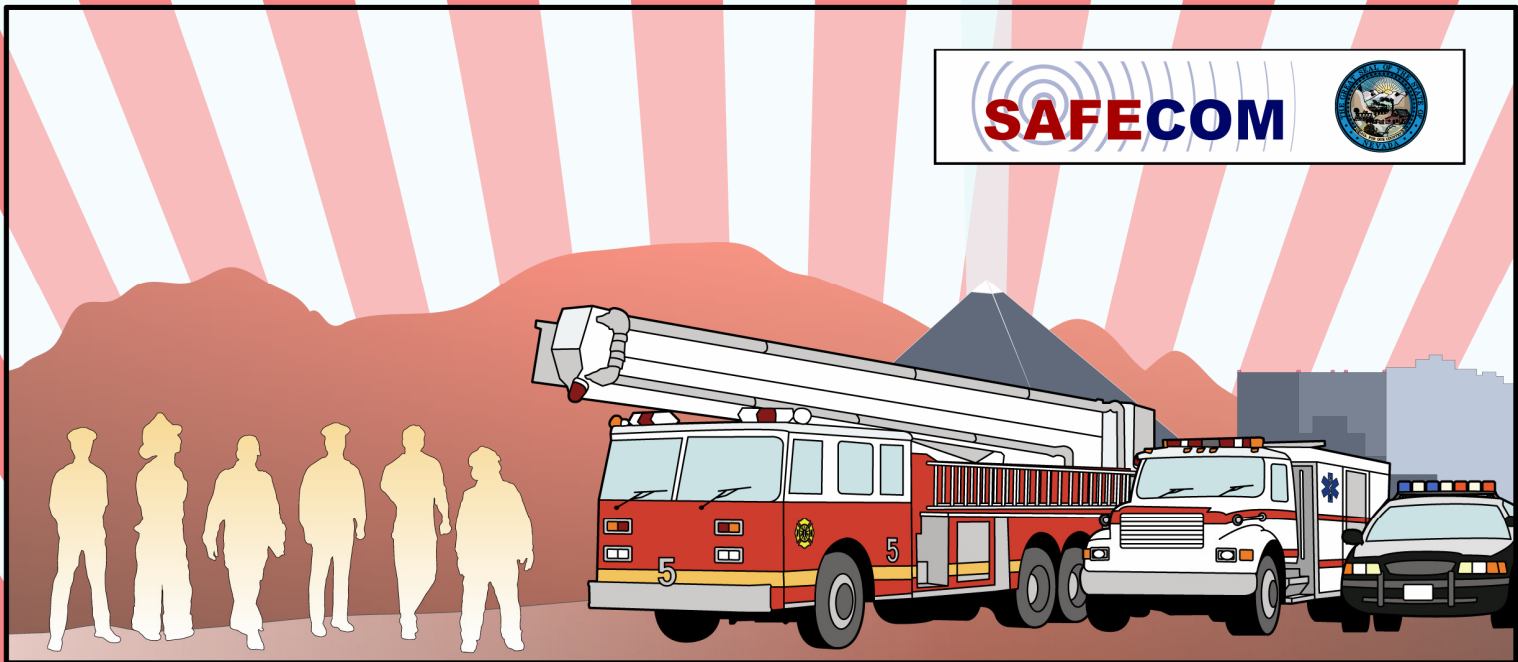# Enhancing Communications Interoperability:
Guidelines for Developing Requests for Proposals (RFPs)

SAFECOM

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Foreword

Effective Requests for Proposals (RFPs) can help the public safety community make purchases and procurements that support its need for improved interoperability solutions and services. This report provides the public safety community with key considerations and guidance to support the creation of such RFPs.

The SAFECOM program has found that effective RFPs:

❑ Reflect the needs of all stakeholders affected by and supporting the purchase

❑ Use practitioner-driven requirements documented through an inclusive consensus-building process

❑ Have a clear scope for the technology, equipment, or services requested

❑ Bring forth thoughtful proposals that are responsive and tailored to the requirements

❑ Clarify what the performance expectations of the vendor or vendors will be during the implementation phase

This guidance equips the public safety community with a reference for developing RFPs for solutions, equipment, or services tailored to meet public safety practitioner needs.

SAFECOM Background
The SAFECOM program, the communications program of the Department of Homeland Security's Office for Interoperability and Compatibility (OIC), along with its federal partners, provides research, guidance, tools, and templates on communications-related issues to local, state, and federal public safety agencies. SAFECOM believes that any successful effort to improve public safety interoperability must include the voices of first responders on the front lines in large, small, rural, and urban communities across the Nation.

OIC was directed by Section 7304 of the Intelligence Reform and Terrorism Prevention Act of 2004 (Public Law 108-458) to address communication issues facing public safety. As such, OIC, through the SAFECOM program, is conducting two Regional Communications Interoperability Pilot (RCIP) projects. These pilot projects focus on providing assistance in two selected states, the State of Nevada and the Commonwealth of Kentucky, and gathering experience and information for SAFECOM to support the development of tools and models for improving interoperability for other jurisdictions nationwide.

In Nevada, SAFECOM formed a partnership with the Nevada Communications Steering Committee (NCSC) and completed a statewide strategic planning process in the summer of 2005. The NCSC also requested this report to support RFP development and release for use by the public safety community in Nevada.[1] In addition, this report will serve as the basis for a future SAFECOM RFP tool intended for use by other public safety communities across the Nation.

Organization of Contents
This document incorporates input from the public safety community and SAFECOM research. It was designed to provide the public safety community with information and critical actions that support achieving successful procurement efforts for improving communications and interoperability. The document is organized into four phases that reflect the major stages of RFP development and execution.

Contents are organized as follows:

❑ *Introduction –* This section discusses RFPs and the procurement process as a necessary step in efforts for enhancing communications interoperability and outlines the scope and purpose of this report.

❑ *Phase 1: Establish Project Leadership and Align Resources* – This section discusses key considerations for building critical relationships and the essential planning required prior to the development and release of the RFP document. Initial steps include establishing project leadership and a working group, understanding and aligning funding sources, and conducting a practitioner-driven needs assessment.

❑ *Phase 2: Develop the RFP Requirements and the Document* – This section identifies critical steps and actions in the development and release phase for the RFP, including efforts to analyze and document specific requirements as well as the drafting of the RFP document.

❑ *Phase 3: Evaluate Proposals and Award the Contract* – This section briefly discusses steps for a community to consider when determining which vendors will be selected and by whom.

❑ *Phase 4: Manage Procurement Implementation* – This section offers suggestions to help ensure that procurement is successfully managed, including suggestions for establishing performance measures, considerations for operational adjustments in policies and procedures, and documentation of lessons learned for future procurement efforts.

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[1] Other deliverables developed during the Nevada RCIP include guidance reports on improving Nevada's governance, developing a funding strategy, and enhancing alignment between Nevada and the Clark County urban area.

❑ ***Conclusion*** – This section offers a brief summary of the best attributes of an effective RFP.

❑ ***Appendices*** – Appendix A contains a listing of supplemental resources and informational Web sites. Appendices B through D contain sample forms and documents for use in RFP development and release.

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Introduction

Procurement: A Key Issue

During the statewide communications interoperability strategic planning process conducted for the Nevada pilot project, public safety practitioners expressed a lack of confidence that the solutions and services they had purchased were truly designed to meet their unique requirements. They expressed a strong desire that procurements for solutions, services, and equipment be driven by them and meet their specific needs and requirements.

Public safety practitioners attributed the difficulty to completing practitioner-driven procurements to a variety of factors, including:

❑ Technical experts from within the community are generally overextended or unavailable to advise the buyers —whether county commissioners, agency leaders, or elected officials—on purchasing decisions. This situation creates a dependency on vendors to provide education and recommendations for what is required to improve interoperability.

❑ Interoperability purchases are often not coordinated across jurisdictions, agencies, or disciplines through collaborative regional purchasing strategies and evaluation criteria to address the regional interoperability needs of practitioners.

❑ Public safety leaders have not established processes and procedures to ensure that communications systems are practitioner-driven and built on open architectures.

❑ Buyers of interoperability equipment and solutions do not take into account or are not informed of the impact that new technology purchases will have or how they will be fully integrated with existing communications systems in their regions.

One possible remedy is to collaboratively develop clearly articulated requirements for obtaining solutions, equipment, and services for improved interoperability, and systematically document them in Requests for Proposals (RFPs). SAFECOM recognized that the difficulty of procuring equipment, solutions, and services designed to meet the needs of the public safety community extended beyond Nevada. Therefore, the key considerations and guidelines described in this report should be tailored to meet the needs of each individual community, region, or state preparing for and conducting interoperable communications procurements.

Requests for Proposals: A Key Tool

An RFP is a document or tool that petitions vendors to submit proposals for providing services, equipment, or solution packages in response to clearly documented requirements. An RFP includes the conditions and schedule for the work to be performed, legal requirements and protections, vendor evaluation factors, budget estimates, and a host of other procurement expectations.

Vendors respond to an RFP with proposals, which are then evaluated by those issuing the RFP. This leads to the selection of a vendor or vendors with whom a contract is established for the delivery of the services, equipment, or solution described in the RFP.

The RFP process provides formal, specific guidance to the vendor community on the requirements and expectations of the buyer agency or community that is conducting the procurement. In addition, this process fosters competition among vendors. It also provides advantages to the buyers because a solution, equipment, or service can be selected that best fits their needs at an optimal price. Using the RFP procurement process often leads to a reduction in costs and improved, customer-focused delivery of service.

Experience makes clear that the most effective RFPs:

❑ Reflect the needs of all stakeholders affected by the purchase

❑ Use practitioner-driven requirements documented through an inclusive, consensus-building process.

❑ Have a clear scope for the technology, equipment, or services requested

❑ Bring forth thoughtful proposals that are responsive and tailored to the requirements

❑ Clarify what the performance expectations of the vendor or vendors will be during the implementation phase

The Procurement Lifecycle

This report provides guidance organized to reflect the four phases of the *Procurement Lifecycle* depicted below:

Procurement Lifecycle

PHASE 4

Key Activities:

1. Review and update working group membership.

2. Establish performance measures.

3. Update operating policies and procedures.

4. Document lessons learned and benchmarks.

PHASE 3

Key Activities:

1. Review and update working group membership for proposal evaluation.

2. Conduct proposal evaluations and award the contract.

PHASE 1

Key Activities:

1. Identify the RFP project leader.

2. Understand and secure funding resources.

3. Establish a collaborative working group.

4. Conduct a practitioner-driven needs assessment.

PHASE 2

Key Activities:

1. Review and update working group membership for the RFP development.

2. Analyze and document specific requirements.

3. Develop and publish the RFP document.

PHASE 4 — MANAGE PROCUREMENT IMPLEMENTATION

FEEDBACK OF LESSONS LEARNED

PHASE 1 — ESTABLISH LEADERSHIP AND ALIGN RESOURCES

Procurement Lifecycle

PHASE 3 — EVALUATE PROPOSALS AND AWARD A CONTRACT

PHASE 2 — DEVELOP THE RFP REQUIREMENTS AND THE DOCUMENT

Report Objective

The goal of this report is to present and promote creative, successful, and replicable ideas for the development and release of RFPs for interoperable communications solutions or services. The guidelines and key considerations in this report are not intended to be the sole source of guidance for RFP development. SAFECOM recognizes that local resources, needs, and issues within individual communities must be taken into consideration at every stage of the Procurement Lifecycle.
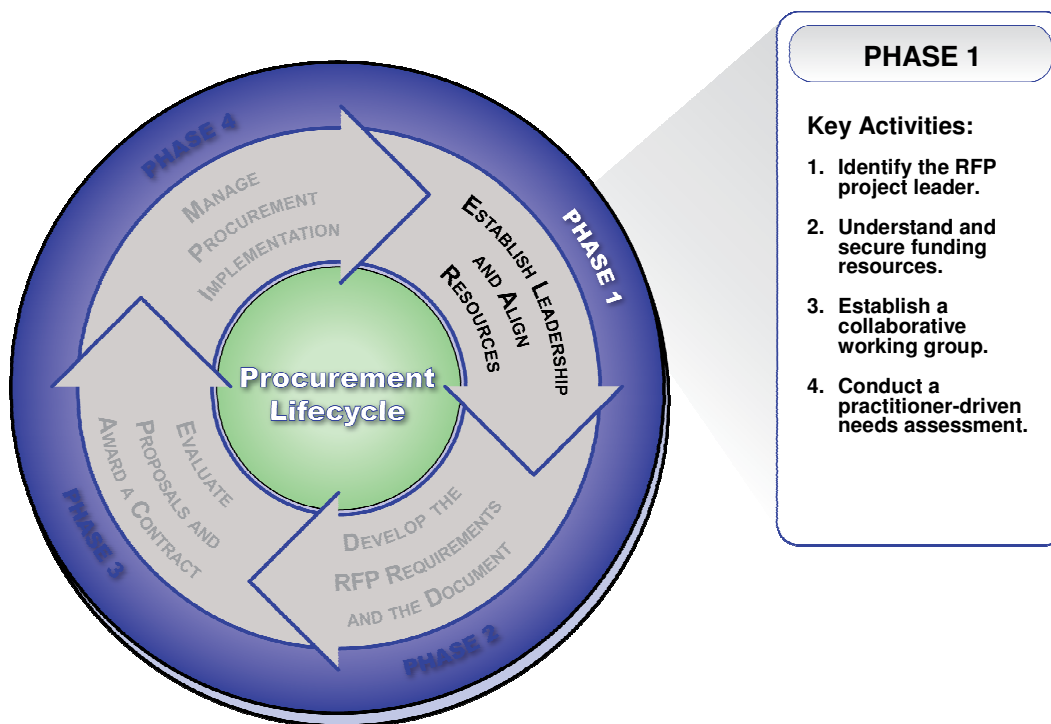
Assumptions

SAFECOM's approach to addressing the needs of public safety agencies for interoperable wireless communications assumes the conditions listed below. These assumptions apply to the RFP procurement process and are important to keep in mind when planning, developing, and releasing RFPs:

❑ A practitioner-driven approach is critical to the creation of any sustainable communications interoperability solution.

