Appendix A - Project Requirements and Response Instructions

Sections 1 - 6

Contents

1 Introduction and Instructions

1.1 Overview

The Proposer must submit the required number of copies of its completed responses to this Appendix A. Note that 2 separate responses are required from each Proposer, one for each scenario as defined in **Section 1.4.3 Suite on HANA and S/4HANA** below. The table below presents the sections of this Appendix A to be incorporated from the Proposer's Proposal. This Appendix A and the Proposer's responses will be negotiated and revised by the parties and such negotiations will form the basis for the creation by the JCC of a final Statement of Work that will be incorporated into the final contract for execution.

1.2 Sections

This Appendix A has multiple sections that, when taken together, reflect the combined requirements for the Project. The Project will have requirements governing Implementation, Technical, Functional and Post-Implementation warranty support. Proposers are advised to review and complete all Sections.

Section	Description
1	Introduction and Instructions
2	System Implementation Requirements
3	Phoenix Functional Requirements
4	Phoenix Technical Requirements
5	Acronym Guide and Glossary of Terms
6	Exhibits

1.3 Critical Success Factors

There are minimum requirements ("Requirements") that must be satisfied in order for the Proposers to prevail and for the JCC to successfully reach its Project objectives. Failure to meet any Requirement marked as "Mandatory" shall be grounds for Proposer disqualification. These Requirements are not intended to be all-inclusive and the Council will prefer Proposers who act in an advisory capacity in preparing their responses.

Responses for **Section** 1.3 are to be made to 1.0 Fundamental Requirements RTM [Tab 1.3 Fundamental].

1.3.1   Proposer must propose a hyperscale cloud hosting platform that includes either Amazon Web Services (AWS) or Microsoft Azure Cloud Platform.

1.3.2   Proposer must submit NTE (Not-to Exceed) pricing for all cost proposals.

1.3.3   Proposer must begin Project work (Project Kickoff) on or before June 30, 2020.

1.3.4   Proposer should complete all migration work on or before January 31, 2021 and provide 12 months of post-migration warranty support. Post-migration warranty coverage shall culminate in Final Acceptance.

1.3.5   Proposer must provide cost responses for 2 potential scenarios being evaluated by the JCC:

Scenario 1: Migrating Phoenix ERP on-premise to SAP Suite on HANA and SAP BW on HANA along with the migration to the cloud and

Scenario 2: Converting Phoenix ERP on-premise to SAP S/4HANA and SAP BW on HANA along with the migration to the cloud

1.3.6   Proposer must act as the primary vendor and point of contact for the Project for all project control, migration activities, and warranty services. While acting as the primary vendor, the Proposer may, however, utilize subcontracting arrangements as needed and with approval of the JCC to fulfill the requirements of the Project and provide the JCC with the lowest overall cost.

1.3.7   Proposer must propose a migration plan that limits the JCC's dependency on duplicate environments, license obligations, and unnecessary cost redundancy. Proposers will be judged on how well they optimize the JCC's operational costs during migration as well as the reasonableness of their approach and ability to mitigate risk.

1.3.8   Proposer must utilize JCC licenses where ever possible. With the exception of Oracle Cloud DB, the JCC will provide its own licenses (e.g. SAP) for the Project under separate JCC agreements. (Licensing for compute instance Operating Systems e.g. Linux, Windows, VMWare shall be a factor in the standard compute instance configuration and included by the Proposer in the monthly virtual instance operational costs.)

1.3.9   Proposer should propose solutions that do not require the JCC to procure a separate Oracle Cloud DB license for Phoenix during the migration and post-migration for steady-state operations. The JCC maintains an Enterprise Oracle DB license for its on-premise applications hosted in the Technology Center.

1.3.10   Proposer should propose a complete solution that accomplishes a production cutover to the target environment(s) with business interruption limited to no more than 1 business day. (Cutover may include weekend or weekend + JCC holiday.)

1.3.11   Proposer must propose a data migration solution that performs mock and live cutovers keeping in mind that the current hosting facility has an ingress/egress limitation of approximately 10MB/sec.

1.3.12   Proposer must not include business transformation as part of the migration effort, unless required to support the target platform, S/4 Simplification (in the case of a system migration), etc. The Council envisions the effort to migrate from Oracle to HANA to be, for the most part, a technical upgrade (database migration) of its existing SAP platform.

1.3.13   Proposer should include time and resources into their Project schedules for the construction of a Migration Test Plan (MTP). This MTP will detail the process, test scripts, and methodology the Vendor will use to demonstrate to the JCC that the target environment is operationally identical to the source environment. The MTP must be repeatable and reusable by the JCC, post-migration, to validate subsequent promotions of application modifications from one environment to the next. The JCC currently maintains an extensive test catalog that can be leveraged, and it is expected that JCC resources will participate in the creation and execution of the test plan.

1.3.14   Proposer must, in the case of Scenario 2 (SAP S/4HANA and SAP BW), be responsible for identifying, remediating and certifying all modifications related to Simplification and Custom Code, to complete the successful migration of the JCC's existing Phoenix SAP System to the target S/4HANA environment. The JCC employs

several competent Senior Application Development Analysts, and it is expected that JCC resources will participate in custom code remediation.

1.3.15 Proposer must provide clear responses in the appropriate Requirements Traceability Matrix that outline the respective responsibilities and obligations which the Vendor and JCC are to lead and for which they will provide support.

1.3.16 Proposer must provide knowledge transfer to JCC staff and consultants, sufficient and as appropriate, for them to participate in system migration exercises, as well as, continue their current role and responsibility and to support Phoenix ERP's high level of service and operations. Please see RFP **Exhibit 2** – Phoenix Organization, an organizational chart that shows the number of resources per support area. The JCC is staffed with competent, senior support resources. It is expected that a primary Analyst and required subject matter experts for each functional area will be fully available to support the project.

1.3.17 Proposer must demonstrate an application architecture and operational processes for On-Going Support Services that support the JCC's requirements for High-Availability, Business Continuity, and Application Recovery, while maintaining lowest Total Cost of Ownership ("TCO").

1.3.18 Proposer must allow for Judicial Branch holidays when planning activities where JCC staff are required for meetings, consultations, and review of deliverables. The JCC observes 13 holidays. See RFP **Exhibit 9** – Judicial Branch Holiday Calendar.

1.3.19 Proposer must plan for all hosting facilities to be located within the Continental United States.

1.3.20 Proposer must accommodate the Phoenix Recovery Time Objective. The Recovery Time Objective (RTO) is 4 hours or less. Phoenix is a real-time ERP serving the 58 county Trial Courts in California. The maximum time the full system can be offline following declaration of a disaster is 4 hours, before services are fully restored to all end users.

1.3.21 Proposer must accommodate the Phoenix Recovery Point Objective. The Recovery Point Objective (RPO) is 15 minutes or less. In the event of a disaster declaration, Phoenix shall be restored to full functionality with an acceptable data loss of 15 minutes or less.

1.3.22 Proposer must maintain Phoenix hours of operation. Phoenix must be accessible Monday Through Friday to users with access to the JCC network during normal Judicial Branch work hours, (herein defined as 7:00 A.M – 6:00 P.M.) excluding Judicial Branch holidays, planned downtime, system upgrades, and scheduled maintenance. Prior notification via direct email to designated JCC contact(s) will be provided for all system maintenance, upgrades/hotfixes, and any other activities which may impact system availability.

1.3.23 Proposer must maintain Phoenix availability. All Phoenix environments must be available a minimum of 99.95% of total time (excluding permissible/agreed-upon downtime). System Availability reports, including performance compared to service levels, will be provided to demonstrate availability, monthly.

1.3.24 Proposer must involve the JCC's Managed Service Provider and the Implementation Services practice for the target platform Hosting Provider early in the process, preferably at Project Kick-Off.

1.3.25   Proposer must comply with all regulations for Hosting, Managing, and transmission of Personally Identifiable Information (PII).

1.3.26   Proposer must provide Directory Services Integration. The provider must offer an Active Directory (AD)-managed service or a managed directory service that is compatible with AD. This is not directory federation. Providers must enable JCC members to host their directory services on a fully managed and scalable platform that supports, at a minimum, the following:

Domain-joining of Windows and Linux instances

User accounts and group memberships

Single sign-on (SSO)

Group policy

1.4   **Vendor Responses**

Proposers must complete the appropriate Requirements Traceability Response Matrices (**RTM**) for each Project **Section 2.0 – 4.0** described later in this document. Responses indicate the Proposer's ability to fulfill the requirement at the time of submission of the Proposal, using a single response code. Permissible response codes are listed in 1.4.1 below. A negative response to a Requirement marked as "Mandatory" shall be grounds to disqualify a Proposer. Proposers must also provide an additional explanation for certain response codes and are encouraged to provide an additional explanation where it will add clarity to the response. To further enhance the Vendors' understanding of the functional scope of the JCC's Phoenix SAP System, RFP **Exhibit - 4** BPML List is included for review of the Business Processes and executable transactions currently in use.

Should a discrepancy exist between Requirements identified in this Appendix A and those in the RTM, the Vendor will work with the JCC to determine the correct Requirement to apply.

1.4.1   **JCC- Assigned Requirement Priorities**

Every requirement designated with an RQM-ID in the RTM has been given a "Priority" rating from 1 to 4, indicating the JCC desirability. A priority 1 indicates a mandatory requirement while a priority 4 is the lowest rating.

Priority Rating	Priority Type	Definition
1	Mandatory	Mandatory Requirement / Proposer may be disqualified for not meeting requirement
2	Highly Desirable	High Priority Requirement. Very important but not a disqualifiable Requirement.
3	Preferred	Preferred Priority Requirement
4	Minor	Minor Priority Requirement / Nice to Have

1.4.2   **Permissible Response Codes**

Response Code	Response	Response Code Definition	Vendor Response Comment
Y	Yes	The requirement will be fully met -or Designated responsibility is fully accepted	{optional}
N	No	The requirement will NOT be fully met -or Designated responsibility cannot be fully accepted	{encouraged}
P	Partial	Requirement or Responsibility can only be partially met. The Proposer must provide a detailed explanation.	{detailed explanation required}

Failure to provide a comment as to why the requirement cannot be met and an alternative approach may cause the Proposal to be rejected.

1.4.3   JCC and Proposer Roles Defined

Proposers shall provide their responses for each requirement in the respective Requirements Traceability Response Matrix. Proposers shall complete the Vendor Response Code column of the relevant Requirements Traceability Response Matrix based on the Vendor and JCC responsibilities. Proposers may provide a Vendor Response Comment to explain where expectations for roles and responsibilities may differ from those of the JCC. For example:

Description	Role
*Proposer	JCC* has **primary responsibility** for leading the activity and/or ensuring the creation, submission, and acceptance of the deliverable. This includes, but is not limited to: planning, scheduling, assignment of activities to supporting roles by agreement, documentation, follow up, and securing acceptance of the deliverable.	Responsible
*Proposer	JCC* **supports the activity** in a manner mutually agreed upon.	Supports
*Proposer	JCC* **shall be informed or consulted** in a mutually agreeable manner but does not take an active leadership position or assume a position of responsibility for successful completion	Informed

1.4.4   Suite on HANA and S/4HANA

The JCC is soliciting proposals for 2 scenarios: migrating its on-premise ECC to Suite on HANA (SoH) and, alternatively, to S/4HANA. The requirements detailed in the RTM include columns for Proposers to indicate whether the requirement applies to one or both scenarios. Proposers shall provide complete response packages with costs associated with migrating to SoH, and separately, costs for migrating to S/4HANA when addressing the respective scenarios.

1.4.5   Cost Worksheet

Section **8.2 Cost Portion** of this RFP requires all Proposers to provide:

i.   A detailed line-item budget showing the total cost of the proposed services. Proposers shall refer to RFP **Appendix** **D – Cost Proposal** **Sections** **1 – 4** ("Cost Workbook").

ii.   An overview narrative of Services to be provided.

iii.   A "not to exceed" total for all work and expenses payable under the contract, if awarded. A detailed line-item budget showing the total cost of the proposed services.

Proposers must complete all applicable sections of the **Cost Workbook**. This includes costs for Professional Services and Warranty Support. Proposers shall refer to RFP **Appendix** **D – Cost Proposal,** **Section** **1.0 – Introduction and Instructions.** All payments are subject to a Holdback (percentage as defined in Appendix D (Tab 2. Total Cost Summary) which shall be paid at Final Acceptance for Implementation.

1.5   **System Implementation Requirements**

This element of this Appendix A shall reflect all the System Integration, conversion services, migration from on-premise to a cloud services provider and system implementation and post-implementation warranty support:

- ■ Prepare
- ■ Explore
- ■ Realize
- ■ Deploy Run
- ■ Go Live and Post-Deployment Warranty Support

This element of this Appendix A shall reflect a deliverable-based, phased approach to the proposed solution. Proposers are required to complete all Response Templates for this section.

The JCC estimates that the Systems Implementation Services will run from June 1, 2020 through January 31, 2021. This period is based on an estimated 6 – 7 months of migration and Project implementation services. Twelve (12) months of comprehensive, vendor-provided, post-migration warranty coverage is highly desirable. Proposers shall plan to complete the Project no later than January 31, 2022.

The Proposer must insert its Proposal Response Documentation for this Section following a descriptive Title Page in RFP **Appendix C** - **Vendor Response Template**. This becomes part of the Proposer's Final Proposal. Proposers are directed to **Appendix C** (provided) for instructions and required response information.

1.6   **Phoenix Functional Requirements**

This element of this Appendix A shall reflect all expected Project services related to Business Functional Requirements. Proposers are required to complete all Response Templates for this section.

Proposers shall refer to Section 3.0 – Phoenix Functional Requirements; **AND**

Proposers shall refer to Section 2.0 - System Implementation Requirements.

The Proposer must insert their Proposal Response Documentation for this Section following a descriptive Title Page in RFP **Appendix C** - **Vendor Response Template**. This becomes part of the Proposer's Final Proposal. Proposers are directed to RFP **Appendix C** (provided) for instructions and required response information.

1.7   **Phoenix Technical Requirements**

This element of this Appendix A shall reflect the Current, Target and Licensing requirements for the Project. Proposers are required to complete all Response Templates for this section.

This section includes the Fundamental Requirements for Migration Success, Licensing Requirements and Technical Migration Requirements.

Proposers shall refer to Section 4.0 – Phoenix Technical Requirements; **AND**

Proposers shall refer to Section 2.0 - System Implementation Requirements,

The Proposer must insert their Proposal Response Documentation for this Section following a descriptive Title Page in RFP **Appendix C** - **Vendor Response Template**. This becomes part of the Proposer's Final Proposal. Proposers are directed to RFP **Appendix C** (provided) for instructions and required response information.

1.8   **Requirements Deliverables Expectations**

The Proposer must develop Project Deliverables in the form and format agreed to by the JCC. Vendors must submit all Templates and Report formats for approval by the JCC prior to using them in the Vendor's initial submission. This also applies to deliverables that become part of Phase Acceptance or Final Acceptance.

2 <u>System Implementation Requirements</u>

This section identifies System Implementation Requirements associated with the Phoenix Cloud Migration including all SAP HANA migration activities, system integration, on-premise to cloud migration, and post-implementation warranty support. The system implementation should follow the SAP "Activate" Methodology and incorporate the following phases:

- **Prepare**: Project plan and project governance should be defined during this phase, along with project team onboarding. Conversion Pre-Checks and Maintenance Planner will be executed. The Simplification Check List will also be generated during this phase.

- **Explore:** Sandbox migration to HANA should be done during this phase for all JCC SAP systems. Custom code analysis should be performed for the migrated system. Workshops to be conducted with key stakeholders in the areas of Finance, HR, Analytics and Technical for documenting key changes in the solution as well as understanding the custom business processes in these areas. Identification and application of OSS notes to known problems after the HANA migration will be implemented.

- **Realize:** SAP Dev migration to HANA should be done during this phase for all JCC SAP systems. Custom code analysis should be performed for the migrated system. Code remediation and Unit Testing for SAP S/4HANA, SAP BW, Portal and Solution Manager should be performed. While code remediation is being done in SAP Dev systems, SAP QA systems should be migrated to HANA. Integration Testing should be conducted along with issue resolution. Integration testing should involve comprehensive testing targeted at validating objects, connectivity, and interfacing of the source and target systems focused on End-to-end scenarios including checks and validation of data flows in and out of SAP systems. Training systems shall be converted while Integration Testing is being conducted. User Acceptance Testing will be performed after completion of Integration Testing. Performance Testing along with HA and DR testing should also be performed during this phase. A Mock cutover is recommended to be performed that will help in the development of cutover plan.

- **Deploy:** Mock cutover testing should be performed before the actual cutover. The mock test should include activities happening during the business downtime including ramp-down, shutting down of the systems, technical upgrade and migration, post-migration checks and tests, balance checks, interface tests, and finally running of pending background jobs and restarting interfaces before Go-live. A detailed cutover plan should be used to perform the actual cutover of all SAP production systems. End-user training should also be performed.

- **Run:** The HANA migrated or S/4 converted SAP systems will be enabled for the business to perform live transactions in the production systems and the Proposer shall provide support during the Hyper-Care and period.

All phases reflect a deliverable-based, phased approach to the proposed solution.

2.1 Implementation Responsibility Matrix

Below are listed Responsibility, Accountability, Consulted and Informational assignments that are anticipated for the Project. See RFP **<u>Exhibit 8</u>**. Proposers should include additional assignments that are not specifically mentioned.

