



OAKS Quality Management Plan

Prepared

for

The State of Ohio

OAKS Project

Prepared By

Accenture

September 26, 2005

This page intentionally left blank

Document Information

Edition Information:	Type of Document:	Project Plan - Quality
	Status of Document:	<i>Final</i>
	Effective Date:	<i>9/26/2005</i>
	Document File Name:	<i>PM132 OAKS Quality Management Plan</i>
	Document File Location:	<i>In BI Designer at: OAKS\Cabinets\Project Management\Working Deliverables\Deliverable 9</i>
Document Control:	Title of Document:	<i>OAKS Quality Management Plan</i>
	Program Name:	<i>OAKS</i>
	Originator:	<i>Andrew W. Gordon</i>
Contact Information:	Author:	<i>Andrew W. Gordon</i>
	Phone:	<i>614-387-3001</i>
	E-mail Address:	<i>Andrew.gordon@oaks.state.oh.us</i>

Record of Review and Changes

Person	Date	Version	Description of Change
Andrew Gordon	8/5/2005	1.0	Document Created
Andrew Gordon	8/26/2005	1.1	Applied updates submitted by Sheryl Harrington
Andrew Gordon	9/9/2005	1.2	Document finalized and submitted to client
Andrew Gordon	9/22/2005	1.3	Update document with state's feedback

Embedded Deliverable Tracking Form:

1. Keep this embedded form updated as the deliverable winds its way through the deliverable process.
2. This form is to be updated every time this deliverable is submitted for a review (peer review, management review, quality team lead review, etc.)
3. To update this form, double click on the embedded file below, make your updates, click the save button, then close the file.



"Document
Deliverable Tracking

Table of Contents

1	INTRODUCTION	1
1.1	DOCUMENT OVERVIEW	1
1.2	PURPOSE AND SCOPE	1
1.3	PLAN AND/OR PROCESS DEPENDENCIES	1
1.4	RESPONSIBILITY FOR THE QUALITY MANAGEMENT PLAN	1
1.5	REFERENCED DOCUMENTS.....	1
2	QUALITY MANAGEMENT ROLES AND RESPONSIBILITIES	1
2.1	CLIENT QUALITY MANAGEMENT ASSESSMENT PARTNER (CQMA) – <i>KENNETH MITCHELL</i>	2
2.2	QUALITY PROCESS IMPROVEMENT LIAISON (PIL) – <i>JOHN KIM</i>	2
2.3	OAKS QUALITY LEAD (STATE).....	2
2.4	OAKS QUALITY LEAD (ACCENTURE) – <i>ANDREW GORDON</i>	3
2.5	PROJECT TEAM LEADS	3
2.6	PROJECT TEAM MEMBERS.....	3
3	ORGANIZATIONAL QUALITY & PROCESS IMPROVEMENT.....	4
3.1	ACCENTURE USA GOVERNMENT OPERATING UNIT QPI PROGRAM	4
3.2	ACCENTURE DELIVERY METHODS (ADM).....	4
3.3	CAPABILITY MATURITY MODEL	5
3.3.1	<i>CMMI Level 2</i>	5
3.3.2	<i>CMMI Level 3</i>	6
3.3.3	<i>CMMI Level 4</i>	8
3.4	IMPLEMENTING THE QPI INITIATIVES	9
4	OAKS PROJECT QUALITY AND PROCESS IMPROVEMENT.....	10
4.1	PROJECT MANAGEMENT	10
4.1.1	<i>Client Quality Management Assessment</i>	10
4.1.2	<i>Objectives of the CQMA</i>	10
4.1.3	<i>CQMA Process</i>	11
4.2	CLIENT SATISFACTION SURVEY.....	11
4.2.1	<i>Objective of CSS</i>	11
4.2.2	<i>CSS Process</i>	11
4.3	PROJECT OPERATIONS.....	11
4.3.1	<i>Work Products Reviewed</i>	11
4.3.2	<i>Types of Reviews</i>	13
	STEP ONE: INITIAL WORK PLANNING.....	19
	STEP TWO: PREPARE FOR REVIEW (TEAM REVIEW ONLY)	20
	STEP THREE: CONDUCT REVIEW	20
	STEP FOUR: DOCUMENT REVIEW.....	21
	STEP FIVE: PERFORM RE-WORK AND UPDATE FEEDBACK FORM.....	22
	STEP SIX: SUBMIT FEEDBACK.....	23
	STEP SEVEN: GATHER FEEDBACK	23
5	COMPLIANCE.....	24
5.1	COMPLIANCE INTERVIEWS	24
6	OAKS DELIVERABLE PROCESS	24

6.1	DELIVERABLE OVERVIEW	24
6.2	DELIVERABLE PHASES (ANNOTATED OUTLINE, DRAFT, AND FINAL)	25
6.3	THE DELIVERABLE SCHEDULE	25
6.4	OAKS SYSTEM INTEGRATION DELIVERABLES	26
6.4.1	<i>Change Management Deliverables</i>	26
6.4.2	<i>Planning Phase Deliverables</i>	26
6.4.3	<i>Design Phase Deliverables</i>	27
6.4.4	<i>Build/Configure Phase Deliverables</i>	27
6.4.5	<i>Testing Phase Deliverables</i>	28
6.4.6	<i>Deployment Deliverables</i>	29
6.4.7	<i>Production Support Deliverables</i>	29
6.5	THE DELIVERABLE PROCESS	30
6.6	DELIVERABLE PROCESS AIDS	38
7	OAKS PROJECT QUALITY METRICS	40

Table of Figures

FIGURE 1 - PPQA PROCESS	13
FIGURE 2 - THE PEER REVIEW PROCESS	19
FIGURE 3 - THE DELIVERABLE PROCESS	30

Table of Tables

TABLE 1 - CMMI LEVEL 2 PAS	5
TABLE 2 - CMMI LEVEL 3 PAS	6
TABLE 3 - CMMI LEVEL 4 PAS	8
TABLE 4 - USA GOVERNMENT OPERATING UNIT QPI INITIATIVES SCHEDULE	9
TABLE 5 – DOCUMENT DELIVERABLE REVIEW GUIDELINES	12
TABLE 6 - SOFTWARE REVIEW GUIDELINES	12
TABLE 7 - DELIVERABLE PROCESS AIDS	39



1 Introduction

1.1 Document Overview

The purpose of the Quality Management Plan (QMP) is to provide a framework through which quality processes will be established and maintained throughout the life of the OAKS project.

1.2 Purpose and Scope

The QMP is a project-level document that describes all OAKS quality activities, either in detail or by referencing the document that describes those activities in detail. The QMP leverages the capabilities of the Accenture USA Government Operating Unit Quality and Process Improvement (QPI) Team. The QMP applies to all persons working on the OAKS Project, including the project manager, project team leads, and other team members.

1.3 Plan and/or Process Dependencies

The information contained in the OAKS quality plan both affects and is affected by the following project plans and processes.

- OAKS project work plan (the client refers to all project plans (risk, issues, records, configuration, scope management plans) as the work plan – a single document)
- OAKS project measurement plan

Changes to these and the OAKS quality plan will need to be reviewed for impacts to the dependent plans and processes.

1.4 Responsibility for the Quality Management Plan

The Accenture quality lead is responsible for creating and maintaining this document. There is a State quality manager counterpart that will also have authority regarding the content of this plan. This quality plan is written as a separate document from the state's quality management plan due to the unique requirements of the Accenture Quality Process Improvement (QPI) program.

1.5 Referenced Documents

The following documents are referenced in this plan:

- Work plan (Records Management Plan)
- Project measurement plan
- Project deliverable schedule

2 Quality Management Roles and Responsibilities



Adherence to quality standards and practices is the responsibility of all members of the OAKS project. More specifically, the standards, processes, and procedures outlined in this plan depend on the support and cooperation of certain key players on the OAKS project. The following lists the roles and responsibilities of key players in the OAKS quality management process:

2.1 Client Quality Management Assessment Partner (CQMA) – *Kenneth Mitchell*

The CQMA Partner is an Accenture partner external to the OAKS project, assigned to provide independent oversight of the OAKS project system integration execution (from Accenture's perspective). The CQMA partner provides feedback to the Accenture OAKS engagement partner. The OAKS CQMA partner is Kenneth Mitchell. The CQMA partner does the following.

