risk identification, assessment and management processes in place and operating effectively? **Finding**: Yes – The approved Project Management Plan (PMP) describes the Risk Management processes with respect to capture, response planning, mitigation strategies and monitoring. Also, the regular status reporting includes risks. |
| **5.5** | Have project assumptions been verified & appropriate monitoring measures been put in place to ensure failed assumptions do not become risks? **Finding**: TBD – The project Charter contains initial sets of Project Constraints, Assumptions, and Risks. (See Suggestion 2 below.) |
| **Recommendation:** The project should develop a Risk Management Plan to formally describe risk capture, response planning, mitigation strategies and monitoring measures.<br>Status: The Risk/Issues Management Plan is included as Section 11 in the PMP. The document was reviewed and approved by the Project Sponsors in January 2014. This QFP is now set to Stable. | |
| **Suggestion 1:** To enhance Risk tracking, the matrix could include a column for a Contingency Plan. Also in the matrix, the Impact column could include an indication as to whether the impact is on Schedule, Budget, and/or Scope. | |
| **Suggestion 2:** The Project Charter includes Constraints, Assumptions, and Risks. Some of those may still be project risks. CAI suggests the PMs review the Constraints, Assumptions, and Risks to determine if any should be carried forward to the current Risk matrix. | |

# Periodic QA Evaluation Report
## For January 2014

| 6 | Radio System Acquisition<br>**The Radio System Acquisition is adequately planned and executed.** Assessment the project's procurement process, RFP and vendor contract.<br>**Risk Level** Stable / Attention / Alert |
|---|---|
| **6.1** | The RFP was prepared per the City's Procurement Office guidelines**. Finding:** Yes – The RFP went through extensive reviews by all necessary stakeholders. |
| **6.2** | The RFP defined deliverables that meet the business requirements. **Finding:** Yes. |
| **6.3** | The RFP included appropriate scoring and evaluation instructions. **Finding**: Yes – The RFP contains these instructions. |
| **6.4** | Is the Pre-Award Plan completed and understood by Evaluation Team? **Finding**: Yes – The evaluators understood their roles. The SMEs discussed the makeup of the team, including the team's technical advisors. |
| **6.5** | Is the Pre-Award Plan being followed? **Finding**: Yes – The Evaluation Team completed proposal evaluations and announced the award on 5/22/2013, nine days earlier than planned. The seven day protest period elapsed with none received. Contract negotiations with Motorola, the successful vendor, started 6/12/2013 and will complete in August 2013. |
| **6.6** | Are contract negotiations proceeding as planned? **Finding**: Yes - Contract negotiations with Motorola, the successful vendor, started 6/12/2013. PSSRP and Motorola scheduled future meetings and discussed a preliminary project schedule. To help develop the contract, PSSRP has recent contract samples from other Motorola clients. The Radio team visited Spokane.<br>The City Council unanimously approved the contract for execution at the 10/9/13 City Council meeting.<br>The contract was signed 11/12/13. |
| **6.7** | Is the **Subscriber Units** acquisition proceeding? **Finding:** Yes - The project considered an offer from Motorola to purchase the subscriber units.<br>PSSRP recommended moving forward with purchasing the subscriber units as offered by Motorola. A notice of intent to purchase the subscriber units was issued on September 19. Two protests were received; 1) EF Johnson, and 2) RELM. The City rescinded the notice and will be issuing a competitive solicitation process as a result of receiving these protests.<br>PSSRP released a RFI in December 2013 to determine the availability of subscriber units that meet the City's requirements. Five vendors responded in January 2014.<br>PSSRP and Procurement are presenting purchasing options to the Mayor. In February they will decide how to proceed with the acquisition. The subscriber units need to be in place in time to swap out the existing units. |

