Illinois Department of Innovation and Technology Request for Proposal SAP Finance Cloud Migration Project Solicitation #SAPSI20251 State of Illinois ERP System – Azure Environment

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Section A Scope of Work

A.1 Overview and Purpose

The State of Illinois is seeking proposals for a Systems Integrator (SI Migration and Operations Vendor (SI VENDOR)) to migrate our current SAP Enterprise Resource Planning NS2 environment with Virtustream (currently under an SAP contract) to Microsoft Azure (Azure). This request for proposal (RFP) is exempt from the Procurement Code pursuant to Section 1-10(b)(22) and will be conducted on an expedited timeline. Please see Section A.4 for the proposed timeline.

The scope of the project includes migration to Azure plus 90 days support of our SAP applications and Azure environment postproduction go live.

Coordination with Microsoft, SAP, the States' technical and functional teams, the State's current maintenance and operations support vendor, Deloitte (M&O VENDOR), the State's assigned PMO and other parties as required should be planned for.

It is the State's intent to issue an additional RFP for ongoing support and managed services. The SI VENDOR selected for this SAP Finance Cloud Migration project (including 90-day support) contract will not be prohibited from submitting a response to the ongoing support and managed services RFP when issued.

A.2 Desired Outcomes:

A successful project will result in the migration of our existing SAP hosted environments from Virtustream to a new Azure hosted environment capable of supporting the State of Illinois's SAP ERP Financial system while maintaining all integrations without impacting overall service and quality.

This project has a date certain completion date due to end of life of the State's hosting contract with Virtustream. SI VENDOR must be able to start the project no later than 10/1/2024 for a completion date including validation, testing, and deployment no later than 5/31/2025.

A.3 Expectations and Responsibilities

The State expects the SI VENDOR to review the proposed roles and responsibilities, establish an implementation plan, and coordinate completely with necessary parties to ensure the Cloud Service Provider migration is timely and executed effectively.

The State, SI VENDOR, Cloud Service Provider, and M&O VENDOR all have roles and responsibilities in planning, executing, and maintaining these services through the contract period. A proposed RASCI can be found in <u>Appendix 1</u>.

The services expected from the selected SI VENDOR are:

1. Assessment and Planning

- Conduct a comprehensive assessment of the current ECC SAP finance environment leveraging the detailed bill of materials (BOM) associated with our current environment.
- Develop a detailed migration plan, including timelines, resource requirements, risk management, and contingency plans within 30 calendar days of contract execution.

2. Architecture and Design

- Design the target Azure architecture.
- Ensure the design meets performance, scalability, security, and compliance requirements.

3. Migration

- Execute the migration of ECC SAP finance systems to the Azure Platform.
- Coordinate set up and configuration of relevant hardware and software with monitoring agents for Azure and all software.
- Minimize downtime and disruption to business operations during the migration.
- Perform necessary data validation and integrity checks post-migration.

4. Optimization and Testing

- Optimize the migrated environment for performance and cost-efficiency.
- Provide anticipated 3-year cost of ownership metrics to validate cost-efficiency.
- Conduct comprehensive testing, including functional, performance, and security testing.
- Disaster Recovery Services testing procedures and results obtained from Microsoft and a documented review process for State to use at least annually. Disaster Recovery Services to be validated prior to production execution.

5. Training and Documentation

- Provide training for internal teams on managing and operating the new environment.
- Deliver detailed documentation covering the architecture, migration process, and operational guidelines.
- Document all Azure Environments in a system schematic and dataflow diagram as well as detailed listing of all servers and services (see <u>Appendix 2</u>).
- Develop and provide documentation and procedures for all environments production and non-production including maintenance schedules, downtimes, disaster recovery testing, etc.
- Provide knowledge transfer, training, and all implementation documentation to the M&O VENDOR.

6. Support and Maintenance

- Provide post-migration support for 3 months.
- Offer ongoing maintenance and support services for production and lower environments.

A.4 Proposed Timeline

This timeline is proposed with key deliverables the State believes necessary for a successful completion. Any expected modifications to the timeline should be documented in the offeror's response.

Definitions for the below milestones can be found in <u>Appendix 4</u>.

RFP Posted	8/16/2024
RFP Questions Due	8/26/2024
RFP Responses Due	9/09/2024
RFP Award Notification	9/20/2024
Contract Execution	10/1/2024
Environment Assessment Recommendation	10/31/2024
Environment State Approval	11/15/2024
Cycle 1 – SBX & Development (N+1)	12/16/2024
Cycle 2 – Development (N)	1/15/2025
Cycle 3 – QA (N) & ITC	2/21/2025
Cycle 4 – Verification (N) & UAT	3/31/2025
Cycle 5 – Production Dry Run/Cutover	4/30/2025
GO Live	5/31/2025
Hypercare ends	07/01/2025
Cycle 6 – TRN, Development, and QA (N+1)**	07/31/2025
Support and Maintenance Services ends	09/01/2025

Example Timeline:

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24	Week 25	Week 26	Week 27	Week 28	Week 29	Week 30	Week 31	Week 32
Assessment																																
Prepare																																
Cycle 1 - SBX & Dev (N+1)																																
Cycle 2 - DEV (N)																																
Cycle 3 - QA (N) & ITC																	п	rc														
Cycle 4 - VER (N) & UAT																						UAT										
Cycle 5 PROD Dry Run / Cutover / Go-Live																										Go- Live	\mathbf{X}					
Hypercare																																
Cycle 6 - TRN, DEV and QA (N+1)																																

** possibly just copies of QA (N) or PROD

A.5 Expectations for Support from initial environment thru 90-day Support Period

The SI VENDOR must provide the following additional technical support services from the release of the first environment through the 90-day support period. These services are currently being provided by the legacy hosting provider in the legacy Virtustream environment.

The role of the SI VENDOR during the 90-day support period, particularly in relation to Azure interacting with our SAP ERP Finance environment, is to define and ensure the State's SAP ERP Finance system is in an operational state, functioning smoothly with consistent reliability, and security in the hosted Azure cloud infrastructure.

This section establishes the expectations, tasks, and responsibilities of the SI VENDOR after the migration and implementation. The SI VENDOR must provide the following support services across the State's SAP Integrated solutions which include both SAP and non-SAP Production and non-Production solutions.

- Provide server support, management, monitoring, troubleshooting, incident management, issue resolution and maintenance activities for the SAP application, database and connection environment hosted at Microsoft to minimize downtime. Production and non-Production servers / VM's would be in scope.
- 2. Provide DBA (database administrator) support, management, monitoring, troubleshooting, issue resolution and maintenance activities on the State of Illinois' SAP and non-SAP application databases. Production and non-Production servers / VM's would be in scope.
- 3. Provide storage solution support, management, monitoring, troubleshooting, issue resolution and maintenance activities across SAP and non-SAP application file server and database areas. Production and non-Production servers / VM's would be in scope.
- 4. Provide monthly SAP and non-SAP application maintenance activities (restarts, upgrades, fixes, patches, etc.) to the servers / VM's across the Production and non-Production environments and then complete connectivity testing, smoke-testing and technical operational testing post-monthly activities prior to hand-off to the functional and technical testing teams.
- 5. Provide email notifications of success or failure of the above activities' monthly maintenance activities to the State's SAP leadership team and PMO and document activities within the state SAP team's Operations and Steady State SharePoint site.

A.5.1 Incident Management

Incident Priorities

State of Illinois currently has the following response times by priority level:

Priority	Response time
Priority 1 - Very High	Within 20 minutes of Notification
Priority 2 – High	Within 60 minutes of Notification
Priority 3 – Medium	Within 4 hours of Notification
Priority 4 – Low	Within 1 business day of Notification
	Answer within 8 rings

Incident Classification

State of Illinois currently has the following response classifications by level.

Priority	Definition
1 - Very High	Major part of the PRD system is unavailable/not operating correctly and/or business impacting transactions cannot be completed, affecting multiple users. Where no reasonable workarounds exist, and business operations are not possible. Or Problem has a critical impact on the business (e.g., Loss of the Application Production server impacting all users).
2 – High	Part of the PRD or DEV or QA system is unavailable/not operating correctly, affecting users in a single function. No reasonable work-around exists and where business impacting operations in this function are not possible/severely impacted. Or Problem has a serious impact on part of the business (e.g., a configuration change is impacting a small subset of users).
3 - Medium	Part of the system is unavailable/not operating correctly, affecting users in a single function. Work-around in place, but business operations are impacted, although not severely. Or Problem has a temporary impact on users and is non-critical or is a development issue (e.g., Email is slow to deliver).
4 - Low	System Incident that is causing inconvenience to the business, but not impacting operations. Or Problem has a minor impact on users, or issue is a request for further information. Or Service Desk Support (e.g., a Service or Change request or request for general assistance).

A.5.2 Database Management

The SI VENDOR will review the database management set up with the Cloud Services provider and then understand the M&O VENDOR responsibilities for the current ongoing database management services as outlined below.

Service Level Name	Measure	Target
HANA Critical Patches and Fixes	Installing critical security patches and fixes published by Third Party Software vendor. Patches to be implemented upon Customer request and during Customer agreed maintenance window.	Patch or fix to be implemented within 5 business days of Customer request (assumes the request accommodates Customer's maintenance window).
HANA Database Recovery Point Objective	Amount of data loss measured in time. SLA assumes client configuration includes virtual HANA appliance copy of production and QA/Dev HANA appliance in secondary data center.	30 Minutes
HANA Database Recovery Time Objective	Duration of time within which the HANA database must be restored following a disaster. SLA assumes client configuration includes virtual HANA appliance copy of production and QA/Dev HANA appliance in secondary data center.	4 hours

Section B- Current Conditions

B.1 Current Environment

The State's ERP system environment includes SAP ECC, SRM, BOBJ, GRC, Process Orchestrator, BODS, Hana Runtime, Hana Enterprise, NetWeaver, Redwood RunMyJobs Enterprise Edition, Solution Manager, and Windows Terminal Services (WTS).

The selected SI VENDOR will review and evaluate the current architecture provided in <u>Appendix 2</u> and make recommendations for implementation leveraging the input from the Cloud Services vendor, legacy M&O VENDOR and State team to replicate current functionality in the new environment.

B.2 Software Requiring Migration

In addition to the servers and specifications, the following software will be migrated and require supported:

- SAP ECC
- o SAP SRM
- SAP BOBJ
- SAP GRC
- SAP Process Orchestrator
- o SAP BODS
- o SAP HANA Runtime
- o SAP HANA Enterprise
- o SAP NetWeaver
- Redwood RunMyJobs
- SAP Solution Manager
- Windows Terminal Services (WTS)

B.3 Current Architecture Environment Example

The detailed listing of the servers and specifications are in <u>Appendix 2</u>. The SI VENDOR should review that list with the Cloud Services Provider and M&O VENDOR to determine if any changes are recommended.



Current State Finance Production Architecture (established - 2016)

B.4 FedRamp Requirements

FedRAMP requirements are essential to ensure the security and reliability of cloud services used by federal and state agencies receiving federal funding. FedRAMP requires rigorous security checks and adheres to strict standards. This assures the State's ERP system data is safe and the service is compliant with federal security regulations for both federal and state grant reporting purposes.

The Cloud Computing Service provider must comply with FedRAMP Moderate or High baseline requirements and provide a comprehensive framework for security controls that protect sensitive government data. The SI Vendor is responsible for ensuring these requirements are met and policies and procedures are in place to ensure continuous monitoring and assessment. The procedures and review should evaluate the following requirements:

- 1. **Security Controls:** Implementation of FedRAMP security controls, including access control, incident response, and system and information integrity.
- Continuous Monitoring: Regular security assessments and continuous monitoring as per FedRAMP guidelines. Annual SOC reports and quarterly bridge letters will be provided from the hyper-scaler and SI VENDOR.
- **3. State Audit Requirements:** All requirements above are to comply with all Federal and State grants and related program requirements and must be adhered to or remediated immediately if necessary.

B.5 Job Scheduler – Redwood SaaS Solution

The State of Illinois utilizes the Redwood job scheduler solution to automatically run and monitor our job schedule.

Prior to this migration the Redwood solution will be hosted externally within the Redwood SaaS environment running and monitoring the State's SAP jobs within the existing hosted environment.

For the migration project, the Cloud Provider and SI VENDOR will need to connect the newly migrated application VM's to the external Redwood environment and perform any needed setup, validation testing and configuration to ensure the jobs run as expected for the State of Illinois.

Please note that State resources and the M&O VENDOR resources will be available to support and consult in this effort. The SI VENDOR's Project plan should include estimates of time for any State or M&O Vendor resources to ensure capacity will be available.

**Note: an example of the jobs running in the State's SAP environment is available in Exhibit 4.

Frequency	Dates	Day and Time	
Monthly	First weekend of the month	Planned outage window = Friday @ 7pm Central thru Saturday @5am	All non-production VM's and services, OS, security, networking, and application management (all as needed)
Monthly	Third weekend of the month	Planned outage window = Friday @ 7pm Central thru Saturday @5am	All production VM's and services, OS, security, networking, and application management (all as needed)

B.6 Scheduled Maintenance

B.7 Disaster Recovery Test or Validation Services

An initial Azure environment DR test will be required by the SI VENDOR and Cloud Services Provider prior to 6/30/2025 for the migrated State ERP – Finance system.

Services provided by the Cloud Services Provider, SI VENDOR, and M&O VENDOR are outlined below:

	Cloud	SI VENDOR	M&O	SolL
	Services		VENDOR	
	Provider			
Project Management	R	RA	1	А
Planning	R	RA	С	А
Setup	А	R	С	С
Testing	R	RA	1	А
Validation	С	RA	R	А
Documentation	А	RA	С	R

Section C Proposal Requirements

Through this request for proposal, the State seeks to select a qualified SI VENDOR who has previously executed an SAP ECC Implementation, preferably a migration, into Azure or a similar hyperscaler.

The posting of this Request for Proposal does not place the State under any obligation to select a vendor. As previously mentioned, this request is exempt from the Procurement Code pursuant to Section 1-10(b)(22).

If a vendor is selected, the State will select the awarded vendor based on the evaluation procedures found in <u>Section D.</u>

REQUIRED DOCUMENTS AND CRITERIA	Yes or No
Are you currently registered to do business with the State of Illinois?	
Have you completed all the required disclosures statements? Vendor	
Disclosure or IPG Active Registered Vendor Disclosure	
The standard Terms and Conditions (T&Cs) for State contracts are	
required. Do you agree with these T&C's? The T&C's are attached as	
Exhibit 1. If taking any exceptions to the T&Cs, an Offeror must submit a	
redline version of the T&C's with their proposal. See section D for more	
of the terms. The State receives the right to reject any and all	
exceptions.	
Have you provided implementation services for the State of Illinois's SAP	
program in the past 10 years?	
Name Specific Project and Years	
Have you successfully completed a Cloud Service Computing	
implementation for an SAP ERP system for another local, state, or	
federal program in the past 5 years equivalent in size and complexity?	
Provide relevant information including contact names and contact	
information for at least 3 Reference Entities in the Past Performance	
section of your response.	
Do you understand all the desired outcomes and agree to execute them	
within the timeline required 10/1/2024 – 5/31/2025?	
Do you have the resources and experience (technical, functional, and	
project management) to execute all desired outcomes of this project	
described above within the timeframe necessary (between 10/1/2024 -	
5/31/2025)?	

Attach resumes of the resources for verification of experience as	
described in the Management Plan section of your response.	
Did you include your responses to the Commitment to Diversity	
information identified in <u>Exhibit 3</u> ?	
Did you review the RASCI for expectations on roles and responsibilities	
(See <u>Appendix 1</u>) and agree with the allocation of responsibilities?	
If no, then did you provide a recommendation for changes to the RASCI	
in your proposal?	
Did you provide a detailed technical proposal addressing the required	
services and deliverable expectations? <u>Technical response – See</u>	
Appendix 3 – Required Services and Deliverable minimum	
expectations at Exhibit 2	
Does the price proposal ("quote") identify all required deliverables,	
proposed timeline, and outline roles and responsibilities?	

BUSINESS ENTERPRISE FOR MINORITIES, WOMEN, AND PERSONS WITH DISABILITIES ACT PARTICIPATION AND UTILIZATION PLAN

This section will indicate if this solicitation contains a goal to include businesses owned and controlled by minorities, women, and persons with disabilities. If this solicitation contains a goal, then failure to complete and submit a Utilization Plan, including documentation demonstrating good faith efforts when requesting a waiver, shall render the Offer non-responsive. 30 ILCS 575/4(e).

BEP Goal: 0%

Go to <u>https://cei.illinois.gov/programs0/business-enterprise-program.html</u> for complete requirements for BEP certification. Go to State of Illinois Commission on Equity and Inclusion at <u>https://cei.illinois.gov/</u> to search for certified BEP vendors.

Section D Evaluation Procedures – Instructions to Offerors

Offerors shall furnish the information required by this solicitation. Offerors are expected to examine this entire solicitation document. Failure to do so will be at the Offeror's own risk.

If the State elects, in its sole discretion, to award a contract resulting from this solicitation, award will be made to the responsible Offeror whose offer conforming to the solicitation will be most advantageous to the State, price and other factors considered. The Offeror's proposal will be evaluated on a Best Value Source Selection of the Offeror's response to the factors listed in <u>Section C</u> of the RFP.

State Point of Contact: The point of contact for this solicitation is: <u>Doit.SAPRFP@illinois.gov</u>

Prospective Offerors may request an explanation or interpretation of the solicitation via email to the State Point of Contact. If sending questions via email, prospective Offerors are requested to include the solicitation number and RFP title in the subject line of the email and the company's full name and address in the body of the email.

All questions related to the RFP are due to the Evaluation Team at <u>Doit.SAPRFP@illinois.gov</u> no later than **1 PM Central Time on August 26th, 2024.**

Submittal of Proposals

Offerors will be required to submit the following:

Factor 1: Technical Approach (Not to exceed 10 pages)

Factor 2: Project Plan, which is a comprehensive and detailed project plan including a detailed description of tasks and activities, their duration and dependencies on other tasks and activities. It shall include clearly defined roles and responsibilities for all partners including the State. (Factor 2 shall not exceed 10 pages).

Factor 3: Management Plan, including Key Management and Personnel, Staffing Plan and Leveragability of Resources (staff and tools), Commitment to Diversity, Quality Control Plan; (Factor 3 shall not exceed 10 pages).

Factor 4: Prior Experience and Past Performance (Narrative for Factor 4 shall not exceed 10 pages for the narrative. Past experience shall list specific projects that are of similar size and scope to the project defined in the RFP. The project description must include industry, size of the organization and relevant project details.

Factor 5: Price Proposal and support

Delivery of Price Proposals

Responses including Price Proposals are due at 1:00 pm Central Time on **September 9^{th,} 2024** to: <u>Doit.SAPRFP@illinois.gov</u>

All documents must be submitted electronically as PDF documents and meet the following specifications:

- 8.5 x 11 inches maximum paper size
- Times New Roman Font
- Font size 12 (except on tables and chart, nothing less than 10 font)
- Single-spaced

- 1-inch margins on all sides
- Include page numbers
- Cover page must reference Solicitation Number and Title

Offerors are cautioned that if any part of their offer exceeds page limitations, the State may evaluate only through the permitted number of pages. Pages beyond that limit may not be evaluated.

Only e-mail submissions will be accepted. A facsimile offer or offer received through the mail will not be accepted. Please include the following subject line for the email: "Proposal Submission for Solicitation SAPSI20251.

Late proposals will not be considered. State cannot be held responsible for errors, including technological, or delays in the submission of quotes.

