Section 4 **Bidder's Products, Methodology, and Approach to the Project**	4.1 FACTS II Requirements Summary	**4.11 Interfaces**
	4.2 Functional Requirements	4.12 System Development
	4.3 Technical Requirements	4.13 System Testing
	4.4 Customer Relations Management Tools	4.14 System Training
	4.5 Project Initiation and Management	4.15 Conversion
	4.6 System Hardware	4.16 System Implementation
	4.7 System Planning and Analysis	4.17 Post Implementation Support
	4.8 Requirements Verification	4.18 Support Federal Review
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	4.10 Reports	DE_SACWIS-002k_4

4.11 Interfaces

RFP reference: 6.11 Interfaces, Page 48

Deloitte adopts a Service Oriented Architecture (SOA) based approach in delivering Federal and State interfaces needed for FACTS II. Our transfer system is pre-configured with these interface protocols that we will customize to meet FACTS II requirements.

Interfaces need to be precise, complete, timely, provide information clearly and support a seamless integration across the enterprise to reduce workload on workers, comply with numerous State and Federal requirements, accurately determine eligibility, manage caseloads, validate key reported data, and ultimately to deliver benefits to the people of Delaware on time and information to the workers and providers to complete their processes. Deloitte comprehensively understands DSCYF current challenges and its desire to support seamless integration as part of FACTS II.

Development and implementation of interface depends on multiple factors such as interface complexity, service agreements with interface associates, feasibility, and business need. Skillfully incorporating the leading technology, demonstrated business knowledge, and relevant experience confirms successful interface implementation. Deloitte understands the business need and functionality requirements for the interfaces module and has extensive experience implementing complex interfaces in several Integrated Case Management systems

section
HIGHLIGHTS

- Proven experience in developing similar interfaces as required by DSCYF
- Successfully implemented Federally Mandated Interfaces in our child welfare implementations.
- Experience in partnering with external agencies and information exchange through interfaces

nationwide, such as the IV-A, IV-D, courts, police, hospitals, financial, and federal reporting. Our SACWIS solutions go live with interfaces as opposed to planning and implementing those months after system rollout. In each of our SACWIS solution implementations, we have developed online and batch interfaces that have enabled day to day operations and meet federal compliance. How does our experience benefit DCSYF? The table below provides a snapshot of all the states that have Deloitte's production proven Interfaces as stated in your RFP that we bring to DSCYF.

Deloitte brings deep Interface Experiences from our Past Implementations to Delaware							
Interface Name	DC	AL	OK	WV	TN	MD	Allegheny - PA
National Child Abuse and Neglect Data Systems (NCANDS)	✓	✓	✓	✓	✓	✓	✓
Social Security Administration (SSA)	✓	✓	✓	✓	✓	✓	✓
First State Financial (FSF)	✓	✓	✓	✓	✓	✓	✓
Business Licensing System	✓	✓	✓	✓	✓	✓	✓
Electronic Vital Records System (EVRS)	✓	✓	✓	✓	✓	✓	✓
Courts Management and Education Tool (COMET)	✓	✓	✓	✓	✓	✓	✓
Courts Organized To Serve (COTS)	✓	✓	✓	✓	✓	✓	✓
Child Placement Review Board (CPRB)	✓	✓					
Juvenile Information System	✓	✓	✓	✓	✓	✓	✓
Delaware Substance Abuse and Mental Health Datamart (DSAMH)	✓	✓	✓	✓	✓	✓	✓
Delaware Student Information System (DSIS) eSchool Plus	✓	✓	✓	✓	✓	✓	✓

Table 4.11-1. Deloitte's extensive experience in implementing Interfaces.

Table below highlights the key features and benefits we bring to Delaware.