❑ Members of the public safety community will emerge as leaders to address practitioner-identified communications interoperability needs and gaps.

❑ The priorities of local, tribal, and state public safety communications systems are first and foremost to provide reliable agency-specific communications. Secondly, those systems should provide reliable regional interagency communications interoperability. The requirement for reliable interagency communications interoperability between local, tribal, state, and federal agencies is tertiary.

❑ Public safety communications will continue to operate on a variety of technologies across fragmented spectrum bands in the near future. Therefore, promoting a "system of systems" approach and recognizing that interoperable solutions are rarely "one size fits all" is critical to achieving interoperability.

Phase 1: Establish Project Leadership and Align Resources

Procurement Lifecycle

PHASE 1

Key Activities:

1. **Identify the RFP project leader.**

2. **Understand and secure funding resources.**

3. **Establish a collaborative working group.**

4. **Conduct a practitioner-driven needs assessment.**

This section briefly discusses essential pre-planning steps to ensure a successful process when developing and releasing an RFP for interoperable communications solutions, equipment, or services. These steps include:

1. Identifying the RFP project leader

2. Understanding and aligning resources to support the process

3. Establishing a collaborative working group

4. Conducting a practitioner-driven needs assessment

Establishing a strong foundation for the RFP process will help identify potential barriers to success and ensure that key stakeholders are adequately informed and involved. Unnecessary delays or rework in the process will thereby be avoided.

Identify the RFP Project Leader

As a first step, the agency sponsoring the procurement identifies and recognizes a project leader. The project leader will manage the RFP effort, coordinate stakeholders, and oversee the procurement process. This project leader will serve as the accepted authority or liaison with his or her agency's procurement office during the RFP development and throughout the implementation phase.

The project leader immediately begins the following tasks:

❑ *Have, or quickly gain, a firm understanding of the political environment* and stakeholder organizations in the community.

❑ *Develop working relationships* with:

   o Leaders from the agencies and entities supporting or affected by the procurement

   o Leaders who control budget and funding sources

   o Personnel who manage the contracting process

The following guidelines and key considerations for enabling a strong foundation for the RFP procurement effort are recommended to the project leader:

❑ *Partner with the procurement officer and legal advisors* early on in the development of the RFP and explain the project goals and objectives to them.

   o Find out deadlines, schedule time for document reviews, and schedule meetings to understand the contracting and procurement process and requirements.

      ▪ Be clear on how much time is needed for document review.

      ▪ Build meeting times and other time constraints into the RFP process schedule.

      ▪ Inform the procurement officer on the specific needs of the public safety community.

      ▪ Ensure that the community's legal advisors take precautionary steps to avoid contestations of the contract award.

   o Request standard contractual language from the procurement officer or legal counsel to include in the RFP.

   o Find out if there are any excluded bidders.

❑ *Understand current local, regional, state, and federal regulations, budget cycles, and requirements* and consider their impact on the upcoming procurement.

❑ Plan your procurement in alignment with the future direction and trends in technology to keep up with innovations and evolving solutions for communications interoperability.

Understand and Secure Funding Sources

A successful procurement requires identifying and securing the needed funding and financial resources. The project leader develops a cost estimate and is also responsible for working with key stakeholders and community leaders. The project leader will use his or her established working relationships with decision makers who make budgeting decisions to secure funding for the full lifecycle of the procurement—from planning to implementation to maintenance. It is also important for the leader to understand the rules and regulations tied to the funding to avoid project pitfalls.

The following provides guidelines and key considerations for understanding and securing funding sources:

❑ *Verify that the goals and desired outcomes of the procurement effort relate to a long-term strategic procurement plan.*

○ Often "end-of-year" money will be released and communities must make purchasing decisions at the last minute. If there is not a spending strategy, communities risk making purchases on instinct, without consensus, and without alignment to long-term goals.

Key Questions for Project Leaders
During the Initial Pre-Planning Stages:

- Why are we doing this procurement and where does it fit within the short-term and long-term interoperability plans?
- Where does money need to be allocated?
- What is the value of moving forward with the planned procurement?
- When funding is allocated for this project, what opportunities or initiatives will be delayed or replaced?
- Will spending the money on the identified projects create more value and an adequate return on investment than other projects not selected to justify spending the money?

   Tip: Understand your spending priorities early in the fiscal year in case last-minute funds become available.

❑ *Develop a draft cost estimate* for what the total cost of the procurement effort will be. This estimate accounts for the cost of staff hours and other personnel resources needed for project governance, policy development, training and exercises, maintenance, and technology or equipment purchase costs.

  o See Appendix B for a worksheet that will help guide the development of a draft cost estimate.

❑ *Review the SAFECOM Recommendations on a Funding Strategy for the State of Nevada report.* SAFECOM provided Nevada with a detailed approach to securing funding for interoperable communications. This report may be useful in identifying strategies and funding mechanisms for the upcoming procurement. This document can be found on the NCSC Web site at: www.ncsc.nv.gov or at the SAFECOM program Web site at www.safecomprogram.gov.

❑ *Develop a business case* to build support for the project from leaders of partnering agencies, public officials, and the general public. The business case may be in the form of a pamphlet, a PowerPoint presentation, or other communication format and contains content that will influence your audiences to support the procurement effort.

  o Key components of this business case include:

    ▪ Descriptions of why the procurement is needed based on difficulties in the current state

    ▪ Identification of the expected benefits for the targeted audiences and for the public safety community

    ▪ Discussion of the potential consequences of not moving forward

    ▪ Identification of potential funding resources

    ▪ A high-level outline of the implementation plan

> ### *Highlight from Wyoming's WyoLink Effort*
>
> The Wyoming Department of Transportation (WYDOT) leads the Public Safety Mobile Communications (PSMC) planning efforts. The PSMC is overseeing the development of WyoLink, a system which will allow all Wyoming public safety agencies to communicate efficiently with each other, from any location and at any time. The PSMC developed a business case strategy to gain funding support from the state. In addition, Wyoming co-sponsored a one-day symposium and held a series of meetings in regions across Wyoming to present its statewide communications system plans to potential users, legislators, and other key stakeholders as part of an effort to engage their support.

❑ *Establish working relationships* with personnel in the finance department and share information via updates and regular communications, where appropriate.

- o To engage their support for the upcoming purchase, inform personnel in charge of disbursing funds, managing budgets, and overseeing procurement practices of your anticipated project needs and their role in supporting the procurement.

- o Provide updates to key personnel to document important decisions in the procurement process to be in compliance with future or potential audits.

- o Work with key personnel to ensure the funding is available, <u>and that the funding can be applied to the purchase.</u>

❑ *Identify a recognized decision maker or leader from the agency or community* with authority to support and allocate funding resources for the procurement. This leader will support the project by:

- o Reviewing the current budget for available funding

- o Securing funding through commonly available mechanisms and investigating new ones

- o Ensuring that finance managers and legal advisors from the lead agency and partnering agencies are informed early in the procurement planning process

❑ *Develop a firm understanding of the governmental and political structure* controlling funding and resources. Local, regional, and state governments, after all, vary in makeup and administration.

Tip: Benefits of Understanding the Political Landscape

It is important to clearly understand the chain of command, the associated budgetary control, and any legal constraints. Such understanding allows the project leader to:

- Recognize potential risks and mitigation steps
- Identify key stakeholders to the project's success and how to engage their support
- Develop streamlined decision-making processes

❑ *Secure the appropriate amount of funding* and establish a process to expedite the release of funds when a decision for an award is made. The process will depend on the strong working relationships established with personnel in charge of funding.

Establish a Collaborative Working Group

The project leader works with relevant stakeholders in the planning and procurement process by establishing a working group, or project action team, to support all phases of the procurement—needs assessment, requirements development, proposal evaluations, and execution. In particular, having representatives from the agencies and entities supporting or affected by the procurement on the working group, and actively engaging them, may help win early buy-in and ease potential resistance. In determining roles and responsibilities, keep in mind that the composition of the working group may change according to the tasks and key activities scheduled for each phase of the process.

At the outset of the effort, the working group develops a written project charter that identifies the project objectives, timeline, and issues. The project charter serves as a guide to stakeholders and potential vendors who want to understand why the project is being undertaken, what will be accomplished, and by whom.[2]

The level of effort and commitment varies with the size and complexity of the procurement effort and on whether dedicated staff is available to provide support. However, establishing expectations of the working group members and getting agreement early in the formation of this group helps avoid misunderstandings.

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[2] *Schools Interoperability Framework Implementation Planning Toolkit*, p. 10: http://www.sifinfo.org/tool_kit.asp.

The following graphic depicts one model for the relationship between the working group and the project leader, along with suggested membership and responsibilities. This model represents a situation in which the project leader is given the authority to make decisions based on his or her position in the agency leading the procurement.

Working Group: Phase 1

Project Leader

Working Group

Project Leader Responsibilities:
- Conduct project oversight and coordination.
- Understand and align funding sources.
- Establish collaborative relationships with key partners and the working group.
- Make critical decisions during the procurement.

Working Group Membership:
- Leaders from key agencies and communities in the region
- Desire and ability to invest and support interoperability solutions

Working Group Member Responsibilities:
- Support conducting the needs assessment.
- Support the development of a high-level budget.
- Support the identification of key funding sources.
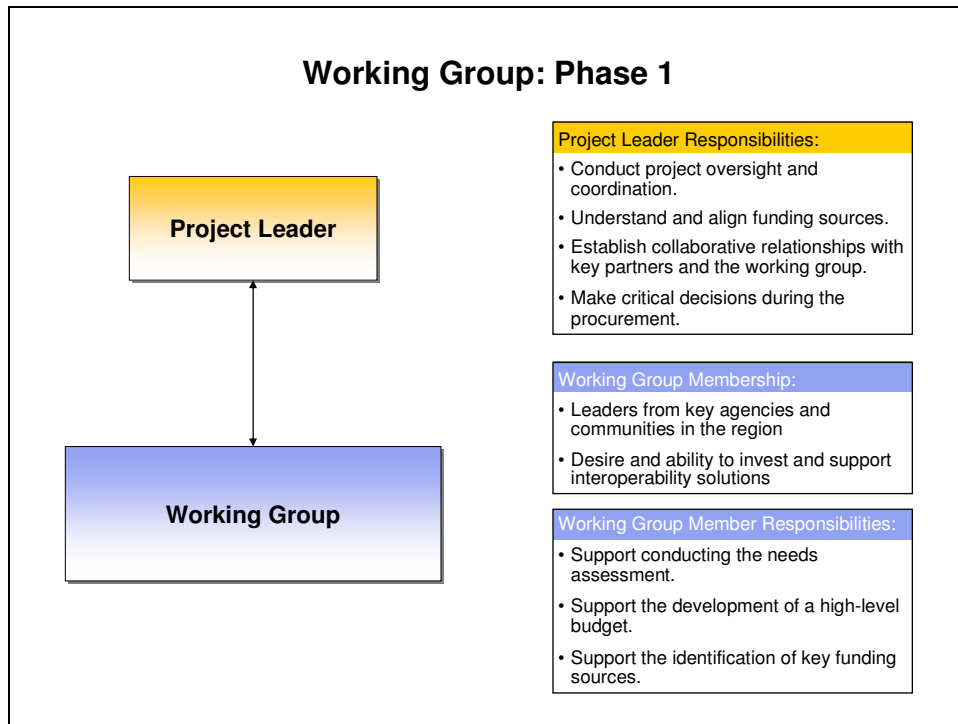
Alternatively, in situations where the procurement is funded by multiple agencies and jurisdictions, the decision-making authority often rests with the working group. This relationship could be modeled as depicted in the graphic below.

