VIDEO CONFERENCING

WEB ENHANCEMENT AND CUSTOMIZATION

PROJECT MANAGEMENT PLAN
(PMP)

EXECUTIVE SPONSOR – LAWRENCE C. PACHECO, CIO
PROJECT DIRECTOR – TIM OAKELEY
PROJECT MANAGER – BRYAN GILL, PMP

ORIGINAL PLAN DATE: DECEMBER 12, 2007
REVISION DATE:
REVISION 1.0
# PROJECT MANAGEMENT PLAN
## NMCD VIDEO CONFERENCING

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## PROJECT MANAGEMENT

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PROJECT MANAGEMENT

OVERVIEW

Project Management is comprised of project management knowledge areas, a project lifecycle, and general management activities. See Figure 1.

The outer circle of Figure 1 identifies the Project Management Knowledge Areas described in PMBOK®. PMI has organized the contents of PMBOK® around nine knowledge areas. A knowledge area is a collection of project management knowledge and practices for a particular management process such as “Project Scope Management.” This guideline applies the knowledge and practices derived from Project Management Knowledge Areas to tasks performed in the lifecycle of a project.

New Mexico Oversight of Information Technology Projects 1.12.5.1 NMAC revised 9/30/2005 specifies that all IT projects shall be managed using a formal project management methodology, processes and techniques. The State of New Mexico has adopted the Project Management Institute (PMI) approach to project management. The six phases, shown in the inner circle of Figure 1, are Selection, Initiation, Planning, Execution and Control, Closeout, and Operations and Support. The Project Lifecycle begins at Initiation, and proceeds through the phases of Planning, Execution and Control, and Closeout. During the project management lifecycle agencies shall select and implement a phase product development lifecycle. Formal project management methodology requires analyzing and monitoring risk at periodic intervals during the project management lifecycle and mitigation risks before they negatively impact the IT project schedule, scope or budget.

Project management is an iterative process because each phase in a project lifecycle builds on the previous phase. An example of the iterative nature of project management is that the planning phase is, in part, a refinement of the initiation phase. There may be overlap between phases and in some cases, a phase may be repeated due to changes within a project. During each phase, project managers perform three important general management activities. The activities are planning, execution, and control. These activities are shown in the center of Figure 1 as a triangle. The activities are repetitive and may occur in order or in some instances simultaneously. A project manager, for example, will plan the execution of tasks for the initiation phase and then execute and control the planned tasks for that phase.
**PROJECT MANAGEMENT ENVIRONMENT**

Successful project management is predicated on an environment where sound management practices are in place. The principles, concepts, techniques, tools, and skills of general management are the foundation for successful project management. Critical among these are basic people skills and financial management skills, established processes for organizational planning and communication, availability of tools that support management processes and a culture that values cooperation and teamwork.

**PROJECT OVERSIGHT PROCESS MEMORANDUM – DOIT, JULY 2007**

“Project management plan” is a formal document approved by the executive sponsor and the Department and developed in the plan phase used to manage project execution, control, and project close.

The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and documents approved scope, cost and schedule baselines.

A project plan includes at least other plans for issue escalation, change control, communications, deliverable review and acceptance, staff acquisition, and risk management.

“Project manager” means a qualified person from the lead agency responsible for all aspects of the project over the entire project management lifecycle (initiate, plan, execute, control, close). The project manager must be familiar with project scope and objectives, as well as effectively
coordinate the activities of the team. In addition, the project manager is responsible for developing the project plan and project schedule with the project team to ensure timely completion of the project. The project manager interfaces with all areas affected by the project including end users, distributors, and vendors. The project manager ensures adherence to the best practices and standards of the Department.

Project “product” means the final project deliverables as defined in the project plan meeting all agreed and approved acceptance criteria.

“Product development life cycle” is a series of sequential, non-overlapping phases comprised of iterative disciplines such as requirements, analysis and design, implementation, test and deployment implemented to build a product or develop a service.
2.0 PROJECT ORGANIZATIONAL STRUCTURE

2.1 STAKEHOLDERS

<table>
<thead>
<tr>
<th>NAME</th>
<th>STAKE IN PROJECT</th>
<th>ORGANIZATION</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>Erma Sedillo</td>
<td>Program Operations</td>
<td>NMCD Executive Management</td>
<td>Deputy Secretary Administration</td>
</tr>
<tr>
<td>Lawrence C. Pacheco</td>
<td>Executive Management</td>
<td>Information Technology</td>
<td>CIO</td>
</tr>
<tr>
<td>Tim LeMaster</td>
<td>Executive Management</td>
<td>Adult Prisons</td>
<td>Director, APD</td>
</tr>
<tr>
<td>Don Dorsey</td>
<td>Business Unit Leadership</td>
<td>Adult Prisons</td>
<td>Deputy Director, APD</td>
</tr>
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<td>Helen Carr</td>
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<td>Deputy Director, APD</td>
</tr>
<tr>
<td>Charlene Knipfing</td>
<td>Executive Management</td>
<td>Probation and Parole</td>
<td>Director, PPD</td>
</tr>
<tr>
<td>David Jablonksi</td>
<td>Business Unit Leadership</td>
<td>Probation and Parole</td>
<td>Deputy Director, PPD</td>
</tr>
<tr>
<td>Tim Oakeley</td>
<td>IT Infrastructure</td>
<td>Information Technology</td>
<td>IT Infrastructure Manager</td>
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2.2 PROJECT CUSTOMERS

All NMCD employees and employees of private facilities,

- Central Office Staff
- Penitentiary of New Mexico (PNM) Facility Staff
- Central New Mexico Corrections Facility (CNMCF) Staff

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1 The Project Organization describes the roles and responsibilities of the project team. It also identifies the other organizational groups that are part of the project and graphically depicts the hierarchical configuration of those groups. It exists to clarify interaction with the project team.

2 List all of the major stakeholders in this project, and state why they have a stake. Stakeholders are individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or project completion. They may also exert influence over the project and its results.
Southern New Mexico Corrections Facility (SNMCF) Staff
Western New Mexico Corrections Facility (WNMCF) Staff
Roswell Correctional Center (RCC) Facility Staff
Springer Correctional Center (SCC) Facility Staff
Private Facility Staff
Probation and Parole Staff
Parole Board Staff
Corrections Corporation of America (CCA) Staff
GEO Group Inc.
Correctional Medical Services (CMS) Staff
PB&J (Peanut Butter & Jelly) Staff
UNM (University of New Mexico) Medical Staff
New Mexico Courts
Out of State Correctional Facilities and Probation and Parole offices
Out of State Tele-psychiatry Doctors
2.2 PROJECT GOVERNANCE STRUCTURE

2.2.1 Describe the Organizational Structure – Org Chart

2.2.2 Role and Members of the Project Steering Committee

The primary function of the Steering Committee is to take responsibility for the feasibility, business case and the achievement of outcomes of the Video Conferencing project. The Video Conferencing Steering Committee will monitor and review the project, as well as provide oversight of ongoing operations.

The Steering Committee provides a stabilizing influence so organizational concepts and directions are established and maintained with a visionary view. The Steering Committee provides insight on long-term strategies in support of legislative
mandates. Members of the Steering Committee ensure business objectives are being adequately addressed and the project remains under control. In practice these responsibilities are carried out by performing the following functions:

- Monitoring and review of the project at regular Steering Committee meetings;
- Providing assistance to the project when required;
- Controlling project scope as emergent issues force changes to be considered, ensuring that scope aligns with the agreed business requirements of project owner, sponsor and key stakeholder groups;
- Resolving project conflicts and disputes, reconciling differences of opinion and approach;
- Formal acceptance of project deliverables.

### 2.2.2.1 Approval Responsibilities

The Steering Committee is responsible for approving major project elements such as:

- Prioritization of project objectives and outcomes as identified in the Project Charter;
- Deliverables as identified in the project Scope Statement;
- Budget, ensuring that effort, expenditures and changes are appropriate to stakeholder expectations;
- Schedule;
- Risk management strategies, ensuring that strategies to address potential threats to the project's success have been identified, estimated and approved, and that the threats are regularly re-assessed;
- Project management and quality assurance practices.

### 2.2.2.2 Role of a Executive Steering Committee member

It is intended that the Steering Committee leverage the experiences, expertise, and insight of key individuals at organizations committed to building professionalism in project management. Steering Committee members are not directly responsible for managing project activities, but provide support and guidance for those who do. Thus, individually, Steering Committee members should:

- Understand the strategic implications and outcomes of initiatives being pursued through project outputs;
- Appreciate the significance of the project for some or all major stakeholders and represent their interests;
- Be genuinely interested in the initiative and be an advocate for broad support for the outcomes being pursued in the project;
- Have a broad understanding of project management issues and approach being adopted.

In practice, this means they:

- Review the status of the project;
Ensure the project’s outputs meet the requirements of the business owners and key stakeholders;
- Help balance conflicting priorities and resources;
- Provide guidance to the project team and users of the project’s outputs;
- Consider ideas and issues raised;
- Check adherence of project activities to standards of best practice both within the organization and in a wider context;
- Foster positive communication outside of the Committee regarding the project’s progress and outcomes;
- Report on project progress to those responsible at a high level, such as agency executive management groups, heads of agencies, or Governor’s Cabinet; and
- Process any whole-of-Government issues associated with the project.

2.2.2.3 Schedule and Process
The Committee will meet monthly or as required to keep track of issues and the progress of the project’s implementation and on-going statewide support to its stakeholders.

The New Mexico Correction Department Chief Information Officer chairs the Steering Committee and facilitates the Steering Committee Meetings.

2.2.2.4 Meeting Agenda
At each meeting, project status will be reported to the committee by the project manager. The Project Manager will be the voice of the project and conduit for status reporting and all project activities. The following agenda outline will be used for all meetings:

A. Introductory Items such as:
   - Introductions
   - Review Agenda
   - Minutes from last meeting
   - Review of actions arising from previous Steering Committee meeting(s).

B. Review Project Status

   - Overall Status
     - Scope status
     - Schedule status
     - Budget status

   - Deviation from green
     - New issues arising since the last meeting
     - Review and approval of project change orders
     - Budget
     - Milestone review
     - Formal acceptance of deliverables
PROJECT MANAGEMENT PLAN
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- Accomplishments against last meeting’s plans
- Plans for the next reporting period
- Outstanding issues, open points, project conflicts

- Specific requests for assistance of the Steering Committee

C. Consideration of other items relevant to the project
D. Review and summarize new actions from this meeting
E. Plans, date and location for next meeting

2.2.2.5 Members

<table>
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<th>REPRESENTING</th>
<th>TITLE</th>
<th>MEMBER TYPE</th>
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<tbody>
<tr>
<td>Larry Pacheco</td>
<td>Information Technology Division</td>
<td>Chair, Chief Information Officer</td>
<td>Voting</td>
</tr>
<tr>
<td>Charlene Knipfing</td>
<td>Probation and Parole</td>
<td>Director – PPD</td>
<td>Voting</td>
</tr>
<tr>
<td>Tim Oakeley</td>
<td>Information Technology Division</td>
<td>Infrastructure Manager</td>
<td>Voting</td>
</tr>
<tr>
<td>Dr. Singh</td>
<td>Tele-Medicine/Tele-Health</td>
<td></td>
<td>Voting</td>
</tr>
<tr>
<td>Sherry Stevens</td>
<td>Parole Board</td>
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<td>Voting</td>
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<tr>
<td>Lawrence Jaramillo</td>
<td>APD</td>
<td>PNM Level 6 Deputy Warden</td>
<td>Voting</td>
</tr>
<tr>
<td>Josh Ruden</td>
<td>Legal</td>
<td></td>
<td>Voting</td>
</tr>
<tr>
<td>Bryan Gill</td>
<td>Project Management Office / Project</td>
<td>Project Manager</td>
<td>Non-Voting</td>
</tr>
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2.2.3 ORGANIZATIONAL BOUNDARIES, INTERFACES AND RESPONSIBILITIES

The New Mexico Corrections Department (NMCD) is the overall entity and its collective representatives and organizational units. The NMCD responsibilities include:

- Requesting and securing project funding
- Ensuring sufficient resources

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3 Project roles and responsibilities provide structure and clear understanding of authority, which are important to the success of the project. The following roles and their responsibilities are listed below: State Health Department, Executive Sponsor, Project Director, Steering Committee, Project Manager, Project Team, Stakeholders, and End Users.
PROJECT MANAGEMENT PLAN
CDCMIS WEB ENHANCEMENT AND CUSTOMIZATION

- Reviewing and approving commitments to other agencies and entities
- Reviewing, approving, and supporting project management tools
- Championing the project

The Executive Sponsor is the point person(s) for the project within the highest level of the NMCD. The responsibilities of the Executive Sponsor include:

- Adjudicate any appeals relative to Steering Committee decisions
- Appoint Committee and Team members
- Attend executive requirements reviews and resolve requirements issues
- Cast the deciding vote where a consensus cannot be reached by the Steering Committee
- Champion the project
- Communicate with the Senior Management of the NMCD
- Contribute to lessons learned
- Empower the Project Manager
- Ensure project staff availability, funding, and contract management
- Ensure user and sponsor acceptance of Project Deliverables and Product Deliverables
- Participate in planning sessions
- Provide management review and approve changes to project plan, contract or deliverables
- Review and accept the initial risk assessment, management plan, project plan, and budget

The Steering Committee is chartered to provide governance over the direction and support of the project and is chaired by the Project Director. The Steering Committee member responsibilities include:

- Attend and participate in meetings
- Review and accept deliverables
- Review presented documentation
- Balance larger picture versus details of project
- Review project funding and expenditures
- Champion the project
- Contribute to lessons learned

The Project Manager’s primary responsibility is to manage the project. This role must not get too involved in the business or technical details of the project. The Project Manager responsibilities include:

- Develop initial management plan and project plan
- Provide leadership for a coordinated project effort
- Document project assumptions, constraints, and critical success factors
- Conduct initial risk assessment
- Facilitate meetings
- Assign tasks
PROJECT MANAGEMENT PLAN
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- Track schedules
- Develop detailed plans with project team for risk, change, and quality
- Ensure project consensus whenever possible
- Manage expectations
- Report on project status
- Maintain issues log
- Maintain action items log
- Promote and practice change management
- Close-out action items
- Value teamwork, cooperation, and planning
- Champion the project
- Facilitate lessons learned process

The Project Team member is an important role in that it is the link between the vision and the reality of the project. The Project Team members’ responsibilities include:

- Attend and participate in meetings
- Participate in the planning process
- Accomplish and provide deliverables
- Represent specific area(s) (e.g., technical, clinical, process, etc.) for the overall project as assigned
- Report progress, issues, etc.
- Champion the project
- Contribute to lessons learned

Stakeholders are individuals or organizations whose interest may be impacted by the execution or completion of the project. They may also exert influence over the project and its results. Key stakeholders include the performing organization (NMCD), Executive Sponsor, Project Director, Steering Committee, Project Manager, and Project Team members. In addition to these internal resources named, there are other internal resources and various external resources. The list of additional prospective stakeholders for the Video Conferencing Project is listed in Section 2.1.

End Users are important to the project and provide excellent input, especially in function and process definitions. If multiple categories of End Users exist for a project, a representative of each category is generally a member of the Project Team. Key roles and responsibilities for end users depend on the project, but are usually very specific such as testing and validation. This project is focused on implementing infrastructure to further utilize existing video conferencing equipment. Due to this nature of the project the end users will be limited to technical staff and a list of list Video Conferencing end users/team members can be found in Section 5.4.

An Independent Verification and Validation representative plays a very important role in a project. The representative will be a non-voting member of the Video Conferencing Steering Committee and in addition will be on the Video Conferencing Project Team.
distribution list for meeting information and meeting minutes. This role is discussed in Section 4.5 and lays out the IV & V deliverables for the project.

Overall it is important to acknowledge different cultures and styles, expectations and perspectives, and encourage a high level of involvement to positively impact the outcome of the project. Key individuals have been selected to represent and champion the project and no responsibility is greater.

2.3 EXECUTIVE REPORTING

Monthly Face-to-Face meetings will be held with the Project Steering Committee. Monthly reports will be delivered at that time according to standing meeting agenda located in Section 2.2.2.4. Monthly reporting will be reported to DoIT by the 10th of each month to include all areas included in required DoIT excel template. An example of this monthly reporting template is included in Appendix F. A project repository Sharepoint site has been implemented for the Project Team. Activities are underway to provide DoIT consultants and IV & V Vendor online access to project documentation as required by DoIT Oversight Memo. DoIT consultants and Execute NMCD staff are invited to attend Project Team meetings and Project Manager will meet with individuals as needed to review issues or concerns as required.

3.0 SCOPE

One of the major problems in a lot of projects is scope creep. This often comes from scope or requirement statements that are often phrased on too wide a basis. Also a problem, the scope statement rarely contains testing or measurement information that can serve as exit criteria or a means to meet critical success factors. Projects can be more successful by spelling out measurement information and clear statements that define how each phase of a project will be determined successful. By adding more detail to the Scope Definition in the planning phase, any changes to scope definition can be managed much more simply in the Scope Change Control as part of the Controlling Phase of a project.

3.1 SCOPE STATEMENT

Implement a separate video network and required infrastructure for Video Conferencing in order to lift current restrictions due to bandwidth constraints on the existing data network. This will allow more Video Conferences to take place five days a week versus two days a week.

3.2 PROJECT OBJECTIVES
### 3.2.1 Business Objectives

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<th>Number</th>
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<td>Bus. Objective 1</td>
<td>Implement separate network for video conferencing in order to lift current restrictions due to bandwidth constraints.</td>
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<tr>
<td>Bus. Objective 2</td>
<td>Grow Video Conferencing Family Visitation programs.</td>
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<tr>
<td>Bus. Objective 3</td>
<td>Increase Video Conference Staff Training sessions to lower travel costs and requirements.</td>
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<tr>
<td>Bus. Objective 4</td>
<td>Increase number of video conferences for re-entry hearings.</td>
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<td>Bus. Objective 5</td>
<td>Increase schedule availability for courts to schedule and hold court hearings.</td>
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<tr>
<td>Bus. Objective 6</td>
<td>Increase number of video conferences for Parole Board hearings to lower travel costs.</td>
</tr>
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<td>Bus. Objective 7</td>
<td>Allow for Population Ctrl Strategies Committees meetings via Video Conference – unavailable now due to restriction of days available.</td>
</tr>
<tr>
<td>Bus. Objective 8</td>
<td>Allow for Wardens meetings via Video Conference – unavailable now due to restriction of days available.</td>
</tr>
<tr>
<td>Bus. Objective 9</td>
<td>Assure NMCD employs formal project management practices meeting State Department of Information Technology requirements and related NMCD Policies and Procedures.</td>
</tr>
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</table>

#### 3.2.1.1 Business Objective 1 – Implement Separate Video Network

<table>
<thead>
<tr>
<th>Description</th>
<th>Implement separate network for video conferencing in order to lift current restrictions due to bandwidth constraints.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>This will allow us to increase the number of Video Conferences from two days a week to five days a week and will no longer impact existing NMCD data network with video traffic.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>Allowing a separate network will satisfy NMCD business requirements for video conferencing.</td>
</tr>
</tbody>
</table>

#### 3.2.1.2 Business Object 2 – Family Visitation Program

<table>
<thead>
<tr>
<th>Description</th>
<th>Grow Video Conferencing Family Visitation programs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With the separate network and the increased number of days allowed to video conference this will allow increased Video Family Visitations between the inmates and their families. Inmates look forward to meeting with their families and keep in good standing with their case worker. This will decrease the security risk with a cooperative inmate.</td>
</tr>
</tbody>
</table>
### Acceptance/Fit Criteria
- Allowing more Family video conferences will meet or exceed our existing conferences.

### 3.2.1.3 Business Objective 3 – Staff Training

<table>
<thead>
<tr>
<th>Description</th>
<th>Increase Video Conference Staff Training sessions to lower travel costs and requirements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With the increased number of days allowed to Video Conference this will allow Staff to be trained more often and travel less. Proving the means for Staff to become more proficient with their job through more frequent training.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>Providing more Staff Training sessions and less travel will meet or exceed our existing criteria of training Staff while increasing training outcomes and lowering cost.</td>
</tr>
</tbody>
</table>

### 3.2.1.4 Business Objective 4 – Re-Entry Hearings

<table>
<thead>
<tr>
<th>Description</th>
<th>Increase number of video conferences for re-entry hearings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With the increased number of days allowed to Video Conference NMCD Probation and Parole officers can meet with the inmate prior to being released. Currently, most of the officers have to travel to facility in order to meet with the inmate. Increased video conferencing will allow more time meeting with the inmate and less time traveling to the site.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>Allowing more Re-entry Video hearings will meet or exceed our existing criteria. Reducing travel cost and meeting re-entry requirements in a timely basis.</td>
</tr>
</tbody>
</table>

### 3.2.1.5 Business Objective 5 – Court Hearings

<table>
<thead>
<tr>
<th>Description</th>
<th>Increase schedule availability for courts to schedule and hold court hearings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>Increasing number of available days for video conference will allow the courts to coordinate with NMCD to hold court hearings within the facilities. Currently, the courts are restricted to Mondays or Fridays. This becomes difficult when it comes to scheduling with the Judge and available court rooms. Not all Judges have Mondays and Fridays available for hearings. Inmates no longer have to be transported between the facility and the courthouse thus decreasing the threat to the public.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>Allowing more video conferencing court hearings meets or exceeds our existing criteria. Reducing transports of inmates, reduction of cost and increase in video availability to increase safety.</td>
</tr>
</tbody>
</table>
### 3.2.1.6 Business Objective 6 – Parole Board

<table>
<thead>
<tr>
<th>Description</th>
<th>Increase number of video conferences for Parole Board hearings to lower travel costs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
<td>Increasing the number of days allowed to video conference will allow the Parole Board to meet more often and travel less to facilities. The Parole board conducts hearings statewide with inmates who are eligible for a Parole hearing.</td>
</tr>
<tr>
<td><strong>Acceptance/Fit Criteria</strong></td>
<td>Allowing more video conference Parole Board hearings meets or exceeds our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2.1.7 Business Objective 7

<table>
<thead>
<tr>
<th>Description</th>
<th>Allow for Population Control Strategies Committees meetings via Video Conference – unavailable now due to restriction of days available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
<td>Increasing the number of days allowed to video conference will allow the staff members of the Population Ctrl Strategies Committee to travel less often and eliminate the phone conferencing costs we are presently paying for.</td>
</tr>
<tr>
<td><strong>Acceptance/Fit Criteria</strong></td>
<td>Allow video conference Population Ctrl Strategies Committee meetings meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2.1.8 Business Objective 8

<table>
<thead>
<tr>
<th>Description</th>
<th>Allow for Wardens meetings via Video Conference – unavailable now due to restriction of days available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
<td>Increasing the number of days allowed to video conference will allow the Wardens to travel less often and eliminate the phone conferencing costs we are presently paying for.</td>
</tr>
<tr>
<td><strong>Acceptance/Fit Criteria</strong></td>
<td>Allow video conference Wardens meetings meet or exceeds our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2.1.11 Business Objective 9 – Formal Project Management Practices

<table>
<thead>
<tr>
<th>Description</th>
<th>Assure NMCD employs formal project management practices meeting State Department of Information Technology requirements and related NMCD Policies and Procedures.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
<td>CMIS is currently being enhanced using a formal Project Management process following state guidelines and DoIT requirements.</td>
</tr>
<tr>
<td><strong>Acceptance/Fit Criteria</strong></td>
<td>Document project progress and accomplishments in comparison to the established schedule in the PMP</td>
</tr>
</tbody>
</table>
3.2.2 TECHNICAL OBJECTIVES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech. Objective 1</td>
<td>Implement independent video conferencing network.</td>
</tr>
<tr>
<td>Tech. Objective 2</td>
<td>Implement video network to co-exist with existing LAN. Both Remote and Local</td>
</tr>
<tr>
<td>Tech. Objective 3</td>
<td>Implement new Video Conference Multi Conference Unit and Gatekeeper</td>
</tr>
<tr>
<td>Tech. Objective 4</td>
<td>Replace Central Office router to accommodate separate network</td>
</tr>
<tr>
<td>Tech. Objective 5</td>
<td>Replace Remote site routers to accommodate separate network</td>
</tr>
<tr>
<td>Tech. Objective 6</td>
<td>Prepare Central Office datacenter to accommodate new equipment</td>
</tr>
</tbody>
</table>

3.2.2.1 Technical Objective 1 – Independent Video Network

<table>
<thead>
<tr>
<th>Description</th>
<th>Implement independent video conferencing network.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>Allowing NMCD to increase the number of Video Conferences from two days a week to five days a week and will no longer impact existing NMCD data network with video traffic.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>This implementation will meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

3.2.2.2 Technical Objective 2 – Co-exist Video network with Remote and Local LAN

<table>
<thead>
<tr>
<th>Description</th>
<th>Implement video network to co-exist with existing LAN. Both Remote and Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>This will allow NMCD not have a physical separation on the LAN where the cameras reside. In the past when physical separation took place on the LAN, the cameras were limited to one dedicated room. With this implementation this will not restrict the camera equipment to be located in one room.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>This implementation will meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

3.2.2.3 Technical Objective 3 – Multi-Conference Unit

| Description | Implement new Video Conference Multi Conference Unit and Gatekeeper |
### 3.2.2.4 Technical Objective 4 – Central Office Router

<table>
<thead>
<tr>
<th>Description</th>
<th>Replace Central Office router to accommodate separate network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With this implementation we will be replacing the end of life and end of service core router. With the new router it will accommodate two separate circuits if required.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>This implementation will meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2.2.5 Technical Objective 5 – Remote Site Routers

<table>
<thead>
<tr>
<th>Description</th>
<th>Replace Remote site routers to accommodate separate network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With this implementation we will be replacing the end of life and end of service remote routers. With the new routers it will accommodate two separate T1 circuits – Data and Video.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>This implementation will meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2.2.6 Technical Objective 6 – Central Office Data-Center Architecture

<table>
<thead>
<tr>
<th>Description</th>
<th>Prepare Central Office datacenter to accommodate new equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>With this implementation we will be preparing the datacenter with a new rack and power to accommodate the new equipment being installed.</td>
</tr>
<tr>
<td>Acceptance/Fit Criteria</td>
<td>This implementation will meet or exceed our existing criteria.</td>
</tr>
</tbody>
</table>

### 3.2 PROJECT EXCLUSIONS

While the scope of the overall project is inclusive of the implementation of a secondary video network for all of NMCD public and private facilities the project activities will be limited to:

- Constrained to scope for each approved by Project Steering Committee.
3.3 CRITICAL SUCCESS FACTORS

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Metrics 1</td>
<td>Provide separate video network to ensure critical applications are not impacted and video conferencing services are not restricted to off peak hours.</td>
</tr>
<tr>
<td>Quality Metrics 2</td>
<td>Replacement of the End of Life and End of Service Core Router to ensure both the Data Network and the Video Network are not jeopardized. Core router will be fully redundant.</td>
</tr>
<tr>
<td>Quality Metrics 3</td>
<td>Replacement of the End of Life and End of Service WAN Routers to ensure both the Data Network and the Video Network are not jeopardized.</td>
</tr>
<tr>
<td>Quality Metrics 4</td>
<td>Replacement of the Multi Conference Unit to ensure there are enough conference rooms to handle the increased load.</td>
</tr>
</tbody>
</table>

4.0 PROJECT METHODOLOGY AND DELIVERABLES

4.1 STRATEGY

Developing a project strategy is a process of choosing an approach to the work that maximizes strengths and minimizes weaknesses while balancing the anticipated cost and potential benefit. A good strategy will minimize risk while maximizing return on investment.

The Video Conferencing Steering Committee established the strategic direction by choosing to implement the project using a phased approach. Phase I utilized funds from a federal grant, and end of year monies to purchase video conferencing equipment for a pilot / proof of concept for the department. The areas that were identified by the department to test video conferencing were for Video Re-Entry hearings, Video Parole Hearings, Video Court Hearings, Video meetings, Video training sessions, and Video Family Visitations. This phase purchased cameras for Probation and Parole offices that were identified as strategic locations where these sessions could take place. They also purchased one camera per facility. The tests went extremely well and the department was very anxious to expand the program.

Following this phase additional needs were identified and addressed during Phase II. This phase focused on addition cameras for the facilities which reduced the risk of moving inmates between buildings. It also focused on the Local Area Networks (LANs) at video conferencing locations by replacing network switches to support faster network connections.
Now we are ready to move into Phase III which will address the Wide Area Network (WAN). Building a separate video network will assure that the data network is not impacted with the additional load put on the network for video conferencing.

The project strategy is based on the strategic direction from the Video Conferencing Steering Committee. Three principles guide the project strategy:

### 4.1.1 Project Management

- One of the common factors that has been identified as a contributing cause of many information technology project failures is the lack of effective project management. The State of New Mexico has implemented project management programs both in the State Department of Information Technology and in each of the Departments. The Video Conferencing project will adhere to project management standards being implemented within state government and specified by the Project Management Institute (PMI) in their Project Management Body of Knowledge (PMBOK®) guidelines.

### 4.1.2 Rapid Implementation

- Faster implementation is better than drawn out implementation. Solutions that require too long to implement, have a high risk of failure. Administrations change, business needs change and solution requirements change. Time is the enemy. Successful package implementations are fast implementations, even at the expense of some functionality.

### 4.1.3 Well-defined Objectives

- The project should be tightly focused on a well-defined set of objectives. This strategic principle is supported by the second principle above. Fast implementation timelines allow the project team to focus on a well-defined set of objectives that are specific and attainable. The “keep it simple” approach minimizes risk and implementation time. It empowers the team to concentrate on those objectives that offer the maximum return on the invested time and effort while allowing the team to spend adequate time and energy on validation, testing and documentation – tasks that are the first to be sacrificed in a more complex and drawn out implementation plan. The net result is a successful implementation and goal achievement in a period in which momentum can be maintained.

### 4.1.5 Project Implementation

- The Video Conferencing project implementation strategy was developed with these principles in mind. The activities and tasks required to implement the Video Conferencing strategy have been organized into two separate work categories. Following the completion of the planning phase this area will be updated to reflect the changes to section of the plan. Those categories are:

  - Project Management
  - Outreach/Deployment
4.1.5.1 Project Management – The environment in which the Video Conferencing project must be installed and implemented is high profile and complex because it requires the teamwork across multiple agencies and vendors.

The discipline of the project management concept offers a variety of tools and techniques to deal with and control complex projects. The State of New Mexico has implemented the Project Management concept at the state level and within each department as part of a strategy to better manage and coordinate the state’s information technology resources and budget.

4.1.5.2 Outreach/Deployment – The Video Conferencing project has a significant advantage at this time because there is widespread support throughout the New Mexico Corrections Department.

Introducing an innovative technology is difficult in most situations. Introducing and having an innovative technology rapidly adopted by a majority of the user can be even more difficult. Fortunately, there is some guidance available to us for how to approach this problem. Given the widespread support and current use of video conferencing technology this project enjoys there is an excellent opportunity for this final phase of NMCD Video Conferencing to be a complete success.

The Diffusion of Innovation Theory proposed by Everett M. Rogers, offers guidance on how best to approach the introduction of an innovative technology. Using the basic tenets of his theory, an outreach plan will be developed that targets the innovators, early adopters and early majority of the potential user base. The intent is to reach a critical mass of Video Conferencing users as quickly as possible. We hope to accomplish this by carefully targeting those key people that have the broadest technical skill and process influence in their respective organizations and carefully coordinate the outreach message in order to manage the expectations of the user community and orchestrate user community enthusiasm to coincide with the product delivery strategy. These strategies coupled with the widespread support for the concept of a web enabled streamlined environment with additional functionally should allow for the rapid adoption of the enhanced Video Conferencing Network throughout Corrections.
## 4.2 Project Management Life Cycle

<table>
<thead>
<tr>
<th>Phase</th>
<th>Summary of Phase</th>
<th>Key Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiating</strong></td>
<td>History: Project was voted on for Initiation Certification during the November 28th, 2007 meeting. Currently the project is awaiting written project certification approval.</td>
<td>Project Initiation Request for Certification and Release of Funds Form (PCC)(^5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Charter for Certification (PCC) Template V 1.0 dated August 14, 2007 located at DoIT website(^6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Authorization to Proceed with Planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Design Strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk Assessment and Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monthly Project Status Reporting to DoIT(^7)</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td>The planning phase will further define the project activities and work products to meet the required outcomes.</td>
<td>Project Planning Request for Certification and Release of Funds Form (PCC)(^8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Scope</td>
</tr>
</tbody>
</table>

\(^5\) The Request for Certification and Release of Funds form is submitted when a project goes for any of the certification phases. It deals with the financial aspects of the project, as well as other topics that indicate the level of planning that has gone into the project. Many of the questions have been incorporated into the preparation of the project charter.

\(^6\) The Project Charter for Certification sets the overall scope for the project, the governance structure, and when signed is considered permission to proceed with the project. The Project Charter for Certification is used to provide the Project Certification Committee with adequate knowledge of the project and its planning to certify the initiation phase of the project.

\(^7\) Project status reports. For all projects that require Department oversight, the lead agency project manager shall submit an agency approved project status report on a monthly basis to the Department.

\(^8\) The Request for Certification and Release of Funds form is submitted when a project goes for any of the certification phases. It deals with the financial aspects of the project, as well as other topics that indicate the level of planning that has gone into the project. Many of the questions have been incorporated into the preparation of the project charter.
<table>
<thead>
<tr>
<th>Controlling</th>
<th>Project controlling activities will begin with project certification and will continue through approved project close out.</th>
<th>Monthly Project Status Reporting to DoIT&lt;sup&gt;9&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Work Breakdown Structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Schedule&lt;sup&gt;10&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV &amp; V Vendor Contract&lt;sup&gt;11&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change Control Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Design Plan and Architecture document</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acceptance Test Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revised Project Management Plan</td>
</tr>
<tr>
<td>Execution</td>
<td>Project execution will begin with approved Certification - Implementation Phase.</td>
<td>Performance/Status Reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corrective Action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plan Change Requests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Change Requests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Issue Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Planning Request for Certification and Release of Funds Form (PCC)&lt;sup&gt;12&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monthly Project Status Reporting to DoIT</td>
</tr>
</tbody>
</table>

<sup>9</sup> Project status reports. For all projects that require Department oversight, the lead agency project manager shall submit an agency approved project status report on a monthly basis to the Department.

<sup>10</sup> A tool used to indicate the planned dates, dependencies, and assigned resources for performing activities and for meeting milestones. The defacto standard is Microsoft Project

<sup>11</sup> “Independent verification and validation (IV&V)” means the process of evaluating a project to determine compliance with specified requirements and the process of determining whether the products of a given development phase fulfill the requirements established during the previous stage, both of which are performed by an organization independent of the lead agency. Independent verification and validation assessment reporting. The Department requires all projects subject to oversight to engage an independent verification and validation contractor unless waived by the Department.

<sup>12</sup> The Request for Certification and Release of Funds form is submitted when a project goes for any of the certification phases. It deals with the financial aspects of the project, as well as other topics that indicate the level of planning that has gone into the project. Many of the questions have been incorporated into the preparation of the project charter

<sup>13</sup> Project status reports. For all projects that require Department oversight, the lead agency project manager shall submit an agency approved project status report on a monthly basis to the Department.
4.2.1 PROJECT MANAGEMENT DELIVERABLES

Project Deliverables are work products or artifacts that are driven by the project management methodology requirements and standard project management practices regardless of the product requirements of the project.

4.2.1.1 Request for Certification and Release of Funds - Initiation

Description – This form accompanies the Project Charter for initial request for project funding. This form will also be required for subsequent requests for project funding. The initial Request for Certification and Release of Funds form for the Video Conferencing Project was submitted to the RCC on November 28, 2007.

Deliverable Acceptance Criteria – Review by Project Director and Project Sponsors prior to submission to DoIT.


4.2.1.2 Request for Certification and Release of Funds - Planning

Description – This form accompanies the Project Charter for Planning request for project funding. This form will also be required for subsequent requests for project funding

Deliverable Acceptance Criteria – Review by Project Director, and Project Sponsors prior to submission to DoIT.

### 4.2.1.3 Request for Certification and Release of Funds - Initiation

**Description** – This form accompanies the Project Charter for implementation request for project funding.

**Deliverable Acceptance Criteria** – Review by Project Director, and Project Sponsors prior to submission to DoIT.

**Standards for Content and Format** – Request for Certification and Release of Funds from the DoIT website. Template Request for Certification and Release of Funds, http://www.doit.state.nm.us/docs/POCD/DoIT-Request-for-Certification.doc

**Quality Review** – Review by Steering Committee. Deliverable Acceptance Signatures Required: DoIT, State CIO

### 4.2.1.4 Project Close Out Report

**Description** – This form accompanies the Project Lesson Learned for Project Close Out approval.

**Deliverable Acceptance Criteria** – Review by Project Director, and Project Sponsors prior to submission to OCIO.


**Quality Review** – Review by Steering Committee. Deliverable Acceptance Signatures Required: DoIT, State CIO

### 4.2.1.5 Project Scope

**Description** – Scope of a project is the sum total of all of a project's products and their requirements or features.

**Deliverable Acceptance Criteria** – Review by Project Oversight Team. Acceptance by Executive Sponsor.


**Quality Review** – Project Director, IV&V Review as designated by the IV&V Contract within NMCD.CMIS.IV&V.002 Project Status and Initial Risk Assessment Report. Deliverable Acceptance Signatures Required: Project Steering Committee
### 4.2.1.6 Project Management Plan

**Description** – The Project Management Plan means a formal approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and document approved scope, cost and schedule baselines.

<table>
<thead>
<tr>
<th>Deliverable Acceptance Criteria</th>
<th>Review by Project Oversight Team. Acceptance by Executive Sponsor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Review</td>
<td>Project Director, IV&amp;V Review as designated by the IV&amp;V Contract within NMCD.CMIS.IV&amp;V.002 Project Status and Initial Risk Assessment Report. Deliverable Acceptance Signatures Required: Project Director, Steering Committee</td>
</tr>
</tbody>
</table>

### 4.2.1.7 Work Breakdown Structure

**Description** – A Work Breakdown Structure (WBS) is a fundamental project management technique for defining and organizing the total scope of a project, using a hierarchical tree structure.

<table>
<thead>
<tr>
<th>Deliverable Acceptance Criteria</th>
<th>Review and Recommendation for Approval by Project Team. Approval from Project Director, Steering Committee.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Review</td>
<td>Project Director, IV&amp;V Review as designated by the IV&amp;V Contract within NMCD.CMIS.IV&amp;V.002 Project Status and Initial Risk Assessment Report. Deliverable Acceptance Signatures Required: Project Director, Steering Committee</td>
</tr>
</tbody>
</table>

### 4.2.1.8 Project Schedule

**Description** – Project Schedule consists of a list of a project’s terminal elements with intended start and finish dates, assigned resources, dependencies.

<table>
<thead>
<tr>
<th>Deliverable Acceptance Criteria</th>
<th>Completely integrated project schedule that meets DoIT and NMCD standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards for Content and Format</td>
<td>MS Project provided in a Gantt chart providing a graphical representation of a project schedule.</td>
</tr>
<tr>
<td>Quality Review</td>
<td>Project Oversight Team Review, Executive Steering Committee Approval. Deliverable Acceptance Signatures Required: Steering Committee</td>
</tr>
</tbody>
</table>
4.2.1.9 Vendor Planning and Documentation

<table>
<thead>
<tr>
<th>Description</th>
<th>Deliverable Acceptance Criteria</th>
<th>Standards for Content and Format</th>
<th>Quality Review</th>
</tr>
</thead>
</table>

Deliverable Acceptance Signatures Required: Project Manager

4.2.1.10 Project Repository

<table>
<thead>
<tr>
<th>Description</th>
<th>Deliverable Acceptance Criteria</th>
<th>Standards for Content and Format</th>
<th>Quality Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardcopy Notebook(s) or binder(s) containing hard copy of project documentation throughout the project life cycle. Electronic Copy is located on PMO Sharepoint site within NMCD for all project documents that the project team has access to.</td>
<td>Binder(s) with official copies of documents collected to manage and control the project. A format will be obtained from the NMCD PMO. Hardcopy of documents will be printed from the electronic repository. A document outlining the path and criteria for project repository.</td>
<td>Hardcopy of all final project documents to include sign-offs, specifications, change logs, issue logs, etc. These documents should be arranged into categories and kept updated throughout the life cycle. The documentation will be retained following state retention requirements. Electronic Copy of all project documents throughout the life cycle of the project. Documents must have a date in the file name to distinguish versions.</td>
<td>Periodic reviews during the project with Team Leaders, NMCD PMO Manager, Project Team and IV &amp; V Vendor.</td>
</tr>
</tbody>
</table>

Deliverable Acceptance Signatures Required: Project Director

4.2.1.11 Project Independent Verification and Validation (IV&V)

<table>
<thead>
<tr>
<th>Description</th>
<th>Deliverable Acceptance Criteria</th>
<th>Standards for Content and Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing independent assessment of the contribution and results from the review of project deliverables and ongoing project activities.</td>
<td>Contract Scope of Work.</td>
<td>Hardcopy of all final IV &amp; V deliverables include sign-offs and NMCD IV &amp; V report responses.</td>
</tr>
</tbody>
</table>
4.2.1.12 Project Risk Management Plan

**Description** – A plan to describe the project’s approach to identifying, analyzing, responding to, monitoring and controlling project risk. Contained as part of PMP in Section 6.1.


**Quality Review** – Project Team Review, Steering Committee approval

**Deliverable Acceptance Signatures Required**: Steering Committee

4.2.1.13 Project Issue Management Plan

**Description** – A plan to describe the project’s approach to identifying, analyzing, responding to, monitoring and controlling project issues. Contained as part of PMP in Section 6.2.

**Deliverable Acceptance Criteria** – Documentation that defines issue management: roles and responsibilities, budget, timing, scoring, thresholds, reporting format and tracking.


**Quality Review** – Project Team Review, Executive Steering Committee approval

**Deliverable Acceptance Signatures Required**: Steering Committee

4.2.1.14 Project Scope Management Plan

**Description** – A plan to describe how scope changes will be managed classified and documented. The plan will specify a process for identifying the proposed

**Deliverable Acceptance Criteria** – Documentation that details how changes will be reviewed approved. Meets DOIT-PMO-TEM-020: Revision 1.0 Dated July 27, 2007. Template requirements.
change using a structured change control process. Contained as part of PMP in Section 6.3


Quality Review – Project Team Review, Steering Committee approval

Deliverable Acceptance Signatures Required: Steering Committee

4.2.1.15 Project Change Control Plan

Description – A plan to describe the process for implementing changes to the project.

Deliverable Acceptance Criteria – A document that details the process of how system changes will be reviewed approved. Meets DOIT-PMO-TEM-020: Revision 1.0 Dated July 27, 2007. Template requirements.


Quality Review – Project Team Review, Executive Steering Committee approval

Deliverable Acceptance Signatures Required: Executive Steering Committee

4.2.1.16 Project Budget Management Plan

Description – Budget Plan defines cost estimates and costs applied within the project through resource assignment, rates and fees. Contained as part of PMP in Section 6.5


Quality Review – Project Team Review, Executive Steering Committee approval

Deliverable Acceptance Signatures Required: Executive Steering Committee
### 4.2.1.17 Project Communication Plan

**Description** – Communication Plan. A plan that defines the content, means and timing of communication related to the project. Contained as part of PMP in Section 6.6.

**Deliverable Acceptance Criteria** – Documentation that describes the projects approach to communicating project information, what information will be communicated, to whom, by whom, when, and in what manner. Meets DOIT-PMO-TEM-020: Revision 1.0 Dated July 27, 2007. Template requirements.


**Quality Review** – Project Team Review, Steering Committee approval

**Deliverable Acceptance Signatures Required:** Steering Committee

### 4.2.1.18 Project Quality Management Plan

**Description** – Quality plan that defines how the project will ensure requirements and needs which are undertaken will be achieved.


**Quality Review** – Project Team Review, Project Manager and Steering Committee Approval.

**Deliverable Acceptance Signatures Required:** Project Manager, Steering Committee

### 4.2.1.19 Configuration Management Plan

**Description** – Plan that defines how project information will be managed. Contained as part of PMP in Section 6.9.


4.2.1.20 Project Procurement Plan

**Description** – Plan that defines the process which will be used for procurement within the project. Contained as part of PMP in Section 6.10.


**Quality Review** – Project Team Review, Steering Committee approval.

Deliverable Acceptance Signatures Required: Steering Committee

4.3 PRODUCT LIFE CYCLE

Product Key Deliverables to be defined in the planning phase.

4.4 PRODUCT LIFE CYCLE MODEL

Product Life Cycle Model will be defined in the planning phase.

4.5 IV & V

4.5.1 INDEPENDENT VERIFICATION AND VALIDATION (IV&V) DEFINED

Independent Verification and Validation involves the evaluation of the work products generated by a Project team that is designing, building or acquiring, testing and

14 “During the project management lifecycle, agencies shall select and implement a phase product development lifecycle methodology approved by the Department.” PROJECT OVERSIGHT PROCESS Memorandum
implementing technology software or is acquiring, configuring and implementing technology hardware (and related software) by a completely independent entity. Successful IT projects include this independent oversight to assure the acquired or developed software and configured hardware has well-defined requirements, is thoroughly tested against those requirements and the end-users are prepared for the business process changes the implementation of the new software, and associated new or upgraded hardware, will engender. The IV&V service provider has no stake in the failure or success of the software, but rather has the responsibility of assisting the Project team in the ultimate success of the IT project.

The general approach to IV&V is focused on:

- Working with the State Agency and its Project vendor(s) to define and obtain agreement on Project deliverables and expectations.
- Finding key areas that pose risk to the Project and recommending mitigation strategies to reduce those risks.
- Leveraging experienced resources who know where to focus to perform targeted reviews of Project deliverables and practices.
- Monitoring the progress of the Project.
- Maintaining a project-wide focus on critical issues, milestones and objectives.
- Documenting and delivering clear, factual analyses of Project deliverables and actual practices.

### 4.5.2 Benefits of IV&V

Project’s IV&V service provider:

- Helps to ensure project success.
- Infuses quality into the project.
- Helps project management keep the project on schedule and within budget.
- Helps to build internal project management skills as may be needed.
- Increases oversight of contractual compliance of vendors.

### 4.5.3 Qualitative Risk Analysis

One of the mandatory requirements of IV&V services is to complete an Initial Risk Assessment with Recommended Mitigation Strategies. Following is a brief discussion of a qualitative risk analysis.

The goal of qualitative analysis is to separate the vital few risks from the trivial many. The value of a risk event is the probability the event will occur times the consequences of the event given that it does occur: value = probability x impact (consequences). The IV&V role is to analyze each potential risk to the Project in terms of the probability of the risk occurring and the impact should that risk occur. The probability and the impact are ranked high, medium, or low.
A probability-impact matrix plots the probability that a risk event will occur against the impact of the risk event given that it does occur. For example, risks with low probability and low impact may merit only monitoring, while risks with near certain probability and catastrophic impact may require immediate executive attention to mitigate the risk. Experience has shown management is often more concerned about the consequences of risk events rather than the probability of the events occurring.
The following chart depicts the concept of comparing risk probability to impact.

It is as important to place emphasis on assessing the impact of risk events as on their probabilities. Given two risk events with the same value, it is critical to devote resources to address risk events with significant consequences and defer spending resources on risk events of little or no consequence to the project goals. However, sometimes it is important to devote resources to a risk with little probability of occurring, but one that has high consequences. For example, risk events with the consequences of threatening the survival of the organization, or bringing unfavorable media attention to the organization, probably will attract a great deal of management attention, regardless of the probability of the events occurring.

4.5.4 AWARDED VENDOR POD - IV&V APPROACH

The IV&V services for the NMCD Video Conferencing will be conducted by POD based on IV&V guidelines derived from Project Management Institute (PMI) Best Practices and New Mexico Department of Information Technology (DoIT) guidelines.

POD will assist the NMCD by monitoring the Video Conferencing Project Management Plan (PMP) and actual project management activities, by completing independent quality reviews of various Project planning documents and monitoring Project activities in relation to the written plans and schedules, and by making recommendations, as deemed necessary, for improvements to the Project to help ensure it’s successful conclusion. Successful IT projects include this independent oversight to assure the enhanced and
customized software is thoroughly tested against established requirements and the end-users are prepared for the business process changes the implementation of the new software and associated hardware will engender. POD IV&V activities will assist NMCD in identifying Project risks and mitigation strategies to reduce those risks. POD IV&V monitoring activities will focus on advising NMCD about issues and recommend solutions as issues arise, providing independent reviews of project plans and activities, and monitoring the progress of NMCD on the Project.

4.5.5 POD IV & V RESOURCES

4.5.6 IV & V DELIVERABLES

IV & V Deliverables will be added following completion of contract award. At the time of PMP development contract was in initial review at DoIT.

4.6 TECHNICAL STRATEGY

The Video Conferencing Network requires statewide communications infrastructure that provides a broad array of functional business capabilities and requires many technical components.

For these reasons, the enhancement of the Video Conferencing system has been divided into three relatively short duration and inter-related phases. These project phases have quickly establish the needed technical infrastructure, deploy new capabilities in a timely fashion, and reduce the risk of not meeting scope, schedule, and budget.

4.7 DELIVERABLE APPROVAL AUTHORITY DESIGNATIONS

Complete the following table to identify the deliverables this project is to produce, and to name the person or persons who have authority to approve each deliverable.

4.7.1 PROJECT DELIVERABLES

<table>
<thead>
<tr>
<th>DELIVERABLE NUMBER</th>
<th>PLAN SECTION</th>
<th>DELIVERABLE</th>
<th>APPROVERS (WHO CAN APPROVE)</th>
<th>DATE APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRJ-DEL-001</td>
<td>4.2.1.1</td>
<td>Request for Certification and Release of Funds - Initiation</td>
<td>EXECUTIVE SPONSOR, PCC, DOIT</td>
<td></td>
</tr>
<tr>
<td>DELIVERABLE NUMBER</td>
<td>PLAN SECTION</td>
<td>DELIVERABLE</td>
<td>APPROVERS (WHO CAN APPROVE)</td>
<td>DATE APPROVED</td>
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<tr>
<td>PRJ-DEL-002</td>
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<td></td>
<td></td>
<td>PCC</td>
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<td></td>
<td>DoIT</td>
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</tr>
<tr>
<td>PRJ-DEL-003</td>
<td>4.2.1.3</td>
<td>Request for Certification and Release of Funds - Implementation</td>
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<td></td>
<td>PCC</td>
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<td>DoIT</td>
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</tr>
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<td>PRJ-DEL-004</td>
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<td>Project Close Out Report</td>
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<td>DoIT</td>
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<td>PRJ-DEL-006</td>
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<td>PROJECT DIRECTOR</td>
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<td>PRJ-DEL-007</td>
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<td>Work Breakdown Structure</td>
<td>PROJECT DIRECTOR</td>
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<td>PRJ-DEL-008</td>
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<td>PRJ-DEL-009</td>
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<td>Vendor Planning Documents</td>
<td>PROJECT MANAGER</td>
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<tr>
<td>PRJ-DEL-010</td>
<td>4.2.1.10</td>
<td>Project Repository</td>
<td>PROJECT</td>
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<tr>
<td>DELIVERABLE NUMBER</td>
<td>PLAN SECTION</td>
<td>DELIVERABLE</td>
<td>APPROVERS (WHO CAN APPROVE)</td>
<td>DATE APPROVED</td>
</tr>
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<td>---------------</td>
</tr>
<tr>
<td>PRJ-DEL-011</td>
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<td>Project Independent Verification &amp; Validation (IV&amp;V)</td>
<td>DIRECTOR</td>
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<td>PRJ-DEL-012</td>
<td>4.2.1.12</td>
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<td>PRJ-DEL-013</td>
<td>4.2.1.13</td>
<td>Project Issue Management Plan</td>
<td>STEERING COMMITTEE</td>
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<td>PRJ-DEL-014</td>
<td>4.2.1.14</td>
<td>Project Scope Management Plan</td>
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<td>PRJ-DEL-015</td>
<td>4.2.1.15</td>
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<tr>
<td>PRJ-DEL-016</td>
<td>4.2.1.16</td>
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<td>PRJ-DEL-017</td>
<td>4.2.1.17</td>
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<td>STEERING COMMITTEE</td>
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<td>PRJ-DEL-018</td>
<td>4.2.1.18</td>
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<td>STEERING COMMITTEE</td>
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<td>PRJ-DEL-019</td>
<td>4.2.1.19</td>
<td>Configuration Management Plan</td>
<td>STEERING COMMITTEE</td>
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<tr>
<td>PRJ-DEL-020</td>
<td>4.2.1.20</td>
<td>Project Procurement Plan</td>
<td>STEERING COMMITTEE</td>
<td></td>
</tr>
</tbody>
</table>
4.7.2 **PRODUCT DELIVERABLES**

These will be defined within the planning phase.

<table>
<thead>
<tr>
<th>Deliverable Number</th>
<th>Plan Section</th>
<th>Deliverable</th>
<th>Approvers (Who can approve)</th>
<th>Date Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDT-DEL-001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.7.3 **IV & V DELIVERABLES**

These will be added following contract award. At time of PMP development contract was under DoIT preliminary review.

<table>
<thead>
<tr>
<th>Deliverable Number</th>
<th>Plan Section</th>
<th>Deliverable</th>
<th>Approvers (Who can approve)</th>
<th>Date Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

4.8 **DELIVERABLE ACCEPTANCE PROCEDURE**

Deliverables produced shall be reviewed and signed off by the appropriate levels as defined above and noted in each deliverable detail in Section 4.7.2, 4.7.3 and 4.7.4 above. Video Conferencing Project Manager, Project Director (or designee), and Executive Steering Committee (or designee) have various levels of approval authority. A sample of the Deliverable Acceptance form is included in Appendix C.

If the approver(s) determines that the deliverable is completed and should be accepted, he (or she) should sign the Deliverable Acceptance Form. If the approver(s) determines that the deliverable is not completed and should not be accepted without modification or rework, he (she) should notify the Project Manager in writing that the deliverable has not been accepted and specify what is necessary for approval of the deliverable.

Unapproved deliverables will be added to the Issues List and assigned to the appropriate project resource for resolution.

All deliverables will be monitored by the NMCD Project Manager. The implementation vendor is also required to propose and implement an effective quality assurance and quality control process. In addition, NMCD will contract an IV & V vendor to provide...
project oversight as an extension of the project management team, ensuring that the implementation vendor meets these requirements in an acceptable and proactive fashion.

The procedure established for acceptance of each deliverable in this project is based on the business requirements. Each requirement will be assigned a number and when the requirement is completed, it will be logged and tracked on the Deliverable Acceptance log. All key project deliverables will be handled according to the following deliverable acceptance process:

<table>
<thead>
<tr>
<th>Step</th>
<th>Who</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Workgroup Lead</td>
<td>• Forward the deliverable with written communication the deliverable is final, complete and meets project requirements.</td>
</tr>
</tbody>
</table>
| 2    | Project Manager | • Complete a Deliverable Acceptance form (see Appendix C)  
• Review the deliverable within 2 business days of receipt  
• If approved, sign the acceptance form and forward the deliverable and signed form to the appropriate approval role or group  
  If rejected, return the deliverable and unsigned form to the Project Workgroup Lead |
| 3    | Project Director / Executive Steering Committee | • Review the deliverable within 2 business days  
• If approved, sign the acceptance form and forward the deliverable and signed form to the Project Manager and/or next approval level  
• If rejected, return the deliverable and unsigned form to the Project Manager |
| 4    | Project Manager | • Return a copy of the approved form to the Project Workgroup Lead within 5 business days  
• Update the key deliverables log  
• Note the deliverable approval in the next project progress report(s) |

If a deliverable is disapproved, the unsigned acceptance form will be returned to the Project Workgroup Lead with a detailed description of why the deliverable was rejected. If necessary, a meeting will be held to discuss the deliverable in detail. All resubmitted items will be modified to address the items that were specifically rejected.
5.0 PROJECT WORK

5.1 WORK BREAKDOWN STRUCTURE (WBS)\textsuperscript{15}

Complete Work Breakdown Structure will be developed during planning phase of the project.

\textsuperscript{15} A WBS is a deliverable-oriented grouping of project elements that organizes and defines the total work scope of the project. Describe the work activities that comprise the work breakdown structure (WBS) or the work packages within the WBS. Identify the WBS element or other work package identifier and provide a general description of the tasks or activities, the definition or objectives, and the milestones and deliverables of each work package.
5.2 SCHEDULE ALLOCATION - PROJECT TIMELINE

Schedule will be developed as part of planning phase of the project dependent on work underway with DoIT. NMCD is working towards a June 30, 2008 completion at this time.
## 5.3 PROJECT BUDGET

<table>
<thead>
<tr>
<th>Phase / Activity</th>
<th>Associated Deliverables</th>
<th>Estimated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation</td>
<td></td>
<td>25,000.00</td>
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<tr>
<td>Planning</td>
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<td>45,000.00</td>
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<tr>
<td>Implementation</td>
<td></td>
<td>634,400.00</td>
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<tr>
<td>Closeout</td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

16 Costs estimates are the costs applied to an activity in a project by assigning resources with associated rates or fees. Resources can include equipment, material, technology, processing cycles, or people. The total cost is critical and should be consistent with the proposal; include breakdowns as needed. Match these cost estimates with the actual billed amounts. Use an appropriate format for the project size and customer requirements (e.g., by WBS, milestone, or deliverable).
5.4 PROJECT TEAM

5.4.1 PROJECT TEAM ORGANIZATIONAL STRUCTURE

Team organizational structure is dependent on completion of discovery phase activities with DoIT. Information is expected within 2 weeks of the development of PMP and will be incorporated into the plan during the planning phase.
5.4.2 Project Team Roles and Responsibilities

See 5.4.1 above

5.5 Staff Planning and Resource Acquisition

See 5.4.1 above

5.5.1 Project Staff

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost Estimate</th>
<th>Estimated Hours</th>
<th>Availability</th>
<th>Skill Set</th>
<th>Work Product/Deliverable</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

5.5.2 Non-Personnel Resources

These resources are dependent on discovery activities underway with DoIT and will be updated during the planning phase of the project.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost Estimate</th>
<th>Estimated units/hours</th>
<th>Availability</th>
<th>Source</th>
<th>Work Product/Deliverable</th>
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<tbody>
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</tbody>
</table>
5.6 PROJECT LOGISTICS\(^{17}\)

5.6.1 PROJECT TEAM TRAINING

\(^{17}\) Logistics describes how the project manager, project team, the business owner/customer and any vendor resources will physically work together. Include anything to do with moving or starting resources. Training specifically related to project team members should be included here.
6.0 PROJECT MANAGEMENT AND CONTROLS

6.1 INTEGRATED PROJECT CONTROL PROCESS

Project control is the mechanism by which the project team assesses progress relative to the project plan. The Video Conferencing project will implement the project control process through bi-weekly project status meetings of the Project Oversight Team and Monthly meetings of the Executive Steering Committee. The meetings will be designed to identify variances from the project plan and to identify and initiate corrective actions where appropriate.

- **Cost Control** – NMCD using Computer Enhancement funding is responsible for the project budget. The project manager will maintain a copy of the current budget and notify VIDEO CONFERENCING Executive Steering Committee of budget variances as they are identified.

- **Schedule Control** – The project team is responsible for establishing and maintaining a project schedule. The project team will assess the current project schedule status and report variances as they are identified. Additionally, the team will identify and implement the appropriate corrective actions to eliminate or minimize schedule variances.

- **Scope Control** – The project scope is defined and documented in the Work Breakdown Structure located in Section 3.1 of the Project Management Plan. The detailed scope definition contained in Section 3.1 and 3.2 will be used to evaluate project scope issues.

- **Quality Management** – Video Conferencing quality management will be established for each deliverable based on the quality mechanisms of the responsible organization, and the Video Conferencing Quality Management Plan (Section 6.9) of this document.

These four parameters of the project are integrally linked and any significant change in one which will likely cause changes in the others. Project control establishes the mechanism to routinely track and report on these parameters. If issues arise that will result in significant variances in these parameters, the project team will prepare and submit a Project Change Request form through the Project Change Control process (See Section 6.5).

The process below is designed to capture project status information on a weekly basis. That information is then used to trigger corrective action, risk mitigation and a variety of reporting processes. This process is critical to successful project communication and is the foundation on which a successful project control system will be built. The process allows for flexibility in dealing with project control issues while ensuring that project status information is captured and documented.
6.2 RISK MANAGEMENT PLAN

Risk identification begins in the early planning phase of the project. A Risk Management Worksheet is started during the planning phase. Then, as scheduling, budgeting, and resource planning occur, the worksheet is updated to reflect further risks identified in the planning.

Risk identification is a recurring event; it is not performed once and then set aside. Risk identification, management, and resolution continue after project initiation throughout the life of the project. New risks are developed as the project matures and external and internal situations change. Trigger dates can be included in the schedule for tracking risks.

When probability of a risk increases, or when a risk becomes a reality and the project manager must deal with a real problem, re-planning occurs. At this point, the project manager and project team develop strategies that assess the impact of the problem. This re-planning results in budget, schedule, or resource changes for completion of the project.

To properly implement a contingency plan, a reserve is usually required where dollars and/or time are held by a project manager to apply to the execution of a contingency plan. Without maintaining a reserve, the project manager is forced to go back for additional time or dollars for every risk as it becomes an issue. It is far more desirable to maintain a level of reserve where problems can be dealt with from within the original budget and schedule of the project.

There are some situations where nothing can realistically be done to prevent or deal with a risk. In this case, the project must be managed in such a way that the probability of the event occurring is minimized. If the event does occur, the project manager must re-plan the project and include the effect of the problem.

6.1.1 RISK MANAGEMENT STRATEGY

Information Technology (IT) projects have many inherent risks. The technology itself, risks associated with introduction of new and/or innovative ideas, organization change issues, internal project issues, and external issues such as politics and the economy. The list of potential risks is almost limitless.

Risk management involves executing risk mitigation actions to reduce the effect of the risk. Top risk items will be highlighted as part of the project reviews.

---

18 PMBOK®:

Risk: “An uncertain event or condition that, if it occurs, has a positive or negative effect on a project’s objectives.”

Issue: “A point or matter in question or dispute, or a point or matter that is not settled and is under discussion or over which there are opposing views or disagreements.”

Both Risks and Issues can significant impact a project’s success, and both should be handled in similar ways.
<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK PLANNING</th>
<th>RISK IDENTIFICATION</th>
<th>RISK QUALIFICATION</th>
<th>RISK QUANTIFICATIONS</th>
<th>RISK RESPONSE</th>
<th>RISK MONITORING AND CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFINITION</td>
<td>Deciding how to approach and plan risk management activities</td>
<td>Determining which risk might affect the project</td>
<td>Analysis of risks and conditions to prioritize their effects</td>
<td>Measuring the probability and consequences of risks and estimating their implications</td>
<td>Developing procedures and techniques to enhance opportunities and reduce threats</td>
<td>Monitoring residual risks, identifying new risks, executing risk reduction plans, and evaluating their effectiveness</td>
</tr>
<tr>
<td>TOOLS &amp; TECHNIQUES</td>
<td>Planning Meetings, Document reviews, Assumption analysis, Checklist</td>
<td>Precision ranking, Probability impact risk rating matrix</td>
<td>Interviewing</td>
<td>Avoidance, Mitigation, Acceptance, Transference</td>
<td>Risk Response Audits, Risk Review Meeting</td>
<td>Workaround Plans, Corrective action, Change Requests, Updated Project Log, Updated Risk Form</td>
</tr>
</tbody>
</table>
6.1.1.1 Risk Definitions

“Risk Management” means the systematic process of identifying, analyzing, and responding to project risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of events adverse to project objectives. It includes the processes of risk management planning, risk identification, qualitative risk analysis, quantitative risk analysis, risk response planning, and risk monitoring and control.

“Risk” means an uncertain event or condition that, if it occurs, has a positive or negative effect on a project’s objectives.

“Risk Management Plan” means deciding how to approach and plan risk management activities for a project.
6.1.2 Risk Management Process

Risk Management Process

Raise Risk

- Identify Risk
- Submit Risk

Log Risk

- Review Risk
- Risk applicable to project?
  - YES: Update Risk log and Assign Priority
  - NO: Review Risk Log

Assign Risk Actions

- Review Risk Log
- Has risk taken place?
  - YES: Issue Change Request
  - NO: Does Risk Mitigation require a change?
  - YES: Issue Change Request
  - NO: Does Risk require contingency or mitigation plan?
  - YES: Issue Change Request
  - NO: Issue Actions Assigned

Implement Actions

- Risk Closed: YES
  - Communicate Risk Closure
6.1.3 Project Risk Identification

Risk management is the process of identifying potential project risks, assessing the probability and severity of risk events, and planning appropriate responses. Risk management is a priority task on any IT project and is managed just like cost, schedule, scope and quality.

6.1.4 Risk Analysis

Risk assessment/analysis attempts to rate each risk two ways – the likelihood that the risk will occur and the consequences (impacts) associated with the risk should it occur. The project will analyze, prioritize, and document risks by the likelihood of occurrence (e.g., Certain, Expected, Likely, Possible, Unlikely), and potential impact (very high, high, medium, low, very low).

6.1.5 Project Risk Mitigation Approach

The process of mitigating the possibility of the risk and assigning responsible individuals to identified risks. Identified risks will have appropriate mitigation strategies/plans. Risks that are highly probable and have significant impact to the project will be included in contingency planning.

There are three types of resolution strategies – eliminating, reducing, or accepting risk:

- **Eliminating** or (avoiding the specific threat) abolishes the cause. The project team can never eliminate all risk, but specific risk events can be avoided through careful planning. Generally, risk elimination should be pursued when the risk cannot be managed away or will be unrealistically expensive to implement.

- **Reducing** the cost of a risk through mitigation. Mitigating a risk involves taking specific action to change a planned event in the project. For example, if a risk will occur “if” the project continues on its current course, then the option is to change the course. Specific risk mitigation actions are based on the extent of change to the Project Plan, the cost to make the change (in terms of dollars and/or time), and the consequences (severity and cost) of the risk occurring.

- **Accepting** that a risk will occur and developing mitigation actions to implement should the risk event occur. Accepting risk can also be expressed by increasing the cost of the budget to some threshold to deal with a specific risk item.

6.1.6 Risk Monitoring and Control

Monitoring and Control is the process of tracking, evaluating and responding to ongoing developments relative to project’s plans, risk mitigation plans and specific contingency plans. Risk management is an integral component of integrated project control. This is an ongoing process for the duration of the project and will be part of every Project Status Meeting.

6.1.7 Risk Reporting and Escalation Strategy

The best way to deal with a large amount of data/information is to categorize it in such a way that you can begin to understand the relationships between the data and start to see structure. The tool that has been chosen to support the project team is analyzing risk is an Excel spreadsheet.

The Video Conferencing Project will utilize a Risk Management Log for risk reporting. The Risk Management Log will be maintained for the duration of the project. The Project Team(s) will review risks at least once monthly at Project Team meetings. Risks that cannot be resolved by the
Project Team (including the Project Director) will be escalated to the Project Director and/or Executive Steering Committee. Project Risks are also reported on the monthly project report to DoIT.

### 6.1.8 PROJECT RISK TRACKING APPROACH

Project Risk Tracking is the process of tracking, evaluating, and responding to ongoing developments relative to project plans, risk mitigation plans and specific contingency plans. Risk tracking is an ongoing process for the duration of the project and will be part of Project Status Team meetings. The Video Conferencing Project will track, evaluate, prioritize, and respond to risks using a Risk Management Log.

### 6.1.9 IDENTIFIED RISKS AT PLANNING STAGE

![Risk Matrix](image)

<table>
<thead>
<tr>
<th>Probability</th>
<th>Very Low</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Expected</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Likely</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Possible</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Unlikely</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

- **Minimum risk - Acceptable**: 1
- **Some risk - Monitor at PM/Team Level**: 1
- **High risks - Active monitoring with ongoing Contingency/Mitigation activity**: 1
- **Show stoppers - Active participation with steering committee to mitigate**: 0

#### 6.1.9.1 Schedule Adherence

<table>
<thead>
<tr>
<th>Description</th>
<th>Probability</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of loss of funding if work is not completed by June 30, 2008</td>
<td>Certain</td>
<td>High</td>
</tr>
</tbody>
</table>
6.1.9.2 Project Certification Approval

**Description** – Timely Certification and procurement approval is required to implement this system quickly and meet completion by end of year if re-authorization of funds is not approved.

**Probability** – Possible

**Impact** – Medium

**Mitigation Strategy** – New Mexico Corrections Department is working with DoIT leadership to ensure proper documentation is provided timely. Planned certification for implementation is currently planned for January.

**Contingency Plan** – Based on November certification a contingency plan will be developed.

6.1.9.3 Timely Delivery of Communication Lines

**Description** – Timely Certification Historically implementation of communication lines in a timely manner has been challenging for the state.

**Probability** – Unlikely

**Impact** – Medium

**Mitigation Strategy** – New Mexico Corrections Department is working with DoIT leadership to ensure agreed upon solution is provided in a timely manner.

**Contingency Plan** – Based on November certification and discovery activities in conjunction with DoIT a mitigation strategy will be developed.

6.3 ISSUE MANAGEMENT PLAN

With any project, no matter how comprehensive the planning process, issues will arise that need to be addressed. This section of the project manual addresses how this process will be managed for the Video Conferencing project.

When an issue is identified, primarily by the project team, it will be added to a document called Video Conferencing Risk_and_Issue_Log.doc stored in the project library. An issue can also be identified by anyone affiliated with the project although the project team will be primarily responsible for tracking issues through to resolution. The project team will review the issues list once a month. Issues, which could negatively impact the project, will be brought to Steering Committee’s attention according to the change control process in Section 6.3.
The project manager will coordinate all activity related to issue management using the process defined below.

**6.3.1 Issue Management Roles**

**Issue Originator**
- Documents the issue as clearly and completely as possible on the Issue Form
- Submits issue form to Project Manager

**Project Manager**
- Tracks status of issue in the Issue Log
- Transcribes issue onto Issue Form if necessary
- Clarifies issue if necessary
- Sends issue for impact analysis to Business analyst or Project Team as necessary
- Forwards issue, impact analysis and recommendation to project director and appropriate NMCD management
- Makes necessary updates to project plan
- Keeps issue originator apprised of issue status
- Approves low impact resolution recommendations

**Business Analyst**
- Researches and clarifies issue as needed
- Identifies alternative resolutions
- Makes recommendation
- Estimates time and resources required to resolve the issue
- Identifies where added tasks fit into project plan
- Updates Issue Form with impact analysis
- Sends updated Issue Form to project manager
- Updates Functional and Application Specifications as necessary

**Project Director / Executive Steering Committee**
- Reviews issue, impact analysis and recommendation
- Either approves the resolution, denies the resolution or places the resolution on hold
- Ensures any required additional resources are available
6.3.2 Resolution Process

<table>
<thead>
<tr>
<th>Issue Management Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise Issue</td>
</tr>
<tr>
<td>Identify Issue</td>
</tr>
<tr>
<td>Submit Issue</td>
</tr>
<tr>
<td>Review Issue</td>
</tr>
<tr>
<td>Issue applicable to project?</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>Update Issue log and Assign Priority</td>
</tr>
<tr>
<td>NO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assign Issue Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Issue Log</td>
</tr>
<tr>
<td>Has Issue been resolved?</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Does Issue Require a change?</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Issue Change Request</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>Change Management Process</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Change Approved</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Management Process</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>Issue Actions Assigned</td>
</tr>
<tr>
<td>NO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM Approval</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Does Issue resolution fail outside variance?</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>Project Director/Executive Steering Committee Approval</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>PM Assign Resolution Activities</td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Actions Complete</td>
</tr>
</tbody>
</table>

Originator
Project Manager
Project Team
PM
Project Manager
Project Director
Executive Steering Committee
Module Project Team
LISTED BELOW ARE EXAMPLES OF HOW AN ISSUE CAN BE RESOLVED:

- An issue can become a task added to the project plan with proper approval, if new, or within scope of the project. It could be resolved by an action taken.
- A document can be created which addresses the issue.
- A resolution could create new issues that need to be addressed.
- A new policy could be created which addresses the issue.

6.3.3 ISSUE ESCALATION PROCESS

Issues that cannot be managed by the Video Conferencing Project Team will be escalated to other appropriate project stakeholders, depending upon the type of issue. Examples:

- Issues that relate to the Video Conferencing system will be classified appropriately (bugs, enhancements, etc.) and assigned to the software integration vendor or NMCD staff for resolution.
- Issues that pertain to project resources, funding sources, etc. and fall outside acceptable project variances for Project Manager to handle will be escalated to the Project Director and/or Video Conferencing Steering Committee for assistance with resolution.
- Contractual issues with vendor contracts will be escalated to the Video Conferencing Project Contract Manager.

6.4 SCOPE MANAGEMENT PLAN

A formal change control process is an essential component of a successful IT project. The key to controlling project change, is managing the impact to the project plan, budget, and implementation schedule.

Some changes will be unavoidable – instances where changes have to be made to comply with legal, federal/state regulations, policy changes, compliance with changes in the business direction of the enterprise, or where technology may dictate change. Other non-essential changes can be avoided through management of a formal change control process.

Scope changes (sometimes referred to as scope creep) are the continual addition of functional enhancements to the product requirements throughout the project life cycle. Excessive scope changes are directly related to poorly defined product requirements and specifications. A well thought out change control process will assist the project manager and team in controlling “scope creep”.

Three (3) steps are necessary to control scope changes:

1. Establish the baseline product.
2. Obtain agreement from the project “approvers”.
3. Enforce a formal change control process.

---

19 The external process is provided for issues that involve project resources, processes, procedures, or methodology that cannot be resolved within the Division that is responsible for managing the project without affecting the overall project schedule, cost, or quality.
Scope Management will utilize the change control process detailed in Section 6.5 below.

6.5 CHANGE MANAGEMENT PLAN

Change control is the process of influencing the factors that create changes, ensuring that changes are agreed upon, determining whether a change has occurred, and managing the actual changes when and as they occur. Change control will apply to configuration management, scope, cost and schedule control, and tracking assumptions and constraints. These elements are supported by policies, procedures, and project documentation, such as the project management plan and project work plans.

In managing Change the Video Conferencing project will use the “triple constraint” to evaluate requests. The triple constraint is a triangle with the points of the triangle being scope, cost and time.

If any one of these items changes, at least one of the others must somehow change.

- If there is a request for added scope (a new feature or expansion of an existing feature), then unless another feature is traded off or simplified, either the schedule must change or the cost (staffing) must change.
- If an accelerated release schedule is requested, then either the cost must increase (more staff), or the features must be reduced.
- If a cost reduction is requested (typically this means fewer staff, but it could mean less-experienced staff), then the features should be reduced (extending the schedule with fewer staff may or may not reduce total cost).

6.5.1 SCOPE MANAGEMENT SYSTEM

Any modification or deviation from the standard functionality, or changes to the time or costs will be subject to the change control procedures. Any of the State of New Mexico Video Conferencing Project Team members may initiate the Request for Change process whenever there is a perceived need for a change that will affect the overall costs, timeline, or functionality of the project. A log of change requests will be reviewed at progress meetings and will be included in the monthly project status reports to check on changes that have not been completed.

To manage the project scope, the project will utilize a standard scope control document called Request for Change Form (Appendix E). This form will be used to control scope changes in the project as well as record issues and problems identified throughout the implementation process.

6.5.2 REQUIREMENTS MANAGEMENT SYSTEM

Knowing your requirement base when development begins is key to the change process. Only then can you start making and tracking changes.

People like to think of requirements in terms of entire features, but within each feature are many low-level requirements that must be developed and tested. In this guideline, we will call these "requirement objects." Individual requirement objects may change without greatly affecting what is considered the "feature."
For example, a Reporting feature might describe how a user requests a report, how the user knows when the report has completed, and how the user views the report results. Suppose a change is made to the notification method (e.g. using an email instead of an alert). A requirement object must be changed, but the basic Reporting feature is not greatly altered.

It might appear that since no one seems to care whether notification is via email or an alert it doesn't need to be documented as a requirement. But the developer cares and needs guidance, the tester cares and needs to understand how to test the feature, and product consistency might matter to someone eventually.

To effectively track changes, it is important to have a method of tracing the change to only the affected requirement object(s). To do this, it is critical to have the requirements documented in a Requirements Management (RM) system that distinguishes between each requirement object and allows attributes to be associated with each one individually.

### 6.5.3 Configuration Management System

Configuration management is a subset of change control to ensure the project’s product is correct and complete. It includes the use of the detailed functional requirements in identifying the characteristics of the product. These requirement specifications and the quality and change control processes create a more scope-specific product, such as software released to production. For specific information on configuration management for the project see Section 6.10 below.

Another element of change control is the triple constraint of scope, cost and schedule control. These three constraints provide a reference against which project activity and possible changes can be measured. All proposed configuration changes will be measured in terms of their impact on these three measures.

### 6.5.4 Change Management Process

As always, it's important to start with a process and follow it.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Parties involved</th>
</tr>
</thead>
</table>
| Document the requirement revision(s) or the new requirement(s), including the rationale for the change (especially if work has already begun or if it alters something already developed). | Requestor can be anyone, but is typically someone in:  
  ▪ Project Team – usually to add functionality or clarify a requirement based on a question from the design team  
  ▪ Application Development – usually to change something that is overly complicated or to clarify a requirement |
| Create a change request that includes this documentation using form from Appendix E. | Requestor |

If this change is merely *clarification* of an existing requirement and there is no triple constraint impact:
### Process Step | Parties involved
---|---
Approve the request. | Project Manager
Revise the requirements baseline. | Project Manager
Notify the developer (who is probably already part of the process). | Project Manager

**Otherwise (if there is a real change):**

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Parties involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate the work involved in this change (both development and test), the impact on other parts of the system, and the impact on the overall schedule.</td>
<td>Business Analyst/Application Lead</td>
</tr>
<tr>
<td>Create a new schedule estimate.</td>
<td>Project Team</td>
</tr>
<tr>
<td>Approve (or deny) the request. If approved:</td>
<td>Project Manager, Project Director, Change Review Board</td>
</tr>
<tr>
<td>- Change the requirements baseline.</td>
<td>Project Manager</td>
</tr>
<tr>
<td>- Make sure developer knows of and understands change.</td>
<td>Project Manager, Business Analyst Application Manager</td>
</tr>
<tr>
<td>- Make sure all stakeholders know of schedule impact based on the clarification or new requirement.</td>
<td>Project Manager</td>
</tr>
<tr>
<td>- Make sure QA bases testing on the documented and approved requirements that include all changes and additions.</td>
<td>Project Team</td>
</tr>
</tbody>
</table>

### 6.5.5 Negotiating Changes

If any change or addition cannot be handled without changing end date, and if that is not acceptable to the Steering Committee Project Manager will work with the Project Team to recommend mitigation strategies. Areas which will be considered include but are not limited to:

- Adding staff to implement this or another feature/requirement (increasing cost).
- Shuffling assignments to use someone who otherwise would have finished earlier (increasing cost).
- Removing another, less-important requirement/feature (trading off features).
- Simplifying the request so it is more easily implemented (trading off features).
- Delaying all or part of the change until a later release (trading off features).

### 6.5.6 Change Tracking System

Change Requests are tracked using a tracking system that allows a Change Request (CR) to be opened, reviewed, acted upon (authorized or denied), and eventually closed. The change tracking system requires several components.

#### 6.5.6.1 Workflow Definition

- The possible states for the CR (e.g. Open, Resolved, etc.)
- The roles of system users (who can file a CR, who can change the state of a CR, who can be assigned a CR and under what circumstances, who can close a CR, who can view a CR)
- How the CR flows from one state to another (who can move the CR from one state to another, which flows are possible, which ones are typical, which ones are disallowed)

### 6.5.6.2 Data items that define the request
- CR ID
- Title
- Submittal date
- Requestor Name
- Description of problem or modification requested, including rationale
- Type of CR (bug, enhancement, change, etc.)
- Release or version that the problem was found in
- How to reproduce it, if it is a perceived bug
- Requirement ID(s) affected or not being met
- Release or version where the fix/change should be made
- Severity of the problem or issue
- Priority of the fix or change

### 6.5.6.3 Data items that define the state of the CR
- Current state of the CR (e.g., new, open/evaluate, open/fix, resolved, closed)
- Current CR assignee
- Person(s) to be notified when the CR changes state or when a comment is added
- Person assigned (to be assigned or was assigned) as developer
- Estimated or actual development hours
- Person assigned (to be assigned or was assigned) as tester
- Estimated or actual test hours
- Assigned code reviewer, or a status indicating the code was reviewed (and possibly, date)
- Resolution date (date code was fixed/changed)
- Resolution description, including files fixed/changed
- Date of test completion

<table>
<thead>
<tr>
<th>Action</th>
<th>CR State</th>
<th>CR Assignee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Request submitted by Requestor</td>
<td>New</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Review Change Request</td>
<td>Open-Estimate</td>
<td>Infrastructure Manager</td>
</tr>
<tr>
<td>Estimate new work and record as a comment in the Change Request</td>
<td>Open-Estimate</td>
<td>Infrastructure Manager</td>
</tr>
<tr>
<td>CRB approves change</td>
<td>Open-Fix</td>
<td>CRB Chair</td>
</tr>
</tbody>
</table>
A well-documented set of requirements forms the basis for changes and additions and allows impact estimates to be made, given, and accepted with confidence. Well defined processes implemented by requirement and change management tools are essential, but these processes are useless if they aren't used by everyone. The tools must be simple enough that everyone who must use them will accept them. The processes must be enforced by upper management and must never be circumvented by exceptions or "special circumstances." The best processes and tools in the world are pointless unless all stakeholders follow them consistently.

### 6.6 PROJECT BUDGET MANAGEMENT

Budget management is essential to successful projects.

#### 6.6.1 BUDGET TRACKING

The Project Management Office for the Corrections Department is in the process of selecting a standard tool for project reporting and budget tracking. The VIDEO CONFERENCING Project will utilize the standard tool adopted by NMCD for use for all NMCD projects. Until a standard tool has been identified, the Video Conferencing System Project is tracking project expenditures utilizing an Excel spreadsheet.

### 6.7 COMMUNICATION PLAN

The Video Conferencing project is a collaboration of efforts from both NMCD and privately run prisons and outside partners. In addition, it is a project within state government, which will utilize outside contractors to accomplish some of the work. Private sector involvement will include Community Corrections Association (CCA), Geo, Correctional Medical Services, (CMS), an awarded vendor for system integration and development who has yet to be identified and POD Associates for IV & V activities and other stakeholders. This environment will require both extensive internal communications to ensure proper coordination among the state government entities as well as extensive external communication to ensure that the stakeholders in the private
sector facilities are well informed and positioned to provide appropriate support for implementation.

6.7.1 GOAL

Provide effective and timely communications to the project team, vendors, management and the external stakeholder community.

6.7.2 COMMUNICATION STRATEGY

In order to accommodate the various audiences that need specific information about the project, the project will establish communication strategies for the dissemination of project information based on information “push” and “pull” coupled with ad hoc communication. Outreach activities that target the external stakeholder population will also be provided.

The push aspect of this strategy will be based on routine reports issued on a specific schedule and face-to-face meetings as appropriate. The pull aspect will be based on a website containing general project information and information about specific outreach activities and events that may be of interest to both the internal and external stakeholder community. Ad hoc communication will be employed as the specific audience and situation warrants.

This strategy covers all the informational needs of the project stakeholder community. Many will receive routine information about the project. Others will be able to visit the website and obtain the specific information that they’re seeking and all may receive ad hoc communication from the project at any time depending on the need.

Because of the extensive communication requirements of the Video Conferencing implementation, we have divided the communications plan into two sections. The first is internal communication – in this section, we will discuss our communication plans to ensure that those stakeholders within state government and those groups on the Video Conferencing Steering Committee and Project Teams are appropriately informed to ensure that we have efficient and effective coordination among the various teams and appropriate strategic guidance from the Video Conferencing Steering Committee. The second section of the plan outlines our external communication plans, which we will call the outreach plan. The outreach plan is integrated with our project implementation, as well as the communication plans of the Corrections Department Video Conferencing Project.

6.7.3 INTERNAL COMMUNICATION

Communication is fundamental to effective project management. The Communications Plan outlines the roles and responsibilities of participants in the dissemination, review and approval of project information. A communications plan that is well implemented will help manage expectations of the project, assure appropriate levels of communication with internal and external project stakeholders, provide relevant, accurate, consistent information at all times and help generate and sustain enthusiasm and support for the project.

6.7.3.1 Internal Stakeholders

Secretary Joe Williams – New Mexico Corrections Department

Corrections Department
Deputy Secretary of Operations
Deputy Secretary of Administration
Director, Adult Prisons Division
Director, Probation and Parole
Chief Information Officer
Project Manager (PM)
Project Personnel

Department of Information Technology
  - Chief Information Officer
  - Agency Oversight Consultant

NMCD Executive Steering Committee
  - Committee Chair
  - Committee at large

Implementation Vendor
  - Account Executive
  - Project Manager
  - Project Personnel

### 6.7.3.2 Internal Communication Matrix

<table>
<thead>
<tr>
<th>Deliverable/Description</th>
<th>Target Audience</th>
<th>Delivery Method</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Status</td>
<td>Steering Committee</td>
<td>Face-to-Face</td>
<td>Monthly</td>
<td>PM</td>
</tr>
<tr>
<td>Monthly DoIT Status Report</td>
<td>DoIT Legislature</td>
<td>E-mail</td>
<td>Monthly</td>
<td>PM</td>
</tr>
<tr>
<td>Bi-Weekly Status</td>
<td>PM Team</td>
<td>Face-to-Face</td>
<td>Bi-Weekly</td>
<td>PM</td>
</tr>
<tr>
<td>Project Status</td>
<td>Project Teams</td>
<td>Face-to-Face</td>
<td>As Needed</td>
<td>PM</td>
</tr>
<tr>
<td>Weekly PM Status</td>
<td>NMCD CIO ITD Exec Staff</td>
<td>Face-to-Face</td>
<td>Weekly</td>
<td>PM</td>
</tr>
<tr>
<td>Project Web Page</td>
<td>As needed</td>
<td>Web Page</td>
<td>As needed</td>
<td>PM Team</td>
</tr>
<tr>
<td>Ad hoc</td>
<td>As needed</td>
<td>As needed</td>
<td>As needed</td>
<td>As needed</td>
</tr>
<tr>
<td>IV &amp; V Reporting</td>
<td>Executive Steering</td>
<td>E-Mail</td>
<td>Quarterly</td>
<td>IV &amp; V Vendor</td>
</tr>
</tbody>
</table>
6.7.4 EXTERNAL COMMUNICATION

The intent is to reach a critical mass of private Video Conferencing users as quickly as possible. We hope to accomplish this by carefully targeting those key people that have the broadest technical and process influence in their respective organizations and careful coordination of the outreach message in order to manage the expectations of the user community and orchestrate user community enthusiasm to coincide with the product delivery strategy.

6.7.4.1 External Stakeholders
- Corrections Corporation of America
- Geo
- Correctional Medical Services (CMS)

6.7.5 PROJECT WEBSITE

The project website will focus on project specific information. The intention is to provide a single source of project information for all stakeholders. The website is the primary tool provided to implement a “pull” communication strategy. Information

Topics will include:
- Project Charter
- Project Management Plan
- Project Schedule
- Current Project Status
- Frequently Asked Questions
- Video Conferencing tutorials
- Video Conferencing reference material

The Communication Plan is dynamic and may be changed as situations and specific communications needs warrant. The plan will be reviewed periodically to determine if it is still appropriate and if new stakeholders have been identified.

6.7.6 STATUS MEETINGS
- Monthly Executive Steering Committee
- Bi-Weekly Project Team Meetings

6.7.7 PROJECT STATUS REPORTS
- State DoIT Monthly Reports
- Monthly Project Status Reporting
- Monthly Steering Committee Dashboard
- Monthly Project Team Report
The Video Conferencing Project Oversight Team shall meet bi-weekly. The Video Conferencing Project Manager awarded vendor Project Manager will participate in a weekly project status meeting.

The Video Conferencing Steering Committee is scheduled to meet monthly except for an occasional emergency meeting.

The Video Conferencing Project will provide a status update at each Project Team meeting. The minutes from bi-weekly Project Team meetings will be recorded and distributed to Project Team members. These minutes will also be provided to the IV & V vendor and will be available to DoIT for review per DoIT Project Oversight Memorandum July 5, 2007.

The awarded implementation / develop vendor Project Manager will publish a monthly status report.

The Video Conferencing Project Manager will publish a monthly status report to the Steering Committee. The Video Conferencing Project Manager will provide face-to-face and written reports to the Steering Committee at its regularly scheduled meetings.

### 6.8 PERFORMANCE MEASUREMENT (PROJECT METRICS)

The Project Manager and Executive Sponsor define the project metrics that will be used to control the project. Each project will need to have an established metrics program. Metrics are collected for measuring the progress of a project against its planned budget, schedule, resource usage, and error rates, and of establishing a historical database, which will aid in planning and forecasting future projects. At a minimum metrics must be established for time (schedule), cost (budget) and quality.

#### 6.8.1 BASELINES

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Category</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule and Progress</td>
<td>Milestone Performance</td>
<td>• Adherence to Milestone Dates</td>
</tr>
<tr>
<td></td>
<td>Work Unit Progress</td>
<td>• Component Status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Requirement Status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Test Case Status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Critical Paths Tested</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Problem Report Status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reviews Completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change Request Status</td>
</tr>
<tr>
<td>Incremental Capability</td>
<td></td>
<td>• Build Content – Component</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Build Content – Function</td>
</tr>
<tr>
<td>Resources and Cost</td>
<td>Personnel</td>
<td>• Effort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff Experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff Turnover</td>
</tr>
</tbody>
</table>
Quality Management is an important aspect of any project to make sure that the product delivered is accepted and works as designed. There are number of ways that quality has been built into this project. The first is IV&V, which will make sure the project meets it’s expected requirements through a third party evaluation of the project.

The second is the integrated control processes and change control processes, which assure that any issues or changes that are made to the project, are executed in a structured manner. The most important of these is the change control process to minimize the change of scope to the project and if scope does change it is done knowing the impact to the project. Please see sections 6.4 and 6.5 for more details.

The third process for quality management is our risk management plan which measures, mitigates and includes contingency plans for each risk. Please see section 6.2 for more details.

The project team will also create lessons learned at the end of the project. These lessons learned will be incorporated into the next phase of the project and also be part of the project library which will be available for future projects to use.

All of these processes combined will create a product that has quality that is built in not tested in after the fact. This will provide an environment minimizing the chaos that is normally a part of an IT implementation.

**6.9 QUALITY MANAGEMENT PLAN**

| Financial Performance | • Budget Variance  
|                        | • Cost  
| Availability          | • Resource Availability Dates  
|                        | • Resource Utilization  
| Growth and Stability  | Product Size and Stability  
|                        | • Lines of Code  
|                        | • Components  
|                        | • Database Size  
| Functional Size and Stability | • Requirements  
|                        | • Function Points  
|                        | • Change Request Workload  
| Product Quality        | Defects  
|                        | • Problem Reports  
|                        | • Defect Density  
| Development Performance| Rework  
|                        | • Rework Size  
|                        | • Rework Effort  
| Process Maturity       | • Capability Maturity Model Level  
| Productivity           | • Product Size/Effort Ratio  
|                        | • Functional Size/Effort Ratio  

**6.9.1 QUALITY STANDARDS**
Project will expand this list of Quality Standards following the completion of the Planning Phase of the project.

6.9.2 PROJECT/PRODUCT DELIVERABLE PRESENTATION

A Deliverable Acceptance Form will be submitted with project deliverables requiring acceptance/sign-off. (A copy of this form is in Appendix C – Forms). Where feasible and appropriate, Project deliverables may be submitted to the Video Conferencing Project Manager in electronic file format and forwarded via email.

6.9.2 PROJECT AND PRODUCT REVIEW AND ASSESSMENTS

<table>
<thead>
<tr>
<th>Review Type</th>
<th>Quality Standard</th>
<th>Tools</th>
<th>Reviewer</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milestones</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See section 4.7 for Project/Product Deliverable Presentation and deliverable review cycles.

The table above will be completed during product deliverable identification in the planning stage.
The Video Conferencing Project will follow the review process defined in section 4.8. Reviewers will indicate their acceptance of the project/product deliverable by signing and dating the Deliverable Acceptance Form.

Hard copies of deliverables will be maintained in the Video Conferencing System Project library maintained in the Project Management office.

### 6.9.3 AGENCY/CUSTOMER SATISFACTION

The project manager should assess the on-going sense of the customer agency about how they feel the project is going, and how team members are acting on the project. This feedback would be helpful to the success of the project and the professional growth of the project team members.

#### 6.9.3.1 Questionnaire

The following questionnaire will be used to begin developing a sense of the customer agency about how the project is going. This tool will be used on a quarterly basis to monitor changes to agency sense of how the project is going.

<table>
<thead>
<tr>
<th>STANDARDS</th>
<th>Not Applicable</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The level of <em>business or agency knowledge</em> of Video Conferencing meets your expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Conferencing performs in a <em>professional</em> and <em>cooperative</em> manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The level of <em>communications</em> by Video Conferencing both written and oral, meet your expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Conferencing project team works well with you and your staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Conferencing project management team is <em>accessible</em> when you need them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Video Conferencing provides adequate *information and training* resulting in effective knowledge transfer.

Video Conferencing *completes project tasks* within the agreed upon schedule.

The level of *technical or business expertise* of Video Conferencing meets your expectations.

You are receiving *full value* from the Video Conferencing project management team.

The *overall service* provided Video Conferencing is fully meeting your expectations.

### 6.9.4 Product Deliverable Acceptance

How NMCD takes procession of the product. Delivery of media; manuals; contracts; licenses; services agreements; configuration settings; status of patches to COTS products; in-house or vendor developed code; test cases, routines, and scripts; and other items required to operate the product.

See section 4.3, 4.7 and 4.8 for details on product deliverable acceptance.

#### 6.9.4.1 Contracted Deliverables

Reviewer signatures will be required for deliverables produced by awarded vendor.

1. Project Manager
2. Project Director
3. Steering Committee
4. Contract Manager

- If the deliverable is accepted, the reviewer should notify the Project Manager of the acceptance of the deliverable and sign and date the Deliverable Acceptance Form.
  - After all designated reviewers have approved and signed off on the deliverable the Project Manager will notify the Contract Manager that the deliverable has been accepted and payment may be made to the contracted vendor.
The original Deliverable Acceptance Form will be filed in the Project Library. A copy of the fully executed Deliverable Acceptance Form will be given to the Project Director, Steering Committee, and the Contract Manager.

If the deliverable is not accepted, the reviewer should notify the Video Conferencing Project Manager in writing and specify what action by the vendor is needed.

The Video Conferencing Project Manager will notify the Contract Manager that the deliverable has not been accepted and specify what action is needed by the vendor for the deliverable to be accepted. Payment cannot be made to the vendor until the deliverable has been accepted.

The Contract Manager will notify vendor in writing that the deliverable was not accepted and advise what rework/modification by vendor is required.

Vendor will make the necessary revisions and resubmit the deliverable for review and acceptance.

6.10 CONFIGURATION MANAGEMENT STRATEGY

One of the challenges of high-technology product development is to ensure that the product being manufactured is identical to the product that was designed, reviewed, tested, and validated. Although physical prototypes and functioning systems are often built during the engineering process, the true output of an engineering effort is "paper": drawings, code listings, specifications, process instructions, and other documents that define the "form, fit, and function" of a product or system. In most cases, this documentation must be able to "stand alone": It must provide complete manufacturing, installation, and servicing instructions without the need of engineering to supply supplementary information. The documentation must be absolutely accurate and deterministic. Product manufactured by different personnel on different days or by different manufacturing facilities must be identical in form, fit, and function. And, as models and versions change, the documentation must change with them. As those different models and versions proliferate in the field, the manufacturer should be able to reproduce the exact design documentation of any model and version for maintenance and servicing.

Configuration management (CM) is a major component of successful information technology (IT) project delivery. Without effective configuration management, the integrity of project configuration items and the ability to report on the status and configuration of those items are jeopardized.

The Configuration Management Plan is included within the Video Conferencing Project to establish a consistent method for formally identifying and controlling project configuration items. Project configuration items include product configuration items such as hardware and software, as well as project management information such as plans and budget information. CM is an integral function in delivering IT projects because it facilitates the protection of configuration items and communicates changes that have been made to them. CM, effectively planned and executed,

Configuration Management determines how project information (files, reports, designs, memos, documents, etc.) will be managed (tracked, approved, stored, secured, accessed, version control, etc.) and owned by (e.g., Agency managing the project or the Customer). Standards and team awareness are critical.
contributes to the production of high quality IT products and avoidance of rework. Quality IT products and avoidance of rework increases the value of IT assets and saves costs, enabling delivery of projects that meet defined cost, schedule, quality, and requirements objectives.

A Configuration Management Plan serves as the core-planning tool describing the overall planning efforts for implementing and executing configuration management throughout a project’s life cycle. It provides visibility and control of the project’s product’s performance, functional, and physical attributes. Project CM establishes and maintains the integrity of project configuration items. CM facilitates orderly management of information about, and changes to, baselines that need to be controlled at the project level and, if applicable, the enterprise level.

A complete configuration management plan will be implemented during planning activities. This plan will tie to the Change Management Processes and Procedures which are being developed for the NMCD as part of this project.

6.8.1 Version Control

All documents will be tracked with version control. Version numbers will be included on all pages of the document and tracked on the revision history page of the document.

6.8.2 Project Repository

An FTP site has been created as the project repository to enable the Department of Information Technology and the IV & V vendor access to all project deliverables. This meets the requirement outlined in the PROJECT OVERSIGHT PROCESSS Memorandum.

6.11 PROCUREMENT MANAGEMENT PLAN

Goods and services for this project will be purchased from existing State Price Agreements.

6.12 PROJECT DEPLOYMENT PLAN STRATEGY

To ensure successful deployment of the product of the project the Video Conferencing project will execute a formal Deployment Plan. The plan will follow the following outline and address all areas defined below.

Deployment activities include:

- site preparation
- assessment of deployment readiness
- data creation/conversion

Projects often have some element of procurement, i.e. the requirement to purchase goods and/or services from outside the organization. The procedures to be used to handle these procurements should be included here. Activities such as a make-or-buy analysis; writing requirements; solicitation planning, evaluation and selection; inspection and acceptance; contract closeout should all be included.
• training and documentation preparation and delivery
• transition to support
• notification of deployment
• maintenance planning
• release of the product
• contingency planning

Deployment planning can reduce project risk by reducing uncertainty in implementation of system products. Documentation of detailed deployment activities contributes to the success of IT systems by establishing and communicating expectations for all aspects of the activities necessary to get a product to production, including necessary resources. In addition, risks are minimized by contingency planning, including withdrawal or back-out procedures to be executed if problems occur during deployment activities.

6.13 TEST PLAN STRATEGY

A test plan is a systematic approach to testing a system. The Video Conferencing project will use structured formalized test plans and scripts to ensure user acceptance and system deployment readiness. Following the completion of the Requirements Definition Phase a formal testing plan will be executed as part of the project activities.

6.13.1 INTRODUCTION

6.13.2 TESTING OBJECTIVES

6.13.3 TEST TYPES

The following test types will be considered and discussed in the development of the testing plans for the VIDEO CONFERENCING project.

<table>
<thead>
<tr>
<th>Type of test</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Testing</td>
<td>Testing conducted to verify the implementation of the design for one software element (e.g., unit, module)</td>
</tr>
<tr>
<td>Integration Testing</td>
<td>An orderly progression of testing in which software elements, hardware elements, or both are combined and tested until the entire system has been integrated. Testing will also include integration with current PowerBuilder legacy application throughout end of life transition.</td>
</tr>
<tr>
<td>System Testing</td>
<td>The process of testing an integrated hardware and software system to verify that the system meets its specified requirements</td>
</tr>
<tr>
<td>Acceptance Testing</td>
<td>Formal testing conducted to determine whether or not a system satisfies its acceptance criteria and to enable the customer to determine whether or not to accept the system</td>
</tr>
<tr>
<td>Performance Testing</td>
<td>Performed to confirm that the system meets performance goals such as turnaround times, maximum delays, peak performance, etc.</td>
</tr>
<tr>
<td>Volume Testing</td>
<td>Tests the system to verify that the system can handle an expected volume profile</td>
</tr>
<tr>
<td>Stress Testing</td>
<td>Tests the entire system to find the limits of performance</td>
</tr>
<tr>
<td>Operational Readiness Testing</td>
<td>Tests the system to find defects that will prevent installation and deployment by the users</td>
</tr>
<tr>
<td>Data Conversion and Load Testing</td>
<td>Performed to verify the correctness of automated or manual conversions and/or loads of data in preparation for implementing the new system</td>
</tr>
</tbody>
</table>
6.13.4 **TEST DATA MANAGEMENT**

- System and user acceptance tests –
- Performance/volume/stress test –
- Operational readiness test

**6.14 TRAINING PLAN STRATEGY**

**6.14.1 INTRODUCTION**

Two major audiences are addressed in the Video Conferencing project training requirements:

- Individuals who will use the product
- Individuals who provide operations support for the products.

This *Training Requirements* document will describe the basic training resource and timing requirements, and a high level description of the performance objectives to be achieved through training of the users and the operations support staff for the product under development.

The training requirements document will be completed as part of the Planning Phase. Areas that will be addressed will include:

1. Deployment schedule and the number of groups/users that will receive the deployed product
2. A documented project plan including a description of changes to the business process, if any, that will accompany the product when it is deployed.
3. Documented system requirements, including one or more of the following:
   - description or model of functional requirements
   - use cases capturing representative user scenarios and system behavior
   - data usage description or logical data model for the applications to be supported
   - descriptions of data, system, and user interfaces
   - high level description or model of system architecture

**6.14 INDEPENDENT VERIFICATION AND VALIDATION**

Independent Verification and Validation (IV&V) is a risk mitigation strategy designed to provide management with project oversight through an independent evaluation a project’s product and process quality. The New Mexico Corrections Department Video Conferencing System project has adopted a low risk implementation strategy by using a phased approach Given that the project has adopted a Phased strategy and is in use across the organization, its IV&V plan will be tailored to address the unique risks associated with communication infrastructure projects.

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22 Independent Verification and Validation (IV&V) means the process of evaluating a system to determine compliance with specified requirements and the process of determining whether the products of a given development phase fulfill the requirements established during the previous stage, both of which are performed by an organization independent of the development organization. Describe the process that will be employed to meet IV&V requirements.
IV&V will:

1. Evaluate and verify that processes, and system designs comply with the specified requirements of the Enterprise Architecture Standards

2. Evaluate and validate that products and deliverables of a given development phase fulfill the requirements and performance outcomes set forth in the scope and project plan

3. Provide a “close-out” report to the Executive Board at the end of project
It is the policy of NMCD that all IT projects shall be proposed, approved, planned and implemented in accordance with a project management methodology that complies with the Project Management Institute’s (PMI) *A Guide to the Project Management Body of Knowledge* (PMBOK). Please refer to Appendix G, Closing the Project.

Once project activities have concluded the project shall be closed by finalizing all deliverables, formally accepting the project products, compiling lessons learned, releasing project assets and obtaining sign off on the project from the sponsor.

A. Verify that the final product is complete and meets the goals and objectives of the project.

B. Verify that the business owner has accepted the final product.

C. Close all contracts. Approve and pay final invoices from contractors.

D. Write final project status report.

E. Notify all stakeholders that the project has been completed and is being closed.

F. Archive project records.

G. Document successes and issues of the project.

H. Conduct a lessons learned session with stakeholders.

I. Celebrate project completion.

---

Project Close will always consist of administrative project activities and possibly contractual project activities and an external vendor is employed. Completing both sets of activities is a mandatory step in the project life cycle. Administrative activities complete the internal needs for the Agency/Unit that is responsible for managing the project, such as lessons learned, recording the last hours against the project, and providing transition for the staff to other assignments. Contractual activities meet the contractual needs, such as executing a procurement audit and formal acceptance of the project work products.
J. Release resources.

7.1 Administrative Close

Administrative Close occurs at both the end of phase and end of project. This closure consists of verification that objectives and deliverables were met. Acceptance is formalized and phase activities are administratively closed out. Administrative closure occurs on a “by-phase” basis in accordance with the WBS and should not be delayed to project end. At that point, the burden of closing is too great and audits inaccurate. The specific project close activities for a given project are contingent on the project’s complexity and size. Project managers should work with the project’s project management consultant to tailored Project Close procedures to compliment the project’s objectives.

7.2 Contract Close

Contract close is similar to administrative close in that it involves product and process verification for contract close.
APPENDIX
APPENDIX A: GLOSSARY

ACRONYMS

APD    Adult Prison Division of NMCD
CIS    Criminal Information System (Idaho O-Track)
CMIS   Criminal Management Information System (New Mexico O-Track)
CTA    Corrections Technology Association. A public, non-profit network of professionals actively involved in leveraging technology in the field of Corrections. Members of the association consist primarily of Chief Information Officers, IT Directors and operational and administrative staff from State and Provincial Departments of Correction, as well as from Federal, county and local correctional agencies.
DoIT   Department of Information Technology
ITD    Information Technology Division at NMCD
IPP    Integrated Project Plan
NCOMS  National Consortium of Offender Management Systems. A joint board coalition organized for the purpose of developing, maintaining, and enhancing a comprehensive electronic database system for managing all aspects of offender incarceration, supervision, and rehabilitation among the participating members. The consortium is responsible for maintaining the standardized core module of the system module set for its members and for assuring multi-jurisdiction compatibility to facilitate the sharing of enhancements, data integration, data sharing, and mutual support.
PMI®   Project Management Institute.
PMBOK  Project Management Body of Knowledge
PMC    Program Management Consultant
PMO    Program Management Office
PMP    Project Management Plan
QM     Quality Management
WBS    Work Breakdown Structure

24 Definition found at http://www.correctionstech.org/
TERMS

Acceptance Criteria - The criteria that a system or component must satisfy in order to be accepted by a user, customer, or other authorized entity. [IEEE-STD-610]

Acceptance Testing - Formal testing conducted to determine whether or not a system satisfies its acceptance criteria and to enable the customer to determine whether or not to accept the system.

Agency - New Mexico Corrections Department

Assumptions - Planning factors that, for planning purposes, will be considered true, real, or certain. Assumptions generally involve a degree of risk. They may be documented here, or converted to formal risks.

Base System - NCOMS Web-enabled Offender Tracking System version 1.0 (O-Track)

Baseline - A specification or product that has been formally reviewed and agreed upon that thereafter serves as the basis for further development, and that can be changed only through formal change control procedures.

Commitment - A pact that is freely assumed, visible, and expected to be kept by all parties.

Configuration Management (CM) - A discipline applying technical and administrative direction and surveillance to identify and document the functional and physical characteristics of a configuration item, control changes to those characteristics, record and report change processing and implementation status, and verify compliance with specified requirements.

Configuration Management Library System - The tools and procedures to access the contents of the software baseline library.

Constraints - Factors that will (or do) limit the project management team’s options. Contract provisions will generally be considered constraints.

Contingency Planning - The development of a management plan that identifies alternative strategies to be used to ensure project success if specified risk events occur.

Crashing - Taking action to decrease the total duration after analyzing a number of alternatives to determine how to get the maximum duration compression for the least cost.

Critical Path - The series of activities that determines the duration of the project. The critical path usually defined as those activities with float less than or equal to specified value often zero. It is the longest path through the project.

Dependencies, Discretionary - Dependencies defined by the project management team. They should be used with care and usually revolve around current Best Practices in a particular application area. They are sometimes referred to as soft logic, preferred logic, or preferential logic. This may also encompass particular approaches because a specific sequence of activities is preferred, but not mandatory in the project life cycle.
Dependencies, Mandatory - Dependencies that are inherent to the work being done. In some cases, they are referred to as hard logic.

Dependency Item - A product, action, piece of information, etc., that must be provided by one individual or group to a second individual or group so they can perform a planned task.

Deliverable - Any measurable, tangible, verifiable outcome, result, or item that must be produced to complete a project or part of a project that is subject to approval by the project sponsor or customer.

Duration - The number of work periods (not including holidays or other nonworking periods) required to complete an activity or other project element.

Duration Compression - Shortening the project schedule without reducing the project scope. Often increases the project cost.

End User - The individual or group who will use the system for its intended operational use when it is deployed in its environment.

Effort - The number of labor units required to complete an activity or other project element. Usually expressed as staff hours, staff days, or staff weeks.

Executive Level Representative - individual empowered with the authority to represent and make decisions on behalf of the Agency’s executives

Fast Tracking - Compressing the project schedule by overlapping activities that would normally be done in sequence, such as design and construction.

Float - The amount of time that an activity may be delayed from its early start without delaying the project finished date.

Formal Review - A formal meeting at which a product is presented to the end user, customer, or other interested parties for comment and approval. It can also be a review of the management and technical activities and of the progress of the project.

FY 08 - state fiscal year July 1, 2007 through June 30, 2008

FY 09 - state fiscal year July 1, 2008 through June 30, 2009

FY 10 - state fiscal year July 1, 2009 through June 30, 2010

Integrated Project Plan - A plan created by the project manager reflecting all approved projects and sub-projects.
Lessons Learned - The learning gained from the process of performing the project. Lessons learned may be identified at any point during the execution of the project.

Method - A reasonably complete set of rules and criteria that establish a precise and repeatable way of performing a task and arriving at a desired result.

Methodology - A collection of methods, procedures, and standards that defines an integrated synthesis of engineering approaches to the development of a product.

Milestone - A scheduled event for which some individual is accountable and that is used to measure progress.

Non-technical Requirements - Agreements, conditions, and/or contractual terms that affect and determine the management activities of an architectural and software project.

Performance Reporting - Collecting and disseminating performance information. This includes status reporting measurement, and forecasting.

Procurement Planning - Determining what to procure and when.

Product Scope - The features and functions that characterize a product or service.

Project Leader (Technical) - The leader of a technical team for a specific task, who has technical responsibility and provides technical direction to the staff working on the task.

Project Management - The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project Management is also responsible for the oversight of the development and delivery of the architecture and software project.

Program - A group of related projects managed in a coordinated way. Programs include an element of ongoing work.

Program Management Office - An organizational entity responsible for management and oversight of the organization’s projects. As a specific reference in this document, the Office of the Chief Information Officer.

Project Manager - The role with total business responsibility for an entire project. The individual who directs, controls, administers, and regulates a project. The project manager is the individual ultimately responsible to the customer.

Project Charter - A document issued by senior management that formally authorizes the existence of a project. It provides the project manager with the authority to apply organizational resources to project activities.

Project Management Plan - A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and documents approved scope, cost, and schedule baselines. The Project Management Plan (PMP) is a project plan.
Project Schedule - A tool used to indicate the planned dates, dependencies, and assigned resources for performing activities and for meeting milestones. Software products such as ABT’s Workbench and Microsoft Project are tools used to develop project schedules.

Project Scope - The work that must be done to deliver a product with the specified features and functions.

Project Sponsor - The individual that provides the primary sponsorship for an approved project. This individual will play a key role in securing funding, negotiating for resources, facilitating resolution of critical organizational issues, and approving key project deliverables.

Quality - The degree to which a system, component, or process meets specified requirements. The degree to which a system, component, or process meets customer or user needs or expectations.

Quality Management - The process of monitoring specific project results to determine if they comply with relevant standards and identifying ways to eliminate causes of product non-compliance.

Risk - Possibility of suffering loss.

Risk Management - An approach to problem analysis, which weighs risk in a situation by using risk probabilities to give a more accurate understanding of the risks involved. Risk Management includes risk identification, analysis, prioritization, and control.

Risk Management Plan - The collection of plans that describes the Risk Management activities to be performed on a project.

Risk Management - Risk mitigation seeks to reduce the probability and/or impact of a risk to below an acceptable threshold.

Scope Change - Any change to the project scope. A scope change almost always requires an adjustment to the project cost or schedule.

Software Life Cycle - The period of time that begins when a software product is conceived and ends when the software is no longer available for use. The Software Life Cycle typically includes a concept phase, requirements phase, design phase, implementation phase, test phase, installation, and checkout phase, operation and maintenance phase, and, sometimes, retirement phase.

Stakeholder - Individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or project completion. They may also exert influence over the project and its results.

Standard - Mandatory requirements employed and enforced to prescribe a disciplined uniform approach to software development

Statement of Work - A description of all the work required completing a project, which is provided by the customer.

System Requirements - A condition or capability that must be met or possessed by a system component to satisfy a condition or capability needed by a user to solve a problem. Subproject
Team - A collection of people, often drawn from diverse but related groups, assigned to perform a well-defined function for an organization or a project. Team members may be part-time participants of the team and have other primary responsibilities.

Technical Requirements - Those requirements that describe what the software must do and its operational constraints. Examples of technical requirements include functional, performance, interface, and quality requirements.

Traceability - The degree to which a relationship can be established between two or more products of the development process, especially products having a predecessor-successor or master-subordinate relationship to one another. [IEEE-STD-610]

Work Breakdown Structure - A deliverable-oriented grouping of project elements that organizes and defines the total work scope of the project. Each descending level represents an increasingly detailed definition of the project work.
APPENDIX B: WORK BREAKDOWN STRUCTURE
APPENDIX C: DELIVERABLE SIGN OFF SHEET

CDCMIS IV & V DELIVERABLES
PROJECT DELIVERABLE ACCEPTANCE FORM

Project Deliverable: NMCD.CMIS.IV&V.001
Date: Tuesday, November 6, 2007

The above named project deliverable has been [ ] Accepted [ ] Rejected

Larry Pacheco, CIO
Project Director

[ ] Accepted [ ] Rejected

Bryan Gill, Project Manager

DATE

DATE

REVISON: 1.0

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APPENDIX D: ISSUE REPORTING FORM
APPENDIX E: REQUEST FOR CHANGE FORM
APPENDIX F: MONTHLY DOIT REPORTING TEMPLATE
“Project management plan” is a formal document approved by the executive sponsor and the Department and developed in the plan phase used to manage project execution, control, and project close. The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and documents approved scope, cost and schedule baselines. A project plan includes at least other plans for issue escalation, change control, communications, deliverable review and acceptance, staff acquisition, and risk management. plan.”