Proposal Preparation

Proposals shall consist of two separate volumes individually titled and numbered as stated below.

Volume No. Volume Title

I	Technical Proposal	Total points 560
	Commitment to Diversity	Total Points 140
II	Price Proposal (Price Submission)	Total Points 300

Volume I – Technical Proposal will be comprised of the following subsections:

- 1. Technical Approach specifically addressing the requirements defined in the RFP.
- 2. Project Plan
- 3. Management Plan
- 4. Prior Experience and Past Performance

Volume II - Price Proposal (Price Submission)

The Offeror shall provide a firm-fixed price for all services and deliverables described in this RFP. Offeror must provide list of all labor categories of their quote, hourly rate for each labor category and the estimated hours for each labor category based on the requirements defined in the RFP.

General Instructions

Offeror's proposal shall set forth full, accurate, and complete information as required by this solicitation package. The penalty for making false statements is prescribed in 18 USC 1001.

Offeror shall propose in detail the nature of its proposed work, how the work will be accomplished, how the proposed work will meet the technical requirements of the RFP.

Offerors shall provide a Technical Proposal in response to the RFP. The deliverables under this Technical Proposal are to have schedules for an available release without defects.

The Technical Proposal shall include the Offerors' Technical Approach that demonstrates the Offeror's ability and expertise to deliver a solution that meets the established needs and purpose of the solicitation. Offeror's proposed solution should align with the goals stated in the RFP.

The Offeror's Technical Proposal must demonstrate their understanding of the RFP requirements, to include deliverables, available deliverables and/or releases without defects, technical capability to perform the work, including how coordination with all stakeholders will be accomplished, understanding of and ability to meet the technical requirements expressed in the solicitation and overall approach and what, if anything, it would need from the State to ensure success as well as identifying any risks or barriers that would reduce or delay success.

Please note that a word-for-word repetition of language in the RFP will not be sufficient to demonstrate technical understanding. The proposed solution must also demonstrate it is complete by addressing each of the Tasks included in the RFP. In addition, the proposed solution must be comprehensive but feasible given the resources the Offeror proposes to devote to each task.

Statements that the Offeror understands, can, or will perform the requirements of the RFP without supporting information or narratives are inadequate. Paraphrasing the RFP or parts thereof, is similarly inadequate, as are phrases such as "standard procedures will be employed" or "well known techniques will be used." The approach to addressing the requirements must be clearly defined by the Offeror. This section shall be written such as to enable evaluators to make a thorough evaluation as to whether the services proposed adequately respond to the specific State requirements.

Evaluation of Factor 1: TECHNICAL APPROACH

Technical submission will be based on the level of understanding demonstrated in the Technical Proposal defining the task requirements, and on the level of detail provided as well as the comprehensiveness of the approach. The technical approach shall contain sufficient detail to demonstrate to State that the Offeror has the necessary understanding of the tasks that are required, as well as an understanding of the supporting infrastructure and processes needed to support this work. State will also evaluate whether the Offeror's proposed approach to meet the contract requirements appears reasonable and will successfully accomplish the requirements of the RFP. This factor will be evaluated to determine the extent to which the Offeror's proposed approach will ensure successful implementation of the stated objectives. This factor will assess the Offeror's overall approach to the project and what, if anything, it would need from the State and all other partners to ensure success as well as identifying any barriers that would reduce or delay success.

Evaluation of Factor 2: PROJECT PLAN

The State will evaluate the project plan for overall approach and the work breakdown structure to meet the State timeline. Factors such as planning assumptions, completeness, dependencies, resource allocation, status reporting, proactive risk identification and risk mitigation, communications, variance management etc., will be assessed. It is vital that the Offeror demonstrate and commit to a collaborative and harmonious approach to working with all stakeholders in successfully delivering the project.

Evaluation of Factor 3: MANAGEMENT PLAN

State will evaluate the Offerors Management Plan for its ability to deliver quality processes, products and deliverables as detailed in the Offerors quote. The Offeror shall submit a Management Plan to support the Offeror's proposed approach to describing your management team, key management and key personnel, and staff and how the Offerors business and delivery team is structured as it pertains to this requirement. A key evaluation aspect of the Management Plan is the Offeror's commitment to the State's interests and goals of the State's ERP Program. The Offerors submitted management plan, when implemented, will support the Offeror's delivery of technical products and services of an acceptable quality. At a minimum, the Offeror shall include the following:

Subfactor 1: Proven and specific management expertise demonstrated preferably by a CMMI ML3 and ISO 9001 program management approach to ensure quality and standards-based service delivery. Specifically, rehosting of SAP's ECC environment ensuring on time, in scope and within defined budget project delivery in accordance with industry best practices.

Subfactor 2: Quality Control Plan (QCP) – Offeror shall provide a QCP that details how they will manage the contract and all tasks both onsite and at remote locations. It will be evaluated for completeness in managing all the requirements in the RFP including coordination and collaboration with all stakeholders.

Subfactor 3: Key Management and Personnel Team – Offeror shall describe the key personnel proposed to support the solicitation. Resumes shall be submitted for all key personnel. The Offeror shall provide a resume for each member of the key management team and all key personnel - each resume shall be limited to two pages. At a minimum, resumes provided shall contain the following:

Resumes shall include a description of the individuals' qualifications and number of years of similar type of work and how it relates to the specific tasks called out in the Technical Proposal, experience shall be clearly annotated. Formal education shall be documented as follows – Degree (or certificate), major/Subject, Institution, Location (City, State) and Date of Graduation (may list as expected with anticipated date) if less than six months. Qualifications for key personnel shall clearly delineate the number of SAP ECC environments that they have rehosted to a hyperscaler including a brief description of the size and scope of the project as well as the timeframe when this project was completed and the role they performed in this project. It is within the Offerors discretion whether to submit resumes for non-key personnel, but resumes should only be submitted for individuals who are assigned specific roles under the contract. Resumes for individuals who are not assigned a specific role should not be included and will not be reviewed.

Subfactor 4: Staffing Plan – Offeror shall provide the Staffing Plan proposed to support the solicitation, including the following:

- Identification of Planned Staff including key personnel.
- Documentation of Commitment to Diversity goals (see Exhibit 3)
- Identify the technical expertise needed to rehost the SAP ECC environment to a hyperscaler.
- Identify the functional expertise needed to rehost the SAP ECC environment to a hyperscaler.

- Identify the cloud technical expertise needed to rehost the SAP ECC environment to a hyperscaler.
- Identify the project management expertise needed to rehost the SAP ECC environment to a hyperscaler.
- Identify the Quality Control expertise needed to rehost the SAP ECC environment to a hyperscaler.
- Identify the stakeholder engagement, management and communications expertise needed.

The staffing plan will be evaluated as well as the qualifications of management team and the key personnel. The subfactor responses will be evaluated to determine whether they meet or exceed the requirements listed under each subfactors above and the performance risk associated with those responses.

Evaluation of Factor 4: PAST EXPERIENCE AND PAST PERFORMANCE

Evaluation of this factor will be based on responses and how they relate to the RFP requirements.

Sub Factor 1:

The Offeror shall provide a narrative that demonstrates relevant prior experience that are similar in size and scope to the State's requirements in type of work performed, complexity of the work, total dollar amount, public sector, etc., as detailed in the RFP. The narrative should detail how the Offeror's experience is relevant to the solicitation's requirements and tasks described.

The response may include a description of how the Offeror's prior experience demonstrates its capability and capacity to deliver high quality like services and solutions in a performance-based environment. State will evaluate the Offeror's extent of relevant prior experience including corporate experience, knowledge, and capability for all substantive areas of the RFP. In conducting the prior experience assessment, the State may use data obtained from other sources as well as that provided in the quote.

Prior experience is preferred within the last three years but is not limited and maybe considered if within the last five years or awarded more than five years ago but completed within one year of the closing of this solicitation, and/or the Offeror is currently performing.

Offerors with relevant prior experience and relevant past performance are preferred and this will be considered a strength in the evaluation process.

Subfactor 2:

Past performance is required from Offerors. Reference information should be provided for all awards completed within two years or currently under performance and may provide any awards within the last three years that are similar in scope and value to this effort.

The exclusion of any contracts meeting these time frames may be grounds for a marginal or poor evaluation. The relevance of past performance will be based on the key requirements of the project,

as well as the size, scope and complexity of the efforts as compared to those required by this solicitation.

The State reserves the right to contact customers identified in the quote or other Public Sector customers not identified in the quote and solicit further information about performance related to quality, timeliness, and cost. When assessing your prior experience and past performance the State may contact other sources of information, including, but not limited to, the following: Federal, State, and local government agencies, better business bureaus, published media, and electronic databases to confirm your narrative and references. The accuracy of past performance data, including phone numbers of the points of contact are the full responsibility of the Offeror and inaccuracy may result in non-consideration of the reference. Past performance information may be obtained from a variety of sources including other Government contracting activity reports.

Offeror must either provide the above information or affirmatively state that it possesses no relevant directly related or similar past performance. In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available, the Offeror will not be evaluated favorably or unfavorably on past performance.

References for past performance may be contacted and asked to verify the following at a minimum – would you hire again; is the Offeror capable, efficient, and effective; did the Offeror conform to the terms and conditions of your contract; was the Offeror reasonable and cooperative during the contract; and what type of customer satisfaction was provided.

Evaluation of Factor 5: PRICING (pricing should be submitted in Volume II of your quote)

Pricing will be evaluated for reasonableness, completeness and how realistic it is in relation to the RFP requirements. As part of its price evaluation of each Offeror, State may consider the price proposed as compared to the GSA Schedule Pricing, any reductions offered, and historical price information for similar work performed at State. State may also consider additional outside sources to use in its determination of whether the offered pricing is reasonable and realistic. In determining whether a particular Offeror presents the best value to the State, the State may consider the pricing (in addition to the technical proposal) offered in relation to the pricing (and technical proposals) presented by other Offerors. A price realism analysis may be performed at the discretion of the State Point of Contact for this solicitation but is not required. If a price realism analysis is performed it will not be a mechanical comparison of numbers but instead will consider the number and labor categories of personnel proposed at the proposed prices and rates and whether such type and quantity of personnel demonstrate a realistic understanding of the technical requirements.

Price will be evaluated to determine whether the price proposed is reasonable and realistic. This determination will be based on the review of the technical solution in comparison to the total proposed price and the backup documentation submitted.

Sub Factor 1:

Price assumptions, conditions, or exceptions – Submit all (if any) price assumptions, conditions, or exceptions related to any of the RFP requirements. If not noted in this section of the Offeror's proposal, it will be assumed that the Offeror proposes no price assumptions, conditions, or exceptions for award, and agrees to comply with all of the terms and conditions set forth in this RFP. It

is not the responsibility of the State to seek out and identify price assumptions, conditions, or exceptions buried within the Offeror's proposal. The State reserves the right to reject any proposal that includes any price assumptions, conditions, or exceptions that impact or affect the State's objectives or requirements.

ADDITIONAL EVALUATION INFORMATION

Proposals must contain sufficient detail to allow for thorough evaluation and sound determination of whether the Offeror would be able to perform in accordance with the solicitation requirements. Offerors should be careful that their proposals are too general. Proposals MUST address this particular solicitation with specific statements relevant to the RFP. The State considers all unsubstantiated statements such as "The Offeror understands and will perform in accordance with the RFP" as being deficient.

RELATIVE IMPORTANCE OF TECHNICAL EVALUATION FACTORS TO COST OR PRICE

For purposes of evaluation of offers and the selection of the contractor, under this solicitation, the combined relative merit of the Offeror's technical proposal as evaluated in accordance with the technical evaluation factors listed herein shall be considered significantly more important to cost or price. Note: All technical factors and subfactors are considered equal to each other when combined.

DISCLOSURE OF CONTACTS - The Offeror shall disclose all contacts with all State personnel in regard to this specific project that have occurred prior to submission of this proposal. The disclosure shall provide, at a minimum, the date the contact(s) occurred, the name(s) of the Offeror and State persons the contact(s) occurred with, and the general substance of the reason(s) for and outcome(s) of the contact(s). The requirement for disclosure applies to any and all subcontractors and consultants equally with the Offeror. Failure to disclose all contacts may be viewed that improper contact was made in violation of State regulations that bar improper conduct and may render the Offeror ineligible for award. The information provided will be reviewed to ensure that no improper contacts between State personnel and the Offeror have occurred that could affect the award of the procurement.

Appendix 1 – Proposed RASCI

The below three tables outline the responsibilities as expected. **The SI VENDOR should notify the State in writing during the RFP process of any recommended changes to the expected RASCI.**

The coding in the below RASCI is as follows:

R- Responsible	A- Accountable	S- Supportive	I- Informed	C- Consulted
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For RASCI charts:

Responsible: is the party responsible for ensuring that the task, function, or deliverable described is completed accurately and timely; often known as the "doer".

Accountable: is the party to whom "R" is accountable and is the authority who approves or signs off on work before it is effective.

Supportive: is the party who provides resources or plays a supporting role to the extent reasonably necessary to complete the task, function, or deliverable. When Virtustream is "Supported", Virtustream may charge Customer on a time and materials basis for its resources used to "Supported".

Consulted: is the party who reviews output or progress necessary to complete the task, function, or deliverable. When Virtustream is "Consulted", Virtustream may charge Customer on a time and materials basis for its resources used to "Consult".

Informed: is the party who needs to be notified of results, completion, or deliverable but need not necessarily be consulted.

R, A, S, C, I	Microsoft	SI Migration and Operations Vendor	M&O Vendor	SoIL
System Management				
Project Management	S	R, A	S	А
Change Management planning	С	A	С	R
Training planning	1	R		A
Infrastructure planning	RA	R	С	А

RASCI Matrix for Azure Migration Project Support- State of Illinois example

Infrastructure setup (VM builds, network connections,	RA	С	С	А
routes and switch setups, load balancers, firewalls,				
storage, co-locations, etc.)				
Network communication planning	RA	S	S	R
Network communication setup	RA	R	С	RA
Network communication testing and validation	RA	R	А	А
Infra. System alert software setup	RA	I	С	А
Infra. Monitor system setup	RA	I	С	А
Job scheduler connection setup and validation	S	RA	С	А
Job scheduler operations and monitoring	I	S	R	А
Application System alert software planning	I	RA	С	А
Application System alert software setup	I	RA	С	С
Storage monitoring setup	RA	А	С	А
VM back-up collection	С	RA	С	S
VM back-up validation	R	RA	С	S
VM back-up installation / loading	R	RA		S
New VM copy validation	С	R		А
Database Administration activities (HANA DB and Sybase DB)	S	RA	S	A
VM network connection testing	А	RA	S	RA
BASIS technology testing and validation	1	RA	S	А
Printer setups (agencies as needed) and validation	С	R	S	А
Data team testing and validation	1	R	S	RA
Interface team testing and validation	I	R	S	RA
Interface agency connection setup and validation	1	R	S	RA
Functional team testing and validation	1	R	S	RA
Security team testing and validation	1	R	S	А
Report testing and validation	1	R	S	А
BI team reporting and view testing and validation	1	R	S	А

Scheduler setup, testing and validation	I	R	S	А
Transport management setup	I	R	CS	А
Integrated testing cycle	I	RA	S	RA
User acceptance testing cycle	I	A	S	RA
EIT testing cycle	I	R	S	А
Training planning	I	R	S	А
Training prep	I	R	S	А
Training execution	I	R	С	А
Cutover	R	RA	S	RA
Knowledge transfer	I	RA	R	А
Go-Live	RA	RA	S	RA
Hypercare support	С	RA	А	А
Documentation	R	R	С	А

	Cloud Service Provider	SI Migration and Operations Vendor	M&O Vendor*	SolL
System Management				
SAP transports	1	1	R	A
Resolution of incident / Service tickets	RA	S,R	RA	
Printer definition	1	I	R	A
Printer and output troubleshooting	А	1	RA	С
OSS note application	С	С	RA	1
OSS connection management	С	RA	С	С
Management and implementation of enhancement packs	A	R	R	А
Infra. System alert definitions	RA	R	1	С
Infra. System alert software setup and management	RA	R	1	С
Infra. Monitor system logs for error and warnings	RA	R	1	С
Application System alert definitions	I	R	R	А
Application System alert software setup and management	1	R	R	A
Application Monitor system logs for error and warnings	1	R	R	A
Application Monitor background jobs	1	1	R	А
Troubleshoot and resolve system background job issues	1	С	R	A
Troubleshoot and resolve functional/business application background job issues	1	С	R	A
Monitor lock entries	1	1	RA	С
Monitor abnormal program failures	1	1	RA	С
Monitor and update failures	I	1	RA	С
Monitor Transport Management System	S	I	RA	С
Monitor communication channels (RFC, ICM, Message server, IPSec tunnels, etc.)	R	R	R	RA
Troubleshoot and resolve Infra. system issues	RA	R	С	
Troubleshoot and resolve application system issues	С	R	R	А
Monitor and tune system and application performance	С	С	R	А

RASCI Matrix for 90-day Steady State Post Migration-State of Illinois example

Monitor for performance issues and	I	С	R	А
bottlenecks in application code	<u> </u>	c	D	Δ
Perform application code tuning		3	R	A
Batch Job monitoring and management (per	1	ĸ	к	А
Interface scheduling management and	1	c	D	٨
monitoring (ner documented processes and	'	5	IX	~
business cases				
Manage short dumps	S	S	RA	С
System log file analysis, management /	1	S	RA	С
resolution				-
Application administration and	1	S	R	A
troubleshooting				
Database Management – DBA's	1	R	S	А
Storage management – files, attachments	С	R	S	А
and storage space				
Application Patch updates	1	R	S	S
SAP client maintenance		S	R	А
Shift handover / KT of new DC resources	RA	1	C,I	1
Planning of SAP system / landscape	S	С	R	А
Perform application startup and shutdown	S	RC	R	A
(maintenance and emergency) as requested				
OS Administration				
Monitor CPU and Memory utilization	RA	R	1	1
Monitor file system usage	S	R	С	C, I, A
Troubleshoot and resolve operating system	RA	R	RA	I
issues				
OS patch updates	S	R	SC	А
Output Management				
Monitor spool system for errors	S	R	S	А
Troubleshoot and resolve system printing	S	R	RA	I
issues				
Troubleshoot and resolve site printing issues	С	S	R	
Setup and test system printers	R	S	R	С
Setup and test site printers	С	S	R	С
Client and Change Management				
Perform client and system copies	C, I	R	С	А
Manage transport management system	S	С	R	А
config				
Apply transports and migrate config and	S	С	RA	С
code changes				
Software Management				
Document software versions and end of				
	5	к	C	А

Apply SAP software updates (etc. support	С	R	С	А
packages, vulnerabilities, kernel updates				
and upgrades, etc.)				
Apply database software updates (e.g.,	С	R	С	А
service packages and updates, upgrades,				
vulnerability fixes etc.)				
Apply OS software patches, vulnerability	RA	R	С	А
fixes, updates and upgrades				

