FFY06

Nevada Radio Communications Interoperability Project (RCIP)

Project Plan and Scope

A. Document Review and Approval Signature Block

The section provides a means of tracking the review and approval of this Project Plan and Scope Document for the Radio Communications Interoperability Project (RCIP). This is also the list of who has authority to approve changes in this document and by definition, the Project Management Team. All parties listed below must approve this document before the project exits the Initiation Phase.

Name	Signature	Date	Comments / Issues / Concerns
NCSC Committee Approval – Chair:			
RCIP Project Manager: Mark Blomstrom			
Engineering Module Project Coordinator: Mark Blomstrom			
SOP & Training Materials Module Project Coordinator: Dennis Cobb			
Gateways and Interconnects Module Project Coordinator: Dave McTeer			
Radio Cache Module Project Coordinator: Brett Primas			
Microwave Engineering Module Project Coordinator: Kathi Lowry			
SNACC Simulcast Module Project Coordinator: Jim Wilson			

B. Document Revision History

The revision history shows the history for this document and provides descriptions of particular changes made.

Version	Date	Description	Name
1.0	11/17/06	Initial draft to change structure for type	Barbara Middleton
2.0	12/14/06	Proj Mgr's changes reflecting grant format	Mark Blomstrom
3.0 – 3.2	1/23/07	Initial input of Proj Coordinators, Proj Mgr	Mark Blomstrom
4.0	2/9/07	Final input, review by PM SME	M. Blomstrom/S. Smith

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C. Introduction

C.1 Document Purpose

The purpose of this Project Plan and Scope document is to:

- Define the scope and objective of the project.
- Specify the requirements and assumptions.
- Define the project resources and limitations.
- Identify the project stakeholders and the project team.
- Describe the methodology and process the project will use to progress from start to finish.
- Provide the basis against which expectations of benefits and progress can be evaluated.
- Define project risks, mitigation strategies and contingency plans.
- Identify project communication requirements and reporting mechanisms.
- Ensure that all project stakeholders understand and approve of the project scope.

The intended audience is the sponsor, the project stakeholders and the entire project team.

C.2 Abbreviations, Acronyms and Definitions

The following abbreviations, acronyms, and definitions are used in this document and throughout the FFY06 Radio Communications Interoperability Project documents.

Term	Definition
RCIP	FFY06 Radio Communications Interoperability Project
Interoperability	
DHS	Department of Homeland Security, a federal agency and grantor.
DoIT-PDO	Nevada Dept of Information Technology, Project Delivery Office
NCSC	Nevada Communications Steering Committee
NHSC	Nevada Homeland Security Commission
DEM	Nevada Division of Emergency Management, the State Administrative Agency
ICTAP	Interoperable Communications Technical Assistance Program, part of DHS
SAFECOM	SAFECOM program is part of DHS

C.3 References and Associated Documents

The following documents were used for reference in the generation of this Project Plan and Scope document, and are identified here for reference and additional information as project work described herein proceeds. In the event of conflict between this document and one of the reference documents, this document shall take precedence.

Name	Document Description
Nevada Communications Interoperability Plan, v.2 (NCIP)	Strategic plan for communications interoperability developed by the Nevada Communications Steering Committee (NCSC), for approval by the Nevada Homeland Security Commission, as required by the Nevada 2003 Legislature in Assembly Bill 441. References identified in Section 4 of the Nevada Communications Interoperability Plan (NCIP) are hereby incorporated into this document. See: www.ncsc.nv.gov
"DHS Initiative Plan"	Part of the Enhancement Plan for Nevada, the Initiative Plan for Interoperable Communications is specifically for development of enhanced interoperable communications. Required by DHS as part of grant process and prepared by Nevada grant working group in FFY06 grant cycle. Contains extracts and references from the NCIP.
"DHS FFY06 Investment Justification"	Grant application to DHS for interoperable communications specifically for FFY06. Built from Initiative Plan.
DHS Program Management Handbook	Reference document on grant program management from DHS Office of Grants and Training, Preparedness Directorate.
RCIP Summary Status Report	RCIP Summary Progress and Status Report. Provides monthly progress and status summary for purpose of tracking and monitoring project, and required reporting to various oversight bodies and authorities. Associated with FFY06 Project Plan and Scope document, and RCIP Task and Timeline Communications Interoperability Project.
RCIP Task and Timeline	RCIP Task and Timeline. Identifies project tasks and timeframes. Associated with RCIP FFY06 Project Plan and Scope document, and RCIP Summary Status Report.
SAFECOM "Interoperability Continuum"	Component elements (or dimensions) of communications interoperability as defined by DHS-SAFECOM. See: www.safecomprogram.gov
SAFECOM "Strategic Recommendations to the Nevada Communications Interoperability Plan"	Strategic recommendations developed by SAFECOM from practitioner-driven focus group process in Nevada. Four practitioner-developed strategic initiatives were presented and subsequently incorporated into the Nevada Communications Interoperability Plan (NCIP) as version v.2 of the NCIP. See: www.ncsc.nv.gov
"DHS Capability Analysis"	Result of preliminary process to building the Initiative Plan for Interoperable Communications, it is prepared by Nevada grant working group in FFY06 grant cycle.

Section 0 RCIP Project

0.1 Project Scope and Limitations

0.1.1 Project Scope and Objective Statement

The overall objective of this project is to significantly advance the state of communications interoperability throughout Nevada to realize a commonly-understood and consistently-available level of basic interoperability, with additional capability available to be applied where and when needed.