Working Group: Phase 1

Working Group

Project Coordinator

Working Group Membership:
- Leaders from key agencies and communities in the region
- Desire and ability to invest and support interoperability solutions

Working Group Member Responsibilities:
- Conduct the needs assessment.
- Develop a high-level budget.
- Identify key funding sources.
- Make critical decisions during the procurement.

Project Coordinator Responsibilities:
- Direct the project based on working group input.
- Manages the funding sources.
- Maintain collaborative relationships with key partners.
- Implement the working group's decisions.

Guidelines and key considerations, for use when establishing a working group at the beginning of a procurement using an RFP, are listed below:

❑ *Identify and establish criteria for the skill sets* needed for the working group. In doing so, the following are questions for the project leader to consider:

   o What level of expertise is needed for the work in each phase of the Procurement Lifecycle?

   o What balance of technical expertise versus practitioner experience is needed for the working group?

   o What agencies need to be involved and what level of decision-making authority is needed for the working group?

   ▪ Can the decision making be delegated by an agency leader to someone who can dedicate the needed time to the effort?

Sample Criteria for Technical and Practitioner Expertise

Here are some sample skill set criteria for identifying technical and practitioner working group members:

From the technical perspective, members should:
1. Possess technical expertise or in-depth knowledge of wireless communications technologies in public safety environments
2. Be familiar with wireless systems that provide personal-area, local-area, or wide-area coverage
3. Understand project issues surrounding communications systems and delivery

From the practitioner and operational perspective, members should:
1. Be familiar with the mission and goals of the community or region
2. Understand the equipment, services, and system requirements
3. Have an operational understanding or knowledge of wireless communications technology that affects first responders
4. Understand technology communications system operations and delivery

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❑ *Recruit, as part of the working group, stakeholders and partners* that will benefit from and assist in the procurement process.

　○ Recruit experienced personnel with the expertise needed to inform and support the procurement project.

Highlight from the WyoLink Procurement

The State of Wyoming finalized a set of recommendations for developing a statewide public safety mobile communications system known as WyoLink. Wyoming worked through a steering committee and an integrated project team comprised of state agencies, county and municipal organizations, federal agencies, and consulting support. Their recommendations were developed over a 12-month period and defined the technical and functional architecture as well as the budgetary requirements for a system that will provide improved coverage, improved interoperability across state and local public safety agencies, and improved functionality, especially in the critical areas of mobile data and encryption. The steering committee's recommendations were chosen after careful consideration of all possible alternatives and included technical, operational, and financial factors.

For additional information about the WyoLink system and project, please reference http://wyolink.state.wy.us/. Appendix A contains Web links to additional sample RFPs from various communities for various types of procurement projects.

❑ *Establish interagency agreements* among the agencies or jurisdictions that will be part of the working group in the different stages of the procurement process. Interagency agreements and Memoranda of Understanding (MOU) formally establish how different agencies or jurisdictions work together and also establish the respective roles and responsibilities.

o Develop MOUs, or similar interagency agreements, early in the procurement effort to clarify collaboration processes, ensure commitment of resources, designate operational policies, agree on technology sharing practices, and provide ongoing technical services.

o Once agencies critical to the project's success are on board with the procurement effort and its intended goals, move forward with the effort, but continue outreach and education efforts to agencies or groups that may be reluctant to buy in.

Tip: Building Relationships and Partnerships

When building partnerships with the key agencies and jurisdictions in the region, make sure to consider:

- What agencies or communities can influence the success or failure of this effort and how can their continued involvement be secured?
- Who are the stakeholders that need to communicate and share information across agencies?
- What will keep your key partners interested in being cooperative and collaborative in this effort?

❑ *Develop a chart of roles and responsibilities* for all relevant stakeholders.

o Define who will be responsible for what actions or tasks in the process.

Tip: Develop a Preliminary RFP Outline

As an early task, consider giving the working group the responsibility for developing an outline for the RFP document. This prompts the working group to organize its efforts early on in the process and helps the group to identify which areas need to be completed and by whom.

❑ *Hold open and transparent discussions with all stakeholders to identify potential conflicts of interest* that may arise and to reach compromises when divergent needs lead to conflicting RFP requirements.

  o The project leader should include or update the working group on the results of these discussions to ensure that they understand and address the detailed operational and performance needs of public safety practitioners.

❑ *Align with neighboring communications systems in the region* to establish relationships for information sharing, cooperation, and collaboration.

  o Establish mutual agreement that each partner will ensure that improvements in the current system will not inhibit future interoperability with the other partner communities.

❑ *Document unique considerations or challenges* that the community will face in conducting the procurement in order to begin considering risk mitigation strategies.

  o What aspects of the geography (size, physical characteristics, and unique features) and topography (land elevation) in the region affect the types of systems, solutions, or equipment needed?

  o How do population trends such as density, urban sprawl, and rural areas factor into the process of determining user needs?

  o What requirements tied to regulations, funding streams, or other factors need to be addressed?

❑ *Document the project scope, objectives, and involved stakeholders* in a project charter. This project charter should:

  o Communicate a clear value statement of the project. The value statement clarifies for all stakeholders the benefits of the procurement.

  o Define, with timelines, the desired outcomes and scope for the project.

  o Outline reasonable seams, or partitions, in the effort where the procurement may be parceled into separate phases.

More Information on Project Charters

The project charter is a single, consolidated source of information written at the outset of the project to document project objectives and purpose. The charter provides information about the timeline, a high-level description of the procurement goals, and current issues driving the need for the project. Development of the project charter cannot be done in isolation by any one party, because the charter outlines an agreement between the project stakeholders of what the project will deliver and how it will be accomplished. The charter also serves as a guide to stakeholders and other interested community members who want to understand why the project is being undertaken, what will be accomplished, and by whom.

Source: Schools Interoperability Framework Implementation Planning Toolkit,
http://www.sifinfo.org/tool_kit.asp.

Tip: Using the Project Charter

Consider including the entire project charter in the introduction or background section of the RFP document, or consider drawing from the charter when writing sections of the RFP.

Conduct a Practitioner-Driven Needs Assessment

The project leader and working group organize and conduct a needs assessment, based on input from the public safety practitioners—including perspectives from technicians and front-line personnel to capture technical and operational requirements. A needs assessment is an evaluation of the existing environment and capabilities of an organization, agency, or jurisdiction to determine what specific equipment, solutions, or services are required. This is done prior to writing the RFP document to ensure that the procurement is driven by the needs of public safety practitioners.

Guidelines and key considerations for conducting a practitioner-driven needs assessment are provided in the following section:

❑ *Use practitioner input* to scope the communications interoperability solution being procured. Public safety practitioners and technicians may be asked to consider the following types of questions:

- o What communications and interoperability solutions or services are needed to improve the public safety community's ability to accomplish its day-to-day mission or to better respond during an emergency incident?

- o What gaps have you encountered in terms of equipment, infrastructure, policies, or training?

- o What services will be needed to support interoperability efforts such as strategic planning, capabilities assessment, training, or exercises?

- o What needs for wireless radio communications and interoperability are not being met?

- o What current trends or upgrades in neighboring communications and interoperability systems have affected your ability to interoperate?

- o How does the geography of your region affect your ability to interoperate? What can be done to address those barriers?

Tip: Using the Needs Assessment Data

The public safety community's responses to questions like these will be the foundation for the development of the RFP requirements.

❑ *Provide an easy-to-use information gathering tool* to collect data on current capabilities and needs from the communities involved in the procurement.

  o Request input from agencies participating in the procurement and from those communities that are not participating but will be affected by the interoperability purchase in the region.

  o Analyze the data with the working group. Alternatively, the analysis task can be assigned to reliable technical and operational analysts or consultants with the working group having oversight and quality assurance responsibilities.

  o Conduct follow-up working group meetings to validate and upgrade the data analysis results.

❑ *Document all needs for communications in an incident response* from various practitioner and discipline perspectives. This will provide a complete picture of communications needs and to identify a cohesive set of operational and technical needs that can be developed into requirements.

  o Consider who needs to talk to whom in an emergency incident response or on a daily basis.

  o Use a broad range of scenarios to develop the communications needs for varying levels of complexity in incident response, in diverse locations, and under varied circumstances.

  o Categorize the requirements into logical groups or functional areas to establish an outline for the procurement requirements. The categories could be as broad as technical and operational or as detailed as interagency security, encryption, coverage, and so forth.

> ## Needs Assessment: Key Considerations
>
> By examining the various operational objectives and specific interoperability needs of each agency, the working group can identify the common problems to address in the current procurement. Key considerations that may help identify practitioner needs include:
>
> - Consider all the mission requirements that the various regional agencies and jurisdictions must meet.
>
> - Imagine emergency incidents of various scales and the community's response in order to determine current gaps and needs for improving interoperability.
>
> - Confer with public safety leaders and personnel at all levels of government and across jurisdictions in order to ascertain interoperability gaps identified in recent training and exercises.

Phase 2: Develop the RFP Requirements and the Document

Procurement Lifecycle

PHASE 2

Key Activities:

1. Review and update working group membership for the RFP development.

2. Analyze and document specific requirements.

3. Develop and publish the RFP document.
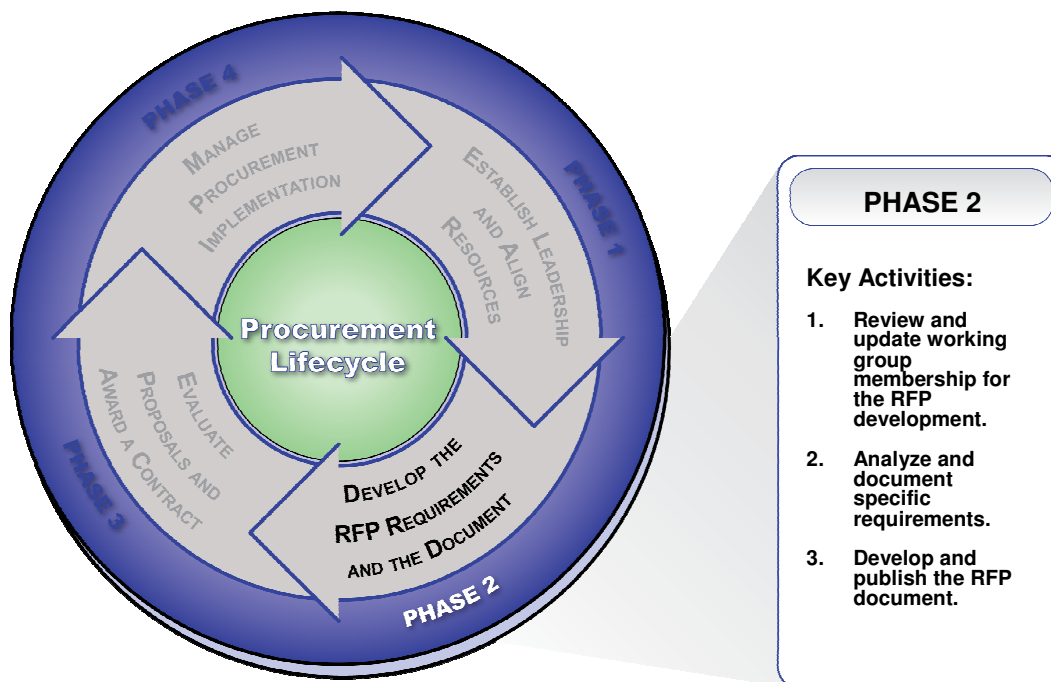
Once the project leadership, funding sources, a working group, and needs assessment are established, steps for developin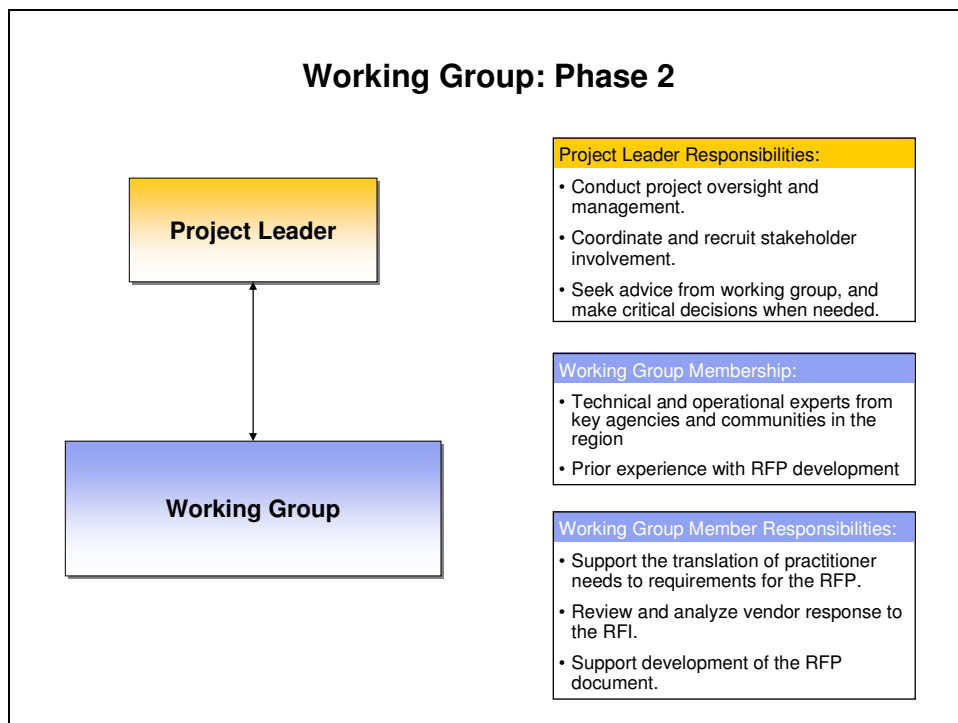g requirements and the RFP document can be taken. This section discusses critical steps and actions in the RFP requirements and document development phase, including:

1. Updating the working group membership, if necessary

2. Documenting and analyzing specific requirements

3. Developing the RFP document

Review and Update Working Group Membership

The working group membership for this phase of the Procurement Lifecycle may need to be updated. While the working group's membership may not actually change, it is best practice to review the members' levels of authority and expertise for the RFP requirements and document development tasks.