**Infra. = Infrastructure / Hardware / Network Connections / Devices and Equipment Services

R- Responsible A- Accountable S- Supportive I- Informed C- Consulted

Appendix 2 – Current Environment

Detail Server Specifications for the SAP Finance Environment

Ser	ervice Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
	Surveillance (SBX) Syst	tems	•		•		•	+								-
1	ECC ERP HANA Database - SBX	SAP Enterprise Resource Planning (ERP)	HANA as DB	SBX	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	ECC ERP App Server - SBX	App-Server for SAP Enterprise Resource Planning (ERP)		SBX	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	SRM HANA Database - SBX	SAP Supplier Relationship Management (SRM)	HANA as DB	SBX	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	SRM App Server - SBX	App-Server for SAP Supplier Relationship Management (SRM)		SBX	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	BCOS (Data Services) DB Server - SBX	SAP BusinessObjects Data Services	HANA as DB	SBX	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	BCOS (App Server) DB Server - SBX	Additional DS/IS Node		SBX	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
													-		-	
1	EP (Enterprise Portal) DB Server - SBX	SAP Enterprise Portal (EP)	HANA as DB	SBX	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	EP App Server - SBX	App-Server for SAP Enterprise Portal (EP)		SBX	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
	•	•	•	•		•		•	•		•	-		•	•	•
1	PI/PO Database - SBX	SAP Process Orchestration (AEX+BPM on Java only)	HANA as DB	SBX	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	PI/PO App Server - SBX	App-Server for SAP Process Orchestration (AEX+BPM on Java only)		SBX	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
	Training (TRN) System	s														
1	ECC ERP HANA Database - TRN	SAP Enterprise Resource Planning (ERP)	HANA as DB	TRN	nonPROD		1,024			4002. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	ECC ERP App Server #1 - TRN	App-Server for SAP Enterprise Resource Planning (ERP)		TRN	nonPROD		64			350. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1

Serv	ervice Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	ECC ERP App Server #2 - TRN	App-Server for SAP Enterprise Resource Planning (ERP)		TRN	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	SRM HANA Database - TRN	SAP Supplier Relationship Management (SRM)	HANA as DB	TRN	nonPROD		512			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	SRM App Server #1 - TRN	App-Server for SAP Supplier Relationship Management (SRM)		TRN	nonPROD		64			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	SRM App Server #2 - TRN	App-Server for SAP Supplier Relationship Management (SRM)		TRN	nonPROD		64			150. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	SRM App Server #3 - TRN	App-Server for SAP Supplier Relationship Management (SRM)		TRN	nonPROD		64			150. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
1	EP (Enterprise Portal) DB Server - TRN	SAP Enterprise Portal (EP)	HANA as DB	TRN	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			1
1	EP App Server - TRN	App-Server for SAP Enterprise Portal (EP)		TRN	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			1
	DEV (N+1) Systems															
1	ECC ERP HANA Database - N+1 DEV	SAP Enterprise Resource Planning (ERP)	HANA as DB	N+1 DEV	nonPROD		512			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	ECC ERP App Server - N+1 DEV	App Server for SAP Enterprise Resource Planning (ERP)		N+1 DEV	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	SRM HANA Database - N+1 DEV	SAP Supplier Relationship Management (SRM)	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	SRM App Server - N+1 DEV	App-Server for SAP Supplier Relationship Management (SRM)		N+1 DEV	nonPROD		32			400. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	SAP GRC (Access Control) HANA DB - N+1 DEV	SAP Access Control	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	GRC (Access Control) App Server - N+1 DEV	App-Server for SAP Access Control		N+1 DEV	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	WebDispatcher - N+1 DEV	SAP Webdispatcher		N+1 DEV	nonPROD		8			50. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2

Ser	Service Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SAP BOBJ BI HANA DB - N+1 DEV	SAP BusinessObjects Business Intelligene Platform (BO BI)	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	BI Web + Processing & Intelligence Server - N+1 DEV	Additional BI node		N+1 DEV	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	Lumira for BI Platform – N+1 DEV	Additional BI node		N+1 DEV	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	BCOS (Data Services) HANA DB - N+1 DEV	SAP BusinessObjects Data Services	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	BCOS (Data Services) App Server - N+1 DEV	Additional BI node		N+1 DEV	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
							·	·								-
1	EP (Enterprise Portal) HANA DB - N+1 DEV	SAP Enterprise Portal (EP)	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	EP (Enterprise Portal) App Server - N+1 DEV	App Server for SAP Enterprise Portal (EP)		N+1 DEV	nonPROD		32			400. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	PI/PO HANA DB - N+1 DEV	SAP Process Orchestration (AEX + BPM on Java only)	HANA as DB	N+1 DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	PI/PO App Server - N+1 DEV	App server for SAP Process Orchestration (AEX + BPM on Java only)		N+1 DEV	nonPROD		32			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
	-	•	·	•	, ,		-	-		•	•	•	•	•	•	•
	QAS (N+1) Systems															
1	ECC ERP HANA Database - N+1 QAS	SAP Enterprise Resource Planning (ERP)	HANA as DB	N+1 QAS	nonPROD		2,048			7346. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	ECC ERP App Server #1 - N+1 QAS	App Server for SAP Enterprise Resource Planning (ERP)		N+1 QAS	nonPROD		64			500. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	ECC ERP App Server #2 - N+1 QAS	App Server for SAP Enterprise Resource Planning (ERP)		N+1 QAS	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2

Ser	ervice Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SRM HANA DB - N+1 QAS	SAP Supplier Relationship Management (SRM)	HANA as DB	N+1 QAS	nonPROD		2,048			7346. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	SRM App Server #1 - N+1 QAS	App-Server for SAP Supplier Relationship Management (SRM)		N+1 QAS	nonPROD		64			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	SRM App Server #2 - N+1 QAS	App-Server for SAP Supplier Relationship Management (SRM)		N+1 QAS	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
																-
1	SAP GRC (Access Control) HANA DB - N+1 QAS	SAP Access Control	HANA as DB	N+1 QAS	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	GRC (Access Control) App Server - N+1 QAS	App-Server for SAP Access Control		N+1 QAS	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	Web Dispatcher - N+1 QAS	SAP Web dispatcher		N+1 QAS	nonPROD		8			50. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
	-	•		•	•	•	•		•		•				•	•
1	SAP BOBJ BI HANA DB - N+1 QAS	SAP BusinessObjects Business Intelligence Platform (BO BI)	HANA as DB	N+1 QAS	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	BI Web + Processing & Intelligence Server - N+1 QAS	Additional BI node		N+1 QAS	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	Lumira for BI Platform - N+1 QAS	Additional BI node		N+1 QAS	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
			-							•						
1	BCOS (Data Services) HANA DB - N+1 QAS	SAP BusinessObjects Data Services	HANA as DB	N+1 QAS	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	BCOS App Server - N+1 QAS	Additional BI node		N+1 QAS	nonPROD		32			100. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
	-	•		•	-	•				•	•	•			•	•
1	EP (Enterprise Portal) HANA DB - N+1 QAS	SAP Enterprise Portal (EP)	HANA as DB	N+1 QAS	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	EP (Enterprise Portal) App Server #1 - N+1 QAS	App Server for SAP Enterprise Portal (EP)		N+1 QAS	nonPROD		64			150. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
1	EP (Enterprise Portal) App Server #2 - N+1 QAS	App Server for SAP Enterprise Portal (EP)		N+1 QAS	nonPROD		64			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2

Ser	ervice Summary Phase 2020 (4/7/12)															
Am	t System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
	1	•										-				
1	PI/PO HANA DB - N+1 QAS	SAP Process Orchestration (AEX + BPM on Java only)	HANA as DB	N+1 QAS	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			2
1	PI/PO App Server - N+1 QAS	App server for SAP Process Orchestration (AEX + BPM on Java only)		N+1 QAS	nonPROD		64			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			2
	•	•							<u> </u>			+			•	
	VER (N+1) Systems															
1	ECC ERP HANA Database - N+1 VER	SAP Enterprise Resource Planning (ERP)	HANA as DB	N+1 VER	nonPROD		2,048			7346. (St)	Backup-1GB-Wly-2W	Linux	95.0%			3
1	ECC ERP App Server #1 - N+1 VER	App Server for SAP Enterprise Resource Planning (ERP)		N+1 VER	nonPROD		64			500. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	ECC ERP App Server #2 - N+1 VER	App Server for SAP Enterprise Resource Planning (ERP)		N+1 VER	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	SRM HANA DB - N+1 VER	SAP Supplier Relationship Management (SRM)	HANA as DB	N+1 VER	nonPROD		2,048			7346. (St)	Backup-1GB-Wly-2W	Linux	95.0%			3
1	SRM App Server #1 - N+1 VER	App-Server for SAP Supplier Relationship Management (SRM)		N+1 VER	nonPROD		64			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	SRM App Server #2 - N+1 VER	App-Server for SAP Supplier Relationship Management (SRM)		N+1 VER	nonPROD		64			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	EP (Enterprise Portal) HANA DB - N+1 VER	SAP Enterprise Portal (EP)	HANA as DB	N+1 VER	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			3
1	EP (Enterprise Portal) App Server #1 - N+1 VER	App Server for SAP Enterprise Portal (EP)		N+1 VER	nonPROD		64			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	EP (Enterprise Portal) App Server #2 - N+1 VER	App Server for SAP Enterprise Portal (EP)		N+1 VER	nonPROD		64			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3
1	PI/PO HANA DB - N+1 VER	SAP Process Orchestration (AEX + BPM on Java only)	HANA as DB	N+1 VER	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			3
1	PI/PO App Server - N+1 VER	App server for SAP Process Orchestration (AEX + BPM on Java only)		N+1 VER	nonPROD		64			300. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			3

Se	Service Summary Phase 2020 (4/7/12)															
Ar	nt System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
	DEV Systems	-					-					-				
1	ECC ERP HANA Database -DEV	SAP Enterprise Resource Planning (ERP)	HANA as DB	DEV	nonPROD		512			2549. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	ECC ERP App Server - DEV	App Server for SAP Enterprise Resource Planning (ERP)		DEV	nonPROD		32			1200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	SRM HANA Database - DEV	SAP Supplier Relationship Management (SRM)	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	SRM App Server - DEV	App-Server for SAP Supplier Relationship Management (SRM)		DEV	nonPROD		32			500. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	SAP GRC (Access Control) HANA DB - DEV	SAP Access Control	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	GRC (Access Control) App Server - DEV	App-Server for SAP Access Control		DEV	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	WebDispatcher - DEV	SAP Webdispatcher		DEV	nonPROD		8			50. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	SAP BOBJ BI HANA DB - DEV	SAP BusinessObjects Business Intelligene Platform (BO BI)	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	BI Web + Processing & Intelligence Server - DEV	Additional BI node		DEV	nonPROD		32			260. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	Lumira for BI Platform - DEV	Additional BI node		DEV	nonPROD		32			250. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	BCOS (Data Services) HANA DB - DEV	SAP BusinessObjects Data Services	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	BCOS (Data Services) App Server - DEV	Additional BI node		DEV	nonPROD		32			200. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
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1	EP (Enterprise Portal) HANA DB - DEV	SAP Enterprise Portal (EP)	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
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Serv	Service Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	EP (Enterprise Portal) App Server - DEV	App Server for SAP Enterprise Portal (EP)		DEV	nonPROD		32			500. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	PI/PO HANA DB - DEV	SAP Process Orchestration (AEX + BPM on Java only)	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	PI/PO App Server - DEV	App server for SAP Process Orchestration (AEX + BPM on Java only)		DEV	nonPROD		32			400. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	SAP SolMan HANA DB - DEV	SAP Solution Manager ABAP >= 7.2	HANA as DB	DEV	nonPROD		256			2605. (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
1	SAP SolMan 7.2 ABAP App Server - DEV	App Server for SAP Solution Manager AVAP >= 7.2		DEV	nonPROD		32			400. (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			4
1	SAP SolMan 7.2 JAVA (App/MDC) - DEV	SAP Solution Manager Java <_> 7.2	HANA add. Schema/Con tainer	DEV	nonPROD		32			250 (St)	Backup-1GB-Wly-2W	Linux	95.0%			4
	DEV - lead															
1	RWD Development	laaS Enhanced - extended portfolio		DEV	nonPROD		16			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			4
1	HPQC Development	laaS Enhanced - extended portfolio		DEV	nonPROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			4
		·														
	QAS Systems		1	1	1 .	1	1	1			1		1	1	1	1
1	ECC ERP HANA Database - QAS	SAP Enterprise Resource Planning (ERP)	HANA as DB	QAS	nonPROD		2,048			300 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	ECC ERP App Server #1 - QAS	App-Server for SAP Enterprise Resource Planning (ERP)		QAS	nonPROD		64			500 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	ECC ERP App Server #2 - QAS	App-Server for SAP Enterprise Resource Planning (ERP)		QAS	nonPROD		64			500 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
	1	1		T	1		T	1		1	1	T	1		1	
1	SRM HANA DB - QAS	SAP Supplier Relationship Management (SRM)	HANA as DB	QAS	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	SRM App server #1 - QAS	APP-Server for SAP Supplier Relationship Management (SRM)		QAS	nonPROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5

Service Summary Phase 2020 (4/7/12)																
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SRM App server #2 - QAS	APP-Server for SAP Supplier Relationship Management (SRM)		QAS	nonPROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	SRM App server #3 - QAS	APP-Server for SAP Supplier Relationship Management (SRM)		QAS	nonPROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
	•										•					
1	SAP GRC (Access Control) HANA DB - QAS	SAP Access Control	HANA as DB	QAS	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	GRC (Access Control) App Server - QAS	App server for SAP Access Control		QAS	nonPROD		32			250 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	WebDispatcher - QAS	SAP WebDispatcher		QAS	nonPROD		8			50 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	SAP BOBJ BI HANA DB - QAS	SAP BusinessObjects Business Intelligence platform (BO BI)	HANA as DB	QAS	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	BI Web + Processing & Intelligence Server - QAS	Additional BI node		QAS	nonPROD		32			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	Lumira for BI Platform - QAS	Additional BI node		QAS	nonPROD		32			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
1	BOOS (Data Services) HANA DB - QAS	SAP BusinessObjects Data Services	HANA as DB	QAS	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	BOOS App Server - QAS	Additional BI node		QAS	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
	•										·					
1	EP (Enterprise Portal) HANA DB - QAS	SAP Enterprise Portal (EP)	HANA as DB	QAS	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	EP (Enterprise Portal) App Server #1 - QAS	App server for SAP Enterprise Portal (EP)		QAS	nonPROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
											•					
1	PI/PO HANA DB - QAS	SAP Process Orchestration (AEX+BPM on Java only)	HANA as DB	QAS	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
1	PI/PO App Server - QAS	App server for SAP Process Orchestration (AEX+BPM on Java only)		QAS	nonPROD		64			500 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
	•	•					•	•		•	•			•		•
1	SLT HANA Database - QAS	SAP LT Replication Server	HANA as DB	QAS	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%			5
Serv	ervice Summary Phase 2020 (4/7/12)															
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Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SLT App Server - QAS	App Server for Sap LT Replication Server		QAS	nonPROD		64			400 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			5
	QAS - lead															
1	HP Load Runner Controller (Turned OFF) #1	laaS Enhanced - extended portfolio		QAS	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			5
1	HP Load Runner Controller (Turned OFF) #2	laaS Enhanced - extended portfolio		QAS	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			5
	VER Systems		1	T		1	1	•	1	P	r	1			P	T
1	ECC ERP HANA DB - VER	SAP Enterprise Resource Planning (ERP)	HANA as DB	VER	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	ECC ERP App Server #1 - VER	App Server for SAP Enterprise Resource Planning (ERP)		VER	nonPROD		64			800 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	ECC ERP App Server #2 - VER	App Server for SAP Enterprise Resource Planning (ERP)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	ECC ERP App Server #3 - VER	App Server for SAP Enterprise Resource Planning (ERP)		VER	nonPROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	ECC ERP App Server #4 - VER	App Server for SAP Enterprise Resource Planning (ERP)		VER	nonPROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	ECC ERP App Server #5 - VER	App Server for SAP Enterprise Resource Planning (ERP)		VER	nonPROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SRM HANA Database - VER	SAP Supplier Relationship Management (SRM)	HANA as DB	VER	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	SRM App Server #1 - VER	App Server for SAP Supplier Relationship Management (SRM)		VER	nonPROD		64			250 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SRM App Server #1 - VER	App Server for SAP Supplier Relationship Management (SRM)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SRM App Server #2 - VER	App Server for SAP Supplier Relationship Management (SRM)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SRM App Server #3 - VER	App Server for SAP Supplier Relationship Management (SRM)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
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Serv	Service Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SAP GRC (Access Control) HANA DB - VER	SAP Access Control	HANA as DB	VER	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	GRC (Access Control) App Server - VER	App Server for SAP Access Control		VER	nonPROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	WebDispatcher - VER	SAP WebDispatcher		VER	nonPROD		8			50 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SAP BOBJ BI HANA DB - VER	SAP BusinessObjects Business Intelligence platform (BO BI)	HANA as DB	VER	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	BI Web + Processing & Intelligence Server - VER	Additional BI node		VER	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	Lumira for BI Platform - VER	Additional BI node		VER	nonPROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
	•															
1	EP (Enterprise Portal) HANA DB - VER	SAP Enterprise Portal (EP)	HANA as DB	VER	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	EP (Enterprise Portal) App Server #1 - VER	App Server for SAP Enterprise Portal (EP)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	EP (Enterprise Portal) App Server #2 - VER	App Server for SAP Enterprise Portal (EP)		VER	nonPROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	PI/PO HANA DB - VER	SAP Process Orchestration (AEX+BPM on Java only)	HANA as DB	VER	nonPROD		256			2605 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	PI/PO App Server #1 - VER	App Server for SAP Process Orchestration (AEX+BPM on Java only)		VER	nonPROD		64			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	PI/PO App Server #2 - VER	App Server for SAP Process Orchestration (AEX+BPM on Java only)		VER	nonPROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
1	SLT HANA Database - VER	SAP LT Replication Server	HANA as DB	VER	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%			6
1	SLT App Server - VER	App Server for SAP LT Replication Server		VER	nonPROD		64			400 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			6
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	PROD and <> <	_>														
1	ECC ERP HANA DB - PROD	SAP Enterprise Resource Planning (ERP)	HANA as DB	PRD	PROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	99.7%	DR_4h _0m		7

Ser	Service Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	ECC ERP App Server #1 - PROD	App Server for SAP Enterprise Resource Planning (ERP)		PRD	PROD		64			800 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	ECC ERP App Server #2 - PROD	App Server for SAP Enterprise Resource Planning (ERP)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	ECC ERP App Server #3 - PROD	App Server for SAP Enterprise Resource Planning (ERP)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	ECC ERP App Server #4 - PROD	App Server for SAP Enterprise Resource Planning (ERP)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	ECC ERP App Server #5 - PROD	App Server for SAP Enterprise Resource Planning (ERP)		PRD	PROD		64			1000 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SRM HANA Database - PROD	SAP Supplier Relationship Management (SRM)	HANA as DB	PRD	PROD		2,048			7346 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	SRM App Server #1 - PROD	App Server for SAP Supplier Relationship Management (SRM)		PRD	PROD		64			450 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SRM App Server #2 - PROD	App Server for SAP Supplier Relationship Management (SRM)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SRM App Server #3 - PROD	App Server for SAP Supplier Relationship Management (SRM)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SRM App Server #4 - PROD	App Server for SAP Supplier Relationship Management (SRM)		PRD	PROD		64			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SAP GRC (Access Control) HANA DB - PROD	SAP Access Control	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	GRC (Access Control) App Server #1 - PROD	App Server for SAP Access Control		PRD	PROD		32			250 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	GRC (Access Control) App Server #2 - PROD	App Server for SAP Access Control		PRD	PROD		32			250 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	WebDispatcher - PROD	SAP WebDispatcher		PRD	PROD		8			50 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SAP BOBJ BI HANA DB - PROD	SAP BusinessObjects Business Intelligence platform (BO BI)	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	BI Web + Processing & Intelligence Server #1 - PROD	Additional BI node		PRD	PROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7

