4.17 Post Implementation Support

RFP reference: 6.17 Post Implementation Support, Page 59

Deloitte understands the importance of support beyond the Delaware FACTS II implementation to address problems or issues that arise and confirm a smooth transition. We bring lessons learned from previous HHS post implementation experiences to Delaware FACTS II and an experienced team to provide superior post implementation support to serve DSCYF's end users and staff for the one-year warranty period.

Deloitte provides a 12-month warranty of the FACTS II solution where both software and performance defects are corrected. We understand that these corrections are completed at no additional cost to DSCYF during this warranty period.

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DSCYF benefits from Deloitte's FACTS II Post Implementation Support through:

- Our extensive experience in providing post implementation support
- A proven methodology and structured approach to resolving defects

Our proven approach not only focuses on a quality implementation of Delaware FACTS II, but also on supporting the solution after implementation. We understand the importance of having sufficient support after implementation to support the optimal usage of the solution.

The benefit of our approach to DSCYF is that it is based on lessons learned and effective practices from similar SACWIS system implementations. These lessons learned are incorporated into our FACTS II Playbook and provide specific knowledge in the effort and complexities that it takes to support this type of system. We have the benefit of having already seen what works and what does not work in situations similar to Delaware FACTS II. We bring these lessons learned to the post implementation support phase for you.

Features of our Post Implementation Support phase and the benefits to DSCYF are detailed below.

Features	Benefits
Post implementation support for Delaware FACTS II is based on industry best practice methodologies and tools, as well as key lessons learned from supporting similar systems in other states.	DSCYF gains established support procedures and reporting practices. Gaining the experience increases likelihood of successful transition from pre-production to production operations.
Deloitte approaches post implementation not as a single stand alone task, but as an integral component of our overall Delaware FACTS II Playbook.	Proven methodology decreases risk of disruption to the business due to a continuation of standard, defined process for support.

Table 4.17-1. Features and Benefits of our Delaware FACTS II Post-Implementation Support.
Deloitte's approach to Post Implementation Support brings key assets to DSCYF.

4.17.0 FACTS II Post Implementation Support

RFP reference: 6.17 Post Implementation Support, Page 59

The Department requires a one-year warranty for the Post Implementation Support phase. The warranty becomes effective following the acceptance by the Department of the FACTS II solution. If the Bidder proposes a Maintenance option, this option would be effective following the conclusion of the warranty phase. The warranty period is included in the cost of the proposal. Bidders agree that correction of defects (both software and performance) will be conducted at no additional cost to the Department during this phase. The Implementation Results Report will include a known list of defects in the production system, which will serve as the initial list of defects to be corrected during the warranty phase.

Our strategy for the post implementation support phase is grounded in our proven FACTS II Playbook System Development Life Cycle (SDLC) methodology. The Implementation Results Report (See *Section 4.16 – System Implementation*) includes a known list of defects in the production system, which serves as the initial list of defects to be corrected during the warranty phase. Each of these known defects is reviewed through the change control process to determine the impact on the system, level of effort for change, and impact to end users. Once the changes have been approved, each of the maintenance fixes goes through the design, development, and test phases prior to being released into production.