> "The purpose of this [grant-funded project] is a well coordinated and pre-planned response to this problem [of communications interoperability]. In accordance with our established Plan, and using our developed Governance, we expect to complete detailed engineering and develop Standard Operating Procedures for interoperability. With the engineering, we expect to deploy emergency radio cache, build gateways between bands, and interconnect four major systems to create a "system of systems". We expect to put policies in place throughout Nevada adopting the SOPs and use of this equipment to create a minimum common level of interoperability. Finally, we expect to create training materials for long term training on the above. Implementing these module steps using [grant] funds will result in the single largest and most effective advancement of interoperable communications possible throughout Nevada."
>
> *Extract from grant application for Nevada: "FFY06 DHS Investment Justification: Interoperable Communications"; part I.A.*

0.1.2 Project Objectives

- This describes the high-level project objectives.

Obj. ID	Major Project Objectives
1.0	Complete the Engineering Module. (See section 1 in this document.)
2.0	Complete the SOP and Training Material Development Module. (See section 2 in this document.)
3.0	Complete the Gateways and Platform Interconnects Module (See section 3 in this document.)
4.0	Complete the Radio Cache Module. (See section 4 in this document.)
5.0	Complete the Microwave Engineering Module. (See section 5 in this document.)
6.0	Complete the SNACC Simulcast Module. (See section 6 in this document)

0.1.3 Major Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified are tied to the major objectives. These are keyed to sections of this document as numbered in the Table of Contents, and to the major objectives as defined in Section 0.1.2. References are to documents identified in C.3 References and Associated Documents.

Req. ID	Requirement, Need or Weakness Addressed
1.1	Addresses NCIP **Action Items**: **T1, T3, T4, and T6.**
1.2	Addresses DHS Capability Analysis **Weakness # 2.1, 2.4, 2.5 and 2.10.**
1.3	Addresses DHS Capability Analysis **Initiatives # 3.3, 3.5 and 3.9**.
1.4	Addresses SAFECOM **Initiative Recommendations 2.2, 2.3 and 2.4**
2.1	Addresses NCIP **Action Items: S1, S2, S3, E1 and E5**
2.2	Addresses DHS Capability Analysis **Weakness # 2.6, 2.7**
2.3	Addresses DHS Capability Analysis **Initiatives # 3.1**
3.1	Addresses NCIP **Action Items: T4 and T3**
3.2	Addresses DHS Capability Analysis **Weakness # 2.1 and 2.5**
3.3	Addresses DHS Capability Analysis **Initiatives # 3.3**
4.1	Addresses NCIP **Action Items: T2**
4.2	Addresses DHS Capability Analysis **Weakness # 2.1, 2.2 and 2.5**
4.3	Addresses DHS Capability Analysis **Initiatives # 3.4**
5.1	Addresses NCIP **Action Items: T5**
5.2	Addresses DHS Capability Analysis **Weakness # 2.2 and 2.4**
5.3	Addresses DHS Capability Analysis **Initiatives # 3.9**
6.1	Addresses NCIP **Action Items: T3**
6.2	Addresses DHS Capability Analysis **Weakness # 2.1**
6.3	Addresses DHS Capability Analysis **Initiatives # 3.9**

0.1.4 Assumptions and Dependencies

ID	Assumption and/or Dependency
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**High degree of awareness of issue, agreement on need for action**, and recent cooperation on addressing: Nv Homeland Security Commission, NCSC, SAFECOM, Legislative reqmt for plan (AB441). (DHS Capability Analysis)
d.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)
e.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.
f.	**Dependency on goodwill of various agencies** within state, local and federal government, and the various associated governing bodies, to continue to allow and encourage their respective employees to contribute time and work to the Project.
g.	**Dependency on continuing support and championship by elected officials and leaders,** especially the Governor.
h.	**Dependency (future) and assumption of sustainability.** "In order to sustain this enterprise initiative in the long term, the collective jurisdictions within the enterprise of Nevada must identify and authorize continuous funding mechanism(s)." (NCIP Action Item G3, DHS Capability Analysis, SAFECOM Recommendation #3)

0.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Problem mitigation. While the FFY06 RCIP will provide a major and significant advancement in communications interoperability in Nevada, it will not completely solve the problem.
b.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire state will not occur within the funding limit of the FFY06 RCIP.
c.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
d.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
e.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

0.2 Project Business Context

This section summarizes the business dimension around the project, including the stakeholders, project leadership and other resources necessary to project execution. It also defines the project in terms of process, risks and communication.

0.2.1 Stakeholders

- The project stakeholders are individuals, groups, or organizations that are actively involved in the project, are directly affected by its outcome, or can influence its outcome. A stakeholder has an interest in the project based on expectation of value or benefit to be received.

Stakeholder	*Involvement, Value/Benefit or Influence*
NHSC	Primary supporting stakeholder and champion, with direct ability to influence the outcome.
NCSC	Primary involvement stakeholder, actively involved representing governmental communication users, with primary ability to influence the outcome.
Governor	Supporting stakeholder and champion, with direct ability to influence the outcome.
First-Responder Professional Associations	Supporting stakeholders representing primary beneficiaries (below), with the ability to be actively involved and to influence the outcome. Includes organizations such as the Nevada Sheriff's and Chief's Assoc., Nevada Fire Chief's Assoc., Nevada State Firefighter's Assoc., etc.
First Responders in Nevada	Primary benefiting stakeholders, directly affected by the outcome.