Ser	ervice Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	BI Web + Processing & Intelligence Server #2 - PROD	Additional BI node		PRD	PROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	Lumira for BI Platform - PROD	Additional BI node		PRD	PROD		32			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	BCOS (Data Services) HANA DB - PROD	SAP BusinessObjects Business Intelligence platform (BO BI)	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	BCOS App Server #1 - PROD	Additional BI node		PRD	PROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	BCOS App Server #2 - PROD	Additional BI node		PRD	PROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	EP (Enterprise Portal) HANA DB - PROD	SAP Enterprise Portal (EP)	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	EP (Enterprise Portal) App Server #1 - PROD	App Server for SAP Enterprise Portal (EP)		PRD	PROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	EP (Enterprise Portal) App Server #2 - PROD	App Server for SAP Enterprise Portal (EP)		PRD	PROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
						•						•				
1	PI/PO HANA DB - PROD	SAP Process Orchestration (AEX+BPM on Java only)	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	PI/PO App Server #1 - PROD	App Server for SAP Process Orchestration (AEX+BPM on Java only)		PRD	PROD		64			900 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	PI/PO App Server #2 - PROD	App Server for SAP Process Orchestration (AEX+BPM on Java only)		PRD	PROD		64			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
								•			•	•				
1	SAP SolMan HANA DB - PROD	SAP Solution Manager ABAP <_> 7.2	HANA as DB	PRD	PROD		256			2605 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
1	SAP SolMan 7.2 ABAP App Server - PROD	App Server for SAP Solution Manager ABAP <_> 7.2		PRD	PROD		32			350 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	99.7%	DR_4h _0m		7
1	SAP SolMan 7.2 JAVA (App/MDC) - PROD	SAP Solution Manager Java <_> 7.2	HANA add. Schema/Con tainer	PRD	PROD		32			250 (St)	Backup-1GB-Dly-1M	Linux	99.7%	DR_4h _0m		7
	•	•			•						•					
1	SLT HANA database - PROD	SAP LT Replication Server	HANA as DB	VER	nonPROD		2,048			7346 (St)	Backup-1GB-Wly-2W	Linux	95.0%	DR_4h _0m		7

Ser	ervice Summary Phase 2020 (4/7/12)															
Amt	System Name	Service	Database	Tier- Name	Tier Type	System ID	RAM (GIB)	No. of add. HA/NA nodes	No. of standby nodes	Storage information (St)	Backup Class	os	SLA	DR	Add. Requirements	Phase
1	SLT App Server #1 - PROD	App Server for SAP LT Replication Server		VER	nonPROD		64			400 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%	DR_4h _0m		7
1	SLT App Server #2 - PROD	App Server for SAP LT Replication Server		VER	nonPROD		64			400 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%	DR_4h _0m		7
	PROD - <>															
1	SAP Router	SAP Router (Integration Use Only)		PRD	PROD		8			50 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	99.7%			7
1	РК01	laaS Enhanced - extended portfolio		PRD	PROD		16			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	99.7%			7
1	РК02	laaS Enhanced - extended portfolio		PRD	PROD		16			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	99.7%			7
1	РКОЗ	laaS Enhanced - extended portfolio		PRD	PROD		16			300 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	99.7%			7
	РКОЗ															
	Jump Server - Window	rs (Windows 2019) <>														
1	Jump Server #1 for Deloitte	laaS Enhanced - extended portfolio		SBX	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			1
1	Jump Server #2 for Deloitte	laaS Enhanced - extended portfolio		SBX	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			1
	Web Dispatcher on Windows Server															
1	Web Dispatcher - Windows 2019	SAP Webdispatcher		nonPROD	nonPROD		32			200 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Windows	95.0%			1
	Migration Server and S	Storage														
1	Migration Server #1	laaS Enhanced - extended portfolio		nonPROD	nonPROD		256			100 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			8
1	Migration Server #2	laaS Enhanced - extended portfolio		nonPROD	nonPROD		256			100 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			8
1	Migration Server #3	laaS Enhanced - extended portfolio		nonPROD	nonPROD		256			100 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			8
1	Migration Server #4	laaS Enhanced - extended portfolio		nonPROD	nonPROD		256			100 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			8
1	Migration Server #5	laaS Enhanced - extended portfolio		nonPROD	nonPROD		256			100 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M	Linux	95.0%			8
1	Storage for Migration	Additional Storage - Filesystem		nonPROD	nonPROD					10000 (St)	Backup-1GB-FS-Mly- full+Dly-incr-2M		95.0%			8

Connectivity

Sap connectivity	Service	Amount Primary DC	Amount Secondary DC
Site to site VPN	CLOUD VPN package including 1TB traffic	1	
Site to site VPN DR	CLOUD VPN package including 1TB traffic		1
1 TB Egress for VPN	CLOUD 1TB additional internet traffic package	1	
1 TB Egress for VPN DR	CLOUD 1TB additional internet traffic package		1
Direct connect link 1000Mbit/s	CLOUD direct connect 1000Mbit/s package	10	
Direct connect link 1000Mbit/s DR	CLOUD direct connect 1000Mbit/s package		10
2 TB Egress for direct connect	CLOUD direct connect 1TB additional traffic package	2	
2 TB Egress for direct connect DR	CLOUD direct connect 1TB additional traffic package		2
2 TB Egress for intra- region VPC peering	CLOUD VPC peering 1TB traffic package	2	
2 TB Egress for intra- region VPC peering DR	CLOUD VPC peering 1TB traffic package		2
2 TB Egress for inter- region VPC peering	CLOUD inter-region VPC peering 1TB traffic package	2	
2 TB Egress for inter- region VPC peering DR	CLOUD inter-region VPC peering 1TB traffic package		2

Load Balancing and Storage

Supplementary services	Service	Amount primary DC	Amount secondary DC	Phase
ALB non-prod (Internal & External)	CLOUD loadbalancer package including 1TB traffic	10		1
ALB Prod (Internal & External) & Dr	CLOUD loadbalancer package including 1TB trafficQ	5	5 <mark>Q</mark>	7
Outbound non-http	CLOUD loadbalancer package including 1TB traffic	1		1
Outbound non-http DR	CLOUD loadbalancer package including 1TB traffic		1	7
Additional traffic estimated	CLOUD loadbalancer package including 1TB traffic	1		1
Additional traffic estimated	CLOUD loadbalancer package including 1TB traffic	1		7
Laas-WTS	Unmanaged laas WTS	2		1
BLOB storage	Storage -S3-1GB	1000		8

Current Storage Latency

Storage Tier	Latency SLA
Tier I Block Storage – Local Only	10 ms
Tier II Block Storage – Local Only	20 ms
Tier III Block Storage – Local Only	40 ms
Tier I Block Storage – Replicated	10 ms
Tier II Block Storage – Replicated	20 ms
Tier III Block Storage – Replicated	40 ms

Appendix 3 – Required Services

Applicable Hosting and Application Service Roles and Responsibilities

This section explains the detailed services that <u>must</u> be replicated within a new hosting and application service support model to best support the State of Illinois SAP Finance agencies. These support services are currently supported in our current environment.

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
1	System Availability	Checks that Operating System is available.	<1 minute	Enterprise Operating System Support - Monitoring		Managed Service	Operating System Support
2	File System Space	Check that file system free space is available.	<15 minute	Enterprise Operating System Support - Monitoring		Managed Service	Operating System Support
3	Event Log Management	Monitor event logs for critical or error event levels.	<1 minute	Enterprise Operating System Support - Monitoring		Managed Service	Operating System Support
4	Event Notification	Alerts for alarms thresholds being met or exceeded.		Enterprise Operating System Support - Event Notification		Managed Service	Operating System Support
5	Capacity Report	Summarized report of a predefined period to aid in Capacity Management. Quarterly on request.		Enterprise Operating System Support - Capacity Management		Managed Service	Operating System Support
6	Storage and File Management	Create/delete/change file systems.		Enterprise Operating System Support - Operating System Management		Managed Service	Operating System Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
7	User and Profile Management	Create/Delete/Change operating system users, profiles, and policies as well as group management are excluded		Enterprise Operating System Support - Operating System Management		Managed Service	Operating System Support
8	Configuration Management	Create/delete/change operating system parameters to the configuration files as recommended by the OS vendor, or via Capacity Management or Service Monitoring		Enterprise Operating System Support Operating System Management		Managed Service	Operating System Support
9	Housekeeping	Create/delete/change vendor specific housekeeping best practices.		Enterprise Operating System Support - Operating System Management		Managed Service	Operating System Support
10	Operations Management	Stop and start of the operating system, system services and processes.		Enterprise Operating System Support - Operating System Management		Managed Service	Operating System Support
11	Scheduling	Create/ Delete/Change background scheduling services.		Enterprise Operating System Support - Operating System Management		Managed Service	Operating System Support
12	Performance Management	Performance analysis, tuning, maintenance, and implementation of recommendations/ Solutions.		Enterprise Operating System Support Operating		Managed Service	Operating System Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
				System Management			
13	OS patches and hotfix	Implementation of supported OS patches (non-security), as well as hotfixes.	Monthly	Enterprise Operating System Support - Patch Management		Managed Service	Operating System Support
14	Critical Patches	Implementation Of Critical and/or Security Patches.	Monthly	Enterprise Operating System Support - Patch Management		Managed Service	Operating System Support
15	System Availability	Checks that Operating System is available.	<1 minute	Enterprise Database Support - Monitoring		Managed Service	Database Support
16	File System Space	Check that file system free space is available.	15 minutes	Enterprise Database Support - Monitoring		Managed Service	Database Support
17	Event Log Management	Monitor event togs for critical or error event levels.	<1 minute	Enterprise Database Support - Monitoring		Managed Service	Database Support
18	Event Notification	Alerts for alarms thresholds being met or exceeded.		Enterprise Database Support- Event Notification		Managed Service	Database Support
19	Capacity Report	Summarized report of a predefined period to aid in Capacity Management. Quarterly on request.		Enterprise Database Support - Capacity Management		Managed Service	Database Support
20	Space Management	Manage all aspects of RDBMS space management for stability and		Enterprise Database Support		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		availability of the RDBMS.		Database Management			
21	Security management	Implement security recommendations as required by the RDBMS vendor, Customer, or recommended via Service Monitoring.		Enterprise Database Support - Database Management		Managed Service	Database Support
22	Object Management	Manage all aspects of RDBMS Object management for stability and availability of the system.		Enterprise Database Support - Database Management		Managed Service	Database Support
23	Configuration Management	Implement configuration recommendations as required by the RDBMS vendor, Customer, or recommended via Service Monitoring.		Enterprise Database Support- Database Management		Managed Service	Database Support
24	Performance Management	Performance analysis, tuning, maintenance, and implementation of recommendations/sol utions.		Enterprise Database Support - Database Management		Managed Service	Database Support
25	RDBMS Backup	Initiate RDBMS backup tasks through RDBMS tools. Customer must purchase Backup Storage Service		Enterprise Database Support - Database Management		Managed Service	Database Support
26	RDBMS Restore and Recovery Advice	Advice on Restore/recovery of supported RDBMS. Customer must purchase Backup Storage Service.		Enterprise Database Support - Database Management		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		Combined maximum of 2 service requests per month					
27	RDBMS Recovery	Perform recovery of supported RDBMS Systems. A combined maximum of 2 test Restore requests per month. Excludes recovery testing which would be at an additional cost. Customer must purchase Backup Storage Service		Enterprise Database Support - Database Management		Managed Service	Database Support
28	Storage and File Management	Create/delete/change file systems.		Enterprise Database Support – Operating System Management		Managed Service	Database Support
29	User and Profile Management	Create/Delete/Change operating system users, profiles, and policies as well as group management are excluded		Enterprise Database Support – Operating System Management		Managed Service	Database Support
30	Configuration Management	Create/delete/change operating system parameters to the configuration files as recommended by the OS vendor, or via Capacity Management or Service Monitoring		Enterprise Database Support – Operating System Management		Managed Service	Database Support
31	Housekeeping	Create/delete/change vendor specific housekeeping best practices.		Enterprise Database Support - Operating System Management		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
32	Operations Management	Stop and Start of the operating system, system services and processes.		Enterprise Database Support- Operating System Management		Managed Service	Database Support
33	Scheduling	Create/Delete/Change background scheduling services.		Enterprise Database Support - Operating System Management		Managed Service	Database Support
34	Performance Management	Performance analysis, tuning, maintenance and implementation of recommendations/sol utions.		Enterprise Database Support - Operating System Management		Managed Service	Database Support
35	OS patches and hotfix	Implementation of supported OS patches (non-security), as well as hotfixes.	Monthly	Enterprise Database Support- Patch Management		Managed Service	Database Support
36	Critical Patches	Implementation Of Critical and/or Security Patches.	Monthly	Enterprise Database Support - Patch Management		Managed Service	Database Support
37	Additional HANA DB	Plan and perform file system extensions for e.g. backup activities		SAP HANA DB Management Tasks		Managed Service	Database Support
38	Additional HANA DB	Monitor database resource consumption (memory, CPU, storage) to detect issues in technical operations		SAP HANA DB Management Tasks		Managed Service	Database Support
39	Additional HANA DB	Monitor table growth to proactively prevent		SAP HANA DB		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		operational issues and make sure, that the service Stays within the contractual sizing boundaries		Management Tasks			
40	Additional HANA DB	Partition tables / rebalance tables {for clarity this is a one- time service provided at additional cost)		SAP HANA DB Management Tasks		Managed Service	Database Support
41	Additional HANA DB	Perform row store / column store migration		SAP HANA DB Management Tasks		Managed Service	Database Support
42	Additional HANA DB	Monitor database for technical issues; analyze and resolve technical database failures		SAP HANA DB Management Tasks		Managed Service	Database Support
43	Additional HANA DB	Cleanup HANA log and trace files (traces, statistic files etc.) to free up capacity and keep HANA system clean and healthy		SAP HANA DB Management Tasks		Managed Service	Database Support
44	Additional HANA DB	Maintain/change SAP HANA configuration parameters based on AP standards and recommendations		SAP HANA DB Management Tasks		Managed Service	Database Support
45	Additional HANA DB	Start/stop database		SAP HANA DB Management Tasks		Managed Service	Database Support
46	Additional HANA DB	Add an additional HANA node to increase HANA capacity (for clarity this is a one-time service provided at additional cost)		SAP HANA DB Management Tasks		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
47	Additional HANA DB	Management of standby databases (HANA System Replication) for high availability		SAP HANA DB Management Tasks		Managed Service	Database Support
48	Additional HANA DB	update HANA database software and client; installing new SAP HANA revisions and DB stack updates into the system to be planned in a mutually agreed up in change window (for clarity, applies to HANA DB stack/revisions only)		SAP HANA DB Management Tasks		Managed Service	Database Support
49	Additional HANA DB	Update & maintain SAP HANA Studio on the central jumpbox		SAP HANA DB Management Tasks		Managed Service	Database Support
50	Additional HANA DB	Implement / maintain additional SAP HANA DB tools located on the hosted server as required by the client (e.g. SAP HANA Analytics Foundation Browser)		SAP HANA DB Management Tasks		Managed Service	Database Support
51	Additional HANA DB	Identify, analyze and optimize expensive SQL-statements to improve application performance (for clarity this is a one- time service provided at additional cost)		SAP HANA DB Management Tasks		Managed Service	Database Support
52	Additional HANA DB	System troubleshooting, e.g, blocked transactions, to overcome issues and bring SAP HANA		SAP HANA DB Management Tasks		Managed Service	Database Support