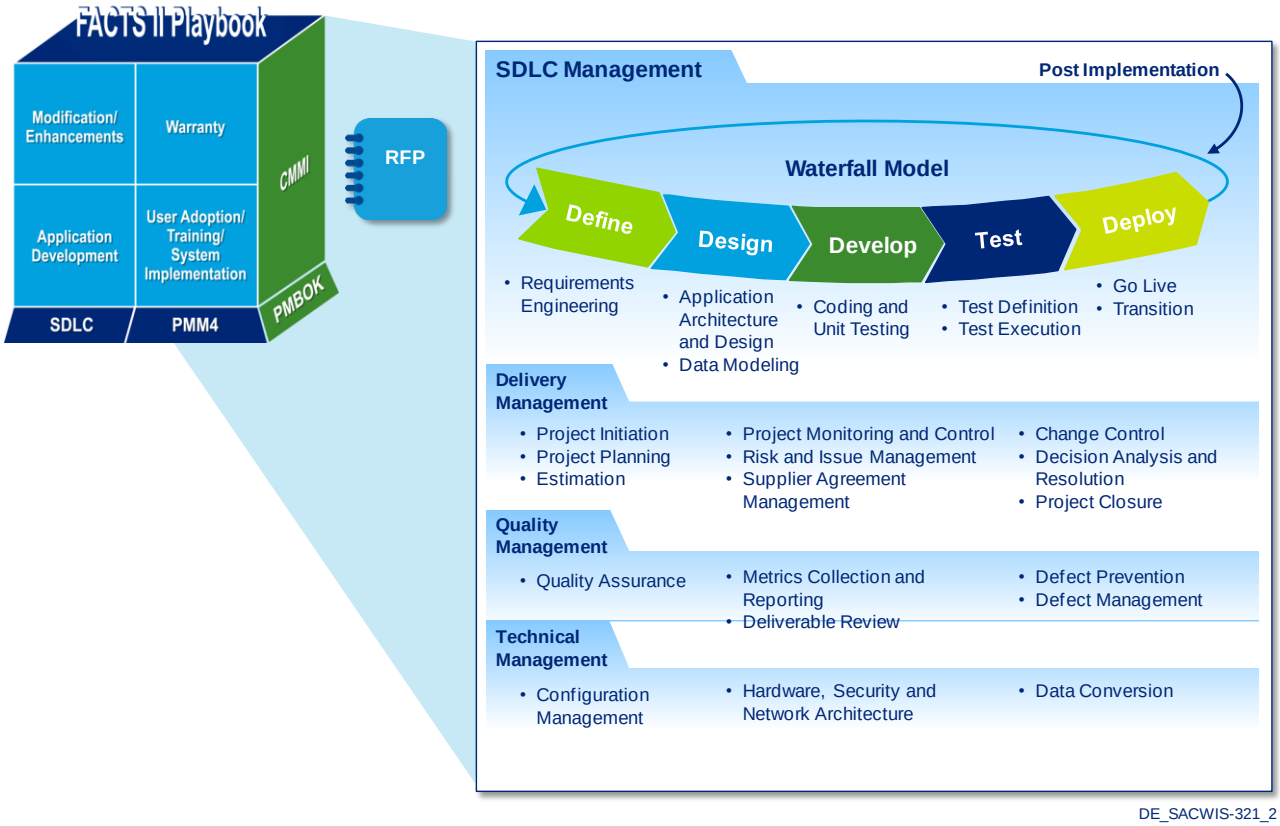


Figure 4.17-1 Our Delaware FACTS II Playbook methodology.
Our approach to Post Implementation Support follows our best-practice FACTS II Playbook methodology.

Our development strategy is designed with a goal of minimizing the number of defects that arise after deployment of each functional release. However, system defects are inevitable and must be anticipated. We work closely with DSCYF to define procedures for prioritizing defects during the warranty and any optional maintenance periods. If a defect is discovered, the maintenance team analyzes it and determines the optimal solution to resolve the defect. All warranty/maintenance defects are logged and tracked in our tracking tool. Deloitte schedules and leads meetings (including DSCYF staff members) to prioritize and plan the deployment of defect fixes.

We approach warranty and defect corrections not as single stand alone tasks, but as an iterative form of our overall system development methodology. These tasks incorporate all the phases of the SDLC, typically repeated at some agreed upon interval in the form of maintenance releases. The SDLC is supported by our Project Management methodology which outlines processes such as change control. This methodology prescribes the activities and tasks that apply to system implementation as well as system maintenance and support.

System Development Life Cycle Methodology for Post-Implementation Support

The warranty period incorporates all the phases of the SDLC, typically repeated at some agreed upon interval in the form of maintenance releases. Our proposed approach utilizes the overall project Change Control process and Project Governance structure to manage the documentation of problems/change requests, grouping of requests for release, and documenting and tracking deliverables and test scenarios.

The Deloitte team provides services for all phases of the SDLC that pertain to business application maintenance and defect correction. Each defined maintenance release goes through these phases in a manner appropriate to the contents of the release. For each release we address the Requirements, Detailed System Design, Development, Test, and implementation preparation phases. While the development team uses the development process to focus on design and coding of new functionality, the maintenance processes are used to support the operations and defect management of the functional releases.

