# Memorandum of Understanding

### Arkansas interRAI Intellectual Disability (ID) Assessment Software Installation and Maintenance

This document sets forth the scope of work to be performed by CH Mack, Inc. (hereinafter "CH Mack") for the Division of Developmental Disability Services (DDS) for implementation of the Arkansas interRAI ID Assessment (the "Arkansas ID Assessment"). Drawing from its extensive knowledge from prior interRAI software development and guidelines, CH Mack will direct a joint development team to install and maintain an assessment software system to document the information gathered during assessments of persons with disabilities. This covers all phases of this work effort.

This agreement is set forth to define each entity's responsibility in order to effectively complete the project mission. This MOU will begin the date all parties have signed and expires when AR DDS provides CH Mack notice that the project mission has been accomplished. This agreement is contingent upon approval by the Arkansas Office of State Procurement.

DDS has the option to extend this work in one year increments for no more than 5 years contingent upon satisfactory performance, continued funding and all necessary approvals.

# **Project Mission**

The purpose of the project is to install and maintain an assessment software system to document the information gathered during a face-to-face assessment process.

### The process will:

- Assess (face-to-face) an individual with disabilities,
- Support the collection of documentation or gather information from other sources in an effort to understand the specific needs of the individual with disabilities,
- Document the individual with disabilities' needs, strengths, limitations, resources, preferences, and level of care requirements using a uniform, automated, comprehensive system,

# DDS goals are to:

- Create detailed compatible data across programs for the purpose of program and budget development
- Standardize inter-rater reliability and promote accurate assessments.

# **Functional Decomposition**

It is anticipated that there will be up to 50 users of this system during the first year. Approximately 140 providers will utilize the "read-only" version of the system. The Arkansas ID Assessment will be an all-inclusive tool as indicated in the table below. This functional decomposition will serve as the foundation for the requirements definition tasks described within this document. Other minor Arkansas ID Assessment requirements may be added as suggested by CH Mack.

**Functional Requirements** 

Functional Requirem	ients
Functional Component	Requirements
Log-in (and User password change)	Users <u>will</u> be allowed to type in their log-in ID and password for authentication to the system and will also be able to change their password.
Data download/upload	Will allow the user to download the person(s) and case data from the central database to the laptop and subsequently upload the same data to the central database.
Demographics	Screens included in this section shall be as follows: Person Search, Name, Address, Identification Numbers, DOB, Sex, Marital Status, Contacts, Education, Employment, Financial, etc.
Assigned Workers	Will enable the assignment of one or more workers to a case. Additionally, a worker can be assigned multiple roles, e.g. financial, eligibility.
Case Overview	Will show some key information regarding the assessment case, e.g. key person information, assigned workers, historical assessments based on the interRAI ID + custom fields, RUG levels, CAPs, etc.
Case Transfer	Will allow the transfer of one or more cases from one worker to another.
interRAI ID Assessment	<u>Will</u> be conducted to include interRAI ID + custom fields directed by Arkansas DDS. CH Mack <u>will</u> build the capability to save snapshots of assessments, i.e. keep historical records of assessments.
Care Planning	Shall include the following: Plan of Care Options, Provider Search, Resource Search, Resource Details, Care Planning, Need Summary, Service Summary (& In-home Service), Equipment/Environment/Physical Concerns/, Community Alerts, Goals, Referrals.
Narratives	<u>Will</u> allow workers to record Case Notes. The worker can enter text and make modifications only while the case is open; after the case is closed that text cannot be edited or deleted. Further text can be added and appended to the existing text. Two different qualifiers can be attached to the text (in addition to date and user-id), e.g. type of service.
	Spell check functionality will be provided through calls to external (third-party) spell check routines.

Requirements
Shall provide access to at least the following three forms – CAP, Assessment Summary, and a Provider form.
Shall list the reports and will provide access to individual reporting, propulations/group reporting, audit materials, complaint reporting, provider/individual with disabilities service reporting, and individual and group cost reporting.  CH Mack will provide a system that incorporates a series of standardized reporting as well the ability to create ad hoc reports using an analytic tool or "report writer". DDS Administrators should be able to configure data sets and reporting formats for use by end users while maintaining the ability to define larger data sets that can be filtered for additional reporting flexibility and functionality. In addition, DDS will be able to produce charts by identifying the columns of a grid that represent various axes and series.  DDS will also have the ability to create new reports using preconfigured datasets in the reporting database and upload these reports into the DDS system.  The following data presentations will be available:  Assessments completed by date, geographic area, program, assessor or unit Assessment/Reassessments completed and referrals made Assessment and payment authorizations Additional TBD DDS category Additional TBD DDS category Complaints regarding the assessment process  Incoming by type Complaint resolution
Shall display automated notifications, reminders, and ticklers upon entering an end user's dashboard.  Shall provide assessment complete/not-complete indicators.  Shall provide triggers/appointment reminder that can be sent to mobile devices.
Will be high-complexity algorithms (more than 15 logic statements) and low- or medium-complexity algorithms, for Plan of Care development and budget management (individual and individual with disabilities base).
Will auto populate fields across all sections.
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Functional Component	Requirements
Change Log	Will track changes made within the assessment.
Comments	Functionality <u>will</u> be provided to enter text comments on assessment screens; however, CH Mack will not develop a screen to allow viewing all comments in a consolidated manner.
Daily Feed	Daily feed from most current MMIS data <u>must</u> be provided for the provider selection and case management purposes.
Electronic Signature	Will allow for the capability for all parties involved (individual with disabilities/representatives, general care providers, physicians, assessors, case managers, etc.)
Risk Indicators	From the care planning section
Notifications	Will include automated email, reminders and ticklers.
Systems Integration /Data Conversion	MedCompass will become the database of record
Data Conversion Requirements	Data Will be Converted from  Waiver APC  10 Bed ICF-MR  Human Development Centers