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		back to normal state of operations					
53	Additional HANA DB	Create/modify users for HANA modeling in the SAP HANA studio		SAP HANA DB Management Tasks		Managed Service	Database Support
54	Additional HANA DB	User, roles and permissions management for non- technical users		SAP HANA DB Management Tasks		Managed Service	Database Support
55	Additional HANA DB	User. roles and permissions management for technical users		SAP HANA DB Management Tasks		Managed Service	Database Support
56	Additional HANA DB	Perform database backups (regular full backups and log backups)		SAP HANA DB Management Tasks		Managed Service	Database Support
57	Additional HANA DB	Restore and recover SAP HANA after technical issues		SAP HANA DB Management Tasks		Managed Service	Database Support
58	Additional HANA DB	HANA Replication (aysnc/sync) between Primary and Secondary		SAP HANA DB Management Tasks		Managed Service	Database Support
59	System Availability	Checks that SAP is available and accessible.	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
60	Version Management	Details the current version levels in operation.	On Request	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
61	Background Jobs	Check for failed background jobs. Based on Customer guidelines.	Automate via CCMS alerting	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
62	IDOC status	Check the status of the in-coming and out-	Queues will be	Enterprise SAP Technical		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		going IDOC queues. Based On Customer guidelines	monitored continuousl y and can be reset if in a stuck status, errors or issues will need to be addressed by the clients middleware technical or functional team member	Support – SAP Monitoring			
63	RFC Communicatio ns	Check the status of the inbound and outbound communication queues. Based on Customer guidelines	Multiple times per day depending on which queue	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
64	Response Times	Check the dialog response time.	Daily or upon request or as part of issue RCA	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
65	Memory Management	Check SAP buffers.	Daily	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
66	CPU Efficiency	Check CPU utilization.	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
67	System Security	Check that system has been locked against System modification and that as determined by the	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		Customer's predefined strategy is enforced					
68	Update Failures	Check for failed updates.	Daily	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
69	Lock Management	Check for long running lock enqueues.	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
70	SAP Processes	Check for long running processes.	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
71	Active Users	Monitor user activity in support of annual SAP license auditing.	On Request	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
72	Program Failures	Check for ABAP failures.	Multiple times per day	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
73	Backup	Checks that backups have been successfully completed. Check the timing/performance of backups	Daily	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
74	Output Management	Check for spool failures.	Daily as per ticket request	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
75	SAP System Log	Check for critical or high warnings.	Daily	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
76	File System Space	Check file system free space.	<1 minute	Enterprise SAP Technical Support – SAP Monitoring		Basis Option	SAP Basis Tasks
77	System Availability	Checks that Operating System is available.	<1 minute	Enterprise SAP		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
				Technical Support - Operating System and Database Monitoring			
78	File System Space	Check that file system free space is available.	15 minute	Enterprise SAP Technical Support - Operating System and Database Monitoring		Basis Option	SAP Basis Tasks
79	Event Log Management	Monitor event logs for critical or error event levels.	<1 minute	Enterprise SAP Technical Support - System and Database Monitoring		Basis Option	SAP Basis Tasks
80	Event Notification	Alerts for alarms thresholds being met or exceeded.		Enterprise SAP Technical Support - Event Notification		Basis Option	SAP Basis Tasks
81	Capacity Report	Summarized report of a predefined Period to aid in Capacity Management. Quarterly on request.		Enterprise SAP Technical Support • SAP Basis Management		Basis Option	SAP Basis Tasks
82	Transport & Correction Management	All transports are managed through Customer's change management process at pre-determined times as agreed to		Enterprise SAP Technical Support SAP Basis Management		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
83	Spool Management	Create/ delete/ change SAP printers.		Enterprise SAP Technical Support - SAP Basis Management		Basis Option	SAP Basis Tasks
84	Client Management	Creation of new empty clients. Deletion of clients. Clients refresh within the same SAP instance.		Enterprise SAP Technical Support • SAP Basis Management		Basis Option	SAP Basis Tasks
85	CCMS Management	Create/delete/change operations timetable, operation modes, SAP load balancing groups, SAP instance profile, DBA planning Schedule.		Enterprise SAP Technical Support - SAP Basis Management		Basis Option	SAP Basis Tasks
86	Background Job management	Scheduling, release, cancellation and deletion of background jobs.		Enterprise SAP Technical Support - SAP Basis Management	Virtustream and Customer will mutually agree in advance as to what actions to take as a result of any deviations occurring, such as job interruptions , and such mutually agreed and Customer will supply the documented	Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
					procedures accordingly		
87	SAP Early- watch	Review and implementation of appropriate SAP Basis Early watch recommendations		Enterprise SAP Technical Support - SAP Basis Management	In coordination with Customer's approval and predetermin ed change management process.	Basis Option	SAP Basis Tasks
88	Performance Management	Performance analysis, tuning, cording, maintenance and implementation of recommendations/sol utions		Enterprise SAP Technical Support - SAP Basis Management	This Service does not include improvemen t of the performance of Customers ABAP / Java programs	Basis Option	SAP Basis Tasks
89	SAP Restore and Recovery Advice	Advise on Restore/recovery of supported SAP systems.		Enterprise SAP Technical Support - SAP Basis Management		Basis Option	SAP Basis Tasks
90	SAP Refreshes	Perform instance refreshes of SAP supported SAP systems.		Enterprise SAP Technical Support - SAP Basis Management	Maximum of 2 instance refreshes per quarter. More than 2 instance refreshes per quarter is billable project work	Basis Option	SAP Basis Tasks
91	Space Management	Manage all aspects of RDBMS space management for stability and		Enterprise SAP Technical Support -		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		availability Of the RDBMS.		Database Management			
92	Security Management	Implement security recommendations as required by the RDBMS vendor, Customer, or recommended via Service Monitoring		Enterprise SAP Technical Support - Database Management		Basis Option	SAP Basis Tasks
93	Object Management	Manage all aspects of RDBMS object management for stability and availability of the System.		Enterprise SAP Technical Support - Database Management		Basis Option	SAP Basis Tasks
94	Configuration Management	Implement configuration recommendations as required by the RDBMS vendor, SAP, Customer, or recommended via Service Monitoring.		Enterprise SAP Technical Support – Database Management		Basis option	SAP Basis Tasks
95	Performance Management	Performance analysis, tuning, maintenance and implementation of recommendations/ solutions.		Enterprise SAP Technical Support - Database Management		Basis Option	SAP Basis Tasks
96	Verify RDBMS backup tasks	Verify RDBMS backup tasks through RDBMS tools. Customer must purchase Backup Storage service		Enterprise SAP Technical Support - Database Management		Basis Option	SAP Basis Tasks
97	RDBMS Restore and Recovery Advice	Advice on Restore/recovery of supported ROEMS. Customer must		Enterprise SAP Technical Support -		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
		purchase Backup Storage service.		Database Management			
98	Storage and File Management	Create/delete/change file systems.		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks
99	User and Profile Management	Create/Delete/Change operating System users, profiles and policies as well as group management are excluded		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks
100	Configuration management	Create/delete/change operating system parameters to the configuration files as recommend by the OS vendor, SAP, or via capacity Management or service Monitoring		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks
101	Spooling and Printer management	Create/delete/change printers, hold/remove spool requests.		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks
102	Operations Management	Stop and start of the operating system, system services and processes		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
103	Scheduling	Create/Delete/Change background scheduling services.		Enterprise SAP Technical Support – Operating System Management		Basis Option	SAP Basis Tasks
104	Performance Management	Performance analysis, tuning maintenance and implementation of recommendations/ solutions.		Enterprise SAP Technical Support – Operating system Management		Basis Option	SAP Basis Tasks
105	SAP Kernel release	Implementation of SAP kernel release.	Quarterly upon request	Enterprise SAP Technical Support – SAP Patch Management		Basis Option	SAP Basis Tasks
106	SAP Support Packages	Implementation of SAP support packages/content/AD DON/PLUGIN		Enterprise SAP Technical Support – SAP Patch Management		Basis Option	SAP Basis Tasks
107	RDBMS Maintenance release	Implementation of RDBMS maintenance release and service packs.	Quarterly upon request	Enterprise SAP Technical Support – SAP Patch Management		Basis Option	SAP Basis Tasks
108	RDBMS Patches/hotfix	Implementation of RDBMS patches and hotfixes.	Upon request	Enterprise SAP Technical Support – SAP Patch Management		Basis Option	SAP Basis Tasks
109	OS patches	Implementation of OS patches.	Upon request	Enterprise SAP		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
				Technical Support – SAP Patch Management			
110	Additional Basis Tasks	SAP transport		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
111	Additional Basis Tasks	Resolution of Incident/Service tickets		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
112	Additional Basis Tasks	Printer definition		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
113	Additional Basis Tasks	Printer and output troubleshooting		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
114	Additional Basis Tasks	OSS note application		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
115	Additional Basis Tasks	OSS connection management		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
116	Additional Basis Tasks	Management and implementation of enhancement packs		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
117	Additional Basis Tasks	Nimsoft alert definitions		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
118	Additional Basis Tasks	Nimsoft alert setup		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
119	Additional Basis Tasks	Monitor system logs for errors and warnings		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
120	Additional Basis Tasks	Monitor user activity and work process status.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
121	Additional Basis Tasks	Monitor background jobs.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
122	Additional Basis Tasks	Troubleshoot and resolve system background job issues.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
123	Additional Basis Tasks	Troubleshoot and resolve Functional/business application background job issues.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
124	Additional Basis Tasks	Monitor lock entries.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
125	Additional Basis Tasks	Monitor abnormal program failures		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
126	Additional Basis Tasks	Monitor update failures.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
127	Additional Basis Tasks	Monitor Transport Management System		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
128	Additional Basis Tasks	Monitor communication channels (RFCs. ICM. Message Server, etc.)		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
129	Additional Basis Tasks	Troubleshoot and resolve system issues		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
130	Additional Basis Tasks	Monitor and tune system performance		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
131	Additional Basis Tasks	Monitor for performance issues and bottlenecks in application code.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
132	Additional Basis Tasks	Perform application code tuning.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
133	Additional Basis Tasks	Batch job monitoring and management (per documented process)		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
134	Additional Basis Tasks	Interface scheduling and monitoring (per documented process)		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
135	Additional Basis Tasks	Manage short dumps		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
136	Additional Basis Tasks	System log file analysis / management/resoluti on		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
137	Additional Basis Tasks	Application administration & troubleshooting		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
138	Additional Basis Tasks	Application patches update		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
139	Additional Basis Tasks	SAP client maintenance		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
140	Additional Basis Tasks	Shift handover / KT Of new VS resource		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
141	Additional Basis Tasks	Planning of SAP system/landscape		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
142	Additional Basis Tasks	Perform application startup and shutdown.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
143	Additional Basis Tasks	Monitor CPU and memory utilization.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
144	Additional Basis Tasks	Monitor file System usage.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
145	Additional Basis Tasks	OS patches update		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
146	Additional Basis Tasks	Troubleshoot and resolve operating system issues.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks

Number	Service Name	Service Description	Frequency	Section	Exclusions	Offering	Category
147	Additional Basis Tasks	Monitor spool system for errors.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
148	Additional Basis Tasks	Troubleshoot and resolve system printing issues.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
149	Additional Basis Tasks	Troubleshoot and resolve site printing issues.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
150	Additional Basis Tasks	Setup and test system printers.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
151	Additional Basis Tasks	Setup and test site printers.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
152	Additional Basis Tasks	Perform client and system copies		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
153	Additional Basis Tasks	Manage transport management system configuration.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
154	Additional Basis Tasks	Apply transports and migrate configuration and code changes.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
155	Additional Basis Tasks	Document software versions and end of support dates.		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
156	Additional Basis Tasks	Apply SAP software updates (e.g support packages, kernel)		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
157	Additional Basis Tasks	Apply database software updates (e.g. service packages)		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks
158	Additional Basis Tasks	Apply OS software patches and updates		RACI for SAP Basis Management		Basis Option	SAP Basis Tasks

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Cloud Service Computing Environment

SI Vendor must work with the Cloud Service Computing provider and the M&O Vendor to ensure the State of Illinois has service metrics, incident monitoring, prioritization, and solutioning; back-ups, database management, FedRAMP security audits, and scheduled maintenance as per the below requirements. These roles and responsibilities are outlined in the RASCI schedules in <u>Appendix 1</u> and should be adhered to throughout the migration implementation as well as during steady state operations. Any discrepancies or recommendations for change should be documented in writing within the proposal response to ensure State agreement prior to contract execution.

Back-ups

Backups are essential in the State ERP system to protect and ensure the availability of the State data. The SI VENDOR will work with the Cloud Services provider to understand the current setup for backup schedules and ensure the proposal outlines how they are documented, timely, and effective in the event of an incident for timely and effective recovery of information. Backups are required on the following frequency.

Description	Computer Environment segment to which Service Level applies	Service Levels
Backup Frequency and retention period for	PRD	Daily backup and log file generation per SAP product standard 1 Month retention time. Backup of the production environment will be replicated to an alternate data center.
Databases	DEV/QAS	Weekly backup and log file generation per SAP product standard. 14 days retention time. Backup of the non- production environment will be replicated to an alternate data center.
Backup Frequency and retention period for File	PRD	Monthly full backup and daily incremental. 1 Months retention time. Backup of the production environment will be replicated to an alternate data center.
systems	DEV/QAS	Monthly full backup and daily incremental. 1 Months retention time. Backup of the non- production environment will be replicated to an alternate data center.

Service Metrics Requested

Service metrics are measurable values that indicate the performance, quality, and efficiency of a cloud computing service. These metrics evaluate how well a service meets the State's intended objectives and standards. Service metrics include uptime, response time, data transfer rates, and other performance indicators. The SI VENDOR will work with the Cloud Computing Vendor and M&O VENDOR to document, review and evaluate the State ERP system service metrics using performance monitoring, issue identification, and capacity planning. The SI VENDOR will review the Service Level Agreement (SLA) compliance benchmarks and create a procedure to document and measure the systems performance for management reporting. The following guidelines are the baseline requirements for this project:

- HANA Aggregate Service Availability (HANA ASA)
 - Prod 99.8%
 - Non-Prod 99.0%

**Note: HANA ASA will comprise of the following components: Infrastructure, OS, local DB and the HANA in-Memory DB

Service Availability expressed as a percentage is calculated as follows for HANA availability. "Availability" or "Available" subject to the terms of the calculation below, and subject to any Service Level Exception, means that the applicable VM, storage and network access within the data center is available to Customer.

 $\frac{(T \times Customer Aggregate Stack) - (U \times Unavailable customer HANA Aggregate Stack)}{T \times Customer Aggregate Stack} \times 100$

Where,

T = the total number of minutes within the applicable month, less the minutes (or portion thereof) for any Scheduled Outages.

Aggregate Stack = the overall components that comprise the HANA Stack (Network, Server, Hypervisor, Storage, OS, DB).

U = the number of minutes (or portion thereof) that any applicable HANA systems are not available to Customer in the applicable calendar month. This excludes any unavailability due to Scheduled Outages.

Unavailable Customer HANA Aggregate Stack = the number of applicable HANA Stack that are unavailable to Customer in the applicable calendar month.

Non-HANA Aggregated Service Availability

- Prod 99.5%
- Non-Prod 99.0%
- **Note: Non-HANA ASA will comprise of the following components: Infrastructure, OS, local DB and the DB

Service Availability expressed as a percentage is calculated as follows for Non-HANA ASA availability. "Availability" or "Available" subject to the terms of the calculation below, and subject to any Service Level Exception, means that the applicable VM, storage and network access within the data center is available to Customer.

- $\frac{(T \times Customer \ Aggregate \ Stack) - (U \times Unavailable \ customer \ Non - HANA \ Aggregate \ Stack)}{T \times Customer \ Aggregate \ Stack} \times 100$

Where,

T = the total number of minutes within the applicable month, less the minutes (or portion thereof) for any Scheduled Outages.

Aggregate Stack = the overall components that comprise the Non-HANA Stack (Network, Server, Hypervisor, Storage, OS, DB).

U = the number of minutes (or portion thereof) that any applicable HANA systems are not available to Customer in the applicable calendar month. This excludes any unavailability due to Scheduled Outages.

Unavailable Customer HANA Aggregate Stack = the number of applicable Non-HANA Stack that are unavailable to Customer in the applicable calendar month.

Appendix 4 – Milestone Definitions

RFP Posted (8/16/2024) - This is the date we expect the Request for Proposals to be ready to publish.

RFP Questions Due (8/26/2024)- Vendors interested in responding to the Request for Proposal should ask any questions related to the Request for Proposal no later than 5 pm on this date.

RFP Responses due (9/09/2024) - Vendors interested in responding to the Request for Proposal should submit no later than 5 pm on this date.

RFP Award Notification (9/20/2024) - the State of Illinois is estimating notification to awarded Vendor will be published by this date.

Contract Execution (10/1/2024)- the State of Illinois expects the contract to be executed by this date. This contract execution date is imperative to the timely completion of this project.

Environment Assessment Recommendation (10/31/2024)- the State of Illinois expects the contracted Vendor to provide a written deliverable which includes the Vendor's review and assessment of the current environment and recommendations for a final system set up and migration plan to the State for any changes by this date.

Environment State Approval (11/15/2024) - the State of Illinois expects to review and discuss the Vendor assessment and recommendation and negotiate a final system set up and migration plan by this date.

Cycle 1 – SBX & Development (N+1) (12/16/2024) - the State of Illinois expects Cycle 1 to include the sandbox and development (N+1) environments to be setup, migrated, tested, and deployed by this date.

Cycle 2 – Development (N) (1/15/2025) - the State of Illinois expects Cycle 2 to include the development environment to be setup, migrated, tested, and deployed by this date.

Cycle 3 – QA (N) & ITC (2/21/2025) -the State of Illinois expects Cycle 3 to include a QA environment equal to production (current iteration) to be setup, migrated, tested, and deployed by this date. The State also expects a formal* Integration Testing cycle by this date.

Cycle 4 – Verification (N) & UAT (3/31/2025) - the State of Illinois expects Cycle 4 to include a verification system environment equal to production (current iteration) to be setup, migrated, tested, and deployed by this date. The State expects that the migrated environment is successfully deployed and functioning to allow for formal* user acceptance testing completion.

Cycle 5 – Production Dry Run/Cutover (4/30/2025) - the State of Illinois expects Cycle 5 to include a production dry run as a full-scale rehearsal of the actual migration and go live process. Cycle 5 also should include the cutover process of transitioning the system from the old environment to the new live production environment including all data, configurations, batch schedules, integrations, and applications as defined in Scope of Work ensuring system is fully operational and ready for use on Go Live date.

GO Live 5/31/2025 - The State of Illinois expects the SAP Finance migration project to be completed and final deployment from staging to live production with user access available for all agencies.

Hypercare ends (7/1/2025) - The State of Illinois expects the system to be closely monitored to ensure it functions correctly in the live environment. During this timeframe, the deployment team should be available to ensure any issues are quickly addressed to minimize disruption to users. Support team should be on standby to provide immediate assistance.

Cycle 6 – TRN, Development, and QA (N+1) (7/31/2025) - The State of Illinois expects the Vendor to ensure the Training, Development, and QA instances are fully functional and up to date with the production environments. The Vendor should ensure the ability to have continuous instance update schedule to ensure an adequate training, development, and QA sites for production support as well as system enhancements and continual day to day real scenarios testing and training.

Support and Maintenance Services ends (9/1/2025) - The State of Illinois expects the Vendor to provide support and maintenance services for 90 days post go live. The support and services expected are outlined by the RASCI deliverables and as proposed in Appendix 1- and defined as required services in Appendix 3.

*Formal (above in the section) is defined as the following: Formal testing is an activity aimed at evaluating and documenting the capabilities of a program or system in determining that it meets the business requirements as defined in the business blueprint/flows or requirements matrix and the functional specification document. The process consists of proper functional and technical scenario planning, preparation and evaluation of software products and related work products to determine and document that they satisfy specified business requirements, to demonstrate that they are fit for purpose and to detect, track and resolve defects. Additional details will be specified in project deliverables.

Exhibit 1 – Example Contract

State of Illinois

Information and Technology Standard Terms and Conditions

1. TERMINATION

1.1 TERMINATION FOR CAUSE: The State may terminate this Contract, in whole or in part, immediately upon notice to Vendor if: (a) the State determines that the actions or inactions of Vendor, its agents, employees, or subcontractors have caused, or reasonably could cause, jeopardy to health, safety, or property, or (b) Vendor has notified the State that it is unable or unwilling to perform the Contract.

If Vendor fails to perform to the State's satisfaction any material requirement of this Contract, is in violation of a material provision of this Contract, or the State determines that Vendor lacks the financial resources to perform the Contract, the State shall provide written notice to Vendor to cure the problem identified within the period of time specified in the State's written notice. If not cured by that date the State may either: (a) immediately terminate the Contract without additional written notice or (b) enforce the terms and conditions of the Contract.

For termination due to any of the causes contained in this Section, the State retains its rights to seek any available legal or equitable remedies and damages.

1.2 TERMINATION FOR CONVENIENCE: The State may, for its convenience and with thirty (30) days' prior written notice to Vendor, terminate this Contract in whole or in part and without payment of any penalty or incurring any further obligation to Vendor.

Upon submission of invoices and proof of claim, Vendor shall be entitled to compensation for supplies and services provided in compliance with this Contract up to and including the date of termination.

1.3 AVAILABILITY OF APPROPRIATION: This Contract is contingent upon and subject to the availability of funds. The State, at its sole option, may terminate or suspend this Contract, in whole or in part, without penalty or further payment being required, if (1) the Illinois General Assembly or the federal funding source fails to make an appropriation sufficient to pay such obligation, or if funds needed are insufficient for any reason (30 ILCS 500/20-60), (2) the Governor or the Agency reserves funds, or (3) the Agency determines, in its sole discretion or as directed by the Office of the Governor, that a reduction is necessary or advisable based upon actual or projected budgetary considerations or available funds for payment. Vendor will be notified in writing of the failure of appropriation or of a reduction or decrease and the Agency's election to terminate or suspend, in whole or in part, as soon as practicable. Any suspension or termination pursuant to this section will be effective upon the date of the written notice unless otherwise indicated.