- Meet quarterly with the Accenture OAKS engaging partner to receive a cost and schedule status report on the OAKS project
- Provide feedback and recommendations based on CQMA's past experience or best practices from similar Accenture engagements

2.2 Quality Process Improvement Liaison (PIL) – *John Kim*

The OAKS quality PIL is assigned by the Accenture quality leadership to provide oversight of the day-to-day execution of the quality processes on OAKS. The OAKS PIL is John Kim (john.g.kim@accenture.com). The PIL is responsible for the following activities:

- Provide the OAKS quality lead with all resources required to implement Capability Maturity Model – Integrated (CMMI) Level 4 processes on the OAKS project (see Section 3.3.3)
- Verify that the Accenture team implements and uses Accenture Delivery Methods (ADM) on OAKS (see Section 3.2)
- Meet once a month with the Accenture OAKS quality lead, and project team members to do the following:
 - Conduct best practice reviews (see Section 4.3.2.4.1)
 - Conduct QPI interviews (see Section 5)
 - Conduct Product and Process Quality Assurance (PPQA) reviews (see Section 4.3.2.4)
 - Gather, analyze, and provide feedback on monthly metrics submission
 - Provide follow up compliance audit reports to OAKS project team leads and senior leadership
 - Provide training to OAKS project members on the core QPI curriculum:
 - Requirements management
 - Configuration management
 - Peer reviews
 - Using Data (metrics analysis and reporting)

2.3 OAKS Quality Lead (State)

The OAKS State quality lead is responsible for the following activities:



- Complete deliverable checklist
- Ensure timely review and acceptance of deliverables
- Prepare Agenda for QMT meetings
- Lead QMT meetings
- Coordinate with the Accenture quality lead on executing quality plan processes
- Provide input to Accenture quality lead on the Quality Management Plan

2.4 OAKS Quality Lead (Accenture) – Andrew Gordon

The OAKS Accenture quality lead is responsible for the following activities:

- Write and maintain the OAKS quality management plan
- Provide a quality review of all document deliverables submitted for project management approval (see Section 6.5)
- Create and maintain the deliverable schedule (see Section 6.3)
- Create and maintain all deliverable process aids and checklists (see Section 6.6)
- Design, develop, and implement the following processes
 - Risk management process
 - Issues management process
 - Metrics gathering, analysis and reporting
 - Peer review process
 - Deliverable process
- Conduct periodic random audits to ensure all quality processes are being followed
- Serve as project point of contact for all CMMI and QPI related issues – liaison to the project PIL, supporting all PIL activities (see Section 2.2)

2.5 Project Team Leads

The OAKS project team leads are responsible for the following activities:

- Provide oversight, and management review of all deliverables submitted to the client
- Participate in peer reviews and software walkthroughs
- Assist engaging partner in preparing for CQMA reviews
- Participate in monthly QPI best practice reviews
- Provide process improvement feedback to OAKS quality lead

2.6 Project team members

The OAKS project team leads are responsible for the following activities:

- Become familiar with all project quality initiatives by reading the quality plan
- Follow all processes defined for peer reviews and document deliverables
- Provide input and feedback to quality leads to support continuous process improvement



3 Organizational Quality & Process Improvement

3.1 Accenture USA Government Operating Unit QPI Program

This section contains a discussion about the Accenture USA Government Operating Unit QPI initiative as well as CMMI Level 4 compliance and how it relates to the OAKS project. **While this section discusses Accenture USA Government Operating Unit quality programs, it is anticipated that all OAKS team members will follow the USA Government Operating Unit QPI approach as implemented on the OAKS Project.**

Accenture Policy 0011 states that the QPI methodology will be rolled out to all systems development projects. This policy requires that:

- Programs/Projects follow the USA Government Operating Unit methodology described in the Accenture Delivery Methods (ADM) and use tailoring guidelines.
- Peer reviews are implemented on all projects. Work products to be peer reviewed include designs, code, scenarios, scripts, deliverables, and test cases.
- Programs/projects develop training plans for program/project personnel to augment Accenture and market unit training.
- Program/project management identifies key peripheral groups that affect program outcomes and work with them to assure successful delivery.
- Program/project teams use the USA Government Operating Unit approach to developing the program metrics. The USA Government Operating Unit metrics plan describes the overall approach for identifying, collecting, and analyzing delivery metrics.

The Accenture QPI team is tasked with ensuring that all Accenture engagements adhere to the standards set for quality. The QPI team is a unit within Accenture tasked with supporting all QPI activities. The project PIL represents the QPI team on OAKS. The mission of the QPI Team is to enable the USA Government Operating Unit to deliver high quality client service by developing, maintaining, and deploying best practices, methodologies, tools, and knowledge capital using the CMMI framework for process improvement. The benefits of implementing this program include reduced risk and increased productivity through shorter delivery cycles, reduced costs, and higher quality work products.

The USA Government Operating Unit uses a combination of ADM and other packaged software methodologies to accomplish the QPI goals. For the OAKS project, the packaged tools will be the ADM. CMMI calls for a Software Engineering Group (SEG) and Software Engineering and Process Group (SEPG). The OAKS Program Management Office (PMO) has identified the Technical Team as the SEG and the QPI Team as the SEPG for this project. Therefore, this plan will refer to QPI and Technical Team to remain consistent with OAKS terminology.

3.2 Accenture Delivery Methods (ADM)

The Accenture Delivery Methods (ADM) serves as a proprietary source of the Accenture USA Government Operating Unit required methodology resources. The ADM is an integrated web enabled application that provides a one-stop shop for all Accenture system integration activities. This includes documented processes, procedures, checklists, templates, and other resources to support all phases of the Software Life Cycle (SLC), and project management. While ADM is an



Accenture proprietary tool that has evolved over the last 20 years, it will be shared with the various sub-contractors working on the Accenture team.

There are many different versions of ADM, each specific to the kind of project engagement. For OAKS, the version of ADM being used is ADM for PeopleSoft implementation. ADM can be accessed through BI Designer.

All Accenture engagements are required to use ADM for project management and all SLC activities.

3.3 Capability Maturity Model

The CMMI is a framework representing a path of improvements recommended for system organizations that want to increase their system process capability. The OAKS project intends to focus on Level 2, 3, and 4 process areas as outlined by the USA Government Operating Unit QPI methodology. The PIL will conduct Process and Product Quality Assurance (PPQA) process reviews using the best practices matrix to determine the OAKS project's level of CMMI compliance. Since the Accenture Government Operating Unit has been certified CMMI Level 4, all best practices will be assessed using level 4 criteria.

3.3.1 CMMI Level 2

CMMI Level 2 compliance requires that basic project management and organizational processes be established and followed. In addition, Level 2 requires that the necessary process discipline be in place to repeat earlier successes on projects with similar applications. Discipline helps ensure that existing practices are retained during times of stress. Also, to achieve CMMI Level 2 compliance, the status of activities and work products must be visible to management at defined points. Table 1 describes the Performance Activities (PAs) for Level 2.

Table 1 - CMMI Level 2 PAs

	Process Area	Purpose	Source Document
Level 2			
1	Requirements Management	To manage the requirements of the project's products and product components and to identify inconsistencies between those requirements and the project's plans and work products	Requirements Management Plan Release 1 Functional Requirements Compliance Matrix
2	Project Planning	To establish and maintain plans that define project activities	Work Plan Global Estimating Model (GEM) summaries Estimating Worksheets



3	Project Monitoring and Control	To provide understanding into the project's progress so that appropriate corrective actions can be taken when the project's performance deviates significantly from the plan	Monthly Project Status Metrics Workbook Risk Dispersion Chart
4	Measurement and Analysis	To develop and sustain a measurement capability that is used to support management information needs	Work Plan Monthly Project Status
5	Process and Product Quality Assurance	To provide staff and management with objective insight into the processes and associated work products	Best Practice Workbook PPQA Review Reports Metrics Workbook
6	Configuration Management	To establish and maintain the integrity of work products using configuration identification, configuration control, configuration status accounting, and configuration audits	Configuration Management Plan (Work Plan)
7	Supplier Agreement Management	To manage the acquisition of products and services from suppliers external to the project for which there exists a formal agreement	Supplier Master Agreement

3.3.2 CMMI Level 3

Level 3 compliance requires that the software system process for both management and engineering activities is documented, standardized, and integrated into an organization-wide software process. Furthermore, all projects use a documented and approved version of the organization's process for developing and maintaining systems. Table 2 describes the PAs for Level 3.

Table 2 - CMMI Level 3 PAs

	Process Area	Description	Source Document
Level 3			
8 (con't from Level 2 Table)	Organization Process Focus	To establish and maintain an understanding of the organization's processes and process assets, and to identify, plan, and implement the organization's process improvement activities	USA Government Operating Unit Quality Process and Improvement Plan
9	Organization Process	To establish and maintain a usable set of organizational process assets	USA Government Operating Unit Quality



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

	Process Area	Description	Source Document
Level 3			
	Definition		Process and Improvement Plan
10	Organizational Training	To develop the skills and knowledge of people so they can perform their roles effectively and efficiently	QPI Training Plan, MyLearning.com
11	Integrated Project Management	To establish and manage the project and the involvement of the relevant stakeholders according to an integrated and defined process that is tailored from the organization's set of standard processes	Work Plan (Project Plan)
12	Risk Management	Purpose is identify potential problems before they occur, so that risk-handling activities may be planned and invoked as needed across the life-cycle to mitigate adverse impacts on achieving objectives	Risk Management Plan (Work Plan)
13	Decision Analysis and Resolution	To make decisions using a structured approach that evaluates identified alternatives against established criteria	Work Plan (Project Plan)
14	Requirements Development	To produce and analyze customer, product, and product component requirements	Requirements Management Plan (Work Plan)
15	Technical Solution	To develop, design, and implement solutions to requirements. Solutions, designs and implementations encompass products, product components, and product related processes either singly or in combinations, as appropriate	Technical Proposal
16	Product Integration	To assemble the product from the product components; ensure that the product, as integrated, functions properly; and deliver the product	Product Test Models and Scenarios, Scripts, Technical Proposal
17	Verification	To assure that selected work products meet their specified requirements	Work Plan (Quality Plan) Peer review checklist
18	Validation	To demonstrate that a product of product component fulfills its intended use when placed in its intended	Work Plan (Quality Plan) Component Test Plan



	Process Area	Description	Source Document
Level 3			
		environment	Test Approach
19	Integrated Teaming	To form and sustain an integrated team for the development of work products	Work Plan (Project Plan) Roles and Responsibilities OAKS Orientation Binder
20	Organizational Environment for Integration	To provide an Integrated Project and Process Development (IPPD) infrastructure and manage people for integration	USA Government Operating Unit Quality Process and Improvement Plan

3.3.3 CMMI Level 4

At maturity level 4, an organization has achieved all the specific goals of the process areas assigned to maturity levels 2, 3, and 4 and the generic goals assigned to maturity levels 2 and 3. Sub-processes are selected that significantly contribute to overall process performance. These selected sub-processes are controlled using statistical and other quantitative techniques.