DE FACTS II Features	Deloitte Approach Benefits DE FACTS II
Prioritization of Interfaces based on the business needs of agency	Interfaces required upfront will be designed and developed first. We will also look at what interfaces exist today and try to leverage as much as possible from these so as to reduce risk
Seamless integration of Interfaces	A fully integrated system enables the user community with a one-stop human services application, a **seamless** approach that does not require the case manager to navigate between applications to gather data.
Integrated approach to design and develop Interfaces	Our interface lead will be a part of the overall application design and development to determine that interface design is not happening in a silo.

Table 4.11-2. Features and Benefits we bring to the DSCYF.

With many complex interfaces to be constructed in a SACWIS, the importance of involvement of experienced SACWIS resources cannot be overstated. We would like to describe here the nature of the SACWIS interface functionality that we have developed for multiple partner agencies. Based on our understanding of RFP FACTS II, implements interfaces that include:

Title IV-A

Deloitte has developed an interface with the Title IV-A system for each of the five Integrated Case Management systems that we have developed – it is one of the federally mandated SACWIS interfaces. This interface alerts the IV-A TANF system that a child has been placed into foster care and agency custody. IV-A benefits should be updated accordingly. This interface helps maintain up-to-date household composition and financial data from the IV-A system to support the initial IV-E determination. The precise nature of the data exchanged and the technology employed to make that exchange differ from state to state. However, the broad intent of each of these interfaces is as follows:

did you **KNOW?**

All five of our SACWIS family states have included the IVA interface on day one of "Go-Live"

• Cross check key demographic information:

 – Name

 – Address

 – Date of birth

 – SSN

- Inform the Title IV-A agency when a child is removed so that adjustments can be made to the amount of TANF benefit paid to the family.

- Retrieve income and asset information for the removal family to assist in Title IV-E determination.

In all of the states we have implemented SACWIS, the Title IV-A agency was also the conduit for Medicaid information. Therefore, our Title IV-A interface was additionally used to retrieve the Medicaid number and inform the Medicaid agency that a child was in foster care.

Data Element 1	Data Element 2	Data Element 3	Data Element 4	Data Element 5	Data Element 6	Through	Data Element 46
County	DHR County ID	Case ID	Client ID	Child Name	Child DOB	....	Case Workers Tele No

Table 4.11-3. Template for IV-A Interface.

Title IV-D

Deloitte has developed an interface with the Title IV-D system for AL FACTS SACWIS system – it is one of the federally mandated SACWIS interfaces. The Child Support interface alerts the IV-D Child Support system that 1) the child has been placed into foster care and DHR custody and 2) DHR should become the payee for any child support payments. This interface helps maintain up-to-date information related to paternity and child support payment history from the child support system to support IV-E eligibility determinations. The precise nature of the data exchanged and the technology employed to make that exchange differ from state to state. However, the main objective of each of these interfaces is as follows:

Have You HEARD?

- The District of Columbia's court orders are obtained and scanned into the SACWIS system for easy retrieval by social workers.

- Interface of potentially eligible children to the child support agency to see if an existing child support court order is in effect against an absent parent. If a relevant court order is found, then the payee under that order is switched to the child welfare agency.

- Interface of all removed children to the child support agency in order to initiate a child support court order against the parent from whom the child was removed.

- Prevention of referral of a child to the child support agency if the social worker believes that such a referral could place the child at risk.

- Interface of monthly costs of care for children in custody so that the amount of the child support court order can be set or adjusted appropriately.

- Creation of child support account receivables once the child support agency informs the state of an active court order.

- Liquidation of those receivables as cash is received from the child support agency.

We believe that our child support functionality is one of the more comprehensive approaches to addressing this required component of federally required SACWIS functionality.

Data Element 1	Data Element 2	Data Element 3	Data Element 4	Data Element 5	Data Element 6	Data Element 7	Through	Data Element 173
County	DHR County ID	Case ID	Client ID	Child Name	Child DOB	Child SSN	….	Spouse (Father's Spouse) Address County

Figure 4.11-4. Template for IV-D Interface

AFCARS/ NCANDS

Deloitte has successfully interfaced both NCANDS and AFCARS submissions for multiple jurisdictions since the electronic submission process was first initiated.