STANDARD BUSINESS TERMS AND CONDITIONS

2.1. PAYMENT TERMS AND CONDITIONS:

- 2.1.1 Late Payment: Payments, including late payment charges, will be paid in accordance with the State Prompt Payment Act and rules when applicable. 30 ILCS 540; 74 III. Adm. Code 900. This shall be Vendor's sole remedy for late payments by the State. Payment terms contained on Vendor's invoices shall have no force or effect.
- 2.1.2 Minority Contractor Initiative: Any Vendor awarded a contract of \$1,000 or more under Section 20-10, 20-15, 20-25 or 20-30 of the Illinois Procurement Code (30 ILCS 500) is required to pay a fee of \$15. The Comptroller shall deduct the fee from the first check issued to Vendor under the Contract and deposit the fee in the Comptroller's Administrative Fund. 15 ILCS 405/23.9.
- 2.1.3 Expenses: The State will not pay for supplies provided or services rendered, including related expenses, incurred prior to the execution of this Contract by the Parties even if the effective date of the Contract is prior to execution.
- 2.1.4 Prevailing Wage: As a condition of receiving payment Vendor must (i) be in compliance with the Contract, (ii) pay its employees prevailing wages when required by law, (iii) pay its suppliers and subcontractors according to the terms of their respective contracts, and (iv) provide lien waivers to the State upon request. Examples of prevailing wage categories include public works, printing, janitorial, window washing, building and grounds services, site technician services, natural resource services, security guard and food services. The prevailing wages are revised by the Illinois Department of Labor and are available on the Illinois Department of Labor's official website, which shall be deemed proper notification of any rate changes under this subsection. Vendor is responsible for contacting the Illinois Department of Labor at 217-782-6206 or (http://labor.illinois.gov) to ensure understanding of prevailing wage requirements.
- 2.1.5 Federal Funding: This Contract may be partially or totally funded with Federal funds. If Federal funds are expected to be used, then the percentage of the good/service paid using Federal funds and the total Federal funds expected to be used will be provided to the awarded Vendor in the notice of intent to award.
- 2.1.6 Invoicing: By submitting an invoice, Vendor certifies that the supplies or services provided meet all requirements of this Contract, and the amount billed and expenses incurred are as allowed in this Contract. Invoices for supplies purchased, services performed, and expenses incurred through June 30 of any year must be submitted to the State no later than July 31 of that year; otherwise, Vendor may have to seek payment through the Illinois Court of Claims. 30 ILCS 105/25. All invoices are subject to statutory offset. 30 ILCS 210.
- 2.1.6.1 Vendor shall not bill for any taxes unless accompanied by proof that the State is subject to the tax. If necessary, Vendor may request the applicable Agency's Illinois tax exemption number and federal tax exemption information.
- 2.1.6.2 Send invoices to:

Agency:	Department of Innovation and Technology
Attn:	Accounts Payable
Address:	120 W Jefferson St
City, State Zip	Springfield, IL 62702

- 2.2. ASSIGNMENT: This Contract may not be assigned or transferred in whole or in part by Vendor without the prior written consent of the State.
- 2.3. SUBCONTRACTING: For purposes of this section, subcontractors are those with contracts with an annual value exceeding \$100,000 and who are specifically hired to perform all, or part of the work covered by this Contract. Vendor must receive prior written approval before use of any subcontractors in the performance of this Contract. Vendor shall describe, in an attachment if not already provided, the names and addresses of all authorized subcontractors to be utilized by Vendor in the performance of this Contract, together with a description of the work to be performed by the subcontractor and the anticipated amount of money that each subcontractor is expected to receive pursuant to this Contract. If required, Vendor shall provide a copy of any subcontracts within fifteen (15) days after execution of this Contract. All subcontracts must include the same certifications that Vendor must make as a condition of this Contract. Vendor shall include in each subcontract the Standard Illinois Certifications form available from the State. If at any time during the term of this Contract, Vendor adds or changes any subcontractors, then Vendor must promptly notify, by written amendment to this Contract, the State Purchasing Officer or the Chief Procurement Officer of the names and addresses, the expected amount of money that each new or replaced subcontractor will receive pursuant to this Contract, and the general type of work to be performed. 30 ILCS 500/20-120.
- 2.4. AUDIT/RETENTION OF RECORDS: Vendor and its subcontractors shall maintain books and records relating to the performance of the Contract or subcontract and necessary to support amounts charged to the State pursuant the Contract or subcontract. Books and records, including information stored in databases or other computer systems, shall be maintained by Vendor for a period of three (3) years from the later of the date of final payment under the Contract or completion of the Contract, and by the subcontractor for a period of three (3) years from the later of final payment under the term or completion of the subcontract. If Federal funds are used to pay Contract costs, Vendor and its subcontractors must retain their respective records for five (5) years. Books and records required to be maintained under this section shall be available for review or audit by representatives of the procuring Agency, the Auditor General, the Executive Inspector General, the

Chief Procurement Officer, State of Illinois internal auditors or other governmental entities with monitoring authority, upon reasonable notice and during normal business hours. Vendor and its subcontractors shall cooperate fully with any such audit and with any investigation conducted by any of these entities. Failure to maintain books and records required by this section shall establish a presumption in favor of the State for the recovery of any funds paid by the State under this Contract or any subcontract for which adequate books and records are not available to support the purported disbursement. Vendor or subcontractors shall not impose a charge for audit or examination of Vendor's or subcontractors' books and records. 30 ILCS 500/20-65. Vendor and its subcontractors shall upon reasonable notice appear before and respond to requests for information from the Illinois Works Review Panel. 30 ILCS 559/20-25(d).

- 2.5. TIME IS OF THE ESSENCE: Time is of the essence with respect to Vendor's performance of this Contract. Vendor shall continue to perform its obligations while any dispute concerning the Contract is being resolved unless otherwise directed by the State.
- 2.6. NO WAIVER OF RIGHTS: Except as specifically waived in writing, failure by a Party to exercise or enforce a right does not waive that Party's right to exercise or enforce that or other rights in the future.
- 2.7. FORCE MAJEURE: Failure by either Party to perform its duties and obligations will be excused by unforeseeable circumstances beyond its reasonable control and not due to its negligence, including acts of nature, acts of terrorism, riots, labor disputes, fire, flood, explosion, and governmental prohibition. The non-declaring Party may cancel this Contract without penalty if performance does not resume within thirty (30) days of the declaration.
- 2.8. CONFIDENTIAL INFORMATION: Each Party to this Contract, including its agents and subcontractors, may have or gain access to confidential data or information owned or maintained by the other Party in the course of carrying out its responsibilities under this Contract. Vendor shall presume all information received from the State or to which it gains access pursuant to this Contract is confidential. Vendor information, unless clearly marked as confidential and exempt from disclosure under the Illinois Freedom of Information Act ("FOIA") (5 ILCS 140), shall be considered public. Unless otherwise agreed by the Parties, and then only upon receipt of the State's prior written consent, Vendor and its subcontractors shall not access or attain any personally identifiable information or sensitive information on or from the State's systems, and Vendor agrees that any such information is the confidential information of the State. In any event, Vendor shall implement and maintain reasonable security measures to protect any and all data, information, and records disclosed by the State under this Contract from unauthorized access, acquisition, destruction, use, modification, or disclosure. No confidential data collected, maintained, or used in the course of performance of this Contract shall be disseminated except as authorized by law and with the written consent of the disclosing Party, either during the period of this Contract or thereafter. The receiving Party must return any and all data collected, maintained, created or used in the course of the performance of this Contract, in a non-proprietary, readily usable format, promptly at the end of this Contract, or earlier at the request of the disclosing Party, or notify the disclosing Party in writing of its destruction. The foregoing obligations shall not apply to confidential data or information lawfully

in the receiving Party's possession prior to its acquisition from the disclosing Party; received in good faith from a third Party not subject to any confidentiality obligation to the disclosing Party; now is or later becomes publicly known through no breach of confidentiality obligation by the receiving Party; or that is independently developed by the receiving Party without the use or benefit of the disclosing Party's confidential information.

- 2.9. USE AND OWNERSHIP: All work performed, or supplies created by Vendor under this Contract, whether written documents or data, goods, or deliverables of any kind, shall be deemed work for hire under copyright law and all intellectual property and other laws, and the State of Illinois is granted sole and exclusive ownership to all such work, unless otherwise agreed in writing. Vendor hereby assigns to the State all right, title, and interest in and to such work including any related intellectual property rights, and/or waives any and all claims that Vendor may have to such work including any so-called "moral rights" in connection with the work. Vendor acknowledges the State may use the work product for any purpose. Confidential data or information contained in such work shall be subject to the confidentiality provisions of this Contract.
- 2.10. INDEMNIFICATION AND LIABILITY: Vendor shall indemnify and hold harmless the State, its agencies, officers, employees, agents, and volunteers from any and all costs, demands, expenses, losses, claims, damages, liabilities, settlements, and judgments, including in-house and Contracted attorneys' fees and expenses, related to: (a) any breach or violation by Vendor of any of its certifications, representations, warranties, covenants, or agreements; (b) any actual or alleged death or injury to any person, damage to any real or personal property, or any other damage or loss claimed to result in whole or in part from Vendor's negligent performance; (c) any act, activity, or omission of Vendor or any of its employees, representatives, subcontractors, or agents; or (d) any actual or alleged claim that the products or services provided under this Contract infringe, misappropriate, or otherwise violate any intellectual property rights (including but not limited to patent, copyright, trade secret, or trademark rights) of a third party. Vendor shall also defend (subject to the consent of the Office of the Attorney General ("OAG")) the State against any and all third-party claims related to this Contract. In accordance with Article VIII, Section 1(a) and (b) of the Constitution of the State of Illinois and 1973 Illinois Attorney General Opinion 78, the State may not indemnify private parties absent express statutory authority permitting the indemnification. The State shall not be liable for indirect, special, consequential, or punitive damages.
 - 2.10.1 DATA BREACH PREVENTION, NOTICE, AND REMEDIATION: Vendor shall ensure the security, storage, and integrity of the State's content, data, computers, networks, and systems (which may include the use of encryption technology to protect the State's content and data from unauthorized access). Notwithstanding anything to the contrary in this Contract, to the extent that Vendor experiences or causes an information breach or security incident that impacts the State's data, content, computers, systems, or networks, Vendor shall immediately notify the State and will use best efforts to immediately remedy any such breach or incident, and to prevent any further breach or incident, at Vendor's expense, in accordance with applicable privacy rights, laws, regulations, policies, and standards, including but not limited to the Illinois Personal Information Protection Act (815 ILCS 530). Vendor shall

reimburse the State for any and all costs incurred by the State in responding to, and mitigating damages caused by, any such breach or security incident, including all costs of notice and/or remediation.

- 2.10.2 DATA LOSS AND DAMAGE TO STATE COMPUTER SYSTEMS: Vendor shall adhere to all indemnification and liability obligations stated in this Contract and will remain liable where any damage or impairment to the State's computers, systems, and networks, or any loss or corruption of the State's data or content, is due to Vendor's negligent or intentional acts and omissions. Further, Vendor shall reimburse the State for any and all costs incurred by the State in restoring such data, content, computers, systems, or networks.
- 2.11. INSURANCE: Vendor shall, at all times during the term of this Contract and any renewals or extensions, maintain and provide a Certificate of Insurance naming the State as an additionally insured for all required bonds and insurance. Certificates may not be modified or canceled until at least thirty (30) days' notice has been provided to the State. Vendor shall provide: (a) General Commercial Liability insurance in the amount of \$1,000,000 per occurrence (Combined Single Limit Bodily Injury and Property Damage) and \$2,000,000 Annual Aggregate; (b) Auto Liability, including Hired Auto and Non-owned Auto (Combined Single Limit Bodily Injury and Property Damage), in amount of \$1,000,000 per occurrence; and (c) Worker's Compensation Insurance in the amount required by law. Insurance shall not limit Vendor's obligation to indemnify, defend, or settle any claims.
- 2.12. INDEPENDENT CONTRACTOR: Vendor shall act as an independent contractor and not an agent or employee of, or joint venturer with the State. All payments by the State shall be made on that basis.
- 2.13. SOLICITATION AND EMPLOYMENT: Vendor shall not employ any person employed by the State during the term of this Contract to perform any work under this Contract. Vendor shall give notice immediately to the Agency's director if Vendor solicits or intends to solicit State employees to perform any work under this Contract.
- 2.14. COMPLIANCE WITH THE LAW: Vendor, its employees, agents, and subcontractors shall comply with all applicable federal, state, and local laws, rules, ordinances, regulations, orders, federal circulars and all license and permit requirements in the performance of this Contract. Vendor shall be in compliance with applicable tax requirements and shall be current in payment of such taxes. Vendor shall obtain at its own expense, all licenses and permissions necessary for the performance of this Contract.
- 2.15. BACKGROUND CHECK: Vendor affirms that it checks the criminal records of all applicants for felony convictions and misdemeanor convictions involving a violent act or threat of violence within five (5) years prior to employment, where permitted by law.

Whenever the State deems it reasonably necessary for security reasons, the State may conduct, at its expense, criminal and driver history background checks of Vendors and subcontractors, officers, employees, or agents performing services on State owned, leased, or controlled property. Vendor or subcontractor shall reassign immediately any such individual who, in the reasonable opinion of the State, does not pass the background checks. The background checks shall be in compliance with all federal laws. The State further agrees as follows:

- Use of the information collected will be for the specific purpose of facilitating a background check;
- All information collected will be treated as confidential;
- The State will limit access to the information received and will properly store it in a reasonably secure manner;
- The State will promptly dispose in an appropriate manner all collected information when the purpose for which it was originally collected is no longer valid; and
- State must provide notice and consent forms. Vendor's and subcontractor's officers, employees, or agents performing services on state owned, leased, or controlled property not consenting shall be reassigned.

However, in no event can Vendor agree to waive the rights of its employees, nor can Vendor provide the State with any information protected by law, including but not limited to Vendor's background check data.

- 2.16. APPLICABLE LAW:
 - 2.16.1 PREVAILING LAW: This Contract shall be construed in accordance with and is subject to the laws and rules of the State of Illinois.
 - 2.16.2 EQUAL OPPORTUNITY: The Department of Human Rights' Equal Opportunity requirements are incorporated by reference. 44 ILL. ADM. CODE 750.
 - 2.16.3 COURT OF CLAIMS; ARBITRATION; SOVEREIGN IMMUNITY: Any claim against the State arising out of this Contract must be filed exclusively with the Illinois Court of Claims. 705 ILCS 505/1. The State shall not enter into binding arbitration to resolve any dispute arising out of this Contract. The State of Illinois does not waive sovereign immunity (including all rights provided in the State Lawsuit Immunity Act, 745 ILCS 5) by entering into this Contract.
 - 2.16.4 OFFICIAL TEXT: The official text of the statutes cited herein is incorporated by reference. An unofficial version can be viewed at (www.ilga.gov/legislation/ilcs/ilcs.asp).

- 2.17. ANTI-TRUST ASSIGNMENT: If Vendor does not pursue any claim or cause of action it has arising under Federal or State antitrust laws relating to the subject matter of this Contract, then upon request of the Illinois Attorney General, Vendor shall assign to the State all of Vendor's rights, title, and interest in and to the claim or cause of action.
- 2.18. CONTRACTUAL AUTHORITY: The Agency that signs this Contract on behalf of the State of Illinois shall be the only State entity responsible for performance and payment under this Contract. When the Chief Procurement Officer or authorized designee or State Purchasing Officer signs in addition to an Agency, he/she does so as approving officer and shall have no liability to Vendor. When the Chief Procurement Officer or authorized designee or State Purchasing Officer signs a master Contract on behalf of State agencies, only the Agency that places an order or orders with Vendor shall have any liability to Vendor for that order or orders.
- 2.19. EXPATRIATED ENTITIES: Except in limited circumstances, no business or member of a unitary business group, as defined in the Illinois Income Tax Act, shall submit a bid for or enter into a Contract with a State agency if that business or any member of the unitary business group is an expatriated entity.
- 2.20. NOTICES: Notices and other communications provided for herein shall be given in writing via electronic mail whenever possible. If transmission via electronic mail is not possible, then notices and other communications shall be given in writing via registered or certified mail with return receipt requested, via receipted hand delivery or via courier (UPS, Federal Express, or other similar and reliable carrier). Notices shall be sent to the individuals who signed this Contract using the contact information provided with the signatures. Each such notice shall be deemed to have been provided at the time it is actually received. By giving notice, either Party may change its contact information.
- 2.21. MODIFICATIONS AND SURVIVAL: Amendments, modifications, and waivers must be in writing and signed by authorized representatives of the Parties. Any provision of this Contract officially declared void, unenforceable, or against public policy, shall be ignored and the remaining provisions shall be interpreted, as far as possible, to give effect to the Parties' intent. All provisions that by their nature would be expected to survive, shall survive termination. In the event of a conflict between the State's and Vendor's terms, conditions, and attachments, the State's terms, conditions, and attachments shall prevail.
- 2.22. PERFORMANCE RECORD / SUSPENSION: Upon request of the State, Vendor shall meet to discuss performance or provide contract performance updates to help ensure proper performance of this Contract. The State may consider Vendor's performance under this Contract and compliance with law and rule to determine whether to continue this Contract, suspend Vendor from doing future business with the State for a specified period of time, or whether Vendor can be considered responsible on specific future contract opportunities.

- 2.23. FREEDOM OF INFORMATION ACT: This Contract and all related public records maintained by, provided to or required to be provided to the State are subject to the Illinois Freedom of Information Act ("FOIA") (5 ILCS 140) notwithstanding any provision to the contrary that may be found in this Contract.
- 2.24. SCHEDULE OF WORK: Any work performed on State premises shall be performed during the hours designated by the State and performed in a manner that does not interfere with the State and its personnel.

2.25. WARRANTIES FOR SUPPLIES AND SERVICES

- 2.25.1 Vendor warrants that the supplies furnished under this Contract will: (a) conform to the standards, specifications, drawing, samples, or descriptions furnished by the State or furnished by Vendor and agreed to by the State, including but not limited to all specifications attached as exhibits hereto; (b) be merchantable, of good quality and workmanship, and free from defects for a period of twelve months or longer if so specified in writing, and fit and sufficient for the intended use; (c) comply with all federal and state laws, regulations, and ordinances pertaining to the manufacturing, packing, labeling, sale, and delivery of the supplies; (d) be of good title and be free and clear of all liens and encumbrances and; (e) not infringe any patent, copyright, or other intellectual property rights of any third party. Vendor agrees to reimburse the State for any losses, costs, damages, or expenses, including without limitations, reasonable attorney's fees and expenses, arising from failure of the supplies to meet such warranties.
- 2.25.2 Vendor shall ensure that all manufacturers' warranties are transferred to the State and shall provide to the State copies of such warranties. These warranties shall be in addition to all other warranties, express, implied, or statutory, and shall survive the State's payment, acceptance, inspection, or failure to inspect the supplies.
- 2.25.3 Vendor warrants that all services will be performed to meet the requirements of this Contract in an efficient and effective manner by trained and competent personnel. Vendor shall monitor performances of each individual and shall immediately reassign any individual who does not perform in accordance with this Contract, who is disruptive or not respectful of others in the workplace, or who in any way violates the Contract or State policies.
- 2.26. REPORTING, STATUS AND MONITORING SPECIFICATIONS: Vendor shall immediately notify the State of any event that may have a material impact on Vendor's ability to perform this Contract.
- 2.27. EMPLOYMENT TAX CREDIT: Vendors who hire qualified veterans and certain ex-offenders may be eligible for tax credits. 35 ILCS 5/216, 5/217. Please contact the Illinois Department of Revenue (telephone #: 217-524-4772) for information about tax credits.

- 2.28. SUPPLEMENTAL TERMS: Notwithstanding any provision to the contrary in Vendor's supplemental terms and conditions, or in any licensing agreement attached hereto:
 - 2.28.1 The procuring Agency and the State do not waive sovereign immunity (including all rights provided in the State Lawsuit Immunity Act, 745 ILCS 5);
 - 2.28.2 The procuring Agency and the State do not consent to be governed by the laws of any state other than Illinois;
 - 2.28.3 The procuring Agency and the State do not consent to be represented in any legal proceeding by any person or entity other than the Illinois Attorney General or his or her designee;
 - 2.28.4 The procuring Agency and the State shall not be bound by the terms and conditions contained in any click-wrap agreement, click-wrap license, click-through agreement, click-through license, end user license agreement, or any other agreement or license contained or referenced in the software or any quote provided by Vendor, except as attached to this Contract.
 - 2.28.5 The procuring Agency and the State shall not indemnify Vendor or its subcontractors (including any equipment manufacturers or software companies);
 - 2.28.6 Vendor shall indemnify the procuring Agency and State pursuant to the terms and conditions of the Indemnification and Liability clause of this Contract;
 - 2.28.7 Vendor's liability shall be governed by the terms and conditions contained in the Indemnification and Liability clause of this Contract; and
 - 2.28.8 Vendor must ensure that all information technology, including electronic information, software, systems and equipment, developed or provided under this contract complies with the applicable requirements of the Illinois Information Technology Accessibility Act Standards as published at (www.dhs.state.il.us/iitaa). 30 ILCS 587.
- 2.29. SECURITY REQUIREMENTS: The State of Illinois has specific security requirements for information and systems. Vendor must ensure these requirements are fully understood and allocate sufficient project time and resources to address the security requirements.