RACI Matrix JCC HANA Migration Project		JCC	Vendor
	Deliverable or Task		
1	Provide requisite connectivity and network infrastructure	R	C
2	Submit all Templates and Report Formats to JCC for preapproval prior to first submission.	C	A
3	Evaluation of the existing test cases & update test cases	R	C
4	HANA migration of SAP ECC, Solution Manager, SAP BW and Portal	C	A
5	Execute Prechecks	C	R
6	Review Prechecks	C	R
7	Preconversion Configuration	C	R
8	Code Remediation	C	R
9	Upgrade & DB Conversion	C	R
10	Database installation/patches, SAP software installation, Client/System Refresh	C	R
11	Post Conversion Configuration	C	R
12	Testing (Regression/Integration/UAT) of remediated code	C	R
13	Testing (Regression/Integration/UAT) of Interfaces	C	R
14	Simplification Workshops	C	R
15	Security Enablement Workshop	C	R
16	Security Execution	C	R
17	Analytics Enablement Workshop	C	R
18	Fiori Enablement Workshop	C	R
19	Organizational Change Management	R	C
20	End User Training	R	C
21	Disaster Recovery Setup and Configuration	C	R
22	Issue Tracking and resolution	C	R
23	Project Plan	C	R

24	Project Governance	C	R
25	Identify the key stakeholders and decision makers and provide reasonable access to all stakeholders and other relevant personnel as required during the engagement for clarification of questions, issue resolution, and reviews	R	I
26	Project Management	C	R
27	Project Metrics and Status Reporting	I	R
28	Ownership of deliverables committed in the project scope	I	A
29	Knowledge Transfer Planning and Execution	C	A
30	Post-Go-Live Functional Configuration and Support	C	A
31	Review and sign-off on deliverables	R	I
Insert new rows above this one			

R	**Responsible**
A	**Accountable**
C	**Consulted**
I	**Informed**

2.2 Environments

2.2.1 Current Environment

PHOENIX CURRENT LANDSCAPE

Active Directory

BW NW 7.4

Oracle 12c

AWS – Axway EFTP

IE11
SAPGUI 7.5

EP NW 7.5
Fiori Launchpad
SAP SSO

Oracle 12c

ECC EHP7
SAP_HR 608
Fiori
BSI

Oracle 12c

uPerform 5.40

Oracle 12c

Solution
Manager 7.2
SPS9

Oracle 12c
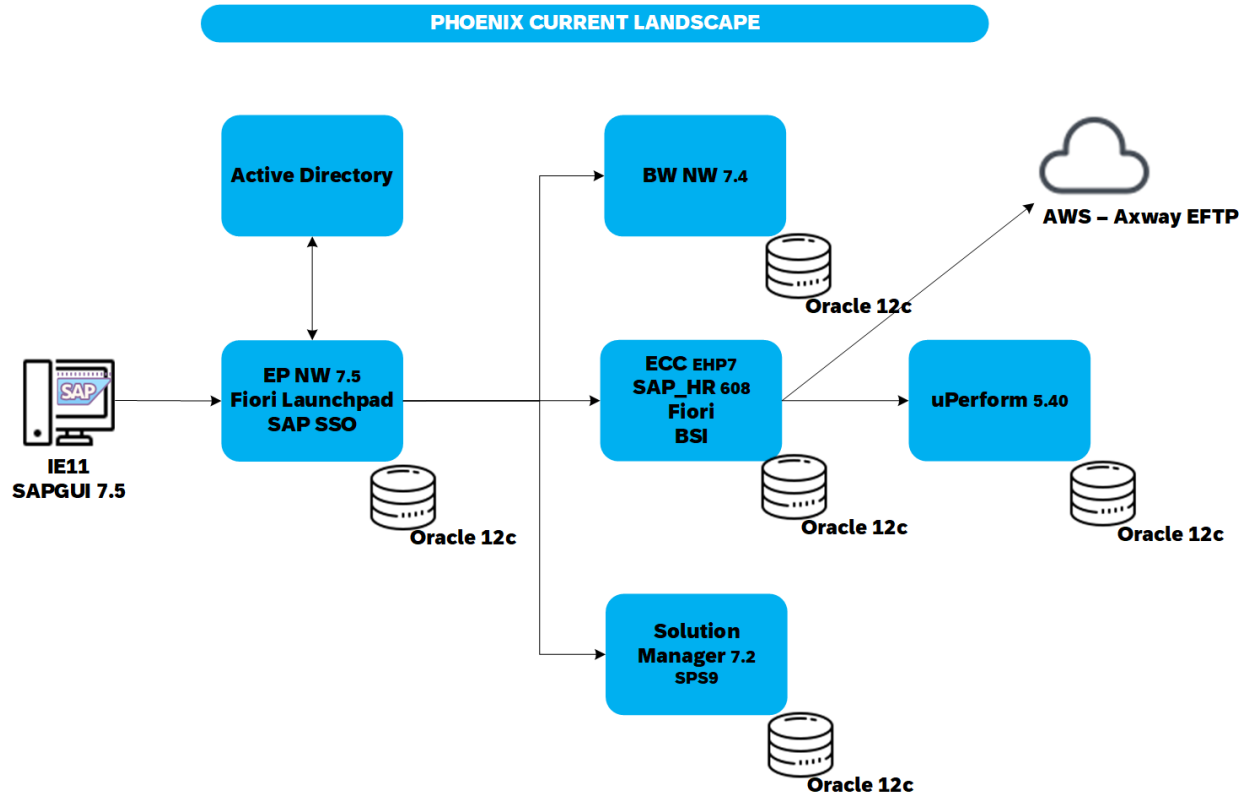
Exhibit 6 – Current Landscape

2.2.2   Target Environment

The target environment is BW on HANA and either Suite on HANA or S/4HANA. Respondents are asked to scope the effort and include costs for each Scenario.
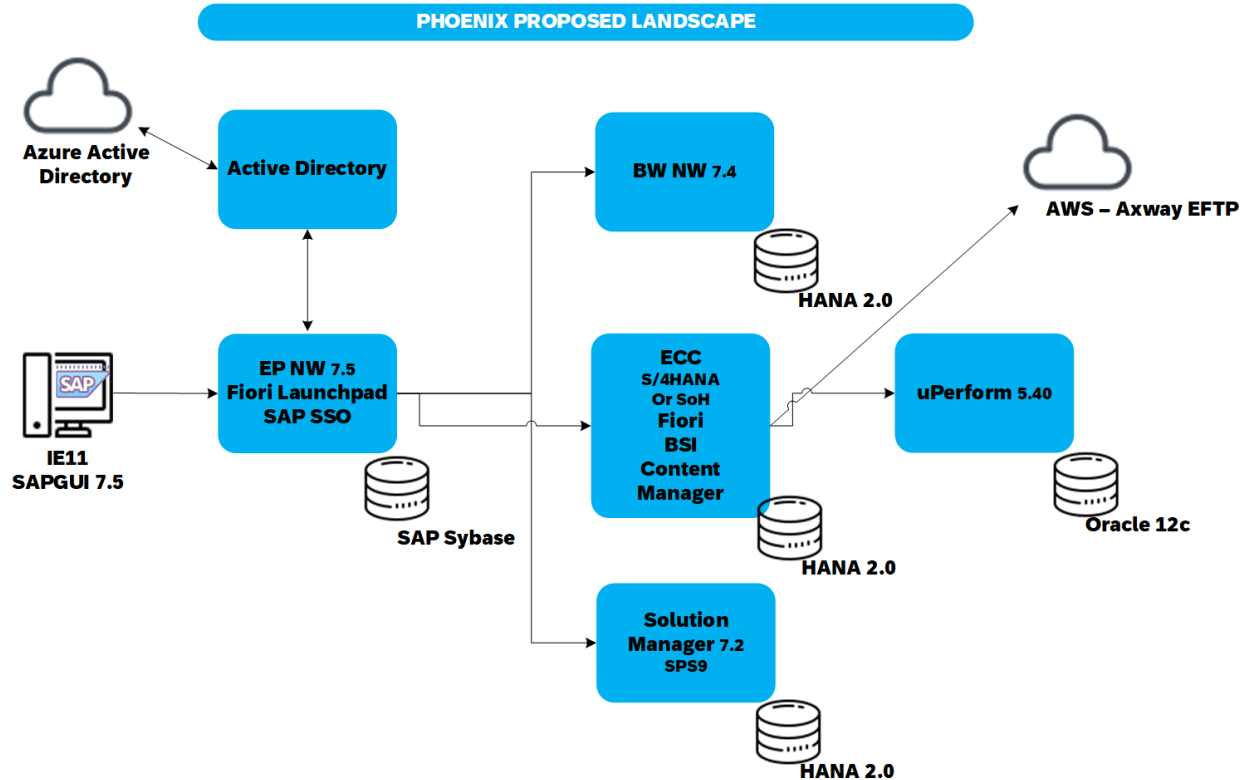
Exhibit 7 – Target Landscape

2.2.3   Environment Consolidation

The current SAP landscape is spread across three JCC data centers. This diagram depicts the current landscape and the consolidated future Cloud landscape and planned data refresh. Phoenix must be fully operational within the acceptable cutover requirements. The Proposer is expected to define the migration strategy; and any tools that will be required to perform the cut-over of the Production environment.
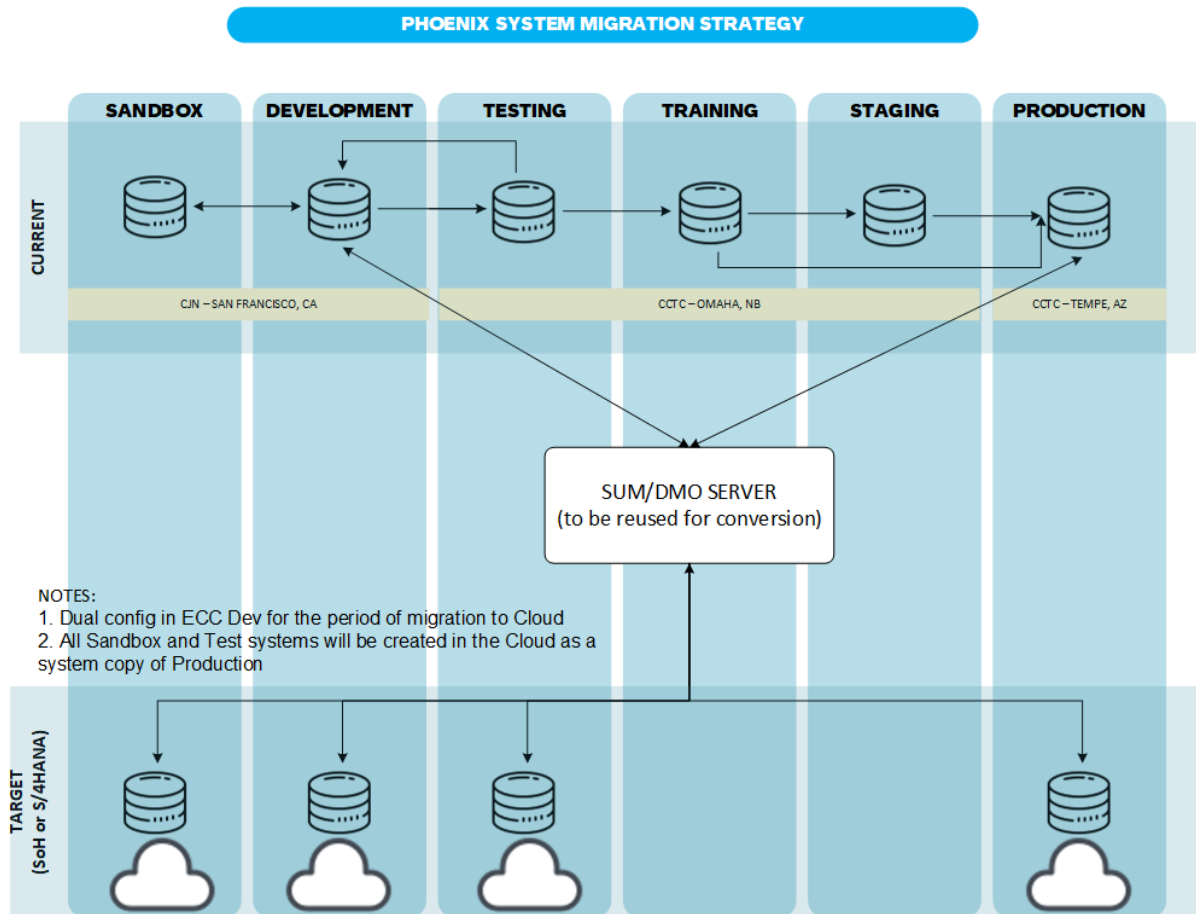
2.3 Phoenix HANA Sizing

A Baseline Readiness check was performed in the SAP ECC system with a target SAP S/4HANA 1809 system. Proposers should refer to RFP **Exhibit** 12 - Readiness Check Baseline – HANA Readiness. The SAP HANA sizing results are based on running the "Business Suite on HANA and S/4HANA sizing report". Proposers should also refer to RFP **Exhibit** 10 – Infrastructure Assessment.

The sizing report calculates the total memory requirements for the system after the system conversion to SAP S/4HANA. The requirements are based on the size of the tables in the source system and the compression rate of the source system.

With the result of the sizing report, Proposers have an initial indication of the system's starting size. This sizing procedure does not consider additional growth caused by additional Trial Court Deployments, business growth or SAP Support Pack implantations.

2.3.1 Anticipated Storage Requirements (GB)

Proposers are referred to RFP **Exhibit 11** – Storage Requirements for an estimation of the storage requirements for the Phoenix Operational environments. These are only estimates and

the selected Vendor will be expected to perform their own landscape assessment as part of the System Implementation Phase. An example of the anticipated for Production GB/month:

Estimated Storage in GBs per month						
Production						
	Portal	SoH	BW	SolMan	uPerform	Total
Block Storage (eg. database)	105	540	230	192	100	5806
File System Storage (eg. backups)	105	540	230	192	100	5806
Shared File System (NFS) (eg. Transports and Content Server files)		500				1000
Long-term Storage (eg. archived data)		300				400
Block Storage (eg. for DR)	210	1080	460	384	200	2334

General information

2.3.2 General Indicators	Values
Type of Analysed Database	ORACLE
Used Size on Disk	1027 GB
Number of Tables Successfully Analyzed	99,934
Number of Tables with Errors	0
Version of Report /SDF/HDB_SIZING	76
SAP Note for SAP HANA Sizing	**1872170**

2.3.3 Estimated Memory Requirement	Values in GB
Column Store Data	192
+ Row Store Data	19
+ Changes in Financials Tables and Columns	9
+ Changes in Logistics Tables and Columns	<1
+ Cached Hybrid LOB(20%)	49
+ Workspace	220
+ Fixed Size for Code, Stack and Other Services	50

2.3.3 Estimated Memory Requirement	Values in GB
= Anticipated Initial Memory Requirement for SAP HANA	**539**

2.3.4 Estimated Disk Sizing	Values in GB
Column Store Data	192
+ Row Store Data	19
+ Changes in Financials Tables and Columns	9
+ Changes in Logistics Tables and Columns	<1
+ Hybrid LOBs	247
+ Space Required for Merges	50
+ Metadata and Statistics	25
= Initial Net Data Size on Disk	**542**

LARGEST TABLES IN COLUMN STORE

2.3.5 Column Store Record Counts		
Table Name	Data Size in GB	Estimated Record Count
PCL2	28	12,058,289
GMIA	11	119,550,387
ZZSPLITA	11	126,828,581
PCL4	9	25,944,725
BALDAT	8	25,754,304
ZFIT_CHK_PDF	8	236,048,959
ACDOCA	8	192,209,545
FMIA	8	90,220,142
COEP	7	107,130,415
SRT_MONILOG_DATA	6	12,425,700

LARGEST TABLES IN ROW STORE

2.3.6 Row Store Record Counts		
Table Name	Data Size in GB	Estimated Record Count
D010TAB	6	48,306,354
D010INC	3	16,568,388
DD03L	2	8,394,428

2.3.6 Row Store Record Counts		
Table Name	Data Size in GB	Estimated Record Count
SMIMCONT1	1	573,380
SEOCOMPODF	<1	2,200,936
SWNCMONI	<1	152,653
ARFCSDATA	<1	182,838
TST03	<1	4,588,445
BDLDATCOL	<1	81,344
VRSX4	<1	302,840

2.4 Project Scope and Timeline

- Two Proposal Scenarios when migrating to Cloud

    1. SAP ECC migration to SAP Suite on HANA

    2. SAP ECC Conversion to SAP S/4HANA and

- SAP Solution Manager migration to HANA

- SAP NetWeaver Portal migration to a non-Oracle database recommended by Vendor

- SAP BW to SAP BW on HANA

- Solutions for limiting short term exposure to Oracle Cloud DB licensing

- Removing all long-term dependencies on Oracle Cloud DB

The migration to the cloud of the complete JCC landscape will be done in the following sequence: Sandbox -> Development -> QA -> Training -> Staging -> Production. All the systems should be thoroughly tested after completing the cloud migration.

As mentioned earlier, the current hosting facility has an ingress/egress limitation of approximately 10MB/sec. Proposers shall propose a data migration solution that performs mock and live cutovers with that constraint in mind. For their solutions, Proposers shall provide a detailed timeline and phases documenting their approach.

The SAP ECC modules in scope for this migration include:

- SAP Finance and Controlling

- SAP HCM

- SAP Grant Management

- SAP Fund Management

- SAP Public Sector Collections and Disbursements (PSCD)

- SAP Trust Accounting

- SAP Purchasing

- SAP FIORI apps

The JCC expects that the qualified Proposer will be able to utilize the information provided in this RFP along with their own relevant experience to provide a specific approach, plan, sequence, and staffing estimates to deliver a high-quality migration. Proposers will demonstrate experience and lessons learned gained from other similar and successful implementations.

Proposer shall provide a high-level plan with key tasks and timeline for both the Scenarios and must include the following in addition to cloud migration and HANA migration of all SAP systems and any other tasks that they deem fit:

- Conversion Pre-Checks and Maintenance Planner

- Simplification check

- SAP JCC (JCC, Vendor Partners, Trial Courts) Customer Vendor Integration (CVI)

- Custom code analysis

- Custom code remediation

- Integration Testing

- User Acceptance Testing

- Mock Testing of Cutover

- Performance Testing

- Training

2.5 Implementation Approach and Methodology

Proposers should propose a realistic timeline that allows adequate time for all project activities necessary for successful Project management of Scope, Schedule, Cost, and Quality. Explanation and justification of the proposed timeline and phasing must be addressed by the Proposer. Is essential to:

- Provide a concise description of the Proposer's overall methodology and differentiators.

- Provide a well-articulated and concise narrative that fully describes the Proposer's methods, tools, accelerators, frameworks, etc. associated with the Proposer's proposed approach to fulfill the roles and responsibilities described.

- Include all assumptions the Proposer is making with respect to JCC's role/staffing.

- Provide a detailed list of deliverables associated with each phase of the project.

- Provide acceptance criteria for each proposed deliverable.

- Describe your recommendations on governance and how you will help ensure the required structure and processes are in place and supported throughout the migration.

- The current Phoenix Training and Staging environments are not planned for migration.

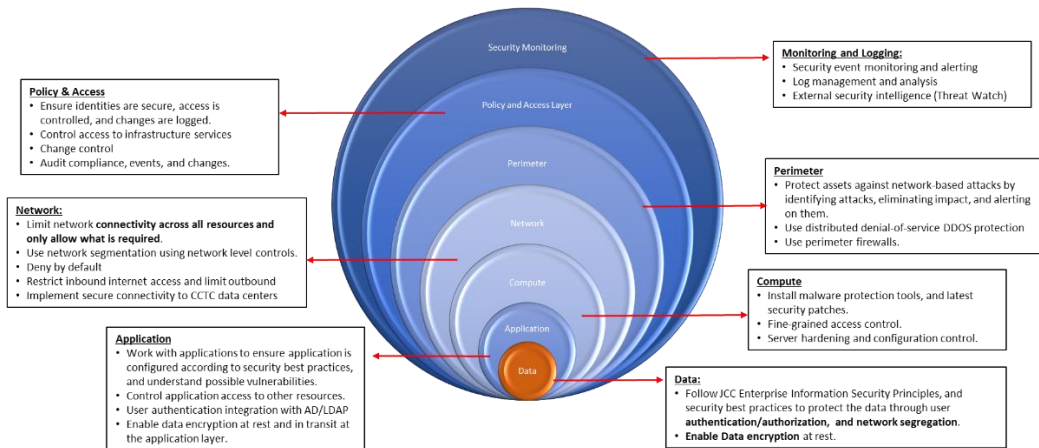### 2.5.1 JCC Cloud Security Model Architecture

The JCC's preferred Model Cloud Security Architecture is established in AWS and involves the use of a Virtual Private Cloud (VPC) for each application to provide an additional layer of isolation. Different subnets within the VPC are designed to isolate security layers similar to the JCC's on-premise Layered Security Model. Traffic between the layers is further isolated by IP and port. The JCC uses AWS Security Groups and NACLs (Network Access Control List) to do this isolation. Proposers will need to provide a similar model for Microsoft Azure if Azure Cloud is their hosting solution.

The implementation shall follow and comply with the JCC cloud security architecture framework (RFP **Exhibit** 16). The JCC cloud security architecture uses a layered security approach and a shared security responsibility model. Included in the architectural frame is the enterprise conceptual design and High-Level VPC Reference Design.
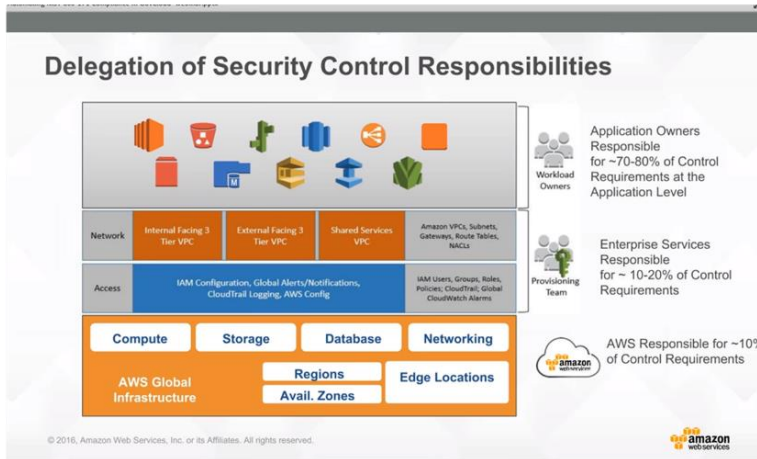
2.5.2 JCC Layered Security Approach

Layered Security Approach

Security mechanisms and controls applied at different layers of the application stack to protect confidential/sensitive data stored on servers and storage devices. The common principles used to define security posture are confidentiality, integrity, and availability.

Policy & Access
- Ensure identities are secure, access is controlled, and changes are logged.
- Control access to infrastructure services
- Change control
- Audit compliance, events, and changes.

Network:
- Limit network **connectivity across all resources and only allow what is required**.
- Use network segmentation using network level controls.
- Deny by default
- Restrict inbound internet access and limit outbound
- Implement secure connectivity to CCTC data centers

Application
- Work with applications to ensure application is configured according to security best practices, and understand possible vulnerabilities.
- Control application access to other resources.
- User authentication integration with AD/LDAP
- Enable data encryption at rest and in transit at the application layer.

Monitoring and Logging:
- Security event monitoring and alerting
- Log management and analysis
- External security intelligence (Threat Watch)

Perimeter
- Protect assets against network-based attacks by identifying attacks, eliminating impact, and alerting on them.
- Use distributed denial-of-service DDOS protection
- Use perimeter firewalls.

Compute
- Install malware protection tools, and latest security patches.
- Fine-grained access control.
- Server hardening and configuration control.

Data:
- Follow JCC Enterprise Information Security Principles, and security best practices to protect the data through user **authentication/authorization, and network segregation**.
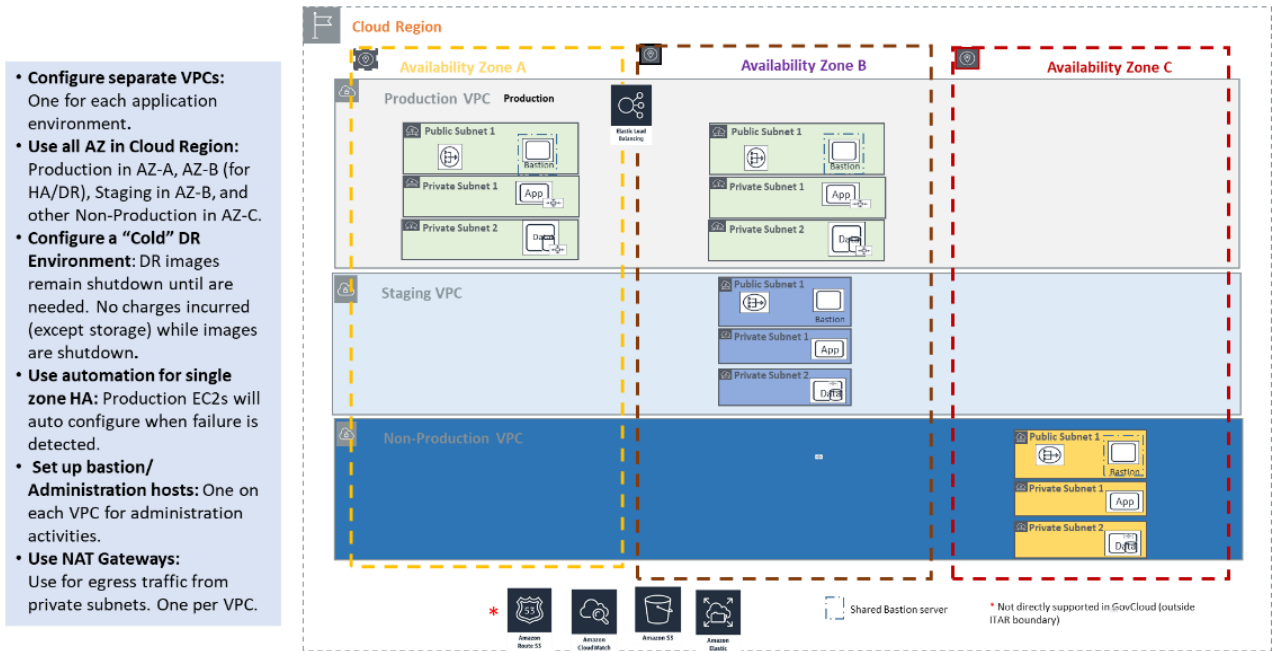- **Enable Data encryption** at rest.

Shared Security Responsibility Model

Cloud Service Providers are responsible for providing secure infrastructure up to the hypervisor level, while customers for securing the operating systems, application platforms, and data. The following AWS diagram is used as a reference.

2.5.3   JCC High-Level VPC Reference Design

High Level VPC Reference Design

2.6   Interfaces

Listed below are some of the key interfaces that are used at JCC. RFP **Exhibit 3** enumerates the detailed list of all Custom External Partner Axway and Direct interfaces. The Proposer is expected

to ensure that all the interfaces work with the HANA and/or S/4 migrated systems as designed. The types of interfaces and integrations required for Phoenix include:

- SAP ECC to BSI Tax Factory for HR

- SAP ECC to uPerform: This is an SAP approved product for context-sensitive help and user training. This utilizes web services to link into ABAP providing user help on how to do a specific task.

- SAP ECC to Neo Post Mailing system: Neopost mailing service runs on a PC in a JCC facility for ZIP code validation.

- Web IDE in SAP Hana Cloud: Web IDE is used for all UX front end development

- Axway EFTP Product: Manages secure file transfer (inbound/outbound) to support Interfaces

- Integration with Bank of America for ACH

- Payroll Integration

- Benefits (secure file transfer using Axway to Benefit providers)

- PSCD interface (secure file transfer using Axway to Courts)

- Jury AP (secure file transfer using Axway to Courts)

- SAP Direct-to-Vendor interfaces for Bank of America and CalPERS

- Integration with the JCC's Identity Management Solution (Microsoft Azure B2B)

- Phoenix Interface Monitor (PIM): Custom GUI built with Web Dynpro, PIM provides:

  a. Ability to monitor interface progress through retrieval, search, and display as a list with filtering, sorting, etc.;

  b. Detailed interface status/log and report display;

  c. Ability to generate approval, triggering, re-processing, adding comments, setting, status such as Ignoring, etc.; and

  d. Data file display and download.

2.7 **Custom Objects**

A Baseline Readiness check was performed in the SAP ECC system with a target SAP S/4HANA 1809 system. Below is the summary of the custom code found. The detailed list of custom code is provided in RFP **Exhibit 5** – Custom Object Workbook. The Proposer is expected to ensure that the custom objects work as designed in the selected target environment.

Item	Number of Objects
Total SAP Notes	262
Relevant SAP Notes	43
Non-Relevant SAP Notes	219
Total Custom Code Objects	3936

Item	Number of Objects
Total Modifications	311

2.8   **Prepare Phase**

Responses for **Section** 2.9.1 are to be made to 2.0 System Implementation RTM Tab 2.9.1 Prepare.

2.8.1   **Prepare Phase Deliverables Requirements**

2.9.1.1   Proposer should include advisory services of the software vendor SAP, such as support of the HANA Ambassador program, or placement of SAP consulting resource(s) in key project team positions, (for scenario 2, SAP S/4HANA system migration).

2.9.1.2   Proposer must at all times comply with California SB1386 (Data Security Breach Reporting).

2.9.1.3   Proposer must provide a Project Manager (PM) to represent the Proposer in the management of the project, interfacing with the JCC PM in any decisions relating to the project.

2.9.1.4   Proposer should support the JCC to provide a Project Manager to represent the JCC business units in this project, interfacing with the Proposer's PM, and representing the JCC in any decisions relating to the project.

2.9.1.5   Proposer must assume and lead all day-to-day management of all Vendor personnel, including subcontractor personnel, and associated deliverables related to the required services.

2.9.1.6   Proposer should obtain oversight and approval through coordination with the program management office and executive management.

2.9.1.7   Proposer should support the JCC to interface with and support requests from the Project Manager as requested by the JCC.

2.9.1.8   Proposer should follow SAP's Activate project ALM management methodology.

2.9.1.9   Proposer must provide a robust project management methodology and toolkit founded on industry best practices.

2.9.1.10   Proposer should conduct project management activities throughout the lifecycle and execute the associated plans.

2.9.1.11   Proposer must establish a formal requirements management process that shall include:

Assumption Definition, Tracking, and Traceability

Business and Technical Requirement Definition, Tracking, Traceability, and Verification

Operational Change Process

Phase and Product Entry and Exit (Acceptance) Criteria Definition, Tracking and Signoff

2.9.1.12 Proposer must establish a Key-Decisions Roadmap of critical decisions that will be required of key stakeholders over the course of the Project.

2.9.1.13 Proposer must provide a Project Charter that outlines the scope, timeline, objectives, organization structure, project approach, high-level deliverables, resources, and governance structure.

2.9.1.14 Proposer must align Stakeholders with the Governance structure developed for the Project and Key Decision Makers.

2.9.1.15 Proposer should provide a Project Operational Change Plan that defines roles, responsibilities for establishing procedures and managing Operational Change requests.

2.9.1.16 Proposer must provide, update, and maintain throughout the lifecycle of the project a Project Schedule which is consistent with SAP's Activate ALM and includes, but is not limited to the following components:

Tasks

Activities

Milestones

Resources

Dependencies

Task and activity durations

Critical path identification

Templates

2.9.1.17 Proposer must provide, update, and maintain a formal, comprehensive Project Management Plan (PMP) for migration and onboarding activities that includes (but is not limited to) the following key components:

Proposer and subcontractor management

Budget management, expenditure control, and Earned Value as mutually agreed upon by the JCC and Proposer

Critical path identification, and dependencies

Current project schedule

Deliverable/product review and approval and other acceptance criteria

Issue tracking, escalation, and resolution

Operational change request approval and tracking

Project initiation activities

Project success evaluation criteria and project close-out activities

RACI (Responsible, Accountable, Consulted, Informed) of all JCC, Vendor and 3PP Roles and Responsibilities

Relationships to other IT or business efforts

Schedule/milestone tracking and resource allocation

Status and other reporting activities

2.9.1.18   Proposer must identify contacts within the Cloud Provider organization for architecture and design of the solution.

2.9.1.19   Proposer must provide a Risk Management Plan that shall be used, quantify the potential impact of each identified risk, present mitigation plans for each identified risk, and enact appropriate risk responses.

2.9.1.20   Proposer must implement risk mitigation measures and contingency plans as high-priority risks are identified and monitored.

2.9.1.21   Proposer must provide an Issue Management and Resolution Strategy and process including identification, tracking, and resolution of issues.

2.9.1.22   Proposer must provide formal Training and Knowledge Transfer Strategy and Plans to document training requirements and the approach the JCC support organization will use for updating training requirements, development of training curricula, and deploying training for the JCC's support staff as required. Include specific knowledge transfer milestones with clear deliverables for each set of activities that will be owned by the JCC.

2.9.1.23   Proposer must provide a Master Test Strategy that describes the approach that will be taken to fully test all components of the system including test control and approval processes, test participants, how testing will interface with the configuration management process, and test documentation expectations for the following test types: unit, functional, volume, end-to-end, document conversion/migration validation, security, integration, response time & capacity, regression, and user acceptance.

2.9.1.24   Proposer must provide formal Communication Strategy and Plans that shall be used to communicate with all project stakeholders throughout the life of the project including, at a minimum, the following activities:

Communication with internal and external stakeholders

Formal kickoffs of phases

Communication of milestones

Status reports

2.9.1.25   Proposer must provide a Quality Management Plan that designates a Quality Management Planning Team (made up of Proposer and JCC staff) and a liaison to work with JCC staff to resolve any emerging problems or areas of concern and to ensure standards are being met.

2.9.1.26   Proposer must provide a description of how Operational Changes resulting from problem-solving or process improvement will be documented and approved.

2.9.1.27   Proposer must provide Project Status Reports and conduct regularly scheduled status meetings reviewing project progress, planned activities, major milestones, and project deliverables, all critical path dependencies and bottlenecks, staffing resources, risk management, issues/issue resolution, and next steps.

2.9.1.28 Proposer must provide weekly status reviews, issues logs, and progress reports at the sub-team level (e.g. Phoenix functional teams, technical team, deployment team).

2.9.1.29 Proposer should use the JCC's repository to store, organize, track, control and disseminate all information and items produced by and delivered to the project.

2.9.1.30 Proposer must provide a toolset to support project activities such as issues management, requirements management, and change management, etc., accessible by all internal and external project team members. The data will be provided to the JCC upon completion of the project.

2.9.1.31 Proposer must ensure alignment of the system with JCC's technical architecture, security guidelines and IT policies and procedures and Judicial Branch Information Systems Controls Framework (RFP **Exhibit** **13**).

2.9.1.32 Proposer must communicate project scope change process and procedures to JCC stakeholders.

2.9.1.33 Proposer must prepare and track JCC change requests and document impact analysis associated with proposed changes.

2.9.1.34 Proposer must support the JCC to approve and prioritize changes.

2.9.1.35 Proposer must provide all training necessary to ensure that Proposer project team members are appropriately skilled and knowledgeable on all industry-standard and related best practice components utilized in establishing the Phoenix test environments and the supporting platform. This also includes best practices on business processes and the configuration of Phoenix to meet JCC business requirements.

2.9.1.36 Proposer should support the JCC to provide and document a Business Process and Organizational Change Management Strategy.

2.9.1.37 Proposer should support the JCC to lead business process and organizational change management activities.

2.9.1.38 Proposer must support the JCC to document deliverable details, formats, and acceptance criteria.

2.9.1.39 Proposer must support the JCC to approve all Templates, Formats and Materials to be submitted to support Deliverables Acceptance.

2.9 **Explore Phase**

Responses for **Section** 2.10.1 are to be made to 2.0 System Implementation RTM Tab 2.10.1 Explore.

2.9.1 **Explore Phase Deliverables Requirements**

2.10.1.1 Proposer must provide a Business Solution that shall define the overall design for the implementation of the Project, including at a minimum:

Business and architectural end-state design for the Phoenix system

Reporting strategy

Onboarding and Migration activities

Migration approach

Optimized TCO emphasizing reduction in interim on-premise and cloud hosting costs

2.10.1.2   Proposer must engage Cloud Services Provider for Architectural and Design assistance:

Target Cloud Architecture

Security

Networking

Interfaces

Build Sheet (Cloud and On-premise)

Reporting

Post Migration Managed Services

Service Level Requirements

2.10.1.3   Proposer must conduct Functional and Technical Design Workshops and breakout sessions necessary to address and finalize requirements for migration, remediation and post-migration validation for existing custom Interface requirements for (but not limited to):

Java Programs

Encryption and Decryption,

FTP File Transfers (inbound/outbound)

File and Directory status Retrieval

SAP Vendor-Direct Interfaces for CalPERS and Bank of America

Phoenix Interface Monitor (PIM)

Interface Notifications

XML Transformations

Interface file generation and processing (inbound and outbound)

Benefit Workbench post-migration validation

Preservation of Integration History Data

Migration of Batch jobs

2.10.1.4   Proposer must conduct Functional and Technical Design Workshops and breakout sessions necessary to address and finalize requirements for (but not limited to):

Target Cloud Architecture

Security

Networking

Integration with JCC's Identity Management Solution (Microsoft Azure B2B)

Interfaces

Build Sheet (Cloud and On-premise)

Reporting

Post Migration Managed Services

Service Level Requirements

2.10.1.5   Proposer must conduct Functional and Technical Design Workshops and breakout sessions necessary to address and finalize requirements for (but not limited to):

Review of available conversion tools:

Usage Procedure Logging (UPL)

ABAP Call Monitor (SCMON)

Custom Code Lifecycle Manager (CCLM)

SAP Code Inspector

ABAP Test Cockpit (ATC)

Simplification

Addressing in the Readiness Check Dashboard

Custom Code Scoping

S/4HANA ABAP checks

Custom Code Analysis

Fit-To-Standard

Reporting

Post Migration Managed Services

Service Level Requirements

2.10.1.6   Proposer must perform operational and technical assessment and analysis of the current environments for sizing and planning purposes.

2.10.1.7   Proposer must develop a Technical Design with supporting Build Sheets which includes:

Administrative User access (Special Requirements if any)

Application required Parameters

As-Is and To-Be Client Landscape

Availability Zones

Regions

Backup, Recovery, Retention

Complete SAP Product Build Workbook (Requires JCC input)

Connectivity for applications and Interfaces by port/protocol

Define backup schedules, retention, and policies (if applicable).

DR Planning

Finalize Platform Definitions for each Server/Application

Firewall configurations

Hardware sizing/capacity configurations

Hostnames / SID naming conventions

IP requirement, the S-User ID requirement

Network Design and Diagram

NAT Gateway Design

Server Design

Server Landscape

Software Licensing

Software Versions

Solution Manager Work Center requirements

Standardized Security Protocol definition

Storage Requirements

System User IDs / Groups

Transport Landscape

2.10.1.8   Proposer must develop Migration Strategy, Plan and Schedule, optimized for TCO, which includes environment migration schedules, decommissioning plans, as-is and to-be overlapping resource costs. This includes an update of the Project Plan (12) and the Business Solution (36).

2.10.1.9   Proposer should factor a minimum of 3 "mock" migrations into the Migration Strategy.

2.10.1.10 Proposer must update Key-Decisions Roadmap of critical decisions that will be required of key stakeholders over the course of the Project.

2.10.1.11 Proposer must update Project Charter that outlines the scope, timeline, objectives, organization structure, project approach, high-level deliverables, resources, and governance structure.

2.10.1.12 Proposer must optimize the final Migration Strategy contemplating the least amount of impact on production systems; ideally 0 production hours impact.

2.10.1.13 Proposer must configure Security Groups and Setup.

2.10.1.14 Proposer must define JCC- networks, firewalls, and connections.

2.10.1.15 Proposer must configure VPC and Subnet.

2.10.1.16 Proposer must confirm network Ips.

2.10.1.17 Proposer must confirm connection set up and security.

2.10.1.18 Proposer must address and remediate Obsolete, Not Working, Syntactic and Semantic issues with the Readiness Check Dashboard:

Active Business Functions

Add-On Compatibility

Business Process Analytics

Business Warehouse Extractors

Custom Code Analysis

Data Volume Management

HANA Sizing

Simplification Items

2.10.1.19 Proposer must rerun Readiness Check as needed until all flagged items are corrected.

2.10.1.20 Proposer must perform System Builds using the Build Sheets and workbook developed earlier:

AD and DNS Setup

Build VM's per Build Sheet

Create repeatable VM images

Configure backups to support SLAs

Configure HA and DR setup

Configure the SAP HANA database and applications

Create templates for new VMs or VMs from source/deployment automation

DR Provision and Configuration

Execute technical cutover (final data/networking)

HA Provision and Configuration

Migrate data / VM source files for testing

Set up NAT Gateway Address Translation Tables

Network, Storage, and Compute Provisioning

OS/DB/Infra hardening per JCC-defined STIGs

Replicate data for production cutover

Setup DB monitoring

Setup Infrastructure monitoring

Setup OS monitoring

Troubleshoot application issues

Troubleshoot infrastructure issues

Update Documentation - Build Sheets, STIG, Gold Image doc, Low-Level Design document, High-Level Design Document as needed

Workload planning and stress testing (if applicable)

2.10.1.21 Proposer must deploy Operating Systems and Database(s):

Provision virtual machine with operating systems

Create operating system backups

Install and configure OS Libraries

OS Parameters for Specific SAP Build Installs

Apply SAP Best Practices / Azure specific OSS Notes

Apply SAP specific OSS Notes related to target Cloud Services Provider

OS Monitoring Agent Configuration

OS Backup Agent Configuration

Windows Active Directory Configuration

Configure OS for Network Configuration

Provide LDAP / AD user accounts

Provide DNS entries cloud

Add Cloud AD to JCC AD or Cloud systems to JCC AD

Define System (Privileged) Accounts and groups to be created

Define the operating system STIGs

Implement OS STIGs

Configure NTP server in accordance with agreed-upon settings

Define the appropriate time zone on a per-server basis and provide the time zone server URL.

Provision/Install DB

Configure Table Spaces

Create and Maintain Custom DB Objects

Configure Backup, Restore and Recovery

Install initial OS and DB Patches

Install and Configure DB tools

Install and Configure 3rd party tools

2.10.1.22 Proposer must support the JCC to act as the primary point of contact with the JCC Customer-Facing Business Team.

2.10.1.23 Proposer must work with JCC partners, owners of external systems, and/or third-party service providers to collect information required to develop and document a detailed interface design and approach (in the Detailed Design Standards and Design Documents) according to JCC standards.

2.10.1.24 Proposer must document the Technical System Design specifying all components, modules, data stores, reports, interfaces, interface components (e.g. Axway and direct), Proposer-Proposed Enterprise Technology Tools, and associated operations procedures for the system.

2.10.1.25 Proposer must support the JCC to review and approve detailed design documentation.

2.10.1.26 Proposer must create/document Unit, Integration, End-to-End, User Acceptance, Document Conversion, Regression, and Security Test Plans.

2.10.1.27 Proposer must create test environments necessary to support the ongoing application development/configuration including any elements required for supporting the enhanced functions or features.

2.10.1.28 Proposer must install Proposer-Proposed Enterprise Technology Tools (and any other utilities/tools if required to support the Proposer's methodology) in the test environments necessary to support the ongoing application development/configuration including any elements required for performance testing and validation, or which support enhanced functions or features.

2.10.1.29 Proposer must provide all Test Plans and Test Scripts in alignment with the Master Test Strategy.

2.10.1.30 Proposer must establish formal Response Time and Capacity Testing Strategy and Plans.

2.10.1.31 Proposer must establish, document, remediate, and maintain the overall Reports, Interfaces, Conversions, Enhancements and Workflows, Development Schedule.

2.10.1.32 Proposer must provide training materials for initial training and knowledge transfer to the JCC support organization.

2.10.1.33 Proposer must provide initial training and knowledge transfer to the support organization, in accordance with the Training and Knowledge Transfer Plan, to support the detailed requirements definition phase of implementation activities.

2.10.1.34 Proposer must provide a Training Curriculum Document that outlines the training and course content including the course topics and the content to be delivered with each topic.

2.10.1.35 Proposer must provide formal End-user Training Strategy and Plans to document training requirements and the approach the JCC will use for updating training requirements, development of training curricula, and deploying training for the end-users as required. Include training milestones with clear deliverables for each set of activities.

2.10 **Realize Phase**

Responses for **Section** 2.11.1 are to be made to 2.0 System Implementation RTM Tab 2.11.1 Realize.

2.10.1   Realize Phase Deliverables Requirements

2.11.1.1 Proposer must perform all necessary technical design, development, configuration, document conversion/migration, unit testing, and scripting, of system modules as required to provide and implement the design specifications.

2.11.1.2 Proposer must create Test Cases and Test Data that are fully documented and repeatable without consulting assistance.

2.11.1.3   Proposer must create a test environment and documents where required by the project, including a demonstration of requirements traceability to verify the requirements as specified in the requirements document have been satisfied.

2.11.1.4   Proposer must provide Data Transfer services, separate from the Cloud Services Provider, including media and courier services, to transfer on-premise production data to the Cloud Service Provider in a manner that meets the "mock" cutover SLA.

2.11.1.5   Proposer must conduct all appropriate testing (e.g. unit testing, end-to-end testing, response time and capacity testing, regression testing, parallel testing).

2.11.1.6   Proposer must complete Functional Adaptation:

Rerun checks for HANA compatibility e.g. using ATC

Update modifications to standard transactions SPDD, SPAU, SPAU_ENH

Fix S/4HANA Findings

Review Simplification Items

Run ABAP SQL Monitor

Tune for performance

2.11.1.7   Proposer must provide and document test results, Documented Successful Testing Results.

2.11.1.8   Proposer must validate the system for compliance with the System Security Strategy and Plans.

2.11.1.9   Proposer must manage the JCC functional, integration, parallel, and regression test environments and associated test data including creation and maintenance during the testing period.

2.11.1.10 Proposer must support the JCC to review testing results for compliance with policies, procedures, plans, and test criteria and metrics (e.g. defect rates, progress against schedule).

2.11.1.11 Proposer must support the JCC to coordinate user acceptance testing (e.g. gain user involvement, establish and define acceptance criteria, setting high-level test objectives, establish high-level test scenarios, establish end-to-end test scenarios).

2.11.1.12 Proposer must facilitate and support user acceptance test as prescribed by the JCC, including: establishing adequate test environment based on user acceptance criteria; preparing data to support test scenarios within modified system as well as managing the relationship with all interfaced systems necessary to conduct test; troubleshooting; supporting users to progress through scenarios; simulating interfaces or working with integrated systems to conduct end-to-end tests; supporting document batch/load processing; exercising functionality; and reporting results.

2.11.1.13 Proposer must conduct user acceptance tests.

2.11.1.14 Proposer must utilize the JCC-preferred defect tracking tool (ServiceNow).

2.11.1.15 Proposer must correct defects found as a result of testing efforts.

2.11.1.16 Proposer must support the JCC to review and approve configuration management policies and procedures.

2.11.1.17 Proposer must perform configuration management activities throughout the life cycle.

2.11.1.18 Proposer must provide training materials to support end-user training.

2.11.1.19 Proposer must perform Organizational Readiness Assessment to identify opportunities and resistance to changes.

2.11.1.20 Proposer must create and maintain the JCC training data as required by the JCC.

2.11.1.21 Proposer must provide Training and Knowledge Transfer Effectiveness Reports for the JCC support organization.

2.11.1.22 Proposer must provide and apply appropriate business process and organizational change management tools and activities while ensuring processes are in place for communication.

2.11 Final Preparation

Responses for **Section** 2.12.1 are to be made to 2.0 System Implementation RTM Tab 2.12.1 Final Preparation.

2.11.1   Final Preparation Deliverables Requirements

2.12.1.1   Proposer must provide Initial and Final Deployment Plans (turn-over-to-production plan).

2.12.1.2   Proposer must coordinate deployment and support activities with applicable JCC sites.

2.12.1.3   Proposer must perform deployment and support activities with applicable JCC sites.

2.12.1.4   Proposer must conduct pre-installation business surveys to assess site readiness against a set of best practices checklist criteria.

2.12.1.5   Proposer must develop Transition Plans that encompass business process, operations (business and IT), and technical-support plans that need to be in place to mitigate implementation risk. Coordinate this documentation with site-specific end-user training activities.

2.12.1.6   Proposer must provide Recommended Operations and Administration Procedures related to the deployment.

2.12.1.7   Proposer must provide Role to Position Mapping Document which outlines the security roles, positions, and authorizations configured in the system.

2.12.1.8   Proposer must provide a mechanism for JCC representatives to review and accept converted/migrated data elements before production deployment of new or upgraded functionality.

2.12.1.9   Proposer must provide Data Transfer services, separate from the Cloud Services Provider, including media and courier services, to transfer on-premise production data to the Cloud Service Provider in a manner that meets the cutover SLA.

2.12.1.10 Proposer must perform final migration from existing system(s) to the Phoenix system, by electronic or manual methods and perform selected integration, response time and

capacity, end-to-end, and user-acceptance testing to validate that the solution is ready for production.

2.12.1.11 Proposer must track deployment and document migration/conversion status and notification.

2.12.1.12 Proposer must provide Training and Knowledge Transfer, in support of developing a Level 2 support team to the JCC support personnel, prior to deployment.

2.12.1.13 Proposer must provide training materials, including dialogue scripts, for Level 2 support for the system to the JCC and other vendor personnel as applicable.

2.12.1.14 Proposer must develop/provide Technical Documentation as well as training related to configuration management, installation, development and performance tuning for targeted JCC technical and functional personnel.

2.12.1.15 Proposer must develop business process support documentation and associated business rules and configuration parameters for the targeted JCC project team and business super users. Deliver the "train the trainer" training.

2.12.1.16 Proposer must provide initial Operational End-user Training for the system.

2.12.1.17 Proposer must provide Draft and Final End-user Training Materials for the system.

2.12.1.18 Proposer must provide communications materials and Site-specific Training Materials.

2.12.1.19 Proposer must provide recommendations for ongoing business process and organizational change management activities.

2.12.1.20 Proposer must support the JCC to provide a Post Production Support Strategy which outlines the processes for end-users to obtain support in the post-go-live environment.

2.12.1.21 Proposer must implement business process and organizational change management recommendations.

2.12.1.22 Proposer must provide formal Business Continuity Strategy and Plans that describe the approach that will be taken to adhere to SLRs and perform business disaster recovery activities.

2.12.1.23 Proposer must support the JCC to provide formal Managed Services Support Strategy and Plans that describe the approach that will be taken to perform business ongoing support activities.

2.12.1.24 While informing the Proposer, JCC shall provide updated monthly costs for Managed Services for 1-year and 3-year (hosting commitment) terms.

2.12.1.25 While informing the Proposer, JCC shall provide updated monthly costs for Managed Services.

2.12.1.26 Proposer must provide a Business Contingency Plan that describes the approach that will be taken during go-live activities.

2.12.1.27 Proposer must provide Batch Schedule which sequences the execution of automated background jobs for processing with other JCC production jobs.

2.12.1.28 Proposer must provide metrics regarding scalable and acceptable levels of performance.

2.12.1.29 Proposer must update the training and knowledge transfer plan as required.

2.12.1.30 Proposer must develop help desk scripts.

2.12.1.31 Proposer must create a Go/No-go Checklist.

2.12.1.32 Proposer must support the JCC to approve production deployment go/no-go decisions.

2.12.1.33 Proposer must conduct Go/No-go Meeting and develop Go/No-go Documentation.

2.12 Go Live and Post-Deployment Warranty Support

Go-Live and Warranty Support will occur for a specified period, as detailed in the tables below and prior to Final Acceptance. The purpose is to stabilize the system, minimize the impact of any early system issues and prepare to transition the system to the JCC's Managed Services Provider and Phoenix Center of Excellence for long-term support. The post-implementation support team will closely monitor the newly deployed system and user activity; assign appropriate resources to resolve issues; rapidly detect and escalate issues as required, and quickly resolve and communicate resolution.

Responses for **Section** 2.13.1 are to be made to 2.0 System Implementation RTM Tab 2.13.1 Go-Live.

2.12.1 Go Live and Deployment and Warranty Support Requirements

2.13.1.1 Proposer must successfully meet all Section 1.3 Fundamental and ensure Acceptance by the JCC.

2.13.1.2 Proposer should provide 12 months of post-implementation warranty support which is exclusive of any additional responsibilities of the JCC's Managed Services and Ongoing Operational Support provider.

2.13.1.3 Proposer must provide monthly reports detailing the warranty work (i.e., number and type of defects, the status of defects).

2.13.1.4 Proposer must perform system fixes to correct system-level performance problems that the Proposer was responsible for.

2.13.1.5 Proposer must perform additional custom code remediation as identified as warranty work.

2.13.1.6 Proposer must perform fixes to correct improperly converted files or tables that the Proposer was responsible for.

2.13.1.7 Proposer must perform fixes to correct translation or load errors for interfaces that the Proposer was responsible for.

2.13.1.8 Proposer must perform fixes to correct errors from application configuration or parameter table settings that are not consistent with the intended design and were the responsibility of the Proposer.

2.13.1.9 Proposer must perform training fixes to correct interpretation and documentation errors related to the user or technical training documentation or other training delivery media developed by the Proposer.

2.13.1.10 Proposer must test the system to ensure that no regression errors are introduced.

2.13.1.11 Proposer must support the JCC to approve of all Warranty Service fixes with formal sign-off.

2.13.1.12 Proposer must provide operating system support.

2.13.1.13 Proposer must provide monitoring and tuning for performance and backup.

2.13.1.14 Proposer must conduct active performance monitoring.

2.13.1.15 Proposer must update all documentation and related files/deliverables such as:

Business Solution documents.

Requirements Definition documents.

Design and Specification documents.

Workflows, Reports, Interfaces, Conversion/Migration, and Enhancements functional and technical specifications.

Package Configuration and Development documents as well as any associated system changes.

Integration and Testing documents as well as test data/documents.

Implementation and Migration Deployment documents.

Problem Monitoring and Reporting documents.

Change Control documents and associated configuration parameters and system source code.

Training documents and associated training data.

Knowledge Transfer documents.

Operational support processes and procedures.

2.13.1.16 Proposer must conduct and document an Organizational Change Management Effectiveness Assessment.

2.13.1.17 Proposer must perform system administration, if required.

2.13.1.18 Proposer must perform software configuration, if required.

2.13.1.19 Proposer must perform software customization, if required.

2.13.1.20 Proposer must perform report development (as requested per approved change order).

2.13.1.21 Proposer must monitor and tune the system for performance.

2.13.1.22 Proposer must execute and maintain the Business Continuity Plan.

2.13.1.23 Proposer must maintain Level help desk scripts.

2.13.1.24 Proposer must conduct ongoing operations end-user training.

2.13.1.25 Proposer must install new or enhanced software functions or features.

2.13.1.26 Proposer must participate in an ongoing review of Phoenix architecture and recommend any modifications to architecture design as it may relate to the system.

2.13.1.27 Proposer must refine, configure and maintain high-level release-specific system architectures.

2.13.1.28 Proposer must maintain "End State" system architecture.

2.13.1.29 Proposer must document/create Maintenance and Repair Policies and Procedures.

2.13.1.30 Proposer must document/create a System Maintenance Plan (e.g. committed and proposed work schedules).

2.13.1.31 Proposer must maintain all revisions to the plan (e.g. committed and proposed work schedules).

2.13.1.32 Proposer must provide system maintenance plan for all categories of maintenance services (e.g. Minor Enhancements, Corrective Maintenance, Preventative Maintenance, Adaptive Maintenance, and Perfective Maintenance) as described above.

2.13.1.33 Proposer must provide technical and functional support to the JCC as directed by the JCC.

2.13.1.34 Proposer must provide business hours and off-hours Go live and Deployment support.

2.13.1.35 Proposer must perform Warranty diagnostics on software and services.

2.13.1.36 Proposer must recommend Warranty database management system tuning changes.

2.13.1.37 Proposer must provide Level 1 help desk with coordination of user support activities (including "how to" support and user account and password administration).

2.13.1.38 Proposer must respond to escalated trouble ticket items in accordance with established procedures.

2.13.1.39 Proposer must support the JCC to establish priority of trouble ticket items/service requests.

2.13.1.40 Proposer must support the JCC to approve and sign-off on all site-specific migrated data.

2.13.1.41 Proposer must provide on-site implementation support.

2.13.1.42 Proposer must conduct post-implementation acceptance tests and provide results.

2.13.1.43 Proposer must support the JCC to review/approve post-implementation acceptance test results.

2.13.1.44 Proposer must support the JCC to provide Maintenance Production Release Plans and schedules.

2.13.1.45 Proposer must participate in scheduling releases (e.g. upgrades and/or ongoing configuration changes).

2.13.1.46 Proposer must support the JCC to review configuration management results.

2.13.1.47 Proposer must recommend and document processes and procedures associated with change requests.

2.13.1.48 Proposer must provide ongoing end-user training for improving "how-to-use" skills related to the system.

2.13.1.49 Proposer must assess the effectiveness of the business process and organizational change management activities.

2.13.1.50 Proposer must provide Roadmap for the Deployment of subsequent initiatives.

2.13.1.51 Proposer must document Successful Deployment.

2.13.1.52 Proposer must perform Phase Closeout including system tuning activities, assessment of knowledge transfer tasks, transfer project artifacts to project repository, lessons learned document, update Business Solution, and transition support to COE and/or Shared Services organization.

2.13.1.53 Proposer must warranty Services will be provided pursuant to final acceptance as stipulated in the contract.

2.13.1.54 Proposer must provide and perform orderly handover of processes and procedures for tracking and reporting the status of all warranty services.

2.13 **Final Acceptance**

Prior to the end of the Warranty support period, the Contractor and the JCC will jointly assess the status of the implementation and review the status of outstanding issues and adherence to service level requirements. The purpose of the assessment will be to provide written verification that the delivered system operates as expected post-implementation. Final Acceptance will be granted at the end of the Warranty support period and when 100% of the Level 1 and 2 issues have been resolved and all Successful Business Outcomes are achieved and documented.

In addition to documenting zero-P1/P2 defects, Final Acceptance shall be determined by obtaining the Successful Business Outcomes as defined in RFP **Appendix D – Cost Proposal Section 1**.

2.13.1 **Issue Priority Levels**

Four levels of priority will be assigned to issues identified during the post-implementation Warranty and support period. The Proposer is responsible for the application availability and usability, including reports, interfaces, and development for the Phoenix system prior to the end of the go-live and Support Warranty period. The levels of priority include:

Priority	Description
P1	Critical - A Priority Level 1 Incident is generated if: • A critical component of an application or the entire application has stopped or is so severely impacted that the application or component cannot reasonably continue to operate and there is no Workaround available; • A critical business process has stopped or is so severely impacted that the business process cannot reasonably continue to occur and there is no Workaround; or • Data is corrupted, or data integrity issues related to security/confidentiality pose a risk to the JCC • There has been any evidence of Security Intrusion

Priority	Description
	Examples: • Major JCC Application Software or connectivity Problem for Phoenix Systems • Severe Problem during critical periods (e.g., month-end processing, payroll processing) • Security violation (e.g., denial of service, widespread virus, etc.)
P2	High - A Priority Level 2 Incident is generated if: • A critical component of the application is unavailable or will not work or the entire application has stopped or is so severely impacted that the application or component cannot reasonably continue to operate, but a Workaround is available; • A critical business process is unavailable or is so severely impacted that the business process cannot reasonably continue to occur, but a Workaround is available • A non-critical component of the application is unavailable, will not work or is not operating as expected and there is no Workaround available; • A non-critical business process is unavailable or is not occurring as expected and there is no Workaround available Examples: • Business functions are severely degraded, multiple End-Users (less than 25) are impacted or a key JCC application component is affected. • Batch processing issues for mission-critical applications. • Financial reporting issues; reports not tying to the general ledger.
P3	Medium - A Priority Level 3 Incident is generated if a non-critical component of the application is unavailable, will not work or is not operating as expected and there is a Workaround available; or a non-critical business process is unavailable or is not occurring as expected and a Workaround is available. Examples: • Workstation Problem (e.g., hardware, software). • Degraded performance on a workstation. • Single End-User affected accessing critical application functions.
P4	Low- A priority 4 Incident reflects an issue with an Application or Procedure where an easily obtainable workaround is available, or a repair is possible. The ability to perform normal business functionality is only slightly impacted. An irritation. Examples: • Customer may have resolved the issue, but the Incident is captured in order to further Problem Management and Root Cause Analysis

Priority	Description
	• Slower than usual response times • Bugs or support issues that don't impact product usability.

3   Phoenix Functional Requirements

This section identifies Business Functional Requirements associated with the Phoenix Cloud Services (Phoenix) Implementation Project:

- General Functional Requirements that apply to all applications.

- Finance (FI) including General Ledger, Accounts Payable and Accounts Receivable, Funds Management, Grants Management (Grantee) and Procurement (MM-PUR)

- Human Capital Management (HCM) including Personnel Administration, Organizational Management, Benefits Administration, Time Management, Payroll, and Employee and Manager Self-Services

- Business Warehouse (BW)

- Fiori Applications

- Custom Objects

- Reports

- Workflow

3.1   General Functional

It is expected that the migrated or upgraded system in either Scenario (SoH or S/4HANA) will continue to meet all functional requirements that are currently fulfilled by the SAP ECC 6.0 ERP system. That is, the technical migration to Suite on HANA or system migration to S/4HANA is expected to be performed to produce as little change as possible to users of the system. The Business Process Master List (BPML) is also provided, RFP **Exhibit 5 – BPML List** for vendors' review to ascertain the overall functional scope of the Phoenix Program. A brief description of each of the process areas is provided below.

Responses to Phoenix Functional Requirements that must be satisfied for all Functional areas during the migration of Phoenix Service Area Components, either by the JCC or the Proposer are to be made to **3.0 Phoenix Functional RTM Tab 3.1 General**.

3.1.1   Proposer should prepare a Migration Assessment Document Template for review and approval by the JCC. The Migration Assessment Document will be used for identifying and tracking all remediation activities (e.g. Simplification, Custom Code Remediation, Report Modifications, Configuration) related to pre and post migration requirements.

3.1.2   Proposer should prepare a Migration Test Plan for review and approval by the JCC as an accompanying document to the Migration Assessment Document. The Migration Test Plan provides for the testing strategy; development of effective test cases; and an audit, validation and signoff strategy for all migration remediation activities identified in the Migration Assessment Document.

3.1.3   Proposer should support the JCC to provide a P1-P4 Impact classification for identifying impact, criticality and highest priority items for inclusion into the Migration Assessment Document.

3.1.4   Proposer should provide a matrix identifying which Vendor, 3PP and JCC migration participants are Responsible, Accountable, Consulted, Informed; for inclusion into the Migration Assessment Document.

3.1.5   Proposer should provide a responsibility matrix for which migration participants are Accountability, Responsibility, Consulted, Informed.

3.1.6   Proposer must apply all SAP required -Notes and perform recommended migration, simplification and custom code analysis for the target environment and, as needed, update the Migration Assessment and Migration Test Plan.

3.1.7   Proposer should run Simplification list for SAP S/4HANA Version XXXX (Latest version), prepare impact analysis and perform remediation.

3.1.8   Proposer must run Upgrade Precheck, Apply SAP Support -Notes as needed and perform remediation.

3.1.9   Proposer should validate and remediate the in-scope executable transactions (T-Codes) in RFP **Exhibit 14** - ST03N Transaction Profile July.xlsx

3.1.10   Proposer must analyze and document all required reports must be identified, evaluated, and remediated as needed. Refer to RFP **Exhibit 5** - Custom Object Workbook.xlsx for types of reports in use, custom objects, and in-scope executable transactions.

3.1.11   Proposer should ensure that the upgraded SAP S/4HANA system works for one Company code and one currency (USD).

Note : Fixed Asset management and Profit Center Accounting are not used in the system

3.1.12   Proposer should support multiple Business Areas including, but not limited to, financial reporting by BA as well as consolidated financial reporting.

3.1.13   Proposer should execute SAP recommended reconciliation programs and consistency checks and ensure issues are remediated.

3.1.14   Proposer must remediate the list of Custom Programs in RFP **Exhibit 5** - Custom Object Workbook.xlsx

3.1.15   Proposer must ensure that, post upgrade, all sub-ledgers must be reconciled to GL.

3.1.16   Proposer must remediate standard workflows (enhanced). Areas in use:

MM Purchase Requisition

MM Purchase Order

AP Invoice Approval

FM-BCS Budget Transfer Approval

3.1.17   Proposer should create and provide training documents for the new SAP S/4HANA Transactions.

3.1.18   Proposer should conduct training for the super users for the new SAP S/4HANA Transactions.

3.2   **Finance (FICO)**

Phoenix FICO was first implemented in 2002 to a pilot court and was subsequently improved and rolled out to all 58 Trial Courts by 2010, when deployment was completed at the final court, Los

Angeles Superior Court. The FICO Functional areas that are in scope include General Ledger (classic GL with Special Purpose Ledger (SPL)), Accounts Payable and Accounts Receivable, Funds Management Budget Control System, Grants Management (Grantee) and Procurement (MM-PUR), including all related inbound and outbound interfaces. Cash Management is performed using mostly core General Ledger functionality with standard and custom reporting. Public Sector Collections and Disbursement (PSCD) is also in use to perform Trust Accounting functions and reconciliation with Trial Court Case Management Systems (CMS) at three (3) Trial Courts.

Responses to Phoenix Functional Requirements that must be satisfied during the migration of Phoenix Service Area Components, either by the JCC or the Proposer are to be made to **3.0 Phoenix Functional RTM Tab 3.2 FICO**.

3.2.1   Proposer must validate and remediate Chart of accounts, GL accounts , Cost elements and commitment items related Fund Management master data and derivation.

3.2.2   Proposer must ensure that the upgraded system supports 12+1 periods after upgrade.

Note : Period 13 used to post special year end closing entries.

3.2.3   Proposer must evaluate and remediate Special Purpose Ledger.

Note : SPL is being used for Financial reporting. Customization and Custom enhancement is existing to transform data when GL updates Special Purpose Ledger

3.2.4   Proposer should implement program (SAP OSS) to delete parked documents per SAP recommendation. Vendor should prepare strategy to back up and restore the parked documents if required.

3.2.5   Proposer must ensure that all GL balances must match before and after upgrade.

3.2.6   Proposer should validate Park and Post process of accounting documents after upgrade.

3.2.7   Proposer must review and remediate FI - GL Validation rules.

3.2.8   Proposer must review and remediate FI - GL Substitution rules.

3.2.9   Proposer should activate New GL functionality in the system and ensure all financial processes work accurately. Strategy must be provided for activation of New GL and document splitting.

3.2.10   Proposer must ensure that all Vendor Open items must match before and after upgrade.

3.2.11   Proposer must ensure that all Vendors are converted to Business partners using CVI process. A custom program is used to upload multiple vendors at a time. The list of Custom Programs in RFP **Exhibit 5** - Custom Object Workbook.

3.2.12   Proposer must ensure that all Customer Open items must match before and after upgrade.

3.2.13   Proposer should ensure that all Customers are converted to Business partners using CVI process.

3.2.14   Proposer should validate and test Controlling master data and processes. Master Data in use:

Cost Center Hierarchy

Internal Order (Statistical)

Note: assessment and distribution in limited use; no labor distribution from CATS nor activity allocation.

3.2.15 Proposer must validate FM integration and validate and test master data and budget execution process in Funds Management Budget Control System. Master Data in use:

Fund (Multi-Year Budget relevance)

Funds Center Hierarchy

Functional Area

Commitment Item

Funded Program

Derivation Strategies (FM-BCS and AVC)

Note: Budgeting is done at the Fund level. Budget fund master data has valid from and to date. This functionality must work after upgrade. Availability Control is active.

3.2.16 Proposer should validate and test Grant management functionality for Budget management.

Note: Standard Grant Management functionality and Custom upload programs are used along with a funded program (FM) for Budget Management.

3.2.17 Proposer must test and validate that cases created in the PSCD (Public Sector Collection and Disbursement) module work after the upgrade.

Note: Business Partners are not created for those Courts that are not using the PSCD module. For these courts, only GL entries are recorded and the Case No is recorded in the assignment field of the associated documents.

3.2.18 Proposer must validate and Remediate customized Cash Management code and processes. Cash management is a customized combination of SAP GL and SAP CM, heavily reliant on a custom daily cash report and process integrated with Bank of America processes, as described/listed in RFP **Exhibit 4** - BPML List.xlsx and RFP **Exhibit 5** - Custom Object Workbook.xlsx (BPML and custom code).

3.2.19 Proposer should test and validate WBS master data and reporting after upgrade.

Note: no milestone reporting or other Project Systems planning or settlement is in use.

3.2.20 Proposer must validate and Remediate Procurement process as needed.

Purchase Requisition Processing,

Purchase Order Processing,

Goods Receipt,

Logistics Invoice Verification,

Reporting, etc.

Note: All purchases are Non-Stock items and no material master is managed. See RFP **Exhibit 5** - Custom Object Workbook.xlsx for in-scope transactions and related custom code.

3.2.21 Proposer should validate Asset Master.

Note: Asset Master is used to keep inventory only. No integration with Procurement nor FI.

3.3   Human Capital Management (HCM)

Phoenix HCM was first implemented in 2006 to a pilot group of Trial Courts and is being subsequently improved and rolled out to Trial Courts as requested, subject to JCC and Trial Court resource availability. HCM services are now deployed to 17 Trial Courts with another 8 Court requests being considered for future deployment. New court deployment activities will be paused during system migration and resumed once the Project is complete. HCM functional areas in scope include Organizational Management, Personnel Administration, Benefit Administration, Time Management, and Payroll, including all related inbound and outbound interfaces. Employee Services (ES) and Manager Services (MS) functions are deployed as Fiori apps, as described in section 7.4 Fiori Applications below. Some Web Dynpro applications still exist, mainly to support MS reporting. These may be remediated or replaced by standard Fiori apps through the system migration process.

Responses to Phoenix Functional Requirements that must be satisfied during the migration of Phoenix Service Area Components, either by the JCC or the Proposer are to be made to **3.0 Phoenix Functional RTM Tab 3.3 HCM**.

3.3.1   Proposer must evaluate and ensure all the custom IMG (zJCC _IMG) custom programs and custom info types triggered during the process and make sure they are compatible with SAP S/4HANA Upgrade. Please reference the List of Custom programs [objects, transactions] in RFP **Exhibit 5** - Custom Object Workbook.xlsx.

3.3.2   Proposer must ensure that Business Partner (BP) functionality is activated as part of SAP S/4HANA upgrade and convert existing Employee customers/vendors to BPs. Vendor shall test and remediate any impact of Business Partner to security and integration with reporting and third-party systems.

3.3.3   Proposer must evaluate Personnel Administration processes and include them in remediation during system migration. This includes master data, personal actions, dynamic actions, and custom design for ASA/MSA process need to be remediated and validated. Personnel Administration processes include but are not limited to:

PA-Direct Hire

PA-LOA with Pay

PA-LOA without Pay - Inactive

PA-LOA without Pay - Active (FMLA)

PA-Workers Compensation Processing

PA-Transfer

PA-Organizational Change

PA-Promotion/Demotion

PA-Reclassification/Retitle

PA-Rehire

PA-Retired Annuitant

PA-Retirement

PA-Termination

PA-Return from LOA

PA-Change in Pay

PA-Display Master Data

PA-Maintain Master Data

3.3.4   Proposer must analyze Ad-Hoc Reporting for custom tables and info types. These reports should be included in testing cycles during upgrade. Reference list of custom reports in Custom Reports in RFP **Exhibit 5** - Custom Object Workbook.xlsx

3.3.5   Proposer must evaluate Organizational Management Structure, Job, Position processes, especially as pertain to customer Info types and include them in remediation during system migration. There are some custom info types for Org objects and these have to be analyzed during technical upgrade and tested end to end during the integration testing cycle. Org Objects have custom actions in current process and Vendor should evaluate and test all Objects end to end.

Organization management processes include but are not limited to:

OM-Create Jobs

OM-Maintain Jobs

OM-Create Org unit

OM-Maintain Org unit

OM-Create Position

OM-Maintain Position

OM-Position Vacancy Maintenance

OM-Create and Maintain Pay Policy

OM-Reports

3.3.6   Proposer must test the downstream systems for any impact due to changes in custom Organization Management objects. Vendors should evaluate custom posting rules in PPMOD and test GL posting end to end with to Finance Integrations.

3.3.7   Proposer must evaluate every IMG node effected by S/4HANA Upgrade during Technical objects analysis. JCC Business requirements are configured using standard SAP Benefits Administration and enhancement via Custom IMG (zJCC_IMG) for the Benefits Module. All the Benefits processes listed below are in scope for analysis for SAP S/4HANA Upgrade. Vendor must test each business process for every judicial Court from Enrollment to Benefit Vendor payment process including Reconciliation:

Benefits processes in scope include but are not limited to:

BN- New Hire Enrollment (Post Hire Action)

BN-Open Enrollment

BN-Life Events Admin (HR Enrollment) &(ESS Enrollment)

BN-Benefit Plan Participation Changes/Terminations

BN-Retirement Processing

BN-Judges Retirement System

BN-401/457 Processing

BN-457 CalPERS

BN- Retirement Reconciliation

BN-Administration Reports

BN-Ad-Hoc Reports

BN-Benefits Vendor Attachment

BN-Retirement Correction Memo Refunds & collections

BN-Master Data Maintenance for PEPRA to Classic Retirement (Reciprocity)

3.3.8   Proposer must evaluate all custom operations and custom functionality in the Time Management Module. They should remediate and test all Custom enhancements within time eval and as well as with master data updates for time infotypes to accommodate business rules at JCC. S/4HANA upgrade should not impact standard functionality and all custom developments should be tested during the upgrade to ensure custom functionality is not lost. Evaluate all custom functions and Time schemas to ensure the upgrade is successful with respect to tech objects and Time Evaluation from functional standpoint.

Time Management processes in scope include but are not limited to:

TM-Time Collection /Approval

TM-Time Transfer

TM-Time Evaluation

TM-Time Corrections

TM-Time Payouts

TM-Quota Corrections

TM-Maintain Substitutions

TM-Maintain FMLA

TM-Time Validations

TM-Time Approval

TM-Maintain Time Quota

TM-Donated Leave

TM-Reporting

3.3.9   Proposer must remediate and test custom payroll processes in Custom IMG as a part of S/4HANA upgrade. Payroll process include some custom IMG(zJCC_IMG) processes to accommodate Trial Court business requirements. Vendor should

evaluate every custom function, operation called within each payroll schema to test end to end payroll processing. Multiple custom enhancements were in place to accommodate payroll business processing with in SAP . Vendors must evaluate all custom programs using ABAP list produced during SPAU and SPDD analysis to arrive at the impact of HANA Upgrade and test each enhancement individually along with String testing. Payroll processes in scope include but are not limited to:

PY-Commission to Judge Promotion

PY-Deceased Employee Process

PY-Deductions Processing

PY-Earnings Processing

PY-Garnishment Administration, Processing & refunds

PY-Gross to Net Payroll (Manual) & (Process Model)

PY-Payroll Posting to Accounting & TPR

PY-Interface Demographics

PY-IT0165 Deduction Limits

PY-Claims Processing

PY-Payroll Reporting for Courts

PY-Off-Cycle Workbench

PY-Tax Payments and Reporting

PY-Payroll Reconciliation

PY-Benefit Reconciliation

PY-Garnishment vendor attachment reconciliation and processing

PY-W-2 Reconciliation and Reporting

Other customizations in scope include but are not limited to:

PPMOD, ER Cost Distribution, Benefit TPR processing and attachments, wage type permissibility, additional custom processing classes and cumulations, custom payroll operations and functions, customized processing class 85, customization to ACH functionality, enhancements to Payroll Process Models, creation of payment distribution to "revolving fund", and enhanced payment posting to include check number assignment.

3.3.10   Proposer must perform Payroll De-clustering as part of SAP S/4HANA upgrade to enable better reporting and new Features on SAP S/4HANA.

3.3.11   Proposer must remediate and test each of the process within ESS & MSS applications, as well as, their integration with other SAP modules. ESS & MSS applications are customized using UI5 and Fiori with ODATA enhancements. Several WebDynpro developments also exist. ESS/MSS tile business processes in scope but not limited to:

Employee Services:

My Leave Request

My Timesheet

My Team Calendar

My Paystubs

My Personal Info

Open Enrollment

Manager Services:

General Info

Approve Leave Request

Approve Timesheets

My Team Calendar

My Substitutions

Reporting

3.4   **Business Warehouse (BW)**

SAP Business Warehouse (BW) is implemented to meet Financial and Procurement reporting needs. After system migration, a BW on HANA (not BW/4HANA) solution is expected. Functional areas currently supported by the BW solution include:

- Finance – General Ledger (classic), including Special Purpose Ledger

- Finance – Funds Management

- Finance - PSCD

- MM – Procurement

Responses to Phoenix Functional Requirements that must be satisfied during the migration of Phoenix Service Area Components, either by the JCC or the Proposer are to be made to **3.0 Phoenix Functional RTM Tab 3.4 BW**.

3.4.1   Proposer should ensure that future state functionality for BW on HANA matches the existing as-is BW Functionality.

3.4.2   Proposer must ensure that solution extracts data from below list of S/4HANA modules:

1. Funds Management

2. Finance Special Ledger

3. Procurement

4. Public Sector Collections and Disbursement

3.4.3   Proposer should ensure that solution provides Ad-hoc reporting capabilities that can be customized and run by date ranges and other filter criteria.

3.4.4   Proposer must ensure that solution provides historical reporting capabilities with graphic charts (for example: Budget vs Actual, Balance Sheet comparing prior periods, Total Revenue Card comparing years etc.)

3.4.5   Proposer should ensure that solution provides Dashboard Reporting capabilities with Single Sign On (SSO) that should let End Users to access BW reports in enterprise web URL categorized by different business areas such as:

        1. Finance Reports

        2. Purchasing Reports

        3. Trust Reports

3.4.6   Proposer should ensure that solution provides a method for generating reports as PDF or Excel files without impacting the performance.

3.4.7   Proposer must ensure that solution extracts data from S/4HANA using below extractors via ODP (Operational Data Provisioning):

        1. 0PU_IS_PS_31

        2. 0PU_IS_PS_32

        3. 0PU_IS_PS_33

        4. 0PU_IS_PS_43

        Additional customization to above extractors might be needed (via append structure or CMOD)

3.4.8   Proposer must ensure that solution continues to extract data from S/4HANA using below extractors via ODP (Operational Data Provisioning):

        1. 2LIS_02_HDR

        2. 2LIS_02_ITM

        3. 2LIS_02_SCL

        4. 2LIS_02_SGR

        5. 2LIS_02_ACC

        6. 2LIS_06_INV

        7. 2LIS_03_BF (Only quantity on Goods Receipt is derived)

        8. ZEKPO_FLAGS (Custom Extractor based on EKPO table)

        Additional customization to above extractors might be needed (via append structure or CMOD)

3.4.9   Proposer must ensure that solution extracts data from S/4HANA using custom extractors via ODP (Operational Data Provisioning) or CDS Views based on below tables (Need separate extractors for each table):

        1. DFKKOPBW

        2. PAYR

        3. DFKKCR

        Additional customization to above extractors might be needed (via append structure or CMOD)

3.4.10   Proposer must ensure that solution extracts data from S/4HANA using custom extractors via ODP (Operational Data Provisioning) at Totals and Line Item level:

        (Current Ex: 3FI_SL_ZZ_SI, 3FI_SL_ZZ_TT)

3.4.11   Proposer should ensure that Report performance remains at, at least, current levels as measured by BW statistics, allowing for reasonable tolerance of approximately +5 seconds per report run. Vendor must consider to incorporate HANA optimization in to

extractor customization logic with minimal fetch from base tables using SQL statements to ensure acceptable performance during data extraction in to BW.

3.4.12   Proposer should ensure that solution provides summarized reporting by hierarchical grouping and provide drill-downs by specific data points (i.e. by courts, by customer, by costs, etc.).

3.4.13   Proposer should provide solution delivering same flexibility and operational capability as is existing BW environment (maintain schedule or implement near real-time data migration (<10 min frequency)).

3.4.14   Proposer must perform reporting consolidation and Rationalization activity during initial project phase (Current Report Count = 60+).

3.4.15   Proposer should ensure that solution loads data into Advanced Data Store Objects (ADSO) as raw data from S/4HANA using ODP.

3.4.16   Proposer should consider the Reporting Solution built on HANA Calculation view for all data lookups and calculated/Restricted columns for ease of maintenance and support for faster data reloads.

3.4.17   Proposer should ensure that solution retains data in BW on HANA dated from 2002 till current. This is for Historical Reporting.

3.4.18   Proposer should ensure that BW on HANA system falls under ChaRM process for any changes between environments or transporting objects between environments.

3.4.19   Proposer should ensure that solution enables statistics on BW on HANA environment to track on statistical values via Dashboard reporting.

3.4.20   Proposer must ensure that solution continues to enable exporting flat files from BW on HANA on a schedule time for external users.

Destination Folder: --AL11

Data feeds: --1)Budget/Actual

        --2)Special Ledger

3.4.21   Proposer must ensure that solution retains existing reports as-is or replicate/Migrate in to new BW on HANA system (Find BW Reports tab for list of reports).

3.4.22   Proposer must ensure that solution retains security roles on Reports categorized by different areas like:

1. Financial Analyst

    a. Internal

    b. External

2. Purchasing

3. Common Utility Roles (General access to reporting tools and BW system)

3.4.23   Proposer must ensure that solution retains object level security restricting data by:

1. Business Area

2. Fund Center

3. Plant

3.5 **Fiori Applications**

All users of the Phoenix SAP System access the system through the Fiori Launchpad. A single tile launches the SAP GUI for backend ERP transaction processing, and a variety of Fiori applications have been enhanced and deployed to the Launchpad for the performance of ES, MS, Procurement and Financial transaction processing. After system migration, the solution must continue to support all live tiles and their respective apps, including integration with the backend application and consideration of appropriate application security. Fiori apps deployed to date include:

3.5.1 **Employee Services:**

- My Leave Request

- My Timesheet

- My Team Calendar

- My Paystubs

- My Personal Info

- Open Enrollment

3.5.2 **Manager Services:**

- General Info

- Approve Leave Request

- Approve Timesheets

- My Team Calendar

- My Substitutions

- Reporting

3.5.3 **FICO**

- Approve Documents
- Line Item Details
- Display Documents

3.5.4 **MM-Procurement**

- Track Purchase Order
- Create Purchase Requisition
- Create Purchase Order
- Approve Purchase Requisition

- Approve Purchase Order

3.5.5 Custom Objects

The Phoenix Program has been implemented with a *moderate* level of customization in the areas of Reporting, Interfaces, Conversions, Enhancements, Forms, and Workflows. The vendor will be expected to:

- Review items in RFP **Exhibit** 5 - Custom Object Workbook, include in MTP and remediate as required review

- Review RFP **Exhibit** 12 - Readiness Check Baseline, include relevant items in MTP and remediate as required

3.5.6 Reports

The users of the Phoenix SAP System rely on a variety of standard and custom reports that make up the entire Phoenix Program reporting solution. The vendor will be expected to Review RFP **Exhibit 15 – List of Reports**, as well as RFP **Exhibit** 4 - Business Process Master List and Executable Transactions list include relevant items in MTP and remediate as required.

All current reporting tools must continue to provide usable reports to business users:

- ABAP reports

- Report Writer/Painter reports

- Ad hoc Query queries and reports

- PA Ad hoc Query queries and reports

- Query Manager queries and reports

- Business Warehouse queries and reports

3.6 Workflow

Workflow is utilized, and must continue to perform after system migration, in FICO and HCM functional areas. Standard workflow is used with a moderate level of enhancement. Processes supported by Workflow include:

- Purchase Requisition Approval
- Purchase Order Approval
- Accounts Payable Posting
- Budget Change Approval

4   Technical Landscape Requirements

This section identifies System Technical Requirements associated with the Phoenix Cloud Services (Phoenix) Implementation Project:

- Current (As-Is) Phoenix ECC Landscape

- JCC Licensing Requirements for Phoenix

- Migration Requirements

4.1   Current Phoenix Landscape

4.1.1   As-Is Requirements

Responses for **Section** 4.1.1 are to be made to 4.0 Phoenix Technical RTM Tab 4.1.1 As-Is.

4.1.1.1   Proposer must provide tools to migrate the on-premise SAP workloads (including DB) VMs running on RHEL 6 to Cloud VMs running on RHEL 8.

Note: There are restrictions on upload speeds max up to 20 Mbps and business downtime of maximum 48 hours

4.1.1.2   Proposer should validate and support Oracle Enterprise DB 12C supportability in cloud.

Note: Oracle will support only Oracle Linux for cloud Oracle DB operations

4.1.1.3   Proposer must perform a detail HANA sizing exercise to finalize the HANA DB hosting requirements, below are the initial assessment sizes per JCC:

SAP HANA

1. ECC:557 GB

2. BW: 173 GB

3. Solution Manager: 192 GB

4. BSI:2GB

Total HANA License: 1 TB

4.1.1.4   Proposer should provide migration support for the current ECC Train environment :

Train DB RHEL-Linux 2*32/320GB

Train CI RHEL-Linux 2*16/20GB

4.1.1.5   Proposer must provide migration support for the current ECC DEV environment:

Dev DB-RHEL-Linux 4*32/620GB

Dev CI-RHEL-Linux 2*32/20GB

4.1.1.6   Proposer must provide migration support for the current ECC SBX environment :

Sandbox DB RHEL-Linux 4*32/620GB

Sandbox CI RHEL-Linux 2*32/20GB

4.1.1.7   Proposer must conduct cloud migration workshops not limited to but including the below items

1) Risks associated to move to cloud

2) Support changes for cloud computing

3) Evaluate cloud options and build a cloud migration strategy

4) Cost analysis of top cloud vendors

5) Potential cost savings and projected ROI date

6) Identify and conclude the cloud migration tools for JCC cloud migration

4.1.1.8   Proposer should provide migration support for the current EP Stage environment Stage RHEL-Linux 8*64/120GB.

4.1.1.9   Proposer must layout the cloud infrastructure details based on the sizing exercise from TR0016.-The details are not limited to but should include:

1) Number of VMs

2) CPU cores, Memory and Storage sizes for each VM

3) Backup and restore sizing

4) HA and DR

4.1.1.10   Proposer should provide migration support for the current EP Train environment Train RHEL-Linux 2*32/120GB

4.1.1.11   Proposer must ensure that the migration tools are SAP approved for cloud migration of current SAP stack which includes SAP, RHEL and oracle software versions:

GCP:

1. Migrate to compute engine for VM migrations include DB

AWS:

1. Server Migration Service (AWS SMS)

2. 1656099 - SAP Applications on AWS: Supported DB/OS and AWS EC2 products

Azure:

1. Azure Site Recovery

4.1.1.12   Proposer must provide migration support for the current EP SBX environment Sandbox RHEL-Linux 2*32/120GB.

4.1.1.13   Proposer must provide migration support for the current BW production environment :

Prod DB-RHEL-Linux 2*32/370GB

Prod CI-RHEL-Linux 2*16/20GB

4.1.1.14   Proposer should provide migration support for the current BW Stage environment:

Stage DB RHEL-Linux 2*32/370GB

Stage CI RHEL-Linux 2*16/20GB

4.1.1.15   Proposer must provide migration support for the current BW QA environment QA DB/CI RHEL-Linux 2*32/270GB.

4.1.1.16   Proposer must provide migration support for the current BW DEV environment Dev DB/CI RHEL-Linux 2*32/120GB.

4.1.1.17   Proposer must provide migration support for the current BW SBX environment Sandbox DB/CI RHEL-Linux 2*32/120GB.

4.1.1.18   Proposer must provide migration support for the current Solution Manager PROD environment PROD DB/CI RHEL-Linux 6*64/420GB.

4.1.1.19   Proposer should provide migration support for the current Solution Manager Stage environment Stage DB/CI RHEL-Linux 4*32/270GB.

4.1.1.20   Proposer must provide migration support for the current Solution Manager SBX environment SBX DB/CI RHEL-Linux 4*32/270GB.

4.1.1.21   Proposer must provide migration support for the current Uperform PROD environment :

Prod DB-Linux 2*32/120GB

Prod APP 1 Windows 2*8/20GB

Prod App 2 Windows 2*8/20GB

4.1.1.22   Proposer must provide migration support for the current Uperform QA environment:

QA DB-Linux 2*32/120GB

QA APP 1 Windows 2*8/20GB

4.1.1.23   Proposer must provide migration support for the current Uperform SBX environment:

Sandbox DB Linux 2*32/120GB

Sandbox APP 1 Windows 2*8/20GB

4.1.1.24   Proposer must provide migration support for the current BSI production environment RHEL-Linux 2*8/20GB.

4.1.1.25   Proposer should provide migration support for the current BSI Stage environment RHEL-Linux 2*8/20GB.

4.1.1.26   Proposer must provide migration support for the current BSI QA environment RHEL-Linux 2*8/20GB.

4.1.1.27   Proposer should provide migration support for the current BSI Train environment RHEL-Linux 2*8/20GB.

4.1.1.28   Proposer must provide migration support for the current BSI DEV environment RHEL-Linux 2*8/20GB.

4.1.1.29   Proposer must provide migration support for the current BSI SBX environment RHEL-Linux 2*8/20GB.

4.1.1.30   Proposer must provide migration support for the current • Storage Tiers provided by Data Center Vendor FAC required:

Platinum storage for production

Nickel storage for non-production

4.1.1.31   Proposer must provide migration support for the current • Current Storage Requirements of SAP Landscape:

Prod Platinum Storage : 2490 GB

Non-Prod Nickel Per environment: 6060 GB

Total Current Storage Requirement: 8550 GB (8.4 TB)

4.1.1.32   Proposer must provide migration support for the current • Storage Maintenance:

No performance issues

Increments of 25 GB for future growths

Upgrades: Data Center Vendor performed once in last 8 years

4.1.1.33   Proposer must provide migration support for the current • Backup Requirements: FAC required:

Production Copy has multiple(4) Storage snap shots

DR Site is replicated using Storage layer replication

Standard file systems using storage replication

Backup Strategy need to be aligned based on Cloud provider for multiple snapshots

4.1.1.34   Proposer must provide migration support for the current • NAS/NFS: 100GB:

NFS is used for SAP file systems like /usr/sap/trans and /sapmnt

Three Data centers use their own/separate-NFS file systems locally – FAC required

4.2   **JCC Licensing**

The JCC will have a "bring your own" approach to application software licenses. Proposers will not have to price licensing into their proposals. Licenses for operational software, e.g RHEL or Windows, will be secured by the cloud service provider and included in their proposed monthly operational costs as part of their standard compute-instance configuration.

4.2.1   **Phoenix Licensing Requirements**

Responses for **Section** 4.2.1 are to be made to 4.0 Phoenix Technical RTM Tab 4.2.1 Licenses.

4.2.1.1   Proposer must provide tools to migrate the on-premise SAP workloads (including DB) VMs running on RHEL 6 to Cloud VMs running on RHEL 8

Note: There are restrictions on upload speeds max up to 20 Mbps and business downtime of maximum 48 hours.

4.2.1.2   Proposer must validate and support Oracle Enterprise DB 12C supportability in cloud.

Note: Oracle will support only Oracle Linux for cloud Oracle DB operations

4.2.1.3   Proposer must perform a detail HANA sizing exercise to finalize the HANA DB hosting requirements, below are the initial assessment sizes per JCC:

SAP HANA

1. ECC:557 GB

2. BW: 173 GB

3. Solution Manager: 192 GB

4. BSI:2GB

Total HANA License: 1 TB

4.2.1.4   While informing the Proposer, JCC shall provide SAP Solution Manager License:

   1. Version: 7.2 SP 9

   2. EOL Support is Dec 2025

4.2.1.5   While informing the Proposer, JCC shall provide Ancile-Uperform:

   1. Version: Pending confirmation from Vendor *

4.2.1.6   While informing the Proposer, JCC shall provide Oracle 12c License to support Ancile Uperform under the JCC's Enterprise Oracle License (no interface with HANA):

   1. Version: 12c

   2. EOL Support is N/A

4.2.1.7   While informing the Proposer, JCC shall provide below DB software licenses:

   SAP HANA

       1. Version: 2.0 SP4

       2. End of Maintenance Support is April 2021

   SAP Adaptive Server Enterprise (ASE)

       1. Version: 16.0 SP03

       2. End of Maintenance Support is DEC 2025

4.2.1.8   Proposer must layout the cloud infrastructure details based on the sizing exercise from TR0016.-The details are not limited to but should include the below:

   1) Number of VMs

   2) CPU cores, Memory and Storage sizes for each VM

   3) Backup and restore sizing

   4) HA and DR

4.2.1.9   Proposer must ensure that the migration tools are SAP approved for cloud migration of current SAP stack which includes SAP, RHEL and oracle software versions:

   AWS:

   1. Server Migration Service (AWS SMS)

   2. 1656099 - SAP Applications on AWS: Supported DB/OS and AWS EC2 products

   Azure:

   1. Azure Site Recovery

4.3   **Migration**

Proposers should also refer to the Project Control and Management requirements that are captured in **Section** 2.0 – System Implementation Requirements.

4.3.1   Migration Requirements

Responses for **Section** 4.3.1 are to be made to 4.0 Phoenix Technical RTM Tab 4.3.1 Migration.

4.3.1.1   Proposer must implement the Phoenix Target environment on one of the JCC's Cloud Service Providers (AZ or AWS).

4.3.1.2   Proposer must implement and follow the JCC cloud security architecture framework (See RFP **Exhibit 16**).

4.3.1.3   Proposer must provide tools to migrate the on-premise SAP workloads (including DB) VMs running on RHEL 6 to Cloud VMs running on RHEL 8.

Note: There are restrictions on upload speeds max up to 20 Mbps and business downtime of maximum 48 hours

4.3.1.4   Proposer must validate and support Oracle Enterprise DB 12C supportability in cloud.

Note: Oracle will support only Oracle Linux for cloud Oracle DB operations

4.3.1.5   Proposer must perform a detail HANA sizing exercise to finalize the HANA DB hosting requirements, below are the initial assessment sizes per JCC:

SAP HANA

1. ECC:557 GB

2. BW: 173 GB

3. Solution Manager: 192 GB

4. BSI:2GB

Total HANA License: 1 TB

4.3.1.6   Proposer must perform a detail Non-HANA sizing exercise to finalize the HANA DB hosting requirements, below are the initial assessment sizes per JCC:

Non HANA DBs

1. SAP EP: 100 GB(SAP ASE)No Additional cost

2. Uperform: 120 GB(Oracle/MSSQL)

3. Solution Manager: 420 GB(SAP ASE-Optional) No additional cost

4.3.1.7   Proposer must recommend the size of HANA runtime license based on the outcome of HANA sizing exercise from line item TR011:

SAP HANA

1. ECC:557 GB

2. BW: 173 GB

3. Solution Manager: 192 GB(Optional)

4. BSI: 20GB(Pending Vendor Confirmation)

Total HANA License: 1 TB

4.3.1.8   Proposer shall be informed of the required SAP S/4 and HANA licenses based on the outcome of sizing exercise.

4.3.1.9   Proposer must conduct cloud migration workshops not limited to but including:

1) Risks associated to move to cloud

2) Support changes for cloud computing

3) Evaluate cloud options and build a cloud migration strategy

4) Cost analysis of top cloud vendors

5) Potential cost savings and projected ROI date

6) Identify and conclude the cloud migration tools for JCC cloud migration

4.3.1.10 Proposer must perform a detail sizing exercise for all SAP workloads (application servers) to determine the cloud computing requirements.

4.3.1.11 Proposer must layout the cloud infrastructure details based on the sizing exercise from TR0016.-The details are not limited to but should include:

1) Number of VMs

2) CPU cores, Memory and Storage sizes for each VM

3) Backup and restore sizing

4) HA and DR

4.3.1.12 Proposer must provide the migration tools for ASIS VM migration to public cloud, the tools should meet the downtime requirements for cloud migration. The restrictions like maximum allowable downtime and limited Mbps upload bandwidth must be considered.

4.3.1.13 Proposer must ensure that the migration tools are SAP approved for cloud migration of current SAP stack which includes SAP, RHEL and oracle software versions:

AWS:

1. Server Migration Service (AWS SMS)

2. 1656099 - SAP Applications on AWS: Supported DB/OS and AWS EC2 products

Azure:

1. Azure Site Recovery

4.3.1.14 Proposer must perform Initial/first replication at VM level and corresponding delta replications should be done till go-live.

4.3.1.15 Proposer must create Cloud compatible virtual machine snap/image and deploy the cloud VMs using the snap/image.

4.3.1.16 Proposer must execute VMs delta replications for DB VMs and Application VMs at regular intervals to reduce the overall downtime for initial AS-IS cloud migration.

4.3.1.17 Proposer must develop the replication plan for all the environments. Cloud VM replications should be scheduled keeping the JCC Data Center upload bandwidth, thorough POC and planning need.

4.3.1.18 Proposer must develop the replication plan/strategy for all the-JCC SAP environments documented under the section of current hosting assessment(except staging).

4.3.1.19 Proposer must perform a POC for cloud migration and properly define/propose the exact migration timelines for the rest of the SAP environments, considering the internet bandwidth limitations for cloud VM replications.

4.3.1.20 Proposer must execute and document backup and recovery process for all SAP applications including Application servers and DB servers.

4.3.1.21 Proposer must follow the current backup schedule policies for production and non-production environments.

4.3.1.22   Proposer must provide premium storage(SSD) for Critical SAP Production applications like SAP ECC, BW and EP.

4.3.1.23   Proposer must consider Tier 2/3 storage for all non-production systems which is cost effective.

4.3.1.24   Proposer must migrate SAP DEV environment to cloud and perform detail unit testing.

4.3.1.25   Proposer must migrate QA environment to cloud and perform detail regression/integration testing.

4.3.1.26   Proposer must migrate Training environment to cloud and perform detail validations per JCC training requirements.

4.3.1.27   Proposer must migrate Production environment to cloud and perform detail validations.

4.3.1.28   Proposer must the downtime of the production cloud migration should not exceed 48 hours.

4.3.1.29   Proposer must configure Virtual private cloud (VPC) to host JCC SAP workloads in cloud.

4.3.1.30   Proposer must provide and configure Internet gateway, customer gateway and router to access the VPC from JCC locations.

4.3.1.31   Proposer must provide and configure public subnet under VPC, the public subnet should host RDP instances for JCC VM access, NAT gateway for Network address translations.

4.3.1.32   Proposer must configure private subnet under VPC to host all the JCC SAP environments. For additional security, Production and Non-production SAP environments should have separate private subnets.

4.3.1.33   Proposer must configure and replicate existing-proxy configuration using Apache(for reverse proxy).

4.3.1.34   Proposer must provide & configure additional security layer for filtering internet/outside data to avoid fishing, hacking etc. Bluecoat is currently used for JCC a similar or same solution should be configured by the vendor.

4.3.1.35   Proposer must test and ensure the network setup is thoroughly tested and network KPIs are meet for latency and network throughput.

4.3.1.36   Proposer must support the existing SAP SSO to access all SAP environments.

4.3.1.37   Proposer must validate and test SAP enterprise portal as single point of entry for all end users.

4.3.1.38   Proposer must configure and provide reverse proxy, firewall and NATing per industry standards to allow only JCC specific traffic to the cloud SAP environments.

4.3.1.39   Proposer must configure and provide data encryption for all SAP systems at DB and Storage level as applicable.

For example: in case of HANA DB HANA DB replication for DATA and Log should be configured for all SAP instances running on HANA DB

4.3.1.40   Proposer must provide customer-controlled encryption across all SAP services.

4.3.1.41   Proposer must migrate to HANA DB:

1. SAP SUM-DMO(Data Migration Option) should be used to migrate to SAP HANA DB (Suite on HANA, BW on HANA, S/4HANA, B/4 HANA)

2. Complex Scenario and expected long downtimes with upgrade involved, the downtime should not exceed 24 hours

4.3.1.42 Proposer must provide and configure one of the below SAP HANA System High availability for S/4HANA and BW on HANA environments with below options:

1. HANA system replication (Additional Cost)

    a. HANA System replication without pre-load option(Cost effective)

    b. HANA Multitier System Replication with Auto Failover (Additional Cost)

2. Compute Engine/host automatic failover/restart (cost effective)

3. Storage Replication (Most of the Cloud vendors Default Feature)

4. SAP HANA AUTO host failover (cost effective compared to 1)

5. Host automatic restore/recovery with HANA Auto start of Services(Cost effective)

4.3.1.43 Proposer must provide and configure SAP HANA System DR-for S/4 HANA, BW on HANA and solution manager environments with below options:

1. HANA Multitier System Replication with Auto Failover (Additional Cost)

2. Storage Replication to a different zone (Default feature with all Cloud vendors)

4.3.1.44 Proposer must provide SAP HANA Backups using the below policies:

1. Prod: Daily Production backups with every 4 hours log backups

2. Prod: Weekly Full backups with daily incremental backups, log backups every 4 hours

3. Non-Prod: Weekly full backups with every 4 hours log backups

4. Storage snapshots Mandatory for HANA backups

5. Archive Log backup file systems are mandatory for staging active archive log backups

4.3.1.45 Proposer must provide SAP application HA for SAP Application Servers and central services. Vendor should present additional application HA options provided by cloud vendors in addition to the below:

1. Multiple application Servers for ECC, BW and EP

2. Deploy application servers across two zones

3. Use Storage replication for Critical application file systems

SAP Central services:

1. Deeply central Services cluster across two zones

2. Node1: Central Services Active & ERS Inactive

3. Node2: Central Service Inactive and ERS active

4.3.1.46 Proposer must configure HA/DR for SAP ASE DB used for Enterprise Portal. Additional options (not limited to below) based on the cloud vendor should be

thoroughly evaluated with JCC team before implementing for the JCC enterprise applications/Databases

1. Compute Engine/host automatic failover/restart (cost effective)

2. Compute Engine live migration in case of HW failure (Minimal disruption to Services)

3. VM/Storage Replication (Most of the Cloud vendors Default Feature)

4.3.1.47   Proposer must configure HA/DR for Non-SAP Application: Uperform and others

1. Compute Engine/host automatic failover/restart (cost effective)

2. Compute Engine live migration in case of HW failure (Minimal disruption to Services)

3. Storage Replication (Most of the Cloud vendors Default Feature)

4.3.1.48   Proposer must evaluate and adjust and implement below cloud sizing requirements for SAP BW on HANA:

SAP Application Servers:

Prod: 4*16/50GB

QA: 4*16/50GB

BW DEV-SBX: 4*32/100GB

SAP HANA:

Prod:-192/208/244/256 GB

QA:-192/208/244/256 GB

DEV-SBX:-192/208/244/256 GB (Multi-tenant)

4.3.1.49   Proposer must vendor must evaluate, adjust and implement below cloud sizing requirements for SAP S/4HANA:

SAP Application Servers:

Prod: 3 Servers(PAS, App1, App2) of each 4*32/50GB, 2 Servers(SCS cluster) of each 2*4/25GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

QA: 2 Servers(PAS, App1) of each 4*32/50GB, 2 Servers(SCS cluster) of each 2*4/25GB

TRN: 1-Servers(PAS+SCS) of 4*32/50GB

DEV: 1-Servers(PAS+SCS) of 4*32/50GB

SBX: 1-Servers(PAS+SCS) of 4*32/50GB

SAP HANA:

Prod: 1 Host 512/644 GB (Additional HA Node of same size Optional based on RPO/RTO)

QA: 1 Host 512/644 GB (Additional HA Node of same size Optional based on RPO/RTO)

Staging: No Target Staging environment and DR will be storage replication to a different Zone

TRN: 1 Host 256 GB

DEV-SBX: 1 Host 256 GB with 2 DBs(Multi-tenant) with Max 128 GB per Tenant

SBX: 11 Host 128 GB(Optional if co-exist with DEV)

4.3.1.50 Proposer must evaluate and adjust and implement below cloud sizing requirements for SAP Enterprise Portal:

SAP Application and DB Server:

Prod: 1 Central Server (DB & CI) of 8*64/128GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

QA:1 Central Server (DB & CI) of 8*64/128GB

TRN: 1 Central Server (DB & CI) of 4*32/128GB

DEV: 1 Central Server (DB & CI) of 4*32/128GB

SBX: 1 Central Server (DB & CI) of 4*32/128GB

4.3.1.51 Proposer must evaluate and adjust and implement below cloud sizing requirements for SAP Solution Manager (Non HANA):

SAP Application and DB Server:

Prod: 1 Central Server (DB & CI) of 8*64/512GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

DEV: 1 Central Server (DB & CI) of 4*32/512GB

4.3.1.52 Proposer must evaluate and adjust and implement below cloud sizing requirements:

SAP Application server:

Prod: 1 Central Server (DB & CI) of 4*32/512GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

DEV:-1 Central Server (DB & CI) of 2*16/512GB

SAP HANA:

Prod:-1 HANA Host 192/256 GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

DEV:-1 Hana Host 64/128 GB(Can be co-hosted with BW/ECC SBX HANA systems to reduce costs)

4.3.1.53 Proposer must evaluate and adjust and implement below cloud sizing requirements:

Application Servers:

Prod: 2 Servers of each 2*8/25GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

QA: 1 Server 2*8/25GB

SBX: 1 Server 2*8/25GB

DB Servers:

Prod: 2 Servers of each 2*32/120GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

QA: 2 Servers of each 2*32/120GB

SBX: 2 Servers of each 2*32/120GB

4.3.1.54   Proposer must evaluate and adjust and implement below cloud sizing requirements:

Servers:

Prod: 1 Servers of 2*8/20GB

Staging: No Target Staging environment and DR will be storage replication to a different Zone

QA:-Servers of 2*8/20GB

TRN:-Servers of 2*8/20GB (Optional: can co-exist with QA to save VM costs)

DEV-SBX:-Servers of 2*16/40GB

SBX:-Servers of 2*8/20GB(Optional: can co-exist with DEV to save VM costs)

4.3.1.55   Proposer must ensure the reduced data foot print for effective HANA DB licensing for SAP BW on HANA and SAP S/4HANA.

4.3.1.56   Proposer must develop and execute a detail house keeping plan to reduce the technical and transactional dataset of BW. Perform House keeping activities including:

1. Key Pre-requisite for any HANA Migration is data cleanup

2. BW Housekeeping should be considered for Technical tables to reduce row-store foot print and BW tables to reduce Column store/redundant foot print

3. SAP BASIS tables like, Job logs, Spools, old/processed TRFCs, dumps, IDOCs should be tackled before initiating the sizing exercise

4. SAP BW datasets like OLD PSA, PSA error logs, BW Stats data, empty partitions, old PC logs, App log data, cube compression. etc. before initiating sizing report

5. Periodic cleanup and table reorgs should be performed

4.3.1.57   Proposer must perform a detailed lessons learned work shop after each upgrade/migration cycle to ensure the defects resolutions are documented in the technical plan for next upgrade/migration cycle.

4.3.1.58   Proposer must ensure the compatibility of BW Source System to migrate to HANA, Vendor should Identify the OS, DB and SAP application minimum requirements for HANA migration.

4.3.1.59   Proposer must size the SUM-DMO HW resource requirements and propose the required Infra structure changes required for OSDB migration of BW on Oracle to BW on HANA. Vendor should consider or provision an additional DMO application server if required based on the final data foot print for upgrade/migration services.

4.3.1.60   Proposer must perform an in place upgrade and migration (to HANA DB) to avoid any Hostname changes and keep the same end user client/gui connection parameters. Upgrade to latest Hostagent and SPAM updates ahead of migration cycle.

4.3.1.61   Proposer must execute upgrade of SAP dependent software that is mandatory for SAP BWonOracle migration to BW on HANA

for example: SAP Hostagent, SPAM/saint tool, SAP kernel etc.

4.3.1.62   Proposer must implement BW ABAP analyzer and BW migration cockpit in all SAP BWonOracle systems.

4.3.1.63   Proposer must execute SAP BW Migration cockpit to identify all the gaps/issues on the source BW system including-but not limited to

- ABAP routines for non-optimized for HANA, transformation absolute in HANA, customer object analysis, inactive BW objects, etc.

4.3.1.64   Proposer must perform a detailed SAP BW on HANA sizing exercise keeping year-on-year data growth post housekeeping activities.

4.3.1.65   Proposer must vendor must install SAP HANA DB and ensure the SAP TDI standards are meet for all SAP BW environments.

4.3.1.66   Proposer must configure HANA DB -2.0 with latest Support pack for all BW landscape:

Prod: Primary Scale up Node with Tier1/platinum storage comprised with SSDs (with possible HA solution based on RTO/RPO)

Prod: HA and DR solution for HANA DB

QA: Primary scaleup node with Tier2 storage

Training: Primary scale-up node with Tier2 storage(Training HANA tenant DB can co-exist with QA or DEV HANA DBs)

DEV and SBX: Primary scale-up node with Tier2 storage, the HANA node should host both BW-DEV and BW-SBX multitenant DBs

4.3.1.67   Proposer must perform all stages of SUM-DMO activities to upgrade & migrate BWonOracle (NW 7.4) to BW on HANA(Latest NW stack).

4.3.1.68   Proposer must perform all stages of SUM-DMO activities for SBX, DEV, QA, Training and production.

4.3.1.69   Proposer must develop and execute a detail test plan based on business usage for BW reporting, data loads etc. including:

Unit testing in DEV

Integration/regression testing in QA

Interface testing(if applicable)

User acceptance testing in QA

4.3.1.70　Proposer must develop solution design and remediate DB interfaces that are not compatible with HANA DB post BW on HANA migration.

4.3.1.71　Proposer must develop and execute a Mock upgrade/migration to define SAP downtime requirements and validate the target production HW stack.

4.3.1.72　Proposer must develop a detail Knowledge Transfer plan involving elements that are required for post go live support.

4.3.1.73　Proposer must perform a detailed DVM analysis on the existing SAP ECC system and implement the DVM recommendations to reduce the overall data set before the S/4HANA conversion.

4.3.1.74　Proposer must employ standard SAP tool that will be used for performing-Custom code analysis.

4.3.1.75　Proposer must employ standard SAP tool that will be used for performing Simplification items.

4.3.1.76　Proposer must employ standard SAP tools that will be used for performing-Business process analysis and Add-on compatibility.

4.3.1.77　Proposer must employ standard SAP tools that will be used for performing-S/4HANA sizing.

4.3.1.78　Proposer must perform a detailed custom code analysis and group them by application areas. The custom code analysis results should be remediated per JCC requirements.

4.3.1.79　Proposer must execute simplification relevance & consistency checks and address all the items in yellow and red from the Simplification check report.

4.3.1.80　Proposer must execute Add-on compatibility and identify the list of incompatible SAP Add-ons. The non compatible Add-ons should be remediated with the corresponding vendors and solution should be implemented to retain the Add-on functionality.

4.3.1.81　Proposer must identify the list of Business Warehouse extractors that are not compatible (obsolete, not working, not-relevant).-Solutions or alternatives should be provided so that BW on HANA system can still extract and report on the relevant data.

4.3.1.82　Proposer must perform SAP ECC to SAP S/4HANA-conversion/migration using SUM DMO tool.

4.3.1.83　Proposer must perform Custom Code Adaption after executing SUM DMO tool.

4.3.1.84　Proposer must perform App specific post conversion activities after executing SUM DMO tool and adapt the modifications and enhancements using SPDD, SPAU and SPAU_ENH.

4.3.1.85　Proposer must execute the below SUM DMO roadmap steps for all SAP environments like SBX, DEV, QA, Training and Production:

HW build

Access management

Source ECC system readiness

House keeping

Upgrade Preparation

Migration Preparation

Upgrade with SUM-DMO (up-time)

Upgrade with SUM-DMO(down-time)

Post processing

Cutover and Transport Migration

Go live Readiness and sign-off

4.3.1.86 Proposer must resolve all ATC (abap test cockpit) simplification issues identified post conversion.

4.3.1.87 Proposer must identify and resolve all Security (PFCG) roles with obsolete transactions and modified transactions.

4.3.1.88 Proposer must perform all SAP application specific follow-on activities for application components like Finance, Human resources etc.

4.3.1.89 Proposer must develop a detailed technical plan for all SAP, non-SAP and Databases interfaced with SAP ECC. The interfaces documented should be thoroughly tested during the Unit testing, Integration and Regression testing.

4.3.1.90 Proposer must develop a comprehensive Unit testing, Integration testing, Regression testing, User acceptance testing plans and develop Test scripts for the same.

4.3.1.91 Proposer should develop training material for end user training.

4.3.1.92 Proposer must provide SOPs (standard operation procedures) for all phases of project execution and post go live support. The SOPs should include SAP HANA operations support and SAP S/4HANA, BW on HANA and other application support.

4.3.1.93 Proposer must develop a detailed Knowledge Transfer plan. All KT documents should be developed with one standard template approved by JCC.

4.3.1.94 Proposer must develop Knowledge Transfer(KT) documents for conducting KT sessions.

4.3.1.95 Proposer must conduct cloud migration workshops not limited to but including:

1) Risks associated to move to cloud

2) Support changes for cloud computing

3) Evaluate cloud options and build a cloud migration strategy

4) Cost analysis of top cloud vendors

5) Potential cost savings and projected ROI date

6) Identify and conclude the cloud migration tools for JCC cloud migration

5 Acronym and Initialism Guide and Glossary of Terms

5.1 Acronyms and Initialisms

Terms/Acronym	Description
AASR	Application Architecture and Security Review
AB	Assembly Bill
ACCMS	Appellate Courts Case Management System
ACD	Automated Call Director
ACH	Automatic Clearing House (CPS)
AD	Active Directory
ADA	American Disability Act
ADP	ADP LLC
AJTS	Assigned Judge(s) Tracking System
ALPA	Arbitrated Loop Physical Address
AMS	Acquisition Management Services
AOC	Administrative Office of The Courts
AP	Accounts Payable
AP	Access Point
ARS	Action Request System
ATS	Acceptance Test Specification
AWR	Automatic Workload Repository (Oracle)
BAP	Branch Accounting and Procurement
BC	Business Continuity
BCV	Business Continuance Volume
BI	Business Intelligence
BOE	Business Objects Enterprise
BOM	Bill of Materials
BRD	Business Requirements Document
BW	Business Warehouse (SAP)
CAB	Change Advisory Board
CAB/EC	Change Advisory Board/Emergency Changes
CAD	Computer Aided Design
CAFM	Computer Aided Facilities Management

CAPS	Contacts and Positions System
CARS	Court Accounting and Reporting System
CBM	Condition-based maintenance
CCMS	California Court Case Management System
CCPOR	California Courts Protective Order Registry
CCTC	California Court Technology Center
CF	ColdFusion
CFCC	Center for Families and Children and the Courts
CFI	Confidentiality Integrity Availability
CHRIS	Court Human Resource Information System – Phoenix HR/Payroll
CI	Configuration Item
CJN	California Judicial Network
CL	Configuration Librarian
CM	Configuration Manager
CMDB	Configuration Management Database
CMS	Case Management System
COD	Court Order Debt
COE	Center of Excellence
COS	Class of Service
COTS	Commercial Off-The-Shelf
CP	Capital Program
CPA	Changes Pending Approval
CPS	Comprehensive Payment Solution (SAP)
CPU	Central Processing Unit
CRC	Reporting Cyclic Redundancy Check
CTI	Category, Type, and Item
CTS	Change and Transport System
CUBS	Columbia Ultimate Business System (Sustain)
CWO	Construction Work Order
DaTS	Data Transport System (ISB Common Services)
DB	Database
DBA	Database Administrator

DBMS	Database Management System
DCR	Dept. of Corrections and Rehabilitation
DCS	Data Center / Cloud Operations Services
DCS - SDM	Data Center / Cloud Operations Services Service Delivery Manager
DCSS	Department of Child Support Services
DEV	Development environment
DHS	Definitive Hardware Store
DI	Data Integration (see ISB)
DKIM	DomainKeys Identified Mail
DMS	Document Management System
DMV	California Dept. of Motor Vehicles
DMZ	Demilitarized Zone
DNS	Domain Name System
DNS - SDM	Data Network Services Service Delivery Manager
DOF	California Department of Finance
DOJ	California Dept. of Justice
DR	Disaster Recovery
DRS - SDM	Desktop/Remote Server Services Service Delivery Manager (same as DTCLS-SDM)
DSL	Definitive Software Library
DSS	Dept. of Social Services
DTCLS - SDM	Desktop Computing and Local Server Services Service Delivery Manager (same as DRS-SDM)
DTS	Dept. of Technology Services
DVBE	Disabled Veterans Business Enterprise
EA	Enterprise Architecture
EAWG	Enterprise Architecture Working Group
ECC	Error Correcting Code
EFM	Electronic Filing Manager
EFSP	Electronic Filing Service Provider
EFT	Electronic Funds Transfer (CPS)
EFTP	Enterprise FTP

EMC	Enhanced Machine Controller
EMFT	Enterprise Managed File Transfer
EMS	Enterprise Message Server
EPSS	Electronic Performance Support System
EPVC	Enterprise Permanent Virtual Circuit
ERP	Enterprise Resource Planning (SAP, CAFM, Phoenix)
ETE	Enterprise Test Environment
ETMS	Enterprise Test Management Suite
FAQ	Frequently Asked Questions
FASB	Financial Accounting Standards Board
FEDRAMP	Federal Risk and Authorization Program
FLSA	Fair Labor Standards Act
FMR	Firewall Modification Request
FMS	Facility Management Specialist
FMU	Facilities Maintenance/Modification Unit
FOM	Facility Operations Manager
FTA	Failure to Appear
FTB	Franchise Tax Board
FTP	File Transfer Protocol
FTPS	File Transfer Protocol SSL
FY	Fiscal Year
GB	Gigabyte
GCS	General Collection Services (Sustain, V2 courts)
GL	General Ledger
GPL	General Public License
GUI	Graphical User Interface
HA	High Availability
HD	Help Desk (Service Desk)
HIPAA	Health Insurance Portability and Accountability Act of 1996
HIS	Host Integration Server
HREMS	Human Resources Enterprise Management System
HVAC	Heating, Ventilation and Air Conditioning
HW	Hardware

I/O	Inbound/Outbound
IaaS	Infrastructure as a Service
IC	Incident Commander
IDIQ	Indefinite delivery/indefinite quantity
IDS	Intrusion Detection System
IIS	Internet Information Services
IL	Incident Lead
IMACD	Install, Move, Add, Change, Dispose
IP	Internet Protocol
IPR	In Process Review
IS	Information Services
ISA	Information Security Assessment
ISB	Integration Services Backbone
ISD	Information Services Division (Now JCC IT or IT)
ISO	International Organization for Standardization
ISR	Information, Storage and Retrieval
ISSS	Integrated Service Support System
JCC IT	JCC Information Technology
IT	Information Technology
ITIL	Information Technology Infrastructure Library
ITS	Integration Test Specification Document
ITSM	IT Service Management
ITSO	Information Technology Services Office (Now IT)
IVR	Interactive Voice Response
IWR	Interactive Web Response
JA	Judicial Assignments
JAD	Joint Application Development
JARS	Judicial Automated Request System
JBE	Judicial Branch Entity
JBSIS	Judicial Branch Statistical Information System
Judicial Council	JCC
JCC	Judicial Council of California
JIS	Judicial Information System (Formerly known as CLIK)

JP	Justice Partners
JRE	Java Runtime Edition
KB	Knowledge Base
KBA	Knowledge Base Article
KT	Knowledge Transfer
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
LDOM	Logical Domain
LEA	Law Enforcement Agency
LFTP	command Line File Transfer Protocol
LPA	Leveraged Purchase Agreement
LSA	Layered Security Architecture
LT	Localization Test environment
LUN	Logical Unit Number
MAC	Move, Add, Change
MAPS	Mail and Print Services
MIB	Management Information Base
MOU	Memorandum of Understanding
MPLS	Multi Protocol Label Switching
MPM	Migration Project Manager
MPOE	Minimum Point of Entry
MTD	Month To Date
NAS	Network Attached Storage
NAT	Network Address Translation
NFS	Network File System
NIC	Network Interface Controller
NIDS	Network Intrusion Detection System
NISAS	Network Infrastructure Security and Architecture Services
NOC	Network Operations Center
NON - PROD	Non-Production environment
NSOC	Network and Security Operations Center
NVPN	Network-based VPN, SBC's product
O/C	Office of Communication (Now Communication)

OAM	Oracle Access Manager (SW)
OAS	Office of Administrative Services (Now Administrative Services)
OC	Orange County Court
OCCM	Office of Court Construction and Management
OCSC	Orange County Superior Court
OEM	Original Equipment Manufacturer
OES	Office of Emergency Services
OGC	Office of the General Counsel
OIF	Oracle Identity Federation (SW)
OIM	Oracle Identity Manager Suite (SW)
OLTP	On Line Transaction Processing
OM	Object Migration
OS	Operating System
P1 - P4	Priority 1 - Priority 4 (Remedy tickets)
PaaS	Platform as a Service
PAT	Product Acceptance Test
PCC	Project Cost Center
PCI DSS	The Payment Card Industry Data Security Standard
PGP	Pretty Good Privacy
PGP	Pretty Good Privacy (encryption)
PM	Project Manager
PMO	Program Management Office (SAIC)
POC	Point of Contact
POP	Point of Presence
PROD	Production environment
PU	Physical Unit
Q&A	Question and Answer
QA	Quality Assurance
QAP	Quality Assurance Plan
QOS	Quality of Service
RAID	Redundant Array of Inexpensive Disks
RASCI	Responsible, Accountable, Supportive, Consulted, Informed (Roles & Responsibilities defined)

RCA	Root Cause Analysis
RCA AI	RCA Action Item
RDBMS	Relational Database Management System
RDP	Remote Desktop Protocol
RFC	Request for Change
RFEM	Real Estate & Facilities Management
RFP	Request for Proposal
RID	Relative Identifier
RITS	Court Reporters, Interpreters and Transcript System
RMA	Return Materials Authorization
ROI	Return on Investment
ROM	Rough Order of Magnitude
RSD	Requirement Specifications Document
RU	Resource Unit
SaaS	Software as a Service
SAIC	Science Applications International Corp.
SAN	Storage Area Network
SB	Senate Bill
SB1386	Security Breach 1386
SCS	Secondary Communication Site
SD	Service Desk (Help Desk)
SDA	Service Desk Agent or Analyst
SDLC	Software Development Life Cycle
SDM	Service Delivery Manager
SFTP	SSH File Transfer Protocol
SICR	Scheduled and Implemented Change Report
SID	Session ID
SIEM	Security Information Event Management
SIS	Sustain Interface Service
SJE	Sustain Justice Edition
SLA	Service Level Agreement
SLO	Service Level Objective
SLR	Service Level Requirement

SME	Subject Matter Expert
SMTP	Simple Mail Transfer Protocol
SNMP	Simple Network Management Protocol
SOA	Service Oriented Architecture (ISB Common Services)
SOC	Security Operations Center
SOW	Statement of Work
SPF	Sender Policy Framework
SPOC	Single Point of Contact
SQA	Software Quality Assurance
SR	Service or Support Request
SS	Shared Services
SSDM	Security Services Service Delivery Manager
SSH	Secure Shell
SSL	Secure Sockets Layer (for secure internet communications)
SSO	Single Sign On
STG	Staging environment
STS	System Test Specifications
SVN	Apache Subversion
SW	Software
TACACS	Terminal Access Controller Access Control System
TB	Terabyte
TBD	To Be Determined
TC	Trial Court
TCAS	Trial Court Administrative Services
TCO	Total Cost of Ownership
TR&R	Technology Refresh and Replenish
TRN	Training environment
TRS	Test Results Specification Document
UAT	User Acceptance Testing
UML	Unified Modeling Language
UPS	Uninterruptable Power Supply
URL	Uniform Resource Locator

UTS	Unit Test Specification Document
VAR	Vulnerability Assessment Report
VEAD	View, Edit, Add, and Delete
VLAN	Virtual Local Area Network (LAN)
VoIP	Voice Over IP
VPC	Virtual Private Cloud
VPN	Virtual Private Network
WAN	Wide-area Network
WIC	WAN Interface Card
WIP	Work In Progress
WO	Work Order
XML	Extensible Markup Language
YTD	Year To Date

5.2 **Standard Glossary**

Term	Definition
Acceptance Test	Testing conducted to determine if an application meets the specified JCC requirements.
Access Rights	The powers granted to users to create, change, delete, or simply view data and files within a system, according to a set of rules defined by IT and business management. It is not necessarily true that the more senior a person, the more power is granted. For example, most data capture – essentially creating new files or transactions, is performed at relatively junior level, and it is not uncommon for senior management to have access rights only to view data with no power to change it. There are very good Internal Control and Audit reasons for adopting this approach.
Accessibility Test	Types of testing intended to ensure that an application is available to and usable by specific user groups e.g., Visual impairment Test, Motor Skills Test, Hearing impairments Test & Cognitive abilities Test.
Administrative Office of the Courts (AOC)	The entity that has the responsibility for overseeing court operations and providing support to the Judicial Council of California. (Renamed as JCC- Judicial Council of California

Appellate and Trial Court Judicial Services (ATCJS)	The Appellate and Trial Court Judicial Services Division is dedicated to securing adequate resources and funding for the appellate and trial courts to enhance the administration of justice and improve public access to the judiciary. The Trial Court Services unit administers the assignment of active and retired judges in the trial and appellate courts, as well as the coordination of complex civil actions. In addition, the unit oversees maintenance of the statewide vexatious litigants list.
Assignment	A Chief Justice approved temporary judicial placement (assignment) at a Superior, Appellate, or Supreme court. At the Superior court level the placement could be for case types such as civil, criminal, juvenile, family, probate, identifying trial or calendar assignment. The reason for the placement could be overload, disqualification matter, medical, vacation, SJO converted vacancy, council or council committee coverage, educational backfill, appellate remand, special masters coverage, appellate labor matters, or appellate backfill.
Assignment Request	The assignment request is the temporary placement request from a requesting Superior, Appellate, or Supreme court. The Assignment Request must be approved the Chief Justice before it can become an official assignment. See Assignment.
Authentication	A systematic method for establishing proof of identity.
Authorization	The process of giving someone permission to do or have something; a system administrator defines for the system which users are allowed access and what privileges they are assigned.
Authorized User	Any user that is authorized to view or edit any data within the CLIK System.
Business Process Flow	The detailed transaction or business activity begins, moves forward and finishes. The processes are an integral portion of the Business Blueprint and will be used as the basis for the Integration and User Acceptance Testing.
Calculated Attribute	Attribute identified as "calculated" value indicates the attribute's value is initially calculated and stored in the business object and may be adjusted by a user per business rules.
California Appellate Courts	California Appellate Courts (District Courts of Appeal) and Supreme Court of California. District Courts of Appeal are divided into six appellate districts, based on geography.

California Rules of Court	Rules established by the JCC to improve the administration of justice. The JCC has constitutional authority to *"adopt rules for court administration, practice and procedure not inconsistent with statute."* Rules of Court have the force of law.
California S.B. 1386	A bill passed by the California legislature that amended civil codes 1798.29, 1798.82 and 1798.84, the California law regulating the privacy of personal information. The first of many U.S. and international security breach notification laws, it was introduced by California State Senator Peace on February 12, 2002, and became operative July 1, 2003.
Center for Judicial Education and Research (CJER)	CJER constitutes the educational arm of the state judicial system. Staff and volunteer subject matter experts and faculty provide both training and education for judges and judicial branch personnel. CJER is acknowledged nationwide as a model in judicial branch education.
Chief Deputy Administrative Director	The Administrative Director provides the highest level of policy and programmatic leadership for JCC staff. Under constitutional authority, the Administrative Director serves as secretary to the JCC, carries out council policies throughout the judicial branch, and serves as the primary administrative advocate for the branch.
Classification	The act, process, or result of classifying. A category or class.
Commission on Judicial Performance (CJP)	The CJP stores the records of the Judicial Officers that may have had any disciplinary actions or complaints.
Control Plane	The Cloud Provider's administrative and control layer that allows the JCC to interact with the cloud provider's services.
Customizing	Modifying the solution/software to suit a specific user group with coding.
Data Access	An object type that is used to control user access to designated objects.
Deliverable Expectation Document (DED)	A document that includes the requirements, format, content, scope, and Acceptance Criteria of the identified Contractor Deliverables.
Demilitarized Zone	More appropriately known as demarcation zone or perimeter network, is a physical or logical sub-network that contains an organization's external services to a larger, untrusted network, usually the Internet. The purpose of a DMZ is to add an additional layer of security to an organization's Local Area Network (LAN).

Department of Finance	The State Executive Branch department that serves as the Governor's staff arm in preparing the annual Governor's Budget and administering the final Budget Act.
Derived Attribute	Attribute identified as "derived" value indicates the business object that should provide the service(s) to obtain the attribute's "derived" value at the time of the request. The value is not stored in the business object.
Development Support	This team's primary responsibility is programming (enhancements and defects), and secondary responsibilities include providing production incident support and troubleshooting recurring problems. Also see Level 3 definition.
Domain Name (Email Address structure)	A domain name consists of one or more parts, technically called labels that are conventionally concatenated, and delimited by dots, such as example.com. 1. The right-most label conveys the top-level domain; for example, the domain name www.example.com belongs to the top-level domain com. 2. The hierarchy of domains descends from the right to the left label in the name; each label to the left specifies a subdivision, or sub-domain of the domain to the right. For example: the label example specifies a sub-domain of the com domain, and www is a sub-domain of example.com. This tree of labels may consist of 127 levels. Each label may contain up to 63 ASCII characters. The full domain name may not exceed a total length of 253 characters. In practice, some domain registries may have shorter limits. 3. A hostname is a domain name that has at least one IP addresses associated. For example, the domain names www.example.com and example.com are also hostnames, whereas the com domain is not.
Email Notification	Email message that is sent to notify the user of a required action or event.

Enterprise-Class	Applications that are designed to be robust and scalable across a large organization. Enterprise class applications are generally: • Open and compatible with existing databases and tools • Customizable for the needs of specific departments • Powerful enough to scale up along with the needs of the business using it • Secure from outside threats and data leaks
Event	A problem, process, or system incident in which a corrective statement is created to resolve.
External Test	A type of testing in which integration of two or more modules pertaining to two or more applications, at least one of which is external to the AOC, is tested.
Fair Labor Standards Act	A federal law (29 USC, Chapter 8) that establishes a minimum wage, maximum working hours with a provision for overtime pay, and prohibitions against oppressive child labor practices.
FedRAMP	The Federal Risk and Authorization Program (FedRAMP) is a risk management program that provides a standardized approach for assessing and monitoring the security of cloud products and services. It was created to support the government's cloud computing plan. The program is intended to facilitate the adoption of cloud computing services among federal agencies by providing cloud service providers with a single accreditation that could be used by all agencies. Certifications are based on a unified risk management process that includes security requirements agreed upon by the federal departments and agencies.
Fiscal Year	The 12-month budgeting and accounting period. The State of California's fiscal year begins on July 1 and runs through the following June 30.
Full-Time Equivalent	Full-time equivalent (FTE) is a way to measure a worker's involvement in a project. An FTE of 1.0 means that the person is equivalent to a full-time worker, while an FTE of 0.5 signals that the worker is only half-time.
Functional Test	A type of black-box testing that addresses functional use cases. Functional testing differs from system testing in that it verifies against design specifications, as opposed to user or system requirements.

Globalization/ localization Test	Testing of any modifications to the software intended to adapt it to a particular culture, locale, and/or language.
GUI Testing	The process of testing a product's graphical user interface to ensure it meets its written specifications.
Hearing Impairment Test	Testing to ensure compliance with policies related to application accessibility by users with hearing impairment
High-Level Functional (aka, Sanity) Test	A sanity test is a very brief run-through of the functionality of an application, to ensure that it works as expected, often prior to a more exhaustive round of testing.
HIPAA Compliance	The Health Insurance Portability and Accountability Act of 1996 (HIPAA) required the Secretary of the U.S. Department of Health and Human Services (HHS) to develop regulations protecting the privacy and security of certain health information. To fulfill this requirement, HHS published what are commonly known as the HIPAA Privacy Rule and the HIPAA Security Rule. The Privacy Rule, or *Standards for Privacy of Individually Identifiable Health Information*, establishes national standards for the protection of certain health information. The *Security Standards for the Protection of Electronic Protected Health Information* (the Security Rule) establish a national set of security standards for protecting certain health information that is held or transferred in electronic form.
Integration	Testing of the information exchange and process activities among two or more modules of an application, after the individual modules have been thoroughly unit tested.
Interface	A process that enables an external system to transfer usable data and/or information to and from the Phoenix System.
Internal Audit	All forms of appraisal of activities conducted by auditors working for and within the organization that they are auditing. Internal auditors may be employees or contractors of the organization.
Internal Controls	The plan of organization and all the methods and measures used by the court to monitor assets, prevent fraud, minimize errors, verify the correctness and reliability of accounting data, promote operational efficiency, and ensure that established managerial policies are followed.
Internal Test	A type of testing in which integration of two or more modules internal to the application is tested and/or integration of two or more modules pertaining to two or more applications internal to the AOC is tested.

ISO 27001 Certified	ISO/IEC 27001 formally specifies an Information Security Management System, a suite of activities concerning the management of information risks (called 'information security risks' in the standard).
Issues Database	A tool used to log and track issues arising during the execution of the Project.
JCC	Judicial Council of California
Judicial Branch Entity	Any one of the California trial, appellate and supreme courts, and other judicial branch agencies, that make up the California Judicial Branch
Judicial Branch Experience	Any experience regarding leadership and committee membership, as well as, JCC committees, working groups, and task forces.
Judicial Council	The governing body of the California courts established in 1926 by article VI, section 6 of the Constitution of California. Under the leadership of the Chief Justice, the Judicial Council is responsible for ensuring the consistent, independent, impartial, and accessible administration of justice (GC 68070, GC 77001, CRC 6.1).
Judicial Experience	Any experience within the judicial branch, primarily in the State of California.
Judicial Officer (JO)	In context of Judicial Assignments Conceptual Object Model document, Judicial Officer consists of judges and justices.
Knowledge Transfer	The process of communicating knowledge that has been developed in one part of an organization to other parts of the organization or to JCCs
Layered Network Security Architecture	The goal of the Layered Network Security Architecture (LSA) project is to secure standardized entry and exit points to and from the CCTC. This provides multiple zones of security for protection of the Judicial Branch systems and data.
Lead	The responsible party that takes an active and primary role in completing the Deliverable or Task in question.
Level 1/ Service Desk	Typically, the single point of contact between the users and IT. The Level 1 group usually handles service requests, manages or tracks incidents, and manages communications with the users.

Level 2/ Production Support	Provides basic technical support for applications and the supporting infrastructure and is usually comprised of multiple groups, e.g., applications and infrastructure. The Level 2 group usually handles technical requests transferred from Level 1 or other IT teams, manages the technical aspect of incidents, and performs operational procedures and standard administrative activities.
Level 3/ Operational Support	Provides advanced technical support for applications and infrastructure. Typically, this expertise is provided by the development support team for the application and technical specialists for the infrastructure.
Load Test	Load testing is the process of putting demand on a system or device and measuring its response. Load testing is performed to determine a system's behavior under both normal and anticipated peak load conditions.
Lockout	Technique used to stop an (apparently) unauthorized attempt to gain access to the system. A typical example is the three tries limit on password entry. It may be a simple matter of a genuine user forgetting their ID and password, or making a mistake in trying to enter, but after three attempts, the system will Lockout that user and report an attempted intrusion to the Security Administrator. Information Security will have to reset the user records to allow another logon attempt.
Logon/off	The processes by which users start and stop using a computer system.
Middleware	A general term for any programming that serves to "glue together" or mediate between two separate programs within the Software.
Milestone	An auspicious point reached in a project that may not have tangible deliverables associated with it (e.g. a report, plan, go-live date).
Motor Skills Test	Testing to ensure compliance with policies related to application accessibility by users with motor skills special needs.
Non-Judicial Experience	Any experience not relating to the judicial branch.
Notification Alert	Email message that reminds the recipient that a pending due date is coming or has been superseded.
Object	An object is any component that can be manipulated by the commands of a programming language, such as a value (computer science), variable, function, or data structure.

Operational Level Agreement	An agreement between two ISD groups, which defines the goods or services to be provided and the responsibilities of each group. It typically defines targets and responsibilities that are required of the second group to meet agreed Service Level Targets in an SLA the first group has with their JCC.
Password	A string of characters input by a system user to substantiate their identity, and/or authority, and/or access rights, to the computer system that they wish to use. Passwords are central to all computer systems – even sophisticated systems employing fingerprints, voice recognition, or retinal scans.
PCI DSS Compliance	The Payment Card Industry Data Security Standard (PCI DSS) is a widely accepted set of policies and procedures intended to optimize the security of credit, debit and cash card transactions and protect cardholders against misuse of their personal information.
Performance Audit	An audit performed to evaluate the economy and efficiency of an organization's operations, its effectiveness in meeting regulatory requirements, and the correspondence between performance and established criteria. The performance audit provides a review of the degree to which management's performance meets pre-stated expectations.
Performance Test	Testing performed to verify the speed or effectiveness of an application, which may include qualitative attributes such as reliability, scalability and interoperability. Performance testing is often done in conjunction with stress testing.
Person	A generic term used in this document to indicate one or more-person types.
Phase	Identifies the different stages of the Implementation of a Project within the ASAP methodology (e.g. Project Preparation, Business Blueprint, Realization, Final Preparation, Go-Live and Deployment Support).
Phoenix	Phoenix (SAP-based) financial system.
Priority	To put things in order of importance. The right to precede others in order, rank, privilege, etc.; precedence.

Privilege	Privilege is the term used throughout most (if not all) applications and systems to denote the level of operator permission, or authority. Privilege can be established at the file or folder (directory) level and can allow (say) Read only access but prevent changes. Privileges can also refer to the extent to which a user is permitted to enter and confirm transactions / information within the system. In many systems, the security features will offer the ability to implement dual control or automatic escalation to the next 'highest' level, to assist with Information Security compliance and best practice.
	Privileges are established at 2 levels, firstly at the network level, where the level of privilege is established with respect to general access rights and permissions; secondly, at the application level where the user's job function and responsibility will determine the level of privilege required.
	In general, a user of an organization's systems should be offered no more than is necessary to perform the function required.
Project Team	All of the personnel of the Contractor, JCC, Courts, and potentially third-party contractors who are assigned to work on the Project in their designated capacities under this Appendix A. Project Team may also refer to those members of the full Project Team that are assigned by the Contractor or the JCC (e.g., the Contractor's Project Team, the JCC's Project Team, the Functional Project Team and so forth).
PSCD	SAP Public Sector Collections and Distributions.
Record	Any document, drawing, book, writing, log, data, etc., and supporting evidence recorded in a permanent form and intended to preserve the knowledge of an action or an occurrence. Records include computer-stored or generated information, microfilm, computer programs, tapes, disks, etc.
REFM	The Real Estate & Facilities Management (REFM) office is responsible for managing the state judiciary's portfolio. REFM manages ongoing operational needs for more than 500 court judicial branch facilities, as well as site selection and acquisition for new capital projects.

Regression Test	Any type of testing intended to uncover new errors, or regressions, in existing functionality or dependent systems after changes have been made to an application, such as functional enhancements, patches, or configuration changes.
Reliability Test	A type of testing conducted to evaluate the ability of an application to perform under specified conditions or operational scenarios for a specified period of time and/or a large number of iterations.
Reverse Shadowing	A training technique where the trainers watch as the trainees perform an activity or task, and provide feedback or assistance as needed.
Role-Based Access Control (RBAC)	With RBAC, access control decisions can be based on the functions that a user performs in his job assignment. Control is given to a user based on a role. A set of operations is assigned to a role and the role is then assigned to only those users who need access to those operations. A user is only allowed to execute the functions in the roles that are assigned to him/her.
SaaS	Software as a Service (SaaS): Is a software distribution model, the service provider makes applications ready to JCC members over the internet, It supports web services and service-oriented architecture.
SAP	Means SAP Public Services, Inc.
Scalability Test	Testing intended to measure an application's ability to scale up or scale-out, in terms of any of its non-functional capabilities, such as user load supported, number of transactions, data volume, etc.
Section 508 Compliance	Compliance standards are set by Section 508 of the Rehabilitation Act of 1973 that requires federal agencies to provide software and website accessibility to people with disabilities.
Security Role	An abstract logical grouping of users that is defined by the person who assembles the application. When an application is deployed, the Security Administrator will map the roles to security identities in the operational environment.
Security Test	Testing to determine that an application protects data and maintains functionality as intended, which can include confidentiality, integrity, authentication, etc.; as it is used here, refers to role-based security, as opposed to infrastructure-related security.

Service Level Agreement	An agreement between an ISD group and a business group. The SLA describes the services to be provided by ISD, documents service level targets and specifies the responsibilities of the ISD and business groups.
Service Provider	An individual or business that contracts to sell its services to the court.
Shadowing	A training technique where the trainees watch as the trainers perform an activity or task.
Smoke Test	Smoke testing is a preliminary to further testing, intended to reveal simple failures severe enough to reject a prospective software release. More specifically, it is a subset of test cases that cover the most important functionality of a component or system, to ascertain if the most crucial functions of a program work correctly.
Stress Test	A type of testing in which a load placed on a system is raised beyond normal usage patterns, in order to test the system's response at unusually high or peak loads.
Subsystem	A supporting application that complements a system
System	A complete application defining a business functionality
System Environment or Environment	The technical infrastructure required for the proper operation and support of the System, including but not limited to the operating system, hardware, software, and peripherals.
System Test	A type of black-box testing conducted on a complete, integrated system, including all of the components that have successfully passed integration testing as well as the software system itself integrated with any applicable hardware system(s).
Task	Those activities to be undertaken to complete a Deliverable, as described in the SOW and the DED.
Testing Procedures (of the System)	The agreed upon criteria for purposes of measuring the performance and accuracy of the xxx System. Testing may include Unit Testing, Integration Testing, Stress Testing, String Testing, Parallel Testing, Volume Testing, and Regression Testing. These tests are based on the Design of the Phoenix System. These criteria will be used at various testing points in a Project to determine conformance of the configuration to the JC's requirements.
UAT	User Acceptance Test is acceptance testing performed by the end users (i.e., JCCs).

Underpinning Contract	An Underpinning Contract is a contract between ISD and a third party that provides goods or services that support delivery of an IT service. It defines targets and responsibilities that are required to meet agreed Service Level Targets in an SLA.
Unit Test	A method by which individual units of source code are tested to determine if they are fit for use. A unit is the smallest testable part of an application.
Usability Test	Usability testing is black-box technique used to evaluate a product by testing it on users, the specific aim of which is to observe people using the product to discover errors and areas of improvement.
User	Anyone that uses the JCC System in any environment, or portion thereof, in Development through to Production, whether for processing transactions, viewing or reporting, or undertaking technical activities such as the setup of User Authorizations.
User Acceptance Testing (UAT)	The concentrated testing of the Test System, including execution, issue resolution and validation of the User Acceptance Test Plans, encompassing end-to-end business processes in the Test System.
Vacancy	A funded Judicial Position that does not have a current occupant.
Visual Impairment Test	Testing to ensure compliance with policies related to application accessibility for the visually impaired.
Volume Test	A type of stress testing, the focus of which is testing the system at the forecasted production volumes.
Vulnerability Test	Testing for known security issues by using automated tools to match conditions with known vulnerabilities.
Workflow	The automation of business processes in the DMS System through the use of User email notifications, event-driven document routings, and prioritized cues.

6 <u>Table of RFP Exhibits</u>

Number	Description
1	Phoenix Program
2	Phoenix Organization
3	Inventory of Direct and SFTP Interfaces
4	BPML List
5	Custom Object Workbook: all custom programs, classes, function modules, etc.
6	Current Landscape
7	Target Landscape
8	Project Implementation RACI
9	Judicial Branch Holiday Calendar
10	Infrastructure Assessment – Current Environments, Licenses, and Target Environments
11	Anticipated Storage Requirements (By Environment)
12	Readiness Check Baseline – HANA Readiness
13	Judicial Branch Information Systems Controls Framework
14	ST03N Transaction Profile July
15	List of Reports
16	Reference Architecture for JCC Cloud Security

END OF APPENDIX A