

**Appendix A thru Appendix E
to QA SOW**

**Version 3.1
March 2019**

Appendix A: Generic Software Project Quality Standards

When delivering Quality Management Services (QMS), the Consultant is expected to use this Appendix to identify relevant quality standards and associated risk cues in connection with Deliverable 2.1 Quality Standards. Deliverable 2.1 Quality Standards is an important aspect of quality planning that supports Deliverable 4.1 Quarterly Quality Assurance Report.

Notes to Consultant:

1. A total of 82 quality standards under 12 quality categories (quality focus areas) are listed. Quality Standard marked with “*” are required. For those Quality Standards not marked with an “*”, only those relevant to a specific project need to be used.
2. Additional quality categories may be added to the extent relevant to a project. In Oregon IT projects, quality categories that are not part of this Appendix include: information security, business transition, and financial control (e.g. separation of roles). Each of these additional quality categories usually consists of multiple quality standards and associated risk cues.
3. For each Quality Standard, “Low Risk Cue”, “Medium Risk Cue”, and “High Risk Cue” comprise a qualitative metric (measurement) of risk associated with the specific Quality Standard.
4. For each Quality Standard, the definition of risk cues provided in this Appendix may be changed or tailored for the needs of a specific project. This tailoring is to be performed independently by the QMS Consultant. Input from state personnel or the state’s contractors may be sought, but cannot substitute for industry standards, best practice, and applicable expert knowledge and judgment that the QMS Consultant must apply independently.
5. The quality standards in this table are organized with the following headers:
 - a. QS# - A sequentially assigned number for quality standards
 - b. Quality Category – Header that names the category in which the following Quality standards belong
 - c. Quality Standard – Named areas of potential quality standards. “*” indicates recommended minimums
 - d. Low Risk Cues – Characteristics of this quality standard when it can be considered low risk to the project
 - e. Medium Risk Cues – Characteristics of this quality standard when it should be considered high risk to the project
 - f. High Risk Cues – Characteristics of this quality standards when it should be considered high risk to the project
 - g. Rating – Level of quality risk you think is true of this project

- Low – This project exhibits the low risk cue, or appears to have no risks in this area
 - Medium – This project exhibits the medium risk cue, or something similar in threat
 - High – This project exhibits the high risk cue, or something similar in threat
 - N / A – This factor is not applicable to this project
 - Need Info – The Contractor needs information from someone else (perhaps an expert) to make a judgment
 - TBD – The project is not far enough along to make a rating; the Contractor needs to review the quality standard at a later time
- h. Risk Rank – The numerical rating for risk as it ranks with other identified. For example the quality standard may have high risk cues, but for the project may be of low risk

Generic Software Project Quality Standards

Using this table to identify quality standards and risk:

A project should use this table to identify quality standards (QSs) and their risks. The project should decide which standards are relevant at what rating, considering the risks they suspect could affect their project.

Material in the quality standards table is organized with the following headers:

QS # - A sequentially assigned number for quality standards.

Quality Category - Header that names the category in which the following QSs belong.

Quality Standard - Named areas of potential quality standards. "*" indicates recommended minimums.

Low Risk Cues - Characteristics of this QS when it can be considered low risk to a project.

Medium Risk Cues - Characteristics of this QS when it provides a medium risk to a project.

High Risk Cues - Characteristics of this QS when it should be considered high risk to a project.

Rating - Level of quality risk you think is true of this project.

Low - This project exhibits the low risk cue, or appears to have no risk in this area.

Medium - This project exhibits the medium risk cue, or something similar in threat.

High - This project exhibits the high risk cue, or something similar in threat.

Not Applic - This factor is not applicable to this project.

Need Info - We need information from someone else (perhaps an expert) to make a judgment.

TBD - The project is not far enough along to make a rating; we need to review this later.

Risk Rank - Numerical rating for risk as it ranks with others identified. For example the QS may have high risk

cues, but overall for the project be of low risk.

						Rating (check one)						Risk Rank
QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues								
					Low	Medium	High	Not Applic	Need Info	TBD		

Process Standards

Business Mission and Goals

1	Project Fit to Customer Organization	directly supports customer organization mission and/or goals	indirectly impacts one or more goals of customer	does not support or relate to customer organization mission or goals							
2	Project Fit to Provider Organization	directly supports provider organization mission and/or goals	indirectly impacts one or more goals of provider	does not support or relate to provider organization mission or goals							
3	Customer Perception	customer expects this organization to provide this product	organization is working on project in area not expected by customer	project is mismatch with prior products or services of this organization							
4	Work Flow	little or no change to work flow	will change some aspect or have small affect on work flow	significantly changes the work flow or method of organization							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)					Risk Rank
					Low	Medium	High	Not Applic	Need Info	
5	Goals Conflict	goals of projects within the organization are supportive of or complimentary to each other	goals of projects do not conflict, but provide little direct support	goals of projects are in conflict, either directly or indirectly						
Decision Drivers										
6	*Political Influences	no particular politically-driven choices being made	project has several politically motivated decisions, such as using a vendor selected for political reasons, rather than qualifications	project has a variety of political influences or most decisions are made behind closed doors						
7	Convenient Date	date for delivery has been set by reasonable project commitment process	date is being partially driven by need to meet marketing demo, trade show, or other mandate not related to technical estimate	date is being totally driven by need to meet marketing demo, trade show, or other mandate; little consideration of project team estimates						
8	Attractive Technology	technology selected has been in use for some time	project is being done in a sub-optimal way, to leverage the purchase or development of new technology	project is being done as a way to show a new technology or as an excuse to bring a new technology into the organization						
9	Short Term Solution	project meets short term need without serious compromise to long term outlook	project is focused on short-term solution to a problem, with little understanding of what is needed in the long term	project team has been explicitly directed to ignore the long term outlook and focus on completing the short term deliverable						
Project Management										
10	*Definition of the project	project is well-defined, with a scope that is manageable by this organization	project is well-defined, but unlikely to be handled by this organization	project is not well-defined or carries conflicting objectives in the scope						
11	*Project Objectives	verifiable project objectives, reasonable requirements	some project objectives, measures may be questionable	no established project objectives or objectives are not measurable						