The following graphic depicts the relationship of the project leader to the established working group and includes suggested member qualifications and responsibilities for completing this phase. This model represents a situation in which the project leader is given the authority to make decisions based on his or her position in the agency leading the procurement.

Working Group: Phase 2

Project Leader

Working Group

Project Leader Responsibilities:
• Conduct project oversight and management.
• Coordinate and recruit stakeholder involvement.
• Seek advice from working group, and make critical decisions when needed.

Working Group Membership:
• Technical and operational experts from key agencies and communities in the region
• Prior experience with RFP development

Working Group Member Responsibilities:
• Support the translation of practitioner needs to requirements for the RFP.
• Review and analyze vendor response to the RFI.
• Support development of the RFP document.

Alternatively, in situations where the procurement is funded by multiple agencies and jurisdictions, the decision-making authority often rests with the working group and could be modeled as depicted in the graphic below.
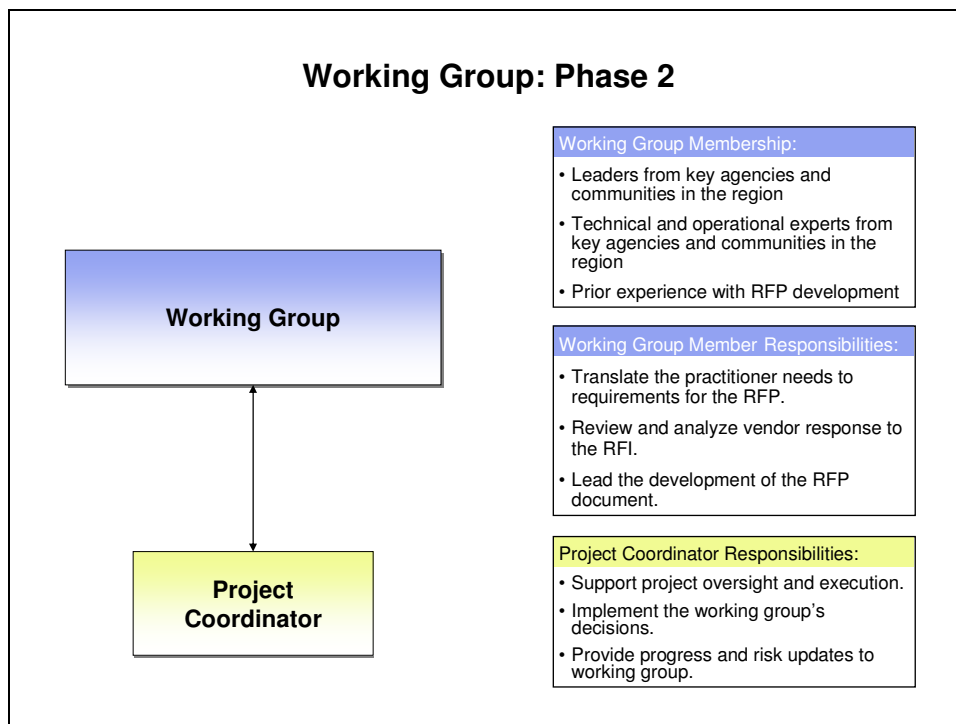
Analyze and Document Specific Requirements

Requirements documentation translates the stated needs of the public safety community into specific requests that vendors must address.

As an example of needs versus requirements, the following analogy might be useful. While a stated need of the practitioner community could be, "radios with in-building capabilities." The requirements associated with that need must be itemized into specific requirements, such as 99.99 percent signal strength in buildings with concrete walls, 20 channel programming, and required user training and certification.

> ### *Transforming Needs into Requirements*
>
> When considering the difference between defining a need and developing requirements for an RFP, it may be useful to keep a familiar situation in mind:
>
> A **stated need** for many growing families may be a larger home. However, to meet that need, the real estate agent would break this need down into some **specific requirements**. For example, some new home purchase requirements may be:
>
> - Large enough to accommodate a family of four
> - Enough rooms for each child to have his or her own room
> - Enough room for hosting dinner parties of up to 12 people
> - A garage large enough for two full-sized cars, plus bicycles
> - A kitchen with energy-efficient appliances according to a stated standard
> - A home that must fall within the allocated budget
>
> Source: *Schools Interoperability Framework Implementation Planning Toolkit*, p.23: http://www.sifinfo.org/tool_kit.asp.

The following are guidelines and considerations for requirements documentation:

❑ *Use the needs assessment data* to develop a preliminary set of requirements that specifically state what features the product or service being acquired should provide. In developing requirements, keep the following in mind:

   o Base the RFP requirements on the public safety practitioners' needs, not on what technology is available or desired.

   o Develop specific definitions for how the products or services should perform or what results are expected.

❑ *Develop and release a Request for Information* (RFI). As its name suggests, an RFI is a formal request for specific information about current technologies and services and their corresponding limitations and about different vendor approaches for delivering a solution or service.

   To the extent possible, the RFI should request information for specific topics, requirements, questions, and processes so that vendors can respond with information tailored to your project scope instead of using boilerplate or general marketing information.

   o Analyze the information received through the RFI to guide the development of the requirements for the RFP.

- o A speedy review of the RFI responses will prevent a significant lapse in time between the release and analysis of the RFI and development and release of the RFP.

More Information on RFIs

A standard RFI describes the purpose of the request and outlines the scope of the project or services to be performed. The intent is to allow vendors to provide targeted information on a specific topic to inform the project leadership and to help with decision making. The format of the RFI should be concise and simple enough to quickly review, to analyze the responses, and to easily leverage the submitted information for the RFP development. RFIs should identify any pre-requisites for responding, point-of-contact information, deadlines for responding, and other specific requirements pertaining to the impending procurement.

Project leaders should include a statement emphasizing they are not bound to make any purchases as a result of receiving information through an RFI. However, vendors often submit replies because responding to an RFI is an opportunity for them to promote their products, services, or offerings through this information-seeking process, and an RFI may be an indicator of real interest by a potential customer in their products.

Post an RFI on Web sites well known to vendors who work with the public safety community. This posting will broaden the audience and potential response from vendors as well as inform local communities that have not been involved about the potential procurement in the region.

❑ *Create a requirements matrix* to refine, at a granular level, each requirement identified in the needs assessment. The requirements matrix consolidates and categorizes the data identified in the needs assessment into an easy-to-read document that indicates priorities and organizes the requirements into logical groupings.

- o The requirements should be prioritized by the working group according to importance.

- o The working group should determine whether to share the prioritization of the RFP's requirements. Some practitioners believe that informing potential vendors of requirement priorities may cause them to overlook lower priority requirements. Others believe that publishing the priorities makes no difference in the quality of RFP responses.[3]

- o See Appendix C for a sample requirements matrix format.

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[3] *Integrated Justice Information Sharing (IJIS) Pre-RFP Toolkit*, 2003. More information can be found at the IJIS Web site: http://www.ijis.org/traction/read?proj=Public&sdate=20051118&edate=all&type=single&rec=33&side=1

❑ *Request the participation of technicians who support other communications systems in the region* in the brainstorming and writing process for the RFP requirements.

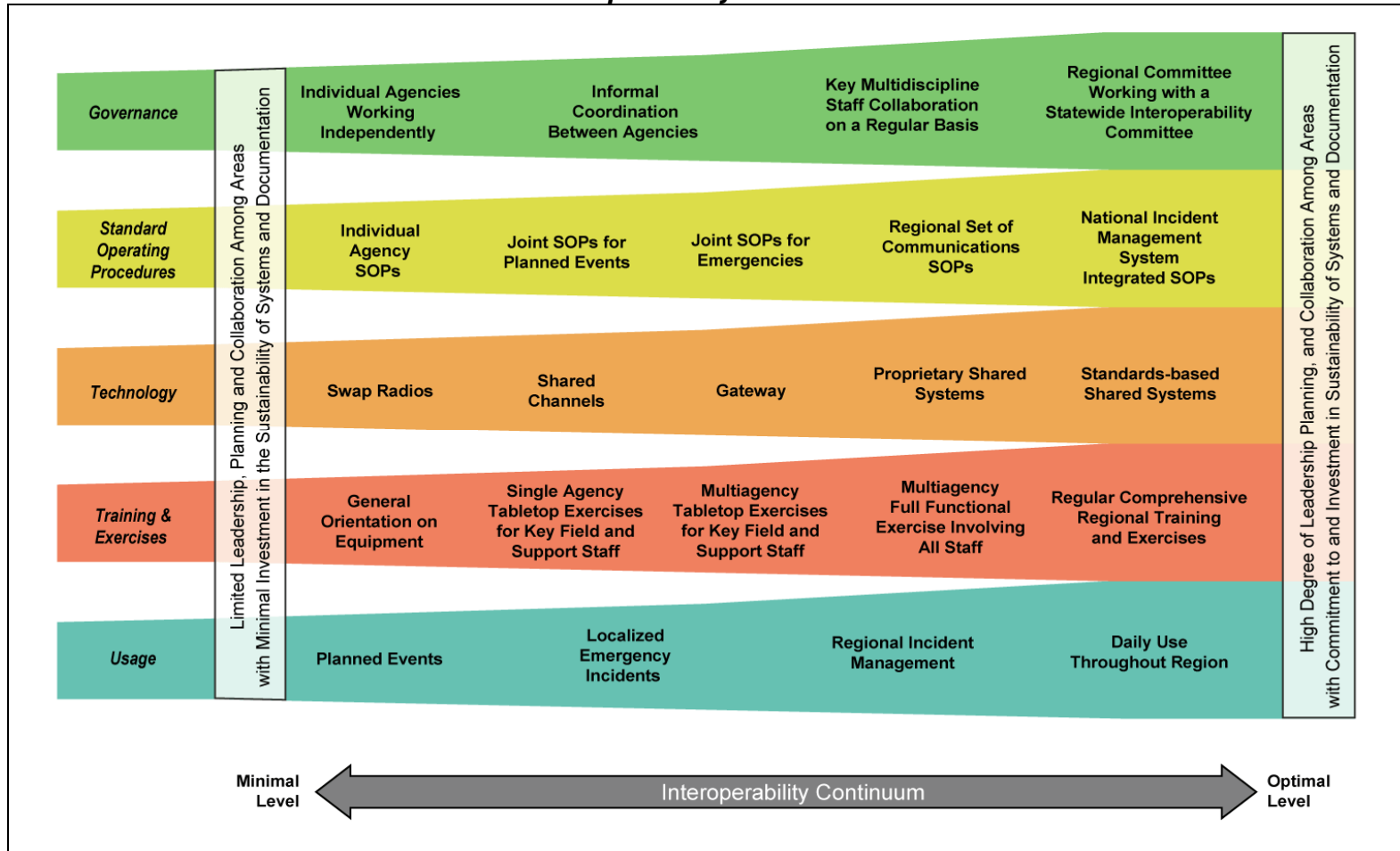***Key Benefits of Technical Support from Neighboring Communities***

Some communities or agencies have realized the benefits by enlisting support from technicians who are working on neighboring systems to write RFP requirements. They used the expertise of the technicians from neighboring systems and their familiarity with existing capabilities and technical limitations to:

- Identify cost saving opportunities by integrating interoperability requirements in the initial procurement instead of needing to reconfigure systems after they are installed
- Enable the technicians from neighboring communities to make well-informed decisions about what direction to take as they plan related, complementary changes to their own systems

❑ *Consider how all aspects of the Interoperability Continuum will be addressed* to ensure success of the procurement. These aspects may include requirements in the RFP to support governance processes, standard operating procedures, training and exercises, and usage of equipment. Taking the time to consider and account for the critical success factors outlined in the Interoperability Continuum increases the chance that the purchase will improve interoperability over the long term.