Quantitative objectives for quality and process performance are established and used as criteria in managing processes. Quantitative objectives are based on the needs of the customer, end users, organization, and process implementers. Quality and process performances are understood in statistical terms and are managed throughout the life of the processes.

For these processes, detailed measures of process performance are collected and statistically analyzed. Special causes of process variation are identified and, where appropriate, the sources of special causes are corrected to prevent future occurrences.

Quality and process performance measures are incorporated into the organization's measurement repository to support fact-based decision making in the future.

A critical distinction between maturity level 3 and maturity level 4 is the predictability of process performance. At maturity level 4, the performance of processes is controlled using statistical and other quantitative techniques, and is quantitatively predictable. At maturity level 3, processes are only qualitatively predictable.

Table 3 - CMMI Level 4 PAs

	Process Area	Description	Source Document
Level 4			
21 (con't)	Organization Process	To establish and maintain a quantitative understanding of the performance of the	OAKS Work Plan



	Process Area	Description	Source Document
Level 4			
from Level 2 Table)	Performance	organization's set of standard processes in support of quality and process-performance objectives, and to provide the process performance data, baselines, and models to quantitatively manage the organization's projects.	
22	Quantitative Project Management	To quantitatively manage the project's defined process to achieve the project's established quality and process-performance objectives.	OAKS Project Measurement Plan

3.4 Implementing the QPI Initiatives

The QPI team is responsible for developing and maintaining the standard process improvement methodology for the USA Government Operating Unit. To ensure full compliance with the methodology, program/project teams must execute all processes and complete all program/project management deliverables using the document templates in ADM. However, a waiver process exists to enable program/project teams to exclude, amend, or supplement elements of ADM to better suit their needs. Additionally, if a standard USA Government Operating Unit methodology does not exist for a particular type of development effort, programs/projects are required to forward any common or tailored product templates and processes to the QPI Team for consideration to be included in future releases of ADM. Also, these programs/projects are encouraged to use any applicable ADM templates to capitalize on past program/project successes, leverage existing templates, and minimize developing new products from scratch.

Table 4 shows a table that should be included in each project's project plan detailing when the QPI team rolled out the USA Government Operating Unit QPI methodology to the specific project:

Table 4 - USA Government Operating Unit QPI Initiatives Schedule

USA Government Operating Unit QPI Initiatives	Responsibility	Date Completed
Start to create Project Plans (Work Plan)	OAKS Accenture quality lead	July 29 2005
Assign the QPI Liaison	QPI Team	June 1 2005
Provide tools to the project	QPI Team	July 15 2005
Provide project documentation to QPI Liaison	OAKS Accenture quality lead	Oct 1 2005
Schedule kickoff meeting	OAKS Accenture quality lead	July 22, 2005
Conduct internal kickoff meeting	QPI Liaison/ Accenture quality lead	Sept 8, 2005



Conduct project-wide kickoff meeting	QPI Liaison/ Accenture quality lead	TBD
Conduct CMMI awareness training	QPI Liaison/ Accenture quality lead	Ongoing
Conduct best practices reviews	QPI Liaison/QM/Project Team Leads	Ongoing
Prepare project management (PM) PPQA review reports	QPI Liaison/ Accenture quality lead	Ongoing
Submit draft copy of project management plan (Work Plan)	Accenture quality lead	July 29, 2005
Produce first QPI progress report	QPI Liaison	Ongoing
Submit final project management plan (Work Plan)	OAKS PM	TBD

4 OAKS Project Quality and Process Improvement

4.1 Project Management

Project management focuses on client-facing quality activities. These activities are centered on meeting and exceeding client expectations, via CQMA, and the Client Satisfaction Survey (CSS).

4.1.1 Client Quality Management Assessment

The CQMA is a formal review of a client engagement by an experienced Accenture team that is external and objective to the engagement. The primary purpose of the review is to verify that each client engagement is progressing based on client expectations, will bring business value to the client, and will deliver the solution on time and within budget according to the approved project plans.

4.1.2 Objectives of the CQMA

The objectives of the CQMA process are as follows:

- To define clearly the roles and responsibilities of persons involved in the CQMA process
- To identify issues or areas for improvement through a comprehensive review process based on Accenture's standard methodology
- To ensure the engagement takes effective corrective actions to address the issues or areas for improvement
- To enable management to review the project status at any time by accessing a common, global repository
- To enable the analysis of CQMA data to improve the project's business practices



4.1.3 CQMA Process

The CQMA process verifies that the engagement is doing the “Right Thing” in the “Right Way” to achieve the “Right Results” for the State of Ohio and Accenture. The process emphasizes proactive follow-up and corrective action to resolve issues efficiently and effectively and implement improvements. The CQMA process is discussed in Accenture “Policy 17–Client Service Quality Management” which establishes and mandates the use of CQMA reviews. This policy may be found at <http://policies.accenture.com>.

4.2 Client Satisfaction Survey

The CSS is conducted annually. It is a formal Accenture survey given directly to the customer by the Accenture Marketing Department. The primary purpose of the CSS is to measure and quantify client expectations and satisfaction.

4.2.1 Objective of CSS

The objectives of the CSS process are:

- To measure overall client satisfaction
- To compare OAKS client satisfaction versus other Accenture projects (both government and non-government)
- To identify areas the OAKS Project can improve
- To allow the customer a formal outlet to provide feedback

4.2.2 CSS Process

Every year, the Accenture Marketing Department will distribute the survey to all OAKS PMO staff and management. Once complete, the customer will return it to the Marketing Department. Accenture will then interpret the results and report the findings to the OAKS Program Management Office.

4.3 Project Operations

While project management focuses on client-facing quality activities, project operations focus on day-to-day system development quality activities. These activities are centered on deliverable, work product, and software-related work product reviews (software related work products are the artifacts created as required in the ADM methodology. The OAKS project has two types of work products to be reviewed: document deliverables and software related work products (code, designs, etc.). The first group includes the majority of documentation. These will be subjected to peer reviews, quality reviews and state reviews. The second type to be peer reviewed is software related work products. These artifacts will be subjected to peer reviews. Management reviews of software related work products are optional.

4.3.1 Work Products Reviewed

4.3.1.1 Deliverable Reviews



OAKS documentation deliverables are required to go through the reviews shown in the following table. The deliverable process is detailed in section 6 of this document.

Table 5 – Document Deliverable Review Guidelines

Deliverable Review		
Reviews	Deliverables	Internal Documentation
Interim Review (w/ client)	M	N/A
Supervisory Review	M	M
Peer Review	M	O
Quality Review	M	O
Table Key		
Mandatory	M	
Optional	O	

4.3.1.2 Software Reviews

OAKS deliverables and key work products typically go through the reviews shown in Table 6. Reviews normally increase the amount of time required to produce the work products. Consequently, all document timelines should include time for each of the reviews when projecting their completion dates. The following table is a guide to work products that will require the various review processes.

Table 6 - Software Review Guidelines

Software Review		
Reviews	Deliverable (e.g. design)	Work Product (e.g. module design packet)
Client Review	M	O
Management Review	M	--
Supervisory Review	--	M
Peer Review	M*	M*
Table Key		
Mandatory	M	
Optional	O	

Note: M* - The project manager will decide the percentage of development artifacts.



4.3.2 Types of Reviews

4.3.2.1 Client Reviews

A formal client review is recommended for all designs. State personnel will be working closely with Team Accenture during the design process; therefore, few edits should be needed.

4.3.2.2 Supervisory Reviews

The developer's immediate supervisor will inspect software designs and modules. Supervisors should be involved throughout the peer review process.

4.3.2.3 Management Reviews

After the software related work products have been through peer and supervisory reviews, the management review will ensure the product fulfills requirements and quality standards.

4.3.2.4 Process and Product Quality Assurance (PPQA) Review

Process and Product Quality Assurance (PPQA) is a process, which ensures the OAKS work products, project management processes, high-level development processes, and day-to-day practices conform to the project's documented processes and standards. The primary targets of the PPQA process are project management and development. PPQA, when applied consistently at all levels of the project, can have a profound impact on the consistent use of standard practices and the take-up of new processes.

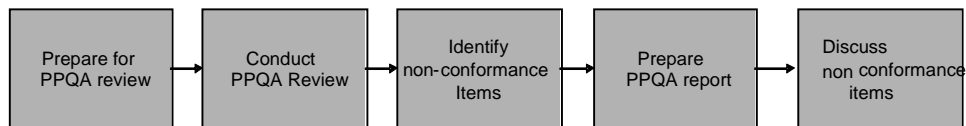


Figure 1 - PPQA Process

4.3.2.4.1 PPQA Purpose

The purpose of this PPQA plan is to independently verify and validate (IVV) that activities and work products are executed and developed according to project documented processes and standards. This plan is designed to verify compliance to OAKS processes and standards, communicate non-compliance items to senior management, recommend corrective action and facilitate follow-up of all identified non-compliance items. PPQA also allows for process improvement and learning.

PPQA activities are planned. The OAKS project plan and the OAKS work plan reflect PPQA activities for OAKS. They allow for adequate resources and assign responsibilities. This process is iterative, which must be continually executed, evaluated, and enhanced, in order to effectively add value to the OAKS Project.



Adherence of work products and activities to the applicable standards, procedures, and requirements is verified objectively. The key words here are "activities" and "objectively". The PPQA reviewer is responsible to help verify that the project-defined standards are enabling the overall success of the OAKS project.