We work with DSCYF to identify your staff that is involved in maintenance activities. This set of DSCYF staff members participate in handling maintenance and defect corrections for each functional release. DSCYF staff members are productively used in performing the activities to correct defects, maintain the system and make enhancements. The DSCYF Project Management Team approves the strategy and execution of maintenance and defect corrections activities.

We work with DSCYF to establish scheduled maintenance releases. This schedule is communicated to the DSCYF Project Management Team for review comment/feedback and undergoes final approval from DSCYF and Deloitte Project Steering Committee. As newer releases and patches of the procured software become available, we assess the impact of implementation and work with the DSCYF team collaboratively to evaluate options and schedule software upgrades in a manner that does not introduce risk or disrupt the project. In any event, we do not perform upgrades or apply patches until approved by DSCYF Steering Committee team and the Change Control Board.

Deloitte extends help desk support through the post implementation period. The FACTS II Help Desk is designed to record all calls using the tool selected and acquired by DSCYF; we work with you to determine the best way to interface this information within the issue resolution tool. Additionally, the help desk attempts to resolve issues at the point of the call and distinguish between policy questions, Delaware FACTS II navigation issues, technical issues, and system bugs. The Help Desk has procedures to prioritize and define escalation criteria to escalate issues that are mission critical to appropriate team leads. This support is described further in *4.16, System Implementation*.

Activities

1. **Establish Procedure for Prioritizing and Managing Warranty Changes.** The Deloitte Project Manager works with the DSCYF Project Management Team to define

the procedures for prioritizing errors, deficiencies, or defects to the system during the warranty period. These procedures include:

- Identifying errors, deficiencies, or defects
- Evaluating the validity of errors, deficiencies, or defects requests to determine if they are warranty related
- Prioritizing the warranty requests
- Identifying bundles of incidents to be grouped together to serve as a maintenance release to production. Maintenance releases for warranty items follow the same development and implementation life cycle as the new development releases
- Testing for production of maintenance releases
- Communication procedures for maintenance releases
- Migrating the modified programs to the production environment

Identify and Track Software Problem Reports. Problem reports are reviewed and triaged on a periodic basis for categorization as warranty items and, as required, assignment to the Deloitte team for resolution. DSCYF defines the priority of these warranty items, which in turn determine the order in which they are resolved. We work with DSCYF to define the exact definitions of these priorities. We continue to use SACWISMate as the project tracking tool to support defect identification and correction.

2. **Fix Problems, Test and Implement the Software Fix.** During the post implementation phase, we provide technical support for remedying mutually agreed upon warranty related problems (e.g., material nonconformance to the accepted detailed design). Once errors, deficiencies, and/or defects have been corrected, they are returned to the appropriate DSCYF personnel for testing. Upon successful testing of the errors, deficiencies, or defects, the corresponding correct system components are migrated to the production environment.

   The specific process for this activity is defined with DSCYF. Typically, after an incident has been identified and assigned to the Development Team for a fix, the next steps in the process are defect resolution, code migration to different environments and finally re-testing in those environments. The Functional Team Leads are responsible for assigning all valid incidents to the Development Team for fix. After the Testers and Functional Leads determine the type and priority level of the problem, the Development Team assesses the problem and triage all defects in order of priority. The urgent ones (Priority 1) are addressed first, and then the high ones (Priority 2), then the medium ones (Priority 3), and finally, the low ones (Priority 4). Defects, or tickets, are assigned to a developer based on developer workloads and a developer's expertise in the business or technical area of the problem.

The developers review the incidents that are assigned to them by their respective Functional Leads and change the incident status to “Fix in Progress.” Once the developers make the necessary code changes to fix the defect, they log the code fix into the defect tracking tool for historical reference purposes. As the developers correct the programming code, the Functional Lead and/or the developers make any necessary update to the program specification stemming from the resolution of this defect. For example, after a defect is discovered, the Functional Lead may need to add a business rule and error message to the specification. The developers then go through a round of testing to make sure that the changes that they have made, fixes the reported incident. If both the developer and Functional Lead are satisfied with the change, all code changes are checked in Visual Source Safe and the status is changed to “Migrate to Test Environment” (i.e. “Migrate to SIT”, “Migrate to Test” etc depending upon the environment to which the fix needs to be migrated) in the defect tracking tool.