- 1. The following Arkansas interRAI ID Assessment and Case Management functions will be provided as part of this Statement of Work:
  - a. Service summary report
  - b. Change log (i.e. keeping track of changes within the assessment).
- 2. Functionality will be provided to enter text comments on assessment screens; however, CH Mack will not develop a screen to allow viewing all comments in a consolidated manner. It is CH Mack's understanding that the narrative functionality, described above, will be used to capture consolidated text.

# **Technical Assumptions**

Technical Functionality	Requirements
Application built for laptops in a disconnected mode	Three different types of operation will be available:  1. View and edit pre-determined data set  2. Only view data  3. View data and create and append new narrative records to existing records. The existing narrative records will be available for viewing only. In this mode, however, multiple users working on the same case will be able to create and append narrative records.
Audit	Data warehouse system will have database row-level audit whereby the worker id and timestamp corresponding to the most recent edit(s) will be recorded.
Connected mode functionality	The only functions available in the connected mode (i.e. connected to the central consolidated database) will be the following:  1. Perform person search, create new person if needed  2. Log-in  3. Transfer case  4. Assign worker(s) to a case  5. View reports  In relation to item #1, it is assumed that the search procedures will perform the search within the central consolidated database.  The remainder of the functionality will be enabled in the disconnected mode after the person data and the associated case assessments are checked out. Log-in functionality will be provided in the disconnected mode also to maintain data security. The worker will also be able to perform data uploads to the central consolidated database through the synchronization process.
Central consolidated database	This will be a Microsoft SQL Server database (OST will determine). This will be the central holding database for all relevant individual with disabilities and assessment data.  In addition to Arkansas interRAI ID Assessment system in the connected mode, DBAs or other similar experts with adequate security rights will be able to access this database for view only purposes.  After the Arkansas interRAI ID Assessment system is developed, no direct access will be provided to the individual with disabilities' and assessment data in the central database while that information is checked out. The only exception shall be the narrative functionality. Workers will be able to create new narratives and append them to the existing ones (that are available for viewing only).

Technical Functionality	Requirements
Laptop Database	Database for the laptop will have similar functionality as the central database. CH Mack will work with Arkansas DDS to adhere to the Common Business Enterprise framework while designing the data model for individual with disabilities demographics, assessment, and planning, which include:  • Microsoft SQL 2008R2  • Microsoft Windows Server 2008R2  • Microsoft .Net framework 3.5 SP1  • Applications must run with LUA  • Applications must be updated with SCCM  • Applications must comply with Arkansas Visually Impaired Law  • Applications must comply with Security Standards of the state of Arkansas and DHS  • Applications must have logging of changes and access to sensitive information through Syslog
Mirror Database	Independent of the application, the central consolidated database <u>shall</u> be able to be accessed by the database administrator (DBA) or similar expert with proper security rights. Running queries on the central consolidated database that will contain production data can (potentially) negatively impact synchronization performance because the queries might tie up the hardware and software resources. If there is a need to have access to the production data, it is suggested that Arkansas DDS (DBA) build a mirror database that can be updated nightly with the production data. Consequently, the mirror database can be made available to all interested (and qualified) people for data scanning and reporting needs.
Synchronization	Synchronization will occur between databases on the laptops and the central consolidated database. CH Mack will determine with DHS the appropriate mode that will be used for this synchronization process.
Conversions	Arkansas DDS will require CH Mack to perform all data conversions.  Arkansas DDS will provide CH Mack access to all existing data tables, as needed.  Arkansas DDS will also require CH Mack to evaluate CH Mack's existing data storage needs and the storage needs for the next 5 years.  The application will only interact with the Microsoft SQL database to retrieve and update individual with disabilities' data — CH Mack will not be responsible for building any transactions to populate this central consolidated database from any other systems (e.g. legacy individual with disabilities index systems).
Interfaces with other systems	Arkansas DDS will be responsible for developing and testing all interfaces with other systems as needed.  Arkansas DDS will be responsible for building any transactions, as required, for interfacing with the legacy systems (e.g. for payments) and also with the Common Business Enterprise components (database, business logic server, etc.).