The PPQA reviewer (the project PIL will conduct all PPQA reviews) informs affected groups and individuals of all activities and results. Results of PPQA reviews are shared with everyone who is affected by the results: the author, project manager, program management office, the project partner, and the project PIL. The results include the documented findings of the PPQA reviewer, as well as the documented actions that will be taken to address non-conformance items found.

Non-compliance items that cannot be resolved by the OAKS project team are addressed by senior management. When issues arise with executing the program/project according to plan, or with a change in the assumptions upon which the plan was built, they must be addressed. The OAKS project leaders and the PPQA reviewer must agree on a resolution to any non-compliance item discovered in the PPQA review. Items that cannot be resolved at the project leader level are escalated to senior management for resolution. By having a formal escalation policy and defining time boxes for responses, sensitive issues are more likely to be dealt with before a crisis occurs.

The overriding goal of the PPQA plan is to ensure OAKS project team members satisfy our client quality expectations and meet the obligations and objectives identified in the OAKS contract and Project Plan. Our ability to deliver quality services is central to that end.

As the name implies, there are two kinds of PPQA reviews: process, and product. A product PPQA Review is when the work product/deliverable owner provides the PPQA reviewer with a hard copy or electronic copy of the work product/deliverable and asks the reviewer to submit problems documented directly on the PPQA report. After reviewing the feedback received from the reviewer, the work product/deliverable owner will determine if a meeting is necessary to clarify any identified problems. The PPQA reviewee is responsible for closing out the PPQA report. The Accenture quality lead will verify that all PPQA findings are resolved.

Process PPQA Review – A best practices review is a process PPQA Review. The project's PIL will typically perform a best practices review on the project's project, risk, quality, measurement, and configuration management plans. A best practices review is a review of project processes that should be in compliance with standards in place through the USA GOU QPI team. The USA GOU QPI team is committed to providing support and guidance on USA Government Operating Unit policies, standards, methodologies, templates and tools. This review ensures that projects deliver high quality client service by developing, maintaining and deploying best practices, methodologies, tools and knowledge capital using the CMMI framework. This review ensures that projects maintain 100% compliance with Accenture Policy (AP) 0011, plus the USA Government Operating Unit (GOU) policy addendum. Accenture Policy 0011 describes the USA GOU's commitment to quality and process improvement using the CMMI framework and outlines the business practices that the USA GOU QPI Program rolls out to USA GOU projects.

4.3.2.4.2 PPQA Roles and Responsibilities



The PPQA schedules for deliverables may be found in the deliverable schedule. To obtain a copy of the deliverable schedule, contact the OAKS quality lead.

Project Managers

- Review all PPQA review non-compliance issues and ensure corrective action on all identified non-compliance issues
- Prepare for Client Quality Management Assessment (CQMA) reviews and implement any specified corrective action
- Use PPQA reports to gain visibility into project
- Resolve escalated issues
- Ensure team members are knowledgeable of CQMA and PPQA concepts and techniques and that they are applied to project activities
- Prepare and conduct performance evaluations of team leads

OAKS Quality Leads

- Coordinate PPQA reviews
- Schedule best practice Reviews/compliance interviews
- Follow up to ensure all best practice review findings are followed up and closed out
- Ensure the definition and maintenance of all OAKS development processes and standards
- Look for continuous improvement opportunities in PPQA process. All suggestions and recommendations should be forward to the project PIL.

QPI Liaison/PPQA Reviewer

- Conduct best practice reviews/compliance interviews and submit findings to project teams leads and the project manager
- Verify that standards are in place and can be used for the review
- Review the following:
 - Project management deliverables
 - Software engineering deliverables (sample of 100% team lead-reviewed work)
- Record all non-conformance items in the PPQA Report
- Discuss report results with deliverable/process owner
- Escalate issues to project partner/AP as appropriate
- Verify that all non-conformance issues are resolved and documented in the PPQA report (date completed)

4.3.2.5 Peer Reviews

Peer reviews ensure OAKS work products, project management processes, high-level development processes, and day-to-day practices conform to the project's documented processes and standards. Peer reviews, when applied consistently at all levels of the project, can have a profound impact on the consistent use of standard practices and the take-up of new processes.



4.3.2.5.1 Peer Review Purpose

An essential element in a sound quality management program is work product and deliverable review. A review is a pre-submission examination of artifacts (or work product) by a source outside that which developed the artifact. Peer reviews apply to **ALL** work products not just deliverable documents. The following are examples of items that are subject to the peer review process.

- Deliverable documents – such as an interface design description
- Project plans – such as this, the quality management plan
- Software design work products – Such as a data mapping scheme to support data conversion
- Source code
- Test scripts and test cases

Peer reviews differ from PPQA reviews in that they are performed by members—other than the deliverable or work product owner—of the same team as the deliverable or work product owner. PPQA Reviews are performed by the PIL.

Peer reviews can be conducted either by an individual reviewing an artifact or a team reviewing one or more artifacts.

- Generally, team reviews occur more often with work products because most work products are collaborative products, while individual reviews occur more often with deliverables
- Team reviews are also more incisive and bring a broader variety of expertise to bear on the work product(s) under review

Furthermore, Peer reviews are required for CMMI Level 4 compliance. Peer review participants should include anyone who has a vested interest in this work product and how it interacts with other system components.

Both individual and team reviews follow the same general steps and both can be used for either deliverables or work product reviews.

4.3.2.5.2 Peer Reviews Roles and Responsibilities

After preparing for the Peer review, the project needs to conduct the Peer review using the technique identified during planning. The main purpose of this step is to recommend changes to the deliverable/work product as noticed by peer reviewer(s). The review is recommended to be conducted **15 work days** prior to due date.

For development efforts, all requirements, design, code, and testing work products will be peer reviewed. All requirements, design and code work product peer reviews must be peer reviewed and documented using the Peer review feedback forms.



There are two types of Peer reviews: facilitated and unfacilitated. The facilitated peer review meeting technique is when the work product/deliverable owner and all the peer reviewer(s) meet either face-to-face or via a conference call and discuss the work product/deliverable to identify and document problems. The peer reviewer(s) read the work product, criteria, and standards and prepare comments before the meeting; however, they may not document all problems or issues in the peer review feedback form. The problems are documented on the peer review feedback form either during the meeting or afterwards by the recorder or other designee.

The unfacilitated peer review technique is when the work product/deliverable owner provides the peer reviewer(s) with a hard copy or electronic copy of the work product/deliverable and asks the reviewer to submit problems either documented directly on the work product/deliverable or on a peer review feedback form. Only peer reviewer(s) that are qualified and understand the material to be reviewed should conduct in an unfacilitated peer review. After reviewing the feedback received from the reviewer(s), the work product/deliverable owner will determine if a meeting is necessary to clarify any identified problems. The deliverable/work product owner is responsible for documenting or referencing problems on the peer review feedback form.

Roles and responsibilities for the facilitated peer review meeting technique are as follows:

The deliverable/work product owner responsibilities include:

- Initiate peer reviews
- Determine the format for the peer review. Complex work products typically require facilitated peer reviews. High visibility work products should also be subjected to facilitated peer reviews
- Participate in the peer review discussion
- Clarify deliverable questions
- Document time spent on peer review
- Provide feedback on peer review process regarding improvements, and changes to the team lead or project manager
- Appoint facilitator and a meeting recorder

The Facilitator responsibilities include:

- Facilitate the peer review process
- Keep review focused on deliverable/work product not on the owner
- Organize logistics of the peer review
- Examine the review materials before the review
- Confirm that all issues have been documented and measurements have been collected from the participants
- Confer with participants to schedule time for a follow up review session, if needed
- Provide feedback on peer review process regarding improvements and changes to the team lead or project manager

The meeting recorder responsibilities include:

- Document problems (errors and defects) in the peer review feedback form.
- Deliver the peer review feedback form to the deliverable/work product owner.



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

- Provide feedback on peer review process regarding improvements and changes to the team lead or project manager.

The peer reviewer(s) responsibilities include:

- Provide recommendations, comments, and changes to the deliverable/work product using the peer review criteria.
- Provide constructive criticism on the deliverable/work product being reviewed.
- Follow the rules and directives of the facilitator.

Roles and Responsibilities for the unfacilitated peer review technique are as follows:

The deliverable/work product owner responsibilities include:

- Clarify deliverable questions with peer reviewer as necessary.
- Document problems (errors and defects) in the peer review feedback form.
- Document time spent on peer review in the peer review feedback form.
- Provide feedback on peer review process regarding improvements and changes to the team lead or project manager.

The peer reviewer(s) responsibilities include:

- Provide recommendations, comments, and changes to the deliverable/work product using the peer review Criteria.
- Provide constructive criticism on the deliverable/work product being reviewed.
- Contact peer reviewee to discuss disagreements (if necessary). If a resolution cannot be reached with the peer reviewee, escalate issue to the project manager.
- Provide feedback on peer review process regarding improvements and changes to the team Lead or project manager.