Once the problem has been fixed, the object or file is compiled and built to the testing environment. The incident is updated to “Ready for Test” (i.e. “Ready for SIT”, “Ready for Test” etc) in the defect tracking tool to reflect that the problem has been fixed and requires retesting to make sure the fix has indeed been made and regression testing to verify that new defects have not been introduced in related functionality.

If the Tester is able to complete the run of the same test script, then the Tester closes the defect and update the status to “Closed” in the defect tracking tool. However, if the Tester is unable to complete the test script run because of the same problem, the Tester does not close the defect. Instead, the Tester re-assigns the defect to the Functional Lead and change the status to “Re-Open.” This cycle continues until the Tester can complete a test script run to re-test the defect. In summary, to close a defect, the programs affected by the incident must be tested by the Developer(s) and the Functional Lead, in addition to a successful re-test by the Testing Team. A defect is closed only after passing these three quality assurance checkpoints.

3. **Defect Logging.** Based on our experience, we recommend that if any defect is found in the FACTS II application, it is communicated to the Help Desk as the central point of control. The Help Desk staff log the defect in the help desk software which is accessible to the Application Team. The Deloitte team then resolves those defects logged in the help desk software during the warranty phase. In this way defects and issues are tracked throughout the period. The procedures for receiving and escalating problems are outlined below.

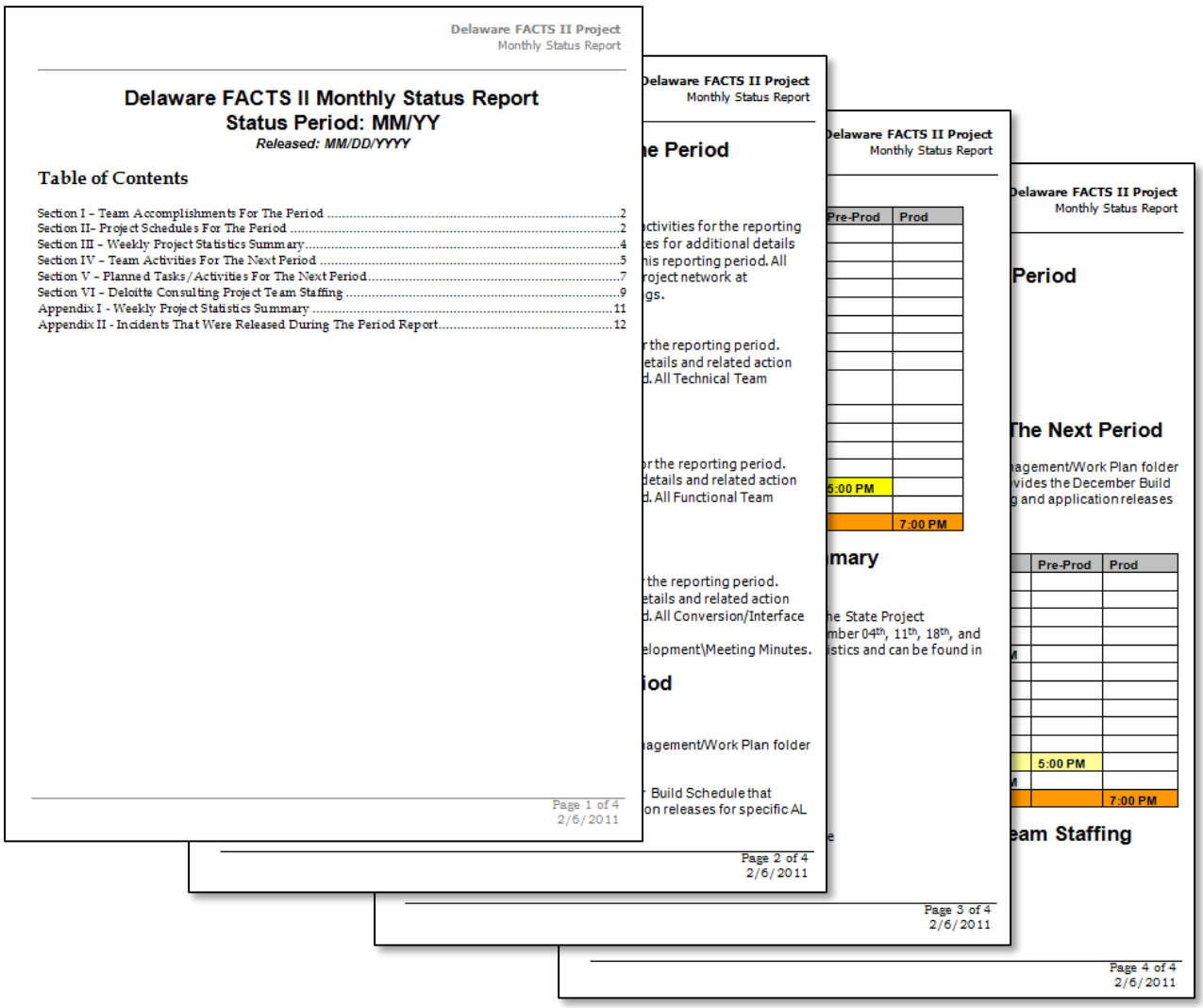
- A user calls the Help Desk when he or she needs assistance
- The Help Desk Operator stays on the phone with the caller until either the problem is resolved, or it becomes clear that additional resources are necessary for resolution
- If the issue cannot be resolved during the call, the Operator creates a Help Desk “trouble ticket.” The ticket number is given to the caller to use for tracking purposes (e.g., if he or she has additional information or inquiries about the problem at a later time)

