4.7 System Planning and Analysis

Deloitte recognizes that properly performing the system planning analysis phase is critical to project success. Our experience managing similar projects in other states and our proven, efficient approach to planning and analysis allows us to implement the Delaware FACTS II system driven by business needs to provide maximum value to DSCYF. We bring the best industry practices, proven techniques and a collection of established tools, methodologies and frameworks to successfully perform the system planning and analysis for Delaware FACTS II.

The Deloitte team understands the importance of a well planned requirement verification and systems design phase for the successful implementation Delaware FACTS II. Our FACTS II Playbook is aligned with industry PMI standards and leverages the framework, tools, best practices, and artifacts of the Systems Planning and Analysis tasks within Delivery Management. It is important that we share our methodology and tools with DSCYF staff and lay the groundwork for collaboration between Deloitte and DSCYF staff during the further phases of the project.

In addition to the initial planning that is conducted to coordinate and prepare the project team and stakeholders for the requirements and design phases, planning continues at the beginning of each new phase. At the beginning of each new phase we revisit the master work plan to focus on the specific phase/task, discuss approaches, timelines, stakeholders, work products, tools, deliverables, and to make any needed revisions. When this occurs, planning moves from the macro level to the micro. As requested by the
Delaware FACTS II RFP, we present the following subsections in which we discuss our approach, methodologies, and activities for the systems planning and analysis phase.

Since 1994, our approach and methodologies have been used to successfully implement seven SACWIS solutions. The thoroughness in our approach and our tried and tested methodology was most recently used in our successful implementation of the Alabama SACWIS project. This project was implemented in 19 months to pilot and has taken a relatively short time to start the Federal Assessment Process. An important part of this was because of our strong planning phase that got the project off to the right start. FACES.NET is another example of a SACWIS project where our approach and methodology was not only used to successfully implement the project but also is being used during the ongoing maintenance and solution enhancement phases. Our FACTS II Playbook is flexible enough to be used during implementation as well as during maintenance as the same activities are completed whenever there is a new requirement and/or design phase even during maintenance.

The figure above depicts Deloitte’s FACTS II Playbook.

RFP reference: 6.7 System Planning and Analysis, Page 44

During the System Planning and Analysis phase, the Bidder’s team will formally document the final application architecture solution. The Bidder, working in conjunction with the Department’s FACTS II team, will plan the Requirements Verifications phase and the System Design phase. The planning will include development of schedules and locations for the design meetings as well as identification of the necessary team members. Additionally, team members will receive orientation on the design methodology to be used and associated tools (i.e., requirements traceability tools, document version tools), as well as the roles, responsibilities, and expectations of design team members. This phase is the foundation of all subsequent design activities for the project, and as such, must provide a clear plan for each step in the design process. In their proposals, Bidders are required to describe their approaches to system planning and analysis activities. This section should describe in detail the methodology to be used, the amount of experience the Bidder has had with the proposed methodology, the anticipated level of effort to prepare design team members to effectively use the principles, and the typical work products associated with the methodology.

We use the FACTS II Playbook as a fundamental methodology for our entire Health and Human Services practice which includes all 24 Integrated Children Services projects and 19 Child Welfare projects. Knowing that all projects are not the same, our FACTS II Playbook is not only structured to provide the framework for the project but also is flexible to be modified or customized to fit the specific needs of a project. This rare combination of
structure and flexibility are fundamental to our success in delivering projects across our Health and Human Services practice.

Deloitte understands that the first step toward achieving an integrated children’s services solution for DSCYF begins during the Systems Planning and Analysis phase. During this phase, we work collaboratively with DSCYF staff to finalize a plan that guides, sets expectations, defines roles and responsibilities, identifies escalation processes, tools, and work products for the project team through the requirements verification and systems design phase.