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
12	*Leadership	project has active sponsor	project has sponsor responsible for project, but unable to spend enough time to direct effectively	project has no sponsor, or project manager concept is not in use							
13	*PM Approach	product and process planning and controls in place	planning and controls need enhancement	weak or nonexistent planning and controls							
14	PM Communication	clearly communicates goals and status between the team and rest of organization	communicates some of the information some of the time	rarely communicates clearly to the team or to others who need to be informed of team status							
15	PM Experience	PM very experienced with similar projects	PM has moderate experience or has experience with different types of projects	PM has no experience with this type of project or is new to project management							
16	PM Attitude	strongly committed to success	willing to do what it takes	cares very little about project							
17	*PM Authority	has line management or official authority that enables project leadership effectiveness	is able to influence those elsewhere in the organization, based on personal relationships	has little authority from location in the organization structure and little personal power to influence decision-making and resources							
18	Support of the PM	complete support by team and of management	support by most of team, with some reservations	no visible support; manager in name only							
Project Parameters											
19	Project Size	small, non-complex, or easily decomposed	medium, moderate complexity, decomposable	large, highly complex, or not decomposable							
20	Hardware Constraints	little or no hardware-imposed constraints or single platform	some hardware-imposed constraints; several platforms	significant hardware-imposed constraints; multiple platforms							
21	Reusable Components	components available and compatible with approach	components available, but need some revision	components identified, need serious modification for use							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
22	Supplied Components	components available and directly usable	components work under most circumstances	components known to fail in certain cases, likely to be late, or incompatible with parts of approach							
23	*Budget & Resource Size	sufficient budget and resources allocated	questionable budget and resources allocated	doubtful budget and resources are sufficient							
24	Budget Constraints	funds allocated without constraints	some questions about availability of funds	allocation in doubt or subject to change without notice							
25	*Cost Controls	well established, in place	system in place, weak in areas	system lacking or nonexistent							
26	*Delivery Commitment	stable commitment dates	some uncertain commitments	unstable, fluctuating commitments							
27	*Development Schedule	team agrees that schedule is acceptable and can be met	team finds one phase of the plan to have a schedule that is too aggressive	team agrees that two or more phases of schedule are unlikely to be met							
Project Team											
28	*Team Member Availability	in place, little turnover expected; few interrupts for fire fighting	available, some turnover expected; some fire fighting	high turnover, not available; team spends most of time fighting fires							
29	Mix of Team Skills	good mix of disciplines	some disciplines inadequately represented	some disciplines not represented at all							
30	Application Experience	extensive experience in team with projects like this	some experience with similar projects	little or no experience with similar projects							
31	Experience with Project Hardware and Software	high experience	average experience	low experience							
32	Experience with Process	extensive experience with this process	some experience with this process or extensive experience with another	little or no experience with a defined process							
33	Training of Team	training plan in place, training ongoing	training for some areas not available or training planned for future	no training plan or training not readily available							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
34	Team Spirit and Attitude	strongly committed to success of project; cooperative	willing to do what it takes to get the job done	little or no commitment to the project; not a cohesive team							
35	*Team Productivity	all milestones met, deliverables on time, productivity high	milestones met, some delays in deliverables, productivity acceptable	productivity low, milestones not met, delays in deliverables							
36	Expertise with Application Area (Domain)	good background with application domain within development team	some experience with domain in team or able to call on experts as needed	no expertise in domain in team, no availability of experts							
Organization Management											
37	*Organization Stability	little or no change in management or structure expected	some management change or reorganization expected	management or organization structure is continually or rapidly changing							
38	Organization Roles and Responsibilities	individuals throughout the organization understand their own roles and responsibilities and those of others	individuals understand their own roles and responsibilities, but are unsure who is responsible for work outside their immediate group	many in the organization are unsure or unaware of who is responsible for many of the activities of the organization							
39	Policies and Standards	development policies and standards are defined and carefully followed	development policies and standards are in place, but are weak or not carefully followed	no policies or standards, or they are ill-defined and unused							
40	Management Support	strongly committed to success of project	some commitment, not total	little or no support							
41	*Executive Involvement	visible and strong support	occasional support, provides help on issues when asked	no visible support; no help on unresolved issues							
42	Resource Conflict	projects within the organization share resources without any conflict	projects within the organization schedule resources carefully to avoid conflict	projects within the organization often need the same resources at the same time (or compete for the same budget)							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
43	Customer Conflict	multiple customers of the project have common needs	multiple customers of the project have different needs, but do not conflict	multiple customers of the project are trying to drive it in very different directions							
Customer/User											
44	*User Involvement	users highly involved with project team, provide significant input	users play minor roles, moderate impact on system	minimal or no user involvement; little user input							
45	User Experience	users highly experienced in similar projects; have specific ideas of how needs can be met	users have experience with similar projects and have needs in mind	users have no previous experience with similar projects; unsure of how needs can be met							
46	*User Acceptance	users accept concepts and details of system; process is in place for user approvals	users accept most of concepts and details of system; process in place for user approvals	users do not accept any concepts or design details of system							
47	User Training Needs	user training needs considered; training in progress or plan in place	user training needs considered; no training yet or training plan is in development	requirements not identified or not addressed							
48	User Justification	user justification complete, accurate, sound	user justification provided, complete with some questions about applicability	no satisfactory justification for system							
Product Standards											
Product Content											
49	Requirements Stability	little or no change expected to approved set (baseline)	some change expected against approved set	rapidly changing or no agreed-upon baseline							
50	*Requirements Complete and Clear	all completely specified and clearly written	some requirements incomplete or unclear	some requirements only in the head of the customer							
51	*Testability	product requirements easy to test, plans underway	parts of product hard to test, or minimal planning being done	most of product hard to test, or no test plans being made							
52	Design Difficulty	well defined interfaces; design well understood	unclear how to design, or aspects of design yet to be decided	interfaces not well defined or controlled; subject to change							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
53	*Implementation Difficulty	algorithms and design are reasonable for this team to implement	algorithms and/or design have elements somewhat difficult for this team to implement	algorithms and/or design have components this team will find very difficult to implement							
54	System Dependencies	clearly defined dependencies of the software effort and other parts of system (hardware, process changes, documentation, ...)	some elements of the system are well understood and planned; others are not yet comprehended	no clear plan or schedule for how the whole system will come together							
Development Process											
55	Alternatives Analysis	analysis of alternatives complete, all considered, assumptions verifiable	analysis of alternatives complete, some assumptions questionable or alternatives not fully considered	analysis not completed, not all alternatives considered, or assumptions faulty							
56	Commitment Process	changes to commitments in scope, content, schedule are reviewed and approved by all involved	changes to commitments are communicated to all involved	changes to commitments are made without review or involvement of the team							
57	Quality Assurance Approach	QA system established, followed, effective	procedures established, but not well followed or effective	no QA process or established procedures							
58	*Development Documentation	correct and available	some deficiencies, but available	nonexistent							
59	Use of Defined Engineering Process	development process in place, established, effective, followed by team	process established, but not followed or is ineffective	no formal process used							
60	Early Identification of Defects	peer reviews are incorporated throughout	peer reviews are used sporadically	team expects to find all defects with testing							
61	Defect Tracking	defect tracking defined, consistent, effective	defect tracking process defined, but inconsistently used	no process in place to track defects							
62	Change Control for Work Products	formal change control process in place, followed, effective	change control process in place, not followed or is ineffective	no change control process used							