Interoperability Continuum

	Minimal Level → → → → → → → → → → → Optimal Level			
Governance	Individual Agencies Working Independently	Informal Coordination Between Agencies	Key Multidiscipline Staff Collaboration on a Regular Basis	Regional Committee Working with a Statewide Interoperability Committee
Standard Operating Procedures	Individual Agency SOPs	Joint SOPs for Planned Events / Joint SOPs for Emergencies	Regional Set of Communications SOPs	National Incident Management System Integrated SOPs
Technology	Swap Radios	Shared Channels / Gateway	Proprietary Shared Systems	Standards-based Shared Systems
Training & Exercises	General Orientation on Equipment	Single Agency Tabletop Exercises for Key Field and Support Staff / Multiagency Tabletop Exercises for Key Field and Support Staff	Multiagency Full Functional Exercise Involving All Staff	Regular Comprehensive Regional Training and Exercises
Usage	Planned Events	Localized Emergency Incidents	Regional Incident Management	Daily Use Throughout Region

Left vertical label: Limited Leadership, Planning and Collaboration Among Areas with Minimal Investment in the Sustainability of Systems and Documentation

Right vertical label: High Degree of Leadership Planning, and Collaboration Among Areas with Commitment to and Investment in Sustainability of Systems and Documentation

Minimal Level ◄——————— Interoperability Continuum ———————► Optimal Level

❑ Strive to w*rite requirements that do not limit the use of off-the-shelf technology* or the capacity to adapt to future standards as they are developed.

  o Refer to research conducted at the outset of the procurement effort or gained through the RFI regarding current trends in technology and standards development.

  o Whenever possible, avoid the need for vendors to customize their existing products to the community's needs. This may significantly lower development costs, if the procurement is for services or software, and may hinder interoperability with other communities.

Sample Requirements

Technical:
- The system must provide 99.95% availability.
- All network sites should have a standard 10 fuel capacity.
- There is no single point of failure.
- The system provides capability for a large number of talk groups for use statewide and within regional operational areas.

Operational (for a training procurement):
- Support for interoperability with identified neighboring systems
- Training is administered in a classroom and hands-on format to all personnel.
- Exercises are developed considering scenarios relevant to the region involved.
- Training is customized to account for the unique technologies used in each community that is part of the procurement's region.

❑ *Require equipment that is practical to install and backwards-compatible* with in-place communications systems. This will avoid major infrastructure overhaul and increased costs.

  o Where possible, require that vendors provide equipment and infrastructure built on open standards.

❑ *Address requirements for standards for interoperability* (for example, Project 25 standards) through clear and concise guidance for what the purchasers expect from equipment labeled as compliant with the standard. This will help develop a shared understanding between buyers and vendors for what certification for or compliance with a standard means to the community making the purchase.

Sample Standards-related Requests

Part I of the *Wyoming Program Guidelines and Application Kit* states, "As delivered, all radio equipment purchased by Subrecipient shall be capable of transmitting and receiving digital unencrypted voice in the Project 25 Common Air Interface (CAI) conventional mode." All equipment offered under this structure that has any trunking, encryption, or data features is guaranteed by the vendor to comply with the mandatory sections of the corresponding Project 25 (P25) Standards dealing with those features included at the time of delivery.

In addition, the Wyolink Program included lists for specific equipment that were pre-determined to meet the requirements of the grant application kit and guaranteed pricing structures. More explicit details on the procurement guidance created by the Wyolink Program can be found on the Web site at http://wyolink.state.wy.us/.

❑ *Avoid using product specifications developed by a specific vendor* or targeted to a specific product in the requirements. This will limit the ability of other vendors to respond to the RFP and does not ensure the community will receive services and solutions addressing its unique needs.

Sample Technical Specifications and Considerations

The following are possible specifications to request in technical procurements:

- **Reliability** in communications capabilities when roaming over appropriate distances
- **High quality** voice signal transmissions
- **End-user support** for equipment that includes handheld portable radios and vehicle-mounted mobile radios
- **In-building radio communications,** if required by agency missions
- Ability to accommodate **peak usage needs**
- **Backward compatibility** with existing technology
- **Compliance** *with operational, functional, and technical standards*

> ### *Tip: Software Licensing*
>
> When developing requirements for equipment or infrastructure procurements, consider contracting for the vendor software licenses by requiring pre-negotiated pricing agreements for firmware upgrades, additional equipment and infrastructure needs, repair fees, and other foreseeable lifecycle costs. The pre-negotiated pricing agreement should be valid for a specified amount of time as deemed agreeable by the buyers and the vendors. Consider negotiating for price agreements that are also applicable to training or consulting services.

❑ *Incorporate acceptance testing and maintenance support requirements* to ensure the products, equipment, or solution meet the functional requirements described in the RFP after they have been delivered and installed by the vendor.

- o Acceptance testing requirements can be defined by a time period, functional description, and minimum performance threshold. For example, the system must be available at 99.99 percent of the time for a 90-day test period beginning when the system or equipment goes online.

❑ *Refer to the desired project outcomes, as identified in the project charter,* to ensure that the documented RFP requirements fully address the project objectives.

Develop and Publish the RFP Document

Once requirements are fully documented, the project team is ready to begin writing the RFP document, which will be released to the vendor community. This document will include, but not be limited to:

- o A Statement of Work (SOW)
- o Description of required vendor qualifications
- o A list and description of evaluation criteria
- o Suggested formatting for vendor responses

The following are guidelines and considerations for creating the RFP document:

❑ *Review recent successful procurements* using RFPs from your region.

   o   Interview project managers from neighboring regions and local communities to enhance the RFP outline developed by the working group in Phase 1.

   o   Determine what aspects of the sample RFPs might apply to your procurement and might work in your community.

   o   Guidelines and considerations for an RFP outline can be found in Appendix D.

❑ *Develop an SOW* that reflects the requirements developed during the documentation step. The SOW is the part of the RFP that specifically defines the expectations of the vendors who respond with proposals in terms of their expertise, tasks, and work products.

   o   A clear SOW will provide a rationale and a common standard to support vendor selection during the evaluation step.

   o   The SOW may also include expectations from the buyers for how the work and budget will be managed and the progress reported by the vendors.

❑ If possible, *identify distinct, self-contained phases* into which the project can be partitioned, especially if the effort is a complex, long-term procurement for infrastructure or system implementation. This allows the community to gather lessons learned and make adjustments to system designs at logical milestones during implementation.

  o Some communities have successfully divided RFPs into phases, such as design/pilot, core implementation, and system expansion.

  o One benefit of a phased approach is that current project leaders are not making binding decisions for future leaders; a phased approach also creates opportunities to award contracts with option years to ensure vendor performance.

  o A phased approach allows the community or jurisdiction making the purchase to evaluate the vendor's performance, ensures the vendor is continually delivering quality work, and allows for a requirement change, if needed.

❑ *Require that vendors self-assess, with written justifications, on their compliance* with the RFP requirements. For example, in a technical RFP that requires backward compatibility to existing systems, require that vendors explain how the products or solutions in their proposals rate in terms of the backward compatibility and integration into the existing system and why. As a further example, in an RFP for services such as training, your community may have a vendor justify how the various activities, equipment, and tasks it is proposing align with the community's training objectives.

Tip: Vendor Self-Assessments

Obviously, vendors have a strong self-interest in emphasizing how their offerings perfectly match the RFP's specifications. The value of this request is in understanding what the vendor sees as its strengths and weaknesses and reading beyond the inherent personal bias.
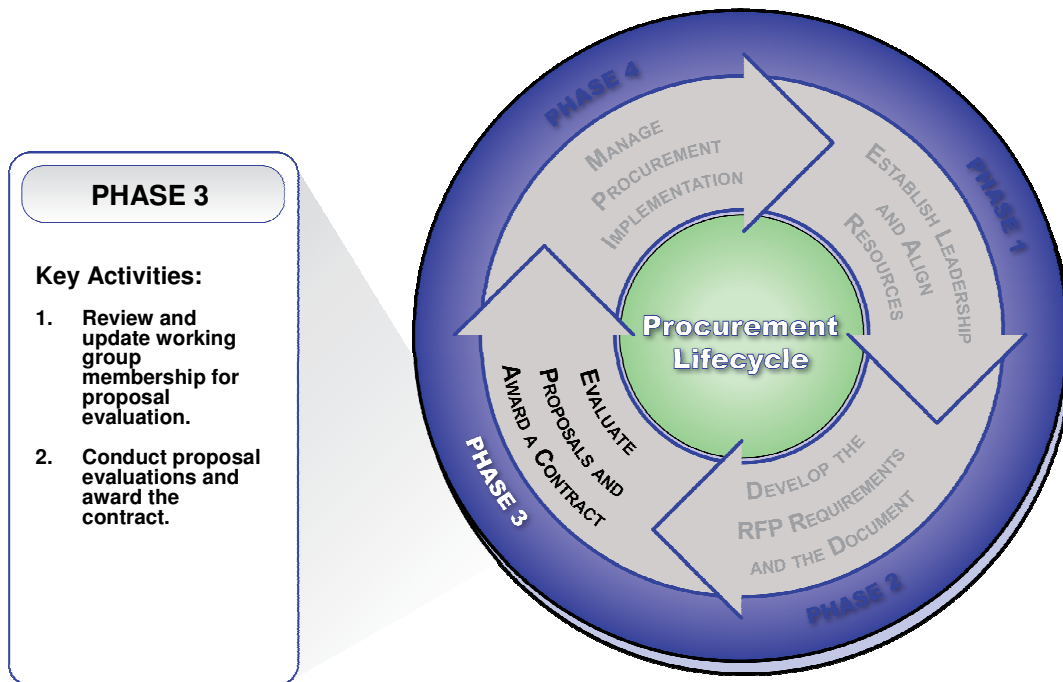

❑ *Create and stratify evaluation criteria* into tiers of importance based on the prioritized requirements.

- o Based on the tiered levels of evaluation criteria, if a vendor solution does not meet the most important components or requirements of the community, the vendor's proposal can be considered non-responsive and not considered further.

- o This is a time-saving mechanism that also helps ensure the practitioners' primary needs are being addressed.

❑ Before releasing the RFP, *conduct an internal "devil's advocate" session* to identify any gaps or weaknesses. Members of the working group can be asked to review and challenge the document, using the following checklist:

- o Does this Request for Proposal:

  - ▪ Reflect the needs of all stakeholders affected by the purchase?

  - ▪ Use practitioner-driven requirements documented through an inclusive consensus-building process?

  - ▪ Have a clear scope for the technology, equipment, or services requested?

  - ▪ Bring forth thoughtful proposals that are responsive and tailored to the requirements?

  - ▪ Clarify the performance expectations of the vendor(s) on behalf of the project manager(s) during implementation?

❑ *Evaluate the impact on interdisciplinary and cross-jurisdictional interoperability.* The procurement may be designed to meet operability requirements; however, there may be opportunities to enhance interoperability in the region if additional requirements are documented in the RFP.

❑ *Post notice of the RFP release* on appropriate Web sites, in trade journals, or local newspapers that are frequently visited by vendors to the public safety community. It may be appropriate to notify vendor contacts who have successfully delivered solutions in the past.

- o If possible and desired, enlist the support of industry media to publicize the procurement effort. Creating a media event around the release of the RFP may raise visibility and spur interested vendors to respond with proposals.

Phase 3: Evaluate Proposals and Award the Contract

Procurement Lifecycle

PHASE 3

Key Activities:

1. Review and update working group membership for proposal evaluation.

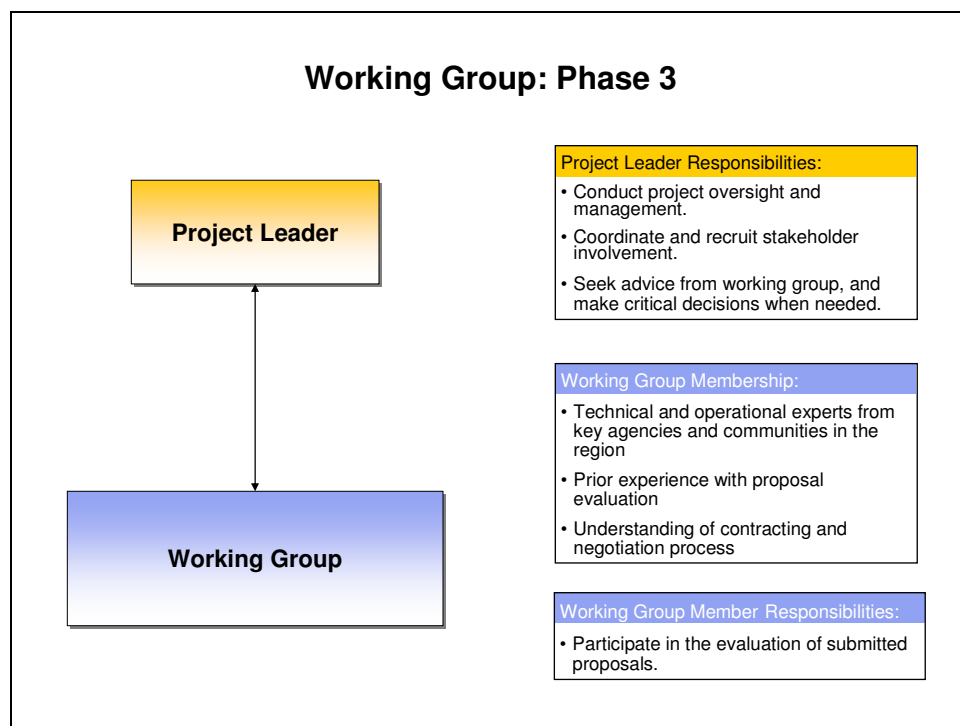2. Conduct proposal evaluations and award the contract.