We realize that the delivering a solution that meets the needs of DSCYF is directly proportional to the clarity of the requirements and the subsequent design that results from the verified requirements. This phase sets the roadwork and path of the future. To develop a clear plan for each step in the requirements validation and design process we use our FACTS II Playbook methodology as the framework and customize the plan to fit DSCYF needs and user culture. Acknowledging and considering the culture of the stakeholders that participate during these phases while remaining within the scheduled timelines requires a delicate balance. We know that the users who participate in the requirements verification and design phases are not system integration experts and require education, clear direction, and structured processes to complete activities as planned. Gaining the confidence of the users that the project actively listens, provides feedback, and that a Delaware FACTS II solution is being created that meets the verified requirements starts here.

During the System Planning and Analysis phase, we formally document the final application architecture solution, which includes detailed information, including tools, processes, technical specifications, and integration requirements for each of the following areas:

- Presentation Layer
- Business Logic Layer
- Data Layer
- Security Components
- Middleware Components
- COTS Components

A sample application architecture document is shown in the figure below.
The following steps document our approach and activities in working with DSCYF during the systems planning and analysis phase.

- Confirm Session Approach
- Identify session participants
- Define Roles, Responsibilities and Expectations of each team member
- Create Session Schedule & Meeting Locations
- Conduct Orientation on
  - FACTS II Playbook design methodology
  - SACWISmate, our requirements verification and design tool
  - Team members role, responsibilities and expectations
• Review and Revise Master Project Plan

**Confirm Session Approach**

We have learned over the course of our SACWIS projects that the best way to approach verifying requirements and designing the system is to know when to combine the FACTS II project team and users to create the right mix of program and technology experts. Our best practices show that the requirement verification sessions should be an all inclusive group that includes the FACTS II project team and key program and technical experts. Having a session that includes a combined team of experts allows all stakeholders to hear how requirements are verified across the system increases the overall understanding of system functional dependencies and how the pieces all fit together. Identifying session participants that provide the right size, having clear roles and responsibilities, escalation processes, and allowing documentation and feedback throughout the process is key. The following provides an overview of the tasks from our Requirements Verification methodology. A detailed description of the requirement verification sessions and tools used to support the phase is provided in the next Section 4.8 Requirements Verification.

• **Conduct Requirement Session Orientation.** Facilitate an orientation for session participants that define the goals, objectives, roles, responsibilities, timelines, general process, and decision making procedures.

• **Facilitate Requirement Verification Session(s).** Conduct interviews and sessions to verify the requirements as defined in the RFP.

• **Develop Requirements Traceability Matrix Report.** Centralize all the requirements in SACWISMate and implement the requirements traceability process to verify requirements, identify requirement gaps, and determine the final system requirements for FACTS II.

Once the requirements verification phase is completed and an initial assessment is made to identify the business and system functionality across various functional areas, we begin on the systems design phase that provides us a comprehensive understanding of DSCYF’s vision for an integrated children services system. JAD sessions are facilitated in parallel and focus on the verified requirements by functional module. The following provides an overview of the tasks from our Design methodology. A detailed description of the design sessions and tools used to support the phase is provided in Section 4.9 System Design.

• **Joint Application Design (JAD) sessions.** Formulate structure of the future Delaware FACTS II solution.

• **Create Detailed Design Documents.** Use SACWISMate to build the functional and technical specifications to build the system.

• **Create System Architecture Documentation.** Includes the physical data model, system architecture, and data dictionary.
Identify Requirement Verification and Design Session Participants

During this step, we work with DSCYF to finalize who participates in the various sessions. Having the same consistent group of session participants from requirement verification thru design provides consistency of understanding in the overall direction of the solution. We encourage DSCYF to identify and commit staff who actively participates in both phases. This approach reduces overall ambiguity and risk of scope creep during these two critical phases. We provide DSCYF with recommendations regarding the type and number of participants required to effectively manage a group of this size who has a large and complex task to complete.

Define Roles, Responsibilities and Expectations

Once the staff is identified, we provide recommended roles and responsibilities and work with DSCYF to assign to the appropriate skilled staff. The roles and responsibilities of all identified staff are well defined. During this step we describe the tasks that Deloitte Consulting is responsible for, those assigned to DSCYF and joint responsibilities during the requirements verification and systems design phases. In this step, we also define the expectations of each team member in this phase of the project. High level category of roles that is discussed, responsibilities defined, and individuals assigned are included in table 4.7.1.

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
<th>Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitator</td>
<td>Know the function.</td>
<td>See that the meeting progresses and adheres to ground rules</td>
</tr>
<tr>
<td></td>
<td>Set the agenda for the meeting in advance.</td>
<td>See that schedules are met</td>
</tr>
<tr>
<td></td>
<td>Send draft of meeting agenda to all stakeholders in advance</td>
<td></td>
</tr>
<tr>
<td>Scribe</td>
<td>Document the meeting results in a distributable format</td>
<td>See that all discussions are captured and issues are documented</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation is distributed to all participants</td>
</tr>
<tr>
<td>Participants</td>
<td>Participate in System Planning and Analysis</td>
<td>Bring relevant documentation to the sessions</td>
</tr>
<tr>
<td></td>
<td>Provide inputs</td>
<td>Use the tools provided and adhere to ground rules set for the sessions</td>
</tr>
<tr>
<td></td>
<td>Build consensus and take decisions</td>
<td></td>
</tr>
<tr>
<td>Deliverable</td>
<td>Review and approve required project deliverables</td>
<td>Adhere to review schedules</td>
</tr>
<tr>
<td>Reviewers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escalation Team</td>
<td>Make decisions on issues that cannot be resolved during the session</td>
<td>Decisions are made in the interest of the FACTS II project</td>
</tr>
</tbody>
</table>

Table 4.7-1. Roles, Responsibilities and Expectations during System Planning and Analysis.

Expectations for all session participants are to actively participate in planning, provide input, carry out their role and complete their responsibilities.
Create Session Schedule and Meeting Locations

Based on availability of DSCFY staff and the stakeholder roles and responsibilities we create meeting schedules, finalize meeting locations, schedule orientation sessions, determine session preparation work, and determine the appropriate communication vehicle to disseminate our plans. Next we publish the meeting schedules and locations to the session participants. It is imperative that we publish the schedules and meeting locations early to allow stakeholders to confirm their commitment, block their calendars, and begin any preparation reading that is provided.

Training on Methodology, Tools & Deliverables and Anticipated Level of Effort

After completing the general coordination activities, the DSCYF project team is oriented to the methodologies, principles, tools, process, and ground rules that are used to facilitate requirement verification and design phases. We bring the internal project team up to speed first before preparing external stakeholders. Microsoft PowerPoint and the project tracking tool SACWISMate are used to create orientation materials to facilitate the orientation sessions. The Deloitte team prepares these materials and facilitates the orientation session as a “test” of the materials. Feedback provided by the DSCYF project team is considered, discussed, and revisions to the materials are made. The final set of materials is used to facilitate the orientation to the external project stakeholders who are participating in the requirement verification and design sessions. As a result of the Deloitte team being responsible to create the final materials, we anticipate that the level of effort for the DSCYF project team members is approximately one day. Participating in the half day orientation, a few hours to provide structured feedback, and a few hours to review the final materials is estimated. For the session participants, the orientation takes no more than one half day to adequately prepare them.

Session preparation for the FACTS II project team is discussed and included when the schedule is determined. Session preparation for the FACTS II project team includes individual teams reviewing the requirements as defined per the RFP and the Deloitte response for discussion during the session. Deloitte produces and disseminates the Requirement Traceability reports that begin with the RFP defined requirement, our response, and evolve to include comments per the requirements verification session, and the finalized requirement that drive design. All session participants are required to review these materials and come to the session prepared to verify the requirement, communicate issues, and ask questions. Additional details regarding the sessions are provided in Section 4.8 Requirements Verification.

Amount of Experience using the Playbook

Deloitte’s Technology System Integration practice uses the FACTS II Playbook methodology to implement and deliver projects. Our practitioners are trained to use our Playbook methodology and follow the methodology throughout the life cycle of every project that they are engaged on. Our Health and Human Services practice which specializes in implementing and delivering integrated children services projects has
delivered over 100 projects using the Playbook methodology. This methodology has been used across the nation to customize and configure our transfer solutions to meet the specific needs of states. DSCYF benefits from a defined, documented and repeatable methodology for implementing a tailored Delaware FACTS II system to meet your specific needs.