The purpose of the AFCARS Interface is to transmit the AFCARS extract file to the federal government to fulfill federal reporting requirements. The Adoption and Foster Care Reporting and Analysis System (AFCARS) collects case level information on all children in foster care for whom State child welfare agencies have responsibility for placement, care or supervision, and on children who are adopted under the auspices of the State's public child welfare agency. This is a one way interface to the federal government.

The National Child Abuse and Neglect Data System (NCANDS) is a voluntary national data collection and analysis system created in response to the requirements of the Child Abuse Prevention and Treatment Act (Public Law 93-247) as amended. The NCANDS consists of two components. The Summary Data Component (SDC) is a compilation of key aggregate child abuse and neglect statistics from all states, including data on reports, investigations, victims, and perpetrators. The Detailed Case Data Component (DCDC) is a compilation of case-level information from those child protective services agencies able to provide electronic child abuse and neglect records.

NYTD

Deloitte has successfully implemented National Youth in Transition Database (NYTD) in production for Alabama.

This program gives States flexible funding to assist Youth in transitioning out of foster care. The law also requires the Administration for Children and Families (ACF) to develop a data collection system to track the independent living services provided to Youth and to develop

outcomes that measure States' success in preparing Youth for their transition from foster care to independent living.

State General Ledger

In AL FACTS project, although AL FACTS generates all of the payment records for services delivered to children and families by providers, it does not generate the check, but interfaces the payment data to the State Treasurer's Office for check generation. This task is generally performed within the State general ledger system, in conjunction with the State treasurer's office in order to support a degree of cash flow management on a statewide level.

AL FACTS is capable of being interfaced with the two primary State general ledger packages: AMS Advantage and R*STARS. Our general ledger interface is bi-directional:

- Payment information is transmitted to the general ledger

- Error information is transmitted from the general ledger if the payment fails on any edits

- Check information is transmitted from the general ledger once the check has been cut

Administrative Office of Courts

For Alabama, we have constructed an interface that retrieves all court upcoming court scheduling information (hearing date, hearing time, court room and judge) and places that information on the case workers AL FACTS calendar and Outlook calendar.

Medical Providers

For the District of Columbia, we developed an interface to the primary provider of medical care to foster children in the District. The goal of this interface is to retrieve:

- Medical history information

- Immunizations

- Upcoming medical appointments

- Diagnoses arising from those appointments

- Prescribed drugs

In addition to the natural benefits of making the complete medical history available to the social worker, we are sensitive to the use of psychotropic drugs within their jurisdiction. Our interface captures the prescription of such drugs and supports case work personnel in understanding how and where psychotropic drugs are being used.

Common Client Index

As exchanges of data between agencies become more commonplace, it becomes correspondingly more difficult to determine that "John Smith" within the SACWIS system

really equates to "John Smith" with a system operated by a partner agency. One solution that has achieved considerable success is the use of a common client index. Under this approach, each individual who is known to any state agency is assigned a unique, cross-agency identifier. As long as an accurate match can be made between the SACWIS and the common client index, then it follows that matches can automatically be made with another partner agency.

We have described above, the interfaces that we have built into our solution. Some of these interfaces are mentioned within your requirements specification; some are federally required. Some of the interfaces that we have described are not mentioned within your requirements specification.

did you KNOW?

In State of Alabama and District of Columbia, Deloitte identified and implemented additional interfaces such as Targeted Case Management thus providing better business outcomes to end users

Deloitte understands that the common drivers to build interfaces between FACT II and other systems are as follows:

- **It is a federal requirement.** ACF requires that SACWIS systems offer interfaces to Title IV-A, Medicaid, Title IV-D and NCANDS.

- **It aids operational efficiency.** For example, Alabama experienced numerous occasions when social worker would miss a court hearing. We discovered that the AL Court was modifying the court hearing schedule without informing the social worker. To rectify this, we built an interface from the Court system to retrieve all scheduled hearings and place those hearings on the AL FACTS calendar of the appropriate social worker.