Evaluating proposals and negotiating a contract with the vendor whose proposal best meets the requirements described in the RFP is the next phase of the procurement effort. The steps in this phase include:

1. Updating the working group membership, if necessary

2. Conducting proposal evaluations and awarding the contract or contracts
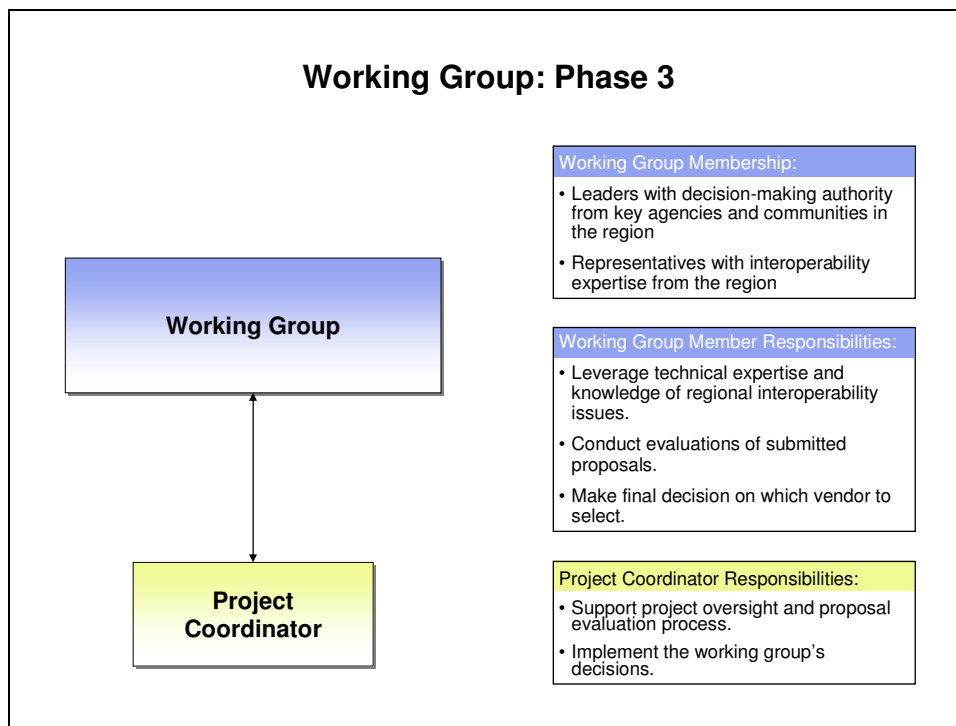
Review and Update Working Group Membership

As noted in the previous section, working group membership may need to be updated as the Procurement Lifecycle enters a new phase. While change may not be necessary, it is useful to re-evaluate the skills and authority needed for evaluating proposals on technical and functional merits.

The following graphic depicts the relationship of the project leader to the established working group for this phase, along with suggested member qualifications and suggested responsibilities. This model represents a situation in which the project leader is given the authority to make decisions based on his or her position in the agency leading the procurement.

Working Group: Phase 3

Project Leader

Working Group

Project Leader Responsibilities:
- Conduct project oversight and management.
- Coordinate and recruit stakeholder involvement.
- Seek advice from working group, and make critical decisions when needed.

Working Group Membership:
- Technical and operational experts from key agencies and communities in the region
- Prior experience with proposal evaluation
- Understanding of contracting and negotiation process

Working Group Member Responsibilities:
- Participate in the evaluation of submitted proposals.

Alternatively, in situations where the procurement is funded by multiple agencies and jurisdictions, the decision-making authority often rests with the working group and could be modeled as depicted in the graphic below.

Working Group: Phase 3

Working Group

Project Coordinator

Working Group Membership:
• Leaders with decision-making authority from key agencies and communities in the region
• Representatives with interoperability expertise from the region

Working Group Member Responsibilities:
• Leverage technical expertise and knowledge of regional interoperability issues.
• Conduct evaluations of submitted proposals.
• Make final decision on which vendor to select.

Project Coordinator Responsibilities:
• Support project oversight and proposal evaluation process.
• Implement the working group's decisions.

Guidelines and key considerations when reviewing and updating working group membership are suggested as follows:

❑ *Convene a committee* composed of members of the working group and important stakeholders to assist with the evaluation of submitted proposals. To maximize the efficiency of this committee, it is important to:

   o   Provide as much advance notice as possible of meeting dates

   o   Share background information, the project charter, and RFP materials

   o   Clearly indicate the time commitment expected

❑ *Request support from technical and operations experts* who are currently working on neighboring communications systems in the region to help in the RFP scoring and evaluation. (Note that the specific expertise needed will depend on the type of the RFP being evaluated.)

❑ *Consider supplementing the working group with an independent technical consultant,* if you do not have the in-house technical expertise. Independent technical experts can provide or support an unbiased review of proposals submitted from vendors.

Conduct Proposal Evaluations and Award a Contract

Key considerations when evaluating proposals and awarding a contract for the procurement are as follows:

❑ *Schedule and conduct a formal evaluation* that includes:

- o Closely reading each proposal

- o Evaluating whether proposals meet the RFP requirements

- o Conducting interviews of vendor references

- o Reviewing testing and evaluation results

❑ *Set up third-party testing and evaluations*, where feasible and economical, to support evaluation of vendor products:

- o Develop a diverse set of testing scenarios to conduct test of the vendor's proposed equipment in an array of operating conditions relevant to the community's normal operating environment.

- o Third-party evaluation reports should be structured to provide results according to a proposed solution's strengths and weaknesses, based on the RFP and test plan, and to avoid reporting comparisons of one vendor product against another.

❑ Prior to selecting a vendor, *conduct proof-of-concept tests* to model and evaluate prospective vendors' proposed solutions or equipment using pre-determined criteria.
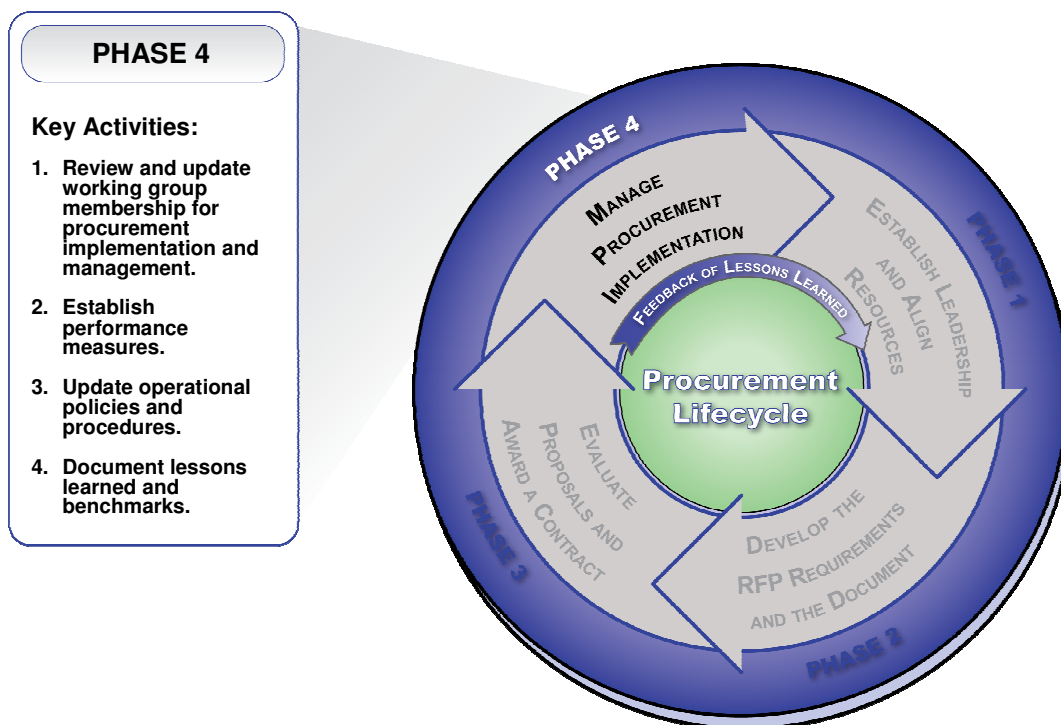
❑ *Document the evaluation process* using standard forms and notes of any discussions and deliberations leading to the selection of a vendor during the process:

  o When checking vendor references, document interviews of clients who have used the vendor in the past.

❑ Request best and final offers from the top two or three vendors so that vendors can ask clarifying questions on their interpretations of the requirements in the RFP and appropriately adjust their pricing by submitting their best and final offer.

❑ Create a report or justification for internal and contractual uses to explain why vendors were eliminated and why the winning vendor was selected.[4]

❑ *Announce the winning vendor, and debrief vendors who were not selected.*
  o The debriefing with the vendors should include a short summary of identified weaknesses in the submitted proposal as well as summarized evaluation results.

This is the last step in the RFP process and the first step toward beginning the project implementation.

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[4] This best practice step was summarized from an excerpt found on:
http://www.informit.com/content/images/0201775751/samplechapter%5Cporterrothch01.pdf.

Phase 4: Manage Procurement Implementation

Procurement Lifecycle

PHASE 4

Key Activities:

1. Review and update working group membership for procurement implementation and management.

2. Establish performance measures.

3. Update operational policies and procedures.

4. Document lessons learned and benchmarks.

PHASE 4

MANAGE PROCUREMENT IMPLEMENTATION

FEEDBACK OF LESSONS LEARNED

ESTABLISH LEADERSHIP AND ALIGN RESOURCES

PHASE 1

Procurement Lifecycle

EVALUATE PROPOSALS AND AWARD A CONTRACT

PHASE 3

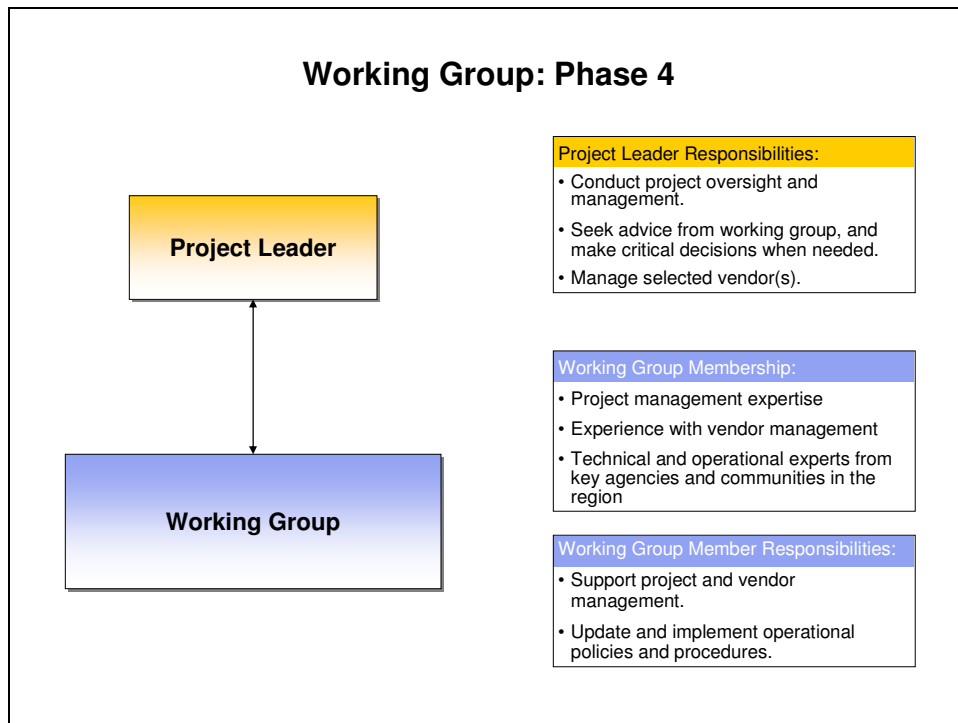DEVELOP THE RFP REQUIREMENTS AND THE DOCUMENT

PHASE 2

This section offers suggested steps that will ensure the implementation of the acquired service or solution is successfully managed. Steps in this phase include:

1. Updating the working group membership for procurement implementation and management, if necessary

2. Establishing performance measures.

3. Updating operational policies and procedures

4. Documenting lessons learned for future procurement efforts

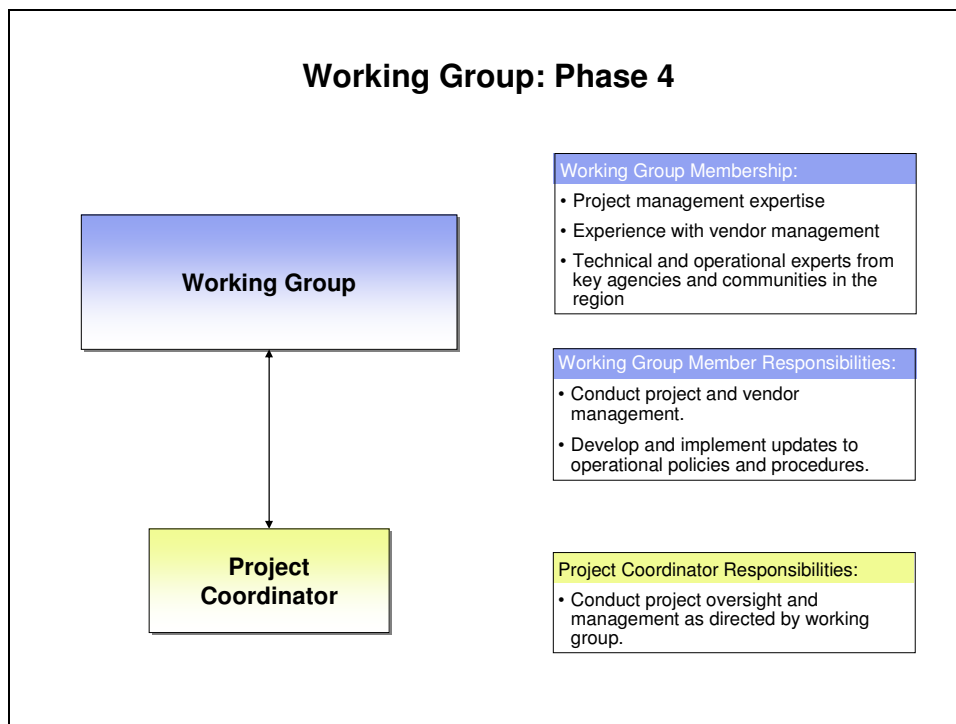## Review and Update Working Group Membership

Once the Procurement Lifecycle moves into the implementation phase, it is an appropriate time to again revisit the composition of the working group. Many of the skills required for implementation differ from those needed for previous phases of the procurement. In addition, the levels of authority needed—and the time commitments involved—often change for the implementation phase. Finally, it is important to avoid "burnout" as well as to expand the overall interoperability effort to a broad range of stakeholders and experts.

The following graphic depicts the relationship of the project leader to the established working group for this phase along with suggested member qualifications and suggested responsibilities. This model represents a situation in which the project leader is given the authority to make decisions based on his or her position in the agency leading the procurement.

Working Group: Phase 4

Project Leader

Working Group

Project Leader Responsibilities:
- Conduct project oversight and management.
- Seek advice from working group, and make critical decisions when needed.
- Manage selected vendor(s).

Working Group Membership:
- Project management expertise
- Experience with vendor management
- Technical and operational experts from key agencies and communities in the region

Working Group Member Responsibilities:
- Support project and vendor management.
- Update and implement operational policies and procedures.

Alternatively, in situations where the procurement is funded by multiple agencies and jurisdictions, the decision-making authority often rests with the working group and could be modeled as depicted in the graphic below.

Working Group: Phase 4

Working Group

Project Coordinator

Working Group Membership:
• Project management expertise
• Experience with vendor management
• Technical and operational experts from key agencies and communities in the region

Working Group Member Responsibilities:
• Conduct project and vendor management.
• Develop and implement updates to operational policies and procedures.

Project Coordinator Responsibilities:
• Conduct project oversight and management as directed by working group.

Establish Performance Measures

Establishing performance measures during the implementation and execution of the contract award is a key responsibility of the project leader and the working group. The following guidelines may be useful when conducting performance management tasks:

❑ *Require a performance bond,* a warranty issued by an insurance company to guarantee satisfactory completion of a project by a contractor, to ensure vendor delivery and performance on the work described in the proposal.

❑ *Establish processes and performance measures* that ensure progress is on track with the project's desired outcomes.

Update Operational Policies and Procedures

As complex interoperability projects get underway and evolve, it is important to ensure that operational policies and procedures stay current. The following are guidelines and considerations for updating the policies and procedures during the implementation phase of the procurement process.

❑ *Define a process for information sharing and for communicating policy and procedure changes* as the new system, equipment, or service is implemented in the community. Updated procedures and information releases should address:

   o What new roles and responsibilities will be needed as a result of the implementation phase?

   o What new operating procedures will be needed as a result of implementing the project for a new system, equipment, or services?

   o What new training will be developed, and what is the proposed roll-out schedule?

❑ *Integrate the new interoperability solution or equipment into operational procedures.*

   o Develop common terminology agreed upon by agency dispatchers and radio technicians to overcome turf issues among these personnel.

   o Test interoperability interfaces for connections between systems on a regularly scheduled basis as well as through unscheduled, impromptu tests.

   o Train incident commanders on how to leverage interoperable connections for improving incident command.

   o Train field personnel on communications protocols relating to interagency communications.

   o Integrate interoperable communications capacity into task force planning.

❑ *Develop an education and training plan* to ensure that practitioners are familiar with the existence and use of any new equipment and system.

Document Lessons Learned and Benchmarks

The following key guidelines and considerations to ensure lessons learned are documented for use in future procurement efforts for the community.

❑ *Be deliberate in documenting lessons learned* to improve future interoperability planning and procurement efforts. To do this, consider the following questions:

   o What actions would have made the RFP process easier, smoother, or more streamlined?

   o If you were doing this process all over again, what would you do differently?

   o What difficulties were encountered in the procurement process, and what could be done to prevent them in the future?

   o What perspectives, political roles, or areas of expertise that were not involved in the process, should have been involved?

❑ *Determine benchmarks for future local, regional, and state-wide planning efforts*.

   o Identify the number of staff resources and leadership hours required in the procurement.

   o Define the different skill levels, expertise, and roles necessary for successfully conducting the procurement project.

   o Describe the process and key factors that were essential to gaining political and financial support for the project.

Conclusion

Communications interoperability is the ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized. Public safety practitioners are often unable to interoperate or share critical voice and data information with other jurisdictions or disciplines in day-to-day operations or during major catastrophic events, including natural disasters and terrorist acts.

The guidelines collected in this report are intended to support public safety communities across the Nation in the development of RFPs that contain clearly articulated, collaboratively gathered requirements for procuring solutions, equipment, or services for improved interoperability. RFPs developed using these key considerations and guidelines serve as one mechanism toward ensuring vendors deliver products and services that meet the needs of the public safety community.

Well-developed RFPs have proven effective in obtaining the most appropriate and cost-effective solutions for a community through the competitive bidding process. From input gathered from the public safety community and research by the SAFECOM program, it is clear that the most effective RFPs:

❑ Reflect the needs of all stakeholders affected by the purchase

❑ Use practitioner-driven requirements documented through an inclusive consensus-building process

❑ Have a clear scope for the technology, equipment, or services requested

❑ Bring forth thoughtful proposals that are responsive and tailored to the requirements

❑ Clarify the performance expectations of the vendors on behalf of the project managers during implementation

Once a successful procurement effort has been achieved, communities are advised to keep working collaboratively to maintain their operational policies are refreshed and up to date.

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Appendix A – Supplemental Resources

This appendix contains additional resources for developing effective RFPs.

Resource	Web Link
Federal Interoperability Assistance Support – Funding Strategy Best Practices Report	http://www.safecomprogram.gov/NR/rdonlyres/E2D71272-B332-4B28-9DE8-745CC576B618/0/Funding_Strategy_Best_Practices_Report.pdf
How To Guide for Funding State and Local Public Safety Wireless Networks	http://www.safecomprogram.gov/SAFECOM/library/grant/1061_HowTo.htm
How To Guide for Managing the Radio System Lifecycle	http://www.safecomprogram.gov/NR/rdonlyres/9826FC3F-BE4D-4C02-9AE9-166AF13C7B9B/0/how_to_guide_radio_system_life_cycle_guide.pdf
Post Symposium Support Report – PSWN Program and NTIA Conference	http://ntiacsd.ntia.doc.gov/pubsafe/TIS_FinalReport.pdf
Sample RFP for VHF Trunked System	http://www.safecomprogram.gov/NR/rdonlyres/317BFC3C-5EED-4865-B774-8C49C31C65A7/0/sample_rfp.pdf

Source: SAFECOM/Public Safety Wireless Network (PSWN)[5]

Resource	Web Link
IJIS Pre-RFP Tool Kit (Requirements)	http://www.ijis.org/traction/read?proj=Public&sdate=20051118&edate=all&type=single&rec=33&side=1
Understanding Wireless Communications in Public Safety	http://www.safecomprogram.gov/NR/rdonlyres/24F0E8A6-CFC4-43A4-8053-EE287D87D2C5/0/Understand_Wireless_Comm.pdf

Source: National Institute of Justice

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[5] The Public Safety Wireless Network (PSWN) program—originally developed as a joint undertaking of the departments of Justice and the Treasury—focused on promoting state and local interoperability by establishing a technical resource center, collecting and analyzing data related to the operational environment of public safety communications, and initiating pilot projects to test and refine interoperable technology. In August 2003, PSWN was folded into the SAFECOM program.

Resource	Web Link
City of Reno RFP	http://www.cityofreno.com/bus/doing_business/current_bids/pdfs/CommunicationsAssessmentRFP.pdf
Iowa Department of Human Services – Sample RFI	http://www.dhs.state.ia.us/dhs2005/dhs_homepage/docs/Shelte_care_RFI.doc
Nebraska RFP	http://www.buffalogov.org/Download/rfps/CNRl%20Interop%20RFP%20Rev%20A.pdf
Wyolink RFP	*WyoLink Web site:* http://wyolink.state.wy.us/ *WyoLink RFP:* http://wyolink.state.wy.us/radio/WyoLink_RFP_as_amended_4.pdf

Source: States and Local Communities

Resource	Web Link
National Institutes of Health (NIH) – Sample RFI	http://grants.nih.gov/grants/guide/notice-files/NOT-OD-04-041.html
RFP Guidance from Porter-Roth:	http://www.informit.com/content/images/0201775751/samplechapter%5Cporterrothch01.pdf
Schools Interoperability Framework (SIF)	Overview: http://www.sifinfo.org/ Implementation Toolkit: http://www.sifinfo.org/tool_kit.asp Readiness Tool: http://docgen.espsg.com/toolkit/welcome.form?sid=9&token=R592358304 Schools Interoperability Framework PESC Best Practice Submission: http://www.pesc.org/events/best-practices-docs/SIF%20-%20Best%20Practices.doc

Source: Additional SAFECOM research

Appendix B – Cost Estimation Worksheet

This spreadsheet is intended to help project leaders develop a rough estimate budget for the total cost of the procurement project from planning to maintenance by identifying areas in which there are associated costs. It helps identify and plan for the costs associated with each element of the Interoperability Continuum, so that a more complete picture of the total procurement cost can be identified. The estimate will help ensure that the budget accounts for technology and equipment purchases, as well as operations-related costs.

Addressing the critical elements for success—governance, standard operating procedures, technology, training/exercises, and usage of equipment—at the budgeting phase will help ensure that the costs of all factors that support progress toward improved interoperability are considered in every project. The spreadsheet can be modified to suit the individual needs of communities or regions and the scopes of their projects.

The following list identifies the elements of the spreadsheet:

Element of the Communications Interoperability Continuum – This element identifies the category to which the activities relate. These are organized according to the elements of the Continuum—governance, standard operating procedures (SOP), technology, training and exercises, and usage of equipment.

Sample Associated Activities – This column provides different sample activities that will help support completing the type of work identified in the previous column.

Cost Components – The cost components offer examples of the related costs that will have to be considered when conducting the associated activities.

Cost Variations – The cost variables column highlights potential factors that may affect prices ranges for the cost components. For example, when buying radios in large quantities, the cost per unit may go down, or when using various contracting vehicles with pre-negotiated consultant rates, the costs may differ.

When drafting a lifecycle budget estimate, consider each identified element, the associated activities related to element, costs components, and any cost variables. Then estimate a cost or budgeted amount for each year that the element is applicable. If the project or service is for a short-term need, the entire range of years may not be needed; however, if the project is for a new system or infrastructure, the total number of years for which to consider costs may be longer.[6]

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[6] The content of the associated cost activities, cost components, and cost variables to consider has been derived in part from the PSWN *How2 Guide for Funding State and Local Public Safety Wireless Networks*, p. 10-12: http://www.safecomprogram.gov/SAFECOM/library/grant/1061_HowTo.htm.

The following, worksheet contains a sample of the Cost Estimate Worksheet. =.[7]

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	**Sample Associated Activities**	**Cost Components**	**Cost Variations**	**Year 1**	**Year 2**	**Year 3**	**Years 4-10**	**Subtotal**
Governance								
Defining alignment with ongoing strategy development and program planning	• Conduct a baseline assessment • Incorporate technical, financial, and strategic planning aspects	• Skilled staff or consultant hours • Software needs • Publishing and dissemination of plans	• Complexity and number of stakeholders involved					
Establish project oversight leadership and structure	• Convene a working group comprised of key stakeholders from the region • Establish interagency or cooperative agreements for working together	• Personnel hours	• Complexity and number of stakeholders involved • Familiarity of participants with each other					
Budget development and tracking	• Complete a cost estimate • Identify of funding sources	• Personnel hours • Training on financial processes and management for personnel • Cost estimate software	• Complexity of the funding streams and related requirements					

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[7] *Note:* When the final document is complete, if delivered in hardcopy to the public safety community, this spreadsheet should be printed and attached. Otherwise, if sending this document via e-mail or Internet, then the spreadsheet should be attached because it has built in summation functions.

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	Sample Associated Activities	Cost Components	Cost Variations	Year 1	Year 2	Year 3	Years 4-10	Subtotal
Procurement planning and management	• Evaluate of long-term goals and current capability and equipment inventory to determine needs	• Skilled staff or consultant hours	• Number of alternatives examined					
Governance Sub-total								
Standard Operating Procedures (SOPs)								
SOP Development	• Gather information from skilled practitioners and thought leaders • Educate public safety practitioners on SOPs	• Skilled staff or consultant hours • Software needs • Publishing and dissemination of SOPs	• Complexity and number of stakeholders involved					
Testing, Evaluation, and Management of SOPs	• Test and evaluate SOPs • Revise and update SOPs	• Personnel hours	• Cost of technical experts or staff personnel at various skill levels					
SOP Sub-total								

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	**Sample Associated Activities**	**Cost Components**	**Cost Variations**	**Year 1**	**Year 2**	**Year 3**	**Years 4-10**	**Subtotal**
Technology and Equipment								
Technical Planning	• Conduct research and analysis of current and future technologies • Complete capability assessments • Define user requirements • Conduct coverage analysis and site testing	• Skilled staff or consultant hours	• Complexity of user needs • Number of users and user groups • Size and scope of current state technical analysis • Size and scope of documentation					
Design and Engineering	• Evaluate technical alternatives	• Necessary software and hardware for modeling or analysis	• Availability of technology • Required technical performance • Information technology resource(s) needed for tasks					
Infrastructure Purchases	• Identify needed infrastructure • Align purchasing with long-term procurement strategy	• Needed sites, towers, and communications centers	• Number of units purchased • Contract vehicle used • Licensing and lease costs • Number of bidders • Construction needed					

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	Sample Associated Activities	Cost Components	Cost Variations	Year 1	Year 2	Year 3	Years 4-10	Subtotal
Equipment Purchases	• Identify needed equipment • Align purchasing with long-term procurement strategy	• Number of portable radios and/or mobile data units needed	• Number of users • Number of units purchased • Contract vehicle used • Licensing and lease costs • Number of bidders					
Upgrades and Maintenance	• Complete routine inventory, testing and maintenance checks and management	• Software licenses • Skilled staff or technician hours • Equipment and infrastructure replacement costs	• Technical staff hourly costs • Contract vehicle used • Licensing and lease costs • Number of bidders • Cost of maintenance agreements • Availability of parts and equipment					
Technology and Equipment Sub-total								

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	**Sample Associated Activities**	**Cost Components**	**Cost Variations**	**Year 1**	**Year 2**	**Year 3**	**Years 4-10**	**Subtotal**
Training and Exercise								
Training development	• Develop training curriculum • Analyze and incorporate state and federal standards, certifications, and requirements	• Skilled staff or consultant hours • Training materials	• Complexity of user needs • Number of users and user groups • Size and scope of documentation					
Exercise planning and execution	• Develop scenarios and plan for exercises • Analyze and incorporate state and federal standards, certifications, and requirements for exercise planning and execution • Develop after-action reports • Conduct gap analyses and develop plans to address gaps	• Skilled staff or consultant hours • Training materials	• Exercise complexity and duration • Exercise location and materials needed • Number of exercise participants					
Training and Exercise Sub-total								

Interoperability Procurement Lifecycle Cost Elements and Estimation								
				Yearly Cost Estimates (in thousands of dollars)				
Element of the Communications Interoperability Continuum	Sample Associated Activities	Cost Components	Cost Variations	Year 1	Year 2	Year 3	Years 4-10	Subtotal
Usage								
Incorporate use of interoperability equipment into daily operations	• Institutionalize regular use and review of interoperability products and procedures • Conduct training during roll-call • Use actual incidents as a basis for scenario testing • Build familiarity with equipment for incident response and incorporate into daily operations, when appropriate	• Personnel time • Materials to institutionalize use	• Varying levels of complexity and regularity of use					
Usage Sub-total								

Appendix C – Sample Requirements Matrix

Each community will have to consider and document the requirements for the RFP that will meet its needs in the individual procurements. The following requirements matrix format is one method of documenting the requirements.

1.0 – Requirement Category

Requirement Identification Number	Requirement Definition	Rationale	Source	Priority Level
1.1			Region	Medium
1.2			Local police	High
1.3			Fire mission	Law

2.0 – Requirement Category

Requirement Identification Number	Requirement Definition	Rationale	Source	Priority Level
2.1			Region	Medium
2.2			Local police	High
2.3			Fire mission	Law

Explanation of Fields
The following listing provides an explanation of the fields suggested for the requirements matrix format. Additional or different fields may need to be included when developing the requirements matrix that suits your community's needs.

Field Title	Description
Requirement Category	This defines the broad category or grouping into which the whole set of requirements is classified or organized.
Requirement Identification Number	This number is a unique identification number assigned to the requirement in order to easily track completion and inventory the requirements.
Requirement Definition	This states the requirement.
Rationale	This provides a short statement in support of the logical need for the requirement. This statement will help clarify why a requirement is needed so that vendors can meet the requirement correctly.
Source	This identifies where the requirement came from— whether specific to an agency's mission, the region, a jurisdiction, external requirement, and so on.
Priority Level	This establishes a convention of categories or levels into which the listing of requirements can be organized. Depending on the number of requirements, there may be three to five different increments. For instance, a community could use: High, Medium, Low, or may further subdivide categories into Very High, High, Medium, Low, and Optional to distinguish the levels of importance for each requirement. Including this field in the RFP is optional, but it is important for internal use when developing evaluation criteria. Additionally, the project leader and working group can use the priority level of each requirement to judge a proposal's responsiveness when conducting proposal evaluations.

Note: When responding, vendors should also provide an explanation as to how each requirement will be met, the approximate level of effort required to achieve the requirement, and whether the response has been customized to suit the needs of the community or as part of a standard implementation for the vendor.

Appendix D – Guidelines and Considerations for RFP Writing

This appendix provides seven sections in a sample RFP format and includes suggestions for content in each section.

The sections are:

   I. Background
  II. RFP Response Process
 III. Contract Administration
 IV. Statement of Work
  V. Evaluation Process
 VI. Pricing Proposal
VII. Appendices

   I.   Background
       a. Problem Definition
       b. Stakeholder Needs

The background section provides a few summary paragraphs describing an overview of the communications interoperability issues the community is experiencing and the project objectives. In addition, a short description of the stakeholders who have come together to request the service, equipment, or solution described in the RFP is provided. The information in the background section may already be documented in the project charter.

The following items are addressed in this section:

❑ A brief identification of the current need and issues experienced by the community, agency, or jurisdiction supporting the procurement

❑ A summary of the stakeholders involved or affected by the procurement, supported by geographic or demographic facts

❑ A general description of what the procurement will be acquiring and the project objectives

   II.   RFP Response Process
       a. RFP Calendar
       b. Instructions for Response
       c. Questions

The section describing the RFP response process provides a draft timeline of important events and instructions for submitting the responses. The timeline may be in draft form,

but is subject to change at the discretion of the community. The timelines includes due dates, award notification dates, contract negotiation timeframes, and desired date of completion. In addition, this section includes guidance on the timeframe and process for submitting clarification questions immediately after the release of the RFP.

The following items are addressed in this section:

❑ Information regarding the procurement timeline and calendar, including proposal response due dates, process, number of copies, and where to deliver the responses

❑ A detailed description of the desired organization of RFP responses, including but not limited to:

   o Page limits
   o Desired response volumes (for example, technical, management, and pricing volumes)
   o Desired outline for the contents—in order to ensure consistency when evaluating the responses

❑ An explanation of when and to whom questions are submitted as well as a description of how answers will be addressed

III.   Contract Administration
      a. Contracting Regulations
      b. Terms and Conditions

This section includes information on restrictions for eligible applicants, the procurement rules governing the acquisition, any standard legal information that may protect the agency or jurisdictions from obligatory purchases—in the case vendor responses fail to meet the RFP requirements—and information regarding protection of proprietary information. In developing the RFP, the project manager works closely with and seeks guidance from the procurement department to keep informed of contractual limitations and include appropriate legal language.

IV.   Scope of Services
      a. Project scope
      b. Requirements Matrix
      c. Technical Approach

This section clarifies for the vendor the project's scope in more detail. It includes a detailed description of the project goals, the functionality desired, the products and services that the buyer aims to procure from the vendor as well as a description of the availability of the client's personnel and relevant information provided by the agency or jurisdiction leading the procurement.

If reasonable, the RFP statement of work identifies the project phases or indicates whether the community will use option year awards. This will allow the community or jurisdiction making the purchase to evaluate the vendor performance and ensure the contract is earned each year and allows for a changeover if desired results are not met.

Clearly defining the products and services requested in the RFP provides clear requirements and information to ensure the vendors understand what is required of them. The requirements matrix can also be included in the scope of services section.

In this section, the buyers also request a detailed description and project plan from the vendor that includes the technical approach and implementation plan the vendor will take to install or deliver the desired product or service.

The following items are addressed in this section:

❑ A request for the vendor to describe a solution or service they will provide to meet the RFP requirements

❑ Definitions and descriptions of the project, the major tasks, key milestones and deliverables with due dates, and the project phases, if needed

❑ A request for the vendors to describe their approach to delivery, a proposed project schedule, and project management methods

❑ A request for the vendor to describe how it will provide and deliver training to personnel from the requesting community, agency, or jurisdiction, and provide a training schedule as part of the delivery process

V.   Evaluation Process
      a. Evaluation Criteria
      b. Finalist Selection Process
      c. Request Qualifications

The purpose of this section is to provide information on the anticipated evaluation process to interested vendors. This section describes in general terms the personnel or

roles evaluating the RFP responses (for example, project manager, technical evaluator, practitioner evaluator). In addition, this section provides the evaluation criteria and standards, such as the weighting of various sections or requirements in the RFP response evaluation processes. Furthermore, this section clarifies whether finalists will be selected and whether additional documentation, presentations, or demonstrations will be required in the finalist phase.

This section includes the following items:

❑ The evaluation criteria and list of possible ratings for vendor proposals, either in terms of weighted scoring for each section or in descriptions for what evaluators will be looking for in the RFP responses. Many communities find that adjectival criteria (for example, using Exceptional, Satisfactory, Meets Requirement, and Unsatisfactory rankings) allows for more flexibility

❑ A clear description of the finalist selection process and requirements

VI.   Pricing Proposal

The pricing proposal is submitted a supplemental volume to a vendor's technical proposal and consists of the cost associated with the vendor's services and responses. The vendor's pricing proposal should be submitted sin a package separate from the vendor's response to the scope of services and requirements in order to ensure that the best solution for the agency or community is selected independent of price.

The RFP requires information the price proposal to include the following:

❑ ***Labor.*** The labor data includes direct and indirect expenses associated with labor. A breakdown of labor and rates for each category of personnel to be used on this project should be required.

❑ ***Direct materials.*** The direct materials data will include total costs for materials acquired or consumed in the performance of the work. The vendor should be asked to provide information for the major items of material and how the estimated expense was derived.

❑ ***Subcontracts.*** This section describes major efforts expected to be subcontracted, the source, estimated costs, and the basis for the estimate.

❑ ***Other costs.*** This section includes any direct costs not included in the labor, direct materials, and subcontracts.

VII.   Appendices

The appendices section may contain requests for the vendor to provide additional information that will assist in the evaluation of the overall vendor response. It may also be useful to provide a page limit in order to prevent an overwhelming amount of supporting documentation.

Items that are generally requested from the vendor for the appendix include the following:

❑ Product specifications for any technology supplied by the vendor
❑ Product brochures
❑ Letters of reference
❑ General list price for all products offered in the vendor response