- If the Help Desk Operator is able to research and resolve the problem, he or she contacts the user to explain the solution and then close the ticket
- If the problem is related to hardware, network, or other technical issues it is forwarded to the technical team for resolution. If it is a policy question it is forwarded to the appropriate DSCYF subject matter expert for resolution
- If it is determined the problem is application or database related, the problem is logged using the Help Desk software and communicated to the Application Team

4. **Creating/Updating New/Existing Documents,** Deloitte understands that during this phase certain changes may have been made to the application which requires documentation. The Deloitte Project Team confirms that all such changes are appropriately updated. This documentation updates are typically on the documents listed below, however this is not an exhaustive list. Deloitte confirms the necessary updates based on the changes made. Sample of documents updated include:

- Requirement Traceability Matrix
- Update Online Help
- Requirement Documents
- Detail System Design
- Code
- System Test Cases

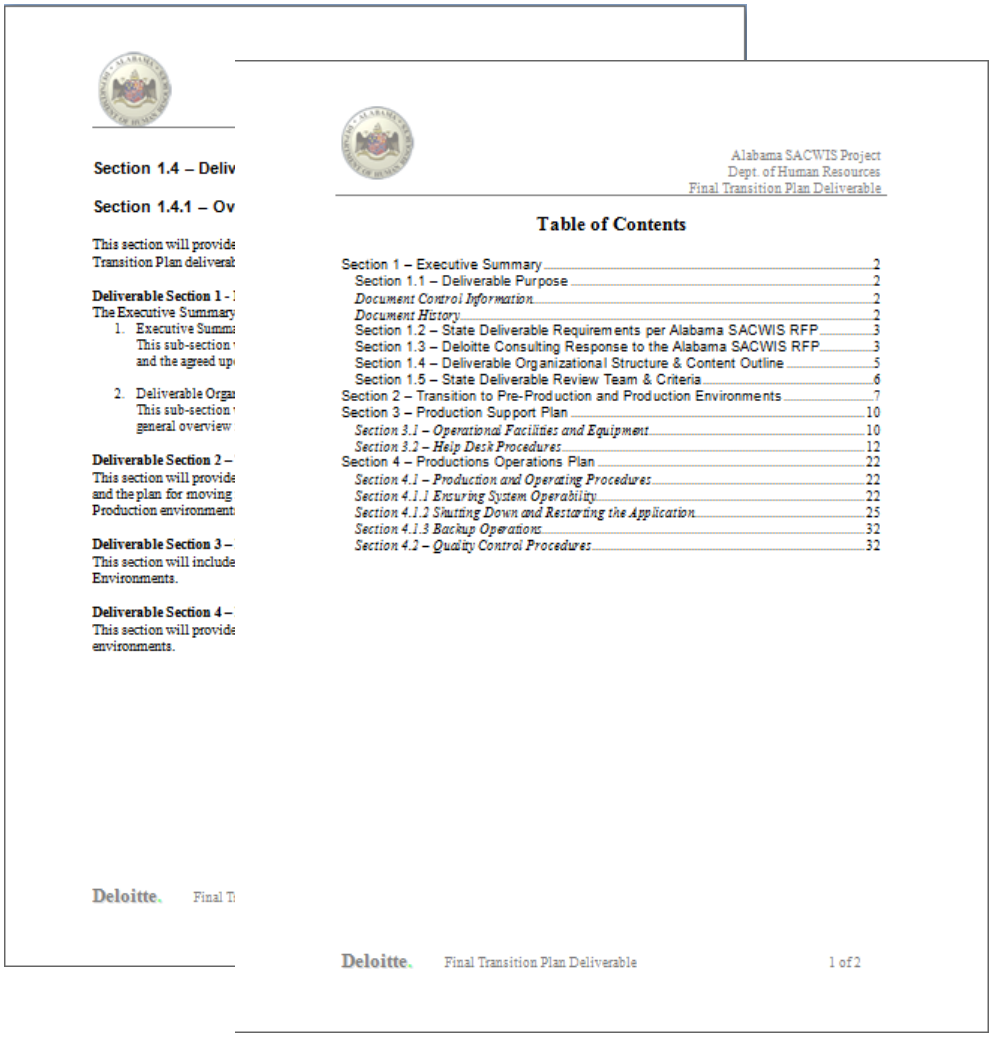
Status on activities is provided in regularly scheduled meetings that are supported by the written weekly and monthly status reports.



DE_SACWIS-307

Error! Use the Home tab to apply 0 to the text that you want to appear here.**. Sample of Post Implementation Status Report.**

The activities described are documented in an operating procedure manual. In addition to definition of the activities, the planning for stopping and restarting the application for both planned maintenance routines and unplanned incidents and backup operations with the objective to be able to make copies of the data for any system at a particular point in time is included in the Final Transition Guide.



Alabama SACWIS Project
Dept. of Human Resources
Final Transition Plan Deliverable

Table of Contents

Deloitte. Final Transition Plan Deliverable 1 of 2

DE_SACWIS-1502

Figure 4.17-4. Sample Final Transition Plan Table of Contents

Maintenance Option