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)						Risk Rank
					Low	Medium	High	Not Applic	Need Info	TBD	
63	Lessons Learned	Lessons learned and improvements made at milestones or phases	Lessons learned conducted, improvements not incorporatated	No lessons learned conducted, improvements not incorporated							
Development Environment											
64	Physical Facilities	little or no modification needed	some modifications needed; some existent	major modifications needed, or facilities nonexistent							
65	Hardware Platform	stable, no changes expected, capacity is sufficient	some changes under evolution, but controlled	platform under development along with software							
66	Tools Availability	in place, documented, validated	available, validated, some development needed (or minimal documentation)	unvalidated, proprietary or major development needed; no documentation							
67	Vendor Support	complete support at reasonable price and in needed time frame	adequate support at contracted price, reasonable response time	little or no support, high cost, and/or poor response time							
68	Contract Fit	contract with customer has good terms, communication with team is good	contract has some open issues which could interrupt team work efforts	contract has burdensome document requirements or causes extra work to comply							
69	Disaster Recovery	all areas following security guidelines; data backed up; disaster recovery system in place; procedures followed	some security measures in place; backups done; disaster recovery considered, but procedures lacking or not followed	no security measures in place; backup lacking; disaster recovery not considered							
Technology											
70	Technology Match to Project	technology planned for project is good match to customers and problem	some of the planned technology is not well-suited to the problem or customer	selected technology is a poor match to the problem or customer							
71	Technology Experience of Project Team	good level of experience with technology	some experience with the technology	no experience with the technology							
72	Availability of Technology Expertise	technology support and experts readily available	experts available elsewhere in organization	will need to acquire help from outside the organization							
73	Maturity of Technology	technology has been in use in the organization for quite some time	technology is well understood in the organization	technology is leading edge, if not "bleeding edge" in nature							
Deployment											

Generic Software Project Quality Standards for Risks

QS #	Quality Standards	Low Risk Cues	Medium Risk Cues	High Risk Cues	Rating (check one)					Risk Rank
					Low	Medium	High	Not Applic	Need Info	
74	Hardware Resources for Deliverables	mature, growth capacity in system, flexible	available, some growth capacity	no growth capacity, inflexible						
75	Response or other Performance Factors	readily fits boundaries needed; analysis has been done	operates occasionally at boundaries	operates continuously at boundary levels						
76	*Customer Service Impact	requires little change to customer service	requires minor changes to customer service	requires major changes to customer service approach or offerings						
77	Data Migration Required	little or no data to migrate	much data to migrate, but good descriptions available of structure and use	much data to migrate; several types of databases or no good descriptions of what is where						
78	Pilot Approach	pilot site (or team) available and interested in participating	pilot needs to be done with several sites (who are willing) or with one who needs much help	only available pilot sites are uncooperative or in crisis mode already						
79	External Hardware or Software Interfaces	little or no integration or interfaces needed	some integration or interfaces needed	extensive interfaces required						
Maintenance										
80	*Design Complexity	structurally maintainable (low complexity measured or projected)	certain aspects difficult to maintain (medium complexity)	extremely difficult to maintain (high complexity)						
81	*Support Personnel	in place, experienced, sufficient in number	missing some areas of expertise	significant discipline or expertise missing						
82	Vendor Support	complete support at reasonable price and in needed time frame	adequate support at contracted price, reasonable response time	little or no support, high cost, and/or poor response time						
		Total Categories	12							
		Total QS's	82							

Appendix B:
Project Evaluation Template
(at end of each project phase or at project closing)

Notes to Consultant

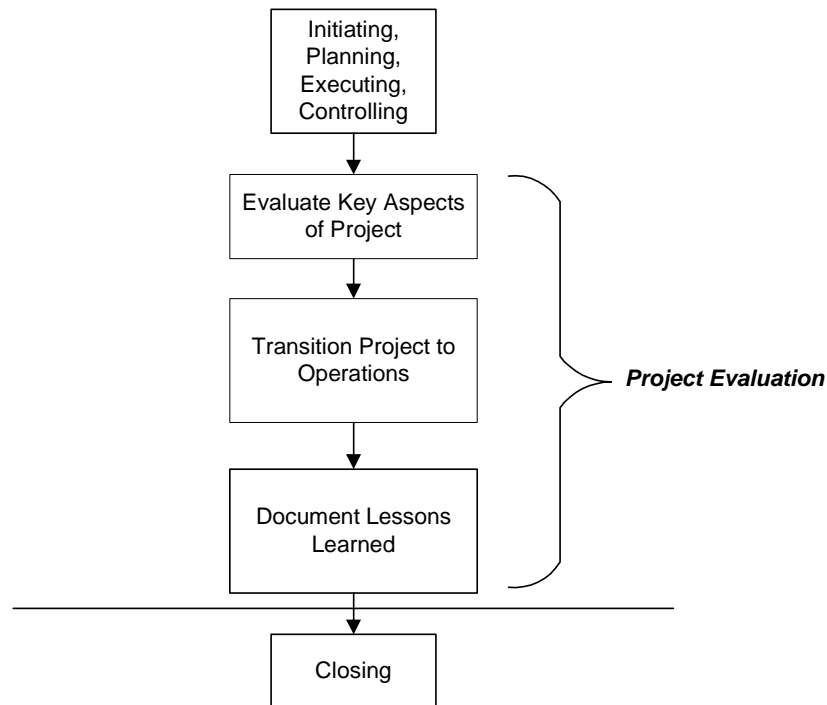
When delivering Quality Management Services (QMS), the Consultant may be authorized by the state to deliver Deliverable 2.6 Project Evaluation/Lessons Learned Report; typically at the end of each Project phase or at the close of the Project. This appendix provides a template for reference purposes.

If this template is used, a level of tailoring is generally expected based on project specifics and input from the Authorized Purchaser and state staff.

If this template is not used, the Consultant's template must be pre-approved by the state before use. Unless otherwise approved by the state, the Consultant's template must have contents that meet or exceed the level of contents described in this template.

Template for Deliverable 2.6 Project Evaluation/Lessons Learned Report

Approval Date: Month Day, Year



Purpose of the Document

The purpose of the Project Evaluation is to evaluate the project (at end of each project phase or at project closing), evaluate transition of the project to operations, provide a basis for feedback to the project team and management, and to document the lessons learned to improve the process and future project potential.

Template Instructions

This template contains suggested boilerplate language and assumes that the project will make appropriate additions, deletions, and changes for their specific needs.

- 1 Insert information between left and right brackets - <> and then Delete Brackets
- 2 Information in italics is additional template instructions. Delete all italicized instructions
- 3 In file on the menu go to properties and in the summary folder enter the document title and author (person or group)
- 4 If the document is longer than 5 pages, you should insert an automatic table of contents

Degree of Attainment of Business Objectives

Document how the project performed against each objective established in the Product Description and Integrated Project Plan.

<Objective n>

Degree of attainment of objective

Success Factors

Nature and causes of variances

<Objective n>

Degree of attainment of objective

Success Factors

Nature and causes of variances

Degree of Attainment of Budget Objectives

State the Planned Cost and Funding for the project, as approved in the Integrated Project Plan. State the Actual Cost and Funding at end of project phase or at completion. Document and explain all cost and funding variances, including approved changes to the cost baseline.

Expenditures (\$000)				
	Planned	Actual	Variance	Explanation
Internal Staff Labor				
Service				
Software Tools				
Hardware				
Materials and Supplies				
Facilities				
Telecommunications				
Training				
Contingency (Risk)				
Total				

Funding Source (\$000)				
	Planned	Actual	Variance	Explanation
General Fund				
Non-General Fund				
Federal				
Other				
Total				

Degree of Adherence to Schedule

Compare the approved schedule baseline against the actual completion dates. Document and explain any schedule variances, including approved changes to the schedule baseline

Degree of Satisfaction of User Requirements

Document any changes to the Requirements and their impact on Performance, Cost, or Schedule Baselines.

Degree of Realization of Anticipated Benefits (Business Case Realization)

Document the primary benefits the agency projected would be realized/attained (benefits or ROI Targets). Document whether those benefits were obtained (or are expected to be obtained) by the project.

Degree of Productivity Experienced

Indicate the productivity level of the project and factors that caused increased performance, as well as, decreased performance.

Degree of Delivery – Product Project Deliverable

List the major Project Deliverables and the date each was accepted by the user. Identify any contingencies or conditions related to the acceptance.

	Deliverable	Date Accepted	Contingencies or Conditions
1.			
2.			
3.			

Transition to Operations and Maintenance

Describe the plan for operation and maintenance of the product, good, or service delivered by the project below. In addition, state the projected annual cost to operate and maintain the product, good, or service. If the operation and maintenance plan is not in place, what is the target date for the plan and what is the impact of not having operations and maintenance for the product, good, or services in place.

Operations and Maintenance Plan

Define what will be maintained, who will be responsible for maintaining, how changes will be made to the application, how regular upgrades to software, utilities, and hardware will be prioritized, what business unit is responsible and any other service agreements. You may want to define what are “functionality enhancements”, “Operations enhancements”, “Defect enhancements” and “Emergency Fixes” and how these requests will be prioritized in the future.

Operations and Maintenance Cost

Expenditures (\$000)						
	Yr1	Yr2	Yr3	Yr4	Yr5+	Explanation
Internal Staff Labor						
Services						
Software Tools						
Hardware						
Materials and Supplies						
Facilities						
Telecommunications						
Training						
Contingency (Risk)						
Total						

Funding Source (\$000)						
	Yr1	Yr2	Yr3	Yr4	Yr5+	Explanation
General Fund						
Non-General Fund						
Federal						
Other						
Total						

Release of Project Resources

List the Resources used by the project. Identify to whom each resource was transferred and when it was transferred. Account for all project resources utilized by the project.

Resource (Describe or name the resource used)	Person or Organization Who Received Resource	Turnover Date
Project Team		
Customer Support		
Facilities		
Equipment		
Software Tools		
Other		

Transition of Project Documentation

Identify all project documentation materials stored in the project library or other repository. Identify the type of media used and the disposition of the project documentation (see Communications Plan).

Report(s) and Document(s)	Media Used	Storage Location	Disposition

Lessons Learned

Identify primary Lessons Learned. Lessons Learned should be stated in terms of Problems (or issues) and Corrective Actions taken. Site any references that provide additional detail. References may include project reports, plans, issue logs, change management documents, or Lesson-learned checklist.

	Statement of Lesson	References	Corrective Actions
1.			
2.			
3.			
4.			

Project (or Project Phase) Closeout Transition Checklist

Complete the Status and Comments column. In the Status column indicate: Yes, if the item has been addressed and completed; No, if item has not been addressed, or is incomplete; N/A, if the item is not applicable to this project. Provide comments or describe the plan to resolve the item in the last column.

	Item	Status	Comments/ Plan to Resolve
1	Have all the product or service deliverables been accepted by the customer?		
1.1	Are there contingencies or conditions related to the acceptance? If so, describe in the Comments.		
2	Has the project (or project phase) been evaluated against each objective established in the product description and Integrated Project Plan?		
3	Has the actual cost of the project (or project phase) been tallied and compared to the approved budget?		
3.1	Have all approved changes to the cost baseline been identified and their impact on the project documented?		
4	Have the actual milestone completion dates been compared to the approved schedule?		
4.1	Have all approved changes to the schedule baseline been identified and their impact on the project documented?		
5	Have all approved changes to the project requirement been identified and their impact on the performance, cost, and schedule baselines documented?		

6	Has operations management formally accepted responsibility for operating and maintaining the product(s) or service(s) delivered by the project?		
6.1	Has the documentation relating to operation and maintenance of the product(s) or service(s) been delivered to, and accepted by, operations management?		
6.2	Has training and knowledge transfer of the operations organization been completed?		
6.3	Has the projected annual cost to operate and maintain the product(s) or service(s) been approved and funded? If not, note and explain who is responsible to resolve.		
7	Have the resources used by the project been reassigned to other units or projects?		
8	Has the project documentation been archived or otherwise disposed as described in the project communication plan?		
9	Have the lessons learned been filed with the Project Management Office?		

Approvals

Position/Title	Signature/Printed Name/Title	Date
Project Manager		

Project Sponsor		
Agency IT Maintenance /Operations Manager		
Program/Agency Management		

Appendix C: QA Status and Improvement Report Template

Notes to Consultant

When delivering Quality Management Services (QMS), the Consultant may be authorized by the state to deliver Deliverable 4.1 Quarterly QA Status and Improvements Reports. In some projects, this deliverable may be more frequent than quarterly. If so, this deliverable may be renamed as needed.

If this template is used, a level of tailoring is generally expected based on project specifics and input from the Authorized Purchaser and state staff.

If this template is not used, the Consultant's template must be pre-approved by the state before use. Unless otherwise approved by the state, the Consultant's template must have contents that meet or exceed the level of contents described in this template.

In performing the work of Deliverable 4.1 Quarterly QA Status and Improvements Reports, the Consultant must attach completed OSCIO Project Assessment Report and Project Budget & Schedule Variance Report to this QA Status and Improvement Report. Format of these two OSCIO reports may not be altered by the Project, and the latest approved version of these reports must be used.

Template for Deliverable 4.1 QA Status and Improvements Reports

Period: Month/Year

	Low	Medium	High
Risk of Project Failure			

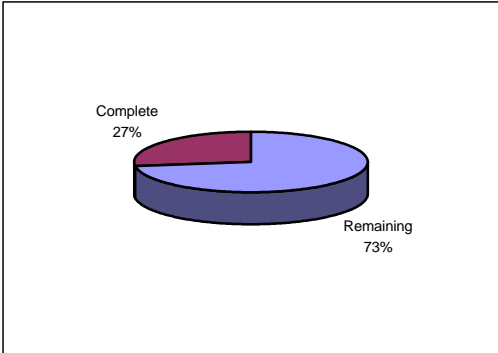
Note: Attach completed DAS OSCIO Project Assessment Report and Project Budget & Schedule Variance Report to this QA Status and Improvement Report. Format of these two DAS OSCIO reports may not be altered by the Project, and the latest approved version of these reports must be used. However, the format of this QA Status and Improvement Report may be customized to the needs of the Project, subject to the review and approval process specified in the QA Contract Statement of Work.

Summary

This section should provide a paragraph summary of the entire report. It should contain information such as; A brief description the primary achievement in the last period. A brief description of the highest ranked primary (if any) quality risks covered in the detail of the report. A brief description of the impact or consequence of the risk if left unresolved. This section should not be more than a 1/3 of this page.

The following section should start with a summary of the Current Progress followed by major milestones.

Current Progress

<p>Progress Point – Make specific progress point regarding schedule, and budget i.e., The project is on schedule</p>	
<p>Include a diagram as above that indicates % complete, % remaining. Following diagram provide more detail relating to any progress points made. At this time, resource usage, task completion and work remaining indicate the project is on schedule and can be completed on time and within planned budget.</p>	

Additional Progress point	Detail of Point.
Additional Progress point	Detail of Point.

Major Milestones – From <date to date>

<i>Abbreviated Major Milestone Title</i>	<i>Status or Milestone.</i>
<i>Abbreviated Major Milestone Title</i>	<i>Status or Milestone.</i>
<i>Abbreviated Major Milestone Title</i>	<i>Status or Milestone.</i>

Current Quality Risks – by Category

The following sections should be summary results of the risks from the Quality Control Audits, using the Quality Standard checklist’s quality categories.