Technical Functionality	Requirements
Security	The system will support Role Based Security:  The system will offer extensive, customizable security and confidentiality features that ensure full HIPAA compliance. User accounts in the system will be assigned a User Profile, which establishes the access to data, functions, and reports for that user in the system.  The system will use a multi-dimensional security model, with security enforced at multiple levels of the software. Standard database security will be supported, as well as a sophisticated presentation level security module that supports user interface security profiles at the level of each object (screen, view, grid, etc.) and field. A separate authorization set will be implemented using business rules security (e.g. when a user can access data, or what client circumstances allow access by a user). An authorized system administrator will be able to create the user profiles used in the system.  An unlimited number of security profiles can be created. Users, both internal and external, will be assigned to a security profile group. Thus, users in one department or organization can be limited in accessing data belonging to another department or organization. Individual system screens can be enabled for one department, but disabled for a different department. For example, a screen could be fully enabled for care managers, but totally denied access by others (non-care managers). Or certain care managers or supervisors could be given "Read-Only" access to a screen. Thus they would be able to read the data regarding a patient, but not change it.  The system will allow data access to be controlled down to the field level, individual fields on a screen can be locked out as either "Read-Only" or "No Access". If the
	access permission is set to "No Access", the field will not even be displayed on the screen.

CH Mack must build the application for use on laptops in a disconnected mode. In the disconnect mode, three different types of operation will be possible: 1) View and edit pre-determined data set, 2) Only view data, and 3) View data with additional capability of creating new narrative records and appending them to existing records. The existing narrative records will be available for viewing only. In this mode, however, multiple users working on the same case will be able to create and append narrative records.

It is required that the accompanying data warehouse system will have database row-level audit whereby the worker id and timestamp corresponding to the most recent edit(s) will be recorded.

CH Mack must provide similar functionality for both the database for the laptop and the central database. This requirement will allow CH Mack to provide all of the functionality as defined in the Functional Decomposition section set forth above. CH Mack will work with Arkansas DDS to adhere to the Common Business Enterprise framework while designing the data model for individual demographics, assessment, and planning.

As noted above, CH Mack must use a recent version of Microsoft SQL, as determined by Arkansas DHS/OST, as the basis of the central consolidated database. Also, the data synchronization between laptop databases and the central consolidated database will be developed by CH Mack.

# Phase I Tasks

The following tasks will be performed by the joint team as part of Phase I of the Arkansas interRAI ID Assessment project:

# Task 1 – Project Management

During this on-going task, the CH Mack Project Manager will help keep the project team focused on the project objectives, maintain the project work plan, review deliverables and works in progress to promote quality, and provide the Arkansas DDS Project Manager with weekly status reports.

In addition to scheduled status reports, the CH Mack Project Manager will work collaboratively with the Arkansas DDS Project Manager to resolve any issues that might arise throughout the Phase I.

# **Project Communication**

CH Mack will work with Arkansas DDS Project Manager to coordinate a common strategy for project communication. CH Mack will implement defined channels for communication, including:

- Scheduling regular meetings to discuss issues of common interest
- Designating resources as points of contact
- Providing stakeholders with project documentation that may be useful or of interest to them

The CH Mack and Arkansas DDS Project Managers will also develop a communication and coordination framework within the project team. This includes the following:

- Regular meetings of the whole team to discuss and resolve issues and concerns. These will be represented as milestones on the project work plan
- · Regular meetings of sub-team leaders to coordinate activity
- Regular internal sub-team meetings to discuss issues relevant to the team's internal activities and to apply methods of best practice wherever it is deemed appropriate.

CH Mack will solicit input from project staff members on a regular basis regarding project issues and areas for improvement.

Arkansas DDS will provide resources dedicated to the project for its duration as required to allow the project to proceed in accordance with mutually agreed to schedules. The number and commitment of functional and technical resources will be set forth in the detailed project work plan to be developed by the parties at the beginning of Phase I. Arkansas DDS functional resources will participate in the validation of the transfer requirements and the design of the system and will conduct the user acceptance testing to confirm that the finished product meets the approved transfer requirements. Arkansas DDS technical resources will work with the CH Mack team to design and develop the Universal Assessment CH Mack will perform regular deliverable walkthroughs with Arkansas DDS project members as the deliverables are being developed.

To promote effective deliverable submission, review, and sign-off, CH Mack will facilitate sessions for early, informal reviews of interim (draft) deliverables between team leaders and Arkansas DDS project

personnel. Arkansas DDS will fully participate in the interim deliverable review process. This technique will allow deficiencies to be identified and corrected early in the process, ultimately conserving time and resources. By deliverable sign-off time, Arkansas DDS staff is familiar with the deliverable through ongoing evaluation and has already exerted a strong influence on its final form. A complete description of the deliverable development, submission and approval process is included in Appendix A.

The following sub-tasks will be performed by CH Mack and Arkansas DDS as part of Task 1 – Project Management:

- Initiate project
- Manage project tasks
- Create and update project work plan
- · Coordinate with stakeholders
- · Conduct regular project status meetings and deliverable walkthroughs
- Submit project status reports

### **Initiate Project**

This sub-task should be completed during the first two weeks of the contract. During this time CH Mack staff will work with Arkansas DDS staff and other consultants to kick-off the project, assemble the project team, define roles and responsibilities of CH Mack staff, prepare a detailed work plan, establish a timeline and interview schedule, define the policies and procedures for the project, define the format of deliverables and other project documentation, and gather available documentation in preparation for the Phase I tasks.

