



South African Reserve Bank

INTEGRATED CROSS-BORDER FOREIGN EXCHANGE REPORTING SOLUTION

for The South African Reserve Bank

Schedule 2 - Support Services

1.0 Introduction

This is RFP Schedule 2 – Support Services Statement of Work (SOW). The Schedule contains the support services project scope and details the Service Provider's responsibilities and related SARB's responsibilities. Changes to the SOW will be processed in accordance with the procedure described in RFP Schedule 3 – Governance and Relationship Management.

1.1 Service Definitions

The Service Provider shall be end-to-end responsible for I-CFERS Application support, including the responsibility for coordinating and resolving issues related to the Licensed Software provided by the Technology Partner. While the Technology Partner provides technical support services in respect of the provided Licensed Software, the Service Provider shall (without detracting from its other obligations) coordinate on behalf of the SARB and take responsibility for resolving any and all issues in relation with the Licensed Software and shall consult the Technology Partner as and when needed to ensure high quality services to the SARB in line with the agreed Service Levels.

The following Support Services are in-scope:

- **I-CFERS Application 2nd line support** – 2nd line support provided by the Service Provider for support of 2nd level requests related to processes, functionality and configuration activities.
- **I-CFERS Application 3rd line support** – Activities associated with provided 3rd level (more advanced) technical and functional support to BSTD/FNSD operations for handling complex incidents, problems and services requests as well as application service management activities.
- **I-CFERS System Administration and 3rd line support** – All system administration activities including database management, performance monitoring and tuning, security configurations monitoring, installing and upgrading instances, batch jobs, interface monitoring and scheduling as well as 3rd line support for all issues related to the I-CFERS infrastructure software.
- **I-CFERS Hosting and 3rd line Support** – Are the technical infrastructure services and activities required to provide and support centralised production, quality assurance, test and development computing environments for I-CFERS applications as well as 3rd line support for all issues related to I-CFERS hosting
- **I-CFERS Application Maintenance** – Activities associated with repairing defects, providing user support and developing Minor Enhancements. Application services are classified as Application Maintenance Services when the work effort is less than or equal to 10 person-days per enhancement for production I-CFERS Application and Middleware programs and systems ("Minor Enhancements"). All Minor Enhancements and upgrades are included in the recurring support fees and are therefore not subject to additional cost. Any activities associated with repairing errors/defects for Service Provider developed Application and Middleware(s) or enhancements that are discovered within one hundred and twenty (120) days of the I-CFERS Application and Middleware(s) or enhancements being placed into the applicable production environment will fall under warranty and are therefore not subject to additional cost.
- **I-CFERS Application Development** – Activities associated with the development and implementation of the I-CFERS Solution, capabilities and Middleware and Major Enhancements related thereto after the Implementation thereof into production. Application services are classified as "Application Development Services" when the work effort is greater than 10 person-days per enhancement ("Major Enhancement"). Application Development Services are not included in the recurring support fees but shall be priced separately on a project by project basis on request by the SARB when the need for such activity arises. Any activities associated with repairing errors/defects for Service Provider developed Application and Middleware(s) or enhancements that are discovered within one hundred and twenty (120) days of the Application and Middleware(s) or enhancements being Implemented and Accepted by the SARB will fall under the warranty provided for in the Agreement and are therefore not subject to additional cost.

The following services and activities are out of scope:

- **SARB I-CFERS Key Users** – SARB Registered Users who support other users within the business to resolve “How do I” questions.
- **SARB Service Desk & Service Management 1st line support** – 1st line support provided by BSTD for call handling and routing of all user issues related to the delivery of IT services and cross functional service management.
- **I-CFERS Application Support 4th line-** Activities associated with repairing defects, providing user support, patches, upgrades for generic I-CFERS code/configuration.

2.0 Support Services – Roles & Responsibilities

This section describes the roles and responsibilities associated with the Support Services as described in this SOW. The tables presented in the subsequent sections outline the key activities and basic principles of the relationship model that the SARB wants to maintain with the Service Provider. The following services are described in the roles and responsibility tables:

- I-CFERS Support Services
 - Service level management;
 - Technical support;
 - Incident resolution and problem management;
 - Change management;
 - Disaster recovery;
 - Monitoring, reporting and review;
 - Resource management;
- I-CFERS application maintenance services;
 - Application maintenance;
 - Release management;
- I-CFERS support transfer services;
 - I-CFERS Competency Centre Implementation;
 - Training and knowledge transfer; and
 - Documentation.

Responsibilities are placed in the column under the party that will be responsible for performing the task:

- The Service Provider responsibilities are indicated in the column labeled “Service Provider”.
- SARB responsibilities (including responsibilities of SARB contracted third parties) are indicated in the column labeled “SARB”.
- For tasks that are indicated under the “Service Provider”, it is assumed that SARB staff will participate where needed based on the Service Provider’s direction. For competencies that are needed on a continual basis for the SARB to operate the I-CFERS Solution the Service Provider needs to ensure SARB’s staff are “trained on the job” by participating in the Support Services in adequate roles

2.1 I-CFERS Application Support services

The Support Services include all activities associated with providing 2nd & 3rd level technical and functional support to BSTD and FNSD for handling complex incidents, problems and service requests as well as application service management activities. The following table identifies Support Services roles and responsibilities that the Service Provider and the SARB will perform.

C2S2 Table 1 I-CFERS Application Support Services Roles and Responsibilities

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
<p>2.1.1 Service Level Management</p> <p>Service Level Management services are the activities associated with monitoring and reporting service delivery compliance with Service Level Requirements defined (SLRs).</p>	<p>Define and maintain SLR</p>	<ul style="list-style-type: none"> Recommend changes in SLRs where appropriate Define and document SLRs and reporting cycles 	<ul style="list-style-type: none"> Ensure service level requirements reflect business needs Approve recommendations, SLRs and reporting cycles
	<p>Report on performance against SLR</p>	<ul style="list-style-type: none"> Coordinate SLR monitoring and reporting with designated SARB representative and third-party vendors, as required Measure and analyze performance against SLRs Calculate penalties/fee reduction as applicable Provide periodic written performance management reports to SARB on SLRs (as defined for each SLR) and penalties/fee reduction as applicable Provide SARB access to performance and SLR reporting and monitoring system Participate to SLR review meetings 	<ul style="list-style-type: none"> Review performance against SLRs and penalties/fee reduction calculation if applicable Approve penalties/fee reduction and written performance reports Conduct periodic scheduled and ad hoc SLRs review meetings as required Participate to SLR review meetings
	<p>Plan, implement and monitor improvement actions</p>	<ul style="list-style-type: none"> Develop SLR improvement plans for services that not meet SLR Implement improvement plans Report on service performance improvement results if relevant 	<ul style="list-style-type: none"> Review and approve improvement plans
<p>2.1.2 Technical Support</p> <p>Technical support services are the activities associated with expert technical assistance required for the tuning of support Applications and Middleware and utilities for optimal system performance</p>	<p>Overall Maintenance and Repair policies and procedures</p>	<ul style="list-style-type: none"> Recommend maintenance and repair policies and procedures 	<ul style="list-style-type: none"> Approve maintenance and repair policies and procedures
	<p>Assist in Organising Support</p>	<ul style="list-style-type: none"> Manage all level 2 & 3 service requests (maintenance, incident, change, problem, etc.) reported with respect of support procedures and using defined issue tracker tools : log, analyze, classify, escalate, resolve and close requests Provide level 3 technical and functional support to SARB BSTD and support functions as identified and directed by BSTD 	<ul style="list-style-type: none"> Provide level 1 support in coordination of user support activities Establish priority of Service Requests

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		<ul style="list-style-type: none"> Respond to escalated trouble ticket items in accordance with established procedures 	
	Provide Support to resolve incidents and remedy problems	<ul style="list-style-type: none"> Perform incident management, including following activities : <ul style="list-style-type: none"> Troubleshoot all incidents determining the probable cause of the incident Recommend and provide where appropriate, any interim or emergency work-around solution(s) until permanent solution is defined and corrective action can be taken Escalate unknown errors and identify incident trends to problem management Report on incident management: <ul style="list-style-type: none"> Inform on progress through resolution process Provide incident management reporting conform to SARB requirements Perform problem management diagnostics on software and services including, but not limited to: <ul style="list-style-type: none"> Identify incident trends, handle unknown Analyze problems for determining problem causes Contingency planning : recommend and implement as appropriate temporary workaround solution Determine final problem resolution Document problem and problem resolution Report recommended problem resolution to appropriate Service Provider and SARB staff Initiate change request where needed Report on problem handling activity 	<ul style="list-style-type: none"> Provide Level 1 Application and Middleware support
	Organise for Enhancements	<ul style="list-style-type: none"> Perform change management tasks and activities to implement authorised changes per Change Management procedures, including but not limited to: <ul style="list-style-type: none"> develop and document functional specifications and spec changes create or modify program code conduct unit testing of affected modules test change for conformance to functional specifications install local system fixes as needed 	<ul style="list-style-type: none"> Approve release packaging of software changes.

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		<ul style="list-style-type: none"> – recover and load data as required • Provide release packaging of software changes • Follow SARB change management procedures associated with maintenance and support 	
	Manage I-CFERS Maintenance Activities	<ul style="list-style-type: none"> • Provide corrective maintenance • Provide preventive maintenance, including analysis and installation of patches and OSS notes on Development, Quality and Production environments • Provide adaptive maintenance • Provide perfective maintenance • Notify SARB BSTD Services of changes and upgrades to 3rd party Application and Middleware systems • Insure the technical integrity of the overall I-CFERS applications 	<ul style="list-style-type: none"> • Review and approve maintenance schedules
	Manage I-CFERS day to day Operations	<ul style="list-style-type: none"> • Develop I-CFERS operations scripts including for the operation scheduler • Develop batch jobs scheduling • Monitor batch jobs • Develop operating system scripts for I-CFERS Application and Middleware • Perform routine system management on Applications and Middleware 	<ul style="list-style-type: none"> • Administrate I-CFERS user account and profiles
	Manage I-CFERS Performance	<ul style="list-style-type: none"> • Resolve I-CFERS Application and Middleware performance issues • Recommend DBMS tuning changes 	<ul style="list-style-type: none"> • Monitor
2.1.3 Incident Resolution and Problem Management Incident Resolution and Problem Management Services are the activities associated with restoring normal service operation as quickly as possible and to minimise the adverse impact on SARB business operations, thus ensuring that the best possible levels of service quality and availability are maintained. Problem Management also includes minimising the adverse impact of Incidents and Problems on the business.	Requirements, Policies, Process and Procedures	<ul style="list-style-type: none"> • Develop, document and maintain in the Standards and Procedures Manual Incident and Problem Management procedures that meet requirements and adhere to defined policies • Establish Incident/Problem workflow, escalation, communication and reporting processes that help to achieve the SLR requirements 	<ul style="list-style-type: none"> • Participate in defining Incident and Problem Management requirements and policies • Review and approve Incident and Problem Management procedures • Review and approve Incident/Problem classification, prioritisation and workflow, communication, escalation and reporting processes
	Single Point of Contact	<ul style="list-style-type: none"> • Provide a single point of contact telephone number for all Service related queries, service requests, logging and clearing of all network related incidents. 	<ul style="list-style-type: none"> • SARB to provide a helpdesk number for all Service related queries and clearing of faults
	Incident and Problem Management System	<ul style="list-style-type: none"> • Provide, configure and operate Incident and Problem Management system that tracks Incidents • Provide SARB access and input capabilities to Incident and Problem tracking system to allow for Incident/Problem monitoring and ad hoc reporting 	<ul style="list-style-type: none"> • Provide reporting requirements

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
	Operational Incident and Problem Management	<ul style="list-style-type: none"> • Implement measures for proactive monitoring and self-healing capabilities to limit service outages • Perform event management monitoring of the Services to detect abnormal conditions or alarms, log abnormal conditions, analyze the condition and take corrective action • Manage entire Incident/Problem life cycle including detection, diagnosis, status reporting, repair and recovery • Coordinate and take ownership of problem resolution by managing an efficient workflow of incidents including the involvement of Third Party providers (e.g., vendors, public carriers, ISP). • Assign problems to L2 & L3 technical maintenance and repair staff as required • Periodically review the state of open Problems and the progress being made in addressing these problems. • Regular feedback by phone, e-mail or SMS to SARB regarding the restoration progress • Interface with Help Desk(s) and SARB for Incident & Problem Management activities • Manage and coordinate subcontractors and third parties in order to meet resolve problems • Upon rectification of the fault, the Service Provider will immediately notify SARB helpdesk that the fault has been resolved 	<ul style="list-style-type: none"> • Participate in Problem review sessions and provide listing and status of Problems categorised by Problem impact • Authorise Close of SARB-initiated Severity 1 and 2 Incidents and supply the Service Service Provider with a reference number • SARB to report all service related incidents to the Service Provider fault acceptance centre
	Improvement Planning	<ul style="list-style-type: none"> • Identify possible enhancement opportunities for improved operational performance and potential cost savings • Implement approved projects to implement enhancement opportunities 	<ul style="list-style-type: none"> • Review and approve projects to implement enhancement opportunities
	Reporting	<ul style="list-style-type: none"> • Provide status report detailing the Incident and Problem Management logs 	<ul style="list-style-type: none"> • Review during monthly Service Tower Account and Service Delivery Meetings
2.1.4 Solution Change Management Change Management activities include services required to appropriately manage and document (e.g., impact analysis, version control, library management, turnover management, build management, parallel development) changes to the application(s) and	Develop and Implement Change Management Framework	<ul style="list-style-type: none"> • Propose change management procedures associated with the SARB authorised change requests • Assist SARB with documentation and communicate change management processes and procedures Implement, manage, and maintain the approved change management system, policies and procedures in line with agreed scope 	<ul style="list-style-type: none"> • Review and approve the change management procedures proposed to streamline the change request process
	Organise Change Management Activities	<ul style="list-style-type: none"> • Perform change management activities in accordance with approved policies and procedures, including (but not limited to) the following: <ul style="list-style-type: none"> - Register, prioritise, approve, track and close 	<ul style="list-style-type: none"> • Notify affected users of timing and impact of authorised Changes

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
any of the constituent components being developed. Change Management also includes services required to appropriately manage and document changes to the underlying application development environment components.		<ul style="list-style-type: none"> Changes <ul style="list-style-type: none"> - Determine Change logistics - Determine Change cost and impact - Schedule and conduct I-CFERS change management governance approvals • Provide impact analysis and estimated effort estimation associated with proposed Changes for all possible alternatives • Monitor change management process and escalate if delays in processing change requests jeopardise timelines 	
	Planning, Monitoring and Status Reporting	<ul style="list-style-type: none"> • Create and keep updated a detailed project plan covering all I-CFERS change management activities • Plan, monitor and manage all activities related to I-CFERS Change Management • Report on progress, budget, issues, risks to programme management 	<ul style="list-style-type: none"> • Review reporting and where required escalate issues for resolution
2.1.5 Disaster Recovery Disaster Recovery services are the services and activities required to prevent interruption of mission-critical services from unanticipated events (both natural and man-made) and to re-establish full functioning as swiftly and smoothly as possible. The main services and activities include disaster recovery plan development, testing and improvement, as well as execution in case of a disaster.	Define Disaster Recovery Strategy	<ul style="list-style-type: none"> • Participate in defining SARB Disaster Recovery strategy, requirements and scenarios • Recommend best practice Disaster Recovery and business continuation strategies, policies and procedures (e.g. Synchronous replication or Asynchronous replication, Standard Disaster Recovery with traditional tape backup, etc.) 	<ul style="list-style-type: none"> • Define the critical business processes that must be maintained in the event of a disaster • Approve Disaster Recovery strategies, policies and procedures
	Define Replication and Backup Policies	<ul style="list-style-type: none"> • Recommend Data (File System, Database, Flat Files etc. etc.) replication, backup and retention policies • Design, develop, test, integrate and implement to Production methods and procedures (e.g. Synchronous replication or Asynchronous replication, Standard Disaster Recovery with traditional tape backup, etc.) 	<ul style="list-style-type: none"> • Establish Disaster Recovery replication methods and procedures (e.g. Synchronous replication or Asynchronous replication, Standard Disaster Recovery with traditional tape backup, etc.) • Define and approve SARB Data (File System, Database, Flat Files etc. etc.) replication, backup and retention policies and requirements • Approve Disaster Recovery replication methods and procedures
	Plan Disaster Recovery Scenarios	<ul style="list-style-type: none"> • Develop and maintain a detailed DR plan to achieve DR requirements. Plan shall include plans for data, back-ups, storage management, and contingency operations that provide for recovering SARB Systems within established recovery requirement timeframes. Plan should also outline defined objectives, resources, and internal communications. • Define recovery process to detail the step-by step procedures that must be followed • Work with SARB BSTD operations to develop, build, and 	<ul style="list-style-type: none"> • Review and approve Disaster Recovery plan

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		test a technical and functional restoration plan. The plan will include the process and details needed to recover SARB Application and Middleware(s), its current configurations and restoration of data, as well as business instructions to be given. <ul style="list-style-type: none"> • Ensure that the recoverability requirements of each business function are met 	
	Test Disaster Recovery Scenario	<ul style="list-style-type: none"> • Establish a formal testing procedure and execution • Setup a formal testing schedule • Performs the recovery test • Participate in DR tests • Develop post testing reports, that identify objectives status, and recommendations for continuous improvement 	<ul style="list-style-type: none"> • Establish DR test requirements • Approve testing procedure, execution and schedule • Assist in performing the recovery test • Coordinate involvement of users for DR recovery testing • Participate in DR tests
2.1.6 Monitoring, Reporting and Review Services Monitoring and reporting services are the activities associated with the ongoing health checks, status reporting, problem management (ongoing surveillance, tracking, escalation, resolution, and tracking of problems) of Application and Middleware support activities.	Define Reporting Structures	<ul style="list-style-type: none"> • Develop a reporting structure covering day-to-day operations and reviews of Service Provider's performance 	<ul style="list-style-type: none"> • Approve reporting structure
	Report and Monitor on Progress of Operations	<ul style="list-style-type: none"> • Develop and provide operational reports (Daily, Weekly, Monthly) that provide status of operational activities, production issues, and key operational metrics, as specified in the Statements of Work • Provide Operational information in real time such as notifications planned in case of an incident of a certain severity level, or in case of a delay (starting with a certain threshold for Severity 1 & 2 incidents) • Provide a weekly operations report on including an account of work carried out from the last report as well as a list of incidents not resolved or opened since the last report • Provide weekly status reviews and progress reports for selected mutually agreed improvement projects • Provide monthly service-level performance reports against each Service Level Agreement, including trends for each and summary view (see also support services) • Provide monthly milestone achievement review and performance reports • Provide mutually agreed to reports to enable invoice reconciliation 	<ul style="list-style-type: none"> • Review and approve operational reports
	Report on Application Environment Status	<ul style="list-style-type: none"> • Provide an electronic copy of an Applications and Middleware inventory being maintained • Provide mutually agreed reports that represent general health of environments (e.g., number of stranded transports, patches not yet applied) as well as reports that represent demand fulfillment in end-customer terms (e.g. 	<ul style="list-style-type: none"> • Monitor

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		defect corrections/change requests that have slipped against commitment, backlogged defects/change requests, Priority 1, 2, and Priority 3 defects). <ul style="list-style-type: none"> • Provide mutually agreed to reports that capture service requests demands and measure of ability to satisfy demand 	

2.2 I-CFERS Application Maintenance Services

I-CFERS Application Maintenance Services are the activities associated with repairing defects, providing user support and developing Minor Enhancements. Application services are classified as services when the work effort is less than or equal to ten (10) person-days per enhancement for production Application and Middleware programs and systems. All Minor Enhancements and upgrades are included in the recurring support fees and are therefore not subject to additional cost.

Any activities associated with repairing errors/defects for Service Provider in respect of each Deliverable (including developed Application and Middleware(s) or enhancements) that are discovered within one hundred and twenty (120) calendar days of the last Deliverable being Accepted will fall under the warranty contemplated in the Agreement and are therefore not subject to additional cost.

Application maintenance services include all life-cycle support activities described in this Schedule and Schedule 1 as applicable.

C2S2 Table 2 I-CFERS Application Maintenance Services Roles and Responsibilities

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
2.2.1 Application Maintenance Services The Service Provider shall support SARB Application Maintenance activities associated with: resolving, repairing, and preventing the occurrence of errors and defects in new or existing applications and logical databases;	Corrective and Emergency Maintenance The repair of defects not identified during the warranty period to enable applications that are in production to provide the required functionality and to meet service levels	<ul style="list-style-type: none"> • Provide Corrective and Emergency Maintenance technical scope shall include: user interface changes, changes to system interfaces, application functional changes, recommend logical and/or physical database changes related to enhancements, modification to standard query structure, report development, and Information Assurance. 	<ul style="list-style-type: none"> • Approve and signoff on maintenance changes as part of the Change Management process
	Preventative Maintenance Preventative Maintenance covers events, which if not addressed	<ul style="list-style-type: none"> • Provide maintenance of applications and logical databases to cover future events that could disable or degrade service of an application if not repaired, 	<ul style="list-style-type: none"> • Approve preventative maintenance activities as part of the Change Management process

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
<p>providing technical support services for configuring and tuning the configurable elements of the applications for achieve optimal application system performance; and installing application service patches, version upgrades, minor enhancements, and API codes extensions. Application Maintenance also incorporates The Service Provider shall provide the following Application Maintenance activities associated with repairing errors and defects of new or existing COTS applications and logical databases</p>	<p>proactively, could impact applications in production</p>	<p>including: changing mission volumes, new releases, application of system patches, proactive performance tuning, proactive archiving, pre-production execution simulation, Information Assurance</p> <ul style="list-style-type: none"> • Perform testing for special events such as: Public holidays, End of financial year, End of calendar year, Leap year 	
	<p>Adaptive Maintenance Adaptive Maintenance activities ensure that application performance is not affected by changes to interfacing applications, new applications or packages and technical environment changes, which if not addressed proactively, could impact applications in production</p>	<ul style="list-style-type: none"> • Perform adaptive maintenance to identify and preempt any disruptive impact that changes to the application environment could have on applications in production 	<ul style="list-style-type: none"> • Notify Service Provider of pending changes that could impact applications in production • Approve adaptive maintenance activities as part of the Change Management process
	<p>Perfective Maintenance Perfective Maintenance activities ensure that applications operate at peak efficiency</p>	<ul style="list-style-type: none"> • Provide Perfective Maintenance to ensure that applications and logical databases operate at peak efficiency with particular focus on areas such as: system CPU hours, general performance tuning, storage space, response time, archiving, and database performance tuning 	<ul style="list-style-type: none"> • Review perfective maintenance results

2.3 I-CFERS Support Transfer Services

I-CFERS Support Transfer Services are the activities associated with creating the ability within BSTD to take over the support and operations of the I-CFERS and environment. This deals with all aspects of defining the I-CFERS Competency Centre requirements through to transferring knowledge and the necessary documentation to enable BSTD operations to effectively support and maintain the systems.

C2S2 Table 3 I-CFERS Support Transfer Services Roles and Responsibilities

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
<p>2.3.1 I-CFERS Competency Centre Implementation</p> <p>Service Provider should support the SARB in implementing an I-CFERS Competency Centre for post-implementation support services. The main objectives of the SARB I-CFERS Competency Centre include:</p> <ul style="list-style-type: none"> • Centralise and secure continuity of user-centric I-CFERS and business process knowledge and support • Streamline business process support • Ensure rapid response to incidents, minor enhancements and improvements • Decision Models & Rules Management • Data Model Management • Master Data Management • Data Producers and Consumers Management • Data Quality Assurance Management • Data Standards Management 	<p>Define Competency Centre Scope</p>	<ul style="list-style-type: none"> • Assist in defining the scope and structure of the I-CFERS Competency Centre 	<ul style="list-style-type: none"> • Determine I-CFERS Competency Centre scope of support services • Determine the structure of the I-CFERS Competency Centre
	<p>I-CFERS Service Catalogue</p>	<ul style="list-style-type: none"> • Review the catalog of services to be delivered and recommend improvements • Recommend skills and competencies needed to deliver each service 	<ul style="list-style-type: none"> • Fine-tune the catalog of services to be delivered
	<p>Organisation</p>	<ul style="list-style-type: none"> • Propose detailed Target Operating Model and Service Delivery Model for I-CFERS Competency Centre including: <ul style="list-style-type: none"> • I-CFERS Competency Centre organisation chart • Roles and responsibilities • Support, governance and communication processes • Internal and external touch-points with all stakeholders and contracted parties, including Service Level agreements • Finalise Target Operating Model and Service Delivery Model • Develop an I-CFERS Competency Centre implementation schedule and planning • Provide guidance and support to the SARB during the implementation and set-up of the I-CFERS Competency Centre 	<ul style="list-style-type: none"> • Review Target Operating Model and Service Delivery Model • Identify I-CFERS Competency Centre resources and plan for staffing • Review implementation schedule and planning
<p>2.3.2 Training and Knowledge Transfer Services</p> <p>Training and knowledge transfer Services refer to the activities related with training and knowledge transfer to the Super Users, Competency Centre, Helpdesk (1st line support) and support staff. The approached requires the Service Provider to provide full training services and be responsible for ensuring users and support staff are adequately trained to the satisfaction of SARB.</p>	<p>Skills Development Plan</p>	<ul style="list-style-type: none"> • Develop a comprehensive skills development plan that is curriculum based. Training Material and classroom training and coaching should also be developed and conducted based on this. 	<ul style="list-style-type: none"> • Co-develop a comprehensive Skills development plan that is curriculum based
	<p>Develop Training and Knowledge Transfer Plans</p>	<ul style="list-style-type: none"> • Develop training and knowledge transfer plan and procedures in the project plan in line with the organisational change management plan • Update the ERP Learning Management System (scheduling courses and maintaining of learner records) 	<ul style="list-style-type: none"> • Approve training and knowledge transfer plan and procedures in the project plan
	<p>Provide Training Material</p>	<ul style="list-style-type: none"> • Develop training materials in English 	<ul style="list-style-type: none"> • Review and validate training materials
	<p>Provide Training Instruments</p>	<ul style="list-style-type: none"> • Advise on training instruments • Use training instruments 	<ul style="list-style-type: none"> • Provide software for developing online trainings • Create and maintain SARB I-CFERS training instances or clients

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
	Training Facilities	<ul style="list-style-type: none"> • Provide a training co-ordinator to assist with the logistical and scheduling requirements 	<ul style="list-style-type: none"> • Provide training venues (Head Office) with the required training facilities
	Training curriculum	<ul style="list-style-type: none"> • Define a curriculum that is modular to allow focused training applicable to different I-CFERS roles; • Develop a skills development plan 	<ul style="list-style-type: none"> • Provide I-CFERS roles and role descriptions • Define learning outcomes and objectives
	Provide training	<ul style="list-style-type: none"> • Organise and provide training for SARB staff • Provide group based coaching sessions mapped to I-CFERS roles • Coaching and guidance as a follow-up to training interventions to ensure application of learning, etc 	<ul style="list-style-type: none"> • Identify and assign SARB support staff that require training: <ul style="list-style-type: none"> ◦ Competence Centre ◦ Helpdesk staff • Ensure appropriate SARB staff attend the training • Assess training needs on a continuous basis • Validate end-user training plan and monitor progress
	Support Repository	<ul style="list-style-type: none"> • Develop a I-CFERS Collaboration Workspace and Online help facilities on Microsoft SharePoint, or where advised 	<ul style="list-style-type: none"> • Ensure staff awareness of online support facilities
	Planning, Monitoring and Status Reporting	<ul style="list-style-type: none"> • Create and keep updated a detailed project plan covering all training and knowledge transfer activities • Plan, monitor and manage all activities related to training and knowledge transfer • Report on progress, budget, issues, risks to programme management 	<ul style="list-style-type: none"> • Review and approve project plan • Review and feedback on progress
<p>2.3.3 Documentation Services</p> <p>Documentation Services are the activities associated with developing, revising, archiving, maintaining, managing, reproducing, and distributing information (e.g., project planning materials, System design specifications, Procedures Manuals, operations guides) in hard copy and electronic form.</p> <p>Documentation related to application services includes system and application and Middleware specifications and documentation, End-user documentation, Site and system security plans, Updates and release notes.</p>	Agree on Documentation Formats	<ul style="list-style-type: none"> • Identify and recommend documentation requirements • Specify the content, purpose, format and production schedule of all documents 	<ul style="list-style-type: none"> • Participate in identifying service documentation requirements • Approve recommended documentation requirements, formats and production schedules
	Organise Documentation Process	<ul style="list-style-type: none"> • Propose document processing flow • Document version control for all documentation for which Service Provider is responsible 	<ul style="list-style-type: none"> • Organise and assure access to documentation to SI Staff • Approve organisation of documentation • Approve documentation delivered
	Document Systems and Applications Operations	<ul style="list-style-type: none"> • Provide timely creation, updating, maintenance and provision of all appropriate project plans, project time and cost estimates, technical specifications, management documentation and management reporting in a form/format that is acceptable to the SARB for projects and major service activities • Provide documented application disaster recovery process • Provide the SARB with a copy of or access to any vendor (or Third Party-supplied) documentation (including updates thereto) for any new, enhanced or modified in scope product/service as provided by the SI • Document and provide a detailed operations manual for operating and managing the I-CFERS system and supporting infrastructure 	<ul style="list-style-type: none"> • Provide I-CFERS architecture documentation • Review and approve documentation as needed

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
	Document Use of Applications	<ul style="list-style-type: none"> • Provide end-user documentation (e.g. user manuals) 	<ul style="list-style-type: none"> • Approve end-user documentation • Prepare updates and release notes • Deliver updates and release notes to End Users
2.3.4 Defect Tracking Services Implement and maintain a documented and structured defect tracking and reporting methodology and process that encompasses all stages of the software development lifecycle (SDLC) including requirements definition, design and analysis, programming, testing (including regression testing), maintenance, and enhancement activities for all in-scope software being supported by the Service Provider. Defect Management is required to ensure that the Service Provider delivers complied object code to the SARB for system-level testing that is compliance with the systems specifications as approved by the SARB and that the code does not contain any Severity 1 defects.	Establish Capability	<ul style="list-style-type: none"> • Maintain a defect tracking repository • Define Communication / escalation process • Define a prioritisation scheme for managing the remediation of defects 	<ul style="list-style-type: none"> • Monitor
	Execute Defect Tracking	<ul style="list-style-type: none"> • Evaluation and analysis of defects • Resolution and verification testing of defect fix (including regression testing where appropriate) 	<ul style="list-style-type: none"> • Verify defect fix
	Reporting	<ul style="list-style-type: none"> • Reporting (defect density, defect age, defect trend) by type / priority 	<ul style="list-style-type: none"> • Review and escalate as required
2.3.5 Release Management Services Release management is the activity associated with the planning and managing of releases of the I-CFERS versions. It includes promoting new and modified code, configuration and scripts through development, test and production.	Develop Framework for Release Management	<ul style="list-style-type: none"> • Recommend operations and administration procedures related to release management 	<ul style="list-style-type: none"> • Approve operations and administration procedures related to release management
	Plan Release Management	<ul style="list-style-type: none"> • Recommend operations and administration procedures related to code migration • Prepare and execute the releases to all environments (e.g. development-to-quality assurance-to-production) the package containing all developed software; installation and operations documentations 	<ul style="list-style-type: none"> • Approve operations and administration procedures related to code migration • Define in all environments (e.g. development-to-quality assurance -to-production) the entry and exit gate criteria and instructions for each release • Create release strategy and procedure
	Code Migration	<ul style="list-style-type: none"> • Request transport of code between environments • Transports of code / customisation from development to quality assurance to production environment on an agreed upon basis • Migrate defect correction code during warranty period • Escalate and resolve issues with SI Services delivery team and development teams 	<ul style="list-style-type: none"> • Review and approve transport request • Track migration status and notification • Perform quality assessment where required
	Planning, Monitoring and Status Reporting	<ul style="list-style-type: none"> • Create and keep updated a detail project plan covering all release management activities • Plan, monitor and manage all activities related to release 	<ul style="list-style-type: none"> • Review and monitor status reports and escalate issues if deemed necessary

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		<ul style="list-style-type: none"> management Report on progress, budget, issues, risks to programme management 	
<p>2.3.6 Software Configuration Management Services</p> <p>Software configuration management is the identification and maintenance of system components and the relationships and dependencies among them. Such activities include:</p> <p>a. Automatic capture and storage of application-to-component and component-to-component relationships</p> <p>b. Maintenance of the history of those relationships and transformations required to appropriately manage and document (e.g., source control, version control, profiles, security plans) configuration changes affecting the application and its processing environment.</p>	<p>Review configuration management results</p>	<ul style="list-style-type: none"> Define configuration management policies and procedures consistent with the SEI CMM Software Configuration Management Key Process Area (KPA) 	<ul style="list-style-type: none"> Review and approve configuration management policies and procedures
	<p>Perform Configuration Management</p>	<ul style="list-style-type: none"> Perform configuration management activities throughout the development life cycle 	<ul style="list-style-type: none"> Review configuration management results
<p>2.3.7 Solution Change Management Services</p> <p>Change Management activities include services required to appropriately manage and document (e.g., impact analysis, version control, library management, turnover management, build management, parallel development) changes to the application(s) and any of the constituent components being developed. Change Management also includes services required to appropriately manage and document changes to the underlying application development environment components.</p>	<p>Develop and Implement Change Management Framework</p>	<ul style="list-style-type: none"> Propose change management procedures associated with the SARB authorised change requests Assist SARB with documentation and communicate change management processes and procedures Implement, manage, and maintain the approved change management system, policies and procedures in line with agreed scope 	<ul style="list-style-type: none"> Review and approve the change management procedures proposed to streamline the change request process
	<p>Organise Change Management Activities</p>	<ul style="list-style-type: none"> Perform change management activities in accordance with approved policies and procedures, including (but not limited to) the following: <ul style="list-style-type: none"> Register, prioritise, approve, track and close Changes Determine Change logistics Determine Change cost and impact Schedule and conduct I-CFERS change management governance approvals Provide impact analysis and estimated effort estimation associated with proposed Changes for all possible 	<ul style="list-style-type: none"> Notify affected users of timing and impact of authorised changes Monitor change management activities

Service Category and Description	Service Entities	Responsibility	
		Service Provider	SARB
		<ul style="list-style-type: none"> alternatives • Monitor change management process and escalate if delays in processing change requests jeopardise timelines 	
	Planning, Monitoring and Status Reporting	<ul style="list-style-type: none"> • Create and keep updated a detailed project plan covering all I-CFERS change management activities • Plan, monitor and manage all activities related to I-CFERS Change Management • Report on progress, budget, issues, risks to programme management 	<ul style="list-style-type: none"> • Review reporting and where required escalate issues for resolution
2.3.8 Resource Management Services Resource management Services are the activities associated with the provision and adjustment of appropriate human resources, according to workloads, expertise, continuity and cost optimisation requirements, to perform the required Services at the required Service Level Requirements	General Resource Management	<ul style="list-style-type: none"> • Continuously monitor the performance of all the human resources made available to the SARB to ensure that the Services comply with the SLRs • Analyze the impact of any new requests made by the SARB and to be implemented by the SI Provider and propose solution • Monitor the workload of the various Provider human resources and adjust as needed to meet SLRs • Propose a solution to prevent or resolve any workload issues 	<ul style="list-style-type: none"> • Monitor
	General Human Resources Management	<ul style="list-style-type: none"> • Recruit and provide the human resources necessary for the performance of required Services in compliance with the terms of the Agreement • Ensure that staffing and skill levels are adequate to achieve contract objectives • Perform Provider annual personnel performance reviews • Consider SARB satisfaction a key component of the assigned Provider personnel performance reviews • Manage Provider staff time off and replacement 	<ul style="list-style-type: none"> • Recruit and provide the human resources necessary for the performance of required Services in compliance with the terms of the Agreement
	Human Resource Changes	<ul style="list-style-type: none"> • Provide Provider staff turnover data directly relevant to the provision of the Services in scope to the SARB • Do not replace or re-assign any of the SI Provider Key Personnel without respecting a notice period of 2 months or prior SARB consent • Inform SARB of any potential Provider Key Personnel staffing changes and of any new personnel assignments planned for new projects and Services • Review and authorise Key Personnel changes to existing services and personnel for new projects and services 	<ul style="list-style-type: none"> • Designate certain members of the SI Provider staff as Key Personnel • Assign a new Provider relationship manager upon SARB request