Note that only peer reviewer(s) that are qualified and understand the material to be reviewed should conduct an unfacilitated peer review. Other roles and responsibilities involved in the peer review process are as follows:

Project Team Leads

- Review all peer review non-compliance issues and ensure corrective action on all identified non-compliance issues
- Prepare for CQMA reviews and implement any specified corrective action
- Use peer review Metrics to gain visibility into project
- Resolve escalated issues
- Act on peer review metrics, as appropriate
- Ensure team members are knowledgeable of CQMA and peer review concepts and techniques and that they are applied to project activities
- Prepare and conduct performance evaluations of team leads

OAKS Quality Lead



- Establish the overall project schedule and associated peer review components
- Ensure the definition and maintenance of all OAKS development processes and standards
- Participate in the peer reviewer process to verify quality of all deliverables before submission to the State

Quality PIL

- Gather and implement process feedback
- Maintain peer review results and update peer review Plan with metrics collected from reviews
- Verify peer review metrics, and provide support for the metrics gathering, analysis and reporting processes
- Look for continuous improvement opportunities in peer review process

4.3.2.5.3 Peer Review Process Steps

The following steps characterize the core requirements of the formal peer review process:

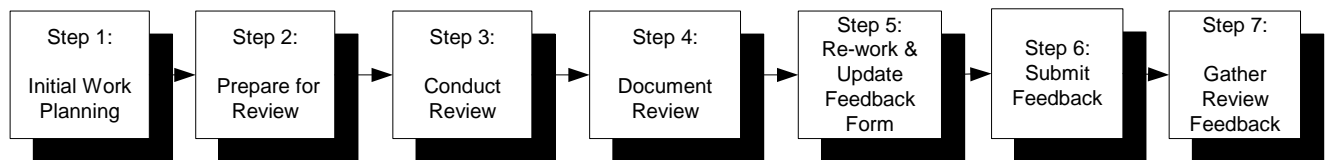


Figure 2 - The Peer Review Process

Step One: Initial Work Planning

Determine Review Assignments

Responsible Agent: *Project Manager (may be delegated to Project Team Lead)*

Description:

Preparing for the formal review requires that the project manager:

- Determine which artifacts must be reviewed
- Determine which will be individual and which team reviews
- Create a schedule for those reviews, establish logistics, and identify and contact the participants
- Track the percentage of peer reviews documented to demonstrate compliance with guidelines below
- Determine and denote which peer reviews are to be documented
- Maintain a work product peer review schedule for that project to collect and array such data



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

- Assign persons and dates for deliverable peer reviews and provide them to the quality lead that will record them in the project deliverable schedule.

General planning guidelines:

- One hundred percent (100%) of project deliverables will be peer reviewed
- One hundred percent (100%) of work products will be peer reviewed
- One hundred percent (100%) of project deliverable peer reviews will be documented
- Sixty percent (60%) of development work product peer reviews will be documented
- Twenty-five percent (25%) of sustainment work product peer reviews will be documented
- Peer reviewers should be anyone with a vested interest in the work product moving on to the next stage of development and could include the functional architect, technical architect, database administrator, or an owner from the previous development stage. team leads are responsible for determining who should appropriately be involved with the peer review at the various stages
- The reviewer should not, if possible, be a supervisor of the document owner, but must possess skills needed to evaluate the deliverable and recommend changes

Inputs:	Outputs:
✓ OAKS project schedule/work plan	✓ Updated deliverable schedule
	✓ Work product peer review schedule

Step Two: Prepare for Review (Team Review Only)

Responsible Agent: *All Project Team Members*

Description:

Once a team member learns he or she is to be a reviewer, he or she will plan his or her schedule accordingly. For team reviewers, once they receive the artifact to be reviewed (and any supporting documentation), they should become familiar with its contents and record any questions or issues that surface. Using the appropriate peer review criteria checklist as a preliminary guide will help prepare them for the actual team review discussion. The reviewer is responsible for:

- Examining the review materials before the review session
- Identifying potential questions

Inputs:	Outputs:
✓ Deliverable schedule	✓ Preliminary review of artifacts
✓ Peer review schedule	✓ Questions & comments

Step Three: Conduct Review

Responsible Agent: *Reviewer or Team Review Facilitator*



Description:

The artifact owner will supply the reviewer or review team with appropriate artifact material to review. An individual reviewer will use the appropriate peer review criteria checklist to examine details of the artifact. Find peer review criteria checklists at the following path in BI Designer: OAKS\Cabinets\Project Management\Quality\Deliverable Process Aids.

Within the peer review criteria checklist the reviewer will use the appropriate tab: Requirements Review, Functional Design Review, Detailed Design Review, Source Code Review, Testing Review, Training Review, or Deliverable Review.

Additional steps for team/facilitated peer review

Reviewer responsibilities:

- Determine the logistics of the review
- Facilitate the review process
- Confirm that all issues have been documented
- Confer with participants to schedule time for a follow up review session if needed
- Capture required peer review feedback form data
- Provide feedback on how to improve the review process

The team review facilitator must set goals before the review process begins. These goals create a target team members can attain and set achievable objectives against which performance can be measured. These targets differ depending on the work product. For example:

- Those work products created by someone with less experience than others should have a higher percentage of their work products reviewed
- Also, a cross-selection of the given work product should be chosen for review, incorporating small, medium, and large work products as well as those with variable complexity. This variety creates a cross-section that will accurately reflect how effective the review process is working. These data are then used to tweak the review process to maximize effectiveness

All participants should conscientiously recommend changes to the product as needed. Be sure to describe the review session and reference any issues resulting from the peer review in the peer review feedback form.

The reviewer must ensure the artifact meets the peer review criteria as outlined in the appropriate peer review criteria checklist.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Artifact ✓ Questions and comments ✓ Peer review criteria checklists 	<ul style="list-style-type: none"> ✓ Errors to be captured in peer review Feedback form ✓ Rescheduled review session (if required)

Step Four: Document Review

Responsible Agent: Reviewer



Description:

The peer reviewer selects the appropriate peer review form. Template peer review feedback forms are found at the following location in BI Designer *OAKS\Cabinets\Project Management\Quality\Peer Reviews*.

The reviewer should review the instructions tab on the feedback form before filling in the data (When opening the Form, click on “Enable macros”). Then complete these steps:

- Go to the “feedback form” tab and fill in the peer review General Information section (Part I). You must complete all red-asterisked items or the form will not save. Click on the respective white data box and a pop-up box will explain the nature of the data requested. More information about each field can be found in the “Instructions” tab
 - **NOTE: “Date Completed” should be the date the review is actually held and completed, not the date the final resolution is updated. Subsequent resolutions of issues or problems saved again into the Form will not change that “Date Completed.” The “Date Completed” date is the date that will complete the file name of the Form and must not be changed**
 - Any issues or problems noted in the review should be listed as “Open” until they are resolved or rejected. Note especially the caution about the “Status” column in Step Five below
- Using the peer review Problem Details section (Part IV), the peer reviewer or facilitator will enter all issues, problems, defects, risks, and action items the review found. Again, fill all red-asterisked columns. The form automatically calculates document number of problems by type and severity. Hovering over the yellow header for each column generates a pop-up box with details about the data requested
- Go to the Comments section (Part III) and add any necessary comments
- Go to the top of the Feedback page and select “Save” (The spreadsheet will name the file appropriately based on the information previously entered into the Admin tab section and automatically save the Form to the appropriate shared drive folder)

Inputs:	Outputs:
✓ Review results	✓ Completed, stored peer review feedback form

Step Five: Perform Re-work and Update Feedback Form

Responsible Agent: Deliverable/Work Product Owner

Description:

Performing the re-work in an accurate manner is as important as the review itself. The work product owner must review the recommended changes and fix the defects accordingly. Record peer review resolutions and how long modifications took in the peer review feedback form.

The re-work and update portion of this process is an iterative one, repeating until all issues, problems, *et al.* are resolved.



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

IMPORTANT: The “Status” column must reflect the condition of the review item in question, i.e., “open,” “closed,” or “rejected.” As you update the peer review with issue/problem resolutions, you must select the appropriate drop-down selection to reflect its status.

NOTE: If an item is “rejected,” its data will not be used in the calculation that populates Part II (Part II’s resulting data will be uploaded to the monthly Measurement Workbook).

Inputs:	Outputs:
✓ Completed peer review	✓ Corrected/modified peer review problems/issues ✓ Modified feedback form

Step Six: Submit Feedback

Responsible Agent: Reviewer/Facilitator

Description: Before saving the completed peer review feedback form, the peer reviewer should print a copy of the form for future reference (“Print” button is at the top right-hand corner of the feedback form tab). Save completed peer review feedback forms. When the Reviewer clicks the “Save” button on the feedback form (*top left-hand corner of the feedback form tab*, the program will automatically save the completed form in the appropriate sub-folder of the respective review folder at *I:\peer reviews*.

Inputs:	Outputs:
✓ Completed peer review feedback form	✓ Saved peer review feedback form

Step Seven: Gather Feedback

Responsible Agent: Reviewer/Facilitator

Description:

- Part of the ongoing process improvement activities for OAKS requires we gather metrics. Desirably, all reviews will:
- Familiarize all team members with a valuable, consistent review process
- Improve their ability to evaluate others’ work objectively
- Instruct reviewers about other work in progress and broaden their view of the overall project
- Reviewing the recommended changes and monitoring the status of defects, enable the OAKS quality lead to recognize inefficiencies and parts of the processes prone to error

The peer reviewer/facilitator should note ideas and team suggestions about how to make the review process more effective and send any process suggestions or corrections to the quality lead so we can improve the flow and clarity of the process.

Inputs:	Outputs:
✓ Completed Review Process	✓ Review improvement feedback



5 Compliance

5.1 Compliance Interviews

At various times during the project, the quality lead or PIL will conduct compliance interviews to measure how well the processes in place are being followed. The quality lead or the PIL or both will choose interview topics. Each project within the OAKS project will participate with a randomly chosen sample representation. Interviews will last approximately 15-20 minutes and will consist of a variety of questions concerning the processes and procedures of the given topic for the month. Interviewer(s) will interview each person separately.