# Periodic QA Evaluation Report
## For January 2014

| 10 | Project & Quality Management and Reporting<br>**The project is appropriately managed and quality controlled.** Assessment of the Project Management and Quality Management Processes and Plans.<br>**Risk Level** Stable / Attention / Alert |
|---|---|
| **10.1** | Have formal Project Management and Quality Management Plans been developed? **Finding:** Yes- The Quality Management Plan (QMP) is included in the Project Management Plan (PMP). |
| **10.2** | Are the Plans being followed? **Finding:** Yes. |
| **10.3** | Are appropriate status reports prepared for tracking and monitoring all project tasks? **Finding:** Yes, for the RFP and DDR (planning) phase. During the execution phase, the project may need more detailed status reporting. |
| **10.4** | Have all the appropriate (needed) project management documents been developed? **Finding:** Yes – The Quality Management Plan (QMP) is included in the PMP. |

**Recommendation:** The project should develop a detailed and formal Quality Management Plan (QMP). The City and the vendor will collaboratively develop the QMP. The plan will describe reviews and Quality Control and Quality Assurance steps to ensure that the vendor is progressing according to the City's needs.

The QMP is not necessarily a separate document and plan. It may be contained in another document, or all QM plans may be described in various other documents. For instance, design reviews and product reviews could be described in a Testing Plan. Likewise, Quality reporting could also be described in a Communication Plan.

Status: The Quality Management Plan is included as Section 9 in the PMP. The document was reviewed and approved by the Project Sponsors in January 2014. This QFP is now set to Stable.

# Periodic QA Evaluation Report
## For January 2014

| 13 | Radio System Architecture<br>**The project adheres to Radio System architecture standards.** Verification that the Project conforms to Radio Architecture standards.<br>**Risk Level** Stable / Attention / Alert |
|---|---|
| **13.1** | The Project supports the Radio System Architecture Framework. **Finding:** Yes – There is a Conceptual Design. Motorola's proposal was selected in part because of its fit into the City's architecture. |
| **13.2** | The project supports the Radio System architecture with respect to geographical coverage, functionality, capacity, and interoperability. **Finding:** In Progress – the final step to prove the vendors fit with the City requirements will be at the Detailed Design Review expected to be completed in March 2014. |
| **13.3** | Will the project deploy system redundancy as planned to **Walter's Hill? Finding:** In progress - The project plan includes installing a microwave tower at Walter's Hill to cover Gresham and East County, with a loop back to BOEC.<br>The Gresham Mayor and a number of Gresham residents are concerned about the tower height to replace the existing 40' telephone pole. It is likely that the tower construction meets the land use requirements established by the City of Gresham. The tower replacement is a BTS project (not PSSRP).<br>The Radio project's conceptual design included a microwave tower location on Walters Hill. The design and schedule may vary depending on the resolution of the Walter's Hill antenna issue. Without the planned tower at Walter's Hill, the new system may not have the planned system redundancy.<br>In November the project team requested Motorola provide a 'drop dead date' for having a decision regarding a replacement tower on Walter's Hill. However it was determined that further progress needs to take place in the DDR phase before arriving at a deadline. Because the tower replacement project is being managed by BTS, the project team has deferred project strategies to the BTS project management team. |

# Periodic QA Evaluation Report
## For January 2014

# Appendix A – CASE Associates Status Report

This section summarizes activities and deliverables completed for the Radio Replacement Project during September 2013.

When applicable, it includes:

- A list of any delayed items
- A description of the problem
- Schedule impact
- A recommended solution

Such items will be carried over to subsequent reports until the problem is resolved.

As of May 2013, this section replaces the "Quality Assurance Status Report." In prior months this section was delivered as a separate report.

### Meetings Attended

PSSRP Executive Steering Committee 1/15/14
Project update with PSSRP PM's and POM 1/29/14

### Documents Reviewed

Radio Project Mgt Plan v 3 0 1-28-2014 APPROVED
COP Radio Status report January 1 -17, 2014 – Project Managers' Report
COP Radio Status report January 20-31, 2014
Infrastructure Design Review Process description – hardcopy handout

### Documents Delivered

Radio CAI Periodic QA Evaluation Report for August 2013, deliverable *Radio.C.13*

### Documents in Process

Radio CAI Periodic QA Evaluation Report for September 2013, deliverable *Radio.C14*

### Delayed Items

| Item | Description of problem | Schedule Impact | Recommended Solution |
|---|---|---|---|
| None | | | |

### Other Issues/Problems/Concerns

None