0.2.2 Project Leadership and Resources

Resource	*Role*	*Phone*	*Email Address*
Nevada Communication Steering Committee (NCSC)	Project Sponsor	(staff support: Amy Goggiano, 775-684-5853	POC for the Chair: Amy Goggiano [aegoggiano@doit.nv.gov]
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853	POC for the Team: Amy Goggiano [aegoggiano@doit.nv.gov]
Mark Blomstrom	Project Manager	775-742-8200	*mark.blomstrom@charter.net*
Peggy Martin	Contract Administration	775-684-5800	*pmartin@doit.nv.gov*
Elaine Fisher	DEM Grant guidance	775-687-	*efisher@dps.state.nv.us*

Resource	Role	Phone	Email Address
		0307	
Glade Myler	Legal advice	775-687-0303	gmyler@dps.state.nv.us
TIME	**FFY06 RCIP Project DEADLINE**	Per DHS FFY06 Guidelines	***Funds must be expended and services and equipment received by 30Jun08***
FUNDING	**Project Budget**	Per approval by NHSC	*Available to NCSC Memebers and RCIP Project Team from* aegoggiano@doit.nv.gov

0.2.3 Methodology and Process

- Description of the general process that will be used to successfully complete the project.

Oversight. The Nevada Homeland Security Commission (NHSC) has control authority of HSGP grant funds by state statute (the Nevada Division of Emergency Management is the designated State Administrative Agency to the federal government for purpose of funds dispersal). The Nevada Communications Steering Committee (NCSC) has delegated oversight of communication issues. The NCSC will actively direct and monitor progress at regularly scheduled monthly meetings, and will report to the NHSC at NHSC quarterly meetings or as otherwise required. The NCSC may use ad hoc subcommittees, as used previously and successfully, for assignments and tasks comprising this project.

Project Management. Professional project management will be employed in two levels. As part of each contract with contractor or consultant, designation of a project manager is required along with standardized reporting and progress monitoring tools. Separate from contractors and consultants associated with individual component tasks, a third-party project manager responsible for the overall project and reporting to the NCSC and in turn the NHSC will be used.

Contract Administration. An experienced and qualified governmental contract administrator will be used for each contract employed and executed. The same or differing contract administrators may be designated by the NCSC. Standard and proven procurement process will be employed, in line with Nevada statues and administrative code. This process will start with a competitive Request For Proposal (RFP) and will result in a legally-reviewed contract. As part of the contract, timelines, subtasks, progress payment schedules and acceptance processes will be established.

0.2.4 Risks

- Major project risks and mitigation plans to minimize the risk are identified, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Loss of individual contributor support and willingness to work on project	Continual communication, including status, progress and importance of project; active NCSC encouragement	Direct query and request; solicitation of assistance from peers, superiors and agency; replacement if necessary.
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Loss of political will and cohesiveness due to disagreement	Continued representational discussion and open input, with decisions on rational basis by consensus or vote	Search and revisit commonly-held motivations; if possible, agree to disagree; if not, decision and direction by higher authority
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project

0.2.5 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC-Executive Sponsor	RCIP Summary Status&Progress Report - High-level overview of progress and status update	Written report via email and meeting presentation	Monthly	Project Manager
Nevada Homeland Security Commission	RCIP Summary Status&Progress Report - High-level overview of progress and status update	Written report via email, meeting presentation as requested	Quarterly	Project Manager for NCSC Chair
DHS	High-level summary and fiscal report	Written report delivered through DEM	Quarterly	Project Manager and Chief Accountant, DoIT.
First-Responders and Associations	RCIP Summary Status&Progress Report - High-level overview of progress and status update	Written report posted on NCSC website	Monthly	DoIT support staff for NCSC

Section 1 RCIP Module I. Engineering

1.1 Project Module Scope and Limitations

1.1.1 Project Module Objective Statement

The overall objective of the Engineering Module is to complete the technical plan for the project, to include data collection, detailed engineering and specifications.

1.1.2 Project Module Objectives

- This section describes the project module objectives.

Obj. ID	Objective Description
1.0	Project Module Plan and Timetable. Produce a detailed project plan and timetable for work identified herein, for completion of the Engineering Module.
2.0	Technical Database. Update the existing technical database on Nevada public safety communication systems and agencies.
3.0	Interoperability Frequency Plan. Develop an interoperable frequency plan for use within Nevada, and in complement to the Nevada Communications Interoperability Plan.
4.0	Proposed Technologies and Concept of Operation. Produce a high-level description of the proposed architecture, technologies, operation from a user's perspective, and provision for the future.
5.0	Detailed Interconnect Engineering. Produce detailed engineering for interconnects between systems, including a specification package suitable for bidding (for use implementing Gateways and Interconnects Module).
6.0	Detailed Gateway Engineering. Produce detailed engineering for gateways (or cross-band repeaters), both fixed and mobile, including a specification package suitable for bidding (for use implementing Gateways and Interconnects Module).
7.0	TIC Plan. Draft a Nevada Tactical Interoperable Communications (TIC) plan using data collected, and the present Las Vegas UASI TIC plan.
8.0	Radio Cache Specifications. Develop a specification package suitable for bid for a radio cache (for use implementing Radio Cache Module)**.**
9.0	Individual System Plans. Produce individual system-oriented plans for interoperability. These would recommend future direction and action for existing public safety communication systems to achieve improved interoperability and mutual aid support.

1.1.3 Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified which are addressed all or in part by the project module objectives.