The joint project team will be responsible for the following during this sub-task:

- Define roles and responsibilities
- Identify Arkansas DDS resources
- Establish detailed work plan
- Establish project procedures and standards
- Establish meeting and interview schedules
- Establish Phase I deliverable formats
- · Identify and gather high-level documentation
- Develop project communication plan
- Install/implement project management software (e.g., issue tracking system, eRoom)

The deliverables for the Project Management task will consist of the following:

- Project Status Reports
- Phase I Project Management Plan

# Task 2 - Document and Validate Business Requirements for Arkansas interRAI ID Assessment Transfer

As part of this task, CH Mack will facilitate sessions with the Arkansas DDS project functional resources and representatives from the end-user community. Arkansas DDS will be responsible for scheduling the requirements sessions and their participants according to the project work plan. During the sessions, the Arkansas interRAI ID Assessment functionality (as outlined in the Functional Decomposition provided in this document) will be presented and reviewed with the Arkansas DDS participants.

Arkansas DDS project management will make diligent and good faith efforts to commit adequate resources to complete this task within the timeframes defined by this contract.

Early in this phase, CH Mack will work with Arkansas DDS project management to validate the scope of the Arkansas interRAI ID Assessment. CH Mack will use Graphical User Interface (GUI) prototyping to animate the "to-be" look and feel of Arkansas interRAI ID Assessment. The "look and feel" of the Arkansas interRAI ID Assessment screens and their navigation will be recreated to the extent reasonable, given that the new GUI environment that will be applied for Arkansas will be different from existing Arkansas waiver database functionality.

This process will enhance CH Mack's overall understanding of Arkansas DDS's desired functionality. This phase will provide the foundation upon which subsequent phases will be based. Therefore, the overall objective of this task is to achieve the following:

- Enhance CH Mack's understanding of the existing business requirements.
- Validate, confirm, and document the Arkansas interRAI ID Assessment business requirements.
- Gain end-user input on CH Mack's understanding of Arkansas interRAI ID Assessment business environment.

The gap analysis that occurs in Phase I will provide an opportunity to define and agree on the modifications that are necessary. Arkansas DDS anticipates that the modifications will consist of:

- GUI design
- Change/add/move label names
- Modification of drop-down list elements
- Field dependencies which require completion of certain fields before moving to additional field entries

The CH Mack Team Lead will work with the appropriate Arkansas DDS Team Lead to organize work plan efforts. The participating Arkansas DDS staff will be assigned to the Joint Requirements Planning (JRP) team based on their subject area experience and knowledge.

To validate the Arkansas interRAI ID Assessment business requirements, the joint project team will:

- Conduct Acceptance Testers Team Orientation
- Prepare for and Conduct Acceptance Testers Sessions
- · Create GUI prototype to animate required functionality
- Document Acceptance Testers Sessions

The outcome of CH Mack's efforts on the business requirements definition and validation process will be an approved Business Requirements Document that clarifies the Arkansas interRAI ID Assessment requirements.

The deliverable for this task will consist of the following:

• Business Requirements Document

# Task 3 -Validate Technical Requirements

In this task, the joint project team will work directly with Arkansas DHS OST staff as well as other appropriate resources from other agencies to validate the technical environment for Arkansas interRAI ID Assessment development. CH Mack will identify Arkansas DDS and/or DHS standards that should be considered or adhered to when implementing a new system, and will also identify any system performance standards required.

As part of this task, the joint project team will thoroughly document the technical requirements for designing and developing the Arkansas ID Assessment, consisting of software and hardware requirements.

The outcome of the efforts of the joint project team in this identification and validation process will be an approved Technical Requirements document that outlines the technical requirements and constraints of the Arkansas interRAI ID Assessment.

The deliverable for this task will consist of the following:

• Technical Requirements Document

# Task 4 - Plan for Phase II

In this task, CH Mack will assist Arkansas DDS in planning for Phase II (design, development, and unit, system, and user-acceptance testing of Arkansas interRAI ID Assessment). Each phase will build upon the work accomplished in the previous phases and adhere to Arkansas DDS's overall vision for Arkansas interRAI ID Assessment. During Phase I CH Mack will work with Arkansas DDS to validate the appropriate approach and timelines for designing and developing the Arkansas interRAI ID Assessment using the functional and technical requirements defined and documented during Phase I. This planning will determine the scope of work for Phase II.

At the end of Phase I, a final decision will be made concerning the exact scope of functionality that will be included in the design and development tasks of Phase II. CH Mack and Arkansas DDS will mutually agree upon a scope of work, which the parties agree can reasonably be completed in the remaining time and contracted price of Phase II. This will be documented in the Phase II plan.

The deliverable for this task will consist of the following:

• Phase II Plan

# Phase II Tasks

CH Mack understands that Arkansas DDS desires a phased approach for completing the design and development tasks based upon the functional and technical requirements for the Arkansas interRAI ID Assessment, as those functional and technical requirements are mutually agreed to by the parties based upon the estimated schedule and contracted price provided by the State of Arkansas for completion of Phase II. Phase II consists of the following tasks:

# Task 1 - Provide Project Management Services

In Phase II CH Mack will continue to provide the project management services described in Phase I above. The CH Mack Project Manager will monitor project progress, manage and update the project

work plan and communicate status to Arkansas DDS Project Management. The CH Mack Project Manager will provide weekly status reports (as also stated in Phase I, Task 1).