RFP reference: 6.17 Post Implementation Support, Page 59

If the Bidder proposes a Maintenance option, this option would be effective following the conclusion of the warranty phase.

The completed Delaware FACTS II simplifies complex business processes and improves the accuracy and timely delivery of services. In order to continue to support the successful transition of the new system, we propose ongoing system maintenance that commences at the completion of the 12-month warranty period. Methodology and processes established during the warranty period are expected to continue into the optional maintenance periods.

Deloitte works with DSCYF to develop a mutually agreed upon Maintenance Agreement.

See *Project Cost* for details on our proposed minimum and maximum state staff for ongoing system maintenance. We are open to further dialogue regarding the proposed plans and costs during maintenance to create a staffing and support plan that is aligned with DSCYF needs.

4.17.1 Associated Deliverables

RFP reference: 6.17.1 Associated Deliverables, Page 57

The following deliverables are required during the Post Implementation Support Phase:

- Final FACTS II Status and Transition;
- Federal Requirements Traceability Matrix; and
- Final System Documentation.

The outcome of the Post Implementation Support phase is the creation and submission of the following deliverables for DSCYF approval:

Deliverable	Description
Final FACTS II Status and Transition	The Final FACTS II Status and Transition deliverable summarizes the state of the FACTS II solution signifying the completion of the post implementation phase
Federal Requirements Traceability Matrix	At the completion of the Post Implementation phase, the Federal Requirements Traceability Matrix is updated to account for changes made to production that are required for federal approval of the system.
Final System Documentation	The final System Documentation is updated to capture any changes to hardware and software, include licensing and version changes, system components, security, configuration management and other IT services support procedures.

Table 4.17-2. Post-Implementation Deliverables.