Req. ID	Requirement, Need or Weakness Addressed
1.1	Addresses NCIP **Action Items**: **T1, T3, T4, and T6.**
1.1.a	NCIP Action Item T1: Establish a formal working relationship with appropriate federal entities to establish common, shared channels for federal, state and local uses.
1.1.b	NCIP Action Item T3: Configure talk groups and construct resources on the proprietary shared systems to permit direct interoperation within their coverage areas. (Core Four Concept)

Req. ID	Requirement, Need or Weakness Addressed
1.1.c	NCIP Action Item T4: Support and encourage a statewide network of inter-tied base stations/repeaters statewide to provide communications gateways between users in disparate frequency bands. (Short Term Gateways)
1.1.d	NCIP Action Item T6: Utilize the NCSC and the regional working groups as cross-discipline, collaborators for long-term communications system planning, to promote sharing of systems and infrastructure as appropriate.
1.2	Addresses DHS Capability Analysis **Weakness # 2.1, 2.4, 2.5 and 2.10.**
1.2.a	DHS Capability Analysis Weakness #2.1: Minimal interoperability between large, shared, multi-agency systems (exception: Washoe-State). Interoperability that does exist has been developed largely to meet day-to-day operational needs. Large-scale, broad-based interoperability to meet infrequent disasters is still a large problem.
1.2.b	DHS Capability Analysis Weakness #2.4: Coordination of problem definition and solutions is difficult (but not impossible) across multiple jurisdictions and multiple disciplines.
1.2.c	DHS Capability Analysis Weakness #2.5: Technical barriers to easy solutions exist within present infrastructure: a) multiple and incompatible radio frequency (RF) band use; and, b) multiple protocols (i.e. analog v. digital, conventional v. trunking).
1.2.d	DHS Capability Analysis Weakness #2.10: Existing plan is not as specific and detailed as needed, and does not adequately address VHF.
1.3	Addresses DHS Capability Analysis **Initiatives # 3.3, 3.5 and 3.9**.
1.3.a	DHS Capability Analysis Initiative #3.3 : Interface Devices. Establish causeways between shared systems (“Core Four”),and talk groups on shared systems allowing conventional gateway interconnects statewide through a mountaintop network of repeaters.
1.3.b	DHS Capability Analysis Initiative #3.5 : Continued Planning. The NCSC must continue to update the current plan, especially toward a five year plan which links existing systems into a statewide communications network, and develops redundancy and fail-soft modes.
1.3.c	DHS Capability Analysis Initiative #3.9 : Continued Planning. The NCSC must continue to update the current plan, especially toward a five year plan which links existing systems into a statewide communications network, and develops redundancy and fail-soft modes.
1.4	Addresses SAFECOM **Initiative Recommendations 2.2, 2.3 and 2.4**
1.4.a	SAFECOM Initiative Recommendation 2.2: Review, consolidate, and validate the accuracy of data collected in the previous survey and inventories through interviews or focus groups to avoid duplication of efforts.
1.4.b	SAFECOM Initiative Recommendation 2.3 : Determine any additional data, questions, and operational and technical information that need to be collected in the capabilities assessment.
1.4.c	SAFECOM Initiative Recommendation 2.4 : Research or edit the existing data collection tools to ensure the ability to gather the data necessary for a technical and operational assessment.

1.1.4 Assumptions and Dependencies

ID	Assumption and/or Dependency
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)
d.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.
e.	**Dependency on goodwill of various agencies** within state, local and federal government, and the various associated governing bodies, to continue to allow and encourage their respective employees to contribute time and work to the Project.
f.	**Assumption that federal agencies will honor requests for and commitments of assistance,** specifically to review and comment on engineering aspects and federal interfaces, and developed system use.

1.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire state will not occur within the funding limit of the FFY06 RCIP.
b.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
c.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
d.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

1.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

1.2.1 Project Module Leadership and Resources

Resource	Role	Phone	Email Address
Mark Blomstrom	Project Module Coordinator	775-742-8200	mark.blomstrom@charter.net
NCSC Technical Subcommittee	Subject Matter Experts: expertise: advice, input and review	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
ICTAP	Guidance and technical assistance		
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: aegoggiano@doit.nv.gov
	Project Management Process Matter Expert	775-684-5876	
Peggy Martin	Contract Administration	775-684-5800	pmartin@doit.nv.gov
Engineering Consultant	Contract technical work	TBD	TBD

1.2.2 Organization and Methodology

- The following describes the general process that will be used to complete the project module.

This project module will be accomplished through the use of an engineering contractor, with input and review by a large number of technical and operational (user) groups, and final approval of deliverables by the NCSC.

The contractor will be selected through standard, proven and competitive Request For Proposal (RFP) process. The contractor will work directly with the Project Module Coordinator and designated groups and individuals, and present the deliverables as specified.

1.2.3 Risks

- Major project risks and mitigation plans to minimize the risk, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Loss of individual contributor support and willingness to work on project	Continual communication, including status, progress and importance of project; active NCSC encouragement	Direct query and request; solicitation of assistance from peers, superiors and agency; replacement if necessary.
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Loss of political will and cohesiveness due to disagreement	Continued representational discussion and open input, with decisions on rational basis by consensus or vote	Search and revisit commonly-held motivations; if possible, agree to disagree; if not, decision and direction by higher authority
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project

1.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor

Section 2 RCIP Module II. SOP and Training Materials

2.1 Project Module Scope and Limitations

2.1.1 Project Objective Statement

The overall objective of the SOP and Training Materials Module is to develop a set of standard operating procedures on the use of interoperable communications for use state-wide by all public safety communications users.

2.1.2 Project Objectives

- This section describes the project module objectives.

Obj. ID	*Objective Description*
1.0	SOPs. Develop Standard Operating Procedures for use state-wide by all public safety communications users.
2.0	Definitions. Develop common nomenclature, terms and definitions.
3.0	Training Materials. Develop training materials and syllabus for internet-based access.
4.0	Policies. Develop policy of and for jurisdictional adoption.
5.0	Press Kit. Develop general information package(s) regarding this project for the public, elected officials and professional (user) associations
6.0	Adoption. Provide model policies and facilitate jurisdictional adoption.