Upon completion, whoever was in charge of conducting the interviews (PIL or quality lead) will document the findings in a word document distributed to those team leads affected by the results. This document should summarize the findings by each question asked. From this document, the action item list is created that identifies the following:

- All non-compliance items that were discovered
- Which project is affected
- A recommended solution to the non-compliance item
- An action item owner who is responsible for fixing the non-conformance item or items

The purpose of the Action Item Spreadsheet is to create a documentation trail of the interviews and to be able to track until closure all non-conformance items discovered. Findings are communicated to project management through the Quality Management Monthly Report.

6 OAKS Deliverable Process

6.1 Deliverable Overview

Deliverables are any document, work product, or milestone delivered to the client that fulfills specific contract requirements. In this context, a deliverable can be a design document, a software installation, or a memo specifying the successful conclusion of a milestone activity. This section of the quality management plan outlines the specific process that the Accenture team will use to create and deliver routine project plans, SLC, and change management documents called for in the OAKS system integrator's Request For Proposals (RFP).

OAKS will be delivered to the client over 4 major implementations, or "Go Live" dates.

- Go Live #1 – July 2006
- Go Live #2 – Oct 2006
- Go Live #3 – July 2007
- Go Live #4 – Jan 2008

All deliverables will be stored and developed in their respective Working Deliverables folder in BI Designer. Once a deliverable has been completed and submitted to the client (Final), a copy of the final deliverable will be placed in the respective Final Deliverable folder. Please reference the OAKS Records Management Plan (*OAKS\Cabinets\Project Management\Final*



Deliverables\Deliverable 9) to see how deliverables will be stored and processed in BI Designer.

6.2 Deliverable Phases (Annotated Outline, Draft, and Final)

All OAKS deliverables (documents) will be completed in three phases: annotated outline, draft, and final. The annotated outline is the initial outline of the deliverable. This document will be shared with the State upon completion, in order to obtain the client's buy-in for our proposed deliverable content. The annotated outline, at the very least, will contain the deliverable's proposed table of contents, and in each content section, present a brief synopsis of that section's content. The annotated outline must be completed and submitted to the client no later than 60 working days prior to the deliverable's due date, or on demand by the client. Further details on how annotated outline are handled can be found in Section 6.5.

The draft is the working version (or in process version) of the deliverable. They are the in process of being written and are under the exclusive control of the deliverable author. The OAKS quality management team and the State must review the draft version of the deliverable before the final version can be submitted. The draft deliverable must be labeled draft in the document footer and in the document information box.

The final is the official version of the deliverable that will be submitted to the client in order to satisfy our contractual obligations.

6.3 The Deliverable Schedule

To support a smooth and efficient delivery process, the OAKS quality lead will create and maintain a deliverable schedule. The purpose of the deliverable schedule is to maintain a list of all deliverables we are on contract to provide, and to keep track of certain important dates, such as dates to submit the deliverable outline for review, dates for peer review, and the deliverable final due date. More specifically, the deliverable schedule will contain the following information.

- A list of deliverables due to the client, organized by go live milestones
- Deliverable draft outline date due to client (while the RFP states that the contractor must submit an annotated outline on demand, we will maintain in the schedule a date to deliver the outline whether or not the client asked for it. Furthermore, regardless of this date, we will submit an outline to the client, upon request, whether this date is before or after the draft due date)
- Deliverable peer review due date
- Deliverable quality assurance review due date
- Deliverable draft review date due to client
- Deliverable final date due to client
- Deliverable owner
- Deliverable peer reviewer
- Deliverable acceptance date (date the deliverable was accepted by the client)
- Deliverable comments

The deliverable schedule will reside in BI Designer in the following location:

OAKS\Cabinets\Project Management\Quality\Deliverable Schedule



All deliverable owners and their respective team leads should view the deliverable schedule to see when their deliverables are due and plan accordingly.

6.4 OAKS System Integration Deliverables

OAKS deliverables can be broken up into the following categories:

- Change Management Deliverables
- Planning Phase Deliverables
- Design Phase Deliverables
- Construct Phase Deliverables
- Testing Phase Deliverables
- Implementation Phase Deliverables
- Maintenance and Support Deliverables

The following is a list of deliverables that fall within the scope of activities outlined in this deliverable process.

6.4.1 Change Management Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
Functional Training to Agency Implementation Team Members	Deliverable 1
Agency Communication Programs	Deliverable 2
Workforce Transition Methodology/ Strategy Document	Deliverable 3
Train-the-Trainer Programs	Deliverable 4
Business Process Reengineering	Deliverable 5
Benefits Reconciliation Report	Deliverable 6
Agency Impact Summary Report	Deliverable 7

6.4.2 Planning Phase Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
Work Breakdown Schedule (WBS)	Deliverable 8
Work Plan	Deliverable 9



Work Product/ Review Package	OAKS Project Deliverable Number
Kick-Off Meeting	Deliverable 10
Formal Training of OAKS PMO Staff	Deliverable 11
End-User Training Needs Assessment and Audience Analysis Document	Deliverable 12
Infrastructure Specifications	Deliverable 13
Initial Environment Setup	Deliverable 14
COTS Software Installation	Deliverable 15

6.4.3 Design Phase Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
System / Subsystem Design Description	Deliverable 16
Database Design Description	Deliverable 17
Interface Design Description	Deliverable 18
Coding Structure and Data Standards Document	Deliverable 19
Security Procedures Document	Deliverable 20
Requirements Traceability Matrix	Deliverable 21
Curriculum Design Document	Deliverable 22
Instructional Design Portfolio	Deliverable 23

6.4.4 Build/Configure Phase Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
-------------------------------------	--



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

Work Product/ Review Package	OAKS Project Deliverable Number
Software Configuration	Deliverable 24
Data Warehouse Configuration	Deliverable 25
Conversion Plan	Deliverable 26
Conversion Software	Deliverable 27
Conversion Testing	Deliverable 28
System Test Plan	Deliverable 29
Unit Test Certification	Deliverable 30
System Acceptance Test Plan	Deliverable 31
Performance Test Plan	Deliverable 32
User Acceptance Test Plan	Deliverable 33
Content Drafts	Deliverable 34
Finalized Drafts and Media Components	Deliverable 35
System Installation Plan	Deliverable 36
System Transition Plan	Deliverable 37
Business Continuity Plan	Deliverable 38
System Administrator Manual	Deliverable 39
Help Desk Implementation Plan	Deliverable 40
Help Desk Implementation	Deliverable 41

6.4.5 Testing Phase Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
Testing Environment Setup	Deliverable 42



Work Product/ Review Package	OAKS Project Deliverable Number
System Acceptance Test Readiness Review	Deliverable 43
System Acceptance Test	Deliverable 44
Performance Test	Deliverable 45
User Acceptance Test Readiness Review	Deliverable 46
User Acceptance Test	Deliverable 47

6.4.6 Deployment Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
Completed Courseware	Deliverable 48
Live Environment Setup	Deliverable 49
Data Conversion	Deliverable 50
System Implementation Readiness Review	Deliverable 51
Go Live	Deliverable 52
Off-Site Environment Migration	Deliverable 53

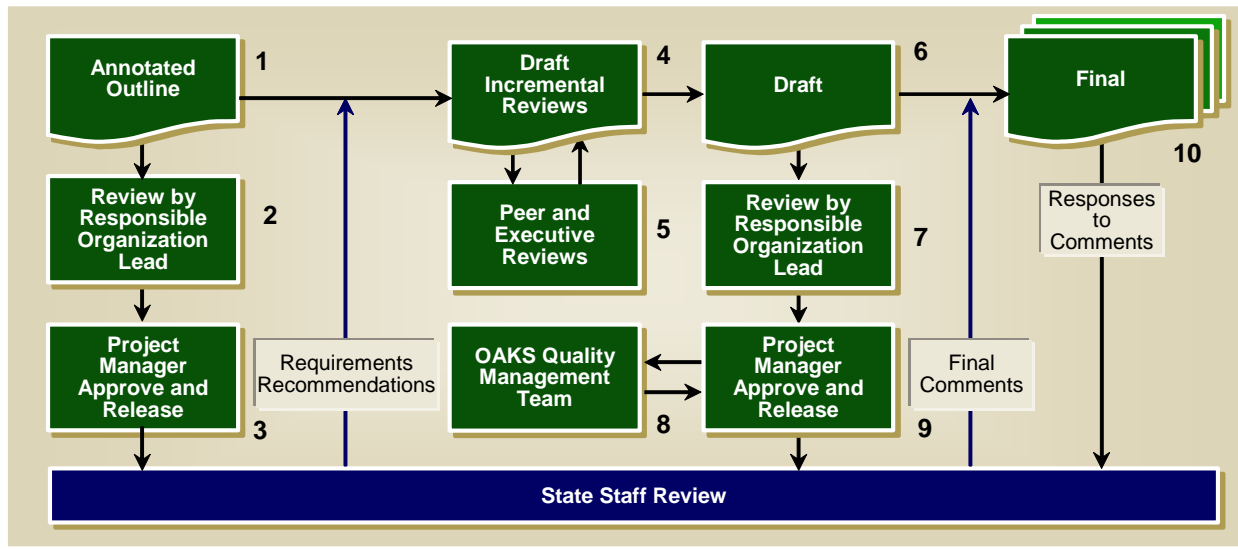
6.4.7 Production Support Deliverables

Work Product/ Review Package	OAKS Project Deliverable Number
Environment Support	Deliverable 54
Post Implementation Support	Deliverable 55
Upgrade Evaluation	Deliverable 56
Project Close Out	Deliverable 57



For details on deliverable specifications and requirements can be found in the system integrators RFP which can be found at (OAKS\Cabinets\Project Management\Library\Project Orientation).