An information security risk assessment, data classification and system categorization process, and the submission of a system security plan must be completed and submitted to the Department of Innovation & Technology, Division of Information Security prior to the commencement of system development or solution delivery activities. Vendor must participate with the risk assessment and data classification and system categorization process. The formal risk assessment and data classification and system categorization process will be administered by the Illinois Department of Innovation & Technology,

Division of Information Security. Vendor program and project management personnel must ensure the coordination of these activities with State of Illinois program and project management personnel.

If not specifically addressed in other Vendor Information Technology Requirements, Vendor must adhere to State of Illinois and Illinois Department of Innovation & Technology's technology and security Policies, Procedures, and Standards. https://www2.illinois.gov/sites/doit/support/policies/Pages/default.aspx

Vendor must also adhere to a minimum-security baseline as identified in the National Institute of Standards and Technology (NIST) Special Publication 800-53, Revision 5, Security and Privacy Controls for Federal Systems and Organizations. https://doi.org/10.6028/NIST.SP.800-53r5. If not specifically addressed in other Vendor Information Technology Requirements, Vendors must assure the adoption of, at minimum, the low security control baselines. Exceptions to this requirement must be approved by the Illinois Department of Innovation & Technology, Division of Information Security.

Cloud solutions must adhere to recommendations of the Cloud Security Alliance. Vendors may find guidance and cross-referencing to the NIST 800-53, Revision 5 with the Cloud Security Alliance controls at CSA (cloudsecurityalliance.org).

State and Federal laws, rules, and regulations as well as industry-specific guidelines require specific and often enhanced security controls on information and systems. The State of Illinois is required to comply with the below laws, standards, and regulations. Vendors must ensure compliance with the below as appropriate based upon the formal risk assessment to include a data classification and system categorization process.

- Illinois Identity Protection Act (5 ILCS 179)
- Illinois Personal Information Protection Act (815 ILCS 530)
- The Family Educational Rights and Privacy Act ("FERPA") (20 U.S.C. § 1232g; 34 CFR Part 99)

• Federal Bureau of Investigations Criminal Justice Information Services ("CJIS") Security Policy, version 5.5, issued June 26, 2016

• Federal Centers for Medicare & Medicaid Services ("CMS") MARS-E Document Suite, Version 2.0 Catalog of Minimum Acceptable Risk Security and Privacy Controls for Exchanges November 10, 2015.

• Federal Centers for Medicare & Medicaid Services Information Security Acceptable Risk Safeguards ("ARS") CMS Minimum Security Requirements Version 2.0 September 20, 20

Exhibit 2- Minimum Proposal Deliverables

Completion of all deliverables will be validated via a process that includes formal documents with requisite State approval. Phase completions must be signed off on prior to moving to the next phase.

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Deliverable Number and Name	Deliverable Description
DL-SAP MigO- Detail Project Plan	This written deliverable documents the Detail Project Plan with tasks and responsibilities, all resources outlined
	including a detailed timeline with key
	dates for monitoring status and progression
	of the project
DL-SAP_Mig1 -Solution Architecture	This written deliverable documents the
	Virtustroom including architecture
	integrations dependences and data
	volumes and outlines the solution
	recommended for the target environment
	design in Azure considering scalability
	performance, and security requirements.
DL-SAP Mig2 - Technical Design Plan	This written document outlines the detailed
	architecture for the new SAP Finance
	environment in the Azure cloud, including
	network topology, compute resources,
	storage, and security configurations. This
	design should address scalability,
	resiliency, and be optimized for cloud
	performance leveraging cloud native
	services where applicable. The plan should
	define the configurations for each instance
	and component, including application
	servers, databases, and middleware,
	tailored to the target cloud environment.
	security and compliance subplan should
	implemented including data encryption
	access controls etc
DL-SAP Mig3 - Technical Design	This written document defines the
	technical architecture and design on the
	migrated SAP Finance environment for the
	State of Illinois. Flowcharts, network
	diagrams, Visio application server
	architecture diagrams, etc. need to be
	applied to this deliverable

DL-SAP_Mig4 -Disaster Recovery Plan	This written document outlines the design,
	procedures, and timelines for a disaster
	recovery strategy to ensure business
	continuity, including backup schedules,
	recovery point objectives (RPO), and
	recovery time objectives (RTO)
DL-SAP_Mig5 -Network Strategy and	This written document provides
Integration Architecture	comprehensive documentation of the
	network strategy and integration
	architecture including diagrams,
	configurations, and protocols to be used.
	This documentation outlines the detailed
	network architecture for the SAP Finance
	Cloud environment, covering network
	topology, subnetting, and routing
	configurations It ensures the design
	supports scalability, high availability, and
	low latency connectivity across all
	components. The document should
	identify and implement connectivity
	solutions between the on-premises
	environment and the cloud, such as VPN,
	direct connect, etc. to ensure secure and
	reliability data transmission. This
	document should define network security
	segmentation and access controls. This
	should document the plan for load
	balancing traffic management and OoS to
	optimize network performance and ensure
	efficient resource utilization. The
	document should include the integration
	architecture design to ensure seamless
	communication and data exchange
	between SAP Finance business solutions
	Ex. ECC. SRM. PO. GRC. etc.) and other
	critical systems, on premise, internal, or
	cloud / external to the State of Illinois.
	Data integration plan for migration and
	synchronization of data between the legacy
	environment and the cloud, ensuring data
	consistency and integrity during and after
	migration. Identify strategies for data
	transformation, mapping, and validation of
	alignment with new cloud architecture.
	Application integration plan should

	validate and document integration strategy
	for third party applications, custom
	application connections, and any other
	external systems that interact with SAP are
	fully functional. The plan should take
	identified API's and ensure
	implementation of managed solutions to
	handle the deployment, governmence, and
	accurity of ADIs for scamless integration in
	security of APIs for seamess integration in
DL-SAP_Mig6 -Cutover Plan	This written document involves the
	development of a comprehensive Cutover
	Plan to manage the transition of the State
	of Illinois' SAP Finance solution to
	Microsoft Azure. The Cutover Plan will
	outline all necessary activities, resources,
	timelines, and contingencies required to
	ensure a smooth, minimally disruptive, and
	successful migration to the Azure cloud
	environment. The Cutover Plan should
	include a detailed timeline with all tasks,
	milestone, assigned resources, from the
	final preparation stage through post
	cutover validation. The detailed plan
	should identify start and end times for each
	activity to ensure a synchronized and
	efficient transition. The cutover plan
	should outline each activity and include the
	appropriate team member responsible. The
	plan should outling final data
	prair should outline final data
	synchronization and verify that all data is
	accurately imgrated with no discrepancies
	or loss. The cutover plan should include
	system backup, configuration freeze,
	validation and testing, cutover execution,
	and post cutover validation and testing.
	Each step should be detailed and verify
	acceptance for the next step to ensure
	orderly shutdown, migration, and new
	cloud environment start up. The cutover
	plan should include issue resolution, stake
	holder communication, and transition to
	BAU. Resources needs for all activities
	should be included.
DL-SAP_Mig7 -Go-Live Readiness	This written document involves the
Assessment	development and documentation of a

	comprehensive Go-Live Readiness
	Assessment that provides a comprehensive
	evaluation of system, data, process, and
	people readiness, with a clear go/no-go
	decision walk through process and is
	approved by key stakeholders.
DL-SAP Mig8 -Knowledge Transfer to	This written deliverable documents the
Steady State support	plan for comprehensive transfer of
5 11	knowledge and documentation from the
	project team to the steady-state support
	team, ensuring the steady state support
	team is equipped to manage, maintain, and
	support the SAP Finance environment on
	Azure post-migration. The knowledge
	transfer process is critical for enabling a
	smooth transition from the hyper care
	phase to business-as-usual (BAU)
	operations. The documentation should
	include Handover for System
	Documentation, p rovide detailed
	documentation on the SAP Finance system
	architecture, configurations, integrations,
	and customizations within the Azure
	environment. Include network architecture.
	security configurations, backup and
	recovery plans, and any other relevant
	technical details. The deliverable should
	include operational procedures, document
	standard operating procedures (SOPs) for
	routine maintenance tasks, system
	monitoring, issue resolution, and
	performance optimization; provide detailed
	runbooks for common scenarios, including
	start-up/shutdown procedures, user
	management, and incident handling;
	support documentation; supply
	documentation on the support processes,
	including escalation paths, service level
	agreements (SLAs), and key performance
	indicators (KPIs) to monitor system
	performance and support effectiveness and
	knowledge transfer training sessions
	including a thorough walk thru of the
	Knowledge Transfer Checklist.
DL-SAP_Mig9 -Knowledge Transfer to	This written document should include all
State team	information above transferred to the steady

	state support team in addition include a post-knowledge transfer support period of ongoing support where the project team remains available to assist the state team with any questions or issues that arise after the formal knowledge transfer is completed and should define/provide a clear escalation path for any complex issues that the steady-state support team
	may need to refer back to the project team
DL-SAP_Mig10 -Change Management Execution Strategy	This written deliverable documents the Change Management Execution Strategy migration to Azure ensures that the organizational changes required for the migration are effectively managed. It clearly documents methods for engaging stakeholders, training users, and ensuring a smooth transition with minimal disruption, ultimately leading to successful adoption
DL SAD Mig11 Change Management	of the new cloud-based environment
Delivery	completion of the Hypercare Plan and Strategy activities for the migration to Azure and details the Change Management processes and details completed during the Hypercare period. This deliverable will contain the signoff from the SI leadership team, hosting provider and State of Illinois migration sponsor / director to document their agreement that the change management processes were followed, and the details are accurate. All change activities occurring during Hypercare activities should be included. State of Illinois applications (HPQC like) should be used as document changes the State of Illinois SOP's for SAP ERP changes should be utilized.
DL-SAP_Mig12-Prod (N) Cutover	This written deliverable documents the
Execution and Delivery	completion of the Cutover Plan and Strategy activities for the migration to Azure. All details defined in the Cutover Plan and Strategy as well as signoff from the SI leadership team, hosting provider and State of Illinois migration sponsor /

	director need to be included. Activities placed with the Cutover Plan and Strategy deliverable should be documented. All activities should be included with check lists and resource names.
DL-SAP_Mig13-Prod (N) Hypercare Plan and Strategy	This written deliverable documents the Hypercare Plan and Execution Strategy for the migration to Azure. It clearly documents methods for engaging stakeholders, ticket management, live training of users, and issue management processes and activities so that the State of Illinois can smoothly transition with minimal disruption, ultimately leading to successful adoption of the new cloud- based environment. Potential activities to be included are Ticket details, data details, transaction volume, agency T-Code entries and agency activity checklists.
DL-SAP_Mig14-Prod (N) Hypercare execution Delivery	This written deliverable documents the completion of Hypercare Plan and Strategy activities for the migration to Azure. All details defined in the Hypercare Plan and Strategy deliverable should be documented. All activities should be included.
DL-SAP_Mig15-Sandbox (N) technical migration, setup and data validation	This written deliverable documents the technical migration, set up, objects, storage, folders, and database validation of the Sandbox (N) environment to Azure. This deliverable must ensure that all technical aspects of the Sandbox (N) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire Sandbox application environment landscape. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig16-Sandbox (N) migration and environment setup strategy	This written deliverable documents the Sandbox (N) Migration Strategy outlining the approach for migrating the State of Illinois'

	SAP Finance environment (N) to Azure. This strategy ensures that the Sandbox environment and the solutions, applications, data, and interfaces within are migrated with minimal disruption, maintaining the integrity of Sandbox activities and enabling continued support for ongoing and future change management work This document should outline the Migration Planning, including Assessment and Preparation and the Migration Roadmap to completion.
DL-SAP_Mig17-Sandbox (N) testing strategy	This written deliverable documents the Sandbox (N) testing strategy. This strategy must outline how the vendor will ensure the migrated environment functions correctly, supports ongoing development activities, and maintains the integrity of custom code, configurations, and data. This deliverable should include the Testing Plan, develop detailed test cases and scenarios that cover all critical functions and processes within the Sandbox environment. This deliverable should also include environment setup verification including System Configuration Testing, Infrastructure Validation, Custom Code Validation, Integration Testing, Data Integrity Testing, Data Access Testing, Defect Management and Resolution, Issue Tracking and Continuous Improvement processes.
DL-SAP_Mig18-Development (N+1) migration and environment strategy	This written deliverable documents the Development (N+1) Migration Strategy outlining the approach for migrating the State of Illinois' SAP Finance environment Development (N+1) to Azure. This strategy ensures that the Development (N+1) environment and the solutions, applications, data and interfaces within are migrated with minimal disruption, maintaining the integrity of development activities and enabling continued support for ongoing and future change management work This document should

	outline the Migration Planning, including
	Assessment and Preparation and the
	Migration Roadmap to completion.
DL-SAP Mig19-Development (N+1)	This written deliverable documents the
DL-SAP_Mig19-Development (N+1) testing strategy	This written deliverable documents the Development (N+1) testing strategy. This strategy must outline how the vendor will ensure the migrated environment functions correctly, supports ongoing development activities, and maintains the integrity of custom code, configurations, and data. This deliverable should include the Testing Plan, develop detailed test cases and scenarios that cover all critical functions and processes within the Sandbox environment. This deliverable should also include environment setup verification including System Configuration Testing, Infrastructure Validation, Custom Code Validation, Integration Testing, Data
	Integrity Testing, Data Access Testing, Defect Management and Resolution, Issue
	Tracking and Continuous Improvement
DL-SAP Mig20-Development (N+1)	This written deliverable documents the
technical migration, setup, objects,	technical migration, set up, objects,
storage, folders and database validation	storage, folders, and database validation of the Development (N+1) environment to Azure. This deliverable must ensure that all technical aspects of the Development (N+1) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire Development (N+1) application environment landscape. The deliverable
	should identify acceptance criteria for completion.
DL-SAP_Mig21-Development (N+1)	This written deliverable documents the
ECC functional migration, setup and data validation and test execution	migration, set up, and data validation of the Development (N+1) ECC environment to Azure. This deliverable must ensure that both technical and functional aspects
	of the Development (N+1) ECC environment are correctly migrated, configured, and validated to support

	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
DI SAD Mig22 Development (N+1)	This written deliverable decuments the
SRM functional migration setup and	migration set up and data validation of
data validation and test execution	the Development $(N+1)$ SRM environment
	to Azure. This deliverable must ensure
	that both technical and functional aspects
	of the Development (N+1) SRM
	environment are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
DI SAR Mig22 Development (N+1)	This written deliverable decuments the
Process Orchestrator interface	migration set up and data validation of
migration, setup and data validation and	the Development $(N+1)$ Process
test execution	Orchestrator environment to Azure. This
	deliverable must ensure that both technical
	and functional aspects of the Development
	(N+1) PO environment are correctly
	migrated, configured, and validated to
	support ongoing development activities in
	the Azure environment. The deliverable
	should identify acceptance criteria for
DL-SAP Mig24-Development (N+1)	This written deliverable documents the
BOBJ functional migration, setup and	migration, set up, and data validation of
data validation and test execution	the Development (N+1) BOBJ
	environment to Azure. This deliverable
	must ensure that both technical and
	functional aspects of the Development
	(N+1) BOBJ environment are correctly
	migrated, configured, and validated to
	support ongoing development activities in
	should identify acceptance criteria for
	completion
DL-SAP Mig25-Development (N+1)	This written deliverable documents the
BODS technical and functional	migration, set up, and data validation of
migration, setup and data validation and	the Development (N+1) BODS
test execution	environment to Azure. This deliverable
	must ensure that both technical and
	functional aspects of the Development

	(N+1) BODS are correctly migrated.
	configured and validated to support
	ongoing development activities in the
	Azure environment The deliverable
	should identify acceptance criteria for
	completion
DI-SAP Mig26-Development (N+1)	This written deliverable documents the
GRC technical and functional	migration set up and data validation of
migration setup and data validation and	the Development $(N+1)$ GRC environment
tast execution	to A zura. This deliverable must ensure
	that both technical and functional aspects
	of the Development $(N+1)$ GPC are
	of the Development (N+1) GKC are
	correctly migrated, configured, and
	validated to support ongoing development
	activities in the Azure environment. The
	deliverable should identify acceptance
	criteria for completion
DL-SAP_Mig2/-Development (N+1)	This written deliverable documents the
SLI + HANA Enterprise technical and	migration, set up, and data validation of
functional migration, setup and data	the SAP Landscape Transformation (SLT)
validation	and HANA enterprise components for the
	development (N+1) environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the SLT
	and HANA are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion.
DL-SAP_Mig28-Development (N)	This written deliverable documents the
migration strategy	Development (N) Migration Strategy
	outlining the approach for migrating the
	SAP ECC Development environment (N)
	to Azure. This strategy ensures that the
	development environment is migrated with
	minimal disruption, maintaining the
	integrity of development activities, and
	enabling continued support for ongoing
	and future development work This
	document should outline the Migration
	Planning, including Assessment and
	Preparation and the Migration Roadmap.

DL-SAP_Mig29-Development (N)	This written deliverable documents the
testing strategy	Development (N) testing strategy. This
	strategy must outline how the vendor will
	ensure the migrated environment functions
	correctly, supports ongoing development
	activities, and maintains the integrity of
	custom code, configurations, and data.
	This deliverable should include the Testing
	Plan, develop detailed test cases and
	and processes within the Development
	environment. This deliverable should also
	include environment setup verification
	including System Configuration Testing
	Infrastructure Validation. Functional
	Testing, Custom Code Validation,
	Integration Testing, Data Integrity Testing,
	Data Access Testing, Performance Testing,
	Stress Testing, Defect Management and
	Resolution, Issue Tracking and Continuous
	Improvement processes.
DL-SAP_Mig30-Development (N)	This written deliverable documents the
technical migration, setup, objects,	technical migration, set up, objects,
storage, folders and database validation	storage, folders, and database validation of
	the Development (N) environment to
	Azure. This deriverable must ensure that
	(N) environment are correctly migrated
	configured and validated to support
	ongoing development activities in the
	Azure environment. These technical
	validation efforts are across the entire
	Development application environment
	landscape. The deliverable should identify
	acceptance criteria for completion.
DL-SAP_Mig31-Development (N)	This written deliverable documents is for
ECC functional migration, setup and	the migration, set up, and data validation
data validation and test execution	of the Development (N) ECC environment
	to Azure. This deliverable must ensure
	that both technical and functional aspects
	are correctly migrated configured and
	validated to support orgoing development
	activities in the Azure environment. The
	deliverable should identify acceptance
	criteria for completion.