- *Categories where no risks were identified should simply be indicated in one line, for example, Decision Drivers – no risks currently identified or not evaluated at this time.*
- *Categories which contained a significant risk should briefly describe the risk, describe the factors used to determine the risk, describe the potential impact, indicate the risk severity rating, and provide a recommended resolution strategy.*

Business Mission and Goals

	Low	Moderate	High
<i>High Risk Cue, i.e. Does not support or relate to customer organization mission or goals</i>	Risk		
	Risk: <Quality Standard Title>, i.e., Project Fit to Customer Organization. <i>Brief description of actual risk to project and current</i>		

	<i>condition.</i>
<i>Primary point</i>	Determining Factors: <i>Briefly describe what was assessed and what indicated the risk condition, refer to expert opinion, industry standard, statistics, internal opinion, or analysis, i.e. specific schedule analysis method.</i>
<i>Primary point</i>	Potential Impacts: <i>Briefly describe the likely risk consequence and probability of occurring.</i>
<i>Actual Rating</i>	Severity Rating: <i>Indicate reason for rating and direction rating is going (if possible), i.e. moderate moving towards severe, or moderate moving towards low.</i>
<i>Primary Point</i>	Resolution Strategy: <i>Describe the mitigation, contingency, or actions recommended to resolve or prevent the quality risk. Recommend person responsible to resolve and suggested time frame in which resolve.</i>

Repeat the above section for the following categories from the Quality Standards Control Checklist below.

- 1 Decision Drivers
- 2 Project Management
- 3 Project Parameters
- 4 Project Team
- 5 Organization Management
- 6 Customer/User
- 7 Product Content

- 8 Development Process
- 9 Development Environment
- 10 Technology
- 11 Deployment
- 12 Maintenance

Specific Project Risks (Including Risks Resolved Since Last Period)

<i>New Risk and Risk Rank</i>	Risk Status: <i>Brief description of status of actions taken on risk and results.</i>
<i>New Risk and Risk Rank</i>	Risk Status: <i>Brief description of status of actions taken on risk and results.</i>
<i>Previous Risk and Risk Rank</i>	Risk Status: <i>Brief description of status of actions taken on risk and results.</i>
<i>Previous Risk and Risk Rank</i>	Risk Status: <i>Brief description of status of actions taken on risk and results.</i>

List of Attachments

1. DAS OSCIO Project Assessment Report
2. DAS OSCIO Project Budget & Schedule Variance Report
3. etc.
4. etc.

Appendix D: QA Status and Improvement “Sample” Report

The intent of this Appendix is to provide an example to assist Consultant in creating a new document based on the standard template given in the previous appendix. All project data provided are fictitious and is for reference purposes only.

Note: Attach completed DAS OSCIO Project Assessment Report and Project Budget & Schedule Variance Report to this QA Status and Improvement Report. Format of these two DAS OSCIO reports may not be altered by the Project, and the latest approved version of these reports must be used. However, the format of this QA Status and Improvement Report may be customized to the needs of the Project, subject to the review and approval process specified in the QA Contract Statement of Work.

XYZ Project QA Status & Improvement Report

Period: January 2002

	Low	Medium	High
Risk of Project Failure		X	

Summary

The development team concluded Joint Application Development (JAD) sessions during the reporting period and delivered the draft requirement documents. Users have reviewed the requirements and provided feedback to the development team. In order to allow adequate time for revision and final review of the requirements the project team has agreed to extend the revision/review period. At this time it is believed this will not effect the final project dates. Risk identified last period associated with an informal communications structure has been mitigated. A risk associated with expectations for deliverable purpose and content was identified and resolved this period.

Current Progress

<p>The project is on schedule</p>	<div data-bbox="760 1423 1252 1770" data-label="Figure"> <table border="1"> <caption>Project Progress Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Complete</td> <td>19%</td> </tr> <tr> <td>Remaining</td> <td>81%</td> </tr> </tbody> </table> </div> <p>At this time, resource usage, task completion and work remaining indicate the project is on schedule and can be completed on time and within planned budget.</p>	Category	Percentage	Complete	19%	Remaining	81%
Category	Percentage						
Complete	19%						
Remaining	81%						

<p><i>Requirements review and revision time frame extended.</i></p> <p><i>Draft requirements produced and reviewed</i></p>	<p>The review and revision deadline for the requirement documents has been extended to assure that there is time to adequately review and revise these documents. The project team believe delay's created by extending the review/revisions cycle for the requirements document will not affect final project dates. We believe this extension will result in a higher quality deliverable that will benefit dall parties.</p> <p>The development team has completed and delivered the draft requirement documents (RAD's). The project has reviewed these documents and provided feedback to the development team. The development team is in the process of making changes to the requirements documents. Final requirement documentation should be complete in February.</p>
<p>Major Milestones</p>	
<p><i>Draft Requirements Document Delivered</i></p>	<p>The draft requirement documents (RAD) have been delivered by the project.</p>
<p><i>Requirements Document Reviewed by Project</i></p>	<p>The project has completed it's review of the requirement documents and provided feedback to the development team.</p>

Current Quality Risks – by Category

Risk discussed last period associated with an informal communications structure has been mitigated. One new risk associated with the expectations surrounding deliverables was identified and resolved this period.

1. Business Mission and Goals

	Low	Moderate	High
<p><i>Multiple demands on state resources</i></p> <p><i>Potential project delays</i></p> <p><i>Implement a standardized staffing</i></p>		<p>X</p>	
<p>Risk: As the Department is faced with multiple projects in 2001 - 2002, including TRACE construction, HIPAA mandates, MMIS replacement, and the department wide re-organization, there are potentially conflicting demands on department staff and management resources. Since these multiple projects are long-term in nature, this is likely an on-going risk for the duration of the project.</p> <p>Potential Impacts: If department staff and management availability is less than needed to meet the vendor's 52-week schedule, there may be project delays.</p> <p>Mitigating Strategy: Project Managers from each major project have adopted a standardized staffing matrix to assess risk and manage resources. The matrix can serve as a tool for the affected managers to</p>			

<i>matrix and regular communication and coordination across all projects</i>	meet regularly and coordinate the use of resources as efficiently as possible. The Project Managers should also use the matrix and the scheduled meetings to plan and manage their own availability. These meetings will be held monthly during the project's duration. However, as the state's involvement intensifies, the project managers may need to meet more often to ensure regular communication and coordination.
<i>Unknown at this time, but should be closely monitored</i>	Severity Rating: Until specific conflicts in state resources are identified, it is difficult to assign a severity rating. However, this risk should be closely monitored, as it is potentially long-term in nature and could adversely impact the schedule.
<i>No Current Risks</i>	No risk identified for this period.

2. Decision Drivers

<i>No Current Risks</i>	No risk identified for this period.
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3. Decision Drivers

<i>No Current Risks</i>	No risk identified for this period.
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4. Project Management

<i>No Current Risks</i>	No risk identified for this period.
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5. Project Parameters

	Low	Moderate	High
<i>52-week schedule appears to be aggressive</i>		X	
<i>Quality of final product may suffer</i>			
<i>Closely monitor project status and progress</i>			

Risk: The project plan identifies a 52-week project cycle, which appears to be aggressive for a project of this size.

Potential Impacts: Adequate time for all project activities, including state reviews, requirements definition and testing, are essential to ensuring the final product meets the state's business and user needs. By compressing the schedule, the quality of the final product may suffer.

Mitigating Strategy: Given the aggressive schedule, it is imperative that the project is monitored closely to ensure all major milestones, deliverables, and activities meet the state's requirements while adhering to the schedule. Any slippage in schedule or perceived quality of work will be evaluated and reported, including anticipated impacts.

<i>Potentially high - a realistic schedule is essential</i>	Severity Rating: Potentially high. A realistic schedule is critical to the overall success of the project.
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6. Project Team

<i>No Current Risks</i>	No risk identified for this period.
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7. Organization Management

<i>No Current Risks</i>	No risk identified for this period.
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8. Customer/User

<i>No Current Risks</i>	No risk identified for this period.
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9. Product Content

	Low	Moderate	High
		X	
<i>Miscommunication about expectations of deliverable purpose and content.</i>	<p>Risk</p> <p>Risk: With the release of the first project draft deliverable there was miscommunication about the purpose and content of the documents. Without some mitigation it is likely this miscommunication will repeat with each deliverable resulting in the impacts noted below.</p>		
<i>Potential impacts are project delay, deterioration of relationships and diminished quality of final product.</i>	<p>Potential Impacts: There are three significant <i>potential</i> impacts of this risk. The first potential impact is the delayed acceptance of deliverables and subsequent schedule slippage. The second potential impact is the deterioration of the relationship on the project as some believes the other failed to meet expectations regarding deliverables. The last potential impact is reduced quality of the final product (TRACE Data Warehouse) resulting from submission and acceptance of deliverables that do not adequately communicate user needs and proposed solutions to project.</p>		
<i>Agree to deliverable content before submission of draft deliverables</i>	<p>Mitigating Strategy: The project and the state should agree on deliverable format and content before construction of the actual deliverable begins. This generally takes the form of a detailed or annotated deliverable outline created by the development team and reviewed and approved by the project as a whole. The project has already agreed to such a plan.</p>		
<i>This risk is severe and the potential</i>	<p>Severity Rating: If left unmitigated this risk is severe. Its potential impact is great. Recognizing this project has already developed an</p>		

<i>impact is great but the Project Team have mitigated this risk.</i>	acceptable mitigation strategy. As long as the strategy is implemented we consider this risk closed. Further we commend both the project for recognizing this risk early and addressing it so quickly.
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10. Deployment

<i>No Current Risks</i>	No risk identified for this period.
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11. Development Process

<i>No Current Risks</i>	No risk identified for this period.
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12. Development Environment

<i>No Current Risks</i>	No risk identified for this period.
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13. Technology

<i>No Current Risks</i>	No risk identified for this period.
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14. Maintenance

<i>No Current Risks</i>	No risk identified for this period.
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Specific Project Risks (Including Risks Resolved Since Last Period)

Risk	Potential Impact	Recommended Strategy
Limited on-site development	Resulting system does not address unique requirements of Oregon	<ul style="list-style-type: none"> • Ensure users participating in JAD session have clear understanding of and clearly communicate requirements to the project. • Review and approve requirements document against user's stated requirements • Require incremental prototypes of the system for review and approval by state • Perform rigorous user acceptance testing • Ensure SOW addresses each milestone/deliverable with adequate review time for the state • Require regular progress reports against milestones and hold the development team accountable

		<ul style="list-style-type: none"> • Perform on-site visits in Atlanta
Multiple commitments on behalf of the development team' Project Manager	Project drifts without full-time PM	<ul style="list-style-type: none"> • Monitor the project for a 100% commitment by the development team' Project Manager

List of Attachments

- OSCIO Project Assessment Report
- OSCIO Project Budget & Schedule Variance Report

Appendix E:

- DAS OSCIO Project Assessment Report (Version 2.2)
- DAS OSCIO Project Budget & Schedule Variance Report (Version 2.0)

Notes to Consultant

When delivering Quality Management Services (QMS), the Consultant may be authorized by the state to deliver Deliverable 4.1 Quarterly QA Status and Improvements Reports. In performing the work of Deliverable 4.1, the Consultant must attach completed OSCIO Project Assessment Report and Project Budget & Schedule Variance Report.

Format of these two OSCIO reports may not be altered by the Consultant or agency management and are subject to revision by OSCIO only. The latest version of these as approved by OSCIO must be used.

**Project Assessment Report
Version 2.2**

To ensure a consistent reporting approach and terminology used across IT projects and across agencies statewide, this template must be used for quarterly reporting without modification.

Note that Items (1a) through (1e) will be reported from two perspectives: "rear view" and "forward view". Rear view refers to project status to date. "Forward view" refers to expectations in the future. Items (2a) through (2d) and Items (3a) through (3b) will be reported in the context of the "forward view" only.

Project Name:			
Agency Name:			
Person completing this form and affiliation:			
Date of completing this form:			
Technology Description			
Platforms:			
% custom:			
Funding Description			

		Rating	Rating	Explanation	Rating Scale^
1	Overall Project Health	(rear view)	(fwd view)		Red, yellow, green*
1a	Total Cost (Budget)				Red, yellow, green*
1b	Schedule				Red, yellow, green*
1c	Scope				Red, yellow, green*
1d	Resource				Red, yellow, green*
1e	Deliverables (Work Products) Quality				Red, yellow, green*
2	Overall Delivery Risk				high, medium, low*
2a	Technology	N/A			high, medium, low*
2b	Financial & Business Case	N/A			high, medium, low*
2c	Business Transition	N/A			high, medium, low*
2d	Funding	N/A			high, medium, low*
3	O&M Risk				
3a	Long-Term Supportability	N/A			high, medium, low*
3b	Long-Term Maintainability	N/A			high, medium, low*

Notes:

^ See attached description of scale.

* Explanation not required when "green" or "low".

1a Total Cost (Budget)

Green = actual is (is expected to be) at or under approved budget baseline, as reported on Project Variance Report.

Yellow = actual is (is expected to be) within 0 to 15% above approved budget baseline, as reported on Project Variance Report.

Red = actual is (is expected to be) more than 15% above approved budget baseline, as reported on Project Variance Report.

1b Schedule

Green = project completion is (is expected to be) at or before approved schedule baseline, as reported on Project Variance Report.

Yellow = project completion is (is expected to be) delayed with project duration 0 to 15% above approved schedule baseline, as reported on Project Variance Report.

Red = project completion is (is expected to be) delayed with project duration more than 15% above approved schedule baseline, as reported on Project Variance Report.

1c Scope

Green = all deliverables fulfill (are expected to fulfill) stated requirements.

Yellow = at least one deliverables does not fulfill (is not expected to fulfill) stated requirements.

Red = more than one deliverables do not fulfill (are not expected to fulfill) stated requirements.

1d Resource

Green = All resources needed by internal and contractor staff are (are expected to be) available.

Yellow = Almost all resources needed by internal and contractor staff are (are expected to be) available.

Red = Almost all resources needed by internal and contractor staff are (are expected to be) unavailable.

1e Deliverables (Work Products) Quality *(Work Products include all planning and design artifacts.)*

Green = All deliverables are (are expected to be) "fit to use".

Yellow = at least one deliverables is (is expected to be) not "fit to use".

Red = more than one deliverable is not (is not expected to be) "fit to use".

2a Technology

Low = all technology employed (including development and testing tools) are stable.

Medium = almost all technology employed (including development and testing tools) are stable.

High = Almost all technology employed (including development and testing tools) are unstable.

2b Financial & Business Case

Low = there is no reason to think that the original business case & ROI targets (if exist) cannot be achieved.

Medium = there is some reason to think that the original business case & ROI targets (if exist) cannot be achieved.

High = there are many reasons to think that the original business case & ROI targets (if exist) cannot be achieved.

2c Business Transition

Low = Business transition and disruption are well planned with few surprises to business operations expected.

Medium = Business transition and disruption are planned, but surprises to business operations are expected.

High = Business transition and disruption are not planned with surprises to business operations expected.

2d Funding

Low = All future tasking requires resources that are expected to be available.

Medium = Almost all future tasking requires resources that are expected to be available.

High = Almost all future tasking requires resources that are expected to be unavailable.

3a Supportability *(work required to ensure proper operation of specified system functions)*

Low = All aspects of the IT investment are supportable in the long-run.

Medium = Most aspects of the IT investment are supportable in the long-run.

High = Many aspects of the IT investment are not supportable in the long-run.

3b Maintainability *(work required to enhance specified system functions)*

Low = All aspects of the IT investment are maintainable in the long-run.

Medium = Most aspects of the IT investment are maintainable in the long-run.

High = Many aspects of the IT investment are not maintainable in the long-run.

**Project
Variance
Report
(Version 2.3)**

Budget Variance											
Current Budget Variance						Projected Budget Variance at Completion					Comments
Project	Report as of Date	Actual Expenditures	Planned Expenditures	Variance Amount	Variance Percentage	Date Baseline Occurred	Baseline Budget	Estimate At Complete	Variance Amount	Variance Percentage	
Project A				\$ -	0%				\$ -	0.0%	
Project B				\$ -	0%				\$ -	0.0%	
Project C				\$ -	0%				\$ -	0.0%	
Project D				\$ -	0%				\$ -	0.0%	

Budget Variance Key	
	At or under Original or Re-baselined Cost Estimate
	Within 0-15% of Original or Re-baselined Cost Estimate
	More than 15% of Original or Re-baselined Cost Estimate

Schedule Variance											
Current Schedule Variance						Projected Schedule Variance at Completion					Comments
Project	Project Start Date	Actual Date	Earned Date	Variance Amount (Days)	Variance Percentage	Date Baseline Occurred	Baseline End Date	Projected End Date	Variance Amount (Days)	Variance Percentage	
Project A				0	0%				0	0.0%	
Project B				0	0%				0	0.0%	
Project C				0	0%				0	0.0%	
Project D				0	0%				0	0.0%	

Schedule Variance Key	
	At or under Original or rebaselined schedule
	0-15% of Original or rebaselined schedule
	More than 15% of Actual or Baseline Date