6.5 The Deliverable Process



OAKS 313

Figure 3 - The Deliverable Process

The deliverable process is a ten-step routine that all OAKS deliverables must follow. The deliverable process is an iterative exercise designed to obtain “buy-in” from the client so that the final deliverable (of which the submission is a formal contractual requirement) meets or exceeds the State of Ohio’s expectations.

This deliverable process is designed primarily to support document deliverables, however, many of the precepts presented in this deliverable process should be applied to all deliverables, such as milestone readiness review meetings, and software components. For example, software design work products (designs and source code) should follow the peer review process to ensure quality. And all deliverables must go through at least two sets of reviews before submission to the client.

Step One: Create Deliverable Annotated Outline

Responsible Agent: Deliverable Owner

Description:

This is the first step in the deliverable process. The deliverable owner must do the following:



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

- Locate and download the deliverable template from BI Designer. The deliverable template is used as the standard document template for all deliverables (documents) submitted to the State
- Name the document template file using the following OAKS file naming standard:
 - OAKS # - Deliverable Name GL #".ext, where OAKS # is the designated deliverable number as assigned by the State in the System Integrator RFP, the deliverable name is the name specified in the RFP, GL # is the Go Live release sequence number, and ext is the appropriate file extension. For example, the 2nd go live Database design description would be named: **OAKS 17 – Database Design Description GL 2.doc**. One time deliverable submission will not need a go live number. For example the work plan would be: OAKS 9 – Work Plan.doc
- If the deliverable document has been submitted before
 - Download a read-only copy of the latest version of the relevant deliverable from the Final Deliverable folder in BI Designer.
 - Be sure to read the client's comments on previous deliverable submissions if you are creating a new version of a deliverable that was previously submitted (for example, if you are working on the go live 2 Interface Design Description, be sure to look at all client comments on the go live 1 Interface Design Description)
- Save the renamed Document Template or the deliverable copy in the Working Deliverable folder in BI Designer designated for your deliverable
- In order to maintain configuration control of our deliverables, all deliverable documents must follow this version numbering scheme
 - Documents in the annotated outline phase will be numbered starting with 1.x. Once the annotated outline has been reviewed by the state, then it moves into the draft phase
 - Documents in the draft phase will be numbered starting with 2.x. Once the draft has been reviewed by the state, it goes into the final phase
 - Documents that are final will be numbered starting with 3.x

The version number and document phase must be logged in the document change log and document information box respectively.

Appendices: should bear the exact number of the master document with which they are first submitted. If an appendix is not submitted with a subsequently incremented version, but re-submitted later, you should increment it using the guidelines above, even though it will not match exactly the version numbering of the master document.

Once the deliverable file's configuration information has been established the owner then creates the deliverable's annotated outline. This includes creating the deliverables main sections and subsections, and rendering the Table of Contents. Each section and subsection must have a brief synopsis describing what information will be presented in the final submission of the deliverable.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Deliverable Requirements as Stated in the RFP ✓ Deliverable Template ✓ Deliverable Schedule 	<ul style="list-style-type: none"> ✓ Deliverable Annotated Outline



✓ Quality Management Plan (Deliverable Process)	
---	--

Step Two: Obtain Management Review of Annotated Outline

Responsible Agent: Project Team Lead

Description

The deliverable owner submits the annotated outline to his or her team lead for review and buy-in. The team lead will also verify that the outline satisfies any specific deliverable requirement as called for in the RFP.

Inputs:	Outputs:
✓ Deliverable Annotated Outline	✓ Deliverable Annotated Outline

Step Three: Submit Annotated Outline to State for Review

Responsible Agent: Project Manager

Description:

The Accenture team Project Manager (or project team lead) submits the annotated outline to the State for review. Unless otherwise specified, this submission will be in the form of an e-mail.

Inputs:	Outputs:
✓ Deliverable Annotated Outline	✓ Deliverable Annotated Outline

Step Four: Create Draft Version of Deliverable

Responsible Agent: Deliverable Owner

Description:

Once the deliverable's outline has been reviewed by the State, the deliverable owner is ready to create the draft version of the deliverable. The deliverable owner must adhere to the following points when creating the draft version of the deliverable document.

- Where applicable, locate the equivalent work product in ADM for PeopleSoft and incorporate ADM's recommendations into what is being created. For example, Deliverables 26, 27, and 28 are very similar to ADM's AP370 – Data Conversion Design



- If the annotated outline review comments are not in spreadsheet form, the deliverable owner will convert the comments into a spreadsheet form and file the comments in the respective deliverable comments folder in BI Designer
- In the document history log, be sure to note the new version number (2.x and the fact that the deliverable is now in draft form)
- Author the draft deliverable, making sure to incorporate the client's comments, while adhering to the following deliverable writing standards:
 - List Punctuation
 - End-punctuate each bullet in a bulleted list with a period if it contains a complete sentence or a verb phrase completing the sentence begun by the introduction (especially if the intro sentence contains “as follows,” or “the following”).
 - Don't end-punctuate at all if the list contains elements that are not complete sentences or verb phrases completing the sentence begun by the introduction (i.e., a list of items).
 - Quotation Marks
 - Commas and periods always go inside quotation marks
 - Semicolons and colons always go outside quotation marks
 - If the quotation is part of what you are quoting, punctuation goes inside the quotation marks; if it is not part of what you are quoting, and punctuation goes outside the quotation marks
 - Parentheses
 - Do not put one set of parentheses inside another. Use brackets for parenthetical words or phrases inside a parenthetical sentence or phrase
 - Parentheses always go inside the punctuation
 - Titles
 - Titles of published books are always in *italics*.
 - Titles of papers or other less-than-book-length publications are always in “quotation marks.”
 - Internet links should always be underlined (Word should automatically underline/hyperlink/blue them).
 - Text Formatting
 - Use **bold** sparingly if at all. The template headers provide enough bold.
 - Paths to network server file locations should be *italicized* (e.g., *I:\Accenture\Risks*).
 - Capitals
 - Position titles (“IPT Lead,” “CQMA Partner”) are always capitalized
 - General references to positions in the text (“the program will include an IPT lead . . .”) are not capitalized (in general, if it is preceded by “the,” capitalize it; if preceded by “a” or “an,” don't).
 - Voice
 - Use the active Subject-Verb-Object (“He handled the payment”) instead of the passive voice (“The payment was handled by him”). Especially avoid the passive that leaves off the subject: “The routine was mis-coded.” It conceals responsibility.
 - Acronyms
 - Always spell out acronyms on first use (E.g., “Use the Baseline Change Request (BCR) to make that change.”).
 - Use your judgment: if you've already spelled out the acronym but haven't used it for many pages, err on the side of caution and spell it out again, especially if it is one your readers may not use regularly.



- Ensure each acronym used in the text appears in the Acronym List attachment.
- Words/Phrases
 - “Which” clauses: you can usually replace “which” with “that” or nothing.
 - “This” should always be followed by a noun or noun phrase.
 - Use verbs to convey action (“He resolved the issue”) instead of nouns (“He achieved a resolution of the issue”); i.e., avoid “-ion,” “-ent,” “-ant,” “-ence,” and “-ance” words—they all “smother” perfectly good verbs.
 - See attached “Instead List” for overused words to avoid.
 - “Will” and “must” should replace “is responsible for” and “has the responsibility for.”
- Numbers
 - Write out numbers one through nine.
 - Use Arabic numerals for numbers 10 and above.
 - When both types appear in a sentence, use Arabic numerals for both.
- Agreement
 - “Data” is a plural noun (“The data are conclusive”).
 - “Each” and “Everyone” and “None” are singular (“Each of them is here”; “Everyone is here”; “None” of them is missing”).
- Attachments/Appendices
 - Attachments continue the pagination of the document (“1,” “2,” etc.) and should be items that are essential to complete understanding of that document (e.g., the List of Acronyms--which explains elements of the document—is an Attachment). Diagrams, tables, etc. too large or distracting for the document body should be attachments.
 - Appendices re-start numbering with radically different pagination (“A-1,” “A-2,” etc.); they should be items related to but outside the essential whole of the document. Other whole documents, outside sources, etc. that elaborate or expand the document, should be appendices.
- “Which” Hunting
 - Use “which” when the clause you are beginning is interjectory or ancillary to the main thought. Example: “The code, which I modeled after Jason’s, performed satisfactorily.”
 - Use “that” when the clause you are beginning is in direct relation to the rest of the sentence. Example: “The code that I inserted performed satisfactorily.”
 - Actually, in many cases, you can remove both without damaging the meaning or style. Examples: “The code I inserted performed satisfactorily”; “The code, modeled after Jason’s, performed satisfactorily.”
 - First preference, no “that” or “which”; second preference, “that.”
- ©, ™, ® Marks
 - Place marks on appropriate terms/names on their first appearance only.

When you save the deliverable to disk, please consider the following. Quite often, the client is not as current as we are regarding desktop software. As of this writing, we are using Office XP® running on Microsoft Windows XP®. The client, however, is using Windows/Office 2000®. As a result, some of the formatting in our deliverables may get corrupted if we save our deliverables in the most recent format available, and the client tries to open it with an older version of the software. Therefore, be sure to save the deliverable in a “lowest common denominator” format that is consistent for both Accenture and the client. As of this writing, this would be Word 97-2003 & 6.0/95 – RTF (*.doc).



After the draft deliverable is created, the deliverable owner must ensure that the draft is peer reviewed.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Deliverable Annotated Outline ✓ Client comments ✓ Accenture Delivery Methods (deliverable template) – if necessary ✓ Accenture Delivery Methods (deliverable checklist) 	<ul style="list-style-type: none"> ✓ Draft version of Deliverable

Steps Five and Six: Peer Review Draft Deliverable and Incorporate Updates

Responsible Agent: Project Team Leads, Project Team Members

Description:

All deliverables going to the client must be peer reviewed. The deliverable owner must adhere to the following points when preparing for a deliverable peer review.