DL-SAP_Mig32-Development (N) SRM functional migration, setup and data validation and test execution	This written deliverable documents is for the migration, set up, and data validation of the Development (N) SRM environment to Azure. This deliverable must ensure that both technical and functional aspects of the Development (N) SRM environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion
DL-SAP_Mig33-Development (N) Process Orchestrator (PO) interface migration, setup and data validation and test execution	This written deliverable documents the migration, set up, and data validation of the Development (N) Process Orchestrator environment to Azure. This deliverable must ensure that both technical and functional aspects of the Development (N) PO environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion
DL-SAP_Mig34-Development (N) BOBJ functional migration, setup and data validation and test execution	This written deliverable documents the migration, set up, and data validation of the Development (N) BOBJ environment to Azure. This deliverable must ensure that both technical and functional aspects of the Development (N) BOBJ environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig35-Development (N) BODS technical and functional migration, setup and data validation and test execution	This written deliverable documents the migration, set up, and data validation of the Development (N) BODS environment to Azure. This deliverable must ensure that both technical and functional aspects of the Development (N) BODS are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The

	deliverable should identify acceptance
	criteria for completion
DL-SAP_Mig36-Development (N)	This written deliverable documents the
GRC technical and functional	migration, set up, and data validation of
migration, setup and data validation and	the Development (N) GRC environment to
test execution	Azure. This deliverable must ensure that
	both technical and functional aspects of the
	Development (N) GRC are correctly
	migrated, configured, and validated to
	the A sure environment. The deliverable
	should identify acceptance criteria for
	completion
DI -SAP Mig37-Development (N) SLT	This written deliverable documents the
+ HANA Enterprise technical and	migration, set up, and data validation of
functional migration, setup and data	the SAP Landscape Transformation (SLT)
validation	and HANA enterprise components for the
	development (N) environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the SLT
	and HANA are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion.
DL-SAP_Mig38-QA (N) migration	This written deliverable documents the QA
strategy	(N) Migration Strategy outlining the
	Illinois' SAP Finance environment (N) to
	Δ zure. This strategy ensures that the $\Omega\Delta$
	environment and the solutions
	applications, data and interfaces within are
	migrated with minimal disruption,
	maintaining the integrity of QA activities
	and enabling continued support for
	ongoing and future QA work This
	document should outline the Migration
	Planning, including Assessment and
	Preparation and the Migration Roadmap to
	completion.
DL-SAP_Mig39-QA (N) technical	This written deliverable documents the
migration, setup, objects, storage,	technical migration, set up, objects,
folders and database validation	storage, folders, and database validation of
	the QA (N) environment to Azure. This
	deliverable must ensure that all technical

	aspects of the QA (N) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire QA application environment landscape. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig40-QA (N) ECC functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the QA (N) ECC environment to Azure. This deliverable must ensure that both technical and functional aspects of the QA (N) ECC environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion
DL-SAP_Mig41-QA (N) SRM functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the QA (N) SRM environment to Azure. This deliverable must ensure that both technical and functional aspects of the QA (N) SRM environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion
DL-SAP_Mig42-QA (N) Process Orchestrator interface migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the QA (N) Process Orchestrator environment to Azure. This deliverable must ensure that both technical and functional aspects of the QA (N) PO environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion

DL-SAP_Mig43-QA (N) BOBJ	This written deliverable documents the
functional migration, setup and data	migration, set up, and data validation of
validation	the QA (N) BOBJ environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the QA
	(N) BOBJ environment are correctly
	migrated, configured, and validated to
	support ongoing development activities in
	the Azure environment. The deliverable
	should identify acceptance criteria for
	completion.
DL-SAP_Mig44-QA (N) BODS	This written deliverable documents the
technical and functional migration,	migration, set up, and data validation of
setup, and data validation	the QA (N) BODS environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the QA
	(N) BODS are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
DL CAD MI-45 OA (N) CDC	This service a deliver where the service of the
DL-SAP_MIg45-QA (N) GRC	migration set up and data validation of
technical and functional migration,	the OA (N) CBC environment to A sure
setup and data vandation	This deliverable must ansure that both
	tachnical and functional aspects of the OA
	(N) GRC are correctly migrated
	configured and validated to support
	ongoing development activities in the
	A zure environment. The deliverable
	should identify acceptance criteria for
	completion
DL-SAP Mig46-OA (N) SLT + HANA	This written deliverable documents the
Enterprise technical and functional	migration, set up, and data validation of
migration, setup	the SAP Landscape Transformation (SLT)
	and HANA enterprise components for the
	QA (N) environment to Azure. This
	deliverable must ensure that both technical
	and functional aspects of the QA (N) SLT
	and HANA are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion.

DL-SAP_Mig47-QA (N) - ITC testing strategy	This written deliverable documents the QA (N) - ITC testing strategy. This strategy must outline how the vendor will ensure the migrated environment functions correctly, supports ongoing development activities, and maintains the integrity of custom code, configurations, and data. This deliverable should include at minimum the Testing Plan, develop detailed test cases and scenarios that cover all critical functions and processes within the Development environment. This deliverable should also include environment setup verification including System Configuration Testing, Infrastructure Validation, Functional Testing, Custom Code Validation, Integration Testing, Data Integrity Testing, Data Access Testing, Defect Management and Resolution, Issue Tracking and Continuous Improvement processes
DI SAP Mig48 OA (N) ITC testing	This written deliverable documents the
script creation and approvals	resources connected to gather business scenario and processing details), the detailed list of all scenarios and scripts planned to be executed and the approvals from the state SFE's and technical leads that these are the tests that will be executed in this cycle
DL-SAP_Mig49-QA (N) - ITC	This written deliverable documents the
migration testing execution	execution of the ITC testing strategy deliverable. Check lists and other documentation details should be provided to verify that the strategy and the full list of scenarios and scripts were executed as well as details on where the testing results have been captured.
DL-SAP_Mig49-VER (N) migration and environment setup strategy	This written deliverable documents the VER (N) Migration Strategy outlining the approach for migrating the State of Illinois' SAP Finance environment (N) to Azure. This strategy ensures that the VER environment and the solutions,

	applications, data and interfaces within are migrated with minimal disruption, maintaining the integrity of VER activities and enabling continued support for ongoing and future QA work This document should outline the Migration Planning, including Assessment and Preparation and the Migration Roadmap to completion.
DL-SAP_Mig50-VER (N) technical migration, setup, objects, storage, folders and database validation	This written deliverable documents the technical migration, set up, objects, storage, folders, and database validation of the VER (N) environment to Azure. This deliverable must ensure that all technical aspects of the VER (N) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire VER application environment landscape. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig51-VER (N) ECC functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the VER (N) ECC environment to Azure. This deliverable must ensure that both technical and functional aspects of the VER (N) ECC environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig52-VER (N) SRM functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the VER (N) SRM environment to Azure. This deliverable must ensure that both technical and functional aspects of the VER (N) SRM environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable

	should identify acceptance criteria for
	completion
DL-SAP_Mig53-VER (N) Process	This written deliverable documents the
Orchestrator interface migration, setup	migration, set up, and data validation of
and data validation	the VER (N) Process Orchestrator
	environment to Azure. This deliverable
	must ensure that both technical and
	functional aspects of the VER (N) PO
	environment are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion
DL-SAP_Mig54-VER (N) BOBJ	This written deliverable documents the
functional migration, setup and data	migration, set up, and data validation of
validation	This deliverable must ansure that both
	tachnical and functional aspects of the
	VED (N) POPL any ironment are correctly
	migrated configured and validated to
	support ongoing development activities in
	the A zure environment. The deliverable
	should identify acceptance criteria for
	completion
DI -SAP Mig55-VER (N) BODS	This written deliverable documents the
functional migration, setup and data	migration, set up, and data validation of
validation	the VER (N) BODS environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the
	VER (N) BODS are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion
DL-SAP_Mig56-VER (N) GRC	This written deliverable documents the
technical and functional migration,	migration, set up, and data validation of
setup and data validation	the VER (N) GRC environment to Azure.
	This deliverable must ensure that both
	technical and functional aspects of the
	VER (N) GRC are correctly migrated,
	configured, and validated to support
	ongoing development activities in the
	Azure environment. The deliverable

	should identify acceptance criteria for
DI_{SAP} Mig57-VFR (N) SIT +	This written deliverable documents the
HANA Enterprise technical and	migration set up and data validation of
functional migration setup	the SADI and some Transformation (SLT)
Tuneuonai migration, setup	and HANA anterprise components for the
	VED (N) environment to A sure. This
	deliverable must ensure that both technical
	and functional access of the VED (N) SLT
	and functional aspects of the VER (N) SL1
	and HANA are correctly migrated,
	configured, and vandated to support
	ongoing development activities in the
	Azure environment. The deliverable
	should identify acceptance criteria for
	completion.
$DL-SAP_Mig58-VER(N) - UAT$	This written deliverable documents the
testing strategy	VER (N) - UAT testing strategy. This
	strategy must outline how the vendor will
	ensure the migrated environment functions
	correctly, supports ongoing development
	activities, and maintains the integrity of
	custom code, configurations, and data.
	This deliverable should include at
	minimum the Testing Plan, develop
	detailed test cases and scenarios that cover
	all critical functions and processes within
	the Development environment. This
	deliverable should also include
	environment setup verification including
	System Configuration Testing,
	Infrastructure Validation, Functional
	Testing, Custom Code Validation,
	Integration Testing, Data Integrity Testing,
	Data Access Testing, Performance Testing,
	Stress Testing, Defect Management and
	Resolution, Issue Tracking and Continuous
	Improvement processes.
DL-SAP_Mig59-VER (N) - UAT	This written deliverable documents the
testing script creation and approvals	process for UAT test script creation
	(including resources connected to gather
	business scenario and processing details),
	the detailed list of all scenarios and scripts
	planned to be executed and the approvals
	from the state SFE's and technical leads
	that these are the tests that will be executed
	in this cycle

DL-SAP Mig60-VER (N) - UAT	This written deliverable documents the
migration testing execution	execution of the UAT testing strategy
	deliverable. Check lists and other
	documentation details should be provided
	to verify that the strategy and the full list
	of scenarios and scripts were executed as
	well as details on where the testing results
	have been captured.
DL-SAP Mig61-Prod (N) testing	This written deliverable documents the
strategy	Prod (N) testing strategy. This strategy
	must outline how the vendor will ensure
	the migrated environment functions
	correctly, supports ongoing development
	activities, and maintains the integrity of
	custom code, configurations, and data.
	This deliverable should include the Testing
	Plan, develop detailed test cases and
	scenarios that cover all critical functions
	and processes within the Development
	environment. This deliverable should also
	include environment setup verification
	including System Configuration Testing,
	Infrastructure Validation, Functional
	Testing, Custom Code Validation,
	Integration Testing, Data Integrity Testing,
	Data Access Testing, Performance Testing,
	Stress Testing, Defect Management and
	Resolution, Issue Tracking and Continuous
	Improvement processes.
DL-SAP_Mig62-Prod (N) testing script	This written deliverable documents the SI
	VENDOR plans on what testing will be
	performed in the Production environment
	Included in this decument is a detailed list
	of all scenarios and scripts and data
	elements that will be used in cutover $-$ go-
	live testing
DI -SAP Mig63-Prod (N) migration	This written document defines and
testing execution	captures the SI VENDOR's technical and
	functional resource access and testing
	checklist and testing results on the
	migrated systems and solutions in scope to
	verify the migration was successful and the
	system is ready for agency use.
DL-SAP_Mig64-Prod (N) SLT +	This written document defines the SI
HANA Enterprise technical and	VENDOR plans on what testing will be

functional migration, setup and data validation	performed in the Production environment once the cutover migration is completed. Included in this document is a detailed list of all scenarios and scripts and data elements that will be used in cutover – go- live testing.
DL-SAP_Mig65-TRN (N) migration and environment setup strategy	This written deliverable documents the TRN (N) Migration Strategy outlining the approach for migrating the State of Illinois' SAP Finance environment (N) to Azure. This strategy ensures that the TRN environment and the solutions, applications, data, and interfaces within are migrated with minimal disruption, maintaining the integrity of TRN activities and enabling continued support for ongoing and future TRN work This document should outline the Migration Planning, including Assessment and Preparation and the Migration Roadmap to completion.
DL-SAP_Mig66-TRN (N) technical migration, setup, objects, storage, folders and database validation	This written deliverable documents the technical migration, set up, objects, storage, folders, and database validation of the TRNRN) environment to Azure. This deliverable must ensure that all technical aspects of the TRN (N) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire TRN application environment landscape. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig67-TRN (N) ECC functional migration, setup, and data validation	This written deliverable documents the migration, set up, and data validation of the TRN (N) ECC environment to Azure. This deliverable must ensure that both technical and functional aspects of the TRN (N) ECC environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion.

DL-SAP Mig68-TRN (N) SRM	This written deliverable documents the
functional migration, setup, and data	migration, set up, and data validation of the
validation	TRN (N) SRM environment to Azure. This
	deliverable must ensure that both technical and
	functional aspects of the TRN (N) SRM
	environment are correctly migrated, configured,
	and validated to support ongoing development
	activities in the Azure environment. The
	deliverable should identify acceptance criteria
	for completion
DL-SAP Mig69-QA (N+1)	This written deliverable documents the QA
migration and environment setup	(N+1) Migration Strategy outlining the approach
strategy	for migrating the State of Illinois' SAP Finance
	environment QA (N+1) to Azure. This strategy
	ensures that the QA environment and the
	solutions, applications, data and interfaces
	within are migrated with minimal disruption,
	maintaining the integrity of QA activities and
	enabling continued support for ongoing and
	future QA work This document should outline
	the Migration Planning, including Assessment
	and Preparation and the Migration Roadmap to
	completion.
DL-SAP Mig70-QA (N+1) technical	This written deliverable documents the technical
migration, setup, objects, storage,	migration, set up, objects, storage, folders, and
folders and database validation	database validation of the QA (N+1)
	environment to Azure. This deliverable must
	ensure that all technical aspects of the QA (N+1)
	environment are correctly migrated, configured,
	and validated to support ongoing change
	management and support activities in the Azure
	environment. These technical validation efforts
	are across the entire QA (N+1) application
	environment landscape. The deliverable should
	identify acceptance criteria for completion.
DL-SAP Mig71-QA (N+1) ECC	This written deliverable documents the
functional migration, setup and data	migration, set up, and data validation of the QA
validation	(N+1) ECC environment to Azure. This
	deliverable must ensure that both technical and
	functional aspects of the QA (N+1) ECC
	environment are correctly migrated, configured,
	and validated to support ongoing development
	activities in the Azure environment. The
	deliverable should identify acceptance criteria
	for completion.

DL-SAP_Mig72-QA (N+1) SRM functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the QA (N+1) SRM environment to Azure. This deliverable must ensure that both technical and functional aspects of the QA (N+1) SRM environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion
DL-SAP_Mig73-VER (N+1) migration and environment setup strategy	This written deliverable documents the VER (N+1) Migration Strategy outlining the approach for migrating the State of Illinois' SAP Finance environment VER (N+1) to Azure. This strategy ensures that the VER (N+1) environment and the solutions, applications, data and interfaces within are migrated with minimal disruption, maintaining the integrity of VER (N+1) activities and enabling continued support for ongoing and future VER (N+1) work This document should outline the Migration Planning, including Assessment and Preparation and the Migration Roadmap to completion.
DL-SAP_Mig74-VER (N+1) technical migration, setup, objects, storage, folders and database validation	This written deliverable documents the technical migration, set up, objects, storage, folders, and database validation of the VER (N+1) environment to Azure. This deliverable must ensure that all technical aspects of the VER (N+1) environment are correctly migrated, configured, and validated to support ongoing change management and support activities in the Azure environment. These technical validation efforts are across the entire VER (N+1) application environment landscape. The deliverable should identify acceptance criteria for completion.
DL-SAP_Mig75-VER (N+1) ECC functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the VER (N+1) ECC environment to Azure. This deliverable must ensure that both technical and functional aspects of the VER (N+1) ECC environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The

	deliverable should identify acceptance criteria for completion.
DL-SAP_Mig76-VER (N+1) SRM functional migration, setup and data validation	This written deliverable documents the migration, set up, and data validation of the VER (N+1) SRM environment to Azure. This deliverable must ensure that both technical and functional aspects of the VER (N+1) SRM environment are correctly migrated, configured, and validated to support ongoing development activities in the Azure environment. The deliverable should identify acceptance criteria for completion

Exhibit 3- Commitment to Diversity

In addition to the technical and price proposals, offerors will be evaluated on their commitment to diversity. The points available for Commitment to Diversity is equivalent to 20% of the Technical Requirements points. The State evaluates Commitment to Diversity without consideration of price.

Commitment to Diversity Vendor Guidance including Vendor Submission Forms have been sent out with the solicitation.

The response to this portion of the RFP will be weighted based upon the percentages associated with the categories below.

Commitment to Diversity Categories

Category 1 – BEP Compliance - Whether or how well the Offeror meets this solicitation's goal of contracting or subcontracting with businesses owned by women, minorities, or persons with disabilities. 5%. This solicitation does not contain a goal so these points will automatically be awarded. Category 2 – Subcontracting/Contracting with any WMD businesses (not limited to BEP vendors) - Whether the Offeror assisted businesses owned by women, minorities, or persons with disabilities. 10%

Category 3 – Diversity, Equity, and Inclusion (DEI) Spend – Offeror's percentage of business, education and/or community spend from prior calendar year gross revenue that involves businesses owned by women, minorities and/or persons with disabilities. The assisted businesses are not required to be certified in the Illinois Business Enterprise Program. 20%

Category 4 – DEI Time - Offeror's hours spent in the prior calendar year on promoting DEI in the workplace, the community, education institutes, or supporting businesses owned by women, minorities, or persons with disabilities. The assisted business is not required to be certified in the Illinois Business Enterprise Program. The success or failure of each event does not impact the points achieved. The event may be voluntary or paid time. 20%

Category 5 – DEI Policies - Entity has provided a written copy of, or link to, their current written workforce diversity, equity, and inclusion policy. Policies must be actionable plans, not overarching concepts around DEI. 10%

Category 6 – Diversity in Staffing - % of individuals on governing board and/ or Senior executives out of all staff who identify as women, minorities, or person with disabilities. 10% % of individuals in management /supervisor positions out of all staff who identify as women, minorities, or person with disabilities. 13% % of total staff who identify as women, minorities, or person with disabilities. 12%

Functional area	System	Status	Chain Name	Job Name	SAP Program
AP	ECC	RUNNING	SOIL_BTC_AM_DLY_01	Z_J_AM_ASKBN	RAPERB2000
AP	ECC	RUNNING	SOIL_BTC_AM_DLY_02	Z_J_AM_AFAB_NEXT	RAPOST2000
AP	ECC	RUNNING	SOIL_BTC_AM_MNLY	Z_J_AM_AFAB_FIRST	RAPOST2000
AP	ECC	RUNNING	SOIL_BTC_AP_WKLY	Z_J_AP_GRIR_CLEARING	SAPF124
FI	ECC	RUNNING	SOIL_BTC_FI_MNLY	Z_J_FI_MMPV_NEXT_PERIOD	RMMMPERI
FM	ECC	RUNNING	SOIL_BTC_FM_DLY_01	Z_J_FM_REINITAVC	RFFMAVC_REINIT
FM	ECC	RUNNING	SOIL_BTC_FM_DLY_02	Z_J_FM_WBS_FP	RFFMMD_AUTOCREATION
GM	ECC	RUNNING	SOIL_BTC_GM_DLY_01	Z_J_GM_REINITAVC	RFGMAVC_REINIT
GL	ECC	RUNNING	SOIL_BTC_GL_DLY_01	Z_J_GL_RECUR_POST	SAPF120
GRC	GRC	HELD	SOIL_BTC_GRC_BWKLY_01	Z_J_GRC_ACTN_USG_SYNC	GRAC_ACTION_USAGE_SYNC

Exhibit 4 – Example of Jobs Running in RedWood Job Scheduler.

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