2.1.3 Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified which are addressed all or in part by the project module objectives.

Req. ID	*Requirement, Need or Weakness Addressed*
2.1	Addresses NCIP **Action Items: S1, S2, S3, E1 and E5**
2.1.a	NCIP Action Item S1: Utilize the regional working groups, on a per-discipline basis, to develop, test and exercise standard operating procedures for operational and communications interoperability consistent with the National Incident Management System
2.1.b	NCIP Action Item S2: The Nevada Department of Public Safety (DPS) should work with the regional working groups to define, test and exercise formal, statewide policy and procedures for interoperability between local agencies and the DPS, utilizing the existing technology currently deployed.
2.1.c	NCIP Action Item S3: Develop, test and exercise standard operating procedures for the use of ad hoc gateway interconnect devices based on the SOPs developed for Recommendation S1.
2.1.d	NCIP Action Item E1: In cooperation with and through the existing state training bodies, develop training programs for all public safety personnel in the state based on the NIMS-based Standard Operating Procedures developed under Recommendation S1
2.1.e	NCIP Action Item E5: Develop a credentialing process to facilitate interoperability operations among people unfamiliar with one another.
2.2	Addresses DHS **Capability Analysis Weakness # 2.6, 2.7**
2.2.a	DHS Capability Analysis Weakness # 2.6: Lack of common standard operating procedures (SOPs) and policies (i.e. interlocal agreements) regarding interoperability between user agencies.

Req. ID	Requirement, Need or Weakness Addressed
2.2.b	DHS Capability Analysis Weakness # 2.7: Lack of training and exercises for users on interoperability and (undeveloped) SOPs.
2.3	Addresses DHS **Capability Analysis Initiatives # 3.1**
2.3.a	Policies and Standard Operating Procedures (SOPs). Develop, implement, test and exercise policies and procedures consistent with National Incident Management Systems (NIMS). This would include a statewide communications inter-local agreement that all municipalities and local governments must agree to in order to receive State and Federal funding.

2.1.4 Assumptions and Dependencies

ID	Assumption and/or Dependency
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**High degree of awareness of issue, agreement on need for action**, and recent cooperation on addressing: Nv Homeland Security Commission, NCSC, SAFECOM, Legislative reqmt for plan (AB441). (DHS Capability Analysis)
d.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)
e.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.
f.	**Dependency on goodwill of various agencies** within state, local and federal government, and the various associated governing bodies, to continue to allow and encourage their respective employees to contribute time and work to the Project.
g.	**Dependency on continuing support and championship by elected officials and leaders,** especially the Governor.
h.	**Dependency (future) and assumption of sustainability.** "In order to sustain this enterprise initiative in the long term, the collective jurisdictions within the enterprise of Nevada must identify and authorize continuous funding mechanism(s)." (NCIP Action Item G3, DHS Capability Analysis, SAFECOM Recommendation #3)

2.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Jurisdictional Autonomy. The resulting product of this module will be presented for adoption by jurisdictions and agencies within Nevada, but the NCSC does not have authority to mandate that adoption.
b.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire

ID	Limitation and/or Exclusion
	state will not occur within the funding limit of the FFY06 RCIP.
c.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
d.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
e.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

2.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

2.2.1 Project Leadership and Resources

Resource	*Role*	*Phone*	*Email Address*
Dennis Cobb	Project Module Coordinator	702-229-3503	*d2520c@lvmpd.com*
NCSC Policy/Standards Subcommittee	Expertise: advice, input and review	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: *aegoggiano@doit.nv.gov*
Professional Associations	Expertise, input		
Glade Myler	Legal advice	775-687-0303	*gmyler@dps.state.nv.us*
ICTAP/SAFECOM	Guidance and technical assistance		
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: *aegoggiano@doit.nv.gov*
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: *aegoggiano@doit.nv.gov*
Mark Blomstrom	Project Manager	775-742-8200	*mark.blomstrom@charter.net*
	Project Management Process Matter Expert	775-684-5876	
Clark County contract administration	Contract Administration		
Consultant	Contract work	TBD	TBD

2.2.2 Organization and Methodology

- The following describes the general process that will be used to complete the project module.

This project module will be accomplished through the use of a contractor, with input and product review by operational (user-practitioner) groups and technical groups. The final approval of deliverable products will be by the NCSC upon recommendation for approval by reviewing professional organizations representing user-practitioners.

Once the development phase is concluded the adoption phase will begin. The contractor will prepare model policies and assist in presentation and facilitation of adoption by jurisdictions.

The contractor will be selected through standard, proven and competitive Request For Proposal (RFP) process. The contractor will work directly with the Project Module Coordinator and designated groups and individuals, and present the deliverables as specified.

2.2.3 Risks

- Major project risks and mitigation plans to minimize the risk, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Loss of individual contributor support and willingness to work on project	Continual communication, including status, progress and importance of project; active NCSC encouragement	Direct query and request; solicitation of assistance from peers, superiors and agency; replacement if necessary.
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Loss of political will and cohesiveness due to disagreement	Continued representational discussion and open input, with decisions on rational basis by consensus or vote	Search and revisit commonly-held motivations; if possible, agree to disagree; if not, decision and direction by higher authority
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project
e.	Impractical product resulting from lack of coordination with technical	Require liaison and coordination of contractor with Engineering contractor, require same from Engineering contractor	Rework until practicality of product is agreed upon.

2.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor

Section 3 RCIP Module III. Gateways and Interconnects

3.1 Project Module Scope and Limitations

3.1.1 Project Objective Statement

The overall objective of the Gateways and Interconnects Module is to procure, install and implement interconnections between major radio systems, and geographically-distributed gateways between radio bands.