- Ten business days before the deliverable due date, pass the file location (or printed hardcopy) of the deliverable draft, the deliverable peer review checklist, and the Accenture Delivery Methods checklist to the peer reviewer and request his or her review
- Peer names (as well as deliverable owner names) are available in the Deliverable Schedule spreadsheet
- Detailed descriptions of the peer review processes are available in Section 4.3.2.5 of this document
- Review the peer reviewer’s peer review feedback form and discuss the findings
- Correct the problems and incorporate accepted reviewer suggestions into the deliverable document

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Accenture Delivery Methods (checklist) ✓ Peer review checklist ✓ Peer review feedback form ✓ Draft Deliverable ✓ Deliverable Tracking Checklist 	<ul style="list-style-type: none"> ✓ Deliverable peer review Comments ✓ Completed peer review feedback form ✓ Update Deliverable Tracking Checklist

Step Seven: Obtain Management Review of Draft Deliverable

Responsible Agent: Deliverable owner and project team lead

Description:



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

After updating the deliverable with peer review comments, the deliverable owner must submit the deliverable to their immediate supervisor for review before submitting to the Quality Team.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Draft Deliverable ✓ Deliverable Tracking Checklist 	<ul style="list-style-type: none"> ✓ Draft Deliverable ✓ Deliverable Tracking Checklist

Step Eight: Submit draft deliverable to OAKS Quality Team for review

Responsible Agent: OAKS quality lead

Description:

The OAKS quality lead will review and track every deliverable (document) sent to the State (outline, draft, and final). The OAKS quality lead will monitor the deliverable schedule to see which submissions are upcoming. The OAKS quality lead will coordinate with the deliverable owner to complete a deliverable review by the OAKS Quality Management Team (QMT).

Before a deliverable is submitted to the State for approval, the Accenture team must provide a draft copy of the deliverable to the OAKS QMT. The QMT will have at least five working days to review the Deliverable and provide comments to the deliverable owner before the deliverable is submitted to the State for review.

After the QMT review, the OAKS quality lead updates the deliverable schedule, and submits the quality related comments to the deliverable owner who applies them to the deliverable. The deliverable owner then submits the deliverable to the Accenture Project Manager for submission to the State.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ Draft Deliverable ✓ Deliverable Tracking Checklist ✓ Deliverable QA Review Checklist ✓ Deliverable Schedule 	<ul style="list-style-type: none"> ✓ Draft Deliverable ✓ Deliverable Tracking Checklist ✓ Deliverable QA Comments

Step Nine: Submit draft deliverable to State for Review

Responsible Agent: Project Manager

Description:

The Accenture project manager submits the deliverable to the State. At this point, the deliverable is still a draft document and not yet final. The State has up to 10 working days to review the draft deliverable and submit comments and feedback to the Accenture team.



Inputs:	Outputs:
✓ Draft Deliverable	✓ Draft Deliverable

Step Ten: Incorporate comments and submit final version of deliverable to client

Responsible Agent: Deliverable Owner

Description:

Once the State submits comments and feedback of the draft submittal, the deliverable owner will do the following:

1. If the draft review comments are not in spreadsheet form, the deliverable owner will convert the comments into a spreadsheet form and file the comments in the respective deliverable comments folder in BI Designer.
2. Update the comments spreadsheet with the deliverable owner's responses to comments.
3. Update the deliverable with the client's comments, making sure the updates are in line with the comments and responses (see previous step).
4. Submit the deliverable for a final supervisor review. Only schedule another peer review if the deliverable had significant changes and updates due to client comments and feedback.
5. Schedule a final QA review of the deliverable with the Accenture quality lead.
6. Oversee the submission of the final version of the deliverable, and comments (including our responses to the comments) to the State.
7. **Verify that a copy of the final deliverable gets filed in the Respective Final Deliverable folder in BI Designer.** The golden version (most current and official) of any deliverable must reside in the respective Final Deliverable folder. Any further updates to the deliverable must begin with the version in the Final Deliverable folder. The final version should be copied to the Working Deliverable folder before any changes can be made to the document.

The following points must be adhered to when submitting deliverables to the client.

- Deliverables must be submitted no later than the due date specified in the project schedule. If this due date cannot be met, the Accenture team must request and obtain an extension (to be updated in the project plan). If the deliverable is submitted after the due date, without obtaining an extension, it will be considered late, and handled as specified in the RFP. Deliverables submitted on or before the extended date will not be considered late.
- At the time of delivery of a written deliverable, the Accenture team will submit an original and a specified number of copies, not to exceed 20, of each deliverable, plus an electronic copy. The specified number of copies will be listed in the deliverable schedule. The electronic copy must be submitted in the form of an Office 2000 file



Ohio Administrative Knowledge System

OAKS —————> Transforming the Way Ohio Does Business

format, unless stated otherwise (a format or medium approved by the State (CD-ROM), E-mail, or posted to a website (OAKS VTS).

- A Deliverable Submittal and Acceptance Form must be submitted with each of the deliverables and be signed by the Accenture team project manager. The Deliverable Submittal and Acceptance Form can be found in BI Designer at (OAKS\Cabinets\Project Management\Quality\Deliverable Aids\).
- The Accenture team will provide deliverables to the OAKS executive program manager who will review (or delegate review of) the materials or documents within ten (10) business days after the receipt date, except for larger Deliverables such as System Design, where there will be a minimum of fifteen (15) business days for review. The receipt date is not counted as one of the ten (10) or fifteen (15) review days.
- If, for some reason, the material or document is determined not to be in compliance, the OAKS executive program manager, will note the reason for non-compliance on the Deliverable Submittal and Acceptance Form and send the form to the Contractor's Project Manager outlining the reason(s) for the State's determination.

Inputs:	Outputs:
<ul style="list-style-type: none"> ✓ State Comments on Draft Deliverable ✓ Draft Deliverable 	<ul style="list-style-type: none"> ✓ Final deliverable (up to 20 copies) ✓ Completed Deliverable Submittal and Acceptance Form ✓ Electronic version of deliverable (as specified by the State) ✓ Draft deliverable comments and responses

In order to ensure the project is not delayed for significant periods of time while the State considers acceptance of any deliverable, the State commits to responding to the Accenture team's deliverables within a reasonable period of time. The OAKS executive program manager will respond in writing with full acceptance, partial acceptance, or rejection of the deliverable on a Deliverable Submittal and Acceptance Form. Acceptance or rejection will be based solely upon the OAKS executive program manager's objective evaluation of whether the deliverable meets the requirements outlined in the OAKS System Integrator RFP, is accurate, and is well prepared.

After the Accenture team submits the final deliverable, the State can either accept or reject the deliverable. If the State agrees the deliverable, deliverable material or documents are compliant, the OAKS executive program manager will indicate compliance by signing the Deliverable Submittal and Acceptance Form and submit to the Accenture team project manager.

If the State rejects the deliverable, the Accenture team will bring the work, determined by the State to be in noncompliance with the contract, into conformance and within ten (10) working days of notice, re-submit the deliverable to the OAKS executive program manager, following the final submission guidelines.

6.6 Deliverable Process Aids

To aid in the execution of the deliverable process activities, please reference the following deliverable process aids.



Ohio Administrative Knowledge System

OAKS → Transforming the Way Ohio Does Business

Document Name	Location in BI Designer	Description
OAKS System Integrator RFP	<i>OAKS\Cabinets\Project Management\Library</i>	The OAKS System Integrator RFP contains a description of the State's expectations regarding the contractor deliverables. It would be wise to review these before starting to work on a deliverable (document).
OAKS Quality Management Plan	<i>OAKS\Cabinets\Project Management\Final Deliverables\Deliverable 9</i>	The Quality Plan outlines the deliverable process, and should be followed accordingly.
OAKS Deliverable Schedule	<i>OAKS\Cabinets\Project Management\Quality\Deliverable Schedule</i>	The OAKS deliverable schedule contains the milestone dates of deliverables due to the client (see section 6.3 above)
Peer review feedback form	<i>OAKS\Cabinets\Project Management\Quality\Peer Reviews\feedback forms</i>	The peer review Feedback form is a spreadsheet the must be completed for all facilitated and non-facilitated peer reviews.
Deliverable Template	<i>OAKS\Cabinets\Project Management\Quality\Templates</i>	This is the starting point for all deliverables (documents) submitted to the State. Not all deliverables have templates. If one is available for the deliverable being worked on, it should be used.
Deliverable peer review Checklist	<i>OAKS\Cabinets\Project Management\Quality\Deliverable Aids</i>	This is a checklist that the deliverable owners should provide to peer reviewers to give them a standard for which to review the deliverable.
Deliverable Tracking Form	<i>OAKS\Cabinets\Project Management\Quality\Deliverable Aids</i>	This is a sign off sheet/checklist that is used to track the deliverable as it goes through the deliverable and quality assurance process.
Deliverable Submittal and Acceptance Form	<i>OAKS\Cabinets\Project Management\Quality\Deliverable Aids</i>	This is a state provided cover sheet that must be submitted with all final versions of deliverables.

Table 7 - Deliverable Process Aids



7 OAKS Project Quality Metrics

Reference the OAKS Project Measurement Plan for quality measurement information:
*OAKS\Cabinets\Project Management\Quality\Metrics\Project Measurement Plan\OAKS
Measurement Plan.doc.*