As Deloitte’s experiences and lessons learned grow, we continually enhance our methodologies to improve communication, management controls, transparency and accountability. Deloitte’s project management staff and team leaders bring their direct experience in delivering projects and similar systems to those identified in the RFP. Additionally, the Deloitte Playbook is used on public sector and commercial projects nationally. The graphic below highlights several states (encompassing over 100 projects). Our Integrated Children Services projects have benefited from, and continue to contribute to, our standard methodologies.

![Deloitte’s National Health & Human Services Experience](DE_SACWIS-187_2)

**Figure 4.7-2. Our National Health & Human Services Corporate Experience using FACTS II Playbook.**

**Typical Work Products**

During the system planning and analysis phase, the Deloitte team in conjunction with DSCYF finalizes a plan that guides, sets expectations, defines roles, responsibilities, identifies tools, and work products for the project team through the requirements verification and systems design phase. The following table summarizes the tasks, responsibilities, deliverables and tools used during the System Planning and Analysis phase.
### Table 4.7-2. Typical Work Products.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>DC Responsibilities</th>
<th>DYSCF Responsibilities</th>
<th>FACTS II Deliverables</th>
<th>Tools used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirm Session Approach</td>
<td>Facilitate session approach review session</td>
<td>Determine stakeholders participate and confirm approach</td>
<td>Requirements &amp; JAD Sessions Deliverable</td>
<td>PowerPoint</td>
</tr>
<tr>
<td>Identify Session Participants</td>
<td>Recommend the requirements for a session participant</td>
<td>Finalize session participants from DSCYF</td>
<td>Requirements &amp; JAD Sessions Deliverable</td>
<td>Word</td>
</tr>
<tr>
<td>Define Roles and Responsibilities</td>
<td>Facilitate definition session</td>
<td>Finalize roles and responsibilities and confirm DSCYF participation</td>
<td>Requirements &amp; JAD Sessions Deliverable</td>
<td>Word</td>
</tr>
<tr>
<td>Define Meeting Time and Schedules</td>
<td>Facilitate discussion</td>
<td>Finalize meeting time and schedules</td>
<td>Requirements &amp; JAD Sessions Deliverable</td>
<td>Word</td>
</tr>
<tr>
<td>Create Design Orientation Materials</td>
<td>Create design orientation materials and present to DSCYF Team</td>
<td>Finalize and provide approval of materials</td>
<td>Design Orientation Materials</td>
<td>PowerPoint</td>
</tr>
<tr>
<td>Facilitate Tool and Phase Trainings to Prepare for Requirement &amp; JAD Sessions</td>
<td>Create materials, facilitate trainings</td>
<td>Actively participate and provide feedback</td>
<td>Design Orientation Materials</td>
<td>FACES.NET</td>
</tr>
</tbody>
</table>
4.7.1 Associated Deliverables

The following deliverables are required during the System Planning and Analysis Phase:

- Application Architecture Document, which should include, at a minimum, detailed information, including tools, processes, technical specifications, and integration requirements for each of the following areas:
  - Presentation Layer
  - Business Logic Layer
  - Data Layer
  - Security Components
  - Middleware Components
  - COTS Components

- Requirements Verification and System Design meeting schedules, including the names of anticipated participants and design meeting times/locations.

- Design orientation materials, describing the methodology to be used and its specific application for the FACTS II team and including descriptions of and instruction on any tools to be used as part of the design process.

The outcome of the System Planning and Analysis phase is the creation and submission for DSCYF approval the following deliverables:

- Application Architecture Document, which should include, at a minimum, detailed information, including tools, processes, technical specifications, and integration requirements for each of the following areas:
  - Presentation Layer
  - Business Logic Layer
  - Data Layer
  - Security Components
  - Middleware Components
  - COTS Components

- Requirements Verification and System Design meeting schedules, including the names of anticipated participants and design meeting times/locations.

- Design orientation materials, describing the methodology to be used and its specific application for the Delaware FACTS II team and including descriptions of and instruction on any tools to be used as part of the design process.