CH Mack assumes that relevant Arkansas DDS project staff will have basic knowledge of the toolsets and programming language(s) and scripts that will be used in the development of Arkansas interRAI ID Assessment. CH Mack will not provide training on the toolsets, programming languages, and scripts.

The deliverables for this task will consist of the following:

- Project status reports
- Phase II Project Management Plan

# Task 2 - Design Arkansas interRAI ID Assessment

While the Business Requirements Validation task concentrated on "what" Arkansas interRAI ID Assessment should do, this task concentrates on "how" these requirements are designed, coded, and implemented.

The design process is built upon: 1) analysis conducted by CH Mack and Arkansas DDS team members, and 2) validated functional requirements within the scope of work mutually agreed upon at the end of Phase I and 3) sessions between project team members and key Arkansas DDS staff. Screen and report standards will be heavily based upon any existing Arkansas DDS standards or previously developed standards for Arkansas interRAI ID assessments. Layouts for each screen and report are developed using the appropriate development tools and are incorporated into the design for the transferred system. The process requires a review of functional requirements as they relate to current Arkansas interRAI ID assessment and plan of care development functionality, definition of the processing changes required, database changes and high level changes to customer views.

CH Mack understands that there will be some required data conversion from existing Arkansas DDS data systems as part of the proposed Arkansas interRAI ID Assessment project.

In the Design task, CH Mack and Arkansas DDS team members will:

- Develop the technical design for Arkansas interRAI ID Assessment, consisting of the screen layouts, data elements by screen, validations by screen, control items on screen (like buttons), and data element dependencies. This design will be based on the InterRAI ID with additions directed by Arkansas DDS and DDS staff. These will be documented in the Technical Design document.
- Prepare Arkansas interRAI ID Assessment data models for the laptop and central consolidated databases, consisting of the physical data model(s), specifications of SQL procedures and database triggers (if any), and data dictionary. These will be documented in the Data Model Definitions document.
- Develop program quality control checklist in collaboration with Arkansas DDS staff

At the completion of the phase, the joint project team will be prepared for the start of development effort.

The deliverables for this task will consist of the following:

- Technical Design Document
- Data Model Definitions Document

# Task 3 - Develop Arkansas interRAI ID Assessment

The CH Mack and Arkansas DDS project team will construct Arkansas interRAI ID Assessment according to the technical design and data models set forth in the approved Technical Design and Data Model Definitions documents. These documents will form the basis for coding and testing. CH Mack has assembled a development team that can leverage past experiences on similar initiatives.

Once the base application has been modified, the joint development team will focus on constructing the Arkansas interRAI ID Assessment; develop new functionality into the subsystem modules and perform unit testing prior to migration of the application to the system and user acceptance test environments. CH Mack will use a rapid application development method to assist with the Arkansas interRAI ID Assessment development.

The following sub-tasks will be undertaken for this task:

- Update and complete program specifications, consisting of program logic, object usage and interaction description, procedure and trigger calls.
- Develop (code) screens and related functionality.
- Prepare initial test plan.
- Unit test screens and related functionality and review programs for conformance with quality control checklist. It is assumed that unit test of software components is complete when all the program components conform to the quality control checklist and can be executed independently in conformance with the program specifications.
- Support Arkansas DDS staff to unit test related interfaces (to CBE databases and other relevant systems).

The deliverables for this task will consist of the following:

- Completed Program Specifications.
- Unit tested Arkansas ID Assessment Software Components.

# Task 4 - Conduct Arkansas interRAI ID Assessment System Testing

The testing approach to be utilized will address issues of application integrity through the use of test scripts and regression testing. These techniques provide confidence that the applications react as expected and that changes, if necessary, do not unexpectedly influence other portions of the applications.

The following sub-tasks will be performed by the joint project team as part of Task 5 – Conduct Testing:

- Finalize test plan.
- Prepare and conduct system testing according to system test scripts developed in collaboration with Arkansas DDS staff and based upon functional requirements set forth in the scope of work. It is assumed that system test of software is complete when all the system test scripts have been successfully executed (as defined above) on the developed system.
- Support Arkansas DDS staff to conduct user acceptance testing.

The purpose of user acceptance testing is to validate that the developed system components realize the functional requirements set forth in the scope of work. No changes will be made to the approved functional requirements at this stage.

CH Mack will assist Arkansas DDS staff to develop user acceptance test scripts. These test scripts will correspond and conform to the business and technical requirements and the technical design and data model definitions. The user acceptance test scripts will also address business scenarios in a reasonable and comprehensive manner, within the domain specified by the deliverables, so that all potential system and business activities that may occur in sequence or at the same time can be accounted for and tested. The number of these scripts and their content will be mutually agreed upon by CH Mack and Arkansas DDS before user acceptance testing begins.

Throughout the user acceptance testing process, each test script will be executed independently to address the corresponding business scenario. When a test script is successfully run and meets mutually agreed upon performance specifications, it will be deemed complete. Once a test script is complete, it will not be considered again in the user acceptance testing process. Following this process, when all the identified user acceptance test scripts are passed, the user acceptance test of the Arkansas interRAI ID system will be deemed complete. Arkansas DDS project management will make diligent and good faith efforts to commit adequate resources to complete this task within the timeframes defined by this contract.