3.1.2 Project Objectives

Obj. ID	*Objective Description*
1.0	Interconnect. Procure, install and test interconnection equipment according to engineering, specifications and quantities developed in Section 1
2.0	Gateways. Procure, install and test gateway equipment according to engineering, specifications and quantities developed in Section 1

3.1.3 Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified which are addressed all or in part by the project module objectives.

Req. ID	*Requirement, Need or Weakness Addressed*
3.1	Addresses NCIP **Action Items: T4 and T3**
3.2	Addresses DHS Capability Analysis **Weakness # 2.1 and 2.5**
3.3	Addresses DHS Capability Analysis **Initiatives # 3.3**

3.1.4 Assumptions and Dependencies

ID	*Assumption and/or Dependency*
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**High degree of awareness of issue, agreement on need for action**, and recent cooperation on addressing: Nv Homeland Security Commission, NCSC, SAFECOM, Legislative reqmt for plan (AB441). (DHS Capability Analysis)
d.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)
e.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.
f.	**Dependency on goodwill of various agencies** within state, local and federal government, and the various associated governing bodies, to continue to allow and encourage their respective employees to contribute time and work to the Project.
g.	**Dependency on continuing support and championship by elected officials and leaders,** especially the Governor.
h.	**Dependency (future) and assumption of sustainability.** "In order to sustain this enterprise initiative in the long term, the collective jurisdictions within the enterprise of Nevada must identify and authorize continuous funding mechanism(s)." (NCIP Action Item G3, DHS Capability Analysis, SAFECOM Recommendation #3)

3.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Problem mitigation. While the FFY06 RCIP will provide a major and significant advancement in communications interoperability in Nevada, it will not completely solve the problem.
b.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire state will not occur within the funding limit of the FFY06 RCIP.
c.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
d.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
e.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

3.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

3.2.1 Project Leadership and Resources

Resource	Role	Phone	Email Address
Dave McTeer	Project Module Coordinator	775-687-9051	dmcteer@ifs.state.nv.us
NCSC Technical Subcommittee	Expertise: advice, input and review	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
ICTAP	Guidance and technical assistance		
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: aegoggiano@doit.nv.gov
Mark Blomstrom	Project Manager	775-742-8200	mark.blomstrom@charter.net
	Project Management Process Matter Expert	775-684-5876	
Peggy Martin	Contract Administration	775-684-5800	pmartin@doit.nv.gov
Engineering Consultant	Contract technical work	TBD	TBD

3.2.2 Organization and Methodology

Describe the general process that you will use to successfully complete the project.

This project module will be accomplished through the use of a procurement contract for both equipment and installation. The specifications will be produced as a deliverable from the Engineering Module, and approved by the NCSC.

The contract provider will be selected through standard, proven and competitive Request For Proposal (RFP) process. The contractor will work directly with the Project Module Coordinator and designated groups and individuals as necessary for installation as specified.

3.2.3 Risks

- Major project risks and mitigation plans to minimize the risk are identified, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Contract/contractor problems due to inability to accomplish work.	Careful contractor criteria and selection; close monitoring of progress	Contract administration/legal efforts to resolve, replace contractor if necessary.
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Loss of political will and cohesiveness due to disagreement	Continued representational discussion and open input, with decisions on rational basis by consensus or vote	Search and revisit commonly-held motivations; if possible, agree to disagree; if not, decision and direction by higher authority
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project

3.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor

Section 4 RCIP Module IV. Radio Cache

4.1 Project Module Scope and Limitations

4.1.1 Project Objective Statement

The overall objective of the Radio Cache Module is to procure, maintain and hold available for use state-wide, a portable cache of radios

4.1.2 Project Objectives

Obj. ID	*Objective Description*
1.0	Radio cache. Procure, deliver, setup and test radio cache equipment according to engineering, specifications and quantities developed in Section 1
2.0	Maintenance Plan. Develop and deliver a maintenance plan and initial maintenance plan training.

4.1.3 Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified which are addressed all or in part by the project module objectives.

Req. ID	*Requirement, Need or Weakness Addressed*
4.1	Addresses NCIP **Action Items: T2**
4.2	Addresses DHS Capability Analysis **Weakness # 2.1, 2.2 and 2.5**
4.3	Addresses DHS Capability Analysis **Initiatives # 3.4**

4.1.4 Assumptions and Dependencies

ID	*Assumption and/or Dependency*
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**High degree of awareness of issue, agreement on need for action**, and recent cooperation on addressing: Nv Homeland Security Commission, NCSC, SAFECOM, Legislative reqmt for plan (AB441). (DHS Capability Analysis)
d.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)
e.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.
f.	**Dependency on goodwill of various agencies** within state, local and federal government, and the various associated governing bodies, to continue to allow and encourage their respective employees to contribute time and work to the Project.
g.	**Dependency on continuing support and championship by elected officials and leaders,** especially the Governor.
h.	**Dependency (future) and assumption of sustainability.** "In order to sustain this enterprise initiative in the long term, the collective jurisdictions within the enterprise of Nevada must identify and authorize continuous funding mechanism(s)." (NCIP Action Item G3, DHS Capability Analysis, SAFECOM Recommendation #3)

4.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Problem mitigation. While the FFY06 RCIP will provide a major and significant advancement in communications interoperability in Nevada, it will not completely solve the problem.
b.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire state will not occur within the funding limit of the FFY06 RCIP.
c.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
d.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
e.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

4.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

4.2.1 Project Leadership and Resources

Resource	Role	Phone	Email Address
Brett Primas	Project Module Coordinator	702-229-3433	b3900p@lvmpd.com
NCSC Technical Subcommittee	Expertise: advice, input and review	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
ICTAP	Guidance and technical assistance		
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: aegoggiano@doit.nv.gov
Mark Blomstrom	Project Manager	775-742-8200	mark.blomstrom@charter.net
	Project Management Process Matter Expert	775-684-5876	
Clark County/Metro contract admin	Contract Administration		
Engineering Consultant	Contract technical work	TBD	TBD

4.2.2 Organization and Methodology

Describe the general process that you will use to successfully complete the project.

This project module will be accomplished through the use of a procurement contract for equipment. The specifications will be produced as a deliverable from the Engineering Module, and approved by the NCSC.

The contract provider will be selected through standard, proven and competitive Request For Proposal (RFP) process. The contractor will work directly with the Project Module Coordinator.

4.2.3 Risks

- Major project risks and mitigation plans to minimize the risk, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Loss of individual contributor support and willingness to work on project	Continual communication, including status, progress and importance of project; active NCSC encouragement	Direct query and request; solicitation of assistance from peers, superiors and agency; replacement if necessary.
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Loss of political will and cohesiveness due to disagreement	Continued representational discussion and open input, with decisions on rational basis by consensus or vote	Search and revisit commonly-held motivations; if possible, agree to disagree; if not, decision and direction by higher authority
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project

4.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor

Section 5 RCIP Module V. Microwave Engineering

5.1 Project Module Scope and Limitations

5.1.1 Project Objective Statement

The overall objective of the Microwave Engineering Module is to complete detailed technical plans and engineering for expansion of the multiple-user microwave system within Clark County, previously designated Phase IV.

5.1.2 Project Objectives

Obj. ID	*Objective Description*
1.0	Identify sites. Identify probable radio sites for contract use.
2.0	Path surveys. Perform path surveys for confirmation of feasible operation.
3.0	Approvals. Obtain approvals and permits as necessary.
4.0	Engineering. Perform soils and architectural engineering.

5.1.3 Major Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified are tied to the project module objectives.

Req. ID	*Requirement, Need or Weakness Addressed*
5.1	Addresses NCIP **Action Items: T5**
5.2	Addresses DHS Capability Analysis **Weakness # 2.2 and 2.4**
5.3	Addresses DHS Capability Analysis **Initiatives # 3.9**

5.1.4 Assumptions and Dependencies

ID	*Assumption and/or Dependency*
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	**Significant interoperability exists**, esp. within large shared systems, and for daily operational needs. (DHS Capability Analysis)

5.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	*Limitation and/or Exclusion*
a.	Funding limitation. This project has a specific funding limitation based on a specific grant of funds. While there are other potential sources of funds, including future grants, there are no guarantees of additional funding or contingency funding beyond the already-identified funds.
b.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.

5.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

5.2.1 Project Leadership and Resources

Resource	Role	Phone	Email Address
Kathi Lowery	Project Module Coordinator	702-455-4953	KLS@co.clark.nv.us
CC Microwave Committee	Expertise: advice, input and review		POC KLS@co.clark.nv.us
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: aegoggiano@doit.nv.gov
Mark Blomstrom	Project Manager	775-742-8200	mark.blomstrom@charter.net
Clark County Real Property Mgmt	Contract Administration		
Engineering Contractor - Harris	Contract technical work		

5.2.2 Organization and Methodology

Describe the general process that you will use to successfully complete the project.

Consulting, architectural drawings, and path surveys will be completed using existing contracts. The Clark County Microwave Committee is responsible for project management and funding expenditures to be reviewed with regular weekly meetings and minutes.

5.2.3 Risks

- Major project risks and mitigation plans to minimize the risk, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
b.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget; if necessary, consider transfer from another module within project
c.	Consultant may require FD6		
d.	Approvals for remote sites (BCC, FAA)		
e.	BLM issues		
f.	PO issues		

5.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor

Section 6 RCIP Module VI. SNACC Simulcast

6.1 Project Module Scope and Limitations

6.1.1 Project Objective Statement

The overall objective of the SNACC Simulcast project module is to engineer and implement a simulcast sub-system upgrade to the existing SNACC radio system for use with 16 (or more) designated interoperable talk groups ("channels") within the Clark County urban area. This sub-system will be connected to the SNACC infrastructure to complete system connectivity throughout the SNACC system. This sub system will provide analog and digital two-way radio communications.

6.1.2 Project Objectives

- This section describes the project module objectives.

Obj. ID	*Objective Description*
1.0	Interoperability. Create additional capability for communications interoperability for two-way radio communications.
2.0	Coverage. Extend and enhance coverage and coverage strength to improve communications IOP within the Urban Area.
3.0	Connectivity. Create additional connectivity to support interoperability in the Urban Area
4.0	Interoperability Talk Groups. Establish and implement a planned set of 16 additional talk groups ("channels") for designed for interoperability, and specifically as a basis for future interconnect with the LVMPD 700MHz trunked radio system.

6.1.3 Major Requirements Addressed

- Specific user requirements, functional requirements, needs and weaknesses previously identified are tied to the project module objectives.

Req. ID	*Requirement, Need or Weakness Addressed*
6.1	Addresses NCIP **Action Items: T3, T6**
6.1.a	NCIP Action Item: T3: Configure talk groups and construct resources on the proprietary shared systems to permit direct interoperation within their coverage areas. (Core Four Concept)
6.1.b	NCIP Action Item T6: Utilize the NCSC and the regional working groups as cross-discipline, collaborators for long-term communications system planning, to promote sharing of systems and infrastructure as appropriate. The regional working groups should work with individual discipline groups to define minimum standards for public safety radio equipment, including the definition and subsequent implementation of appropriate interoperability channel sets.
6.2	Addresses DHS Capability Analysis **Weakness # 2.1**
6.2.a	Capability Analysis Weakness # 2.1: Minimal interoperability between large, shared, multi-agency systems (exception: Washoe-State). Interoperability that does exist has been developed largely to meet day-to-day operational needs. Large-scale, broad-based interoperability to meet

Req. ID	Requirement, Need or Weakness Addressed
	infrequent disasters is still a large problem.
6.3	Addresses DHS Capability Analysis **Initiatives # 3.9**
6.3.a	Capability Analysis Initiatives # 3.9: Standards. Determine specifications for nationwide interoperability of communications equipment. Support and encourage statewide IP-based network connectivity.
6.4	Direction by SNACC Board to Expand SNACC System to add 16 Interoperability Talk Groups (channels). March 2005 SNACC Board Meeting.
6.5	Direction of SNACC Board to Expand SNACC system coverage in the North and North West parts of the Las Vegas/North Las Vegas Urban area. December 2006 SNACC Board Meeting.
6.6	Direction of SNACC Board to Expand SNACC sub System to Analog and Digital for future. December 2006 SNACC Board Meeting.

6.1.4 Assumptions and Dependencies

ID	Assumption and/or Dependency
a.	Large, shared, multi-agency, **trunked radio systems**: Washoe, State, SNACC, Metro (future); exist and **represent a potential platform to build from**. (DHS Capability Analysis)
b.	The INTEROPERABLE COMMUNICATIONS working group noted **minimal interoperability on a macro scale** as a weakness and large, trunked radio systems as a strength (DHS Initiative Plan).
c.	**Dependency on continuing willingness of individuals**, especially NCSC members and supporting staff, to work on Project.

6.1.5 Limitations and Exclusions

- This section attempts to identify aspects or features that a stakeholder might anticipate but which are not included in the project module, or limitations which may not otherwise be apparent.

ID	Limitation and/or Exclusion
a.	Coverage limitation. While this project may provide significant numbers, and therefore coverage, of the state by gateways (localized crossband interconnect), coverage of the entire state will not occur within the funding limit of the FFY06 RCIP.
b.	Time limitation. All grant funds must be utilized, equipment and services received by the FFY06 grant deadline date. Funds not used are returned to DHS.
c.	"Voice" limitation. At this time the primary focus of effort is to establish and improve voice-mode interoperability to a basic, common and consistently available level. Data interoperability is recognized as important, with allowance and consideration in design and engineering, but is the next step and is secondary to "voice" within this project.

6.2 Project Module Business Context

This section summarizes the business dimension around the project module, including the leadership and other resources necessary to project module execution. It also defines the project module in terms of process, risks and communication.

6.2.1 Project Leadership and Resources

Resource	Role	Phone	Email Address
Jim Wilson	Project Module Coordinator	702-455-7390	jimwi@co.clark.nv.us
NCSC Technical Subcommittee	Expertise: advice, input and review	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
ICTAP	Guidance and technical assistance		
Nevada Communication Steering Committee (NCSC)	Project Sponsor, ad hoc review and approval	(staff support: Amy Goggiano, 775-684-5853)	POC for the Chair: aegoggiano@doit.nv.gov
Project Management Team (as identified in Section A)	Project Management	(staff support: Amy Goggiano, 775-684-5853)	POC for the Team: aegoggiano@doit.nv.gov
Mark Blomstrom	Project Manager	775-742-8200	mark.blomstrom@charter.net
Clark County District Attorney's	Contract Administration	702 455-4716	
Engineering Contractor-Motorola	Contract technical work	480-560-6688	Mary.walsh@motorola.com

6.2.2 Organization and Methodology

- Description of the general process that will be used to successfully complete the project.

This project module will be accomplished by the Southern Nevada Area Communications Council's Board and administrated by the Communication Systems Administrator and his staff. We have an pre-established and open contract with Motorola, and this will be an amendment addition to the contract. Motorola will provide a Project Manager as a single point of contact for their representation of the project.

6.2.3 Risks

- Major project risks and mitigation plans to minimize the risk, with contingency plans for use as necessary.

ID	Description	Mitigation	Contingency
a.	Problems with licensing especially 800MHz rebanding, resulting mostly in time delay.	Continually monitor progress, minimize dependence on spectrum in question	Reduce rf channels implemented until licensing is perfected
b.	Loss of grant funds due to time delays and grant cycle deadline.	Expedite tasks and processes where possible; perform in parallel; set default time limits for requested input and action	If necessary and possible, move forward with available information, without perfection; request extension
c.	Contractor schedule slippage	Monitor progress closely with contractor, anticipate possible delays	Move forward to complete all work possible using grant funds; request extension
d.	Inadequate funding to complete task/module	Close control of expenditure by contract and bidding processes; adjust as necessary	Re-quantify or re-scope to assure procurement or work is within budget.

6.2.4 Communication and Reporting

Audience	Description	Delivery Method	Frequency	Owner
NCSC - Executive Sponsor	Project Module input: RCIP Summary Status&Progress Report - High-level overview of progress and status update	Via email to Project Manager	Monthly, two working days prior to month end	Project Module Coordinator
Project Management Team	Review meeting of progress, status, problems and issues	Teleconference meeting	Monthly and as needed.	Project Manager and DoIT support staff for Project Management Team
Project Module Coordinator	Regular and periodic status reports from any/all contractor(s)	Document delivered as appropriate	As appropriate and specified in contract	Contractor