- **It supports effective decision making.** In District of Columbia, we constructed an interface with sanctioned medical providers to retrieve medical histories of all children in District custody. This information supported the social worker in placing that child with an appropriately skilled provider.

- **It aids worker productivity and accuracy.** If a partner agency owns information regarding a child welfare case then using an interface to transfer that data is certainly more efficient than retyping it, and probably more accurate also.

Deloitte has constructed SACWIS interfaces with multiple partner agencies that address each of these drivers.

4.11.0 General Approach for Designing, Developing, and Implementing the Interfaces

RFP reference: 6.11 Interfaces, Page 48

Additional details regarding the interface requirements will be provided at the Bidders' conference to vendors that sign the State's non-disclosure agreement. Bidders should describe their general approach for designing, developing, and implementing the interfaces required by this RFP. These interfaces are of differing priorities, and the Bidder is expected to propose a strategy for addressing them appropriately. Bidders must propose interface solutions that are seamlessly integrated into the new system.

In this section we will describe the SACWIS interfaces that we plan to construct but before we do, it is also important to briefly discuss the nature of interface construction.

Of all of the pieces of functionality that you require, interfaces are likely to have the highest custom development work. Regardless of the rich functionality contained within the transfer solution and its immediate applicability to DSCYF, interfaces are different within each state – mostly because the systems with which we are interfacing are different from state to state. Deloitte has used a number of technical approaches to the development of SACWIS interfaces:

- Batch transmission of flat files

- Batch transmission of XML

- Real time web services

- Real time access to the partner agency database

Deloitte brings to DSCYF, our experiences of developing interfaces that allow automatic and/or scheduled exchange of data applicable to implementation of FACTS II interfaces.

- Our proposed FACTS II solution facilitates exchanges of common data between agencies in order to verify data and prevent duplicate data entry. It comes integrated with functionality that helps support federal reporting and captures data necessary to report AFCARS and NCANDS data elements.

- FACTS II support data reconciliation process that allows correction of data across interfaces and reports. Deloitte will work with DSCYF to determine the most optimum reconciliation process, and develop corresponding batch processes to get the desired results.

- Our experiences have also taught us that partner agencies, while requiring automated real-time interfaces, continue to interface via non-real time mechanisms such as data file exchange through nightly batch processes. Our solution supports both real-time and non-real time mechanisms.

- Our proposed FACTS II Solution interface operations will provide acknowledgements – confirmation or rejection of the notifications.

Activities to Develop Interfaces

The activities involved in the design and development of the interfaces for the Deloitte's proposed FACTS II solution will follow the software development life cycle prescribed by System Development Playbook Methodology. The Deloitte Playbook is a product of the experience and industry top-notch practices accumulated from our work on hundreds of successful projects.

Deloitte HHS Projects use the Deloitte Playbook as their SDM foundation

DE_SACWIS-273
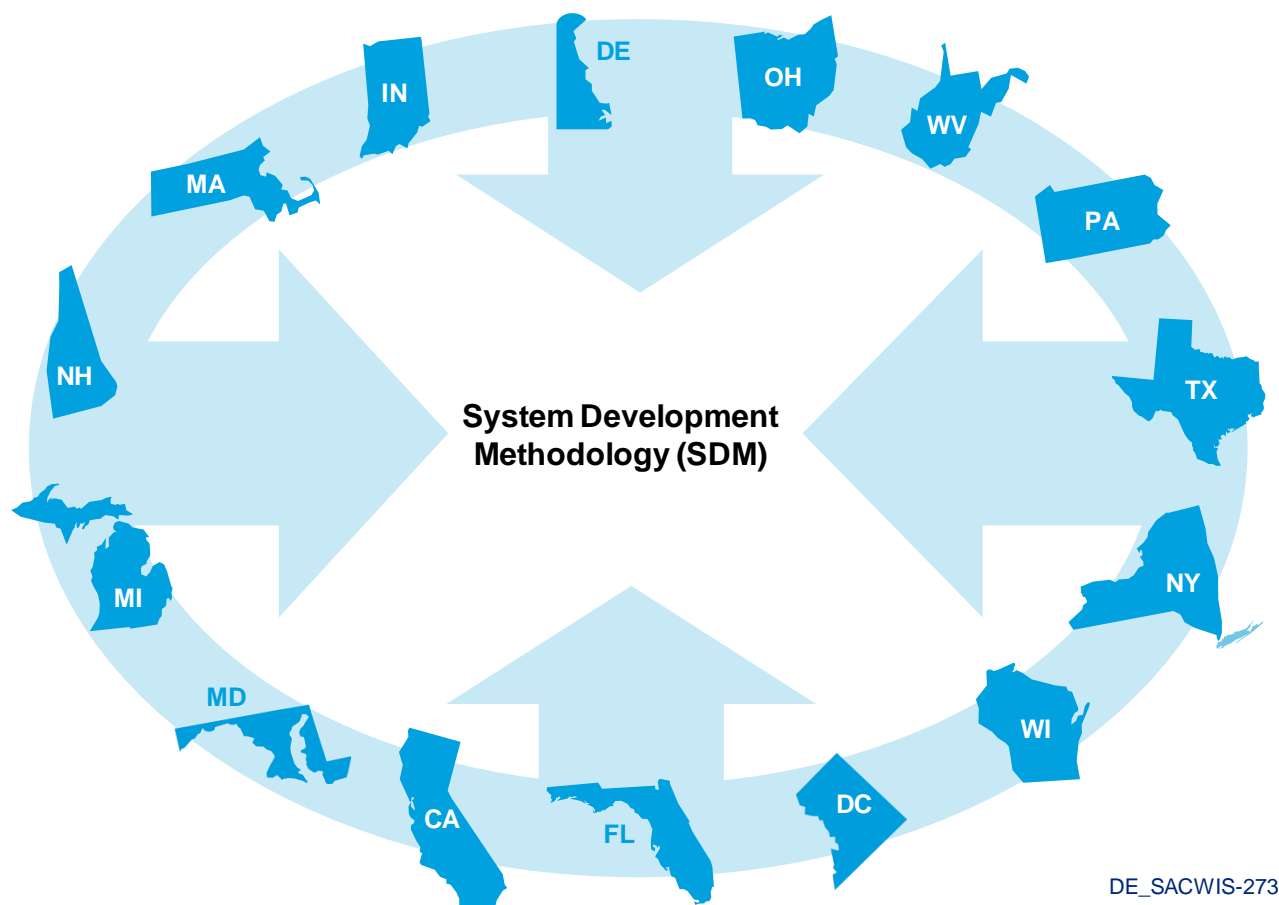
Figure 4.11-1. Projects using the Deloitte Playbook.
In more than 100 state government projects, Deloitte's proven methodology has been implemented across the U.S., in states with implementations similar to FACTS II.

Our Deloitte Playbook encapsulates effective practices, major milestones and deliverables, templates, and tools specific to application development and implementation that allows our applications team to get the FACTS II solution implemented. This standardized collection of proven methods and tools is used to tailor an approach for DSCYF that provides quality delivery throughout the FACTS II project life cycle.

Additionally, the Deloitte Playbook is used on our public sector and commercial projects nationally. The graphic below highlights several states (encompassing over 100 projects)

where our Health Services projects have benefited from, and continue to contribute to, our standard methodologies.

The following is a description of our FACTS II Playbook and the characteristics that make its documented and repeatable methodologies valuable to the overall quality of a systems configuration project.

The FACTS II Playbook is organized into phases and Disciplines. Phases capture the life cycle of the project. Disciplines capture the activities of specific areas of focus as the project goes through the life cycle. The following graphic illustrates the phases and disciplines included in the FACTS II Playbook.
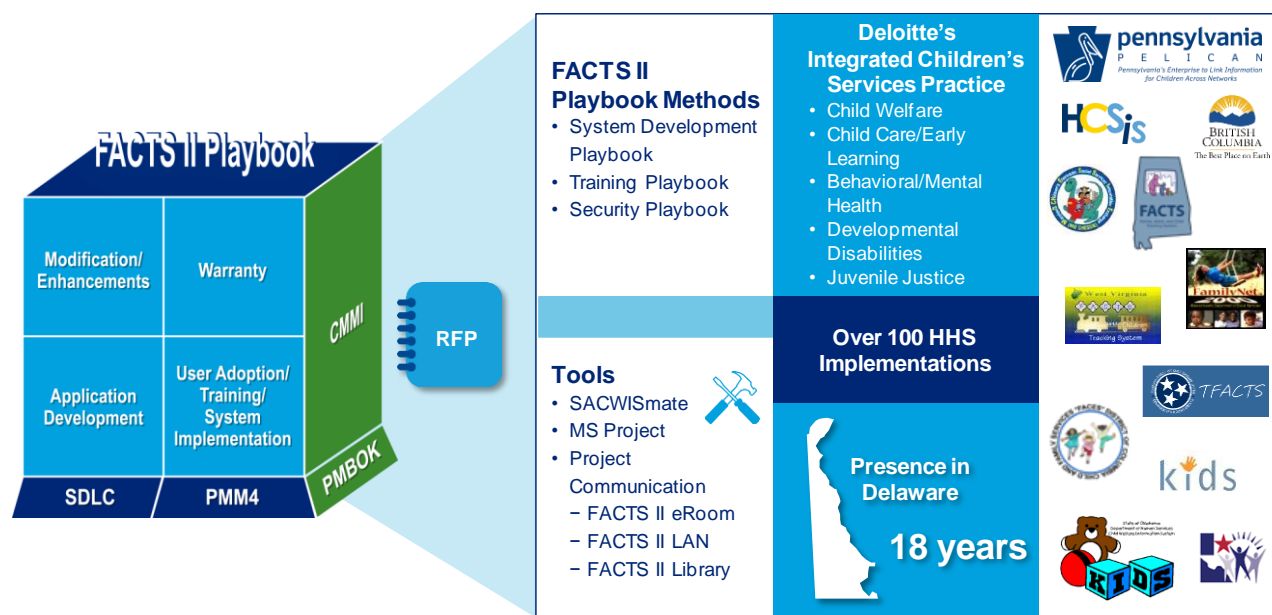
DE_SACWIS-271_4

Figure 4.11-2. Systems Development Playbook V5.0.

Initiate and Plan for Interfaces

As mentioned previously, developing interfaces to integrate with a developing system poses unique challenges. Some of these challenges include getting buy-in from the other agencies which are responsible for the target or host systems, understanding and working around the technology on which these systems operate, and developing the user views of data that comes into the main application. Because of these challenges, a specific plan will be developed that identifies the roadmap for the development and implementation of the FACTS II solution. This plan documents the development, testing guidelines and defines the tasks, subtasks, and persons responsible for each of the activities involved in the development and implementation effort. A thoughtful interfaces work plan where interface activities run parallel to the activities involved in building the main application will be pivotal in having operational interfaces when the entire FACTS II solution goes live.

Define the Interface Business Requirements

During this activity, we conduct Joint Application Design (JAD) sessions with key functional and technical staff from the DSCYF. It is important to have the functional and technical experts for each target or host system available for these JAD sessions. During the JAD sessions, we address the overall requirements as mentioned in the RFP to develop an initial assessment. Based upon the initial assessment, each requirement is then analyzed in greater detail in terms of systems affected, input and output data requirements, data matching, data validation and data translation. We conduct interviews with key staff to identify any gaps that may surface after the JAD sessions.

Design the Interfaces

Once the JAD sessions are completed, the interfaces development team associates the interface processes to the FACTS II system and cross-reference them to the transfer solution, DC FACES.NET online and batch processes.

Through a series of preliminary design meetings, the required functionality of the system is compared to the interface transfer solution functionality (by process) to identify the development effort required. A process model is created which identifies, by process, the logical changes required in the process. Any business logic changes, new or deleted data elements, and new or deleted objects are also identified. The new entities and attributes are given to the data administration team so they may begin processing the changes.The detailed design of the interfaces includes database design, pseudo code for batch or online programs, control and error report designs, and frequency of the interface job.

Develop the Interfaces

During this phase of the system development life cycle, interface programs are coded to interface data to and/or from other State systems with the FACTS II system. Using an approach that depends on common objects and re-usable components, programs are coded according to the business rules, program specifications, and development standards for the DSCYF. Each coded program is compiled and tested against the test database instance before going through the formal testing process. Each interface may be comprised of several programs on the host and target systems depending upon whether the interface is uni or bi-directional. Once the development of the interface programs is completed, the testing of each interface is initiated.

Test the Interfaces

During this activity, each individual program that was coded in the development phase is tested for input, output, and processing of data. All the data elements are verified for accuracy and translation on the target system. During this activity, we also benchmark performance to assess and project execution time during production runs. Each program of the interface is tested via the above-mentioned process. Once the unit testing is complete, the entire interface is tested to verify the inter-communication between programs and the resulting effect on the data.

Deploy the Interfaces

This is the final activity involved in the development and implementation of the interfaces for the FACTS II solution. The interfaces become available for all counties at the completion of this phase. Due to the interdependent nature of interfaces, several interfaces may require simultaneous activation. These interdependencies are considered during the requirements verification and design phase of the project, and the implementation schedule is developed to accommodate these dependencies.

Prioritizing Interfaces

Our experience in building interfaces has taught us that designing and developing them should begin early in the project and *should* focus on the method by which interfaced data is seen by the FACTS II solution. We have also learned that it is important to focus on the interfaces that must be operational from day one for the end-to-end functioning of the overall system. The next sets of interfaces that are undertaken are the one's which are non-critical for the day to day operations.

- **Step 1**. Identify the *critical* and federally *mandated* interfaces which the Integrated Case Management system depends on to make the system work.

- **Step 2**. Identify the interfaces which are *necessary* but not critical.

- **Step 3**. Identify the interfaces which are nice to have or *optional*.

Finally, we work with you and the partner agency to determine if a data interface is required real-time due to a business need and if the system being interfaced with can support the real-time need. If the business requirement can be satisfied via a non-real batch/scheduled interface, then we work with the partner agency for a batch interface. We believe that this approach will help you get your solution off the ground faster, let you establish how you want to approach your interfaces, and facilitate your partner agencies to work in collaboration for the design, development, and implementation of interfaces.

Seamless Integration of Interfaces

Our successful SACWIS interface development efforts will help the Delaware FACTS II project meet the functional objectives of DSCYF. A fully integrated system enables users to make informed decisions regarding general case management and eligibility of clients. The goal for our solutions is to provide the user community with a one-stop human services application, a **seamless** approach that does not require the case manager to navigate between applications to gather data.

Our proposed FACTS II solution uses a service component to interface with and send messages to external applications. It can provide guaranteed asynchronous message delivery and routing services between two different applications. The message will be in the format provided by DSCYF. We will work with DSCYF to customize our solution to provide workflow integration to support collaboration between the FACTS II solution and the service component.

Our proposed FACTS II solution interface service components use XML documents to exchange data with integrating applications. XML schemas or XML Schema Definitions (XSDs) are used to describe and validate an XML document that is being sent to or received from external systems. The schemas define elements that can appear in an XML document, attributes of those elements, parent/child relationships, the order & number of child elements, data types and default values for elements. XML schemas are extensible and can support multiple data types and namespaces. XML schemas are recommended and are a preferred mechanism for describing and validating data that is being exchanged with external systems. DC FACES.NET uses XML schemas to send & receive data from an electronic link. In addition to XML schemas, FACTS II solution also supports data transfer using Flat files and FTP between FACTS II system and any other external application.

Our proposed FACTS II solution promotes interoperability by adhering to standards such as HTML 4.0, XML/XSD. Our solution will also promote interoperability by using message-oriented middleware that can convert one system's interface into another system's interface on the fly. In essence the message-oriented middleware would allow our solution to request services from a server or a service without having to understand where the server is. An example of interoperability is the FACTS II sending an asynchronous message to a remote system or service for address validation.

The message-oriented middleware would facilitate the request and the results between FACTS II and the address validation service thereby providing interoperability. We will work with DSCYF to leverage a preferred message-oriented middleware to link and interoperate with components and services.

Design, Develop and Implement Interfaces

We plan to develop and implement the following **required and optional** interfaces in the FACTS II solution as requested in the RFP to receive, transmit, and verify case and client information. We have assumed that the interface partners will commit staff needed to design, build, and test their in/out bound interface files. Deloitte will conduct interface requirement verification, design, and test phases in accordance with the FACTS II Project plan for go-live with the application functionality. Immediately following this section, please see an Interface Specification Document from our last SACWIS implementation, AL FACTS.

System name	Interface	Description
Delaware Client Information System (DCIS)	Title IV-A (TANF) Delaware Health and Social Services (DHSS)	• Bi-directional interfaces that exchanges data for the initial determination of Title-IV-E, Medicaid information, cross program payment verification, and general client data to increase service delivery to children and families between the programs. Our solution meets the SACWIS federal IVA interface requirements. • All five of our SACWIS family states have included the IVA interface on day one of "Go-Live".
Delaware Automated Child Support Enforcement System (DACSES)	Title IV-D (Child Support) Delaware Health and Social Services (DHSS)	• Bi-directional interfaces that exchanges data for the verification of paternity and the identification of absent parent information. Our solution meets the SACWIS federal IV-D interface requirements. • Three of our SACWIS family states have working IV-D interface solutions.
Medicaid Management Information System (MMIS)	Title XIX (Medicaid) Delaware Medical Assistance Program	• Supports the exchange of child/family health information such as medical providers, medical services rendered, insurance information, immunization, mental health, and medical appointments.
National Child Abuse and Neglect Data Systems (NCANDS)	Mandated Abuse and Neglect Administration for Child and Families	• Supports the exchange of client information of children who are participating and/or receiving services by both the child welfare and the juvenile justice court system.
Social Security Administration (SSA)	SSI Social Security Administration	• Supports the exchange of social security information of participants
First State Financial (FSF)	Financial Delaware Department of Administration	• Supports the exchange of information on cost accounting by both program and child, accounts payable and accounts receivables
Business Licensing System	Provider Licensing Delaware Department of Revenue	• Supports the exchange of licensing information of providers
Electronic Vital Records System (EVRS)	Vital Statistics Delaware Health and Social Services (DHSS)	• Supports the exchange of vital statistics across programs for verification of client information and is necessary to conduct Title IV-E and MA eligibility determinations and redeterminations.
Courts Management and Education Tool (COMET) Courts Organized To Serve (COTS) Child Placement Review	Court System Delaware Court Systems	• Supports the exchange of data such as current charges against client, court schedule, arrests and warrants

System name	Interface	Description
Board (CPRB)		
Juvenile Information System	Juvenile Justice	• Supports the exchange of information on juvenile detention, probation, delinquency
Delaware Substance Abuse and Mental Health Datamart (DSAMH)	DSAMH Delaware Health and Social Services (DHSS)	• Supports exchange of information on substance abuse, mental health and Office of Prevention data for required to support reporting
Delaware Student Information System (DSIS) eSchool Plus	Student Information Delaware Department of Education	• Supports exchange of information on student enrollment and education information

Table 4.11-5. FACTS II Required and Optional Interfaces.

4.11.1 Associated Deliverables

RFP reference: 6.11.1 Associated Deliverables, Page 51

The following deliverables are identified for this activity:

• Interface Analysis and Interface Design Specifications