CH Mack will also support Arkansas DDS in its acceptance testing efforts by providing high-level system training and acceptance test execution instruction to the Arkansas DDS testers. Arkansas DDS staff will test the transfer of information between all of the platforms that the system uses. At the conclusion of both system and acceptance testing, CH Mack will review and evaluate the results of the tests in collaboration with Arkansas DDS, and will resolve system defects (as described in Appendix A, Reviewing the Deliverable, Deliverable Acceptance section) that might arise out of user acceptance tests and that are mutually agreed to be within the contracted scope of work. CH Mack will not be responsible for resolving system defects arising out of work done by Arkansas DDS staff as part of the system development effort, for example, coding for interfaces to external systems.

The deliverables for this task will consist of the following:

- Test Plan (System, Acceptance)
- System tested Arkansas ID Assessment Software Components, and relevant system test scripts
- User acceptance tested Arkansas ID Assessment Software Components

# Task 5 - Plan for Implementation

In this task, as in Phase I, CH Mack will assist Arkansas DDS in planning for the next phase of the Arkansas interRAI ID Assessment project. Phase II completes the development of the Arkansas interRAI ID Assessment software and user acceptance testing. CH Mack will support Arkansas DDS staff to transition relevant activities as needed for the next phase. This will consist of the development of a process description for maintenance of and modifications to the Arkansas interRAI ID system as needed in the future.

The deliverable for this task will consist of the Implementation Plan

## **Project Completion**

Delivery of user acceptance tested Arkansas interRAI ID Assessment software and the Plan for Implementation, upon approval by Arkansas DDS (according to the procedures described in Appendix A), will conclude CH Mack's responsibilities for this project as defined by the Statement of Work.

### **Training**

CH Mack will provide training as described in Appendix C. CH Mack will utilize multiple training methodologies including lecture and hands-on instruction to ensure success for all learners.

CH Mack will utilize training methodologies to include, but not limited to:

- Lecture all aspects of the training modules will use lecture style instruction as the base method of presentation. Classroom-style lectures will provide participants with the essential background and technical information needed to use the new system. The lectures will be complemented with examples, demonstrations and hands-on exercises. To facilitate lecture instructions, the training team will use a PC projection device to project the system on screen, providing visual reinforcement to the trainees.
- Demonstration the training team will develop examples and demonstrations to reinforce the materials presented for each function of the system introduced. Each demonstration will be presented in small, sequential steps and participants will be provided with the opportunity to practice at the end of each step.
- Materials CH Mack will provide:
  - 1. Training workbooks
  - 2. Facilitator guides
  - 3. Quick reference guides
  - 4. On-line help
  - 5. Practice Assessment exercises
  - 6. Internet information

DDS will schedule and host the application training sessions. DDS and CH Mack will work together to ensure that the facilities are configured to accommodate the training including configured laptops and workstations.

### IMPLEMENTATION ASSUMPTIONS

- 1. Validation and documentation of the (transferred) system business requirements and approved transfer modifications will be completed in the two months that comprise Phase I.
- 2. The central (holding) database will be a recent version of Microsoft SQL, as determined by Arkansas DHS/OST. The laptop database will be determined by CH Mack.
- 3. Design and development of the technical infrastructure will be completed according to the agreed upon framework.
- 4. CH Mack will select a product to be used for data synchronization between laptop databases and the central consolidated database.
- 5. Arkansas DDS will require CH Mack to perform all data conversions; Arkansas DDS will provide CH Mack access to all existing data tables, as needed. Arkansas DDS will also require CH Mack to evaluate the DDS existing data storage needs and the storage needs for the next 5 years.
- 6. This Statement of Work does not include costs, with the exception of MedCompass software, incurred by CH Mack for software or hardware required to design or develop the Arkansas

- interRAI ID Assessment. CH Mack assumes that Arkansas DDS will acquire any required hardware for operations through a separate purchasing process. The specific dates will be documented in the work plan developed as part of Phase I Task 2 Initiate Project.
- 7. Arkansas DDS will be responsible for the adequacy of the technical infrastructure (including all hardware, and telecommunications), which includes installations, configuration, capacity planning, related systems operations, user support, and maintenance, beyond what is identified in the RFQ.
- 8. Arkansas DDS will provide an adequate number of personnel, both user and technical, as agreed upon in the Organization Charts in the Organization section of the CH Mack proposal and in the project work plan, in a timely manner to support the project. The project work plans for Phases I and II will assume 1 Arkansas DDS project management staff, and 1 Arkansas DDS technical staff, in addition to the Joint Requirements Planning and Test Advisory Group teams and other testers as required. These staff will be resourced as needed for the duration of the project. Arkansas DDS will also be responsible for the performance of its employees and agents and for the accuracy and completeness of all data and information provided to us in performing CH Mack's services.
- 9. Arkansas DDS business staff assigned to the project will have in-depth knowledge of the relevant programs and policies.
- 10. The project team will have reasonable access to the Arkansas DDS and/or DHS staff necessary to complete this project.
- 11.Arkansas DDS will complete all tasks it is responsible for according to the project work plan and the agreement.
- 12.Review and comment on deliverables and other issues resolutions by Arkansas DDS representatives will occur in a cooperative, timely, and ongoing manner. The CH Mack work plan is predicated upon 10 days of deliverable acceptance and issue resolution period.
- 13. Arkansas DDS will be responsible for maintaining back-up data necessary to replace Arkansas DDS data that is lost or damaged from any cause.
- 14.Key CH Mack personnel will not be removed from the project except for reasons beyond control or with prior approval of the Arkansas DDS Project Manager. It is also assumed that Arkansas DDS Project Manager approval will not be unreasonably withheld.
- 15. Arkansas DDS will be responsible for obtaining a copy of the code (including physical database models and data dictionary) of the existing MS Access database systems from DDS, Arkansas Department of Human Services.
- 16. Arkansas DDS will provide approved contractor staff remote access to Test (UAT) and Production environments to facilitate timely execution of design, development, and testing tasks for the Arkansas ID Assessment System.

### APPENDIX A

# Deliverable Development, Review and Approval Process

Each project deliverable shall be subject to review by Arkansas DDS to verify that it satisfies the acceptance criteria. The deliverable review and approval process is as crucial to the project schedule as is gathering requirements. With Arkansas DDS's approval, CH Mack will establish deliverable sign-off procedures for completing the major tasks and task deliverables specified in the project work plan.

CH Mack will work with Arkansas DDS to develop the acceptance criteria for each deliverable. The criteria will be based on mutually agreed upon deliverable outlines. At the beginning of each phase, CH Mack will provide Arkansas DDS with outlines for all deliverables for that phase. The deliverable outlines will establish the purpose of the deliverable and describe the content. CH Mack will agree on standards and formatting issues at the time of approval of the deliverable outlines. In concept, the acceptance process will be based on the degree to which the deliverable adheres to the approved outline. CH Mack's deliverables are usually produced using either Microsoft Word or Microsoft PowerPoint.

Approved deliverables, as applicable, will define the scope of and form the basis of subsequent work. Each deliverable will also build upon project work completed to date and previous deliverables.

# Refining Deliverable Standards

Purpose	To refine format, content and review process for deliverables
	The same of the sa
Description	Early in the project, CH Mack and Arkansas DDS will agree on the format,
_	content, and review process for the deliverables associated with each task of
	the project. The agreed upon standards will comply with Arkansas DDS's
	requirements and expectations for project deliverables, both in content and
	format. The content will be defined by the approved deliverable outline.
and the second s	

# Performing Deliverable Walkthroughs

Purpose	To validate deliverable content and quality during the development process
Description	Constant involvement of Arkansas DDS staff in all phases of the project will help enable staff to keep abreast of, and in agreement with, the design and development. To promote effective deliverable submission, review, and sign-off, CH Mack will facilitate sessions for early, informal reviews of interim deliverables between team leaders and Arkansas DDS project personnel. Arkansas DDS agrees to fully participate in the interim deliverable review process. This technique will allow deficiencies to be identified and corrected early in the process, ultimately conserving time and resources. It also helps to maintain quality; by the time a product reaches the formal review stage it has already undergone much scrutiny. Another benefit to this approach includes a high level of confidence in the deliverable's accuracy. By deliverable sign-off time, Arkansas DDS staff is familiar with the deliverable through ongoing evaluation and has already exerted a strong influence on its final form.

# Submitting the Deliverable

Purpose	Formal submission of the deliverable for Arkansas DDS approval
December	CII Ve-1-cilltittitt-d-licill 4-4 A-1 PDC Dit-4
Description	CH Mack will submit each project deliverable to the Arkansas DDS Project
	Manager, within the agreed upon time frame specified in the project work
	plan. Each deliverable will comply with the agreed upon standards and
	deliverable outline.
ar statement	

# Reviewing the Deliverable

Purpose	Formal review and approval of the deliverable by Arkansas DDS.
Description	Each project deliverable shall be subject to review by Arkansas DDS to verify that the deliverable satisfies the mutually agreed-upon format and content. CH Mack staff will be available for questions and answers during Arkansas DDS's review period to provide explanation and clarification of deliverable contents when required.
	In the event of a deliverable's non-acceptance or partial acceptance by the Arkansas DDS, an additional review period will be designated for Arkansas DDS to examine the re-submitted deliverable.
	Deliverable Acceptance
	Each deliverable reviewed by Arkansas DDS will result in a written notice of decision. Arkansas DDS will provide CH Mack with one of the following

within 10 business days of submission:

- Written notice of acceptance of the project deliverable
- Written notice of non-acceptance of the entire or partial project deliverable, with written request of deliverable revisions

Arkansas DDS's sign-off will signify that all deliverables have been provided and are accepted, and that CH Mack has completed the deliverable in accordance with objective criteria, mutually agreed and documented by the parties. A notice of deliverable rejection will include details citing the specifics of the non-acceptance, including a description of the defect, which will be a reproducible and demonstrable defect of the deliverable which renders the deliverable (i) inoperable for its purpose as contemplated by this Statement of Work, or (ii) to be materially out of compliance with the requirements for the deliverable as set out in this Statement of Work or other accepted deliverables. In this case, the process of deliverable evaluation. modification, resubmission, and re-review will follow. Any re-review will focus only on areas originally identified as unacceptable. Requests for deliverable revisions will follow similar procedures for analysis through department review. The cycle of review and resubmission of all project deliverables will continue until CH Mack receives a letter of acceptance. Should Arkansas DDS not provide written notice within the timeframes identified above, CH Mack will notify Arkansas DDS in writing. This notification will provide an additional five business days during which Arkansas DDS may provide written notice to CH Mack. Should Arkansas DDS not provide written notice within the additional five business-day timeframe, the deliverable will be deemed accepted.

# Deliverable Re-submission by CH Mack

CH Mack will upon a written notice of rejection of a deliverable correct the deficiencies and bring the rejected portion of the deliverable into compliance with the requirements of this Statement of Work. CH Mack will resubmit the deliverable to Arkansas DDS. Arkansas DDS will provide CH Mack with written notice of acceptance within 5 to 10 business days of re-submission, depending upon the severity of the deficiencies identified for the deliverable.

# **APPENDIX B**

# **High-level Implementation Schedule:**

Startup: June 4 – June 8

Requirements Analysis: June 11 – June 29

Design: July 2 – July 20

Code: July 23 – August 10

Unit Test: August 13 – August 17

Configuration: August 20 – August 31

System Test: September 4 – September 14

UAT: September 17 – September 28

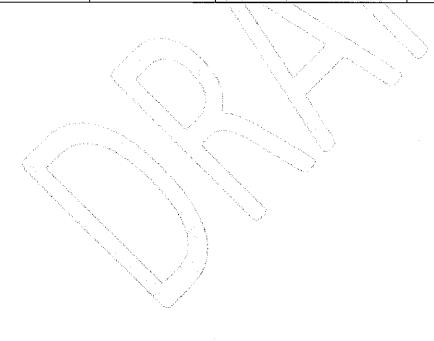
Training: October 1 – October 19

Operational Readiness: October 22 - October 31

Go-Live: November 1 – November 9

# APPENDIX C

Arkansas DDS M	ledCompass Trainin	g			
<u>Phase</u>	<u>Event</u>	CHM Resources	<u>Number</u>	<u>Nights</u>	-
UAT	UAT Support	Project Manager Trainer Lead BA	3	3	
Training	System Admin Training	Trainer	1	2	
Training	Super User Training	Trainer Project Manager	2	3	
Operational Readiness	Assessment	Project Manager	1	2	
Implementation	Go-Live Support	Project Manager Trainer Lead BA	3	3	



# APPENDIX D - MedCompass TM Implementation Costs

	MedCompass <sup>TM</sup> In	"Implementation Pricing for Arkansas DDS	ing for Arkansas D	0.5		
Schuton Component	Years	Year2	Year.3	Year4.	Year5	Total
MedCompass Timese Fee1	3325,000		And the second			\$325,000
Maintenance & Support	000'08\$	280,000	\$80,000	280,000	000,084	\$400,000
Implementation Services <sup>3</sup>	000'516\$					\$345,000
Provider Acress Tem (2 year) Linewse*	000'522\$		May see The			\$225,000
	\$21,109	2 parter	7.6	Jan		\$21,109
Subfotal	\$996,109	( )		And the second		\$1,316,189
		1				

Papelusi Termiterse for up to 50 named uses for use of NecCompass" in support of the Atarias Distinct of Developmental Distability Seviers (DDS) processes and operators as kshed in the Salement of Work (SOM) or Bed "Salement of Work for Adamses inteRA Intelectual Disability (II) Assessment Sufficie Development."

Maintenance & Support (MAS) is 20% of ficence fee, pre-discount approved for DDS, for 50 named user site fixence.

holds al Sovies, Debeades defect in he DDS SOW collect "Saleses of Norkin Adams inteRA interior Disables (II) Assessment Subure Development".

- MecCompass "Implementation PM"
  - Requirements Specification Services
- Implementation and Configuration Services
  - Integration / Interferos Services
- India Data Conversion Sewices
  - System Testing Sewites
    - Training

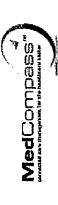
Pofessional Sewices for leats to being inflating termshafon mill be managed frough Charge Request procedures and Statement of Work (SOW) added one to the cripinal confeat.

"Two Year Term Lincase for unimited "read only" access for Providers in support of the Admissis inferRALD Assess

Assumptions:

- hybratsko ocus nitin he krefane dofned in her ok planceskol as dofned in Appendix B of he kittl criffed "Atlantas interNet Intelectual Dissibility (13) Assessment Software installation and labitations.





CH Mack, by signing below, attests that they have received, read and understand the entire Agreement.

IN WITNESS THEREOF, the parties hereto have caused this  $\underline{23}$  page Agreement to be executed by their undersigned officials as duly authorized.

CH Mack, Inc.:	STATE OF ARKANSAS, DIVISION OF DEVELOPMENTAL DISABILITIES SERVICES
SIGNED BY: NAME:	SIGNED BY: NAME:
TITLE:	TITLE:
DATE:	DATE: